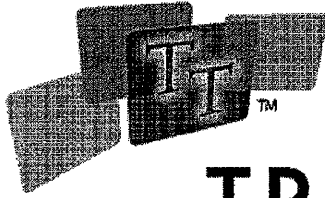


Exhibit 2



TRADING TECHNOLOGIES®

X_TRADER® USER MANUAL

Version 6.11

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TT 009481

Trading Technologies®[®], International, Inc.



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What's New in X_TRADER® 6.11

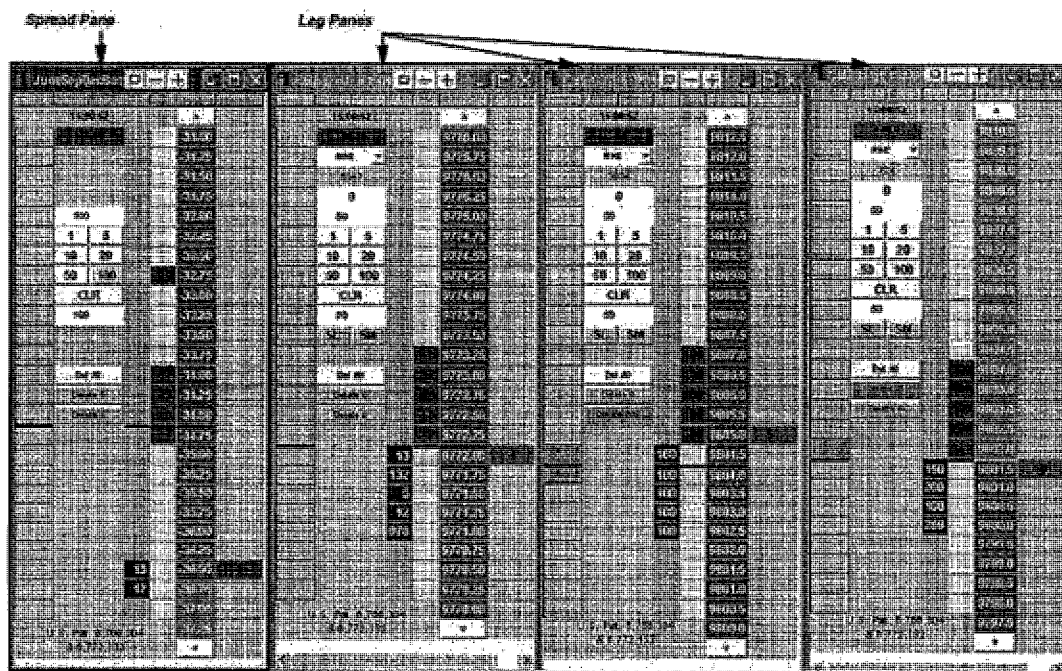
 **Warning:** Be aware that new properties in the Properties dialog box Spread Matrix Tab default to ON. These new properties include:

- Use Minimum Highlighting Mode defaults to ON
- Show Last Traded Price/Net Change defaults to ON
- Spread Matrix: Show Net Position defaults to Along the Diagonal
- Butterfly Condor Matrix: Show Net Position defaults to ON

This document describes the new features and functionality released with X_TRADER® 6.11. Enhancements to X_TRADER® impact the following components:

- Autospreader™
- Spread Matrix
- Butterfly Condor Matrix
- MD Trader™

Autospreader™

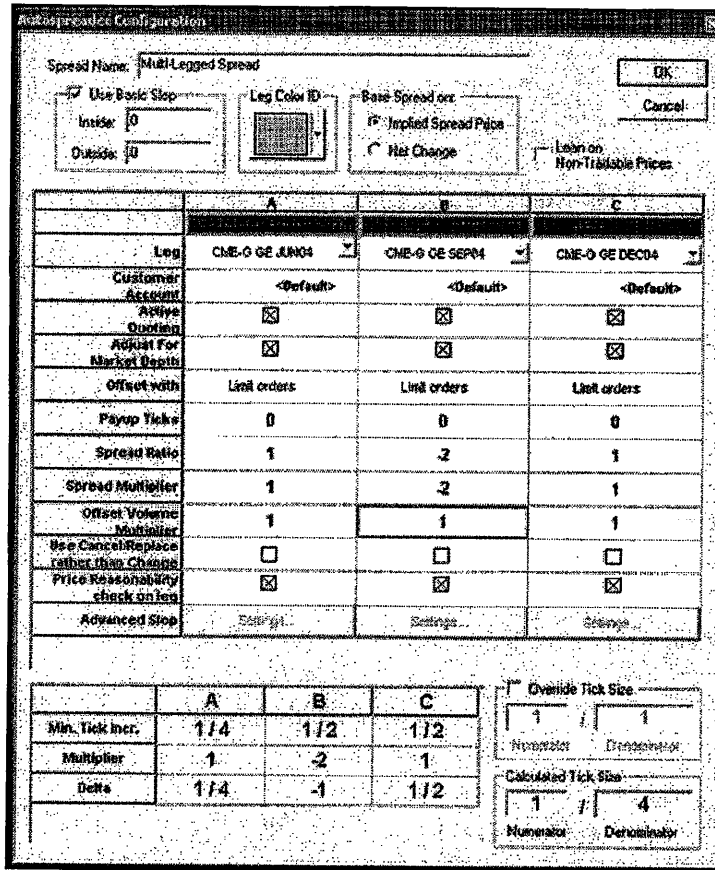


Note: MD Trader™ is protected by U.S. Patents Nos. 6,766,304 & 6,772,132.

Autospreader™ now allows multi-legged spreads that consist of the following features and characteristics:

- Allows up to ten legs per spread.
- Allows **Active Quoting** on one to three legs of the spread.

- Ability to add columns to the **Configuration** dialog box.



- Ability to delete legs of multi-legged spread by clicking the **Delete** button in the specified leg column in the **Configuration** dialog box.

Note: If a leg is deleted, the MD Trader™ window for that spread leg is not closed.

- If the market for any of the legs is *illiquid* at the time of the order, the order is rejected. If the market for any of the legs becomes illiquid while the order is working, the order is pulled. Once a spread quoting order has been filled, no hedge orders are pulled, regardless of market liquidity.

- Hedging logic for multi-legged spreads:
 - If you use limit orders on non-quoted legs and a quoted leg is filled, the prices at which the orders go in on the remaining legs are based on the current market in the remaining legs at the time of the fill confirm from the exchange.
 - Hedging logic for partial fills on multi-legged spreads is the same as for two-legged spreads.
- Hedge orders are color-coded in a non-standard orange color. This color is *not* configurable.

Spread Matrix and Butterfly Condor Matrix

The new properties in the **Properties** dialog box **Spread Matrix** tab that impact *both* the Spread Matrix and the Butterfly Condor Matrix include:

- Use Minimum Highlighting Mode.
- Use Net Change Color Scheme With Actual Prices.
- Show Last Traded Price/Net Change.

Note: Be aware that new properties in the **Properties** dialog box **Spread Matrix** tab default to ON. These new properties include:

- **Use Minimum Highlighting Mode** defaults to ON
- **Show Last Traded Price/Net Change** defaults to ON
- **Spread Matrix: Show Net Position** defaults to **Along the Diagonal**
- **Butterfly Condor Matrix: Show Net Position** defaults to ON

Spread Matrix

Use Net Change Color Scheme with Actual Prices Property:
 - Pink background display negative prices
 - Light green background display positive prices

Last Traded Price or Net Change and Position Rows

Context Menu Options:

- Show Top Outrights as Net Change
- Show Spread Prices as Net Change
- Show Outright Last Traded Price as Net Change

Enhancements to the Spread Matrix allow you to customize the spread matrix and easily identify trade data. These features include:

- New context menu options
- New property settings

Context Menu

New options in the context menu include:

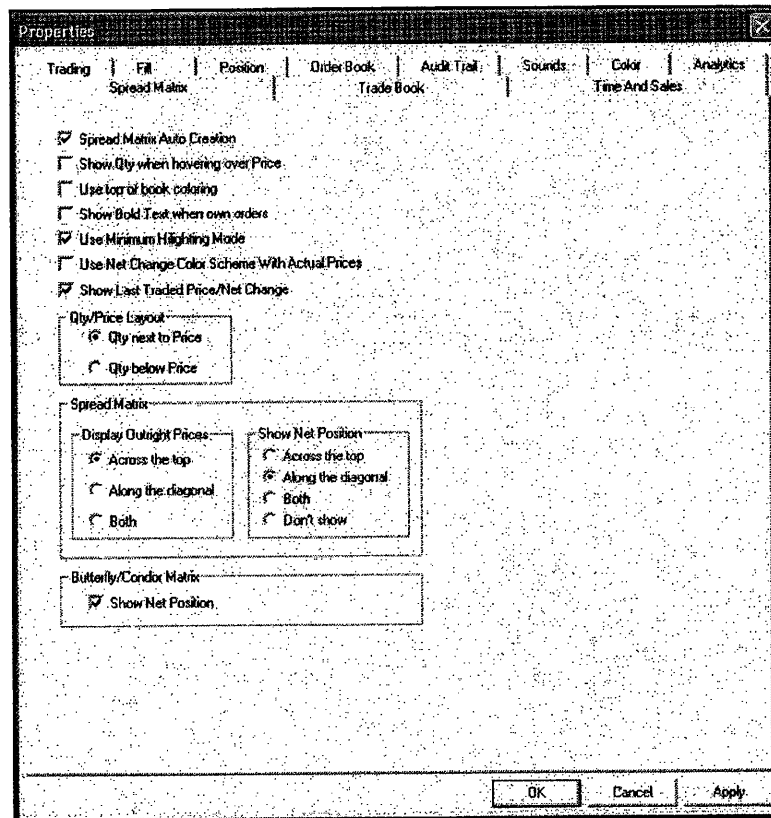
- **Hide Header Rows:** When you enable this option, the Header rows displaying **Bid Prc/ Ask Prc** and **Bid Qty/ Ask Qty** are hidden.
- **Display Prices** option: You have the ability to display Spread Matrix prices as **Net Change** (versus actual prices). Select one or more of the following Net Change **Display Price** options:
 - Show Top Outrights as Net Change
 - Show Bottom Outrights as Net Change
 - Show Spread Prices as Net Change
 - Show Outright Last Traded Price as Net Change

When you choose these display price options, a new default color scheme is used. The new color scheme displays the following:

- Negative prices display pink
- Positive prices display light green
- Prices with no change display white

Properties: Spread Matrix Tab

New features and functionality in the **Properties** dialog box **Spread Matrix** tab.



These new properties include:

- **Use Minimum Highlighting Mode.** The behavior of the Spread Matrix depends on the following market characteristics:
 - Spread Matrix only highlights when both the quantity and price change.
 - Highlighting of the bid or ask depends on whether the Last Traded Price is on the bid or ask.
 - If the last traded price was not on the bid or ask, the Spread Matrix does not highlight.
 - This property is **ON** by default.

- **Use Net Change Color Scheme with Actual Prices:** When you enable this option, **Net Change Color Scheme** colors are used when prices display in the standard format (actual prices). The color scheme follows:
 - Negative prices display pink
 - Positive prices display light green
 - Prices with no change display white

Note: Customize these net change colors in the Properties **Color** tab.

- **Show Last Traded Price/Net Change:** A row designated by an [L] displays at the top of your Spread Matrix. This property is **ON** by default.

Note: If you display Spread Matrix prices in the standard format using actual prices, this row displays **Last Traded Price**.

Or:

If you display Spread Matrix prices as **Net Change** (using the context menu options), this row displays prices in net change.

- You can **Show Net Position** in the Spread Matrix. Choose from one of the following display choices:
 - **Across the top:** Displays a row designated by a [P] across the top.
 - **Along diagonal:** Default. Displays a cell at the bottom of each contract.
 - **Both:** Displays both the [P] row and bottom cell.
 - **Don't Show:** Does not display net position.

Butterfly Condor Matrix

Last Price	Net Price	Contract	Outright		Calendar		Butterfly					
			Ask Price	Ask Qty	Bid Price	Bid Qty	Ask Price	Ask Qty	Bid Price	Bid Qty		
3552.25		Jun 04	3552.00	105	3552.00	30	3552.00	30	3552.00	30	3552.00	30
3550.0		Sep 04	3550.00	105	3550.00	30	3550.00	30	3550.00	30	3550.00	30
3759.5		Dec 04	3759.00	105	3759.00	30	3759.00	30	3759.00	30	3759.00	30
3718.5		Mar 05	3718.00	105	3718.00	30	3718.00	30	3718.00	30	3718.00	30
3872.5		Jun 05	3872.00	105	3872.00	30	3872.00	30	3872.00	30	3872.00	30
3830.0		Sep 05	3830.00	105	3830.00	30	3830.00	30	3830.00	30	3830.00	30
3825.0		Dec 05	3825.00	105	3825.00	30	3825.00	30	3825.00	30	3825.00	30
3802.0		Mar 06	3802.00	105	3802.00	30	3802.00	30	3802.00	30	3802.00	30
3818.5		Jun 06	3818.00	105	3818.00	30	3818.00	30	3818.00	30	3818.00	30

Enhancements to the **Butterfly Condor Matrix** allow you to customize the Butterfly Condor Matrix and easily identify trade data. These features include:

- New context menu option
- New property settings

Context Menu

The context menu includes a **Display Prices** option. You now have the ability to display Butterfly Condor Matrix prices as **Net Change** (versus actual prices).

Select one or more net change **Display Price** options:

- Show Outrights as Net Change
- Show Spread Prices as Net Change
- Show Outright Last Traded Price as Net Change

When you choose these display price options, a new default color scheme is used. The new color scheme displays the following:

- Negative prices display pink
- Positive prices display light green
- Prices with no change display white

Properties: Spread Matrix Tab

The properties found in the **Properties** dialog box **Spread Matrix** tab that impact the Butterfly Condor Matrix include:

- **Use Minimum Highlighting Mode.** The behavior of the Butterfly Condor Matrix depends on the following market characteristics:
 - Butterfly Condor Matrix only highlights when both the quantity and price change.
 - Highlighting of the bid or ask depends on whether the Last Traded Price is on the bid or ask.
 - If the last traded price was not on the bid or ask, the Butterfly Condor Matrix does not highlight.
 - This property is ON by default.

- **Use Net Change Color Scheme with Actual Prices:** When you enable this option, **Net Change Color Scheme** colors are used when prices display in the standard format. The color scheme follows:
 - Negative prices display pink
 - Positive prices display light green
 - Prices with no change display white

Note: Customize these net change colors in the Properties **Color** tab.

- **Show Last Traded Price/Net Change:** A **Last Prc** column displays in your Butterfly Condor Matrix. This property is ON by default.

Note: If you display Butterfly Condor Matrix prices in the standard format using actual prices, this row displays **Last Traded Price**.

Or:

If you display Butterfly Condor Matrix prices as **Net Change** (using the context menu options), this row displays prices in net change.

- Display **Net Position** in the Butterfly Condor Matrix using the Properties **Spread Matrix** tab. A **Net Pos** column displays in the Butterfly Condor Matrix. This property is ON by default.

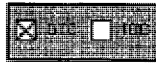
MD Trader™

MD Trader™ contains new features that include:

- Ability to rename MD Trader™ window.

Note: When you rename your MD Trader window, you may only use letters, numbers, and the underscore symbol. The dialog box does not allow you to use special characters or the space bar.

- Allow you to continually send GTC orders using the GTC checkbox. This checkbox resembles the IOC checkbox. When you enable the GTC checkbox, all your orders enter the market as GTC orders.



- Ability to globally re-center all MD Trader™ windows using the **Participate in Global Recentering** property. When you recenter one MD Trader window by clicking the center mouse button, all MD Trader windows automatically recenter.

Note: The property for this setting defaults to ON. New and existing workspaces are automatically affected by the property.

If you manually disable this property for a particular window, that window does not recenter when your other MD Trader windows recenter and will only recenter when you manually recenter it.

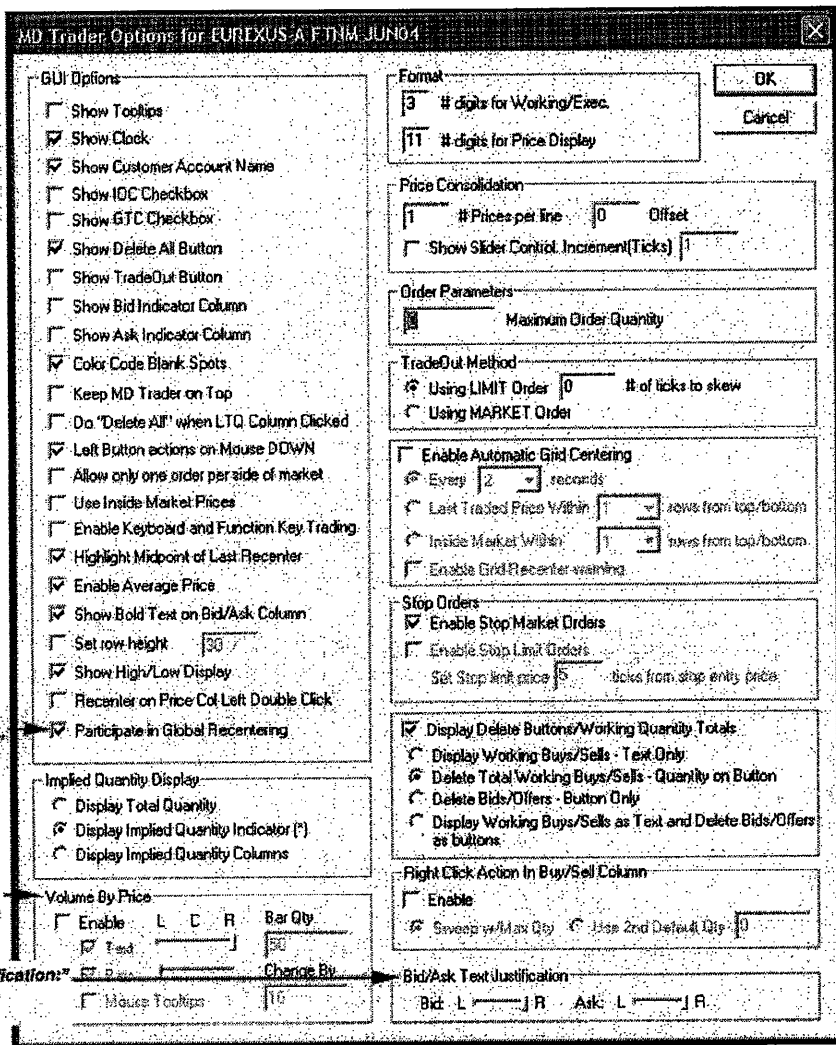
The following MD Trader™ property setting defaults have changed:

- The **Enable Drag/Drop of Working Orders** property is now a standard feature for MD Trader windows. Therefore, the property has been eliminated. Using a right-click, you drag and drop working orders on either side of the market. Doing so pulls the existing order from the market and replaces it with a new order.

Note: This change impacts existing workspaces.

- **Volume by Price** now defaults to OFF.
- **Bid-Ask Text Justification:** Ask text justification defaults to RIGHT ®.

IMPORTANT: The "Enable Drag/Drop of Working Orders" property has been REMOVED. This option is now a standard feature with MD Trader.



"Participate in Global Recentering" defaults to ON

"Volume By Price" now defaults to OFF

"Bid/Ask Text Justification:" Ask Text Justifies to RIGHT (R)

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About This Manual

Introduction to X_TRADER® 6.11 User Manual


This X_TRADER documentation contains both general and specific information about the application. It also includes procedures designed to aid you in learning how to use and interact with the application. This is not intended as a tutorial to every function and option available in X_TRADER, nor does it substitute for the training you receive from your Trading Technologies representatives.

Note: TT™ recommends that you practice trading with TT™ products in a simulated environment before actually performing live trades.

Conventions

This guide uses a set of terms, symbols, and typographic conventions to categorize specific information. Familiarity with these conventions will help you use this guide more effectively.

The following icon is used in this guide:

: A procedure that you should follow to complete a task.

This guide uses the following text conventions:

Convention	Use
ALL CAPITALS	Indicates operating system commands, and acronyms.
Courier	Indicates examples and anything that you must type exactly as it appears. For example, if you are asked to type <code>show version</code> , you would type all the characters shown in Courier exactly as they are printed.
Bold	Indicates menu items, command buttons, folder/directory names, file names, window names, dialog box names and field names. Procedures contain bolded items as well.
<i>Italic</i>	Indicates variables, including variable text. Variable text is used when dialog boxes or their components are not labeled. Variable text is also used for labels that change dynamically based on their current context. The wording of variable text does not exactly match what you see on your screen.

Keyboard Formats

All key names are shown using small capital letters. For example, the Control key is shown as CTRL. The UP ARROW, DOWN ARROW, LEFT ARROW, and RIGHT ARROW KEYS are collectively referred to as the arrow keys.

Key combinations and key sequences appear in the following formats:

Format	Meaning
Key1+Key2	A plus sign (+) between key names means to press and hold down the first key, while pressing the second key. For example, "Press ALT+TAB" means to hold down the ALT key while pressing the TAB key.
Key1, Key 2	A comma between key names means to press and release the keys one after another. For example, "Press ALT, F, O" means to press and release the ALT key, press and release the F key, and then press and release the O key.

Related Documentation

This guide is part of comprehensive Trading Technologies® documentation and online Help systems that include:

- Guardian™ Help
- X_RISK® Plus™ Help and User's Guide
- X_TRADER® Help

X_TRADER® Trading System

Trading Technologies®' X_TRADER® Trading System gives you and your customers the best technological edge in the business. X_TRADER® is the fastest, most adaptable front-end trading screen for stock, futures, and options trading. Combining universal exchange access, high performance, and full customization, X_TRADER®, with its sophisticated trading tools, enhances your presence in all the world's open-access electronic markets.

X_TRADER® is designed to meet the demands of institutional brokers and professional traders globally. It facilitates easy order entry, order routing, and position management. X_TRADER®'s customizable windows allow you to execute and track the complete life cycle of a trade:

- Flexible market window for easy order entry and depth of market
- Extensive order book displaying working orders and editing functions
- Real-time position management window including fill details and real time P&L
- Comprehensive audit trail detailing transactions over a ten-day period

X_TRADER® enables its users to execute trades fast. Speed combined with flexibility gives X_TRADER® users a distinct advantage in today's fiercely competitive global market.

X_TRADER® Pro is an add-on to the standard X_TRADER® software package. This add-on automatically installs with X_TRADER®, but can only be activated by the purchase of an X_TRADER® Pro license. X_TRADER® Pro consists of the **Autotrader™** and **Autospreader™** tools.

Global Client Support Center

Trading Technologies' Global Client Support Center (CSC) has offices in both England (London) and the US (Chicago, Illinois). Support personnel can be dispatched to client sites from all of our offices worldwide. The CSC offers assistance over the phone and via remote dial-in equipment.

Calls received by the USA center are automatically forwarded to London between the hours of 11PM and 6AM CST, Sunday through Friday.

Telephone Numbers:

877.424.8844 (This number can be used 24 hours.)

+1.312.476.1002 (USA)

+44.20.7397.1500 (Europe)

Fax Numbers:

+1 312.312-476-1001 (USA)

+44.20.7600.5050 (Europe)

Global E-mail Support: support@tradingtechnologies.com

Automated Phone Menu

To provide the fastest service, it is important to select the correct option for the particular issue to be addressed by the CSC. This menu option determines the specific CSC staff member to which the call is routed. Callers selecting the incorrect option are informed of the proper option and transferred back to the menu to route their call appropriately.

Below you find the new phone system options, their description and examples of issues to be addressed with the option. The option to be requested can be connected immediately after hearing the mandatory “Calls may be recorded” message.

Upon calling the main line, you now hear the prompts listed below.

- **Greeting:** TT Support, calls may be recorded for quality assurance purposes.
- **Option 1:** For front end software assistance, push 1.
- **Option 2:** For server software assistance, push 2.

During periods of high call volume, callers may receive an information notification message or a “no lines open” message.

- **Information Notification:** Any time there is a problem, which affects multiple customers; the CSC places a message on this line explaining the current situation. It plays prior to the above options.
- **No lines open:** “Thank you for calling, all agents are busy, please stay on the line for the first available agent.” (Repeats every 15 seconds).

Examples

Select Option 1 (front end software assistance) for issues relating to X_TRADER® - including Autotrader™ and Autospreader™, X_Risk™, and Guardian.

Select Option 2 (server software assistance) for issues relating to TT Gateways – including TTSim/Trainer, Wan Routers, Remote Host Servers and TTM or Tibco

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Chapter 1

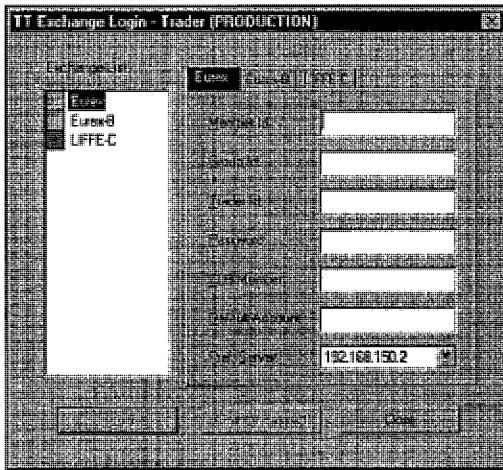
Getting Started

This section lists the minimum number of steps necessary to begin using X_TRADER®. In addition, your particular trading environment (e.g., back office requirements or quoting) may require that you set up additional parameters. Advanced features and functionality are described in their respective sections, while advanced customization is explained in the topics listed under **Common Administrative Tasks**.

To begin working with X_TRADER®:

- Log in to X_TRADER.
- Create a customer profile.
- Pick a product from the **Market Explorer** to populate the **Market Grid**.
- Send an order to market.
- Track messages using the **Audit Trail**.
- Track orders using the **Order Book**.
- Track fills using the **Fill** window.
- Save your workspace.

Logging into X_TRADER®

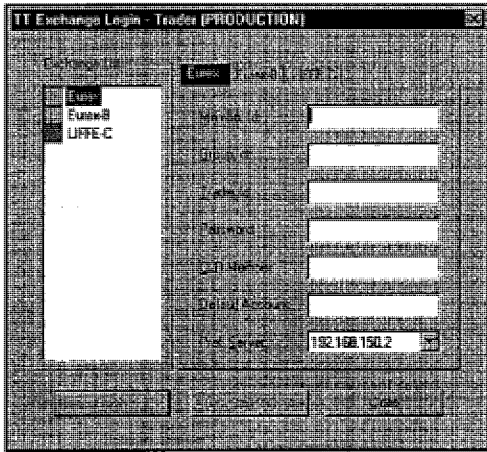


To begin trading you must first log into X_TRADER®.

▶ To log into X_TRADER®:

1. On your Windows desktop, double click the X_TRADER icon.
2. At the **TT™ Exchange Login** window, double-click the **Exchange** name from the **Exchange List** or select the appropriate exchange tab (for example, LIFFE).
3. Enter the login data provided by your X_TRADER® Administrator. Login data includes the **Member ID**, **Group ID** (if applicable), and **Trader ID**. Your login data may also include your clearing member and default account. The preferred server is usually automatically chosen based on availability. After your first log in all data excluding the password is retained.
4. Memorize or keep a record of your login data. This data is not retained after an X_TRADER® software upgrade.
5. Click the **Login** button. If your password is authenticated, a check mark appears in the box on the left of the exchange name.
6. Repeat Steps 3 and 4 for each exchange/marketplace on which you want to trade.
7. Click the **Close** button.
8. After a short delay, while your workstation establishes a connection to the server and loads any undelivered fills, the X_TRADER® **Control Panel** becomes fully enabled. The gray icons now display in full color.




Logging into an Exchange



The first time you log in (or after your workstation is rebooted), you must enter your Member, Group, and Trader Ids, and Password. There are also areas available to enter the Clearing Member, Default Account, and Preferred Server. Your System Administrator will supply the Login data.

The **TT™ Exchange Login** dialog box has a “tab” for each exchange available in your environment. The **Exchange List** displays all available exchanges, as well as Guardian™ status.

The status lights can vary in each environment. Your System Administrator or your provider will inform you of what to expect in your environment.

- A **green**  box next to the exchange indicates that the services are all running.
- A **red**  box next to the exchange indicates that one or more services are not running (“down”).
- A **yellow**  box indicates that one or more services may be running but not active. This may be normal for your trading network.

Memorize or keep a record of your login data. The data is not retained after a X_TRADER® software upgrade.

► **To login into an exchange, use the following steps:**

1. Select the appropriate exchange tab or double-click the name from the **Exchange List**.
2. Enter the login data provided by your System Administrator.
3. Click the **Login** button. After your password has been authenticated, a check mark appears in the box next to the exchange name.
4. If you want to log in to another exchange, select the appropriate exchange tab and enter the login information.
5. Click the **Close** button to close the **TT™ Exchange Login** dialog box.

Change Password on the **Exchange Login** dialog box is not functional at this time.

When you are working with **X_TRADER®** you may want to open more than one exchange during a session.

► **To log into another exchange:**

1. Locate the system tray in the bottom right-hand corner of your desktop. Double-click the TT icon.
2. From the **Guardian** menu bar, open the **File** menu and click **Trader Login**. The **Exchange Login** dialog box opens.
3. Select the appropriate exchange tab, and enter your login data.
4. Click **Login**. After a successful login, a check mark (✓) displays in the exchange's status box.
5. Repeat the above steps for any additional exchanges.
6. Click **Close** to exit the dialog box.

► **To log into X_TRADER® with a different trader ID:**

Note: If you attempt to log in via the **Guardian Trader Login** option without closing **X_TRADER®**, the login appears successful and the **Guardian** window **Status** column changes to reflect the 'new' trader ID. However, all subsequent trades are still be attributed to the original trader's account.

To log in with a different **Trader ID**, you must close **X_TRADER®**. When you restart **X_TRADER**, you must enter the new **Trader ID** in the **Exchange Login** dialog box.

X_TRADER® Pro License

Autospreader™ and Autotrader™ are add-on tools only available with X_TRADER® Pro. Although both modules install during the regular X_TRADER® installation process, they require a separate X_TRADER® Pro license to function. These tools are not available for use unless you purchase this separate license. Contact a Trading Technologies representative for further details.

Once you obtain an X_TRADER® Pro license, you must activate the license in X_TRADER® to access the functionality. Once activated, Autospreader™ and Autotrader™ work as long as the license remains current and you continue to log into the host machine with the same user name. If you upgrade to a different version of X_TRADER®, you must re-activate the license.

If you currently do not have an X_TRADER® Pro license, you may still use X_TRADER®. Although the Autotrader™ and Autospreader™ features are not available to you without the license, all other features are activated.

If you receive a message that you do not have an X_TRADER® Pro license, close X_TRADER® and RESTART it. You can now use it in "norm" mode.

Note: Order Block does not require an X_TRADER® Pro license.

▶ To activate an X_TRADER® Pro license:

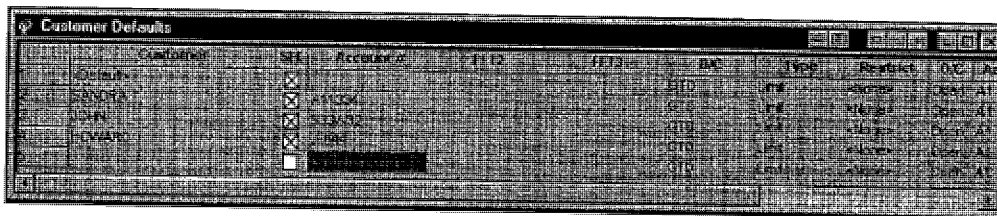
1. Have your TT™ representative enable the X_TRADER® Pro option in the **Settings** menu.
2. Open X_TRADER® from the desktop icon and log onto an exchange.
3. In the X_TRADER® **Control Panel**, on the **Settings** menu, click **X_TRADER® Pro**.

A prompt appears informing you that you must close X_TRADER® and restart it to access X_TRADER® Pro.

4. Quit X_TRADER®.
5. Open X_TRADER® from the desktop icon and log onto an exchange.

The X_TRADER® Pro license is now activated, and you can access Autotrader™ and/or Autospreader™.

Creating a Customer Profile



You define a **Customer Defaults** profile to establish all of the most common order variables by customer name.

► To define a Customer Defaults profile:

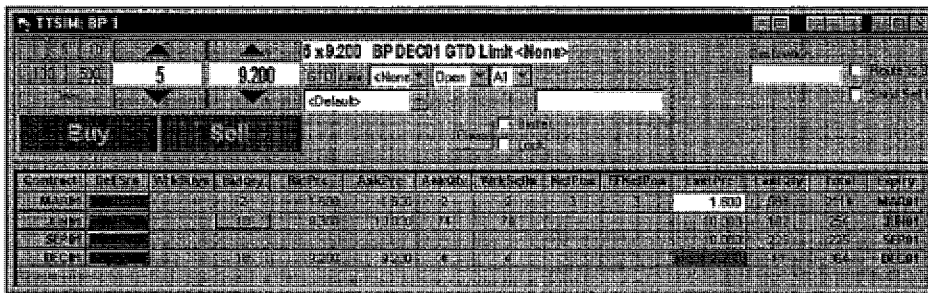
1. From the **Control Panel**, open the **Settings** menu and click **Customer Defaults**.
2. Enter the customer profile information in the **Customer Defaults dialog box**. The first profile has a customer name of **Default** which you cannot change.
3. When changing **Customer Default** data, make sure that you tab to the next field, or press **ENTER** to save your changes. If you enter your change without using the tab key to advance to the next field, or if you do not press **ENTER**, your changes will not be saved. This is a safeguard to ensure that no data is inadvertently changed and then saved in the customer profile.
4. Close the **Customer Defaults** window.
5. The new customer name will be added to the **Customer List** dialog box.

Introduction to the X_TRADER® Workspace

Your X_TRADER® workspace is a file that holds "snapsh"t of your X_TRADER® desktop. This file records all your open windows, the spatial relationships among those windows, and all customized settings from the last time that you saved the workspace. This includes all open and minimized windows, as well as color, font, column/row sizing, placement, selection, and many other formatting preferences.

You create one or more workspaces to fully customize X_TRADER® to fit your particular trading style and environmental requirements. For example, you may have a morning and afternoon workspace to reflect the opening and closing of different exchanges. You may also have a report printing workspace in order to avoid reformatting your windows to display needed data. Refer to the workspace topics in the Index for a further discussion of this feature.

Manually Entering a Market Order



New traders or those who are new to electronic trading may want to use the **Lock** safety feature until accustomed to using X_TRADER®. Every **Order Entry** pane and **Order Book** window has a **Lock** check box.

When enabled, this feature requires you to confirm the action you want to take before sending the order to market. For example, if there is a check in the **Lock** check box, when you chose the **Sell** button, the button title changes to **Apply Sell**. You must click the **Apply Sell** button to confirm your sell order, and only then will it be sent to market.

If the Use Default Qty feature is enabled, clicking in the BidQty or AskQty cells does not populate both the Order Entry Quantity and Price fields. The BidQty or AskQty cells populate with the default quantity.

► **To enter a manual order:**

1. From the **Market Grid**, in the appropriate strike/expiry row on the bid or ask side of the screen, click any cell. Clicking in the **BidPrc** or **AskPrc** (Price) cell feeds the **Order Entry** pane **Price** field. Clicking in the **BidQty** or **AskQty** cells feeds both the **Order Entry** **Quantity and Price** fields. Add or change the order information as necessary: for example, quantity, price, and order type information.
2. Click **Buy** or **Sell**.
3. If you have entered valid data, the order is sent to market. The **Audit Trail** window message displays a status of **OK** and an Action of **Add**.

Sending an Order to the Market

You can enter orders manually using a mouse or on the keyboard, or use the click trading feature through the **Market** window. The **Order Entry** pane is used to enter order information for contracts chosen in the **Market Grid**.

The topics discussed under **Order Entry** and **Market Grid** contain complete descriptions of the **Market** window functionality.

Order Messages in the Audit Trail Window

Time	ENCL	Status	Msg	Action	B/S	OK	CR	CQ	Exch	M/D	S	Stop
12:00:00		ACCEPT		Add	B				NYSE			
12:00:01		OK							NYSE			
12:00:02		OK							NYSE			
12:00:03		OK							NYSE			
12:00:04		OK							NYSE			
12:00:05		OK							NYSE			
12:00:06		OK							NYSE			
12:00:07		OK							NYSE			
12:00:08		OK							NYSE			
12:00:09		OK							NYSE			
12:00:10		OK							NYSE			
12:00:11		OK							NYSE			
12:00:12		OK							NYSE			
12:00:13		OK							NYSE			
12:00:14		OK							NYSE			
12:00:15		OK							NYSE			
12:00:16		OK							NYSE			
12:00:17		OK							NYSE			
12:00:18		OK							NYSE			
12:00:19		OK							NYSE			
12:00:20		OK							NYSE			
12:00:21		OK							NYSE			
12:00:22		OK							NYSE			
12:00:23		OK							NYSE			
12:00:24		OK							NYSE			
12:00:25		OK							NYSE			
12:00:26		OK							NYSE			
12:00:27		OK							NYSE			
12:00:28		OK							NYSE			
12:00:29		OK							NYSE			
12:00:30		OK							NYSE			
12:00:31		OK							NYSE			
12:00:32		OK							NYSE			
12:00:33		OK							NYSE			
12:00:34		OK							NYSE			
12:00:35		OK							NYSE			
12:00:36		OK							NYSE			
12:00:37		OK							NYSE			
12:00:38		OK							NYSE			
12:00:39		OK							NYSE			
12:00:40		OK							NYSE			
12:00:41		OK							NYSE			
12:00:42		OK							NYSE			
12:00:43		OK							NYSE			
12:00:44		OK							NYSE			
12:00:45		OK							NYSE			
12:00:46		OK							NYSE			
12:00:47		OK							NYSE			
12:00:48		OK							NYSE			
12:00:49		OK							NYSE			
12:00:50		OK							NYSE			
12:00:51		OK							NYSE			
12:00:52		OK							NYSE			
12:00:53		OK							NYSE			
12:00:54		OK							NYSE			
12:00:55		OK							NYSE			
12:00:56		OK							NYSE			
12:00:57		OK							NYSE			
12:00:58		OK							NYSE			
12:00:59		OK							NYSE			
12:01:00		OK							NYSE			

The **Audit Trail** window displays messages relating to X_TRADER® actions and exchange announcements.

The **Audit Trail** displays the following three lines of messages for successful buy (blue background) or sell (red background) orders:

- The first message details the order information, including the time the order was sent from the workstation (Time column) to the TT Gateway (i.e., server), an order Status of **ACCEPT**, and an Action of **Add**.
- The second message immediately follows the first and indicates acceptance by the TT Gateway. The order has been routed to the exchange trading host.
- The third message displays sometime after the previous two. This message is the confirmation received from the exchange's trading host. The information detailed includes the time the confirmation was received by the workstation (Time), an order Status (**OK**), and the time the confirmation was sent by the exchange's host machine (Exch Time).

When the order is filled, the fill notification message displays a Status of **OK** and an Action of **Fill**, and provides detailed information about the order.

Refer to the **Audit Trail** topics for a further discussion of this feature.

Exiting X_TRADER®

Close X_TRADER® at the end of each trading session.

▶ To exit X_TRADER® use one of the following methods:

From the **Control Panel**, open the **File** menu and click **Exit**.

Or:

In the top left-hand corner of the **Control Panel**, double-click the X_TRADER® icon.

Or:

In the top right-hand corner of the **Control Panel**, click the **Windows Exit** button.

Automatic Shutdown of X_TRADER®

X_TRADER® automatically closes after eight hours of inactivity when there are no orders in the **Order Book** and no new fills or price updates have been received.

X_TRADER® displays a message informing you that it is closing. If you do not take any action, or if you click **OK**, the X_TRADER® application closes.

At this time this feature is not configurable.

Chapter 2

Common Administrative Tasks

Populating Windows with Contracts

► To populate Various X_TRADER® Windows:

1. Open your **Market Explorer**, select the products you want to trade, and open a **Market** window with these products.

Note: You may also drag and drop contracts directly from **Market Explorer**.

2. Open the window that you want to populate with contracts (e.g., **Autotrader™**, **Autospreader™**, **Market Grid**, etc.) by:

Clicking the appropriate button in the **Control Panel**.

Or:

Using the appropriate menu item in the **Control Panel**.

3. In the **Market** window, click on a contract you want to transfer to the other X_TRADER® window.
4. If you want to transfer more than one contract, press and hold down the **CONTROL** key. Click all of the contracts you want to transfer to the window and then release the **CONTROL** key.
5. Click and hold down the mouse button on a selected (i.e., highlighted) contract.
6. Drag the contract(s) to the appropriate window that you want to populate, and release the mouse button.

The contracts now populate the appropriate window.

Filtering Overview

Filters are used to control the amount of data displayed in the various windows used in X_TRADER®. Filters are available for the following windows:

- **Fill** window
- **Audit Trail** window
- **Order Book** window
- **Trade Book** window

You can set and clear filters at any time and, once the workspace is saved, the filters remain for that particular workspace. Filters can be set in several ways and you can use any combination of them to customize your workspace. Filters can be set using two methods:

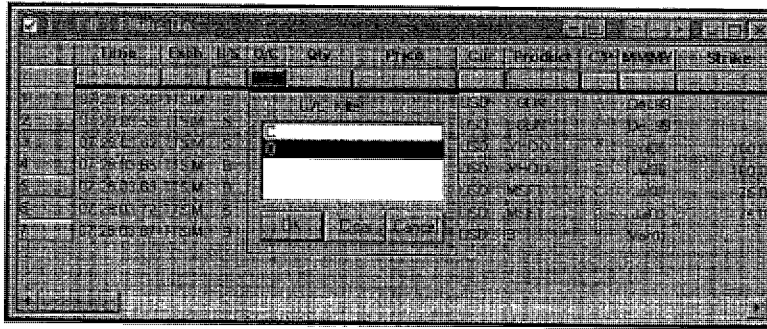
- **Individually** (or in multiple combinations) on one or more columns in the **Fill**, **Trade Book** and **Audit Trail** windows. (The **Order Book** does not support filters using multiple variables.) These types of filters affect only the individual window in which you set them, and must be set for every individual window. Individual filters are saved as part of the workspace.
- **Globally**, using the **Auto Filter** option in the individual window's context menu. This filters the **Order Book**, **Fill**, **Trade Book**, and **Audit Trail** windows by a particular customer (trader). Global filters are saved as part of the workspace.

Use filters to narrow the range of orders that display. For example, opting to filter on a product (**FGBL**) and action (**Sell**) eliminates extraneous orders from the grid. You can set and clear filters at any time.

Notes:

- If you use **Fill** window filters, you do not receive **Fast Fills** from supporting Exchanges. A message reminding you that **Fast Fills** are disabled automatically displays in the **Fast Fills** pane. In addition, the **Fill** window filters carry over to the **Position** pane. The position information includes only the data displayed in the **Fill** pane. To start fresh, simply remove the filter settings. This returns every fill record to the grid.
- A **Filters On** notice appears in the **Title** bar of the window when a filter has been applied to one or more columns. This visually notifies you in case the filtering column has been applied. If you hide a column using the context menu's **Hide Column** selection, this notice changes to **Filters On (Hidden)**. This informs you that the grid still has one or more individual column filters applied to it.
- If you select **<EMPTY>** in the column filter in the **Audit Trail**, the filter applies to all cells that are empty. This is unique behavior to the **Audit Trail** window.
- The **Order Book** does not support filters using multiple variables.

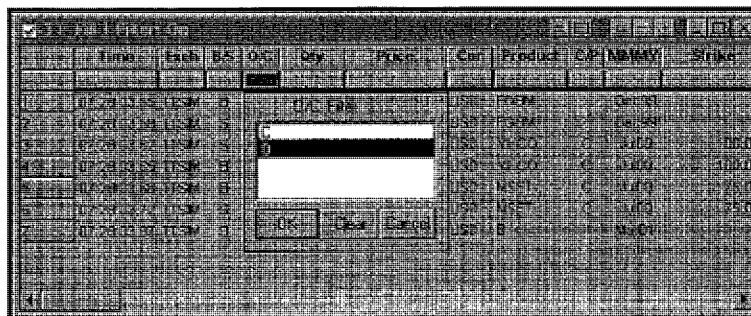
Setting a Column Filter



▶ To set a column filter:

1. Open the box immediately below any column heading. A list of all currently referenced variables for the selected column displays.
2. Select one or more of the variables to set the filter.
3. Click **OK** to activate the filter.
4. When you set a filter, the box below the column heading turns red and displays the filter you selected. If you selected multiple filter variables, a row of asterisks displays.

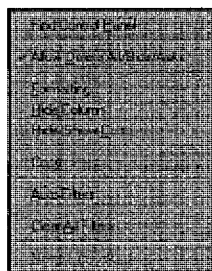
Clearing a Column Filter



► To clear a column filter:

1. Left-click the red column box. A list of all currently referenced variables for the selected column displays.
2. Select one or more of the variables to remove the filters.
3. Click **Clear** and **OK** to remove the filter. The filters box changes from red to gray.

Clearing All Filters



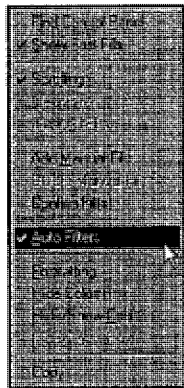
Note: Use of the **Clear All Filters** context options clears only the filters from the particular window in which you enable it. In other words, if you enable **AutoFilters** (or individual column filters) in other windows, clearing all filters from the one window only removes that window's filters. Any other filters, which have been enabled, remain in effect.

► To clear all filters:

1. Right-click any grid cell to access the context menu.
2. Click **Clear All Filters**.

Setting Auto Filters in X_TRADER®

The following screen is taken from the **Fill Window**.



You can set **Auto Filters** in a number of X_TRADER® windows:

- **Order Book** window
- **Fill** window
- **Trade Book** window
- **Audit Trail** window

The **Auto Filters** option sets filters for a particular customer's (trader) account number. If there are numerous working orders for an account shared by a number of traders, it can be difficult to sort and review the orders for a particular trader. Filtering by customer name, as it appears in the **Customer List** window, displays all orders for that particular customer.

► To set the Auto Filter by customer:

1. Right-click in the window grid to access the context menu.
2. Click **Auto Filters**. A check mark indicates that the filter is applied for this customer's account number.
3. From the **Control Panel**, open the Window menu and click **Customer List**.
4. Select a customer from the list.

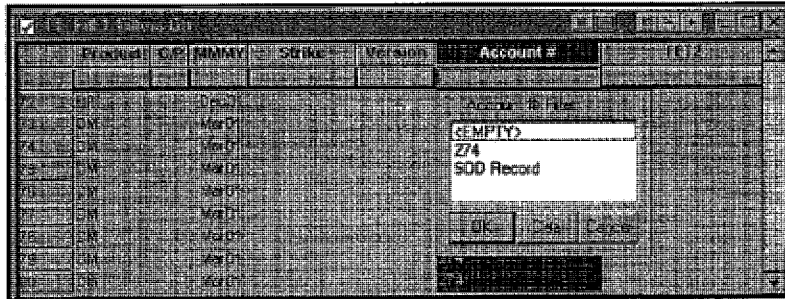
This provides the filter definition. The top heading on the list, **<Default>** is the equivalent to no filter. The **Title** bar now contains a **Filters On** message.

► To remove the customer Auto Filter, use one of these options:

Note: Use of the **Clear All Filters** context option clears only the filters from the particular window in which you enable it. In other words, if you enable **Auto Filters** (or individual column filters) in other windows, clearing all filters from the window only removes that window's filters. Any other filters that have been enabled remain in effect.

1. Click on the red push button directly below the **Account #** column heading in the window pane.

The following screen is taken from the **Fill** window:

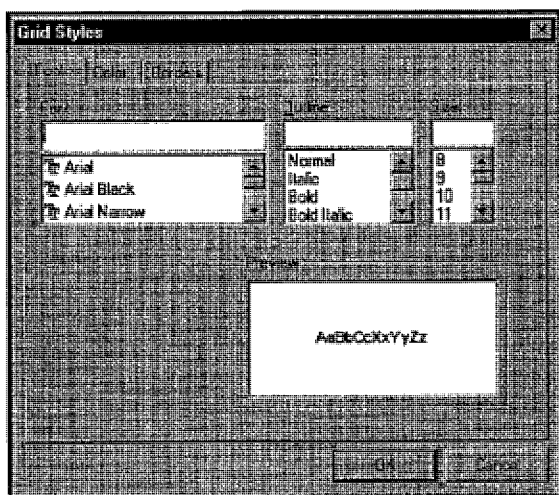


2. Click **<EMPTY>** to remove the **Auto Filter** by customer account. (For any window except the **Audit Trail**.)

Or:

To display the context menu, right-click within the grid pane and click **Autofilters**. The filter is automatically deleted and the checkmark no longer appears.

Font Control Overview



A variety of formatting options are available within X_TRADER®, including a typeface option. You can change the font, outline, and size of the typeface displayed in your windows. You make these changes to your workspace by accessing the **Formatting** option on the context menu of the window in which you want to have the changes appear.

Changing the Font (Text) Style in Workspace

You can change the font, outline, and size of the typeface displayed in your windows.

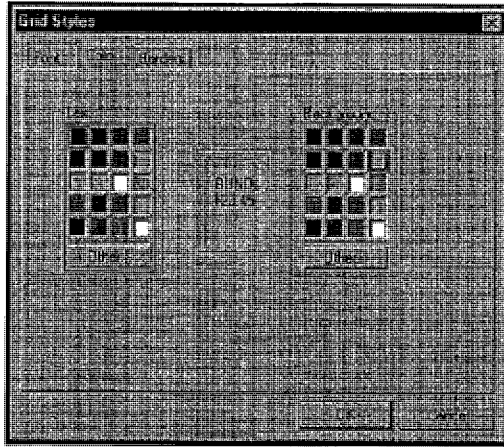
► To change the typeface characteristics:

1. Select the area you want to change or click the top left-hand column heading to select the entire grid.
2. Right-click in the window to access the context menu.

Note: If you are using **Click Trading**, do not click in the **Bid/Ask Price** columns.

3. Click **Formatting**. The **Grid Styles** dialog box appears.
4. Select the **Font** tab and make your changes. The results display in the **Preview** box.
5. Click **OK**. The new font options appear in your workspace.
6. To retain these font style changes, save your workspace.

Changing Grid Text and Background Colors



You can change the color of text and window backgrounds. You can also change the color of rows, columns, or individual cells.

Note: In the **Market Grid** window, when you have enabled **Use Last Traded Price Background Coloring**, the **Last Prc** column colors cannot be changed.

► To change grid text and background colors:

Note: Color-coding for buy/sell is enabled by default in the **Fill, Order Book, and Audit Trail** windows. As a result, selecting colors using the **Formatting** option is disabled. To re-enable the context menu's **Formatting** option, disable the **Color Code Buy/Sell** option for the appropriate window in the **Properties** dialog box.

1. If you want to apply the same text and background colors to the entire grid for all windows, select the window area you want to change, or click the top left-hand column heading to select the entire grid.
2. Right-click in the window to access the context menu

Note: If you are using **Click Trading**, do not click in the **Bid/Ask Price** columns

3. Click **Formatting**.
4. Select the **Color** tab.
5. Text colors display in the left palette; while background colors display in the right. Click a color in the displayed palette or click **Other** to see additional colors. You can also create custom colors. The color preview window displays the specified colors.
6. Click **OK** to exit.
7. To retain these changes, save your workspace.

Grid Formatting Overview

X_TRADER® includes a number of useful methods for customizing its look and feel. You can customize your windows and save them in a workspace so that each time you launch X_TRADER®, you open the workspace and avoid having to customize each individual window's appearance.

You may customize windows by:

- Changing column and row width
- Hiding and showing columns and
- Moving columns and
- Filtering for a specific Customer Account
- Changing font type, style, and size
- Changing the color of text and/or grid backgrounds
- Changing the width, appearance, and type of grid borders
- Resizing a Window Font Using the Frame Buttons

To customize X_TRADER® features including such items as default visible grid columns, click trading, quoting, and cross trading, use the **Properties** dialog box. Click the tab associated with the window you are customizing.

Setting the Default Column Selection

You can use the **Properties** dialog box to customize the default columns that display with a new **Market Grid**, **Fill** pane, **Position** pane, **Order Book**, **Trade Book**, or **Audit Trail** windows.

► **To set the default column selection using the Properties dialog box:**

1. From the **Control Panel**, open the **Settings** menu and click **Properties**.
2. Select the appropriate tab: (**Trading**, **Market Grid**, **Fill**, **Position**, **Order Book**, or **Audit Trail**, etc.) depending on the window and columns you want to set.
3. Click the **Default Visible Columns** button.
4. All checked columns are visible when you open a new window. Left-click in the boxes to select or de-select the column
5. Click **OK** to exit and save.

Moving Rows or Columns

You can customize the order in which the columns and rows are displayed in some windows.

► **To reorganize your display by using the drag-and-drop technique:**

1. Select the entire column or row by left-clicking the column or row heading, or select multiple columns or rows while pressing the **CONTROL** key.
2. Click and hold the left mouse button on the header and drag the row/column to its new position. A red line appears to indicate where the column or row will be dropped.
3. Release the left mouse button to complete the move.
4. To retain your new column settings, save your workspace.

Hiding Rows or Columns

▶ To hide a row or column - Procedure 1:

1. Select the entire column or row by left clicking the column or row heading.
2. Right-click a grid cell to access the context menu.
3. Click **Hide Column** or **Hide Row(s)**.
4. To retain these settings, save your workspace.

▶ To hide a row or column - Procedure 2:

1. If you want to customize a single window, select the column(s) or row(s).
2. Move the cursor over one border until the double-headed arrow displays.
3. With the arrow still displayed, hold the left mouse button down while contracting the column/row until it is no longer visible. This automatically de-selects the columns/rows from the **Hide/Show Columns/Rows** options.
4. To retain these settings, save your workspace.

Restoring Hidden Rows or Columns

▶ To restore a hidden row or column:

1. To restore hidden rows, right-click any grid cell in a window to access the window's context menu.
2. Click **Hide/Show Row(s)** or **Hide/Show Cols**, and select the columns to display.

Or:

Columns or rows hidden by "sliding" the borders closed cannot be restored in the same manner. You must select the row or columns from the **Hide/Show Row(s) or Cols** option.

Changing the Width or Height of one Column or Row

► To change the width/height of one column or row:

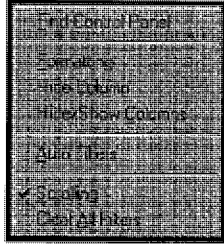
1. Select the entire column or row by left clicking the column or row heading.
2. Move the cursor over one of the column or row borders until a double-headed arrow displays.
3. With the double-headed arrow displayed, hold the left mouse button down and move the mouse to expand or contract the width/height.
4. Release the left mouse button when you are satisfied with the width/height of the column or row.

Changing the Width or Height of Multiple Columns or Rows

► To change the width/height of multiple columns or rows:

1. Hold the left mouse button down while moving the mouse over the heading of the columns or rows you want to change.
2. Release the left mouse button.
3. Move the cursor over one of the column or row borders until a double-headed arrow displays.
4. With the double-headed arrow displayed, hold the left mouse button down while moving the mouse and changing the width/height.
5. Release the left mouse button when you are satisfied with the width/height. All selected columns/rows have changed.

Using the Context Menu to Show/Hide Columns or Rows



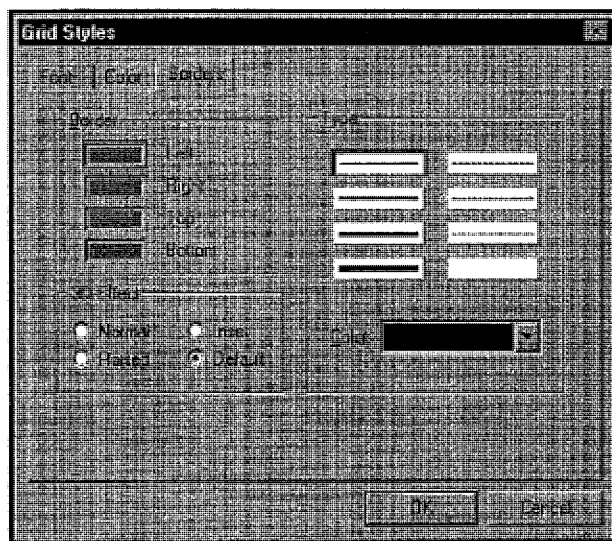
► To select which columns and rows display from the Context menu:

1. Right-click in the window you want to customize to access the context menu.

Note: If Click Trading is enabled, do not click in the Bid/Ask price columns.

2. Click **Hide/Show Row(s)** or **Hide/Show Cols**.
3. Left-click in the boxes to select or de-select the column/row, and click **OK** to exit.
4. To retain the settings for this window, save your workspace.

Changing Border Styles



► To change the grid border type, select a 3D Effect, or choose a border color:

1. Select the area you want to change or click the top left-hand column heading to select the entire grid.
2. Right-click in the window to access the context menu.

Note: If you are using **Click Trading**, do not click in the **Bid/Ask Price** columns.

3. Click **Formatting**.
4. Select the **Borders** tab, make your changes, and click **OK**.
5. Click **OK** to exit.
6. To retain the changes, save your workspace.

Workspace Overview

Your X_TRADER® workspace is a file that holds a "snapshot" of your X_TRADER® Desktop. This file records all your open windows, the spatial relationships among those windows, and all customized settings from the time that you last saved the workspace. This includes all open and minimized windows, as well as color, font, column/row sizing, placement, and selection.

Create one or more workspaces to fully customize X_TRADER® to fit your trading style and environmental requirements.

Multiple Workspace Suggestions:

- Use multiple workspaces to reflect your changing trading environment.
- You can create separate workspaces for different markets.
- If you print reports, you may want to create a workspace that has a preformatted Fill window that prints only specific information.
- You can create as many workspaces as you want. Each one is saved on your workstation's hard drive. These files are retained even if your X_TRADER® software is upgraded. Workspace files are saved in a sub directory of **<installation drive>:\TT\X_TRADER\TTConfig**, and are named the same as your workspace.

If you name a window in a workspace and put an invalid DOS filename character into the name, you will not be able to save that window as part of your workspace. Invalid characters such as "%, *, |, ?," etc. cannot be saved because the actual name of the workspace is used as the file name after the workspace is saved. If you get the following message: "Workspace contains an invalid path" when saving a workspace, look at the window titles (or names). At least one of them will have invalid characters. Simply rename the window without the invalid characters and save the workspace again.

Creating a Workspace

► To create a personalized workspace:

Note: Close **Market Depth** before saving the workspace. Leaving **Market Depth** open may render the feature temporarily inoperable when you reopen the workspace.

1. Before creating your first workspace, you can immediately set your default column preferences using **Properties** dialog box tabs. If you plan to set up multiple workspaces, pre-selecting your default columns saves you time.
2. To create your own workspace, decide which products and windows you want open on your Desktop. Your saved workspace also remembers the windows that you minimized. Customize your workspace—adjust such items as window sizing, displayed columns/rows, colors, sounds, and window placement.
3. To save the workspace under the name of your choice, use either the **Control Panel Save Workspace** button or the **File** menu **Save Workspace** option. You can re-open this workspace at any time in the form in which it was last saved. If you make any subsequent changes, save your workspace.

Saving a Workspace

▶ To save a new or altered workspace:

Note: If you name a window in a workspace and put an invalid DOS filename character into the name, you will not be able to save that window as part of your workspace. Invalid characters such as "%, *, |, ?," etc. cannot be saved because the actual name of the workspace is used as the file name after the workspace is saved. If you get the following message: "Workspace contains an invalid path" when saving a workspace, look at the window titles (or names). At least one of them will have invalid characters. Simply rename the window without the invalid characters and save the workspace again.

On the **Control Panel**, click the **Save Workspace** button



If this is your first workspace, you will be asked to enter a workspace name. If you have already named your workspace, any changes are automatically saved under the same name. The workspace name is displayed in the **Control Panel Title** bar.

Note: Close **Market Depth** before saving the workspace. Leaving **Market Depth** open may render the feature temporarily inoperable when you reopen the workspace.

▶ To save your current workspace under a new name:

1. From the **Control Panel**, open the **File** menu and click **Save As**.
2. In the **Save As** dialog box, enter the new workspace name.
3. Click **OK**.

Opening an Existing Workspace

If any part of a workspace is corrupt, an error message informs you that not all windows could be opened. For example, this may happen if a **Market** window displays an expired contract. The unopened window is deleted from the workspace, and the message does not reappear. All valid (uncorrupted) windows are still saved under the existing workspace name.

Changing the NT windows display resolution affects the size of the workspace. If you increase the resolution, this results in more Desktop space because such items as window size and fonts appear smaller. If you decrease the resolution, the opposite is true. In this case, you can resize windows and adjust the font size by using the grid formatting options. However, depending on the resolution you selected, you may have to reverse the resolution change to properly display the workspace.

▶ **To open a previously saved workspace:**

Tip: Save any changes in the existing workspace before opening a new workspace or all changes will be lost.

1. From the **Control Panel**, click the **Open Workspace** button
2. Select a workspace's name from the list and click **OK**.

Deleting a Workspace

▶ **To delete an existing workspace:**

1. From the **Control Panel**, click the **Open Workspace** button.
2. In the **Open Workspace** dialog box, select the workspace you want to delete.
3. Click **Delete**. The workspace is deleted from the list.

Frame Command Bar



Many of the windows within the X_TRADER® application have a set of frame command and printing controls at the top of the window. These buttons permit you to control printing functions and sizing options using your mouse. The frame command buttons are located to the immediate left of the standard Windows **Close Window**, **Minimize**, and **Maximize** buttons.

► **To use the frame command buttons to resize the grid of a window:**

1. Make the grid active by left clicking in the grid.
2. Left click on the **Reset**, **Zoom Out** or **Zoom In** button.

Button Command	Action
Print Preview	Brings up the standard Print Preview dialog box. Here you can preview the information before printing it.
Print	Brings up the Print dialog box. Here you can select your printer and other options, as well as submitting the document to the print queue. All X_TRADER® windows do not contain Print or Print Preview buttons.
Reset	Resets the window view back to the original (default) size.
Zoom Out	Expands the contents of the active window, making less of the grid visible in the window.
Zoom In	Contracts the contents of the active window, making more of the grid visible in the window.

Resizing a Window Font Using the Frame Buttons



You can quickly resize the window font by using the **Reset**, **Zoom Out** and **Zoom In** frame buttons in the graphic above. Continual clicking on the selected **Zoom** button repeats the **Zoom** action. The **Reset** button sets the window back to its original (default) size.

Note: In certain instances, it is possible to also use the mouse wheel to perform a zoom function. See **Using the Mouse Wheel to Control the Zoom** feature to see the procedure for this.

Printing from X_TRADER®

All X_TRADER® windows do not contain **Print** or **Print Preview** buttons.

► To print data from any X_TRADER® window:

1. Click anywhere in the pane or window. For example, to print your fills, click in the top **Fills** pane of the **Fill** window.
2. Click the **Print** frame button.
3. The **Print** dialog box displays if you have printer services installed through Windows NT*. You can choose a printer, print range, and number of copies, or you can print to a file. Additional print settings are available by choosing the **Properties** button, located to the right of the **Printer Name** list. The additional print settings include such items as paper size, orientation, and reduction.
4. Click **OK**.

* Your System Administrator or network support department must have already installed a printer (usually a shared network printer) on your workstation.

Chapter 3

Audit Trail

Time	Exch	Status	Msg	Action	RS	OC	CP	Qty	Product	MMYY	Strike
08:40:47.670		OK		Trader credit limits have been updated by the administrator.							
08:44:04.501	TTSM	ERR		Product is not allowed							

Use the **Audit Trail** to track daily activity through messages received from X_TRADER®, the TT™ Gateways, and messages from the exchanges that the trader was logged on to during the session.

The **Audit Trail** displays the following information for the current day:

- **Order related messages:** Messages to and from the exchange including fills, add/change/delete orders, and inquiries. Messages related to all members of your Group ID (e.g., Login ID = AAAAABBB###, where BBB represents the Group ID) appear in the **Audit Trail**.
- **Exchange Announcements:** These announcements include busted trades and pre/post opening/closing product activity.
- **Gateway Alerts:** Information concerning the status of server/host processes.
- **Error messages:** Notification of an invalid action.

Audit Trail Message Types

The **Audit Trail** displays messages regarding **Changes, Errors, Fills, and Exchange Announcements**.

Changes include successful buy, sell, change, Cancel-Replace, or delete of orders:

- The **first line of messages** details the order information, including the time the order was sent from the workstation (Time column) to the TT™ Gateway (server), an order Status of ACCEPT, and an **Action** of Add, Change, or Delete.
- The **second line of messages** immediately follows the first and indicates acceptance by the TT™ Gateway. The order has been routed to the exchange host.
- The **third line of messages** displays sometime after the previous two. This message confirms receipt from the exchange. The information detailed includes the time the confirmation was received by the workstation (Time), an order **Status** (OK), and the time the confirmation was sent by the exchange's host machine (Exch Time).

Note: When you use **Cancel/Replace**, the confirmation from the exchange host reflects a new order number.

Error messages occur when the TT™ Gateway rejects a buy, sell, change, Cancel/Replace, or delete order:

- The **first line** details the order information, including a **Status** of ERR to indicate that the order was rejected by the TT™ Gateway and was not sent to the exchange host.
- The **second line** immediately follows the first and reflects a status of ERRS; a message (Msg) explains the error.


Fill messages display a one-line message. The message shows a **Status** of OK, an **Action** of Fill, and provides detailed information about the order.

Exchange Announcements: One-line messages display a status of **Alert, Info, or Warning** and reflect general information sent by the exchange host or the TT™ Gateway.


Audit Trail Exchange Announcements

The **Audit Trail** window displays all announcements released by the exchanges. These exchange-specific announcements include host activity, busted trades, and pre/post opening/closing product activity. Each announcement details the time issued (exchange time), time received (local time), exchange name, severity, and the announcement.

If speakers and audio drivers are installed on your workstation, X_TRADER® "beeps" when an announcement is added to the **Audit Trail**. You can associate any sound file with this event from the **Properties** dialog box **Sounds** tab.

 **Tip:** If you are using **Audit Trail** filters, open two **Audit Trail** windows to ensure receipt of all Exchange and Gateway announcements. Use one **Audit Trail** window to display order-related data with the desired filters. You should set the **Status** column filter for the second window to capture alerts and general information.

Audit Trail Column Descriptions

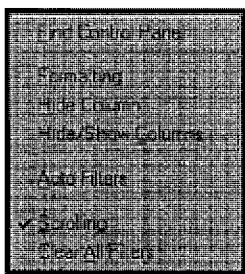
The **Audit Trail** displays information related to all order transactions sent to the exchange. You open the **Audit Trail** window from the **Control Panel** by clicking the **Audit Trail**  button, or by opening the **Window** menu and choosing **Audit Trail**.

An appropriate **Audit Trail** message results from all normal order functions performed on held orders: change, cancel, replace, delete, or submit. You can see held messages in the **Audit Trail** when an order is held, but in actuality, the order is deleted from the market and held only by the Gateway. If a submit fails for a held order, it remains in the hold state and the **Audit Trail** indicates that the submittal failed. The **Audit Trail** also gives you an explanation of why the order submit failed.

Column Heading	Description
Time	Time Message received at workstation
Exch	Exchange
Status	OK, ERR (error), INFO, Alert, Warn (Warning)
Msg	Message
Action	Add, Change, Delete, Fill, Hold, Submit
B/S	Buy/Sell
O/C	Open/Close a Position
C/P	Call/Put
Qty	Quantity
Product	Exchange Symbol for displayed product
MMYY	Month/Year Expiration
Strike	Exercise Price of Option
Limit	Limit Price
Stop Prc	Stop Trigger Price
Type	Limit/Market Order
TIF	Time in Force (for example, GTD, GTC)
Rstr (Restriction)	<None>, FOK, IOC, MOO, MV, Stop

Column Heading	Description
RstrQty	Restricted Quantity
Exec Qty	Executed Quantity
Work Qty	Working Quantity
Cxl Qty	Cancelled Quantity When Using Cancel/Replace
Account #	Back Office Account Number or Account Name
Member ID	Exchange Member ID Assigned by the Exchange or TTORD ID information
Group ID	Group ID Assigned by the Exchange Member Exchange or TTORD ID information
Trd ID	Trader ID Assigned by the Exchange Member Exchange or TTORD ID information
Acct	Agent, Market Maker, Principal, Give-up
Exch Time	Time Message Received/Sent by Exchange Trading Host
Exch Date	Date the Trading Host Received/Sent the Message
Time Sent	Time Sent from Workstation
Time Processed	Time Processed by the TT™ Gateway
P/A	Brokertec only. Designates whether the order was filled passively or aggressively. This notation allows for a correct P&L calculation.
Order No	Order Number Assigned by the Exchange
TT Order Key	A TT™-generated unique order number used to track orders in the Order Book during the order submission process.
IP	IP Address of the Workstation
FFT2	Free Form Text Field 2
FFT3	Free Form Text Field 3
Trans ID	Displays transaction ID for fills. Used to identify the order.

Audit Trail Context Menu



The **Audit Trail** context menu lists additional available features that are enabled by clicking on the menu item with a mouse. Other window context menus share most of these options. To access the context menu, right-click anywhere in the **Audit Trail** window.

Menu Listing	Function
Find Control Panel	Brings the Control Panel to the foreground of the workspace.
Formatting	Provides ability to customize fonts, colors, and borders.
Hide Column	After you click a cell on the grid or select multiple columns, this option hides the column(s).
Hide/Show Columns	Allows you to select which columns to hide or show.
Auto Filters	Use this option to enable Auto Filters. Auto Filters filters the Audit Trail data by selecting a customer from the Customer List window.
Scrolling	Default is ON. All new entries to the window cause the window to scroll up to the new entry. When disabled, window retains its position.
Clear All Filters	Use this option to quickly clear all filters. As a result, all data available displays in the Audit Trail .

Customizing Features in the Audit Trail Window

You can customize a number of features in the **Audit Trail** window:

- For **Message Color Coding**, select any color text and background to identify Buy, Sell, and Exchange Announcement activity. The default colors for Buys are blue text with a gray background. Sells have red text with a gray background. Exchange announcements have white text with a black background. Customize colors in the **Properties** dialog box **Color** tab.
- For **Audio Notification**, assign a sound to the Exchange Announcement event. Add sounds in the **Properties** dialog box **Sounds** tab.
- **Historical Data: Audit Trail** data for the last 10 calendar days is saved on your workstation's hard disk in a Microsoft Access file. Use `<install drive>:\TT\LogFiles\AuditLog.mdb` file to start Access. The available dates display by month and day (i.e., MMMDD—Dec 31).
- To customize the **Audit Trail** messages and audit logs, go to the **Properties** dialog box **Audit Trail** tab.
- You can also set visible **columns** and **rows**, **colors**, **borders**, and **fonts**. By default, all available information is displayed. Move or hide any of the columns (except Time, Exch (Exchange), Status, and Msg). Customize the **Audit Trail** by using the **Audit Trail** context menu.
- Use filters to limit the information displayed.

Note: If you use filters, it is suggested that you open two **Audit Trail** windows to ensure receipt of all Exchange and Gateway announcements. The first window can be used to display order-related data with the desired filters. The second window should have a **Status** column filter set to capture alerts and general information.

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Chapter 4

Autospreader™

Autospreader™ is a multi-pane window designed to facilitate the automatic trading of calendar and inter-product spreads. You define the legs of the spread, the relationships, and parameters between them. Autospreader™ displays the implied market for the spread based on the outright legs. You can enter orders in the spread pane and Autospreader™ works the legs to achieve the spread setting parameters.

Autospreader™ is an add-on tool only available with X_TRADER® Pro. Although it is installed during the regular X_TRADER® installation process, it requires a separate X_TRADER® Pro license.

Features of Autospreader™ include:

- Multi-Legged capability
- Multi-Level Slop
- Offset Volume Multiplier
- User Defined Ticking and Ticking Worksheet

Note: The panes of Autospreader™ are based on the functionality of MD Trader™. Therefore, all functionality of MD Trader™ is also available for each Autospreader™ pane. Refer to MD Trader™ sections of the Help for detailed descriptions of its enhancements, properties, and usage.

Implieds in Autospreader™

Implied prices and quantities are derived from direct orders in a combination of outright contracts and spreads/strategies. Implied pricing evolved at exchanges that trade different contract months of a product as well as spreads and strategies involving different combinations of the contract months. For example, a bid in 1 contract month and an offer in a 2nd contract month can be combined to "imply" a bid in the spread between the 2 months.

By calculating and displaying implied prices and quantities, exchanges found that they could sometimes improve the best bid/ask price or add liquidity to certain contracts or strategies.

Use the Properties **Trading** tab, to calculate implieds in the **Market Grid**, **Autotrader™** and **Autospreader™**:

- **Calculate Implieds Instead of using Exchange Implieds.**

Because some exchanges only display implied pricing data when the implied prices and quantities are at the best price in the market, you may not see some implied values.

This new feature calculates and displays implied pricing in Market Depth as well as the inside market.

To enable this feature, open the Properties **Trading** tab and click the **Calculate Implieds Instead of using Exchange Implieds** option.

- **Implieds From Implieds:** After you enable **Calculate Implieds instead of using Exchange Implieds**, you can enable the **Implieds From Implieds** option. X_TRADER® also calculates and displays implieds from implieds values (sometimes called 2nd generation implieds).
- **Include Implieds for spreads in Market Columns and in Depth.** Displays implied outright, implied spread, and implieds from implieds quantities and prices in market data columns.

To enable this feature, go to the Properties **Trading** tab. Click the **Include Implieds in Market columns and in Depth** option.

For more information about X_TRADER®'s Implied pricing capabilities, go to the **Market** window section of the Help and review **Implied Prices and Quantities**.

Opening Autospreader™

You can use the following methods to open Autospreader™:

- Launch Autospreader™ from **Control Panel** by clicking the toolbar button. The **Manager** window displays. Use the **Manager** window to launch a previously created spread or configure a new spread.
- Use drag-and-drop from the **Market Grid** to create a new spread:
 - Highlight the contracts that will make up the legs of the spread in the **Market Grid**. To display the context menu, right-click and click Autospreader™ to immediately open and populate a **Configuration** dialog box.

Or:

- From the **Manager** dialog box, open a **Configuration** dialog box by clicking **New**. Highlight the contracts that will make up the legs of the spread in the **Market Grid** and drag-and-drop them to populate the **Configuration** dialog box.

Using Market Grid to Create a New Spread

► **To configure a new spread from the Market Grid:**


1. Start X_TRADER® and open up a connection to the exchange(s) where the spread products are traded.
2. Select products from the **Market Explorer**, and open a **Market** window for those products.
3. Select at least two products in the **Market Grid** to highlight them.
4. Left-click on a highlighted product in the **Market Grid** to open the context menu.
5. Select Autospreader™ from the menu to open and immediately populate the **Configuration** dialog box.

Note: The contracts that form the spread legs populate Autospreader™ in the order in which they appear in the grid. To change this order, use the leg drop-down list to select a different contract.


6. Enter the spread parameters in **Configuration** dialog box.
7. Click **OK** to open **Manager** window.
8. To trade the spread, select from the **Manager** dialog box list to highlight it.
9. Click **Launch** to open Autospreader™ with the selected spread to begin trading.

Using Drag-and-Drop to Create a New Spread


► To drag-and-drop contracts from Market window to an empty Autospreader™ Configuration dialog box:

1. Start X_TRADER® and open up a connection to the exchange(s) where the spread products are traded.
2. Select products from the Market Explorer, and open a Market window for those products.
3. Click the Autospreader™ button  on the Control Panel or select Autospreader™ from the Window menu to open the Manager dialog box.
4. Select New from the dialog box to open up the Configuration dialog box.
5. Left-click in the Market Grid to select a contract and when the cursor turns into a circle with a line through it, drag-and drop it into the Configuration window. This will be the first leg of the spread.
6. Do the same for another product, which forms the second leg of the spread.
7. Enter the spread parameters in the Configuration dialog box.
8. Click OK to open the Manager window.
9. To trade the spread, select from the Manager dialog box list to highlight it. Click Launch to open Autospreader™ with the selected spread to begin trading.

Opening Autospreader™ with a Previously Created Spread

Launch Autospreader™ from the Control Panel by clicking the toolbar button . The Manager window displays. Use the Manager window to launch a previously created spread.

► To open a previously created Autospreader™ spread:

1. Start X_TRADER® and open up a connection to the exchange(s) where the spread products are traded.
2. Click Autospreader™ button  on the Control Panel to open the Manager window.
3. Highlight one of the configured spreads in the Manager window.
4. Click Launch to open Autospreader with the configured spread to start trading.

Autospreader and MD Trader

Autospreader™ Leg Panes

Autospreader leg panes are identical in function and display to MD Trader™.

However, whenever you trade the spread, all working orders in the leg panes have a vertical color bar on the left side of the **Working Quantity** column. This color bar designates the working order as being part of the spread and uses the **Leg Color ID** that you assigned to the particular spread you are trading in the **Configuration** dialog box.

Autospreader™ Spread Pane

Autospreader™ spread pane is identical in function and display to MD Trader™.

Use the **Spread** pane to trade your legs in the appropriate markets. Trading via the **Spread** pane is identical to placing trades using MD Trader™. However, Autospreader™ uses the parameters that you set in the **Configuration** dialog box to determine the prices at which the legs are traded.

The **Title** bar of the **Spread** pane displays the **Spread Name** that you designated in the **Configuration** dialog box.

Properties in Autospreader™ Spread Pane

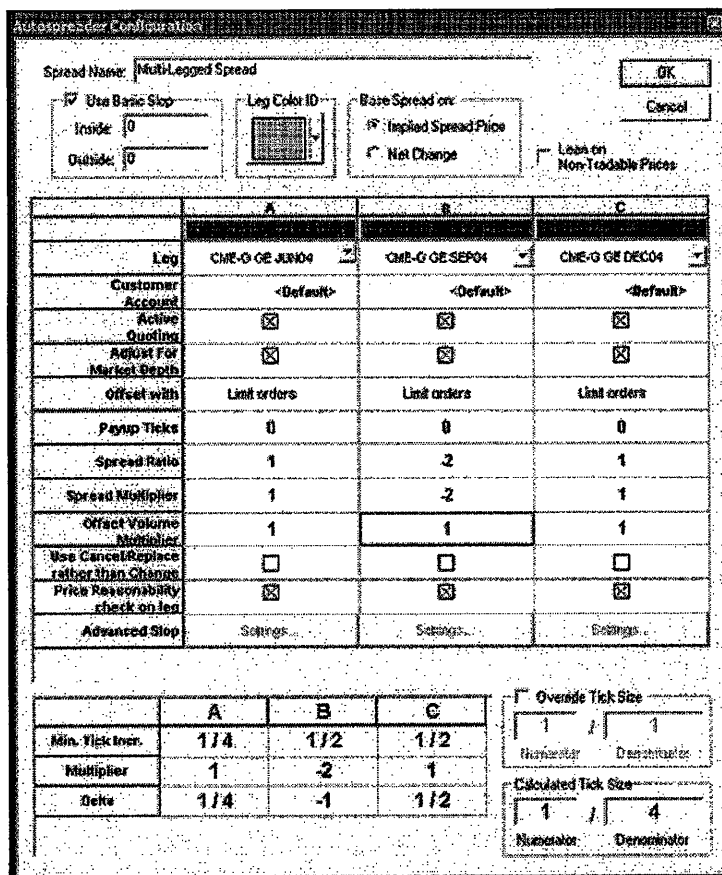
Use the **Spread** pane to trade your legs in the appropriate markets. Trading via the **Spread** pane is identical to placing trades using **MD Trader™**. However, **Autospreader™** uses the parameters that you set in the **Configuration** dialog box to determine the prices at which the legs are traded.

The **Autospreader™** spread pane is similar in function and display to **MD Trader™**. However, if you access the **Options** dialog box to configure the **Spread** pane, notice that you do not have access to the following properties:

- Show Customer Account Name
- Show GTC Checkbox
- Show TradeOut button
- Enable Average Price

These **MD Trader™** properties do not apply in the **Spread** pane of **Autospreader™**.

Configuration Dialog Box

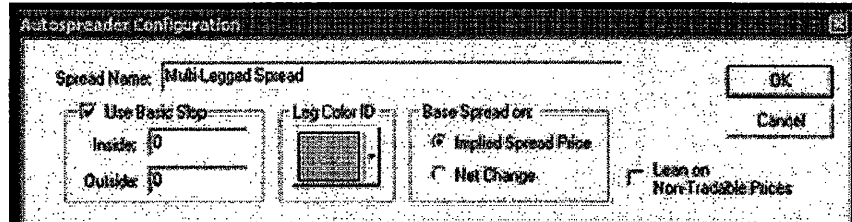


After the two legs have been added to the dialog (through drag and drop or **Market Grid**), the **Configuration** dialog box sets the spread parameters for the entire spread as a whole. This dialog controls the behavior of the spread as it is traded.

Configuration Dialog Box Field Descriptions

Top Pane

These are the fields in the top pane of the **Configuration** dialog box:



Field	Function
Spread Name	Descriptive name of the spread
Use Basic Slop	<p>Slop is used as a means of controlling the rate at which the working leg orders on a spread are changed in the outright markets. The purpose of slop is to avoid excessive quoting which can result in the assessment of transaction fees by certain exchanges. It is also helpful when maintaining a position in the order queue at an exchange.</p> <p>The implementation of slop results in the creation of a price range above and below your spread order entry price at which you are willing to be filled. The slop values apply to the spread price and not to the individual leg prices.</p> <p>Basic Slop configuration uses one level of Inside and Outside slop to determine when to re-price the quoted outright legs based upon movement in the market.</p> <p>Inside Slop: Defines the worst price you will accept for the spread.</p> <p>In other words, if you are buying the spread, Inside Slop indicates the most that you are willing to pay. If you are selling the spread, Inside Slop indicates the least amount that you are willing to accept.</p> <p>Outside Slop: Defines the best price you will accept for the spread.</p>

Field	Function
Leg Color ID	Optional: Use the color selector to identify working spreads and corresponding leg orders in Autospreader™.
Base Spread On	<p>Implied Spread Price: If selected, Autospreader displays the implied price of the spread.</p> <p>Net Change: If selected, Autospreader™ displays the price of the spread as a net change from the previous day settlement prices.</p> <p>If you base spread prices on Net Change, you effectively disable any calculations that display in the Ticking Worksheet. The Calculated Tick Size defaults to 25/100. You can still use the Override Tick Size to change it.</p>
Lean on Non-Tradable Prices	<p>The Configuration dialog box now includes a new property that allows you to choose whether to lean on the quantity at the ¼ 32nd better price when quoting and hedging. Click Lean on Non-Tradable Prices to choose this order entry option.</p> <p>When this option is selected, Autospreader™ considers the quantity available at ¼ tick better price when selecting the ideal quoting price. In addition, Autospreader™ rounds toward the market when hedging if a ¼ better quantity is available.</p>
OK	When the spread has been configured, click to open Autospreader™.
Cancel	Click to close the Spread Settings dialog box and exit the window.

Grid Pane

These are the fields in the grid pane of the **Configuration** dialog box:

	A	B	C
Leg	CME-G-GE JUN04	CME-G-GE SEP04	CME-G-GE DEC04
Customer Account	<Default>	<Default>	<Default>
Active	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Ordering	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Adjust For Market Depth	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Offset with	Limit orders	Limit orders	Limit orders
Payop.Ticks	0	0	0
Spread Rate	1	-2	1
Spread Multiplier	1	-2	1
Offset Volume Multiplier	1	1	1
Use Cancel/Replace rather than Change Price Responsibility check on leg	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Advanced Stop	Settings...	Settings...	Settings...

Field	Function
Delete	Click the Delete button in the specified leg column to delete a leg of a multi-legged spread. If a leg is deleted, the MD Trader™ window for that spread leg is not closed.
Leg Product Name	Name of the first product leg, drawn from the Market Explorer or the Market window when the Spread Settings dialog box is opened. The drop-down list provides a method to select a contract from the product series and also facilitates cloning during a rollover period.
Leg Product Name	Name of the second product leg, drawn from the Market Explorer or the Market window when the Spread Settings dialog box is opened. The drop-down list provides a method to select a contract from the product series and also facilitates cloning during a rollover period.
Customer Account	Accesses the Customer List to select a customer.

Field	Function
Active Quoting	<p>Selects legs Autospreader™ will quote in. If a checkbox is unselected, an order is only sent for that leg when the other leg is filled.</p> <p>When using Multi-Legged spreads, Active Quoting is allowed on up to 3 legs.</p>
Adjust for Market Depth	<p>When checked (default) Autospreader™ uses market depth to calculate spread pricing; if unchecked, the pricing is adjusted by the best bid/offer in the market.</p>
Offset with Limit Orders	<p>When enabled, as soon as the spread is filled on one leg, limit orders are sent for the remaining leg.</p>
Payup Ticks	<p>Used in conjunction with the Offset with Limit Orders button. Indicates the number of ticks that Autospreader™ can adjust the price of the limit order to get the spread order filled.</p> <p>Range of values is -10,000 to +10,000. This allows you to be more aggressive in 2 legged spread hedge pricing.</p>
Spread Ratio	<p>Indicates the quantity of each leg in relation to the others. A negative sign (-) before the number indicates a short leg.</p>
Spread Multiplier	<p>Used to equate the cash value of inter-product spreads in order to calculate the spread value.</p> <p>Fractional representation (i.e., 1/4) can now be used in the Spread Multiplier field. This feature improves Autospreader™'s ticking accuracy. For example, a Spread Multiplier of 0.333333 is now stored internally and displays in the Ticking Worksheet as 1/3.</p>

Field	Function
Offset Volume Multiplier	<p>Previously, the Autospreader™ engine used the entire market quantity of one spread leg to determine the price at which it would quote the other leg. However, since the trader cannot count on getting the entire market quantity, they would often end up legged, i.e. filled on one leg but not the other.</p> <p>The Offset Volume Multiplier allows a trader to define a multiple of the order quantity of one leg, which is then used by Autospreader™ to determine the price at which it will quote the other leg. The field accommodates decimals up to two (2) places.</p> <p>For example: If the quantity on the 2nd leg of the spread is ten (10) and the trader assigns an offset volume multiplier of 2, the Autospreader™ determines the price level at which 20 contracts of cumulative market quantity exists on the 2nd leg and uses this to determine the price at which it quotes the 1st leg of the spread.</p>
Use Cancel/Replace rather than Change	<p>When enabled (default is off), a Cancel/Replace is used to send in orders rather than a Change.</p>
Price Reasonability check on leg	<p>The price reasonability check is taken on a leg price before the trade is submitted to the exchange. This is required for certain exchanges before a trade is accepted in the market.</p>

Field	Function
<p>Advanced Slop</p>	<p>Slop determines when Autospreader™ re-prices the quoted outright legs based upon movement in the market. The price differential of the spread changes as the prices in the outrights move. As the markets in the outright legs move and the spread price crosses the slop threshold, Autospreader™ re-prices the quoted outrights to maintain the spread differential price that you entered into the Autospreader™ pane. When Autospreader™ re-prices the working outright orders, it submits the changed orders to the exchange.</p> <p>Where Basic Slop configuration uses one level of Inside and Outside slop to determine when to re-price the quoted outright legs based upon movement in the market, Advanced Slop allows you to set an unlimited number of Inside and Outside slop levels for each leg of the spread.</p> <p>For example, you may want Slop to re-price your outright with each price update when you are working close to the inside market. Likewise, you probably would not want Slop to continually re-price your outright leg when it is working away from the inside market.</p> <p>This reduces the overall transaction count for the spread, as well as maintain the queue position of the orders.</p>

Ticking Worksheet

Ticking Worksheet displays calculated tick size based on the contract tick size and **Spread Multiplier** of the spread legs. This display allows you to review the ticking relationship between the selected products and how the X_TRADER® system handles the pricing of these products. Column A in the **Ticking Worksheet** reflects ticking values for **Column A** in the middle **Grid** pane of the **Configuration** dialog box and so on.

User Defined Ticking allows the user to override the calculated tick size in the **Override Tick Size** field to condense the display of price information for the spread.

These are the fields in the grid pane of the **Configuration** dialog box:

	A	B	C	
Min. Tick Incr.	1/4	1/2	1/2	Override Tick Size
Multiplier	1	-2	1	1 / 1
Delta	1/4	-1	1/2	Calculated Tick Size
				1 / 4

Field	Description
Minimum Tick Increment	<p>Value is defined by the exchange. It displays the minimum value that the products that make up the legs of the spread tick at.</p> <p>For example, product ZN ticks in 64th. Product ZB ticks in 32^{nds}.</p> <p>You cannot edit this field. Display purposes only.</p>
Multiplier	<p>Used to equate the cash value of inter-product spreads in order to calculate the spread value. This information is taken from the values you specified in the Spread Multiplier field in the grid pane.</p> <p>You cannot edit this field. Display purposes only.</p>
Delta	<p>Value that displays the effect of a 1 tick move on the spread.</p> <p>You cannot edit this field. Display purposes only.</p>

Field	Description
<p>Override Tick Size</p>	<p>Override Tick Size feature is designed to condense the display of price information. You can view a greater range of prices without inhibiting your view of the total quantity available.</p> <p>By enabling Override Tick Size, you can specify a greater tick size that fits your needs.</p> <p>In this example, 1/96 tick size was increased to 1/6.</p>
<p>Calculated Tick Size</p>	<p>Value that displays the calculated minimum tick size of the products.</p> <p>If the products making up the legs of the spread tick at different increments, the Calculated Tick Size displays the minimum tick size that would show a 1 tick move in any of the legs.</p> <p>You cannot edit this field. Display purposes only.</p>

Setting the Spread Settings

► To set the spread settings for a spread in Autospreader™:

Notes:

- Configuring a spread's parameters and the values associated with them are dependent on the products you trade for each leg of the spread.
- EurexUs exchange users, refer to the **Configuration Dialog Box Field Descriptions** for more information about the **Lean on Non-Tradable Prices** option.

1. Choose one of two methods—drag and drop or **Market Grid**—to populate the **Configuration** dialog box.
2. Optional. Set the inside and outside **Slop** values.

Note: The **Use Basic Slop** values default to 0 (zero). If you choose not to use any **Slop** feature, do not change the values.

Or if you want to use **Advanced Slop** settings, disable the **Use Basic Slop** feature. For more information about using **Advanced Slop** settings, see **Using Advanced Slop**.

3. Set the **Base Spread Option** to either **Implied Spread Price** or **Net Change**.
4. Choose a **Customer Account** for each leg of the spread.
5. Optional. Set the **Payup Ticks** (sets the value at which you are willing to trade the spread leg in a moving market).
6. Set the **Spread Ratio**.
7. Set the **Spread Multiplier**.

Note: You can now use fractions in the **Spread Multiplier** field. The **Multiplier** field in the **Ticking Worksheet** displays your specified **Spread Multiplier**.

8. Optional. Set the **Offset Volume Multiplier**.
9. Click **OK** to set the parameters and close the dialog box.

MD Trader™ display: One window displays the spread. Remaining windows display the legs of the spread.

The **Manager** dialog box now includes the title of the newly created spread.

Configuration Dialog Box and Expired Contracts

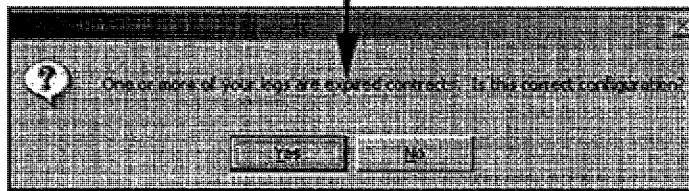
When contracts expire and “roll” to the next expiration month, Autospreader™ displays expired contracts and allows you to choose another contract using a drop-down list. The dialog should not allow you to hit **OK** if any of the spread legs you choose are expired.

If you launch a spread that contains expired contracts in it, Autospreader™ prevents you from trading that expired contract. This applies to expired contracts in MD Trader™ as well.

	A	B
Leg	TTSM ZB JUN01 "Expired"	TTSM ZB SEP01 "Expired"
Customer Account	<Default>	TTSM ZB SEP01 "Expired"
Active		TTSM ZB JUN02
Quoting		TTSM ZB SEP02
		TTSM ZB DEC02

Legs that expire now show "Expired" when the Autospreader Configuration dialog box is edited.

If you select click "OK" when expired legs exist, the following dialog box displays.



Using Multi-Legged Capability

Autospreader™ now allows multi-legged spreads that consist of the following features and characteristics:

- Allows up to ten (10) legs per spread.
- Allows **Active Quoting** on one to three legs of the spread.
- Ability to add columns to the Configuration dialog box.
- Ability to delete legs of multi-legged spread by clicking the **Delete** button in the specified leg column in the **Configuration** dialog box.


Note: If a leg is deleted, the MD Trader™ window for that spread leg is not closed.

- If any of the legs is *illiquid* at the time of the order, the order is rejected. If the market for any of the legs becomes illiquid while the order is working, the order is pulled. Once a spread quoting order has been filled, no hedge orders are pulled, regardless of market liquidity.
- Hedging logic for multi-legged spreads:
 - If you use limit orders on non-quoted legs and a quoted leg is filled, the prices at which the orders go in on the remaining legs are based on the current market in the remaining legs at the time of the fill confirm from the exchange.
 - Hedging logic for partial fills on multi-legged spreads is the same as for two-legged spreads.
- Hedge orders are color-coded in a non-standard orange color. This color is *not* configurable. When there is more than one color at a given price level, you will see the color black, to indicate overlap.

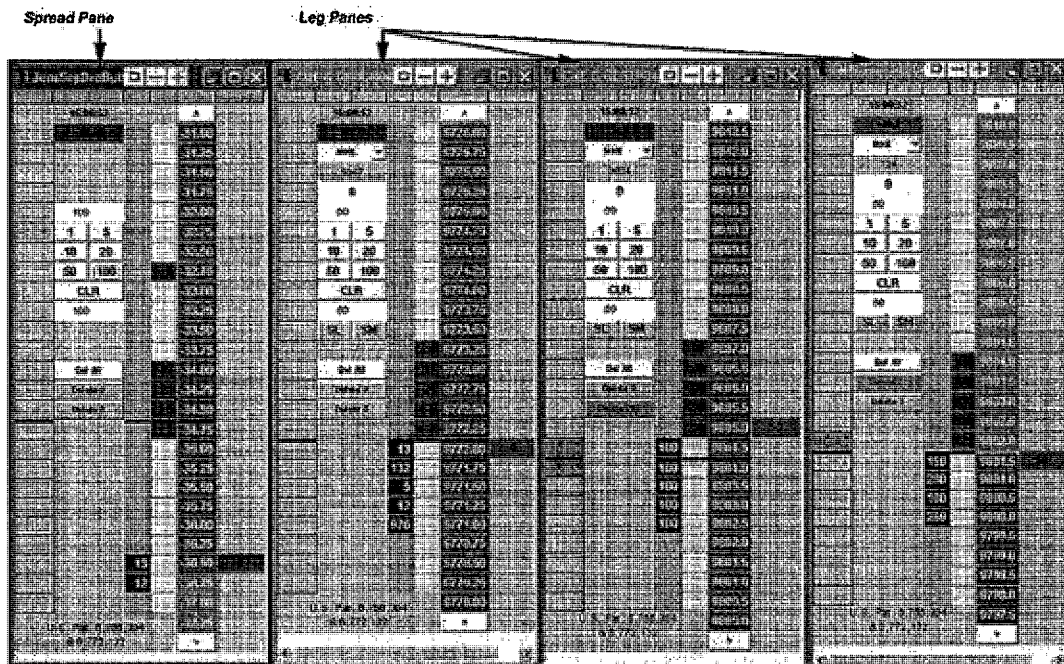
► **To create a multi-legged spread:**

1. Launch a **Market** window for those products you want to trade.
2. From the **Market Grid**, highlight the contracts you want to trade in a spread.
3. To display the context menu, right-click in the **Market Grid** and click **Autospreader™** from the menu.

The **Configuration** dialog box displays with the selected contracts.

 **Tip:** You must manually expand the size of the **Configuration** dialog box. If the **Configuration** dialog box is not large enough, you may not be able to edit the fields in the dialog box.


4. Type a name in the **Spread Name** field.
5. Select a color for the **Spread Leg** from the **Leg Color ID** field.
6. Set the settings of the **Configuration** dialog box. Refer to the **Configuration Dialog Box Field Descriptions** section for more information.
7. Click **OK**. The **Manager** dialog box displays.
8. Highlight the spread name you just created and click **Launch**. The **Spread Pane** and **Leg Panes** display.

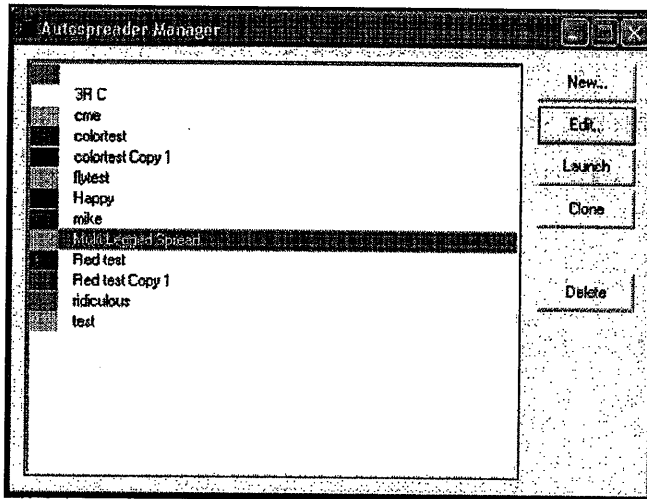


Note: MD Trader™ is protected by U.S. Patents Nos. 6,766,304 & 6,772,132.

If you want to add legs to an existing spread, you can drag and drop contracts into the **Configuration** dialog box.


▶ **To add legs to an existing spread:**

1. Launch the **Market Grid** for those products you want to trade.
2. Launch **Autospreader™** by clicking the **Autospreader** button  in the **Control Panel**. The **Manager** dialog box displays.



3. Highlight the name of the spread and click **Edit**.

The **Configuration** dialog box displays.

 **Tip:** You must manually expand the size of the **Configuration** dialog box. If the **Configuration** dialog box is not large enough, you may not be able to edit the fields in the dialog box.

4. Highlight the specified contracts in the **Market Grid** by clicking on them.
5. Drag and drop the contracts from the **Market Grid** to the **Configuration** dialog box.
6. Edit the settings to manipulate the behavior of the spread.
7. Click **OK**. The spread window and various legs of the spread display.

Using Advanced Slop

Slop is used as a means of controlling the rate at which the working leg orders on a spread are changed in the outright markets. The purpose of slop is to avoid excessive quoting which can result in the assessment of transaction fees by certain exchanges. It is also helpful when maintaining a position in the order queue at an exchange.

The implementation of slop results in the creation of a price range above and below your spread order entry price at which you are willing to be filled. The slop values apply to the spread price and not to the individual leg prices.

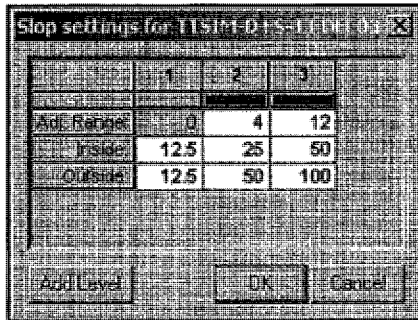
Basic Slop configuration uses one level of Inside and Outside slop to determine when to re-price the quoted outright legs based upon movement in the market.

Advanced Slop allows you to set an unlimited number of Inside and Outside slop levels for each leg of the spread. For example, you may want Slop to re-price your outright with each price update when you are working close to the inside market. Likewise, you probably would not want Slop to continually re-price your outright leg when it is working away from the inside market.

This reduces the overall transaction count for the spread, as well as maintains the queue position of the orders.

► **To use the Advanced Slop feature:**

1. Open Autospreader™ using one of the three methods discussed.
2. Display the **Configuration** dialog box.
3. Type values in the **Configuration** dialog box fields.
4. To use the **Advanced Slop** settings, disable the **Use Basic Slop** field. The advanced **Slop Settings** fields enable.
5. Click the **Settings** button. The **Slop Settings** dialog box displays.

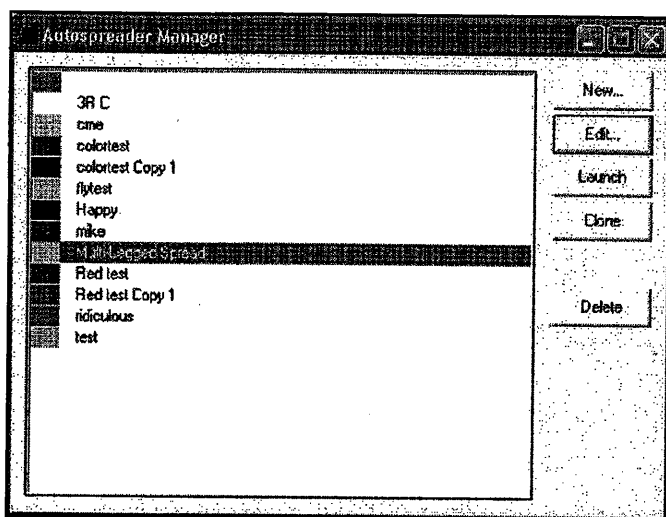


Note: Adjustable Range parameter sets the number of price levels away from the best bid/best offer price in the market.


6. Set the **Adjustable Range** and define **Inside** and **Outside Slop** values in the Level 1.
7. Click **Add Level**. There is no limit to the number of **Slop** levels you can add.
8. Set the **Adjustable Range** and define **Inside** and **Outside Slop** values in the Level 2.
9. Continue to add levels as needed.
10. Click **OK** when you have set all advanced slop levels.

The **Advanced Slop** levels are now set.

Manager Dialog Box



The **Manager** dialog box contains a list of already created spreads. You can create new spreads, edit existing spreads or delete spreads using this dialog box. This **Manager** dialog box can be opened from the **Windows** menu on the **Control Panel** or using the

button on the button bar of the **Control Panel** .

Manager Dialog Box Field Descriptions

The **Manager** dialog box includes a number of buttons that launch, edit existing spreads as well as create new spreads.


Button name	Function
New	Opens a new instance of the Configuration dialog box, used to create a new spread.
Edit	Opens the Configuration dialog box, already populated with the spread information for the specified spread.
Delete	Deletes the spread selected from the list for the workspace.
Clone	Duplicates the selected spread and adds it to the list. The word 'copy' is added to the end of the spread title.
Launch	Opens an instance of Autospreader™ with the spread parameters selected during its initial creation.

Using Manager Dialog Box

The **Manager** dialog box offers the following functionality:

- Click **New** to bring up the **Spread Settings** dialog to configure an entirely new spread.
- Click **Edit** to bring up the **Spread Settings** dialog to reconfigure the selected spread.
- Click **Delete** to delete the selected spread from the list.
- Click **Clone** to duplicate the selected spread and add it to the list as a copy.

▶ **To open Autospreader™:**

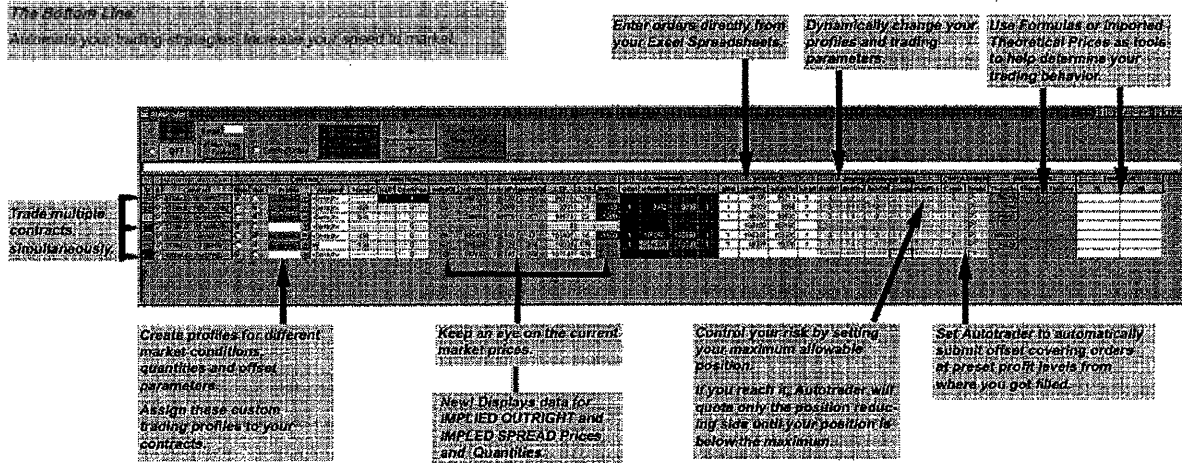
1. Start X_TRADER® and open up a connection to the exchange(s) where the spread products are traded.
2. Click on the **Autospreader™** button on the **Control Panel**  to open the **Manager** dialog box.

Note: You must have an X_TRADER® Pro license to use Autospreader™.

3. Highlight one of the configured spreads in the **Manager** dialog box.
4. Click **Launch** to open Autospreader™ with the configured spread to start trading.

Chapter 5 Autotrader™

TT Autotrader is a flexible, automated order management tool that enables traders to execute complex trading strategies, quote markets and scalp using links from Excel or formulas directly in the Autotrader.




Note: Autotrader™ is an add-on tool is only available with X_TRADER® Pro. Although it is installed during the regular X_TRADER® installation process, it requires a separate X_TRADER® Pro to function.

Opening Autotrader™

There are two ways to open Autotrader™.

Note: Before placing automatic trades with Autotrader™, you must define the trading parameters that you want Autotrader™ to use. To do this, you must have at least one **Trading Profile** created. You may create multiple profiles and assign different trading parameters to different contracts and expirations.

► Opening Autotrader™ - Procedure 1:

1. Using the **Exchange Login** window, log into the exchanges on which you want to use. Close the **Exchange Login** window when you are done.
2. Populate the **Market Explorer** window with all needed futures exchanges and contracts.
3. On the **Control Panel**, click the **Autotrader™** button .

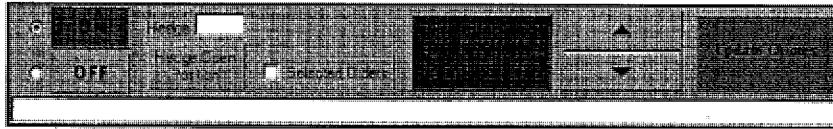
► Opening Autotrader™ - Procedure 2:

1. Using the **Exchange Login** window, log into the exchanges on which you want to use. Close the **Exchange Login** window when you are done.
2. Populate the **Market Explorer** window with all needed futures exchanges and contracts.
3. In the **X_TRADER® Control Panel**, on the **Window** menu, click **Autotrader™**.

Autotrader™ Window

Two sections comprise Autotrader™:

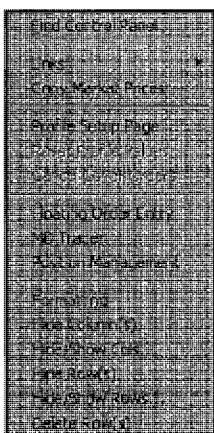
- **Control Bar:** This pane provides trading functionality. Using this pane, you submit, delete, and update orders for all activated or specifically selected contracts.




- **Grid:** Displays contracts, their associated trading parameters, theoretical pricing, and current market conditions. Additionally, it displays your working order information, and enables you to change your trading parameters. You configure trading parameters in the **Profile Setup Page**.

				CONTROL				POSITION				
Status	Active	Contract	Market	Auto	Order	Account	Order	Trans	Order	Market	Quantity	Market

Context Menu



The context menu offers you the following functions:

Function	Description
Find Control Panel	Brings the X_TRADER® Control Panel to front of the Desktop.
Links	<p>The Links option expands the Links submenu:</p>  <p>Use this submenu to copy and paste Excel links into a cell (select Paste) or to remove an Excel link from a cell (select Delete).</p>
Copy Market Prices	For the selected row, seeds the market bid price and market ask price into the appropriate cells (sBidPrc and sAskPrc) in the Scratch section.
Profile Setup Page	Brings up the Profile Setup Page .
Reset Profile Values	Resets all values in the Profile Parameters section of the Grid to the original profile parameters that you configured in the Profile Setup window.
Cancel Cover Orders	Deletes all Cover Orders currently in the market.

Function	Description
Floating Order Entry	Displays a floating order entry window loaded with the selected contract (the one whose row you right-clicked to bring up the context menu). Also, you can click a cell in the Market section for any contract in the Grid to bring up a Floating Order Entry window.
MD Trader™	Displays MD Trader™ loaded with the selected contract (the one whose row you right-clicked to bring up the context menu).
Position Management	Displays the Position Management dialog box.
Formatting	Displays the Grid Styles dialog box.
Hide Column(s)	Hides the selected Column(s).
Hide/Show Cols	Displays the Hide/Show Columns dialog box. Use this box to hide columns that you can currently see or show currently hidden columns.
Hide Row(s)	Hides the selected Row(s).
Hide/Show Rows	Displays the Hide/Show Rows dialog box. Use this box to hide rows that you can currently see or show currently hidden rows.

Starting to Trade Using Autotrader™

There are primarily three ways in which to start trading using Autotrader™:

- Profile Trading
- Trading Theoreticals
- Direct Order Entry

▶ Starting to Trade - Profile Trading:

1. Open Autotrader™.
2. Populate Autotrader™ with the contracts that you want to trade.
3. If you have not yet set up your trading profiles, do so now.
4. In the **Control** section of the **Grid**, in the **Profile** column for the contract row you want to trade, click the appropriate profile that you want Autotrader™ to use.



In this diagram, the profile called **The Bomb** is selected. If this profile has multiple expirations, the expiration of the row's contract determines which set of trading parameters Autotrader™ uses from the profile.

5. If you want to assign a customer account to the contract other than the one associated with the profile, in the **Account** column, click the **Customer Account** that you want Autotrader™ to use while trading the contract.

In the diagram from the previous task, the **Account** called **MEGABUCKS** is selected.

6. In the **Control Bar**, click **ON**. The **Grid** is now enabled (i.e., not grayed out)
7. In the **Row Identifier** section in the **Active** column for the contract row you want to trade, click to select the **Active** check box.

You are now ready to submit orders.

8. In the **Control** section, click **Auto** to have Autotrader™ begin trading using the parameters you set in the selected profile.
9. If you want to use this setup in the future, save your workspace.

▶ **Starting to Trade - Using Theoreticals:**

1. Open Autotrader™.
2. Populate Autotrader™ with the contracts that you want to trade.
3. If you have not yet set up your trading profiles, do so now.

Note: In the **Profile Base Price**, you must select either **Single Theo** or **Bid/Ask Theo**.

4. In the **Control** section of the **Grid**, in the **Profile** column for the contract row you want to trade, click the profile that contains the type of **Theoretical** profile you want Autotrader™ to use.



In this diagram, the profile called **The Bomb** is selected. This profile is set to **Bid/Ask Theo**.

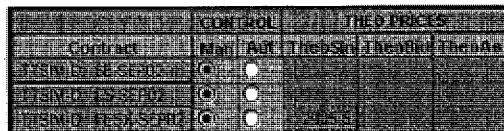
5. If you want to assign a customer account to the contract other than the one associated with the profile, in the **Account** column, click the **Customer Account** that you want Autotrader™ to use while trading the contract.

In the diagram from the previous task, the **Account** called **MEGABUCKS** is selected.

6. In the **Theo Price** section, link your theoretical generator into either:
 - The **TheoSingle** column if you are using a **Profile Base Price** set to **Single Theo**.

Or:

 - The **TheoBid** and **TheoAsk** columns if you are using a **Profile Base Price** set to **Bid/Ask Theo**. Link your theoretical **Bid generator** to the **TheoBid** column and your theoretical **Ask generator** to the **TheoAsk** column.



7. In the **Control Bar**, click **ON**. The **Grid** is now enabled (i.e., not grayed out).
8. In the **Row Identifier** section in the **Active** column for the contract row you want to trade, click to select the **Active** check box.
9. You are now ready to submit orders based off of your theoretical prices.
10. In the **Control** section, click **Auto** to have Autotrader™ begin trading using the parameters you set in the selected profile.
11. If you want to use this setup in the future, save your workspace.

▶ **Starting to Trade - Direct Order Entry:**

1. Open Autotrader™.
2. Populate Autotrader™ with the contracts that you want to trade.
3. If you are going to submit orders to the market automatically, you must set up a trading profile.
4. In the **Control** section of the **Grid**, in the **Profile** column for the contract row you want to trade, click the appropriate profile that you want Autotrader™ to use.

CONTROL				
Manual	Auto	Profile	Account	TransCount
<input checked="" type="radio"/>	<input type="radio"/>	The Bomb	MEGABUCKS	

In this diagram, the profile called **The Bomb** is selected.

5. If you want to assign a customer account to the contract other than the one associated with the profile, in the **Account** column, click the **Customer Account** that you want Autotrader™ to use while trading the contract.

In the diagram from the previous task, the Account called **MEGABUCKS** is selected.

6. Populate your **Scratch** section by either:

Entering formulas

Or:

Linking your order generator (i.e., your Excel spreadsheets)

Contract	CONTROL		SCRATCH			
	Man	Aut	sBid	sBidPct	sAskPct	sAsk
TTSMID-05-SEP02	<input checked="" type="radio"/>	<input type="radio"/>				
TTSMID-05-SEP02	<input checked="" type="radio"/>	<input type="radio"/>				
TTSMID-05-SEP02	<input checked="" type="radio"/>	<input type="radio"/>	1	2912	2921	1

7. In the **Control Bar**, click **ON**. The **Grid** is now enabled (i.e., not grayed out)
8. In the **Row Identifier** section in the **Active** column for the contract row you want to trade, click to select the **Active** check box.
9. You are now ready to submit orders.
 - In the **Control section**, click **Auto** to have Autotrader™ begin trading using the parameters you set in the selected profile.

Or:

 - In the **Control Bar**, click **Update Orders** to manually submit orders from the **Scratch** section to the market.
10. If you want to use this setup in the future, save your workspace.

Generating a Manual Order with the Scratch Pad

SCRATCH			
sBidQty	sBidPrc	sAskPrc	sAskQty

In order to submit manual orders via the **Scratch Pad**, your row must be either:

Assigned to a **Profile** that has a **Profile Base Price** set to **Direct Order Entry**.

Or:

Set to **Manual** in the **Control** section and not assigned to a profile.

Notes:

- In Steps 1 - 4 below, you can use formulas or Excel links to generate your prices and quantities.
- In Steps 2 - 3, you can copy current market prices to your sBidPrc and sAskPrc cells using the option called Copy Market Prices in the Autotrader™ context menu. You must open the context menu in the row that contains your Scratch Pad setup and market prices.

► To manually submit orders:

1. In the **sBidQty** column, type the quantity you want to bid.
2. In the **sBidPrc** column, type the price at which you want to bid.
3. In the **sAskPrc** column, type the quantity you want to offer.
4. In the **sAskQty** column, type the price at which you want to offer.
5. In the **Control Bar**, click **Update Orders**.
 - If at any time you want to resubmit your working orders, click **Update Orders**.
 - If you want to adjust your orders (price or quantity) simply perform this procedure over again.

If the row is assigned to a profile with **Direct Order Entry** as its **Profile Base Price** and is set to **Auto**, Autotrader™ automatically updates your working orders.

Dragging and Dropping Autotrader™ Orders in MD Trader™

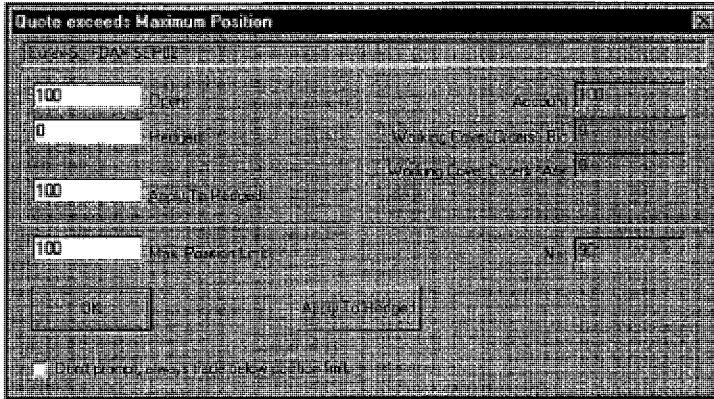
When Autotrader™ submits orders to the market, you can use MD Trader™ to view your working orders and adjust your cover orders.

Using the drag and drop feature of MD Trader™, you can adjust the price at which your cover orders are placed.

However, you cannot drag and drop normal profile orders submitted by Autotrader™. Autotrader™ notices that these orders do not conform to its profile parameter setup, delete them, and resubmit them according to its profile setup.

Quote Exceeds Maximum Limit

Whenever Autotrader™ is set to submit a quote (i.e., normal bids and asks, as well as cover orders) that, if filled, would exceed the value of the **Maximum Position** field that you set up in the **Profile Setup Page**, you are prompted with the **Quote Exceeds Maximum Limit** dialog box:



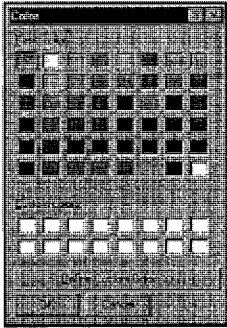
At that time, **Autotrader™** suspends trading of whichever side exceeded the position limit but continues to trade the position reducing side of the market. For instance, if you are short enough contracts to exceed your limit, **Autotrader™** stops submitting offers to the market but does continue to submit bids. Once **Autotrader™** reduces your open position below the set **Max. Position Limit**, it automatically begins submitting both sides of the market once again.

To continue trading and have **Autotrader™** ignore the fact that you have exceeded your maximum position, you must either:

- Hedge enough contracts so that your **Open** is less than your **Max. Position Limit**.
- Or:**
- Increase your **Max. Position Limit** so that it is greater than your **Open**.

Note: Your **Max Position Limit** does not supercede risk parameters set up by your risk administrator. Additionally, the **Apply to Hedged** option functions only in regards to your **Open** position in **Autotrader™**, thus allowing you to continue trading. It does not circumvent risk limits.

Assigning Colors



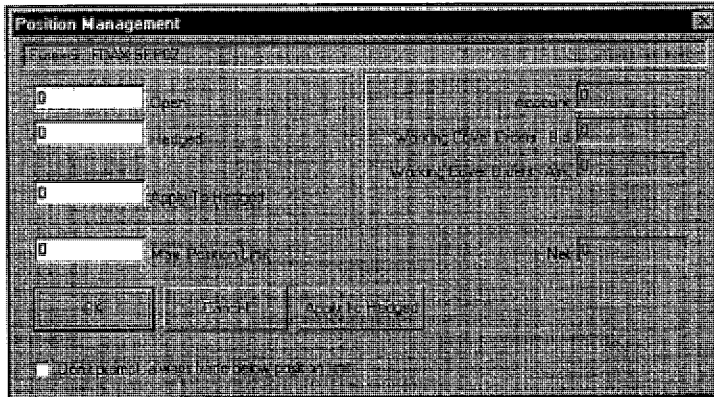
► To assign colors:

1. Open the **Profile Setup Page**.
2. Right-click to bring up the context menu for the **Profile Setup Page**.
3. Click the type of color you want to change:

Command	Description
Change Profile Color	Changes the entire profile color. This color is used in the Grid for a Single Expiration profile. Additionally, this assigns the color to any profile orders that exist in MD Trader™ . In MD Trader™ , this color displays as a vertical stripe in the left side of your working orders column.
Change Contract Color	Changes the background and text color associated with a particular expiration range. This option is only available in profiles that use expiration ranges. If you are customizing this type of color, you must use a different procedure.
Change Cover Order Color	Changes the color associated with your Cover Orders .

4. To select a color, either:
 - In the **Basic Colors** section, click the color you want.
 - Or:**
 - Click **Define Custom Colors**. A color palette appears. Use the palette to select the custom you want to use. Click **Add to Custom Colors**. The color appears in the **Custom Colors** section. Click this custom color.
5. Click **OK**.

Position Management Dialog Box



The **Position Management** dialog box assists you in hedging your Autotrader™ positions outside of the X_TRADER® system. By including a **HedgedPos** (hedged position) column in addition to the **OpenPos** (Open Position) column, you can separate positions that are at risk from positions that have been hedged.

You open the **Position Management** dialog box using the context menu in Autotrader™. Use this dialog box to view, create, adjust, and monitor your hedged position.

Note: Whenever you hedge a quantity, it reduces your **Open Position** by the specified amount.

► To open the Position Management Dialog Box:

1. In Autotrader™, locate the row that contains the contract (and associated strategy) that you want to hedge.
2. In this row, right-click any cell.
3. Click **Position Management**.
 - The **Position Management** dialog box displays.
 - Refer to the table below for a description of each element in the **Position Management** dialog box.

▶ **To hedge your Position - Procedure 1:**

1. Open the **Position Management** dialog box.
2. In the **Hedged** box, type the total number of contracts you want Hedged.
3. Click **OK** to close the **Position Management Dialog Box**.

If you click **Apply to Hedged**, the value you typed in the **Hedged** box does not get taken out of your open position. Instead, any value in the **Apply to Hedged** field gets hedged *in addition to* the current number of hedged contracts.

▶ **To hedge your Position - Procedure 2:**

1. Open the **Position Management** dialog box.
2. In the **Apply to Hedged** box, type the number of contracts you want to hedge *in addition to* the current number of hedged contracts. By default, the contents of the **Apply to Hedged** box equal you current open position.
3. Click either:
 - **Apply to Hedged** (the dialog box remains open)
 - Or:**
 - **OK** (the dialog box closes).

▶ **To edit your Hedged Position:**

1. Open the **Position Management** dialog box.
2. Either:
 - In the **Open** box, type your desired **Open Position** (this cannot exceed your current total of **Open Position** and **Hedged Position**).
 - Or:**
 - In the **Hedged** box, type the total number of contracts you want hedged (this cannot exceed your current total of **Open Position** and **Hedged Position**).
3. Click **OK**.

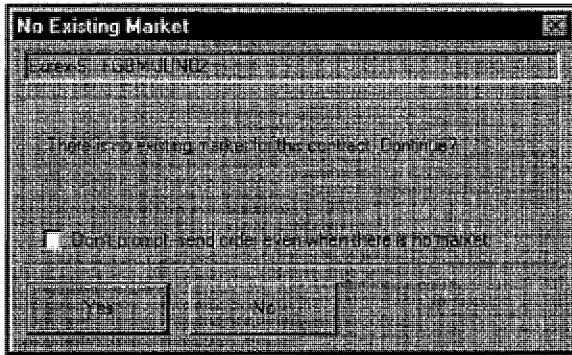
► **To change your Maximum Position:**

1. Open the **Position Management** dialog box.
2. In the **Max. Position Limit**, type your new maximum allowable position for the selected strategy.
3. Click **OK**.

The table below lists each field in the **Position Management** dialog box and its functional description:

Field Name	Field Description
Contract Bar	Displays the selected row's contract.
Open	Displays your current Open Position (in number of contracts).
Hedged	Displays your number of hedged contracts.
Apply to Hedged	<p>Sets the number of contracts you want to designate as being hedged. This setting defaults to your current number of open contracts for the selected row.</p> <p>After editing this setting with the number of contracts you want to hedge, click OK or Apply To Hedged.</p>
Max. Position Limit	Displays your current maximum position setting. You can use this value to temporarily change your maximum position. This does not change your saved profile settings. Instead, any value that you enter seeds the MaxPos column in your Profile Parameters section of Autotrader™.
Account	Displays the current position of the Account you are using in the selected row.
Working Cover Orders - Bid	Displays the number of working cover Bids you have in the market for this contract.
Working Cover Orders - Ask	Displays the number of working cover Offers you have in the market for this contract.
Net	Displays your current Net position.
Don't prompt, always trade below position limit	When selected, configures Autotrader™ to trade only within the maximum allowable position. Because Autotrader™ does not submit orders that could push you over your maximum position, you are never prompted with a Quote Exceeds Maximum Position dialog box. Autotrader™ continues to quote the position-reducing side of the market.

No Existing Market



You receive this dialog box when you attempt to submit orders on a contract without a market. This is only the case when using **Direct Order Entry** or a Theo (Single or Bid/Ask) as your **Profile Base Price**.

If this happens, do one of the following:

- Submit the order to the market anyway. Click **Yes**.
- Cancel your order submission. Click **No**.

If you always want to send orders to the market without receiving a prompt even if a market does not exist, select the **Don't prompt** box before clicking **Yes** or **No**.

Expired Contracts and Workspaces

When you open a previously saved **Autotrader™** workspace that contains an expired contract, **Autotrader™** automatically removes the expired contract. The **Audit Trail** displays a notification that the expired contract was removed.

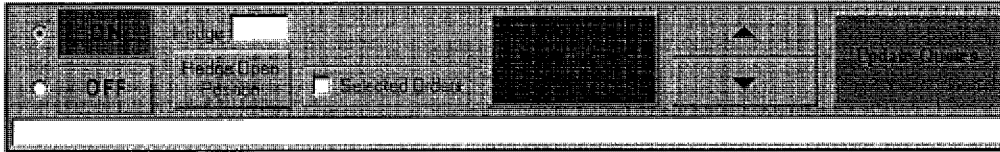
Implieds in Autotrader™

Implied prices and quantities are derived from direct orders in a combination of outright contracts and spreads/strategies. Implied pricing evolved at exchanges that trade different contract months of a product as well as spreads and strategies involving different combinations of the contract months. For example, a bid in 1 contract month and an offer in a 2nd contract month can be combined to "imply" a bid in the spread between the 2 months. By calculating and displaying implied prices and quantities, exchanges found that they could sometimes improve the best bid/ask price or add liquidity to certain contracts or strategies.

Use the Properties **Trading** tab to view and calculate implieds in your Autotrader™:

- **Calculate Implieds for spreads instead of using Exchange Implieds.**
Because some exchanges only display implied pricing data when the implied prices and quantities are at the best price in the market, you may not see some implied values.
This new feature calculates and displays implied pricing in Market Depth as well as the inside market.
 - **Implieds From Implieds:** After you enable **Calculate Implieds instead of using Exchange Implieds**, you can enable the **Implieds from Implieds** feature. X_TRADER also calculates and displays implieds from implied values (sometimes called 2nd generation implieds).
- **Include Implieds for spreads in Market Columns and in Depth.** Displays Implied price and quantity data in the same columns as direct price and quantity data.
Autotrader™ displays implied outright, implied spread, and implied from implied quantities and prices in market data columns.

Control Bar



Use the **Control Bar** to:

- Enable or disable **Autotrader™** using the **On** and **Off** buttons. When the grid is enabled, you can enter values into its columns and rows, and **Autotrader™** can place and delete orders. When disabled, the grid is grayed out, and **Autotrader™** cannot interact with the market.
- Hedge your Open Positions.
Note: You cannot perform this function in the **Control Bar** in **Order Block**.
- Delete either all of your orders for the contracts listed in the **Autotrader™ Grid** or only the ones for the rows that you select.
- Update either all of your orders for the contracts listed in the **Autotrader™ Grid** or only the ones for the rows that you select.
- Edit the parameters of any cell that can be edited using the spin buttons.

► To enable or disable **Autotrader™**:

- To *enable* the **Grid** for trading, click **ON**. All rows are set to **Manual** in the **Control** section of the **Grid**.
- To *disable* the **Grid**, click **OFF**. **Autotrader™** stops interacting with the market and all rows revert to the **Manual** setting in the **Control** section of the **Grid**. **Autotrader™** deletes all of its orders in the market. You can still interact with your various contracts' parameters.

▶ **To hedge your Position:**

Note: In **Order Block**, you cannot use the **Control Bar** to hedge your position.

1. Click a cell in the row that has the contract you want to hedge
2. In the **Hedge** box, type the number of contracts that you want to hedge for that row.
3. Click **Hedge Open Position**.

To remove a hedged position, you must use the **Position Management** dialog box.

▶ **To delete All of Your Orders:**

There are two ways in which you can delete all orders submitted by **Autotrader™**:

- Clear the **Selected Orders** option and then click **Delete Quotes**. All orders that were submitted by **Autotrader™** to the market are deleted.

Or:

- Click **OFF**.

▶ **To update All of Your Orders:**

To update all of your orders that are in the market, the **Selected Orders** option must be clear. Click **Update Quotes**. Orders will be submitted for all rows that are **Active** and have parameters that require **Autotrader™** to submit an order.

▶ **To delete or update Selected Orders:**

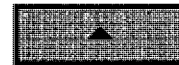
1. Click to select **Selected Orders**. The **Delete** and **Update Orders** buttons now read **Delete Selected Orders** and **Update Selected Orders** respectively.
2. To select a row, click the cell of any **Row Identifier** except the **Active** check box.
3. To select additional rows, press and hold down the **CONTROL** key, and click the cell of a **Row Identifier** (except the **Active** check box) for each row you want to add.
4. After you have selected all rows for which you want to delete or update orders, release the **CONTROL** key.
5. Click either **Update Selected Orders** or **Delete Selected Orders**.

► **To use the Increase and Decrease Arrows to Edit Parameters:**

Note: You can only use the **Increase** and **Decrease Arrows** on cells with editable numeric values. For instance, you cannot use these arrows on the cells in the **Market section** because you cannot edit these cells. Refer to the **Grid** for information on which sections are editable.

1. Select the cell(s) that contains an editable numeric value. You can select multiple cells by:
 - Dragging to select the cells
 - Pressing and holding down the **CONTROL** key and clicking individual cells. Release the **CONTROL** key when you are done selecting cells.

2. To increase the cells' value by one, click the **Increase Arrow**:



3. To decrease the cells' value by one, click the **Decrease Arrow**:



► **To use the Formula Bar to Edit a Row's Parameters:**

1. Select the cell that contains an editable value (numerical or formula). You cannot select multiple cells.
2. At the bottom of the **Control Bar**, click in the **Formula Bar**:



3. Type the new value or formula that you want to assign to the cell.
4. Press **ENTER**.

Autotrader Grid

		CONTROL					POSITION					
Status	Action	Contract	Market	Auto	Profile	Account Name	Trans Count	Net Pos	Open Pos	MCN	Country	Market

You use the **Grid** to:

- Select the contract, customer, and trade parameters you want **Autotrader™** to use.
- Dynamically interact with your previously set trade parameters.
- Monitor market conditions and contract positions.
- Control order submission.
- Interact with your theoretical prices.

For optimal performance, TT recommends you utilize only 15 rows in a **Grid**. The **Grid** does accept more than this, but you may encounter performance degradation. Take into consideration the following when populating the **Grid** with contracts:

- Market timing
- Market conditions
- Your personal trading strategies
- Volatility
- Degree of product updates
- Hardware specifications

The **Grid** is divided into several different sections.

Grid Sections

There are several sections in the **Grid**:

- Row Identifier
- Control
- Open/Close
- Position
- Market
- Working
- Scratch
- Profile Parameters
- Cover Order
- Updates
- Theo Prices
- Formula

For optimal performance, TT recommends you utilize only 15 rows in **Grid**. **Grid** does accept more than this, but you may encounter performance degradation.

Take into consideration the following when populating the **Grid** with contracts:

- Market timing
- Market conditions
- Your personal trading strategies
- Volatility
- Degree of product updates
- Hardware specifications






Row Identifier Section

1			
2	Status	Active	Contract

Use the **Row Identifier Section** to:

- Identify the number of the row in **Autotrader™** for purposes of creating formulas that reference that row.
- View the **Status** of the contract as it trades.
- Enable a row. When enabled, you can interact with a row's fields and **Autotrader™** can trade the displayed contract normally.
- Disable a row. When disabled, the row is grayed out, **Autotrader™** does not trade it, and you cannot interact with its fields.

The table below lists each field and its functional description:

Field Name	Field Description
#	Column automatically assigns sequential numbers to your rows.
Status	<p>Column uses a color schema to display the status of the contract as it trades. The following colors can be displayed in the Status column each meaning a unique status for the row being used to trade:</p> <p>: Used in Manual Mode. Your order needs to be updated.</p> <p>: Used in Auto Mode. Your status is normal.</p> <p>: Used in both Manual and Auto modes. This indicates a problem with your trading (e.g., your Max Position has been reached, or no market exists)</p> <p>: Used in Manual Mode. Your status is normal.</p> <p>: Used in both Manual and Auto modes. This signifies that the throttling/allowance settings have prevented Autotrader™ from updating an order that otherwise would have been updated. You are being warned about possible problems or errors.</p> <p>For specific information on the type of status you have, double-click the status cell for a prompt box description.</p>

Field Name	Field Description
Active	<p>Sets whether you can use Autotrader™ to trade the row's contract.</p> <p>To enable (i.e., activate) the row, click to select Active. You can now trade the contract.</p> <p>To disable (i.e., inactivate) the row, clear the Active cell. When a row is disabled, Autotrader™ cannot trade the contract and deletes all of its orders in the market. You can continue to interact with the contract's trading parameters.</p>
Contract	Column displays the contract assigned to the row.

Control Section

CONTROL					
RowName	Manual	Auto	Profile	Account Name	TransCount

Use the **Control section** to:

- Select automatic or manual trading.
- Select the **Profile** that contains the trading parameters with which you want **Autotrader™** to trade.
- Select the **Account Name** under which you want to trade.
- Monitor the number of transactions that **Autotrader™** has performed.

The table below lists each field and its functional description followed by the procedure you use to configure the particular parameter.

Field Name	Field Description
RowName	By default, this row is hidden. This field names the row. This value is not unique and you can assign the same name to multiple rows.
Manual	Sets the row's contract for manual trading only. When you select this option, Autotrader™ does not automatically quote the contract. However, you can still submit orders according to the trading parameters of the selected profile. To set a contract for manual trading only, click to select Manual .
Auto	Sets the row's contract for automatic trading. Autotrader™ automatically quotes the contract according to the trading parameters you have setup in the Profile Setup Page . You select the particular profile in the Profile field. This option is not available in Order Block . To set a contract for automatic order submission, click to select Auto .

Field Name	Field Description
Profile	<p>Sets the name of the profile that you want Autotrader™ to use while trading that contract listed in the Contract field.</p> <p>To select a profile for use, in the Profile list, click the name of the profile.</p>
Account	<p>Sets the Account Name associated with the trading of this particular contract. The value of this field defaults to the Account Name you set up in the Profile Setup Page for the profile you select.</p> <p>To select an Account Name other than the default, in the Account box, click the needed Account Name.</p> <p>If the account on the Profile Setup Page displays Default, then no changes occur to the Account field on the Grid. If the Account field displays a specific account on the Profile Setup Page, any change to the profile resets the Grid. All profile-related columns reflect any change that occurs after you click Save in the Profile Setup Page.</p>
TransCount	<p>You do not edit this field. Instead, it displays the number of transactions (deletes, adds, and changes) that Autotrader™ has accumulated while trading the contract for that particular row.</p> <p>A Cancel and Replace is the equivalent of delete and add.</p> <p>You can monitor the total transactions for your row in this manner to help avoid exchange fees (i.e., stop trading the product if your transaction count approaches its allowed maximum).</p> <p>If you trade the same contract in another X_TRADER® module (e.g. MD Trader™), its transactions are not included in this field.</p>

Open/Close Section



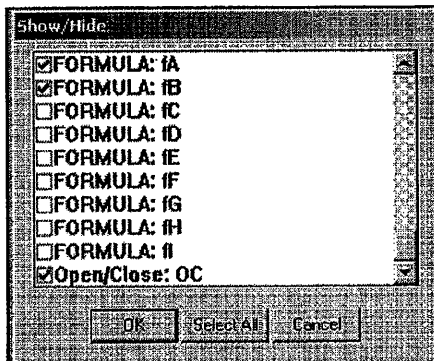
The **Open/Close** column acts as an order identifier that indicates whether or not the trader is initiating a position or closing an existing position.

Options orders require the open/close designation. If you send in a sell order with an **O** designation, short sale rules apply and you cannot sell on a downtick. If you designate a **"C"** in this column, you are closing out a long position and your sell order can be filled on a downtick.

This column is initially disabled.

► To view this column in Autotrader™:

1. Right-click in the **Grid** to display the context menu.
2. Click **Hide/Show Cols** to display the **Show/Hide** dialog box.
3. Scroll down to the end of the list.
4. Click **Open/Close** to display a checkmark in the box.



5. Click **OK**.

The **Grid** automatically displays the **Open/Close** column.

Position Section

POSITION		
NetPos	OpenPos	HedgedPos

You use the **Position** section to monitor your:

- Net Position
- Open Position
- Hedged Position

The table below lists each field and its description. Because the values of these fields are dependent upon your trading activity, you cannot directly edit these fields.

Field Name	Field Description
NetPos	This displays your current net position. Net position is the sum of all positions for a particular Group ID Number across all contracts.
OpenPos	This displays the position for each contract <i>by account</i> . If you have multiple rows with the same contract and Group ID Number , your OpenPos is the same for all rows. This column simply displays all quantities traded since you launched X_TRADER®.
HedgedPos	By default, HedgedPos is hidden. This displays the number of contracts that you designate as being hedged in any of the following manners: <ul style="list-style-type: none"> • In the Quote Exceeds Maximum Position dialog box • In the Control Bar. You cannot hedge your position using the Control Bar in Order Block. • In the Position Management dialog box accessed through the <code>_context</code> menu of Autotrader™ Hedging a row reduces the value in that particular row's OpenPos .

Market Section

MARKET						
mBidQty	mBidPrc	mAskPrc	mAskQty	LTP	LTQ	NetChange

You use the **Market** section to monitor current market conditions. Additionally, you can open a **Floating Order Entry** window for a contract by clicking any cell in its **Market** section. This cell must be in the row for the contract you want to trade.

Features include:

- **Highlighted Market Bid and Market Ask columns when your orders are at the top of the book:**
 - **Market Ask** columns: Background default color is yellow; text default color is red.
 - **Market Bid** columns: Background default color is yellow; text default color is blue.
- **Calculate Implieds for spreads instead of using Exchange Implieds.**

Because some exchanges only display implied pricing data when the implied prices and quantities are at the best price in the market, you may not see some implied values.

This new feature calculates and displays implied pricing in Market Depth as well as the inside market.

To enable this feature, open the Properties **Trading** tab and click **Calculate Implieds instead of using Exchange Implieds**.

- **Implieds From Implieds:** After you enable **Calculate Implieds instead of using Exchange Implieds**, you can enable the **Implieds From Implieds** option. X_TRADER® also calculates and displays implieds from implieds values (sometimes called 2nd generation implieds).

- **Include Implieds for spreads in Market Columns and in Depth.**
Displays Implied price and quantity data in the same columns as direct price and quantity data.

To enable this feature, open the **Properties Trading** tab and click **Include Implieds in Market Columns and in Depth**.

Displays implied outright, implied spread, and implied from implied quantities and prices in market data columns.

Note: For more information about X TRADER®'s Implied pricing capabilities, see the **Implied Prices and Quantities** section of this document.

The table below lists each field and its description. Because the values of these fields are dependent upon current market conditions, you *can not edit* these fields.

Field Name	Field Description
mBidQty	Displays the quantity of the current market's best bid.
mBidPrc	Displays the price of the current market's best bid.
mAskPrc	Displays the price of the current market's best ask.
mAskQty	Displays the quantity of the current market's best ask.
LTP	Displays the last traded price of the contract.
LTQ	Displays the last traded quantity of the contract.
Net Change	Displays the difference between the last traded price and the previous trading day's settlement price.

Working Section

WORKING			
WBidQuantity	WBidPrice	WAskPrice	WAskQuantity

You use the **Working** section to monitor your current bids and offers for that particular row. The table below lists each field and its description.

To delete your working orders, you use the **Control Bar**.

Features include:

- Highlighted **Working Bid** and **Working Ask** columns when your orders are at the top of the book:
 - **Working Ask** columns: Background default color is yellow; text default color is red.
 - **Working Bid** columns: Background default color is yellow; text default color is blue.
- Because these fields only display your working orders, you *can not edit* these fields.

Field Name	Field Description
WBidQty	Displays the quantity of your working bid
WBidPrc	Displays the price on your working bid
WAskPrc	Displays the price of your working offer
WAskQty	Displays the quantity of your working offer

Scratch Section

SCRATCH			
SBidQty	SBidPrc	SAskPrc	SAskQty

Also referred to as the **Scratch Pad**, the **Scratch** section displays current bids and asks calculated by Autotrader™ according to your assigned profile. If you selected **Direct Order Entry** as your **Profile Base Price**, the **Scratch** section displays bid and ask prices and quantities from Excel links or formulas that have been entered directly into the **Scratch** columns.

Depending upon the value of your **Throttle Quoting**, **Scratch** section values might not be submitted to the market.

If you select **Market**, **Single Theo**, or **Bid/Ask Theo** as your **Profile Base Price**, the **Scratch section** is read only. You cannot interact with it and it only displays the current bids and asks.

When your contract is assigned to a profile with **Direct Order Entry** as its **Profile Base Price**, you can use the **Scratch Pad** to:

- Manually create, adjust, and submit orders during the trading session
- Link Autotrader to an Excel spreadsheet. The values in Excel seed the **Scratch** section.
- Enter formulas to calculate bid and ask prices and quantities

Notes: Each of the three types of trading listed above (Manual, Excel links, and Program) requires a different procedure for configuring the fields listed in the table below.

Field Name	Field Description
SBidQty	Sets the quantity of your scratch bid
SBidPrc	Sets the price on your scratch bid
SAskPrc	Sets the price of your scratch offer
SAskQty	Sets the quantity of your scratch offer

Profile Parameters Section

PROFILE PARAMETERS											
BIDOFFSET	BIDQTY	BIDRSVOFFSET	BIDRSVQTY	BIDALLOW	ASKOFFSET	ASKQTY	ASKRSVOFFSET	ASKRSVQUANTITY	ASKALLOW	MAXPOS	

You use the **Profile Parameters** section to view your current profile settings. Autotrader™ uses the settings in this section to determine how it trades. All parameters and their values listed in this section are identical to the fields and their associated values listed in the **Profile Setup Page**.

At any time, you can change the values (or formulas) of the fields listed below to change how Autotrader™ trades that row's contract. You can save these changes with the workspace but they are lost if you delete the row or switch the row's assigned profile.

To revert to your originally configured **Profile Parameters**, from the context menu, select **Reset Default Profile Values**.

Parameter Name	Matching Parameter in Profile Setup Page
BidOffset	Bid Offset
BidQty	Bid Quantity
BidRsvOffset	Bid Reserve Offset
BidRsvQty	Bid Reserve Qty
BidAllow	Bid Change Allowance
AskOffset	Ask Offset
AskQty	Ask Quantity
AskRsvOffset	Ask Reserve Offset
AskRsvQuantity	Ask Reserve Qty
AskAllow	Ask Change Allowance
MaxPos	Maximum Position

Cover Orders Section



The **Cover Order** section displays your **Cover Order offset** and whether or not you have enabled this functionality.

You can enable or disable cover orders and edit your offset directly in the grid.

Field Name	Field Description
CoverOffset	<p>Offset of the cover order. This sets the number of price units away from the fill price at which Autotrader™ submits its covering orders:</p> <ul style="list-style-type: none"> • For a filled bid, the covering order is submitted above the fill price with the appropriate offset. • For a filled offer, the covering order is submitted below the fill price with the appropriate offset.
Enable	<p>When selected, Autotrader™ places covering orders for that row's contract whenever you are filled on a quote submitted by Autotrader™.</p>

Updates Section



When you enable the **Use Change** feature, Autotrader™ sends change requests instead of **Cancel/Replace** requests to exchanges that accept them. Changes are generally counted as one transaction, whereas **Cancel/Replace** requests count as two transactions.

Autotrader™ automatically performs a **Cancel and Replace** on any quote generated due to a change in price.

Field Name	Field Description
Use Change	<p>When selected, Autotrader™ sends a change request to the exchanges that accept them (one transaction).</p> <p>If Use Change is not selected, or if there is a change in price, Autotrader™ sends a Cancel and Replace request (two transactions).</p>

Theo Prices Section



You use the **Theo Prices** section for three reasons:

- To generate a single theoretical price for use as a base when placing bids and offers.
- To generate a theoretical bid and ask for use as bases when placing bids and offers.
- To generate theoreticals for display to help you make better informed trades.

You can generate your theoretical values in one of two ways:

- Use formulas in the Theoretical cells.
- Create links to a theoretical generator that uses the OLE standard (e.g., Excel).

Note: You cannot use formulas in **Order Block** to generate Theoretical prices (although you can create a link to a theoretical generator).

After you set up the appropriate Theoretical fields, you can create profiles that use these theoretical prices as the **Profile Base Price** in determining the prices for your bids and offers. Refer to the **General Information** section in the **Profile Setup Page** for further information on this setup.

Note: Delta, Gamma, ImpVol, Vega, and Theta are values used in options trading. **Autotrader™** provides columns to display these theoreticals, but does not provide pricing models for their automatic generation. Instead, you must import these values from your theoretical price generator or Excel spreadsheet.

Field Name	Field Description
TheoSingle	Use this cell to link to your theoretical price generator.
TheoBid	Use this cell to link to your theoretical Bid generator.
TheoAsk	Use this cell to link to your theoretical Ask generator.
Delta	Use this cell to link to your Delta generator. This value is used in option trading.
Gamma	Use this cell to link to your Gamma generator. This value is used in option trading.
ImpVol	Use this cell to link to your ImpVol generator. This value is used in option trading.
Vega	Use this cell to link to your Vega generator. This value is used in option trading.
Theta	Use this cell to link to your Theta generator. This value is used in option trading.

Formula Section

FORMULA									
A	B	C	D	E	F	G	H	I	J

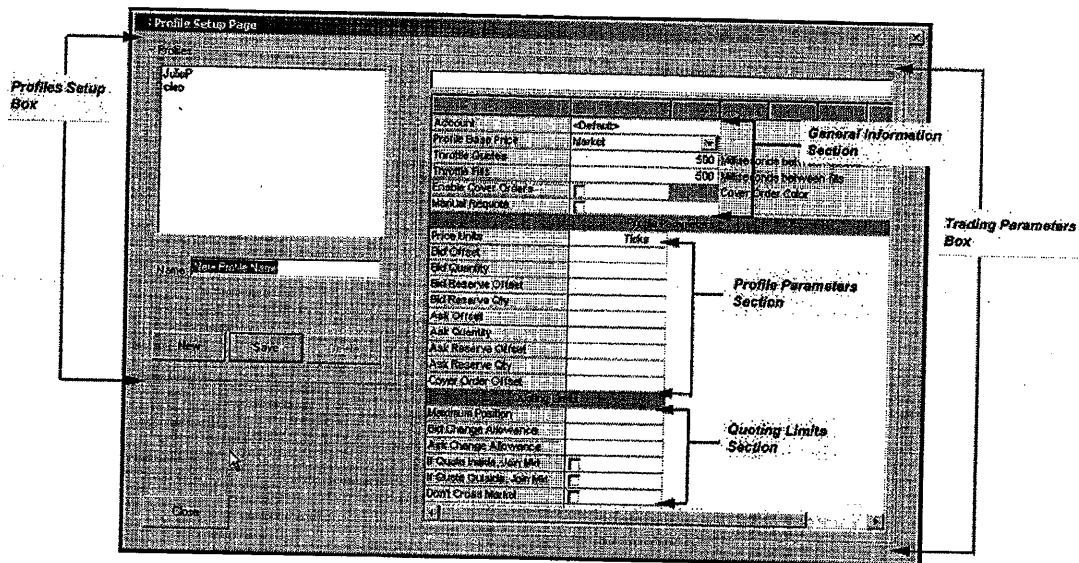
Note: You cannot use formulas in **Order Block**.

The **Formula** section offers you 10 different fields to create and store formulas for use by **Autotrader™**. If needed, you can rename these columns for easier reference. After entering a formula into this section, you can reference it from any parameter field to help generate a new value for that field.

► To enter a Formula into the Formula section:

1. Scroll to the far right of the window.
2. For the row in which you want to use a formula, click the cell in a **Formula** column.
For the first formula, use the **Formula A** column; for the second formula, use the **Formula B** column; etc. If you use more than two formulas, you must show the columns using the **Show/Hide** dialog box.
3. Type the formula you want to store.
4. When entering your formula, you can reference specific cells in this row or other rows.
 - If you want to reference a cell from this row, type its column name in the appropriate section of the formula.
 - If you want to reference a cell in another row, either use the row number or the **RowName** in the appropriate section of the formula. Both of these columns are hidden by default, and you must use the **Show/Hide** dialog box to show them.
5. If you want to use this formula in the future, save your workspace.

Profile Setup Page



Use the **Profile Setup** window to define the trading parameters that Autotrader™ uses when submitting orders to the market.

There are two parts to the **Profile Setup** window:

- Profiles Box**
 This box lists the profiles you set up and name. These profiles contain the trading parameters you configure and then save in the **Trading Parameters** box.
- Trading Parameters Box**
 Use the **Trading Parameters** box to configure the trading parameters you want Autotrader™ to use when submitting orders and interacting with the market. Trading parameters can reference theoretical prices, actual market prices, or be setup for direct order entry.

After entering your trading parameters, click **Close** to exit the **Profile Setup** window.

Opening the Profile Setup Page

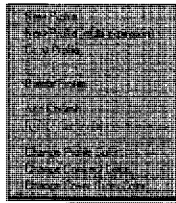
You use the **Profile Setup Page** to define the default trading parameters that Autotrader™ uses when submitting orders to the market. Parameters include trading specifications (bid/ask prices, quantities, and offsets), quoting limits, and account information. You open the **Profile Setup Page** using the context menu in the Autotrader™ window.

▶ **To open the Profile Setup Page:**

1. If you do not have Autotrader™ open, open it.
2. To display the context menu, right-click anywhere in Autotrader™.
3. Click **Profile Setup Page**.



Profile Page Context Menu

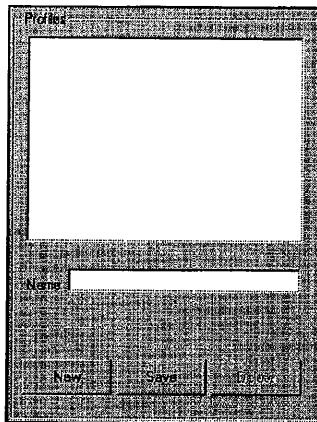


Function	Description
New Profile	Creates a new profile
New Profile (multi-expiration)	Creates a new profile for a product that has multiple expirations. You can use this sort of profile to setup different trading strategies for different contract expiration dates.
Copy Profile	You must have a profile loaded to use this function. Creates a copy of the current profile and names it Copy of X . X is the name of the profile copied by Autotrader™.
Save Profile	Saves the currently loaded profile.
Delete Profile	Deletes the currently loaded profile. You are prompted to verify that you actually want to delete the profile.
Add Column	Adds a new contract expiration column.
Delete Column(s)	You must have more than one expiration column in you profile to use this function. Deletes the selected expiration column.
Change Profile Color	<p>Opens the color palette. Use this palette to change the color associated with the Profile.</p> <p>This color is used in the Grid for a Single Expiration profile. Additionally, this assigns the color to any profile orders that exist in MD Trader™. In the MD Trader™ window, this color displays as a vertical stripe in the left side of your working orders column.</p>
Change Contract Color	Opens the Grid Styles dialog box. Use this dialog box to change the background and text color associated with a particular expiration range. This option is only available in Profiles that use expiration ranges.
Change Cover Order Color	Opens the color palette. Use this palette to change the color associated with your Cover Orders .

Profiles Box

The **Profiles Box** displays all profiles by name that you configure and save. You use the **Profiles Box** to:

- Create new profiles.
- Load saved profiles in the **Trading Parameters Box** for editing.
- Delete saved profiles.



► To create a new profile - Single Expiration:

1. Open the **Profile Setup Page**.
2. Click **New**.
3. Type the name of profile you want to create.
4. Define your trading parameters.
5. Click **Save**.

► To create a new profile - Multiple Expiration:

1. Open the **Profile Setup Page**.
2. Right-click anywhere in the **Profile Setup Page** to display the context Menu for the **Profile Setup Page**.
3. Click **New Profile (multi-expiration)**.
4. Type the name of the profile you want to create.
5. Click **Save**.

▶ **To load (edit) Saved Parameters:**

1. Open the **Profile Setup Page**.
2. In the **Profiles** box, click the name of the profile that contains the parameters you want to view:
3. If necessary, edit the needed parameters.
4. If you edited any parameters and want to retain these changes, click **Save**.

▶ **To delete a saved profile:**

1. Open the **Profile Setup Page**.
2. In the **Profiles** box, click the name of the profile you want to delete.
3. Click **Delete**.

Trading Parameters Box

Profile Best Price	Market	<input checked="" type="checkbox"/>	
Trade Quoting	500	<input checked="" type="checkbox"/>	Miliseconds between Quotes
Enable Cover Orders		<input checked="" type="checkbox"/>	Cover Order Color
Manual Request		<input type="checkbox"/>	
Price Units	Ticks		
Bid Offset			
Bid Quantity			
Bid Reserve Offset			
Bid Reserve Qty			
Ask Offset			
Ask Quantity			
Ask Reserve Offset			
Ask Reserve Qty			
Cover Order Offset			
Maximum Position			
Bid Change Allowance			
Ask Change Allowance			
If Quote Inside, Join Mid		<input type="checkbox"/>	
If Quote Outside, Join Mid		<input type="checkbox"/>	
Don't Cross Market		<input type="checkbox"/>	
Market Improve Limit			
Quote Move Limit			
State Quote Timeout (secs)			

Use the **Trading Parameters** box to define all trading parameters you want Autotrader™ to use when submitting orders and interacting with the market. Trading parameters can reference theoretical prices, actual market prices, or be setup for direct order entry.

After entering the parameters you want to use, name your profile and save it in the **Profiles Box**.

The **Trading Parameters Box** is divided into three sections:

- **General Information** section: This section contains general information that is used by all contract expirations in the particular profile.
- **Profile Parameters** section: This section contains specific trading parameters for each contract expiration in the profile. Parameters include prices, quantities, market offsets, reserve settings, and cover order information for the Bid and Ask.
- **Quoting Limits** section: This section configures the behavior of Autotrader™ in response to market conditions. In addition, it sets your position and **Market Improve** limits.

General Information Section

Account	<Default>		
Profile Base Price	Market		
Profile Quotes	500	Milliseconds between quotes	
Profile Fill	500	Milliseconds between fills	
Enable Cover Orders	<input type="checkbox"/>	Cover Order Color	
Market Residual	<input type="checkbox"/>		

You use the **General Information** section to configure the parameters listed below. Each parameter's name is listed in the **Parameter Name** column. Its functional description is listed in the **Description** column followed by the necessary procedure to configure the particular parameter.

Parameter Name	Description
Account	<p>The Account list displays all customer accounts that you set up previously in X_TRADER®.</p> <p>To assign a customer account to a particular profile, in the Account list, click the name of the customer account.</p> <p>If the account on the Profile Setup Page displays Default, then no changes occur to the Account field on the Grid. If the Account field displays a specific account on the Profile Setup Page, any change to the profile resets the Grid. All profile-related columns reflect any change that occurs after you click Save in the Profile Setup Page.</p>

Parameter Name	Description
Profile Base Price	<p>The Profile Base Price list displays four options. To select a Profile Base Price, in the Profile Base Price list, click the needed value:</p> <ul style="list-style-type: none"> • Market Price: Sets the base price of the profile according to the current market price. • Single Theo: Sets the base price of the profile according to a single user-defined theoretical price. This price must be imported into the TheoSingle column. • Bid/Ask Theo: Sets the base price of the profile according to a user-defined theoretical bid price and a user-defined theoretical ask price. These prices must be imported into the TheoBid and TheoAsk columns. • Direct Order Entry: Sets the base price of the profile according to prices set in an external application that you must link to Autotrader™. The user is responsible for pasting prices directly into the scratch pad. <p>Theoretical base prices and direct order entry prices require the user to input Excel links or formulas to use Autotrader™ for order submission.</p>
Throttle Quoting	<p>This check box allows you to regulate the frequency at which Autotrader™ sends quotes to the market. On certain exchanges, this helps you avoid exchange fees for sending excessive numbers of quotes to the market.</p> <p>If this is not selected, Autotrader™ updates its quotes whenever Profile Base Price changes.</p> <p>To set a throttle on your quoting, click Throttle Quoting. Then in the Milliseconds between Quotes box, type the number of milliseconds that Autotrader™ waits between sending quotes.</p> <p>If you are the market, Autotrader™ does not change your order.</p>
Milliseconds between Quotes	<p>This box configures the number of milliseconds that Autotrader™ waits between sending quotes. Before typing a value in this box, you must select Throttle Quoting.</p> <p>To set the number of milliseconds that Autotrader™ waits between sending quotes, in the Milliseconds between Quotes box, type the needed number.</p> <p>This parameter's minimum setting is 200 Milliseconds and defaults to 500 milliseconds.</p>

Parameter Name	Description
<p>Throttle Fills</p>	<p>This feature resembles the Throttle Quotes feature. For traders using Autotrader™ to spread and using Excel, the Throttle Fills feature prevents them from getting double filled on the second leg regularly. You can now throttle between fills to give your spreadsheet a chance to update the position. This feature is better than throttling between orders so you can continue to work the second leg of a spread.</p> <p>To set a throttle on your quoting, click Throttle Fills. In the Milliseconds between Fills box, type the number of milliseconds that Autotrader™ waits between sending fills.</p>
<p>Enable Cover Orders</p>	<p>This check box configures Autotrader™ to cover your orders. When an order is completely or partially filled, Autotrader™ submits a covering order, which is offset <i>from the fill price</i> by the amount you input in the Cover Order Offset box.</p> <p>Cover orders are the opposite type of order that was filled. Thus, if a bid gets filled, Autotrader™ submits an offer.</p> <p>To configure Autotrader™ to place cover orders, click Enable Cover Orders. You set the offset for Cover Orders in the Profile Parameters section.</p>
<p>Manual Requote</p>	<p>Enabling this feature allows you to control the number of fills Autotrader™ completes. This feature stops fills after an initial fill. Therefore, Autotrader™ does not continue to fill orders that you either do not want or do not even know about.</p> <p>You must click Update Orders to requote.</p>
<p>Cover Order Color</p>	<p>This box displays the color that Autotrader™ uses to designate cover orders it submits to the market.</p> <p>You set this color in the Profile Page context menu.</p>

Profile Parameters Section

Name	White					
Days to Expiration	30	60	90	180	270	360
Price Units	Ticks	Ticks	Ticks	Ticks	Ticks	Ticks
Bid Offset						
Bid Quantity						
Bid Reserve Offset						
Bid Reserve Qty						
Ask Offset						
Ask Quantity						
Ask Reserve Offset						
Ask Reserve Qty						
Cover Order Offset						

You use the **Profile Parameters section** to configure your trading parameters. Autotrader™ uses these parameters to determine how it behaves in submitting and removing quotes to and from the market. You can configure single or multiple expiration dates for the contract you want to trade. By default the **Profile Parameters section** displays the simple-expiration view.

If you need a multiple expiration view or want to setup trading parameters for more than one expiration date, use the **Profile Page** context menu to select **New Profile (multi-expiration)**.

Name	White					
Days to Expiration	30	60	90	180	270	360

In this view, each column (i.e., the White column, the Red column, etc.) contains a set of trading parameters that Autotrader™ uses to trade that particular expiration range. Additionally, two new rows are included: the **Name** and **Days to Expiration** rows.

Note: You can use formulas in any numeric cell (i.e., **Offsets** and **Quantities**) to determine dynamic values.

Profile Parameters Field Descriptions

In the table below, each parameter's name is listed in the **Parameter Name** column. The **Description** column contains a functional description for that particular parameter.

Note: If expiration ranges are used, column settings are used for that particular expiration range only. Thus, you can have several expiration ranges for a contract, each using a different set of profile parameters.

Formula Use: In any field that requires a numeric value, instead of a static number (e.g., 1 or 2), you can use a formula to generate a dynamic value (i.e., for your offsets and quantities). You cannot use formulas in **Order Block** to program trade.

Parameter Name	Description
Name	<p>This box is present only in the Multiple expiration view.</p> <p>For a custom name, replace the text in the Name box with the name you want to associate with this set of trading parameters.</p> <p>In addition to listing a name, the name box also displays the color associated with the expiration range. You customize this color using the Profile Page context menu.</p>
Days to Expiration	<p>This box is present only in the Multiple expiration view.</p> <p>Use this box to set the high-end of the expiration range for the profile. Each expiration range is fully customizable.</p> <p>Autotrader™ automatically determines the low-end of the expiration range based upon the next lower Days to Expiration value.</p>
Price Units	<p>Configures the units in which all parameters are displayed and used in calculations. You have two available options:</p> <ul style="list-style-type: none"> • Ticks • Currency • Price Units defaults to Ticks.

Parameter Name	Description
Bid Offset	<p>Sets the number of price units away from the selected Profile Base Price at which Autotrader™ bids. Unless you are the market, Autotrader™ adjusts your order in the market to match the offset whenever the market moves. You can configure how frequently orders are sent to market by using the Throttle Quoting feature in the General Information section.</p> <p>For all offsets, a positive number sets Autotrader™ to submit the order away from the Profile Base Price (e.g., the market) while a negative number sets Autotrader™ to submit the order inside the Profile Base Price (e.g., the market).</p>
Bid Quantity	Sets the default bid quantity Autotrader™ uses when bidding.
Bid Reserve Offset	<p>Use this box to set the number of price units away from the Profile Base Price at which Autotrader™ submits bid reserves to the market. See the Note in Bid Offset.</p> <p>A bid reserve is submitted when the initial bid (whose offset is set in Bid Offset) is filled.</p>
Bid Reserve Qty	Sets the default bid quantity Autotrader™ uses when submitting bid reserves to the market. If this value is 0, Autotrader™ does not submit bid reserves. Instead, it continues to submit bids normally using the Bid Offset.
Ask Offset	As Bid Offset above except it affects the ask (offer) not the bid.
Ask Quantity	As Bid Quantity above except it affects the ask (offer) not the bid.
Ask Reserve Offset	As Bid Reserve Offset above except it affects the ask (offer) reserve not the bid.
Ask Reserve Qty	As Bid Reserve Qty above except it affects the ask (offer) reserve not the bid.
Cover Order Offset	<p>Offset of the cover order. This sets the number of price units away from the fill price at which Autotrader™ submits its covering orders:</p> <p>For a filled bid, the covering order is submitted above the fill price with the appropriate offset.</p> <p>For a filled offer, the covering order is submitted below the fill price with the appropriate offset.</p>

Expiration Ranges

Each expiration range has its own column wherein you can set up a trading profile for that particular contract expiration.

The **Profile Setup Page** uses the following default expiration ranges and settings:

Default Days to Expiration value	Default Expiration Range	Default Profile Name and Color
30	01 - 30 Days	White
60	31 - 60 Days	Red
90	61 - 90 Days	Green
180	91 - 180 Days	Blue
270	181 - 270 Days	Orange
360	271 - 360 Days	Copper

Example Expiration Range calculation:

Autotrader™ determines expiration ranges according to the following example.

This example assumes the following **Days to Expiration** setup:

White	Red	
30	60	180

Autotrader™ sets:

- The **White** profile to a range of 01 to 30 days since this is the lowest range in the configuration.
- The **Red** profile to a range of 31 - 60 days since the next lowest value of **Days to Expiration** is 30.
- The **Green** profile to a range of 61 - 180 days since the next lowest value of **Days to Expiration** is 60.

Quoting Limits Section

Quoting Limits	
Maximum Position	<input type="text"/>
Bid Change Allowance	<input type="text"/>
Ask Change Allowance	<input type="text"/>
If Quote Inside Join Mkt	<input type="checkbox"/>
If Quote Outside Join Mkt	<input type="checkbox"/>
Don't Cross Market	<input type="checkbox"/>
Market Improve Limit	<input type="text"/>
Quote Move Limit	<input type="text"/>
Static Quote Timeout (secs)	<input type="text"/>

This section configures the behavior of **Autotrader™** in response to market conditions. In addition, it sets the threshold for your maximum position warning.

Note: You can use formulas in any numeric cell (i.e., **Maximum Position**, **Change Allowances**, and **Market Improve Limit**) to determine dynamic values. You cannot use formulas in **Order Block**.

Parameter Name	Description
Maximum Position	<p>Sets the maximum open position (used for both long and short) that a trader can reach before Autotrader™ stops quoting the position-increasing side of the market. When you reach this maximum position, Autotrader™ notifies you via the Quote Exceeds Maximum Position dialog box but continues to quote the position-reducing side of the market.</p> <p>If your position drops back below the maximum position setting, Autotrader™ automatically resumes quoting both sides of the market.</p> <p>The Maximum Position setting does not override other risk parameters that have been set up by your risk administrator.</p>
Bid Change Allowance	Sets the minimum amount of change from the Base Profile Price that the best market bid must move before Autotrader™ adjusts its quotes.
Ask Change Allowance	Sets the minimum amount of change from the Base Profile Price that the best market offer must move before Autotrader™ adjusts its quotes.
If Quote Inside, Join Mkt	<p>You use this check box in tandem with a theoretical pricing or direct order entry model.</p> <p>When selected, Autotrader™ adjusts any order if it is inside the current market. The order adjusts to match the current market price.</p>

Parameter Name	Description
If Outside, Join Mkt	<p>You use this check box in tandem with a theoretical pricing or direct order entry model.</p> <p>When selected, Autotrader™ adjusts any order if it is outside the current market. The order adjusts to match the current market price.</p>
Don't Cross Market	<p>Default is off. When enabled, Autotrader™ rejects any order if it crosses the market. Generally, traders do not want to cross orders.</p> <p>You use this check box in tandem with a theoretical pricing or direct order entry model.</p> <p>Cross order checks only occur when you use Autotrader™ in Auto mode.</p>
Market Improve Limit	<p>You use this parameter in tandem with a theoretical pricing or direct order entry model.</p> <p>Sets the limit of price units by which a quote can improve the market. If an order attempts to improve the market more than the set limit, Autotrader™ adjusts the order so that it remains within the set limit.</p>
Quote Move Limit	<p>Allows you to control how far the quote moves and changes. Most often used when you utilize your own theoretical formulas and spreadsheet. If the new quote exceeds the Quote Move Limit, it will not be sent to market and a warning message displays.</p> <p>Quote Limit checks only occur when you use Autotrader™ in Auto mode.</p>
Stale Quote Timeout (secs)	<p>Most often used when you utilize your own theoretical formulas and spreadsheet.</p> <p>Allows you to check the effectiveness of your theoretical pricing spreadsheet. If your quote does not move in the seconds you set, Autotrader™ notifies you to check your spreadsheet. It may not be updating data properly. Autotrader™ deletes the outdated quotes.</p>

Defining Trading Parameters

Before performing these procedures, you should be familiar with the functional descriptions of the available trading parameters.

Note: You can use a formula to dynamically determine the value of any numerically valued cell (i.e., offsets, quantities, position limits, change allowances, etc.). This is not available in **Order Block**.

To define your profiles and their associated trading parameters, perform the following procedure:

► To define Trading Parameters for a Single Expiration:

1. Open Autotrader™.
2. Open the **Profile Setup Page**.
3. Create, name, and save your new profile.
4. If you want to assign a custom color to your profile, do so now.
5. Configure the **General Information** section by performing the following tasks:
 - In the **Account** box, click the **Customer Account** you want to use as the default account with this profile.
 - In the **Profile Base Price** box, click to select the Base Price that Autotrader™ uses to place its orders in the market. If you select **Direct Order Entry**, the **Bid and Ask Offsets and Quantities** (for original and reserve) are removed from the **Profile Parameters** section. **Direct Order Entry** uses the **Scratch Pad** to send orders to the market.
 - By default, **Throttle Quoting** is selected with a setting of 500 milliseconds. If you do not want to use this function, clear the **Throttle Quoting** check box. If you want to use time interval other than 500, click in the **Milliseconds between Quotes** box, drag to select 500, and then type your needed value.
 - If you want Autotrader™ to submit covering orders whenever you get filled, click the **Enable Cover Orders** check box.
 - If you want to assign a different color to your **Cover Orders**, do so now.

6. Configure the **Profile Parameters** section by performing the following tasks:
 - In the **Price Units** box, click the type of price unit you want to use with this profile.
 - In **Bid Offset**, set the offset at which you want Autotrader™ to start placing bids in the market.
 - In **Bid Quantity**, set the quantity of the initial bid that Autotrader™ sends to the market.
 - If you want to use reserve bids (additional bids placed after the original bids are filled), enter the appropriate values into the **Bid Reserve Offset** and **Bid Reserve Qty** boxes.
 - In **Ask Offset**, set the offset at which you want Autotrader™ to start placing offers in the market.
 - In **Ask Quantity**, set the quantity of the initial offer that Autotrader™ sends to the market.
 - If you want to use reserve asks (additional offers placed after the original offers are filled), enter the appropriate values into the **Ask Reserve Offset** and **Ask Reserve Qty** boxes.
 - If you are using **Cover Orders**, set the offset (away from the filled price) at which you want Autotrader™ to submit the covering order.
7. Configure the **Quoting Limits** section by performing the following tasks:
 - In **Maximum Position**, type your maximum allowable position.
 - In **Bid Change Allowance**, type the amount of market movement that must occur (in Price Units) before Autotrader™ **Cancels and Replaces** its Bids.
 - In **Ask Change Allowance**, type the amount of market movement that must occur (in Price Units) before Autotrader™ **Cancels and Replaces** its offers.
 - If you want Autotrader™ to submit covering orders whenever you get filled, click the **Enable Cover Orders** check box.
 - If you use **Theoreticals** (Single or Ask and Bid) as your **Profile Base Price**, there are for additional configuration tasks.
8. Click **Save**.
9. To go back to the Autotrader™ window, click **Close**.

▶ **To define Trading Parameters for Multiple Expirations:**

This procedure is almost identical to the procedure used to define parameters for a single expiration except for:

- Multiple expiration columns
- The **Name** box
- The **Days to Expiration** box
- The color associated with the expiration date (range)

In addition to the six default expiration columns, you can use the **Profile Setup Page** context menu to add or remove expiration columns.

In addition to the performing Steps 7 and 8 from **Defining Trading Parameters for a Single Expiration** procedure for each expiration column, perform the following tasks

1. In the **Name** box, either:
 - Accept the default column name.
 - Drag to select the contents of the **Name** box, and then type the name you want to assign to that column's trading parameters.
2. In the **Days to Expiration** boxes, either:
 - Accept the default expiration ranges.
 - Edit the expiration ranges to suit your needs.
 - Either accept the default color schema for the expiration ranges, or assign your own colors to each expiration range.
3. Click **Save**.

Additional Theoretical Configurations

If Quote Inside, Join Mkt	<input type="checkbox"/>
If Outside, Join Mkt	<input type="checkbox"/>
Don't Cross Market	<input type="checkbox"/>
Market Improve Limit	

Perform the following tasks in the **Profile Setup Page** when you set the **Profile Base Price** to **Single Theo** or **Bid/Ask Theo**.

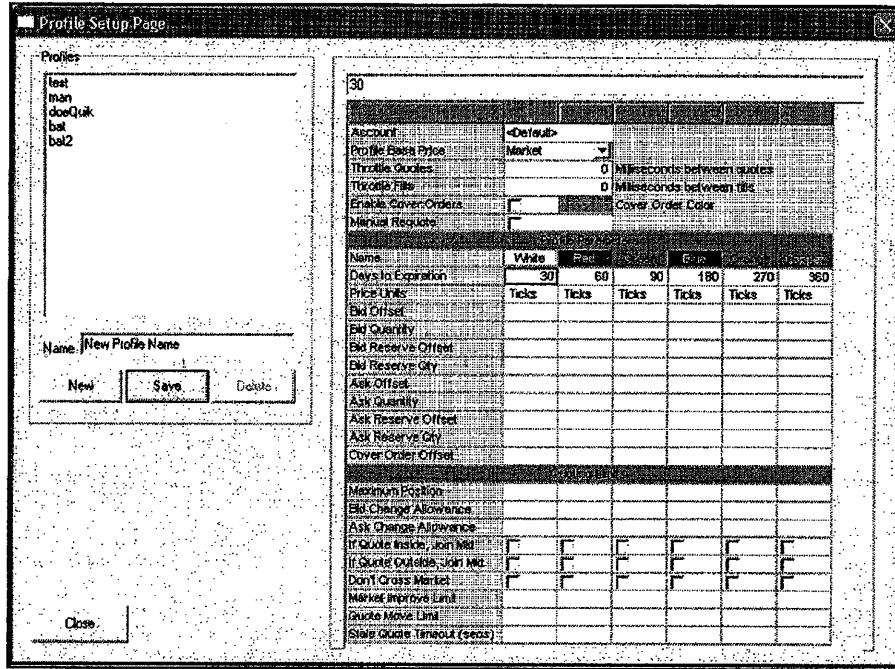
► **To define Trading Parameters for Theoretical:**

1. If you want Autotrader™ to adjust orders that would fall inside the market to the actual market price, click to select the **If Quote Inside, Join Mkt** check box.
2. If you want Autotrader™ to adjust orders that would fall outside the market to the actual market price, click to select the **If Outside, Join Mkt** check box.
3. If you want Autotrader™ to reject orders that would cross the market, click to select the **Don't Cross Market** check box.
4. If you want to set a limit on how much an order can improve the market, use the **Market Improve Limit** box. Type the number of price units beyond which Autotrader™ cannot better the market.
5. Click **Save**.
6. After you close out of the **Profile Setup Page**, you must setup the Theoretical columns in Autotrader™ to import the theoretical values that you are going to use.

Multi-Expiration Profile

A multi-expiration profile contains multiple schedules. Define the schedules by how many days a contract is from expiring. As a contract gets closer to expiring it rolls to a schedule that is less than the days out of the schedule.

Multi-expiration profiles allow for schedules to change as the contracts move through time. As the contracts move, the schedules change with them.



Theoreticals and Formulas

Formulas must begin with an equal (=) sign and conform to the syntax:

`= expression ; constraint expression // comment`

where:

- **expression** defines the calculations needed to generate the value of a cell
- **constraint expression** places limits on acceptable values or the circumstances under which the calculation should take place. Constraint expressions establish conditions under which a formula operates or boundaries for valid results of the formula. A constraint expression can reference the cell in which it resides, using the symbol #
- **comment** is any text you want to attach to the cell. This text is not used in the formula.

For example:

`=A1 + A2 ; #>2 && #<=B5 || #==C7`

In this example, the value of the current cell is the sum of cells A1 and A2, and that value must be either greater than 2 and less than or equal to the value of cell B5, or equal to the value of cell C7.

You can use the following formulas with Autotrader™ to help define its trading behavior:

- Mathematical
- Statistical
- Conditional Statistical
- String Functions
- Logic Functions
- Financial Functions
- Date and Time Functions
- Miscellaneous Functions
- Embedded Tools

Note: You cannot use formulas in **Order Block**.

Mathematical Formulas

Formula	Description
@ABS(<i>X</i>)	Absolute value of <i>X</i>
@ACOS(<i>X</i>)	Arc cosine of <i>X</i>
@ASIN(<i>X</i>)	Arc sine of <i>X</i>
@ATAN(<i>X</i>)	2-quadrant arc tangent of <i>X</i>
@ATAN2(<i>X</i> , <i>Y</i>)	4-quadrant arc tangent of <i>Y/X</i>
@CEIL(<i>X</i>)	Smallest integer greater than or equal to <i>X</i>
@COS(<i>X</i>)	Cosine of <i>X</i>
@COSH(<i>X</i>)	Hyperbolic cosine of <i>X</i>
@DEGREES(<i>X</i>)	Converts the angle expressed in radians to degrees ($^{\circ}$).
@DET(<i>M</i>)	Determinant of the matrix range <i>M</i> , which must be a square matrix
@DOT(<i>R1</i> , <i>R2</i>)	Dot product of the vectors <i>R1</i> and <i>R2</i>
@EXP(<i>X</i>)	$-e$ raised to the <i>X</i> power
@FACT(<i>N</i>)	Value of <i>N</i> !
@FLOOR(<i>X</i>)	Largest integer less than or equal to <i>X</i>
@FRAC(<i>X</i>)	Fractional portion of <i>X</i>
@GAMMA(<i>X</i>)	Value of the gamma function evaluated at <i>X</i>
@GRAND	12th-degree binomial approximation to a Gaussian random number with zero mean and unit variance
@INT(<i>X</i>)	Integer portion of <i>X</i>
@LN(<i>X</i>)	Natural log (base <i>e</i>) of <i>X</i>
@LNGAMMA(<i>X</i>)	Log base <i>e</i> of the gamma function evaluated at <i>X</i>
@LOG(<i>X</i>)	Log base 10 of <i>X</i>
@LOG10(<i>X</i>)	Log base 10 of <i>X</i>

Formula	Description
@LOG2(<i>X</i>)	Log base 2 of <i>X</i>
@MOD(<i>X</i> , <i>Y</i>)	Remainder of <i>X/Y</i>
@MODULUS(<i>X</i> , <i>Y</i>)	Modulus of <i>X/Y</i>
@PI	Value of π
@POLY(<i>X</i> , ...)	Value of an Nth-degree polynomial in <i>X</i>
@PRODUCT(<i>X</i> , ...)	Product of all the numeric values in the argument list
@RADIANS(<i>X</i>)	Converts the angle expressed in degrees to radians ()
@RAND	Uniform random number on the interval [0,1)
@ROUND(<i>X</i> , <i>n</i>)	<i>X</i> rounded to <i>n</i> number of decimal places (0 to 15)
@SIGMOID(<i>X</i>)	Value of the sigmoid function
@SIN(<i>X</i>)	Sine of <i>X</i>
@SINH(<i>X</i>)	Hyperbolic sine of <i>X</i>
@SQRT(<i>X</i>)	Positive square root of <i>X</i>
@SUMPRODUCT(<i>R1</i> , <i>R2</i>)	Dot product of the vectors <i>R1</i> and <i>R2</i> , where <i>R1</i> and <i>R2</i> are of equal dimension
@TAN(<i>X</i>)	Tangent of <i>X</i>
@TANH(<i>X</i>)	Hyperbolic tangent of <i>X</i>
@TRANSPOSE(<i>M</i>)	Transpose of matrix <i>M</i>
@VECLEN(...)	Square root of the sum of squares of its arguments

Statistical Formulas

Formula	Description
@AVG(...)	Average (arithmetic mean) of its arguments
@CORR(R1, R2)	Pearson's product-moment correlation coefficient for the paired data in ranges R1 and R2
@COUNT(...)	Count of its non-blank arguments
@F(M, N, F)	Integral of Snedecor's F-distribution with M and N degrees of freedom from minus infinity to F
@ERF(L, U)	Error function integrated between 0 and L; if U specified, between L and U
@ERFC(L)	Complementary error function integrated between L and infinity
@FORECAST(...)	Predicted Y values for given X
@FTEST(R1, R2)	Significance level () of the two-sided F-test on the variances of the data specified by ranges R1 and R2
@GMEAN(...)	Geometric mean of its arguments
@HMEAN(...)	Harmonic mean of its arguments
@LARGE(R, N)	Nth largest value in range R
@MAX(...)	Maximum of its arguments
@MEDIAN(...)	Median (middle value) of the range R1
@MIN(...)	Minimum of its arguments
@MODE(...)	Mode, or most frequently occurring value
@MSQ(...)	Mean of the squares of its arguments
@PERCENTILE(R, N)	Value from the range R which is at the Nth percentile in R
@PERCENTRANK(R, N)	Percentile rank of the number N among the values in range R
@PERMUT(S, T)	Number of T objects that can be chosen from the set S, where order is significant
@PTTEST(R1, R2)	Significance level () of the two-sided T-test for the paired samples contained in ranges R1 and R2
@QUARTILE(R, Q)	Quartile Q of the data in range R

Formula	Description
@RANK(<i>E</i> , <i>R</i> , <i>O</i>)	Rank of a numeric argument <i>E</i> in the range <i>R</i>
@RMS(...)	Root of the mean of squares of its arguments
@SMALL(<i>R</i> , <i>N</i>)	<i>N</i> th smallest number in range <i>R</i>
@SSE(...)	Sum squared error of its arguments. It is equivalent to @VAR (...) * @COUNT (...)
@SSQ(...)	Sum of squares of its arguments
@STD(...)	Population standard deviation (N weighting) of its arguments
@STDS(...)	Sample standard deviation (N-1 weighting) of its arguments
@SUM(...)	Sum of its arguments
@T(<i>N</i> , <i>T</i>)	Integral of T-distribution with <i>N</i> degrees of freedom from minus infinity to <i>T</i>
@TTEST(<i>R</i> , <i>X</i>)	Significance level (α) of the two-sided single population T-test for the population samples contained in range <i>R</i>
@TTEST2EV(<i>R1</i> , <i>R2</i>)	Significance level (α) of the two-sided dual population T-test for ranges <i>R1</i> and <i>R2</i> , where the population variances are equal
@TTEST2UV(<i>R1</i> , <i>R2</i>)	Significance level (α) of the two-sided dual population T-test for ranges <i>R1</i> and <i>R2</i> , where the population variances are not equal
@VAR(...)	Sample variance (N weighting) of its arguments
@VARS(...)	Sample variance (N-1 weighting) of its arguments
@VSUM(...)	"Visual sum" of its arguments, using precision and rounding of formatted cell values

Conditional Statistical Formulas

Formula	Description
@CAVG(..., C)	Conditional average
@CCOUNT(..., C)	Conditional count
@CMAX(..., C)	Conditional maximum
@CMIN(..., C)	Conditional minimum
@CSTD(..., C)	Conditional sample standard deviation (N weighting)
@CSTDS(..., C)	Conditional sample standard deviation (N-1 weighting)
@CSUM(..., C)	Conditional sum
@CVAR(..., C)	Conditional population variance (N weighting)
@CVARS(..., C)	Conditional population variance (N-1 weighting)

String Functions

Formula	Description
@CHAR(<i>N</i>)	Character represented by the code <i>N</i>
@CLEAN(<i>S</i>)	String formed by removing all non-printing characters from the string <i>S</i>
@CODE(<i>S</i>)	ASCII code for the first character in string <i>S</i>
@EXACT(<i>S1</i> , <i>S2</i>)	Returns true (1) if string <i>S1</i> exactly matches string <i>S2</i> , otherwise returns 0
@FIND(<i>S1</i> , <i>S2</i> , <i>N</i>)	Index of the first occurrence of <i>S1</i> in <i>S2</i>
@HEXTONUM(<i>S</i>)	Numeric value for the hexadecimal interpretation of <i>S</i>
@LEFT(<i>S</i> , <i>N</i>)	String composed of the leftmost <i>N</i> characters of <i>S</i>
@LENGTH(<i>S</i>)	Number of characters in <i>S</i>
@LOWER(<i>S</i>)	<i>S</i> converted to lower case
@MID(<i>S</i> , <i>N1</i> , <i>N2</i>)	String of length <i>N2</i> that starts at position <i>N1</i> in <i>S</i>

Formula	Description
@NUMTOHEX(X)	Hexadecimal representation of the integer portion of <i>X</i> .
@PROPER(S)	String <i>S</i> with the first letter of each word capitalized
@REGEX(<i>S1</i> , <i>S2</i>)	Returns true (1) if string <i>S1</i> exactly matches string <i>S2</i> ; otherwise returns false (0). Allows "wildcard" comparisons by interpreting <i>S1</i> as a regular expression
@REPEAT(<i>S</i> , <i>N</i>)	String <i>S</i> repeated <i>N</i> times
@REPLACE(<i>S1</i> , <i>N1</i> , <i>N2</i> , <i>S2</i>)	String formed by replacing the <i>N2</i> characters starting at position <i>N1</i> in <i>S1</i> with string <i>S2</i>
@RIGHT(<i>S</i> , <i>N</i>)	String composed of the rightmost <i>N</i> characters of <i>S</i>
@STRCAT(...)	Concatenation of all its arguments
@STRING(<i>X</i> , <i>N</i>)	String representing the numeric value of <i>X</i> , to <i>N</i> decimal places
@STRLEN(...)	Total length of all strings in its arguments
@TRIM(S)	String formed by removing spaces from the string <i>S</i>
@UPPER(S)	String <i>S</i> converted to upper case
@VALUE(S)	Numeric value represented by the string <i>S</i> ; otherwise 0 if <i>S</i> does not represent a number

Logic Functions

Formula	Description
@AND(...)	0 if any arguments are 0; 1 if all arguments are 1; otherwise -1
@FALSE	Logical value 0
@FILEEXISTS(S)	1 if file <i>S</i> can be opened for reading; otherwise 0
@IF(X, T, F)	Value of <i>T</i> if <i>X</i> evaluates to non-zero, or <i>F</i> if <i>X</i> evaluates to zero
@ISERROR(X)	Returns 1 if <i>X</i> "contains" an error, otherwise 0
@ISNUMBER(X)	1 if <i>X</i> is a numeric value; otherwise 0
@ISSTRING(X)	1 if <i>X</i> is a string value; otherwise 0
@NAND(...)	0 if all arguments are 1; 1 if any arguments are 0; otherwise -1
@NOR(...)	0 if any arguments are 1; 1 if all arguments are 0; otherwise -1
@NOT(X)	0 if $X=1$; 1 if $X=0$; otherwise -1
@OR(...)	0 if all arguments are 0; 1 if any arguments are 1; otherwise -1
@TRUE	Logical value 1
@XOR(...)	-1 if any of the arguments are not 0 or 1; otherwise 0 if the total number of arguments with the value 1 is even; 1 if the total number of arguments with the value 1 is odd.

Financial Functions

Formula	Description
@ACCRINT(I, Ft, S, R, P, F[, B])	Accrued interest for a security that pays periodic interest
@ACCRINTM(I, S, R, P[, B])	Accrued interest for a security that pays interest at maturity
@COUPDAYBS(S, M, F[, B])	Number of days between the beginning of the coupon period to the settlement date
@COUPDAYS(S, M, F[, B])	Number of days in the coupon period that the settlement date is in
@COUPDAYSNC(S, M, F[, B])	Number of days between the settlement date and the next coupon date
@COUPNCD(S, M, F[, B])	Next coupon date after the settlement date
@COUPNUM(S, M, F[, B])	Number of coupon payments between the settlement date and maturity date
@COUPPCD(S, M, F[, B])	Previous (most recent) coupon date before the settlement date
@CTERM(R, FV, PV)	Number of compounding periods for an investment
@CUMIPMT(R, NP, PV, S, E, T)	Cumulative interest on a loan between start period <i>S</i> and end period <i>E</i>
@CUMPRINC(R, NP, PV, S, E, T)	Cumulative principal paid on a loan between start period <i>S</i> and end period <i>E</i>
@DB(C, S, L, P[, M])	Fixed-declining depreciation allowance
@DDB(C, S, L, N)	Double-declining depreciation allowance
@DISC(S, M, P, R[, B])	Discount rate for a security
@DOLLARDE(FD, F)	Converts a dollar amount expressed as a fraction form into a decimal form
@DOLLARFR(DD, F)	Converts a dollar amount expressed as a decimal form into a fraction form
@DURATION(S, M, R, Y, F[, B])	Macauley duration of a security assuming \$100 face value
@EFFECT(NR, NP)	Returns the effective annual interest rate

Formula	Description
@FV(P, R, N)	Future value of an annuity
@FVSCHEDULE(P, S)	Future value of an initial investment after compounding a series of interest rates
@INTRATE(S, M, I, R[, B])	Interest rate for a fully invested security
@IPMT(R, P, NP, PV, FV[, T])	Interest payment for a specific period for an investment based on periodic, constant payments and a constant interest rate
@IRR(G, F)	Internal rate of return on an investment. See also @XIRR and @MIRR.
@MDURATION(S, M, R, Y, F[, B])	Modified Macauley duration of a security assuming \$100 face value
@MIRR(CF, FR, RR)	Modified internal rate of return for a series of periodic cash flows
@NOMINAL(ER, NP)	Nominal annual interest rate
@ODDFPRICE(S, M, I, FC, R, Y, RD, F[, B])	Price per \$100 face value of a security with an odd (short or long) first period
@ODDFYIELD(S, M, I, FC, R, PR, RD, F[, B])	Yield per of a security with an odd (short or long) first period
@PMT(PV, R, N)	Periodic payment for a loan
@PPMT(R, P, NP, PV, FV, T)	Payment on the principal for a specific period for an investment based on periodic, constant payments and a constant interest rate
@PRICE(S, M, R, Y, RD, F[, B])	Price per \$100 face value of a security that pays periodic interest
@PRICEDISC(S, M, D, RD[, B])	Price per \$100 face value of a discounted security
@PRICEMAT(S, M, I, R, Y[, B])	Price per \$100 face value of a security that pays interest at maturity
@PV(P, R, N)	Present value of an annuity
@RATE(FV, PV, N)	Interest rate required to reach future value <i>FV</i> .
@RECEIVED(S, M, I, D, [, B])	Amount received at maturity for a fully vested security
@SLN(C, S, L)	Straight-line depreciation allowance

Formula	Description
@SYD(C, S, L, N)	"Sum-of-years-digits" depreciation allowance
@TBILLEQ(S, M, D)	Bond-equivalent yield (BEY) for a Treasury Bill
@TBILLYIELD(S, M, D)	Yield on a Treasury bill
@TERM(P, R, FV)	Number of payment periods for an investment.
@VDB(C, S, L, S, E)	Fixed-declining depreciation allowance between two periods
@XIRR(G, V, D)	Internal rate of return for a series of cash flows with variable intervals
@XNPV(R, V, D)	Returns the net present value for a series of cash flows with variable intervals
@YIELD(S, M, R, PR, RD, F[, B])	Yield of a security that pays periodic interest
@YIELDMAT(S, M, I, R, PR[, B])	Annual yield of a security which pays interest at maturity

Date and Time Functions

Formula	Description
@DATE(<i>Y, M, D</i>)	Date value for year <i>Y</i> , month <i>M</i> , and day <i>D</i>
@DATEVALUE(<i>S</i>)	Corresponding date value for a given string <i>S</i>
@DAYS360(<i>S, E</i>)	Number of days between two dates, based on a 30/360 day count system
@DAY(<i>DT</i>)	Day number in the date/time value <i>DT</i>
@EDATE(<i>S, M</i>)	Date/time value representing number of months (<i>M</i>) before or after start date (<i>S</i>)
@EOMONTH(<i>S, M</i>)	Date/time value representing the last day of the month <i>M</i> months after <i>S</i> , if <i>M</i> is positive, or <i>M</i> months before if <i>M</i> is negative
@HOUR(<i>DT</i>)	Hour value (0-23) of date/time value <i>DT</i>
@MINUTE(<i>DT</i>)	Minute value (0-59) of date/time value <i>DT</i>
@MONTH(<i>DT</i>)	Number of the month in date/time value <i>DT</i>
@NETWORKDAYS(<i>S, E, H</i>)	Number of whole working days, starting at <i>S</i> and going to <i>E</i> , excluding weekends and holidays
@NOW	Date/time value of the current system date and time
@SECOND(<i>DT</i>)	Seconds value (0-59) of the date/time value <i>DT</i>
@TIME(<i>H, M, S</i>)	Time value for hour <i>H</i> , minute <i>M</i> , and second <i>S</i>
@TIMEVALUE(<i>S</i>)	Corresponding time value for a given string value <i>S</i>
@TODAY	Date value of the current system date
@WEEKDAY(<i>D</i>)	Integer representing the day of the week on which the day <i>D</i> falls starting at 1 (Sunday) and ending with 7 (Saturday)
@WORKDAY(<i>S, D, H</i>)	Day that is <i>D</i> working days after <i>S</i> , if <i>D</i> is positive, or before <i>S</i> , if <i>D</i> is negative, excluding weekends and all holidays specified as dates in range <i>H</i>
@YEAR(<i>DT</i>)	Year value of date/time value <i>DT</i>
@YEARFRAC(<i>S, E, B</i>)	Portion of the year represented by the number of days between start date (<i>S</i>) and end date (<i>E</i>)

Miscellaneous Functions

Note: Some functions may return a result that is a range or cell reference. These indirect references are not used in determining the pattern of recalculation. Plan carefully before using these functions.

Formula	Description
@CELLREF(<i>N1</i> , <i>N2</i>)	Reference to the cell in column <i>N1</i> and row <i>N2</i>
@CHOOSE(<i>N</i> , ...)	<i>N</i> th argument from the list
@COL(<i>C</i>)	Column address of the cell referenced by <i>C</i>
@COLS(<i>R</i>)	Number of columns in the specified range <i>R</i>
@HLOOKUP(<i>X</i> , <i>S</i> , <i>R</i>)	Value of the cell in range <i>S</i> that is <i>R</i> number of rows beneath <i>X</i>
@INIT(<i>X1</i> , <i>X2</i>)	First argument on the first recalculation pass and the second argument on all subsequent recalculation passes when Autotrader is set to perform iterative calculations
@INTERP2D(<i>R1</i> , <i>R2</i> , <i>N</i>)	Interpolation value for a 2-dimensional vector
@INTERP3D(<i>R</i> , <i>X</i> , <i>Y</i>)	Interpolation value for a 3-dimensional vector
@MATCH(<i>V</i> , <i>R</i> , <i>T</i>)	Relative position in range <i>R</i> of value <i>V</i> based on positioning criteria <i>T</i>
@N(<i>R</i>)	Numeric value of the top left cell in range <i>R</i>
@RANGEREf(<i>N1</i> , <i>N2</i> , <i>N3</i> , <i>N4</i>)	Reference to the range defined by coordinates <i>N1</i> through <i>N4</i>
@ROW(<i>C</i>)	Row address of the cell referenced by <i>C</i>
@ROWS(<i>R</i>)	Number of rows in the specified range <i>R</i>
@S(<i>R</i>)	String value of the top left cell in range <i>R</i>
@VLOOKUP(<i>X</i> , <i>S</i> , <i>C</i>)	Value of the cell in range <i>S</i> that is <i>C</i> number of columns to the right of <i>X</i>

Embedded Tools

Note: Embedded tools should not be contained within other functions or arithmetic operations in a single formula. However, you can copy, move, and format embedded tools just like any other function.

Formula	Description
@DFT(<i>R</i>)	Discrete Fourier Transform of the range <i>R</i>
@EIGEN(<i>M</i>)	Eigen values of the matrix <i>M</i>
@FFT(<i>R</i>)	Discrete Fourier Transform of the range <i>R</i> using a fast Fourier Transform algorithm
@FREQUENCY(<i>R</i> , <i>B</i>)	Returns a frequency distribution for values <i>R</i> with a set of intervals <i>B</i>
@INVDFT(<i>R</i>)	Inverse of the Discrete Fourier Transform of the range <i>R</i>
@INVERT(<i>M</i>)	Inverse of matrix <i>M</i>
@INVFFT(<i>R</i>)	Inverse of the Discrete Fourier Transform of the range <i>R</i> using a fast Fourier Transform algorithm.
@LINFIT(<i>X</i> , <i>Y</i>)	Straight line least squares fit. This function is equivalent to @POLYFIT(<i>X</i> , <i>Y</i> , 1)
@LLS(<i>A</i> , <i>Y</i>)	Linear least squares solution <i>X</i> to the over-determined system of equations $AX=Y$
@MMUL(<i>M1</i> , <i>M2</i>)	Product of multiplying matrix <i>M2</i> by matrix <i>M1</i>
@PLS(<i>X</i> , <i>Y</i> , <i>d</i>)	Analyzes the least squares polynomial model $Y=P(X)$, where <i>P</i> is a polynomial of degree <i>d</i>
@POLYCOEF(<i>X</i> , <i>Y</i> , <i>d</i>)	Least squares coefficients for the polynomial fit $Y=P(X)$, where <i>P</i> is a polynomial of degree <i>d</i>
@TRANSDPOSE(<i>M</i>)	Transpose of matrix <i>M</i>
@TREND(<i>NX</i> , <i>KX</i> , <i>KY</i>)	<i>Y</i> values for new <i>x</i> values given existing <i>x</i> and <i>y</i> values

Autotrader™ Formulas

Using Conversion Formulas

If you want to see the actual values in Excel before they are sent to Autotrader™, you can use the following equations:

Assume A1 has the original price (in 32nds) and B1 has the number of offset ticks:

$$=INT(A1/100)*100+INT((B1+MOD(A1, 100))/32)*100+MOD(B1+MOD(A1, 100), 32)$$

Example:

A1	B1	RESULT
110310	3	111010
111020	-3	110310

Assume A2 has the original price (in ½ 32nds) and B2 has the number of offset ticks:

$$=INT(A2/1000)*1000+INT((B2/0.2+MOD(A2, 1000))/320)*1000+MOD(B2/0.2+MOD(A2, 1000), 320)$$

Example:

A2	B2	RESULT
110310	3	111005
110310	-3	110295

Assume A3 has the original price in $\frac{1}{4}$ 32nds and B3 has the number of offset ticks:

$$\begin{aligned}
 &= (INT(A3/1000) + INT((INT(MOD(A3,1000)/10) + \\
 &\quad INT((ROUNDUP(MOD(A3,10)*0.4,0) + B3)/4))/32)) * 1000 + \\
 &\quad MOD(INT(MOD(A3,1000)/10) + \\
 &\quad INT((ROUNDUP(MOD(A3,10)*0.4,0) + B3)/4), 32) * 10 + \\
 &\quad INT(MOD(ROUNDUP(MOD(A3,10)*0.4,0) + B3, 4)/0.4)
 \end{aligned}$$

Example:

A3	B3	RESULT
110312	3	111000
110312	-2	110307

Assume that:

C32 and D32 contain prices in 32nds, 1/2 32nds, or 1/4 32nds (can be positive or negative), then the result of adding the two can be expressed as:

$$=(INT(ABS(K34)/128)*1000+INT((ABS(K34)-(INT(ABS(K34)/128)*128))/4)*10+INT((ABS(K34)-INT(ABS(K34)/128)*128-INT((ABS(K34)-(INT(ABS(K34)/128)*128))/4)*4)/0.4))*INT(ABS(K34+0.1)/(K34+0.1))$$

Where K34 equals:

$$INT(ABS(C32)/1000)*INT(ABS(C32)/C32)*128+INT(MOD(ABS(C32),1000)/10)*INT(ABS(C32)/C32)*4+ROUNDUP(ABS(MOD(ABS(C32),10)*INT(ABS(C32)/C32))*0.4,0)*INT(ABS(C32)/C32)+INT(ABS(D32)/1000)*INT(ABS(D32)/D32)*128+MOD(ABS(TRUNC(D32/10)),100)*INT(ABS(D32)/D32)*4+ROUNDUP(ABS(MOD(ABS(D32),10)*INT(ABS(D32)/D32))*0.4,0)*INT(ABS(D32)/D32)$$

K34 cannot be substituted into the first formula since the resulting expression is too long for Excel to handle.

Example:

C32	D34	RESULT
99152	-205	98267
99152	99155	-2

Converting Floating Point to a Price

Another set of equations converts a floating point number to a price. If you are using a decimal price feed or a decimal theoretical, use one of these equations to convert it.

Assume A1 has the original price in decimal format for a product that ticks in 32nds. Multiply the result by 10 if you want a zero on the end.

- Round down for the bid.

$$=FLOOR((A6-INT(A6))*32+INT(A6)*100,1)$$

- Round up for the ask.

$$=CEILING((A6-INT(A6))*32+INT(A6)*100,1)$$

The formula would be modified for products that trade in $\frac{1}{2}$ or $\frac{1}{4}$ 32nds.

Autotrader™ Formula Operators

Note: You cannot use formulas in **Order Block**.

In formulas with more than one operator, Autotrader™ evaluates operators in the order of precedence included in the table below. Operators with a higher precedence number are evaluated first. Operators with the same precedence number are evaluated from left to right in the formula.

Precedence can be overridden by using parentheses to explicitly specify the order of evaluation. In formulas with conditional operators, the second and third operands may be any type, including ranges. For example:

```
=@SUM(A1 ? B1..C20 : C10..D15)
```

returns the sum of B1..C20 if A1 evaluates to non-zero; otherwise it returns the sum of C10..D15.

Formulas can contain the following operators to define relationship between values.

Operator	Precedence	Definition
%	14	Unary percent
**	13	Exponentiation
+	12	Unary plus
-	12	Unary minus
~	12	Bitwise complement (integer)
!	12	Logical not
*	11	Multiplication
/	11	Division
%	11	Remainder (integer)
+	10	Addition
-	10	Subtraction
<<	9	Shift left (integer)
>>	9	Shift right (integer)

Operator	Precedence	Definition
<	8	Less Than
>	8	Greater Than
<=	8	Less Than or Equal
=	8	Greater Than or Equal
==	7	Equal
!=	7	Not Equal
&	6	Bitwise And, or String Concatenation
^	5	Bitwise Exclusive-Or (integer)
	4	Bitwise Or
&&	3	Logical And
	2	Logical Or
?:	1	Conditional

Using Formulas in Autotrader™

Note: You cannot use formulas in **Order Block** to program trade.

You can type a formula into any cell in Autotrader™ that uses numeric values. For trading purposes, this includes:

- The **Scratch** section for use when your **Profile Base Price** is set to **Direct Order Entry**.
- **The Profile Parameters** section in the **Grid**
- Any numeric cell in the **Profile Setup Page** (e.g., offsets, quantities, allowances, maximum position, and market improve limit)
- Any cell in the **Theo Prices** or **Formula** sections

Note: When using formulas, use numeric values only (i.e., not ticks). If it is necessary to use formulas using ticks (i.e., =mbidpre-3), use the offset functionality in the **Profile Setup Window**. When using a formula in Autotrader™, you must conform to the following conventions:

Example:

To trade the E-mini S&P, you create a formula to generate a price one tick off of the market bid price from another row: =mBidPrc4-25

This takes the numeric market bid price of the contract in row four and subtracts 25 from it (equal to one tick in the E-mini S&P). Thus, if the bid price in row four is expressed as 10025, your value appears as 10000 (one tick lower).

- Use the standard program syntax
- **Important: Begin the formula with an equal sign: =**
- Use the formula operators to generate mathematically derived values
- Reference cells in the same row by their column name (e.g., wBidPrc, sBidPrc, etc.) or by the column letter. In the diagram below, the **Contract** column has the column letter C.

	A	B	C	D	E	F	G
1							CONTROL
2	Status	Active	Contract	RowName	Manual	Auto	Profile

- You view column letters using the **Hide/Show Rows** option in the Autotrader context menu. The row is called **Column Headers**.
- Reference cells in other rows by their column name or column letter followed by the row number or RowName (see the **Row Identifier** or

▶ **To reference the Formula Section from other Autotrader™ cells:**

1. After typing the formula into a cell in the **Formula** section, click the cell in which you want to reference the formula.
2. Type the name of the formula column that contains the formula(s) you want to reference (e.g., =fA references the cell in fA for that row).

Example of Formula Use

You link a Theoretical Generator into the **fA** cell in the **Formula** section and rename the formula column to **TheoOffset**. This generator creates theoretical offsets. Currently, the theoretical offset is 2.

In the **fB** column of the **Formula** section, you enter the following formula:

=mAskPrc + TheoOffset

Your **Grid** now displays the following:



Delta	fA
	=mAskPrc + Delta

The **TheoOffset** cell displays a theoretically generated offset of 2 and the **fB** cell displays the formula that you entered. As soon as you click another cell or press **ENTER**, the value of the **fB** cell changes and displays only the dynamic value of the sum of the theoretical bid offset (**TheoOffset** cell) and the market ask price (**mAskPrc** cell).

To use the value of the **fB** cell, simply type =fB into the cell in which you want the value to appear. You can further use this value (of **fB**) in other more complex formulas.

Importing Theoreticals to Autotrader™

Autotrader allows you to link in any program that generates theoreticals as long as it conforms to the OLE standard (e.g., Excel spreadsheets). In this manner, you can create profiles that base their bid and ask offsets on Theoretical prices that you import to the Theo Prices section in the **Grid**.

At times, theoretical pricing models may generate results that do not line up accurately with the ticking of a product. In this case, Autotrader rounds its values when submitting to the market.

Note: To automatically open Excel when you open a saved workspace, you must create excel links *from* Autotrader™ *to* Excel. If you only have links *from* Market Grid *to* Excel, the links are saved but do not automatically open when you open the workspace.

▶ To import Theoreticals to Autotrader™:

1. Open the theoretical generator that generates the values you want to import into Autotrader™.
2. Locate the cells in the theoretical generator that contain the theoretical values that you want to import into Autotrader™.
3. Open Autotrader™.
4. Populate Autotrader™ with the contracts that you want to trade.
5. To use imported theoreticals in determining your bids and offers, assign a profile that has a **Profile Base Price of Single Theo or Bid/Ask Theo**.
6. In the theoretical generator, right-click the cell that you want to copy into Autotrader™.
7. Click **Copy**.
8. In Autotrader™, right-click on the cell in which you want to create the Excel link, point to **Links**, and then click **Paste**. The cell now hosts the OLE link to Excel.
9. To use these theoretical values in the future, save your workspace.

Rounding Results

When using formulas and theoreticals, Autotrader™ rounds according to the following rules:

- Bids and Asks are rounded away from the market (i.e., Bids down and Asks up)
- In the case where a product ticks in fractions, if a formula's or theoretical's resulting value pushes the Bid or Ask into the next whole tick value, Autotrader™ rounds the value based on the whole tick.

When using negative numbers, i.e. for spread prices, use offsets in the **Profile Setup Window** or Excel. Do NOT use the **Formula Bar**.

Example 1:

The market is ticking in halves. Autotrader™ receives a value of 3.75:

- When submitting Asks, Autotrader™ rounds to 4.
- When submitting Bids, Autotrader™ rounds to 3.5.

Example 2:

The market is ticking in 32nds and is currently at 3 and 30 (330). Autotrader™ receives an Ask offset of +3.3 from a theoretical pricing engine. Mathematically, this generates an invalid tick price of 333.3.

Autotrader™ converts the number into the valid tick number of 401.

Excel Links

Linking Excel Spreadsheets (OLE Links)

Autotrader™ and Order Block allow you to link any program that conforms to the OLE standard (e.g., Excel spreadsheets) into any editable, numeric cell such as the **Scratch** section for **Direct Order Entry** and the **Profile Parameters** section. In this manner, you can seed Autotrader™ with numbers or values from your own Excel spreadsheets.

 **Tip:** To quickly identify cells with OLE Links, use the **Formatting** option in the Autotrader context menu to assign a specific color to the cell that hosts the link.

Note: To automatically open Excel when you open a saved workspace, you must create excel links *from* Autotrader™ to Excel. If you only have links *from* Market Grid to Excel, the links are saved but do not automatically open when you open the workspace.

▶ To link Excel Spreadsheets into Autotrader™:

1. Open the Excel spreadsheet from which you want to copy cells into Autotrader™.
2. Locate your cells in the spreadsheet.
3. Open Autotrader™.
4. Populate the window with the contracts you want to trade.
5. In the Excel spreadsheet, right-click the cell that you want to copy into Autotrader™.
6. Click **Copy**.
7. In the window, right-click on the cell in which you want to create the Excel link, point to **Links**, and then click **Paste**. The cell now hosts the OLE link to Excel.
8. To use these links in the future, save your workspace.

► **To use Excel Spreadsheets with Direct Order Entry:**

1. Create a profile, assign it a **Profile Base Price of Direct Order Entry**, and set any other needed trading parameters.
2. Populate Autotrader™ with the contract(s) you want to trade with OLE links.
3. Assign the **Direct Order Entry** profile to the contract(s).
4. Link your program that uses the OLE standard (i.e., Excel spreadsheet) into the cells of the Scratch section.
5. Make sure that you have a link or formula to generate values for each **Scratch** section cell (i.e., **sBidQty**, **sBidPrc**, **sAskPrc**, **sAskQty**).
6. To use these links in the future, save your workspace.
7. You are ready to start trading.

Saving Excel Spreadsheets in a Workspace

When linking Excel spreadsheets to X_TRADER® programs such as **Order Block** or Autotrader™, you can save the Excel spreadsheet and all of its stored information within your workspace. When saved in the proper order, calling up a workspace also calls up the Excel spreadsheet to the desktop with any saved information.

You must have the X_TRADER® module that hosts the link (i.e. Autotrader™, **Order Block**, etc.) and the Excel spreadsheet (or appropriate OLE compatible program) open to perform this action.

Note: To automatically open Excel when you open a saved workspace, you must create excel links *from* Autotrader™ *to* Excel. If you only have links *from* **Market Grid** *to* Excel, the links are saved but do not automatically open when you open the workspace.

► **To save Excel Spreadsheets into your workspace:**

1. Save the Excel information to a file using the **Save As** command in the **File** menu of the application.
2. Close the Excel application. Doing so tells X_TRADER® where this information is stored on your hard drive.
3. Save the workspace in the normal fashion.

When you next open X_TRADER®, log onto the same exchange, and then open a workspace. The Excel spreadsheet with all the associated links and working formulas automatically opens on your desktop.

Deleting OLE Links

Since you can create OLE Links only in Autotrader™, you must perform this procedure in Autotrader™.

To delete an OLE Link (i.e., Excel link) from the **Grid**, perform the following procedure:

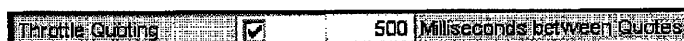
▶ **To delete OLE Links:**

1. Right-click the cell that contains the link you want to delete.
2. Point to **Links** and in the **Links** sub-menu, click **Delete**. The OLE Link is now severed.

Examples

Throttle Quoting

The following example assumes that Autotrader™ is configured with the following **Throttle Quoting** parameters:



Autotrader™ submits a quote to market. After 200 milliseconds the market moves enough to trigger the need for a new quote. However, Autotrader™ does not submit this new quote until 300 more milliseconds have passed (for a total of 500 milliseconds).

Note: This new quote is based off of the current market position. With this in mind, if the market moves back to its original position during the 300-millisecond time frame in the example above, Autotrader™ submits a quote at the same price as the original.

Bid Offset Example: Positive Offsets

In this example, Autotrader™ is set up with the following parameters:

Profile Base Price	Market
Throttle Quoting	<input checked="" type="checkbox"/>
Enable Cover Orders	<input type="checkbox"/>
Price Units	Ticks
Bid Offset	1
Bid Quantity	10
Bid Reserve Offset	2
Bid Reserve Qty	10

Using the following trading parameters, Autotrader™ submits a bid for a 10 lot (the **Bid Quantity**) one tick lower (the **Bid Offset**) than the best bid price.

When the market is swept and the bid is taken, Autotrader™ immediately submits another bid, called the reserve bid. This bid is for a 10 lot (the **Reserve Bid Qty**) two ticks lower (the **Reserve Bid Offset**) than the best market bid at the time that Autotrader™ submits the reserve bid.

Bid Offset Example: Negative Offsets

In this example, Autotrader™ is set up with the following parameters:

Profile Base Price	Market
Throttle Quoting	<input checked="" type="checkbox"/>
Enable Cover Orders	<input type="checkbox"/>
Price Units	Ticks
Bid Offset	-1
Bid Quantity	10

Using the following trading parameters, Autotrader™ submits a bid for a 10 lot (the **Bid Quantity**) one tick inside the market (the **Bid Offset**).

Cover Order Example

In both examples, it is assumed that the **Cover Order Offset** is set to 2.

Cover Order Example 1 - Order Filled:

When a Bid for 20 is filled at 50, Autotrader™ submits an offer to sell 20 at 52.

Cover Order Example 2 - Order Partially Filled:

A trader is Bidding 20 at 50. Only 10 are filled. Autotrader submits an offer to sell 10 at 52.

Market Improve Limit Example

In this example, it assumed that the **Market Improve Limit** is set to 2.

The current market has a best bid at 40 and a sell at 45.

Autotrader™ receives a theoretical price input that generates a bid for 43. This bid is three higher than the market and exceeds the setting in **Market Improve Limit**. Autotrader™ adjusts the order to be 42. This betters the market by two points, which is within the **Market Improve Limit**.

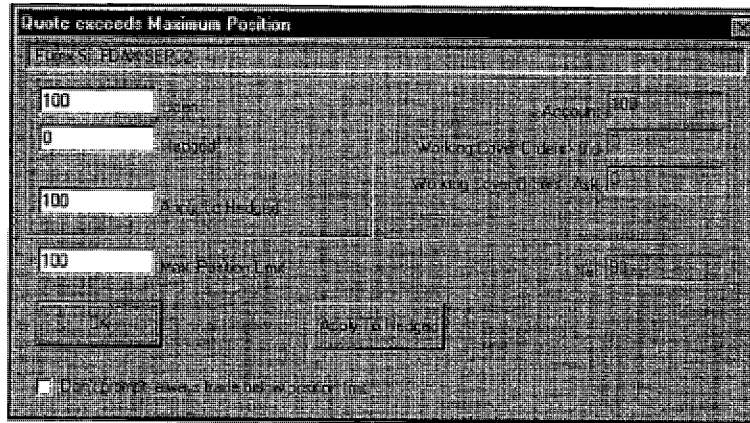
Maximum Position Example

The following example assumes that you have the following settings configured:

- Maximum Position: 100
- Bid Quantity: 10
- Ask Quantity: 10

After you start Autotrader™, the market begins sliding downward and starts taking out your bids. After nine of your bids have been taken out ($9 \times 10 = 90$), none of your offers or cover orders have been taken.

Because your next Bid of 10 could exceed your maximum allowable position, the **Quote Exceeds Maximum Position** dialog box appears.



You can now only continue trading your Bids if you either Hedge your **Open Position** or increase your **Max. Position Limit**.

Since the value of the **Apply To Hedged** box defaults to your current **Open Position**, you can simply click the **Apply To Hedged** button. Your entire **Open Position** becomes hedged and Autotrader begins to submit Bids to market according to your profile setup.

Throttle Quoting and Scratch Pad Example

In the following example:

- The profile's **Throttle Quoting** is set at **500** milliseconds.

Throttle Quoting	<input checked="" type="checkbox"/>	500	Milliseconds between Quotes
------------------	-------------------------------------	-----	-----------------------------

- The row's profile is set with **Bid and Ask Offsets** of 1.
- The **Market Bid Price** is 100.
- The **Market Ask Price** is 105.

This example illustrates how the current bids and asks displayed in the **Scratch Pad** can differ from your working bids and asks.

Autotrader™ sends its quotes into the market: a **Working Bid** at 99 and a **Working Ask** at 106.

The **Scratch Pad** displays 99 in the **sBidPrc** column and 106 in the **sAskPrc** column:

SCRATCH				WORKING			
sBidQty	sBidPrc	sAskPrc	sAskQty	wBidQty	wBidPrc	wAskPrc	wAskQty
10	99	106	10	10	99	106	10

After 100 milliseconds the market moves to 101 as the best Bid and 103 as the best Ask. The **Scratch Pad** updates its values to display 100 in the **sBidPrc** column and 104 in the **sAskPrc** column.

However, due to the **Throttle Quoting** setting of 500, the working Bid and Ask prices are not updated, and they remain at 99 and 106:

SCRATCH				WORKING			
sBidQty	sBidPrc	sAskPrc	sAskQty	wBidQty	wBidPrc	wAskPrc	wAskQty
10	100	104	10	10	99	106	10

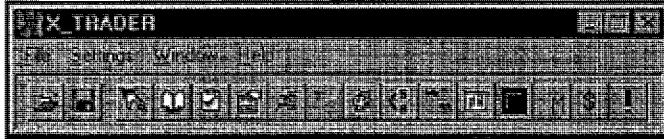
After 300 milliseconds (for a total of 400), the market bounces back to 100 and 106. The **Scratch Pad** reverts to displaying 99 in the **sBidPrc** column and 106 in the **sAskPrc** column. The working Bid and Ask remain the same (99 and 106).

SCRATCH				WORKING			
sBidQty	sBidPrc	sAskPrc	sAskQty	wBidQty	wBidPrc	wAskPrc	wAskQty
10	99	106	10	10	99	106	10

After 100 more milliseconds, the throttle quoting expires. Since the **Scratch Pad** and working orders match, no changes are made to the working Bid and Ask:

Chapter 6

Control Panel



The **Control Panel** appears after you start X_TRADER®. Use the **Control Panel** to access most of the working windows in the application, as well as the associated dialog boxes to set default properties while working in the application.

To quickly display your **Control Panel** on top of your other windows, most context menus offer a **Find Control Panel** option.

► **To find the Control Panel:**

Note: If you enable **Click Trading**, do not click in the **Market Grid Bid/Ask price** columns. Doing so may send a trade to market that you do not want to execute!

1. Right-click in one of the main X_TRADER® windows (for example, **Order Book** or **Fill** window) to access the context menu.
2. Select **Find Control Panel**. If the context menu does not include this option, access the context menu from another window.

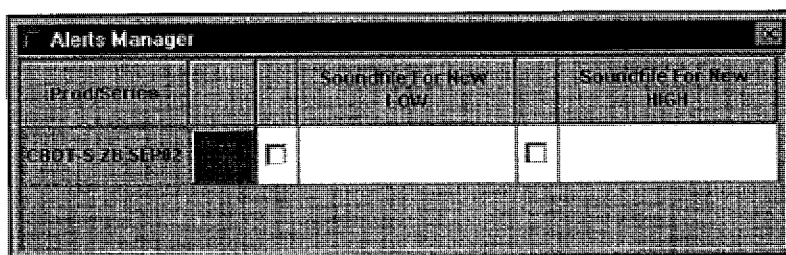
Alerts Manager

You can add specific sounds to a contract's high and low price thresholds. Whenever a contract trades above the high price threshold, or below the low price threshold, these sounds are played.

You can assign different sounds to different contracts and to the high or low price thresholds.

► To assign Sounds to a Contract's High and Low Price Thresholds:


1. In the Toolbar of the X_TRADER® Control Panel, click the Exclamation point . The Alerts Manager window appears.

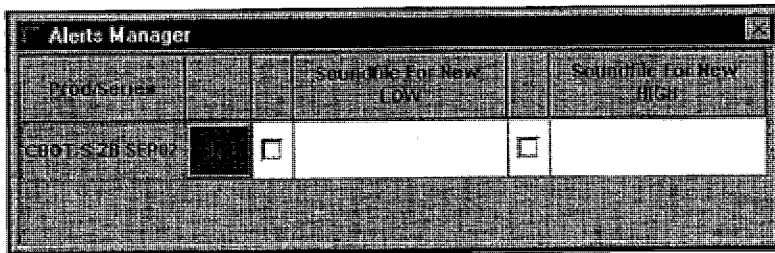



2. Populate the Alerts Manager window with the contracts to which you want to assign sounds for price highs and lows.
3. In the Prod/Series column, locate the contract for which you want to assign sound alerts.
4. Double-click in that row's cell for Soundfile for New LOW. The Sound Explorer dialog box appears.
5. Use the Sound Explorer to explore through your computer to locate the sound file you want to associate with the Low price threshold.
 - By default, the Sound Explorer opens to the location on your computer that stores your X_TRADER® sound files (<root drive>:\Ttx_trader\Sounds).
 - Whenever this contract trades below the day's low price, this sound is played.
6. When you locate the sound file, double-click it. The file and its directory path appear in the cell.
7. Double-click in the row's cell for Soundfile for New HIGH. The Sound Explorer dialog box appears.
8. Use the Sound Explorer to explore through your computer to locate the sound file you want to associate with the High price threshold. Whenever this contract trades below the day's high price, this sound is played.
9. When you locate the sound file, double-click it. The file and its directory path appear in the cell.

10. To activate the setting so that the sound is played whenever the appropriate threshold is crossed, click to put a check mark in the activation box. This box is located directly to the left of the cell.
11. To close the **Alerts Manager** dialog box, click the X on the title bar (located in the upper right corner of the dialog box).

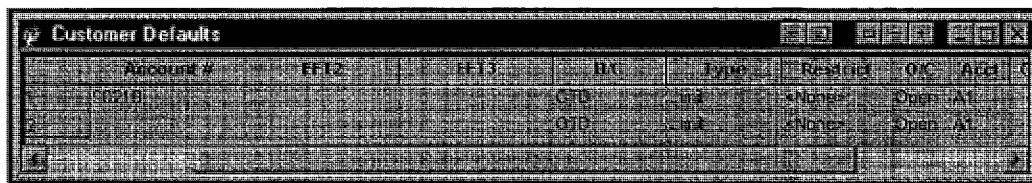
► **To delete Sound Alerts:**

1. In the Toolbar of the X TRADER® Control Panel, click the **Exclamation point** . The **Alerts Manager** dialog box appears.



2. In the **Prod/Series** column, locate the contract for which you want to delete a sound association.
3. In that contract's row, click **DEL** . The contract and its sound associations are removed from the **Alerts Manager** dialog box.

Customer Defaults & Customer List



You define **Customer Default** profiles to establish all of the most common order variables by customer name. You may add a new profile or change the profile of a current customer at any time. All subsequent orders for that customer are affected if you change the **Customer Default** profile. When you create new **Customer Default** profiles, the customer name is automatically added to the **Customer List**.

To access the **Customer Defaults** dialog box, on the **Control Panel**, open the **Settings** menu and click **Customer Defaults**.

Customer List

The **Customer Defaults** dialog box allows you to create customer profiles that reflect most often used trade settings, such as market vs. limit order, and FOK/IOC, among others. When you create new **Customer Default** profiles, the customer name is automatically added to the **Customer List**.

Selecting a name from the **Customer List** populates all open **Order Entry** windows with that customer's default settings. This allows you to quickly change trading accounts so you can place orders in multiple exchanges for multiple products—all for one customer. If you do not want to populate all your **Order Entry** windows with one customer's information, use the **Customer Selection** list from the **Order Entry** window. You also use the **Customer List** to select the account number of a customer for the AutoFilter option.

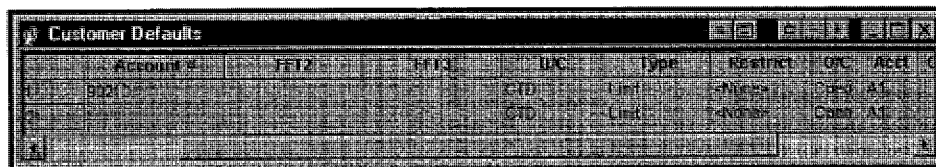
► To open the Customer List:

On the **Control Panel** toolbar click the **Customer List** button.

Or:

From the **Control Panel**, open the **Window** menu and Click **Customer List**.

Customer Defaults Dialog Box Field Descriptions



You define a **Customer Defaults** profile to establish all of the most common order variables by customer name for each customer. You can add a new profile or change the profile of a current customer at any time. By changing the **Customer Defaults** profile, all subsequent orders for that customer are affected.

Enter the following for each customer:

Field	Description
Customer	Name of your choice
SEL	Check this box to automatically add the customer to the Customer Selection list. You add names to the Customer Selection list so that you can quickly change accounts.
Account #	<p>The Account number is a customer account code. Typically this is used to display any user-specific customer account information for any market. The account number information is typically used to associate the trade with a specific customer. This field may be required by the exchange (for example, CME requires it).</p> <p>X_TRADER® system uses the Account number specified in this column if you and your organization do not set up risk management parameters.</p> <p>Therefore, if you are set up with risk management parameters, the system uses the risk management account number and the relevant information from the Customer Default profile. If you are <i>not</i> set up with risk management parameters, the system uses the account number specified in the Customer Default profile row as well as the rest of the information contained in that Customer Default profile.</p>
FFT2 & FFT3	Free Form Text field #2 & Free Form Text field #3 may be used for annotation purposes by the trader or back office (sub-account). The back office manager usually dictates use of this field.
D/C	The order choices are GTD or GTC . The default selection is GTD . The X_TRADER® GTD designation indicates that the order is valid only for the current trading session. The GTC designation indicates that the order is valid until the trader cancels the order or until the contract expires.
Type	Order types are Limit (default selection) or Mkt (Market).

Field	Description
Restrict	<p>* Order restrictions include None, DiscQty, FOK, IOC, MV, and STOP.</p> <p>Support of the order restrictions is determined by each exchange/marketplace. The definition and use of the restriction may differ between exchanges/marketplaces. If the order type is not supported, the Audit Trail displays an error message from the exchange. Refer to each exchange's Market Rules for additional information.</p>
O/C	<p>Indicates whether a position is being opened or closed. This information is not used by the exchange and may be used (or not used) by the trader as his discretion. The default status is open.</p>
Acct	<p>Select one of the following account types:</p> <ul style="list-style-type: none"> • A1 – First Agent Account (e.g., broker) • G1 – Pre-Designated Giveup Trade • G2 – Designated Giveup Trade • M1 – First Market Maker Account • M2 – Second Market Maker Account • P1 – First Principal Account (e.g., proprietary trader) • P2 – Second Principal Account • U1 – Unallocated. For orders that have not been allocated to a customer account, or where allocation is a middle/back office function.
Giveup	<p>Member code for clearing member; for Give-up Trade accounts only.</p>
Use Max	<p>A checked box indicates that the maximum trade quantity restriction is applied. A blank box indicates that there is no maximum order quantity, or that the maximum order quantity is NOT to be applied. You may establish a high order quantity that does not restrict normal trading, yet still provides a measure of security in the event of an erroneous trade. Deselect Use Max to turn off the restriction.</p>
Max Order Qty	<p>The maximum quantity allowed per trade for the specified account. Select the Use Max check box in order to apply the maximum quantity (see above). Deselect Use Max to turn off the restriction. If you are using the Guardian Risk Management tool: any Customer Default maximum order quantity must be less than the Maximum Order Quantity risk parameter defined for the Trader ID, or the trade is not allowed.</p>

* Descriptions of order restrictions follow:

- **None:** No additional restrictions are placed on the order.
- **DiscQty:** Disclose Quantity. Disguise trading volume by disclosing a partial amount of total.
- **FOK:** Fill or Kill. Immediate fill of entire quantity, or immediate cancellation of order if the order cannot be completely filled.
- **IOC:** Immediate or Cancel. An immediate partial fill before the balance is cancelled.
- **MV:** Minimum Volume. The minimum volume of partial fills; default is zero. The Minimum Volume order type is not supported by all exchanges (for example, LIFFE supports MV and EUREX does not). The minimum volume is entered in the Order Entry window. When you choose this restriction, a field labeled Min Vol displays. Enter the minimum volume quantity and place the order.
- **STOP:** Stop order. User defined price triggers generate market buy or sell orders. You can perform all normal operations (hold, submit, change, cancel, replace, and delete) on a stop order. When you choose the STOP restriction, a field labeled Stop Prc displays. Enter the trigger price, and place the order. A stop order displays in the Order Book with a Working status, but it is not actually in the market. A negative order number (-###) displays, indicating that it is a "synthetic" order. When the stop triggers, the order becomes the native order type and remains in the Order Book until filled.

If the trader who originated the order is not logged in (in other words, has no order router), when the order is triggered, the order is sent to market with the trader ID of another trader with the same Group ID. If another trader in the same group is not available (no one from his group is logged on), the order status changes from Working to Hold and does not trigger until the order is resubmitted by the original trader, or a trader with the same Group ID.

The LIFFE Gateway accepts a Stop Limit order only if the limit price meets these criteria:

TRIGGER price \leq BEST ASK price, for a SELL STOP LIMIT

TRIGGER price \geq BEST BID price, for a BUY STOP LIMIT

And

TRIGGER price \leq LIMIT price, for a BUY STOP LIMIT

TRIGGER price \geq LIMIT price, for a SELL STOP LIMIT

X_TRADER® enforces only the second set of limits. A stop limit order is triggered only if the last traded price is within the trigger range. The trigger conditions are:

LAST TRADED price \leq TRIGGER price, for a SELL STOP order

LAST TRADED price \geq TRIGGER price, for a BUY STOP order

If multiple stop orders are in place for the same product at the same trigger price (for the same trader or multiple traders), they are processed in a FIFO (first in, first out) order.

If the Order Server of the LIFFE Gateway goes down, all stop orders must be moved to a hold status (in other words, they will not trigger). Held stop orders are not automatically resubmitted when the Gateway recovers. You must do this manually. Audit trail messages will show you that the orders have been held. In the event that an Order Router goes down, and the stop order triggers, but cannot be sent (because the Order Router is down), the Order Router of another trader in the same group as the trader who entered the order will be used to send the order to market. If no such Order Router is available, the stop order is put into a hold status and an audit trail message is generated.

Customer Defaults Context Menu



Right-click anywhere in the **Customer Defaults** window to access the context menu with additional functionality.

The **Customer Defaults** context menu provides additional commands:

Option	Description
Find Control Panel	Displays the X_TRADER® Control Panel in the foreground of your workspace.
Delete Row(s)	Select a row, right-click to access the context menu, and select Delete Row .
Formatting	Accesses the Grid Styles dialog box so that you can customize fonts, colors, and borders.

Creating a Customer Defaults Profile

You define a **Customer Defaults** profile to establish all of the most common order variables by customer name.

► To define a Customer Defaults profile:

1. From the **Control Panel**, open the **Settings** menu and Click **Customer Defaults**.
2. Enter the customer profile information in the **Customer Defaults** dialog box. The **first** profile has a customer name of "Default" which you cannot change.
3. When changing **Customer Default** data, make sure that you tab to the next field, or press **ENTER** to save your changes. If you enter your change without using the tab key to advance to the next field, or if you do not press **ENTER**, your changes are not saved. This is a safeguard to ensure that no data is inadvertently changed and then saved in the customer profile.
4. Close the **Customer Defaults** dialog box.

Adding Customers to the Order Entry List

You add your most frequently used customer profiles to your **Order Entry Customer Selection** list to simplify switching from one customer profile to another. You may add any number of customers to the **Order Entry** list.

When you are creating a new **Customer Defaults** profile, clicking the **SEL** column in the **Customer Defaults** dialog box adds the customer name to the **Order Entry** list.

▶ **To add customers to the Order Entry List directly from the Customer List:**

1. While both the **Market** window and **Customer List** are open, Click the customer's name.

The customer name immediately displays in the **Order Entry** window.

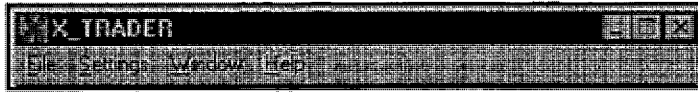
2. Repeat the above two steps for each additional name.
3. Close the **Customer List**.

Changing Customer Profile in Customer Defaults Dialog Box

▶ **To change the information in a customer profile:**

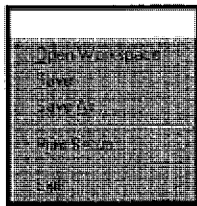
1. From the **Control Panel**, open the **Settings** menu and Click **Customer Defaults**.
2. Change the customer profile information in the **Customer Defaults** dialog box. The first profile has a customer name of **Default** and cannot be changed.
3. When changing customer default data, make sure you that you tab to the next field, or press **ENTER** to save your changes. If you enter your change without using the tab key to advance to the next field, or if you do not press **ENTER**, your changes are not saved. This is a safeguard to ensure that no data is inadvertently changed and then saved in the customer profile.
4. Close the **Customer Defaults** dialog box.

Menu Bar on the Control Panel



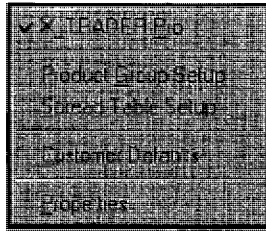
In addition to the **Toolbar**, you can access many of the functions in the **Control Panel** by using the **Menu bar** on the **Control Panel**. Click on any of the links below to see the individual actions available from the **Menu bar**.

File Menu on the Control Panel



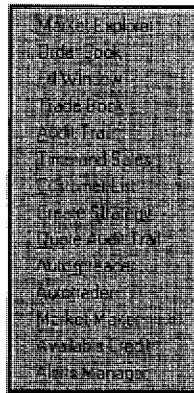
Option	Description
Open Workspace	Opens a previously saved workspace.
Save	Save the currently open workspace.
Save As	Save the currently open workspace under a different name or with a new name.
Print Setup	Displays the Windows Print Setup dialog box. You can set up a printing format here, but it will not be saved when you print out the form.
Exit	Exit the X_TRADER® application.

Settings Menu on the Control Panel



Option	Description
X_TRADER® Pro	<p>Requires a separate license to be activated. Default is unchecked. To activate X_TRADER® Pro functions, open X_TRADER®, select this option, then close and restart X_TRADER®.</p> <p>Check this option to access X_TRADER® Pro features that include Autospreader™ and Autotrader™.</p>
Product Group Setup	<p>Displays the Product Group Information dialog box. Allows you to a Product Group to use with the quoting tool. Product groups control how quotes are calculated. Auto quoting is also controlled using this dialog box.</p>
Spread Table Setup	<p>Displays the Spread Tables dialog box. Allows you to create a spread table to use with the quoting tool. You create spread tables to detail the maximum spread in ticks based on the number of days to expiration and the bid price.</p>
Customer Defaults	<p>Displays the Customer Defaults dialog box. Allows you to create or view customer defaults and customer list information.</p>
Properties	<p>Displays the Properties dialog box. Allows you to customize X_TRADER® features for the Market window (Trading tab), Fill window, Position pane, Order Book, and Audit Trail. Features include Quoting, Click Trading, opportunity check, default visible columns, event sounds, text/background/border select colors, and theoretical server selection.</p>

Window Menu on the Control Panel



Option	Description
Market Explorer	Opens the Market Explorer . Allows you to view exchanges and associated products.
Order Book	Opens a new Order Book window.
Fill Window	Opens a new Fill window.
Trade Book	Opens the Trade Book window that displays aggregate fills grouped by a single order number.
Audit Trail	Opens the Audit Trail window of order-related exchange messages.
Time and Sales	Opens the Time and Sales window that provides the ability to track, record, and save time and sales information for products traded through X_TRADER®.
Customer List	Opens your list of customer accounts.
Create Strategy	Opens the Create New Spread dialog box. Allows you to create multiple-legged spreads, strips, packs, and bundles. The ability to create strategies is exchange-dependent.
Quote Audit Trail	Opens the Quote Audit Trail window for quoting-related exchange messages.
Autospreader	Requires a separate license to be activated. Allows you to configure automatic spread trading.
Order Block// Autotrader™	Opens the Order Block window to trade two sides of a product contract (legs) at the same time.
Market Maker	Opens the Market Maker window for quoting two sides of a market.

Option	Description
Available Credit	<p>Opens the Available Credit dialog box that displays the amount of available credit left in your trading account. A total in green indicates a positive balance; a total in red indicates a deficit.</p> <p>Click Recalculate to view the current balance.</p>
Alerts Manager	<p>Opens the Alerts Manager dialog box. Use this window to assign sounds to a contract's high and low prices of the day.</p>

Help Menu on the Control Panel










Option	Description
Help Topics	X_TRADER® Online Help user documentation.
About X_TRADER	X_TRADER® version and copyright information.










Toolbar on the Control Panel



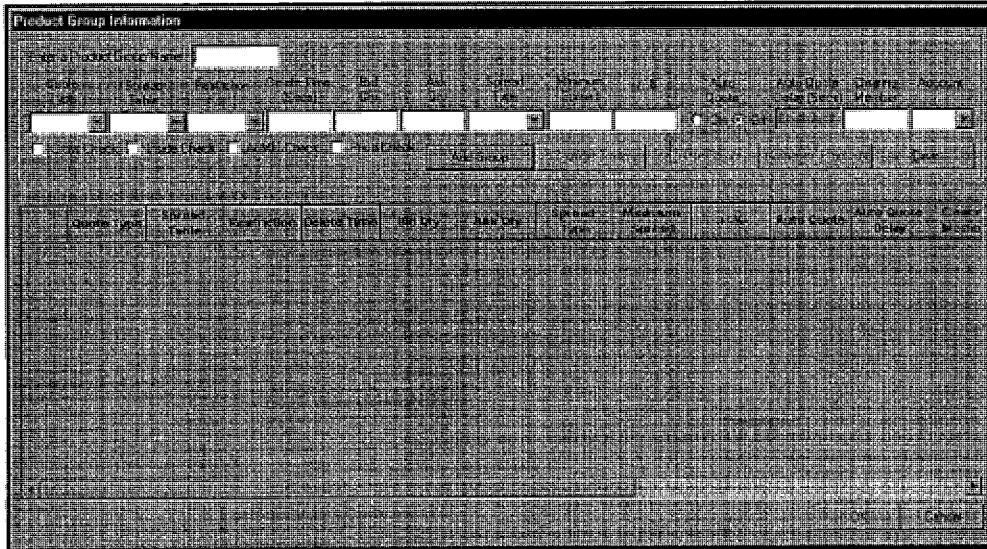
The X_TRADER® **Control Panel** is used to open and save workspaces, define settings, and open new windows. The **Control Panel** displays on your desktop after you start X_TRADER®. You can access most X_TRADER® functions from the **Control Panel**, using either the **Menu bar** or the **Toolbar**.

Note: Establishing a connection to the exchange/marketplace may result in a short delay before the **Control Panel** buttons are enabled. If one or more buttons still remain disabled (grayed out), a service may be down or you may have not established a connection to your server. Please consult your System Administrator.

Button	Description
	Open Workspace: Multiple workspaces can be created and saved. This button displays a list of workspace names. To open a workspace, select a workspace name, and click OK .
	Save Workspace: Saves your current X_TRADER® workspace under the current name. The workspace name appears in the Control Panel title bar. If this is the first time you are saving the workspace, enter a descriptive name in the text box.
	Market Explorer: Lists all products by exchange/marketplace. With the Market Explorer, you may open one or more Market windows with one or more products displayed in each window. For an options Market window, you can also click to display the calls next to or above the puts for the same strike.
	Order Book: Manages your open orders. You can monitor, change, or delete orders, or perform a status inquiry about any open order. Once the order is filled, the entry is automatically deleted.
	Fill Window: Lists the current day's trades. The top pane lists fills. The middle pane displays your net position by product and contract, providing the profit/loss for the current day's trading. The lower pane displays "fast" fills (if supported by the exchange/marketplace).
	Trade Book: Displays an aggregate fill for a single order number on a separate line.
	Audit Trail: Opens a window displaying data sent to the exchange and the responses received from the exchange. Order add, delete, change, inquiry, trader, and customer detail, as well as error messages and all exchange announcements are detailed in this window. Exchange announcements include time issued, time received, exchange name, severity, and the announcement.

Button	Description
	Time and Sales: Provides the ability to track, record, and save time and sales information for products traded through X_TRADER®.
	Customer List: Based on information obtained from the Customer Defaults dialog box, the Customer List displays all accounts by customer name.
	Create Spread: Opens a Spread Tables dialog box to create multiple-legged spreads, strips, packs, and bundles.
	Quote Audit Trail: Market Makers use this feature to monitor addition, deletion, and related error messages for both manual and autoquoting. You can also monitor both inbound and outbound RFQs.
	<p>Autotrader™ / Order Block: Opens a window for creating and maintaining a two-sided market for selected sets of contracts. You use Order Block to trade manually, while Autotrader™ automatically submits bids and offers.</p> <ul style="list-style-type: none"> • In standard X_TRADER® packages, this button launches the Order Block module. • In X_TRADER® Pro, this button launches Autotrader™. To use Autotrader™, you must obtain an X_TRADER® Pro license.
	Autospreader™: Opens the Manager window. Use this window to set up two sided spreads that trade automatically in a multi-pane window. To have access to the Autospreader™ button, you must obtain an X_TRADER® Pro license.
	Market Maker: Used to set up a single spread to automatically enter quotes into the market.
	<p>Available Credit: Displays the amount of available credit left in your trading account. A total in green indicates a positive balance; a total in red indicates a deficit.</p> <p>To view the current balance, click the Recalculate button.</p>
	Alerts Manager: Assigns alert sounds to contracts so that X_TRADER® plays a sound whenever the contract trades above its high price or below its low price for the day.

Product Group Information Dialog Box



Product Groups allow you to define how the bid/ask values are calculated. You create product groups in the **Product Group Information** dialog box. You can specify the quote type, spread table, and delete time, account, and other parameters. Autoquoting is also enabled/disabled via your **Product Groups**.

Product Group Information Field/Column Descriptions

Product group information is entered in the top pane of the **Product Group Information** dialog box. Once this information has been entered, use the **Add Group** button to populate the contents of the lower pane grid.

You can construct the quote according to the following guidelines:

Option	Description
Product Group Name	Enter a name for the Product Group.
Quote Type	<ul style="list-style-type: none"> • Dime: A tick better on both bid and ask. • Join: Current price of both bid and ask. • Mkt Ave: The average between bid and ask is the mid-point for calculating the spread. The Maximum or Percent spread is divided by 2. This figure is added and subtracted from the Market Average to define the upper and lower limits. • Theo: Similar to the Mkt Ave except the theoretical price is used as the mid-point for calculating the spread. • Theo Bid/Ask: Current theoretical bid and ask.
Spread Table	Associate the product group with a pre-defined spread table for time, price, and spread limits. Click any spread table from the list.
Restriction	Delete (delete the quote after a specified number of seconds) or GTC.
Delete Time (Secs)	If you click the Delete Restriction , the Delete Time is the number of seconds the quote remains in the market. The quote is automatically deleted after the specified number of seconds. (The minimum time for EUREX is 20 seconds.)
Bid Qty	The Bid Quantity to be quoted. (The minimum quantity for EUREX is 50.)
Ask Qty	The Ask Quantity to be quoted. (The minimum quantity for EUREX is 50.)

Option	Description
Spread Type	<ul style="list-style-type: none"> • Maximum: The spread defined in the spread table is used to generate the quote. If the center price used for the calculation is 50 and the spread is 4 ticks, the quote will be 48-52. • N/A: The spread type is inconsequential when the quote type is Dime, Join, or Theo Bid/Ask. When set to one of these quote types, the spread type defaults to N/A (not applicable). • Percent: The chosen percentage of the price is used to calculate the spread. The +/- % field is used to define the exact percentage. <p>The Percent Spread Type is also subject to the Spread Table's defined Maximum Spread and the Product Group's defined Minimum Spread.</p> <p>If the calculated quote is greater than the Maximum Spread, the Maximum Spread will be quoted. For example, if the percent calculated is 6 ticks and the Spread Table is 4 ticks, then the Spread Table Max of 4 ticks will be used.</p> <p>This field is not applicable for Dime, Join, and Theo Bid/Ask Quote types.</p>
Minimum Spread	This is the minimum spread--expressed as the total number of ticks--used to generate a quote. If the calculated quote is less than the minimum defined, then this minimum will be used to generate the quote. For example, if the calculated spread is 1 tick and your minimum is 2 ticks, the quote will have a 2-tick spread. Not applicable for Dime, Join, and Theo Bid/Ask Quote types.
+/-%	If you choose the Percent Spread Type, define the percentage of the price that will be used to calculate the spread. Not applicable for Dime, Join, and Theo Bid/Ask Quote Types.
Auto Quote	Select the On or Off option button for automatic quoting in response to an RFQ.
Auto Quote Delay (Secs)	Enter the number of seconds the quote should be delayed before being sent to the market after a Request for Quote is received.
Clearing Member	Enter your clearing member ID.

Option	Description
<p>Account: Enter the account type.</p>	<ul style="list-style-type: none"> • A1: Agent 1. • G1: Pre-designated Giveup Trade 1. • G2: Designated Giveup Trade 2. • M1: Market Maker 1. • M2: Market Maker 2. • P1: Principal 1. • P2: Principal 2. • U1: Unallocated—for orders that have not been allocated to a customer account or where allocation is a middle/back office function.
<p>Quote Viability Checks. The following checks are optional:</p>	<ul style="list-style-type: none"> • Cross Check: The quote is not sent to the market if the constructed bid is greater than the current market ask price; or the constructed ask is less than the current market bid. • Inside Check: The quote is not sent to the market if the constructed bid is greater than the current bid; or the constructed ask is less than the current ask. This check does not apply when the Dime Quote Type is selected. • At Mkt Check: The quote is not sent to the market when the constructed bid and/or ask are equal to the current market price. • Price Check: The quote is not sent to the market if there is no current bid or ask price.

Adding a Product Group

Product Groups allow you to define how the bid/ask values are calculated for quoting purposes. You can specify the quote type, spread table, and delete time, account, and other parameters. Autoquoting is enabled/disabled via your **Product Groups**.

► To add a Product Group:

1. From the **Control Panel**, open the **Settings** menu and choose **Product Group Setup**.
2. Enter your **Product Group** name in the text box at the top of the window.
3. Choose a quote type.
4. After entering all required parameters, click **Add Group**. The product group and defined parameters display in the bottom portion of the **Product Group** dialog box.

After adding, deleting, or changing product group information, choosing the appropriate button (**Add**, **Change**, **Delete**), and associating products, close the product window to ensure that your changes are saved.

Associating a Product to a Product Group

Each quoted product must be "Associated" or assigned to a **Product Group** that you have created. It is the **Product Group** that determines how a quote is generated. Therefore, each product must be associated with **one** (and only one) **Product Group** in order to generate quotes.

► **To associate a product to a Product Group:**

1. From the **Control Panel**, open the **Settings** menu and choose **Product Group Setup**.
2. Select the **Product Group** (single-click in any cell on the bottom half of the Product Group Information window). All the Product Group settings display in the top half of the window.

Note: The trader creates **Product Groups**. If no **Product Groups** display, you must create a custom **Product Group** before products can be associated.

3. Click the **Associate Products** button. If this button is grayed out, a **Product Group** has not been selected. The box in the lower half of the window lists all added **Product Groups**. The **Product Group** name appears in the far left-hand column. Left-click anywhere on the **Product Group** row. The entire row is selected, and the **Associate Products** button is enabled.
4. Select the appropriate exchange from the list.
5. Select the product from the drop list.
6. Click the **Add to List** button, and the exchange and product now display on the product list. You can associate other products with this **Product Group** in the same manner.
7. Click **OK** to complete the association and exit.

Each product can be associated with only one **Product Group** at a time. If you require quotes for the same product to be constructed using different parameters (for example, max vs. percentage or a different clearing member), you must first disassociate the product and then re-associate it with another **Product Group**.

Disassociating a Product from a Product Group

► **To disassociate a product from a product group:**

1. From the **Control Panel**, open the **Settings** menu and click **Product Group Setup**.
2. From the **Product Group Information** dialog box (lower portion of the window), select a Product Group and click the **Associate Products** button.
3. If this button is grayed out, a Product Group has not been selected. The box in the lower half of the window lists all currently active product groups. The Product Group name appears in the far left-hand column. Left-click anywhere on the Product Group row. The entire row is selected and the **Associate Products** button is enabled.
4. Click the product to be removed.
5. Click the **Remove** button.
6. Click **OK** to exit.

Changing a Product Group Settings

▶ **To change a Product Group's settings:**

1. From the **Control Panel**, open the **Settings** menu and click **Product Group Setup**.
2. Select the Product Group (single click in any cell on the bottom half of the **Product Group Information** dialog box). The entire row is selected and all the Product Group settings display in the top half of the window.
3. Make any desired changes in the entry section of the window (top half).
4. Click the **Change Group** button.
5. Click **OK** to save and exit. The changes are not saved until you close the **Product Group** dialog box.

Deleting a Product Group

▶ **To delete a Product Group:**

1. From the **Control Panel**, open the **Settings** menu and click **Product Group Setup**.
2. Select the Product Group (single-click in any cell on the bottom half of the **Product Group Information** dialog box). All the Product Group settings display in the top half of the window.
3. Click the **Delete Group** button.
4. Click **OK** to save and exit.

Properties Dialog Box

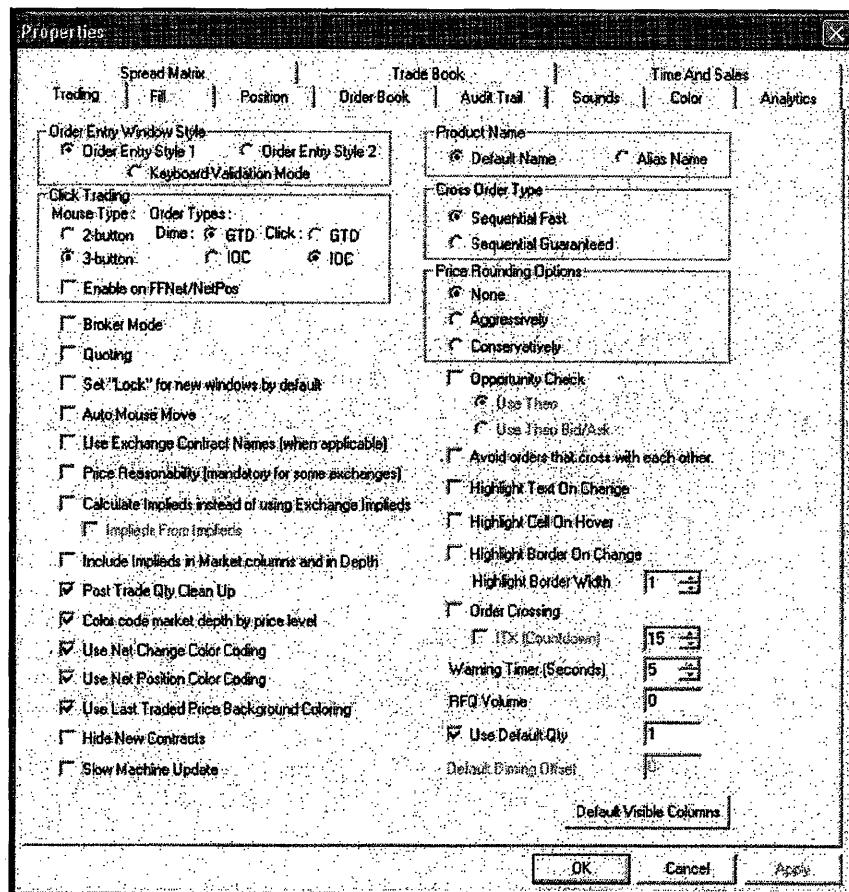
From the X_TRADER® Control Panel, open the **Settings** menu and click **Properties**. The **Properties** dialog box contains eleven tabs that allow you to activate, deactivate, and customize various X_TRADER® windows and options. Property settings made to X_TRADER® are specific to the user.

The **Properties** dialog box settings become the defaults for all new windows. In order for your custom changes to take effect, you must close and re-open trading windows.



Tab Name	Description
Trading	Customize the Market window (Order Entry and Market Grid) features.
Fill	Customize fast fill notification, enable or disable buy/sell color coding, and select default visible columns for the Fill window.
Position	Select default visible columns for the Position pane in the Fill window.
Order Book	Enable or disable buy/sell color-coding and select default visible columns for the Order Book .
Audit Trail	Select viewable records, enable or disable buy/sell color-coding, and default visible columns for the Audit Trail .
Sounds	Associate an X_TRADER® event with an audio cue.
Color	Select text, background, and border colors.
Analytics	Integrate a proprietary pricing model.
Spread Matrix	Set Auto Creation of the Spread Matrix when you open that window, as well as customize the Spread Matrix windows to suit your trading style and environment.
Trade Book	Enable or disable buy/sell color coding and set default visible column for the Trade Book .
Time and Sales	Set the maximum file size and number of days to save T&S file information.

Trading Tab



From the **Control Panel**, point to the **Settings** menu and select **Properties**. Click the **Trading** tab.

The **Trading** tab lets you set default trading properties that suit your trading style and environment. The properties affect order entry windows in the **Market** window and **MD Trader™**.

Setting	Description
Order Entry Window Style Section	<ul style="list-style-type: none"> • Order Entry Style 1: Displays as default and therefore, appears throughout the Help system. • Order Entry Window Style 2: Provides extra Buy/Sell buttons that may be utilized to confirm orders before they are sent to the market. • Keyboard Validation Mode: Allows traders to use their keyboards versus their mouse to submit orders.
Click Trading Section	
Mouse Type	<p>The 3 button mouse is selected by default. The 3-button mouse supports <i>Dime Trading</i> with the middle button. It also supports <i>Click Trading</i> with the right button.</p> <p>The 2-button mouse requires the manual selection of Click or Dime trading. The right mouse button is used to trade.</p>
Order Types	Select GTD (Good 'til Day) or IOC (Immediate or Cancel) for Dime and Click trading.
Enable on FFNet/NetPos	Enable on Fast Fill Net Position.
Misc. Properties Section	
Broker Mode	The Order Entry window offers an oversized Sell button when the bid prices is selected or an oversized Buy button when the ask price is selected.
Quoting	<p>To use the Quoting tool, you must enable it. To enable the Quoting tool, follow these steps:</p> <ol style="list-style-type: none"> 1. Click the checkbox on the Trading tab to allow the selection of the Quoting option from the Market Grid context menu. 2. Access the context menu of each Market window by right-clicking any cell on the Market Grid (<i>excluding bid/ask price columns if click trading is enabled</i>), and click Quoting. The quoting columns immediately display in the Market Grid. <p>For more information, refer to the Market Window, Order Entry pane, Quoting section.</p>

Setting	Description
Set "Lock" for new windows by default	<p>The Lock feature requires the trader to click an additional button (i.e., Apply Buy or Apply Sell) before the order is sent to market. To affect all existing and new Order Entry panes, enable or disable via the Trading tab.</p> <p>To use the option within a single Order Entry pane, click in the Lock checkbox in the pane. This box is located to the right of the Sell button.</p>
Auto Mouse Move	Allows the cursor to automatically move to the Buy when you click the AskQty column or the Sell button when you click on BidQty column.
Use Exchange Contract Names (When Applicable)	The system provides the exchange name.
Price Reasonability (Mandatory for some exchanges)	Price reasonability is defined by each supporting exchange as <i>a maximum number of ticks from the last price</i> . A trade is rejected if it falls outside the parameter set by the exchange. Detailed information must be obtained directly from the appropriate exchange.
Calculate Implieds instead of using Exchange Implieds	<p>Because some exchanges only display implied pricing data when the implied prices and quantities are better than the direct market, you may not see some implied values.</p> <p>This feature calculates and displays implied pricing in Market Depth as well as the inside market.</p> <p>If implied calculations are NOT possible, X_TRADER® displays the EXCHANGE provided implied data.</p> <p>X_TRADER® calculates Implied Ins (outright prices imply into spread prices) and Implied Outs (spread prices imply out to outright prices). However, the only spread it uses to calculate implied outs is the calendar spread. No other spread type is used to imply out to outrights.</p> <p>Implied From Implieds: After you enable the Calculate Implieds instead of using Exchange Implieds option, you can enable the Implieds From Implieds option. Therefore, X_TRADER® also calculates implied from implied values (sometimes called 2nd generation implieds) as well as implied "in", and implied "out" pricing data.</p>

Setting	Description
Include Implieds in Market Columns and in Depth	<p>Displays Implied price and quantity data in the same columns as direct price and quantity data. This includes the BidQty, BidPrc, AskPrc, AskQty columns in the Market Grid.</p> <p>This feature also automatically affects MD Trader™, Autospreader™, and Autotrader™. Therefore, implied data displays in their windows as well.</p> <p>For more information about X_TRADER®'s Implied Pricing capabilities, go to the Market window section in the Help and review Implied Prices and Quantities. This section describes the three major types of implied pricing: Implied In, Implied Out, Implieds From Implieds.</p>
Post Trade Qty Clean Up	<p>Reduces all trades' order quantity back to zero.</p> <p>If the Use Default Qty is enabled at the same time Post Trade Qty Clean Up is enabled, the quantity does not clear after the order is submitted.</p>
Color Code Market Depth by Price Level	<p>Color coding appears in Market Depth by price level.</p>
Use Net Change Color Coding	<p>Displays color coding of Net Change column.</p>
Use Net Position Color Coding	<p>Displays color coding of Net Position column.</p>
Use Last Traded Price Background Coloring	<p>Uses the Last Traded Price (LTP) background coloring scheme.</p>
Hide New Contracts	<p>Allows you to hide new contracts and strategies when they are released. The feature is disabled by default.</p>
Slow Machine Updates	<p>Reduces CPU utilization and improves performance on low-end client machines, such as handheld devices. When enabled, price updates to the screen occur no more frequently than one every 55ms. This refresh rate is rapid enough that the user does not perceive any delay in price updates to the screen, and in very busy markets, prices may appear to update more quickly.</p>
Product Name	<ul style="list-style-type: none"> • Default Name: Labels products by the product name used by the exchange. • Alias Name: Specifies in the Guardian Product Tables. They are used as the product name within X_TRADER® when enabled.

Setting	Description
Cross Order Type	<ul style="list-style-type: none"> • Sequential Fast. Default. Both orders (buy and sell) are immediately submitted, one after the other. Under normal market conditions, the crossing tool sends orders according to your selection. However, there are occasions when heavy network traffic results in routing the orders through different order routers. As a result, different data lines to the exchange may be used to transmit the cross orders and cause the wrong leg to arrive at the exchange host first. • Sequential Guaranteed. Waits for an acknowledgement from the exchange after sending the first order. Only then is the other side submitted. Due to the delay in sending the second order, it is possible for a third party to take the offer or bid before both sides are matched. <p>In both cases, if the first side of the order is filled (partially or completely), the second side of the cross order is still submitted.</p>
Price Rounding Options	<p>Allows you to choose your ¼ 32nd rounding options. This property applies to all orders you enter through X_TRADER® (except Autospreader™ and Autotrader™). This property excludes Stop orders that always round <i>away</i> from the market.</p> <ul style="list-style-type: none"> • None: Sends order at your selected price – even if it is not tradable. Exchange rejects the order. • Aggressively: Rounds ¼ tick prices <i>towards</i> the market. • Conservatively: Rounds ¼ tick prices <i>away</i> from the market.
Misc. Properties Section	
Opportunity Check	<p>Identifies trading opportunities based on theoretical models. Opportunities display in the Market Grid and you can customize the border color in the Properties Color tab.</p> <p>An opportunity can be defined as the possibility of buying a product for less than your theoretical bid price or selling it for more than your theoretical ask price.</p> <p>In order for this feature to work, you must enable Highlight Border on Change (see below).</p> <p>Opportunity Check can be used in general order entry or while using Click Trading. However, if you this feature while also Click Trading, the opportunity selection is based on the click trading parameters and edge implementation. When it is enabled, it requires the extra edge you have set up in Click Trading.</p> <ul style="list-style-type: none"> • Use Theo: Uses a single theoretical price when displaying trading opportunities. (Ignored when used in conjunction with Click Trading.) • Use Theo Bid/Ask: Uses both a theoretical Bid/ theoretical Ask price when displaying trading opportunities. (Ignored when used in conjunction with Click Trading.)

Setting	Description
Avoid orders that cross with each other	<p>When enabled, X_TRADER® sends delete requests (for LIMIT orders only) to the exchange for all orders at the limit price or worse before sending in the new order.</p> <p>This option excludes Market, Stop orders and Held orders.</p> <p>Due to timing issues outside the X_TRADER® system, it is possible that the exchange may process a new order prior to processing a delete request.</p>
Highlight Text on Change	Improves identification of affected cells.
Highlight Cell on Hover	As the cursor moves over a cell, it displays a 3-D effect. Both the column and row headings are also selected to help you track your cursor position.
Highlight Border on Change	Improves identification of affected cells. You can set a border width using the spin buttons.
Order Crossing: If enabled, cross trades can be performed.	<p>ITX (Countdown) Intention to Cross. Displays the ITX button on the right side of the Order Entry window.</p> <p>See Order Entry Field Descriptions for a full description of Intention to Cross.</p>
Warning Timer	Amount of time a quote remains live in a market.
RFQ	Request for Quote minimum volume. Default is zero.
Use Default Qty	<p>The value in the box is used as a Default Quantity for orders.</p> <p>If the Use Default Qty is enabled at the same time Post Trade Qty Clean Up is enabled, the quantity does not clear after the order is submitted.</p>
Default Diming Offset	Specifies the Diming Offset used.
Default Visible Columns	Select the default visible Market Grid columns.

Enabling Implieds in the Trading Tab

Note: Reduced Tick Spread strategies do not support Implied In and Implied Out prices.

You enable Implied features in X_TRADER® from the **Control Panel Properties Trading** dialog box. Descriptions of these features follow:

- **Calculate Implieds instead of using Exchange Implieds:**

Because some exchanges only display implied pricing data when the implied prices and quantities are the best price in the market, you may not see some implied values.

This feature calculates and displays implied pricing data in Market Depth as well as the inside market.

Note: X_TRADER® calculates **Implied Ins** (outright prices imply into spread prices) and **Implied Outs** (spread prices imply out to outright prices). However, the only spread it uses to calculate implied outs is the calendar spread. No other spread type is used to imply out to outrights.

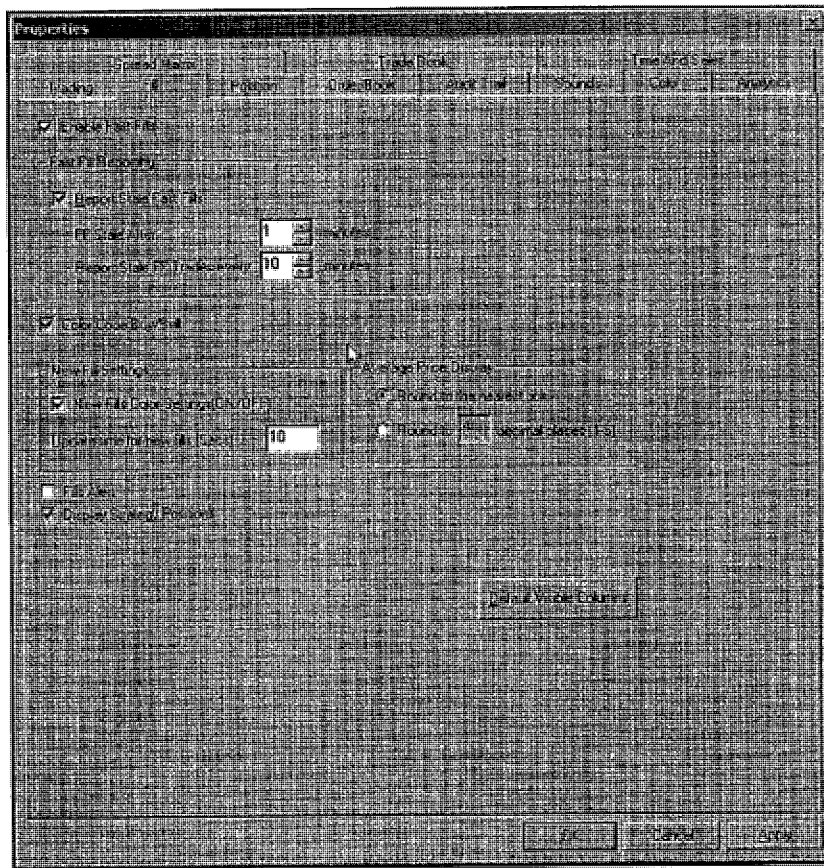
- **Implieds From Implieds:** After you enable the **Calculate Implieds instead of using Exchange Implieds** option, you can enable the **Implieds From Implieds** option. X_TRADER® also calculates and displays implieds from implieds values (sometimes called 2nd generation implieds).

- This feature affects the following X_TRADER® windows:

- **Market Grid**
- **Spread Matrix**
- **Butterfly Condor Matrix:** Implied data does not display in condor matrices because LIFFE does not match implieds from condor matrices.
- **MD Trader™**
- **Autotrader™**
- **Autospreader™**

- **Include Implieds for spreads in Market Columns and in Depth.**
Displays Implied prices and quantity data in the same columns as direct price and quantity data. This feature affects the following X_TRADER® windows:
 - **Market Grid:** The **BidQty, BidPrc, AskPrc, AskQty** columns display implied outright, implied spread and implieds from implieds.
 - **MD Trader™, Autospreader™, and Autotrader™:** Displays implied outright, implied spread and implieds from implieds prices and quantities in market data columns.

Fill Tab



From the **Control Panel**, point to the **Settings** menu and select **Properties**. Click the **Fill** tab. The **Fill** tab allows you to set default properties for the **Fill** pane that exists in the top pane of the **Fill** window.

Descriptions of available options follow:

Setting	Description
Enable Fast Fills	Some exchanges provide partial trade information prior to sending a confirmed fill (i.e., Eurex).
Fast Fill Reporting Section	
Report Stale Fast Fills. Enabled by default. Options include:	<p>FF Stale After: Sets refresh rate for Fast Fills. Fast fills that do not receive a matching confirmation from the exchange are considered stale after the time specified.</p> <p>Report Stale FF: Trades every: Default is 10 minutes. A message reporting the existence of a stale fast fill flashes until you refresh your position.</p>
Color Code Buy/Sell	<p>Enabled by default. Allows you to quickly differentiate among orders. Default text and background colors follow:</p> <ul style="list-style-type: none"> • Text color for Buy orders is blue. • Text color for Sell orders is red. • Confirmed fill text background is gray. <p>To customize buy and sell colors, go to the Color tab.</p>
New Fill Settings	<p>New Fills Color Settings (On/Off): Sets a visible indicator when a new fill appears in the Fill window.</p> <p>Update time for new orders (Secs): Sets when the indicator bar updates and displays new fills. It is set in seconds.</p>
Average Price Display	<p>Round to nearest tick: Shows average price to nearest tick setting.</p> <p>Round to <<n>> decimal places: Sets average price display in decimals.</p>
Fills Alert	Displays dialog box on the desktop when a fill arrives from an exchange.
Display Strategy Positions	Display spread/strategy positions. Spread positions display in the Fill pane and the Position pane of the Fill window, MD Trader™ 's Net Position field, and Market Grid's NetPos column.
Default Visible Columns	Select the default visible Fill window.

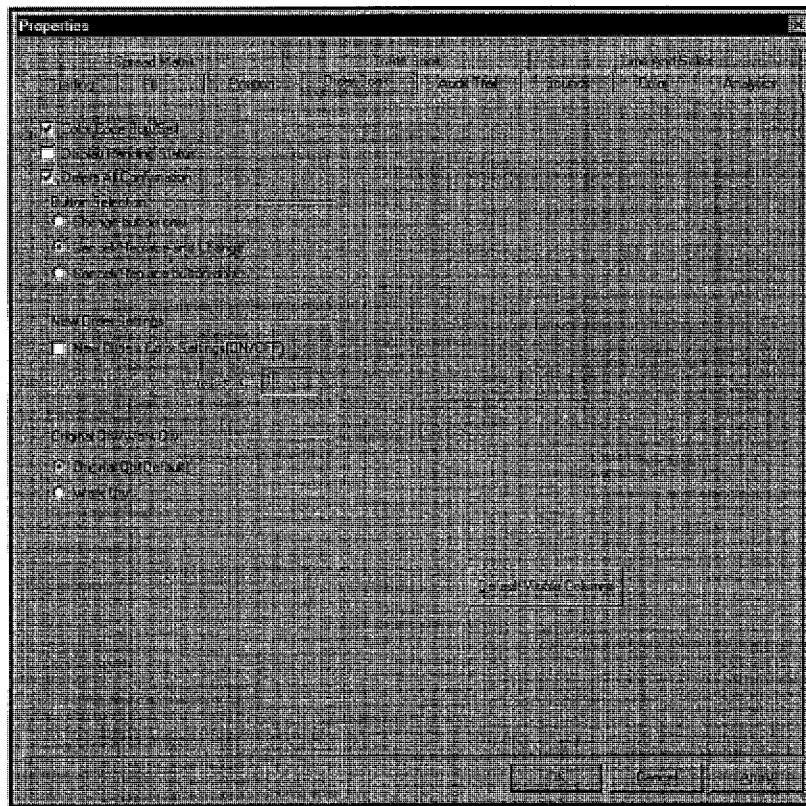
Position Tab

From the **Control Panel**, open the **Settings** menu and click **Properties**. Click the **Position** tab.

The **Position** tab lets you set the **Default Visible Columns** for the **Position** pane.

Click the **Default Visible Columns** button to select from the dialog box the columns of information to be available in the **Position** pane when a new **Fill** window is opened. Each checked column will be visible; an unchecked column will be hidden.

Order Book Tab

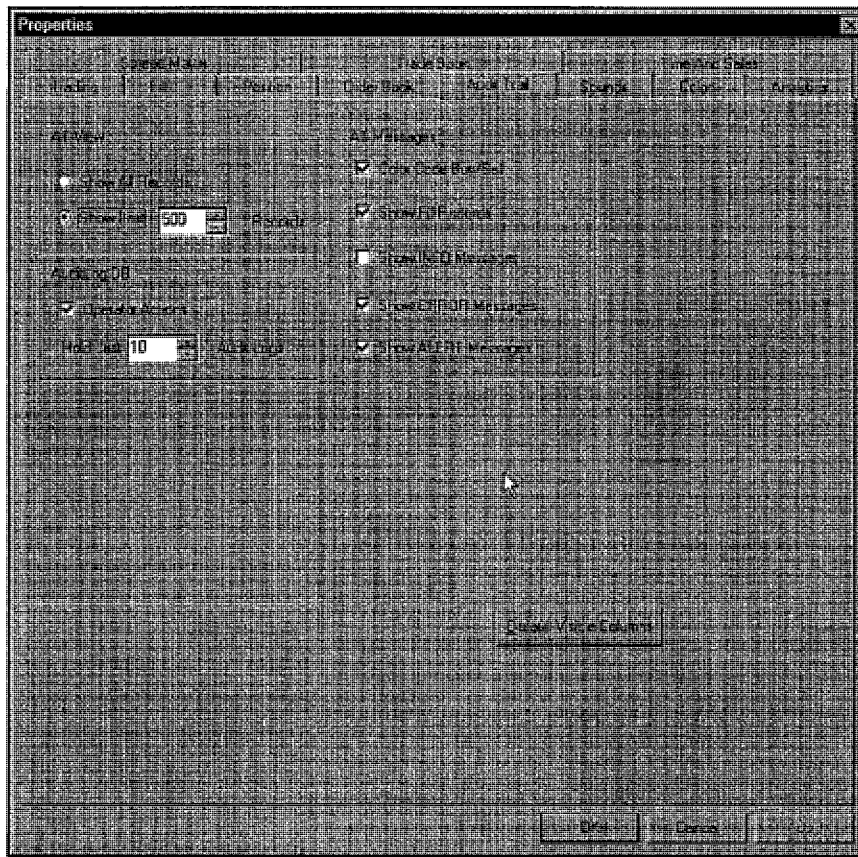


From the **Control Panel**, open the **Settings** menu and click **Properties**. Click the **Order Book** tab.

The **Order Book** tab lets you set default properties for the top pane in the **Order Book** window.

Setting	Description
Colored Code Buy/Sell	Enabled by default. To help you quickly differentiate among orders, the default text color for Buy orders is blue with Sell orders shown in red. The default text background is gray. You can customize buy and sell colors via the Color tab. The colors you select apply for all windows in which buy/sell orders are color-coded. When you enable color-coding, color formatting of the individual grids is disabled. Only the colors you select via the global Properties Color tab are applied.
Display Pending Status	Displays status of orders.
Delete All Confirmation	Enables a warning notification in Order Book window prior to any delete activity.
Button Selection	By default, both the Change and Cancel/Replace buttons are available. Two other button options are allowed: Change button only and Cancel/Replace button only .
New Order Settings	<ul style="list-style-type: none"> • New Orders Color Settings (ON/OFF): When enabled, sets a visible indicator when a new order appears in the Order Book window. • Update Time for New Orders (Secs): Sets the time this indicator bar is visible.
Original Qty/Work Qty	<p>Choose between:</p> <ul style="list-style-type: none"> • Original Quantity: Default. When you highlight a row in the Order Book, the Quantity field of the Order Book displays the order's original quantity. • Work Qty (Quantity): When you highlight a row in the Order Book, the Quantity field displays the current working quantity of the order and takes into consideration any partial fills. <p>You must first highlight a row to view the desired information.</p>
Default Visible Columns	Select the default visible Order Book columns

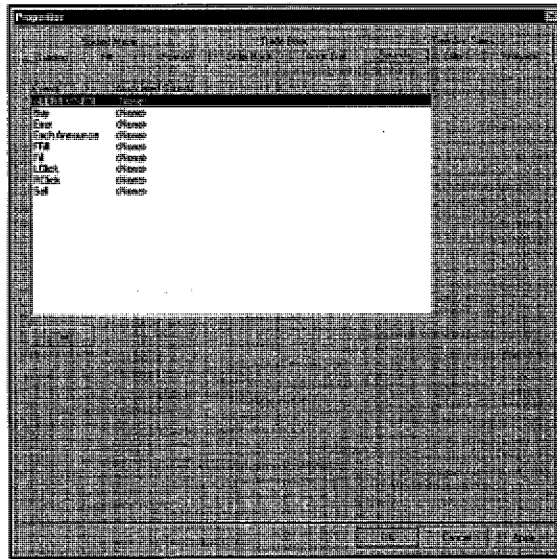
Audit Trail Tab



From the **Control Panel**, open the **Settings** menu and click **Properties**. Click the **Audit Trail** tab.

Setting	Description
Show All Records/ Show Last Records	Show All Records or choose a specific number of the most recent messages to display (100-2000)
AuditLog DB	<p>Ten (10) calendar days of Audit Trail information is automatically stored in a database located in <install directory>\TT\Logfiles\AuditLog.</p> <p>To include Operator Actions, select the checkbox.</p> <p>If you are using automated tools, like Autotrader™ or Autospreader™, change the days kept to three (3). You cannot set the number of days below 3.</p>
AT Messages	<ul style="list-style-type: none"> • Color Code Buy/Sell: Enabled by default. When enabled, the default Buy and Sell text is blue and red, respectively. When you disable this feature, the Audit Trail does not color code your buy and sell orders. • Show Fill Records: Enabled by default. When enabled, the default buy and sell text is blue and red, respectively. • Show INFO Messages: Disabled by default. When enabled, the default colors for messages are white text on a black background. • Show ERROR Messages: Enabled by default. When enabled, the default colors for messages are white text on black background. • Show ALERT Messages: Enabled by default. When enabled, the default colors are black text on a yellow background. Customize text and background colors using the Properties Color tab ALERT/WARN text and background.
Default Visible Columns	Select the default visible Audit Trail columns. For a detailed listing of the available information, refer to the Audit Trail Column Descriptions section.

Sounds Tab



From the **Control Panel**, open the **Settings** menu and click **Properties**. Click the **Sounds** tab. The **Sounds** tab lets you set audio notification for certain events.

If your workstation is equipped with a sound card and speakers and the appropriate drivers have been installed, you can assign sounds to the following events:

- Alert/Warn
- Buy
- Error
- Exchange Announcement
- FFill (Fast Fill)
- Fill (Confirmed Fill)
- LClick (Left Click)
- RClick (Right-click)
- Sell

Note: When performing a cross trade with sounds assigned to **Buy** and **Sell** events, you will not either hear the first sound based on your selection of **Buy First** or **Sell First**, or it will be cut off. Only the second sound event will be audible, because the buy and sell events are closely timed.

Adding an Event Sound

To add a sound to a specific event, from the **Control Panel** open the **Settings** menu and click **Properties**. Click the **Sounds** tab.

The top list box displays the event and its associated sound. By default, no audio files (<None>) are associated with the events.

You can add sounds for a contract's high and low price threshold for the day. Whenever a contract trades above the high price or below the lowest price, these sounds are played. You can assign different sounds for the high and low on the same contract, as well as different sounds for different contracts.

Sounds for high and low prices are managed in the **Alerts Manager** dialog box.

▶ **To add an event sound to a given event:**

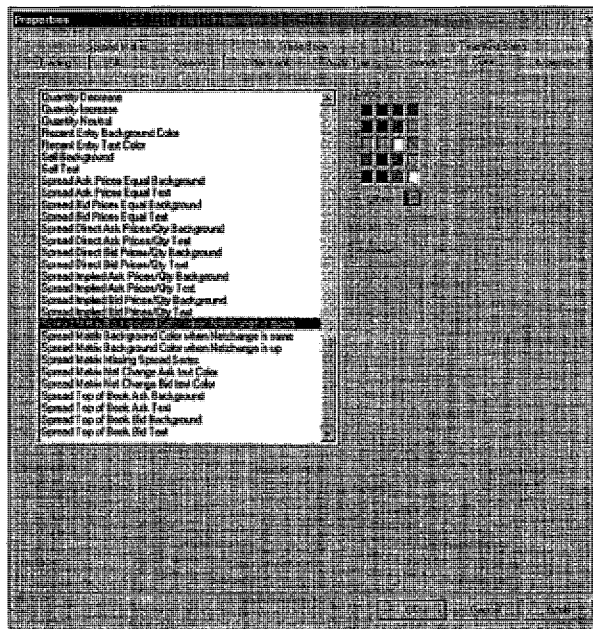
1. From the **Control Panel**, open the **Settings** menu and click **Properties**.
2. Click the **Sounds** tab.
3. Double-click the event and sound in the **Events** and **Associated Sounds** boxes to select them.
4. Click the browse button at the end of the highlighted line to open the **Sound Explorer** dialog box.
5. If necessary, navigate to the location where the sound files are located. (In most X_TRADER® installations this is in the following folder:
<root drive>:\TT\X_TRADER\Sounds).
6. Double-click a sound to select it. In the top box, the new sound name and path displays next to the selected event.
7. Click **Apply** and then **OK** to exit.

Changing or Removing an Event Sound

► To change or remove a sound from an event:

1. From the **Control Panel**, open the **Settings** menu and click **Properties**.
2. Click the **Sounds** tab.
3. In the **Events and Associated Sounds** box, choose an event to highlight it and the line that identifies the sound file.
4. Press the **Delete** key.
5. Click **Apply** and then **OK** to exit.
6. The **Properties** dialog box will close and the event sound will be removed from the event.

Color Tab



From the **Control Panel**, point to the **Settings** menu and select **Properties**. Click the **Color** tab.

Setting	Description
ALERT/WARN Background	Message default background color is yellow.
ALERT/WARN Text	Default color is black.

Setting	Description
Best Ask Price Highlight	Default color is blue.
Best Bid Price Highlight	Default color is red.
Buy Background and Text	Default text color is blue and the background is gray. Setting affects Fill pane, Order Book , and Audit Trail .
Excel Link	Default background color is dark gray.
Held Order Status Background Color	Default background of the held orders is yellow.
Held Order Status Text Color	Default text color is black.
Market Depth Color Levels 1 – 7	Default color follows the NASDAQ Level II color conventions.
MD Trader™ Average Price Long Background Color	Default color is blue.
MD Trader™ Average Price Long Text Color	Default color is black.
MD Trader™ Average Price Short Background Color	Default color is red.
MD Trader™ Average Price Short Text Color	Default color is black.
MD Trader™ Buy Side Blank Color	Default color is dark blue.
MD Trader™ Last Traded Price Down Background Color	Default color is red.
MD Trader™ Last Traded Price Down Text Color	Default color is black.
MD Trader™ Last Traded Price Unchange Background Color	Default color is white.
MD Trader™ Last Traded Price Unchange Text Color	Default color is black.
MD Trader™ Last Traded	Default color is bright green.

Setting	Description
Price Up Background Color	
MD Trader™ Last Traded Price Up Text Color	Default color is black.
MD Trader™ Net Change Down Background Color	Default color is red.
MD Trader™ Net Change Down Text Color	Default color is black.
MD Trader™ Net Change Unchange Background Color	Default color is white.
MD Trader™ Net Change Unchange Text Color	Default color is black.
MD Trader™ Net Change Up Background Color	Default color is bright green.
MD Trader™ Net Change Up Text Color	Default color is black.
MD Trader™ Net Position Flat Background Color	Default color is white.
MD Trader™ Net Position Flat Text Color	Default color is black.
MD Trader™ Net Position Long Background Color	Default color is blue.
MD Trader™ Net Position Long Text Color	Default color is black.
MD Trader™ Net Position Short Background Color	Default color is red.
MD Trader™ Net Position Short Text Color	Default color is black.
MD Trader™ Sell Side Blank Color	Default color is dark red.
MD Trader™ Working Buy Order Background Color	Default color is dark gray.
MD Trader™ Working Buy Order Text Color	Default color is dark blue.

Setting	Description
MD Trader™ Working Sell Order Background Color	Default color is dark gray.
MD Trader™ Working Sell Order Text Color	Default color is red.
Message Background	Default Audit Trail exchange announcement background color is black.
Message Text	Default Audit Trail exchange announcement text color is white.
Non-Tradable Background	Brokertec exchange users only. Customize background color to identify non-tradable products.
Non-Tradable Text	Brokertec exchange users only. Customize text color to identify non-tradable products.
Opportunity	When you have enabled Opportunity Selecting on the Properties Trading tab, the bid or ask price appears yellow (default color) when there is an opportunity to better your theoretical price or theoretical bid/ask prices.
Order Blotter Color	Default color is yellow.
Order Deleting	Default color is red.
Outright Ask Prices Equal Background	Default color is white.
Outright Ask Prices Equal Text	Default color is red.
Outright Bid Prices Equal Background	Default color is white.
Outright Bid Prices Equal Text	Default color is blue.
Outright Direct Ask Prices/Quantity (Qty) Background	Default color is gray.
Outright Direct Ask Prices/Quantity (Qty) Text	Default color is red.
Outright Direct Bid Prices/Quantity Background	Default color is gray.

Setting	Description
Outright Direct Bid Prices/Quantity Text	Default color is blue.
Outright Implied Ask Prices/Qty Background	Default color is coral.
Outright Implied Ask Prices/Qty Text	Default color is black.
Outright Implied Bid Prices/Qty Background	Default color is light blue.
Outright Implied Bid Prices/Qty Text	Default color is white.
Outright Top of Book Bid Background	Default color is yellow.
Outright Top of Book Bid Text	Default color is blue.
Outright Top of Book Ask Background	Default color is yellow.
Outright Top of Book Ask Text	Default color is red.
Partial Buy Background	Default color is yellow.
Partial Sell Background	Default color is yellow.
Price Decrease Border Color	Default color is red.
Price Increase Border Color	Default color is bright green.
Price Neutral Border Color	Default color is white.
Quantity Decrease Border Color	Default color is red.
Quantity Increase Border Color	Default color is bright green.
Quantity Neutral Border Color	Default color is white.
Recent Entry Background Color	Default color is white.

Setting	Description
Recent Entry Text Color	Default color is gray.
Sell Background and Text	Default text color is red; the default grid background color is gray. Setting affects Fill pane, Order Book , and Audit Trail .
Spread Ask Prices Equal Background	Default color is white.
Spread Ask Prices Equal Text	Default color is red.
Spread Bid Prices Equal Background	Default color is white.
Spread Bid Prices Equal Text	Default color is blue.
Spread Direct Ask Prices/Qty Background	Default color is red.
Spread Direct Ask Prices/Qty Text	Default color is black.
Spread Direct Bid Prices/Qty Background	Default color is blue.
Spread Direct Bid Prices/Qty Text	Default color is white.
Spread Implied Ask Prices/Qty Background	Default color is coral.
Spread Implied Ask Prices/Qty Text	Default color is black.
Spread Implied Bid Prices/Qty Background	Default color is light blue.
Spread Implied Bid Prices/Qty Text	Default color is white.
Spread Matrix Background Color when Netchange is DOWN	Default color is coral.
Spread Matrix Background Color when Netchange is SAME	Default color is white.

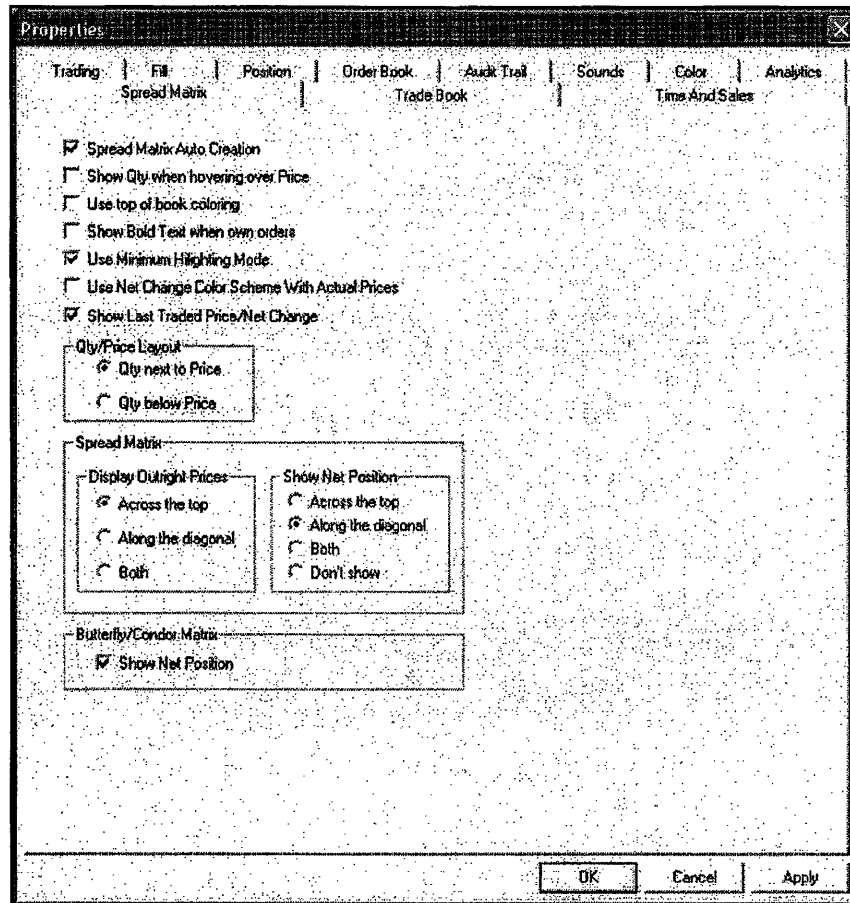
Setting	Description
Spread Matrix Background Color when Netchange is UP	Default color is light green.
Spread Matrix Missing Spread Series	Default color is gray.
Spread Matrix Net Change Ask Text Color	Default color is dark red.
Spread Matrix Net Change Bid Text Color	Default color is navy blue.
Spread Top of Book Ask Background	Default color is yellow.
Spread Top of Book Ask Text	Default color is red.
Spread Top of Book Bid Background	Default color is yellow.
Spread Top of Book Bid Text	Default color is blue.

Changing Window Color Display Options

► To change the colors for X_TRADER® display windows:

1. From the **Control Panel**, open the **Settings** menu and click **Properties**.
2. Click the **Sounds** tab.
3. In the **Selection** box, click the appropriate option listing.
4. Choose a color in the displayed palette. Click **Other** to see an additional palette or to create custom colors.
5. The **Color Preview** window displays your chosen color.
6. Click **OK** to exit.

Spread Matrix Tab



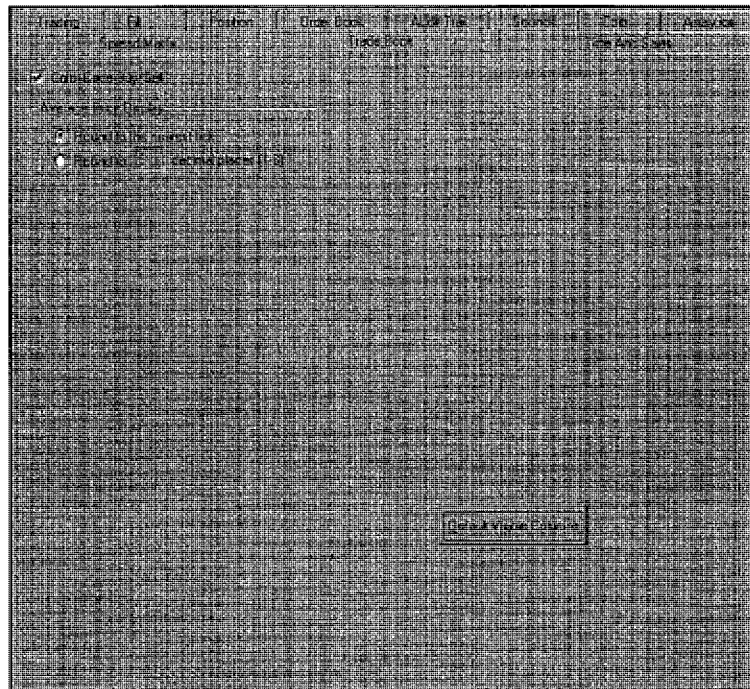
From the Control Panel, point to the Settings menu and click **Properties**. Select the **Spread Matrix** tab.

Setting	Description
Spread Matrix Auto Creation	Automatically creates a spread. This feature allows you to work with the LIFFE exchange to create spreads that may not exist.
Show Qty (Quantity) when hovering over Price	Displays the quantity when your mouse hovers over the Price. Therefore, the Quantity column is hidden.
Use Top of Book Coloring	Displays the top of book price in a different size font and color. Go to the Color tab to select your customized color.
Show Bold Text when own Orders	Displays your own orders in Bold Text to easily identify them.

Setting	Description
Use Minimum Highlight Mode	<p>Default is ON.</p> <p>When you enable this option, the behavior of the matrix depends on the following market characteristics:</p> <ul style="list-style-type: none"> • Matrix only highlights when both the quantity and price change. • Highlighting of the bid or ask depends on whether the Last Traded Price is on the bid or ask. • If the Last Traded Price was not on the bid or ask, the matrix does not highlight.
Use Net Change Color Scheme with Actual Prices	<p>When you enable this option, Net Change Color Scheme colors are used when prices display in the standard format. The color scheme follows:</p> <ul style="list-style-type: none"> • Negative prices display in pink. • Positive prices display in light green. • Prices with no change display in white. <p>Customize these net change colors in the Properties Color tab.</p>
Show Last Traded Price/Net Change	<p>Default is ON.</p> <p>A row designated by an [L] displays at the top of your Spread Matrix. A Last Prc column displays in your Butterfly Condor Matrix.</p> <p>If you display Spread Matrix or Butterfly Condor Matrix prices in the standard format using actual prices, this row displays Last Traded Price.</p> <p>Or:</p> <p>If you display Spread Matrix or Butterfly Condor Matrix prices as <i>Net Change</i> (using the context menu options), this row displays prices in net change.</p>
Qty/Price Layout	<p>Displays quantity and price cells in the matrix in one of two ways to suit your trading style and environment.</p> <ul style="list-style-type: none"> • Qty next to price. • Qty below price. Default.

Setting	Description
Spread Matrix	
Display Outright Prices	<p>Displays outright prices in one of three listed ways to suit your trading style and environment.</p> <ul style="list-style-type: none"> • Across the top • Along the diagonal • Both (Default)
Show Net Position	<p>You can Show Net Position in the Spread Matrix. Choose from one of the following display choices:</p> <ul style="list-style-type: none"> • Across the top: Displays a row designated by a [P] across the top. • Along diagonal: Default. Displays a cell at the bottom of each contract. • Both: Displays both the [P] row and bottom cell. • Don't Show
Butterfly/Condor Matrix	<p>Show Net Position</p> <p>Default is ON. A Net Pos column displays in the Butterfly Condor Matrix.</p>

Trade Book Tab

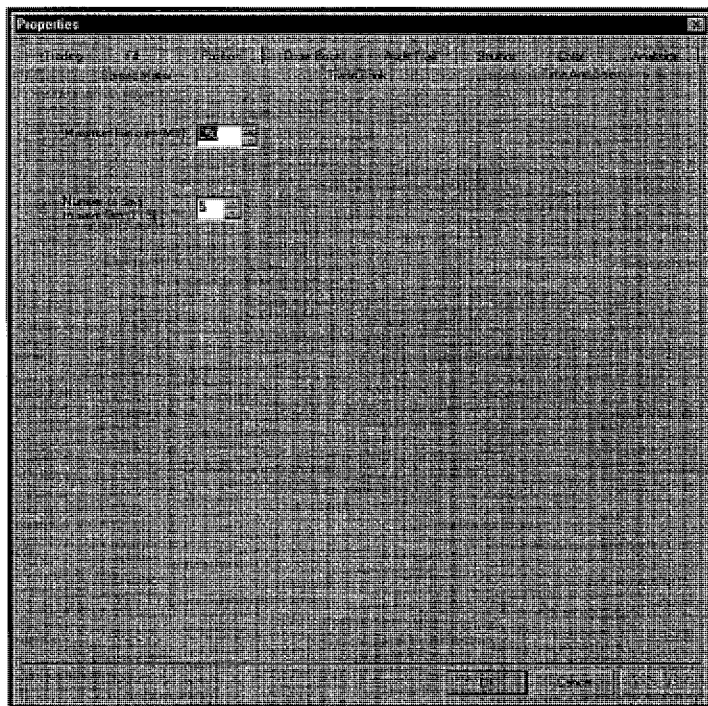


From the **Control Panel**, open the **Settings** menu and click **Properties**. Click the **Trade Book** tab.

The **Trade Book** tab lets you set color coding for buy and sell and the number of viewable columns:

Setting	Description
Color Code Buy/Sell	Enabled by default. To help you quickly differentiate among orders, the default text color for Buy orders is blue with Sell orders shown in red. The default text background is gray. You can customize buy and sell colors via the Color tab; the colors you select apply for all windows in which buy/sell orders are color-coded. When you enable color-coding, color formatting of the individual grids is disabled. Only the colors you select via the global Properties Color tab are applied.
Average Price Display	Set the average price display in nearest tick (the default) or out to a setting chosen by the user.
Default Visible Columns	Select the default visible Trade Book window columns.

Time and Sales Tab



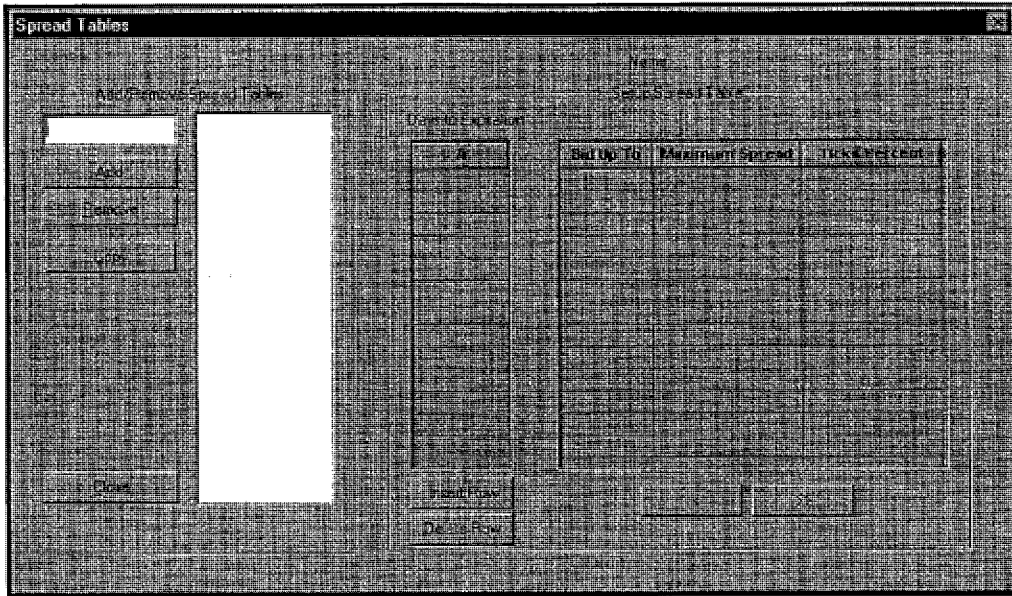
Time and Sales provides X_TRADER® users with the ability to track, record, and save time and sales information for products traded through X_TRADER®.

From the **Control Panel**, open the **Settings** menu and click **Properties**. Click the **Time and Sales** tab.

The **Time and Sales** tab lets you set the maximum saved file size and the number of days to save the file:

Setting	Description
Maximum File Size (MB)	Maximum file size allowed (before automatic purging). Default is 250 Megabytes.
Number of Days to Save Files (1-5)	Number of days to save files (before automatic purging) Default is 5 days.

Spread Tables Dialog Box



Use the **Spread Tables** dialog box to create, maintain, and delete a spread or strategy for use in X_TRADER®. You may create any number of strategies, which are then maintained in a file and are available from a drop-down list. After creation, you can then use the new strategy in the course of your trading.

To access the **Spread Tables** dialog box, from the **Control Panel** open the **Settings** menu and click **Spread Table Setup**.

Adding a Spread Table

Spread tables allow you to define how wide quote spreads should be, based on a product's time to expiration and price. Multiple spread tables provide flexibility within X_TRADER®'s quoting system.

► To add a Spread Table:

1. From the Control Panel, open the Settings menu and click Spread Table Setup.
2. Name your **Spread Table**: In the **Add/Remove Spread Tables** text box, located above the **Add** button, type the name. Click **Add**. The table name displays.
3. Select the table name: Single-click the newly named table to set up your table. The fields in the **Setup Spread Table** area activate.
4. Enter the value in the **Days to Expiration** column: The **Days to Expiration** column (A) is used to set the upper boundary for any given time period. For example, entering 30 in the top cell creates a 0 to 30-day time-to expiration period. Entering 90 in the cell below creates a 31 to 90-day time-to-expiration period. Entering 99999 creates the 91–99999 day time period.

Click any cell in the **Days to Expiration** column, and the exact time period is confirmed in the line above the **Bid Up To** column. For example, if you enter 30 as the number of days to expiration and you click this cell, the line above the **Bid Up To** column will read, "For expiration between 0 and 30 days".

Each expiration period has a corresponding table of prices and spreads. Similar to **Days to Expiration**, the **Bid Up to Price** is an upper bound and the **Maximum Spread** is the largest spread to be used (in ticks). For instance, setting the **Bid Up To** price to 5 and the **Maximum Spread** to 4 means that for all prices up to 5, the **Maximum Spread** for any quote is 4 ticks wide.

- Set up expiration periods. Use a high upper bound (99999) to indicate 'or longer.' A table with the last entry of 30 only goes out to 30 days. Setting the last cell to 99999 creates a last time period of 31 days or longer.
 - Set up prices and spreads. Follow the same logic as above and use a high upper bound for the last price range.
5. Use the **Insert** and **Delete Row** buttons as necessary.

Copying a Spread Table

Spread tables allow you to define how wide quote spreads should be, based on a product's time to expiration and price. Multiple spread tables provide flexibility within X_TRADER®'s quoting system.

► **To copy spread table data from one spread table to a new one:**

1. Select an existing **Spread Table**.
2. Click the **Copy** button.
3. Enter a new table name. All **Spread Table** data is copied to the new table. Edit the new table as necessary.
4. Click the **Close** button. The table information is automatically saved.

Saving a Spread Table

Spread tables allow you to define how wide quote spreads should be, based on a product's time to expiration and price. Multiple spread tables provide flexibility within X_TRADER®'s quoting system.

After entering the information into the spread table in the **Spread Tables** dialog box, click the **Close** button. The table information is automatically saved.

Removing a Spread Table

To remove a **Spread Table**, select the table in the **Spread Tables** dialog box and click the **Remove** button.

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Chapter 7

Fill Window

The screenshot shows a window titled 'X_TRADER' with a 'Fill' tab selected. The window contains two main data tables. The top table has columns for 'Time', 'Date', 'Time', 'Date', 'Price', 'Fill Size', 'Product', 'Type', 'Quantity', and 'Account #'. The bottom table has columns for 'Exchange', 'Product', 'MMNY', 'Strike', 'C/P', 'BuyQty', 'SellQty', 'NetQty', 'FFill', 'PR (Last)', 'AlghBuy', 'AlghSell', 'Bid', 'Ask', and 'Open'. The data is presented in a grid format with alternating shaded rows.

The **Fill** window provides detailed information about the current day's trades. X_TRADER® displays fill information immediately upon receipt from the exchange. However, each exchange has implemented the dissemination of fill information differently. Some exchanges provide the information faster than other exchanges.

The **Fill** window is composed of three panes: **Fills** pane, **Position** pane, and **Fast Fills** pane:

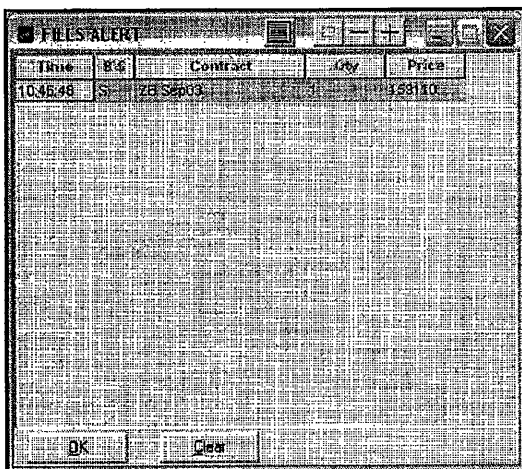
- The **Fills** pane reflects the exchange-confirmed data about a trade.
- The **Position** pane provides net position information by product and contract. The P/L is calculated using only confirmed fills.

Unless set up to do so on the gateway, Eurex fast fills are no longer included in net position calculations. Ask your TT™ representative for information on converting fast fills into confirmed fills.

- The **Fast Fill** pane (supported by some exchanges) displays limited trade information until the confirmed fill is received from the exchange. Some exchanges provide guaranteed fill information via the back office feed. This may result in delayed fills if the trade information is not received from the exchange. The **Fast Fills** pane mitigates the potentially significant delays that may occur waiting for a guaranteed fill. The fast fill net quantity is displayed in the **FFNet** column of the **Position** pane.

Note: The **Position** pane may include the letter "o" (options) in the **Expiration** column when the position represents an option. This procedure distinguishes futures and options positions for the same products that have identical expiration dates, which may occur on LIFFE. For example, a futures and options position for product B Jun00 expiration on LIFFE would display both an entry for Jun00 (futures position) and oJun00 (options position).

Fills Alert Dialog Box



The **Fills Alert** dialog box displays on the desktop when a fill arrives from an exchange.

► **To enable this dialog box:**

1. From the **Control Panel**, select **Properties** and click the **Fill** dialog box.
2. Enable the **Fills Alert** checkbox.
3. Close the **Properties** dialog box.

Use the **Print** button  to print the page.

Fills Pane

Time	Exch	Bid	Offer	Price	Fill Type	Product	Type	MinQty	Account#
10:00:00									
10:00:01									
10:00:02									
10:00:03									
10:00:04									
10:00:05									
10:00:06									
10:00:07									
10:00:08									
10:00:09									
10:00:10									
10:00:11									
10:00:12									
10:00:13									
10:00:14									
10:00:15									
10:00:16									
10:00:17									
10:00:18									
10:00:19									
10:00:20									
10:00:21									
10:00:22									
10:00:23									
10:00:24									
10:00:25									
10:00:26									
10:00:27									
10:00:28									
10:00:29									
10:00:30									

The **Fill** window now displays spread fills for LIFFE and CME gateways in the **Fill** and **Position** panes.

The **Fill** pane includes the **Fill Type** and **Type** columns to allow you to filter on your spread positions and view your spread legs separately from outright trades.

X_TRADER® delivers trade (fill) information immediately upon receipt from the exchange. Each exchange, however, disseminates fill information differently. For example, some exchanges provide the information faster than others; other exchanges send fill information via their back office feed. Therefore, problems may arise due to the following:

- Trade confirmations may not be sent immediately or may not be received from the exchange.
- Guaranteed fills that are provided by back office feeds are typically delayed 10 to 15 seconds and may be delayed for many minutes. The length of the delay varies due to exchange trading volume fluctuations and product state changes (for example, the closing of a market).

Trading Technologies® recommends that you use regular exchange screens to complement X_TRADER® windows during periods of such delay.

Fills Pane Field Descriptions

Note: If logging is enabled, LIFFE fill records are retained in the <install drive>\TT\LogFiles directory on the TT™ LIFFE Gateway. Every day a file is created for each LIFFE trader that records all fills. The file has the following format: "day.month.year.Ttfill_trader mnemonic". The X_TRADER® Administrator must manually delete these files in order to manage hard-disk space.

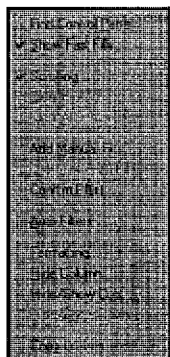
You can display the following column information in the **Fills** pane. It is listed in the order presented in X_TRADER® Properties **Fill** tab.

Column Name	Description
Time	Time fill was received at the workstation
Exch	Exchange
B/S	Buy/Sell
O/C	Open/Close a Position
Qty	Order Quantity
Price	<p>Fill Price.</p> <p>Displays fills on spreads for LIFFE and CME gateways. The pane displays the fill prices on the corresponding legs of the spread, followed by the actual fill for the spread.</p> <p>Displays spread positions in addition to leg position in the Position Pane. The spread positions appear for information purposes only and do not affect risk calculations. (Risk is calculated using legs.)</p> <p>You may also turn a spread fill on or off. The default is off. For more information, go to the Properties Fill tab.</p>
Fill Type	Indicates whether the outright fills are from a spread order. You can use this column to filter on your spread positions and view spread legs separately from the outright trades. If the outright fill is coming from a spread fill, the cell displays Spread Fill Leg. If not, the Fill Type corresponds to the Product Type.
Cur	Currency
Product	Exchange Symbol for displayed product

Column Name	Description
Type	This column allows you to identify the type of order that received a fill. Options include: <ul style="list-style-type: none"> • Future • Future Spread • Option • Option Strategy • Stock • Bond • Swap • Warrant
C/P	Call/Put
MMYY	Displays Spread months in the expiration Month/Year columns.
Strike	Exercise Price of an Option
Version	Version
Account #	Back office account number or account name
FFT2	Free Form Text Field 2
FFT3	Free Form Text Field 3
Clr Mbr	Clearing member
Exch Mbr	Exchange member ID
Exch Grp	Risk Manager Direct User's Trader ID
Exch Trd	Risk Manager Direct User's Trader ID
Trd Mbr	Trader's or Risk Manager's Proxy User's member's ID (e.g., Broker's client=TTORD)
Trd Grp	Trader's or Risk Manager's Proxy User's member's ID (e.g., Broker's client=SIM)
Trd ID	Trader's or Risk Manager's Proxy User's member's ID (e.g., Broker's client=666)
Acct	Agent, Market Maker, Principal, Give-up, Unallocated

Column Name	Description
Exch Time	Transaction Time—at the exchange
Type	Limit/Market
GU	Give-up Member ID
PF	Partial Fill Partial Fill: For Xetra, no Partial/Final fill indicator is provided. Therefore, this value is left blank in the X_TRADER® Fill window.
Rstr (Restriction)	<None>, FOK, IOC, MOO, MV, Stop
Fee	Associated Fee
P/A	Brokertec only. Designates whether your order was filled as a Passive or Aggressive order. This allows you to determine fees based on a specific order.
Order No.	Order Number assigned by exchange
TT Order Key	Unique order number assigned to this order.
Trans ID	Unique transaction ID assigned to each fill and partial fill
Exch Date	Exchange Date
Ord Time	Time order was placed at workstation
Ord Date	Time date was placed at workstation
C	Confirmed by operator
Conf MbrID	Confirmed Member ID
Conf GroupID	Confirmed Group ID
Conf TraderID	Confirmed Trader ID
Conf Time	Time order was Confirmed
Conf IP	Confirmed IP Address
Cntr Party	Counter Party
Row Numbers	Far left column displays row numbers

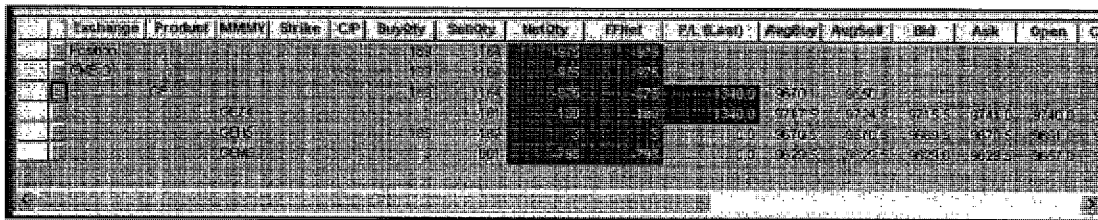
Fills Pane Context Menu



Feature	Description
Find Control Panel	Displays X_TRADER® Control Panel.
Show Fast Fills	Enabled by default. Fast fills only display partial information about the order and are only offered by some exchanges.
Scrolling	Enabled by default. Displays the most recent fill at the bottom of the Fill pane.
Clear Filter	Right-click in the column that contains a filter and click Clear Filter to remove the filter.
Clear All Filters	Right-click in the Fill pane and click Clear All Filters to quickly remove all filters.
Add Manual Fill	Allows you to manually enter a fill. Information displays in the Fill pane and updates the Position pane.
Delete Manual Fill	Right-click the fill and click this option to delete. Only manual fills can be removed from the position.
Confirm Fill(s)	Click a single fill or select multiple fills and click this option. The "C" (Confirmed) column displays a hyphen (-) for trades confirmed by you. An equal sign (=) displays for fills confirmed by another trader.
Auto Filters	Enables Auto Filters, which filters the data by selecting a customer from the Customer List window.
Formatting	Allows you to customize fonts, colors, and borders.
Hide Column	After highlighting a cell or multiple columns, immediately hides the column(s).

Feature	Description
Hide/Show Cols	Allows you to select which columns to hide or show.
Copy	After selecting the data to be copied, click this option to place the data on a clipboard. You can then paste the data into another program (for example, Excel).

Position Pane



The **Position** pane is the middle pane of the **Fill** window and this pane displays your position. Expand/contract each position tree to review more specific data about position information. A plus (+) sign indicates that the tree contains more information. A minus (-) sign indicates that the tree has already been expanded. The level of detail may contain:

- Summary totals
- Totals by exchange
- Totals by product
- Totals by contract expiration

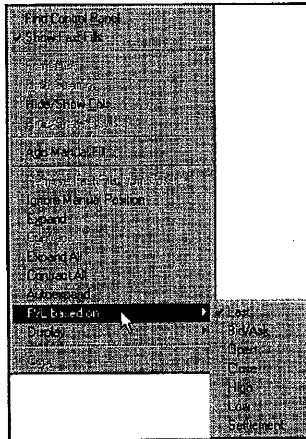
Note: The **Position** pane may contain the letter "o" in the expiration column when the position represents an *option*. This distinguishes between futures and options positions for the same products that have identical expiration dates. This may occur on the LIFFE exchange. For example, a futures and options position for product *B Jun00* expiration on LIFFE displays an entry for *Jun00* (futures position) and *oJun00* (options position).

Position Pane Column Descriptions

Column Name	Description
Exchange	Exchange
Product	Exchange Symbol for displayed product
MMYY	Expiration Month/Year Display calendar spreads for LIFFE and CME products. The spread positions appear for display purposes only <i>and do NOT affect risk calculations</i> . Risk calculations are completed using the individual legs of the spread.
Strike	Exercise price of an option
C/P	Call/Put
BuyQty	Total Buy Quantity
SellQty	Total Sell Quantity
NetQty	Indicates the position at the start of the day plus the difference between what you have bought and sold.
FFNet	Fast Fills Net Quantity (FF Buys-FF Sells) Refer to the Fast Fills Pane for details.
P/L	Profit/Loss (Last)
AvgBuy	Average Buy Price
AvgSell	Average Sell Price
Bid	Bid Price
Ask	Ask Price
Open	Open Price
Close	Close Price
High	High price
Low	Low Price

Column Name	Description
Last	Last price
Stlmnt	Settlement Price
Buy	Buy Totals
Sell	Sell Totals

Position Pane Context Menu



Column Name	Description
Find Control Panel	Brings the X_TRADER® Control Panel to the foreground of your workspace.
Show Fast Fills	Enabled by default.
Formatting	Allows you to customize fonts, colors, and borders for various features in the Fill Window .
Hide Column	Immediately hides the column(s).
Hide/Show Cols	Allows you to select which columns to hide or show by displaying a dialog box with all available columns listed.
Hide/Show Rows	Allows you to select which rows to hide or show.
Add Manual Fill	Allows you to manually enter a fill. Enter the information in the Manual Fill dialog box and the trade then displays in the Fill window and updates the Position pane.
Remove Fast Fills From Position	Removes fast fills from the position and recalculates the P/L.
Ignore Manual Position	Removes manual fills and recalculates the P/L.
Expand	Expands the current branch.

Column Name	Description
Contract	Contracts only the selected product.
Expand All	Expands the position tree to view all branches.
Contract All	Contracts the position tree.
Autoexpand	Automatically opens the position tree.
P/L based on	Calculates your Profit & Loss.
Display	Display position using the native currency, or the quantity multiplied by the price (default). The primary currency is annotated next to the Currency option (for example, Currency – USD).
Copy	After selecting the data to be copied, select this option to place the data on a clipboard. You can then paste the data into another program (for example, Excel).

Calculating Profit and Loss

P/L for open positions can be based on any of the following:

- Last price
- Bid/ask prices
- Opening price
- Closing price
- High price
- Low price
- Settlement price

► To select the P/L method:

1. Right-click any cell in the **Position** pane to access the context menu.
2. Click a calculation method by selecting **P/L based on**. You can select any of the options listed above. Profit/Loss based on the **Last Price** is the default.

P/L Column Display

X_TRADER® allows you to select the P/L (Profit/Loss) column display type.

The **Position** pane's P/L column displays in one of the following:

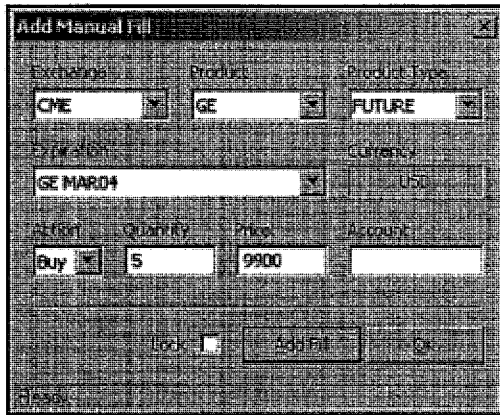
- Selected primary currency. (The Primary Currency designation in the Guardian Currency Table determines the default currency. The default primary currency is USD. To change the primary currency via Guardian, speak to your X_TRADER® System Administrator.)
- Product's native currency.
- Quantity multiplied by the price.
- Ticks.

▶ **To select the P/L Column display type:**

1. Right-click any cell in the position pane to access the **Position** pane context menu.
2. Click **Display**.
3. Select a display type: **Currency**, **Native Currency**, or **Qty x Prec**. (Quantity multiplied by price is the default.)

Note: You can only obtain a total position P/L if you have selected these options from the **Context menu: Display – Currency – USD**.

Manual Fills Dialog Box



Tip: The **Save Manual Fills** option in the Properties **Fill** tab is enabled by default. Therefore, the system saves all manual fills to your hard drive. If you are logged into X_TRADER® and have manual fills on multiple exchanges and you close X_TRADER® and reopen it to log into a different exchange, X_TRADER® prompts you to log into all exchanges where you have manual fills. However, you must then *manually delete* manual fills.

If you disable the feature, X_TRADER® does not save manual fills to the hard drive. If you close X_TRADER® and reopen it and log into a different exchange, X_TRADER® does not prompt you to log into all exchanges where you had manual fills.

In some cases, trades may be executed through some other method other than the X_TRADER® application. Use the **Manual Fills** dialog box to manually add or delete all orders executed through a source other than X_TRADER®. You can calculate your true position and P&L (profit/loss) when you use X_TRADER®.

Access the **Manual Fills** dialog box from the **Fills** pane context menu.

Notes:

- You now have the ability to add manual fills for future spreads and options strategies as well as outright futures and options.
- If you open one (1) Manual Fill dialog box and try to open a second dialog box, the system displays a message box. If you would like to override the current settings with the new specified fill, click OK. The Manual Fill dialog box displays in the foreground and the fields contain the data from the new fill.
- You can manually add all order executed through a source other than X_TRADER® to calculate your true position and profit and loss (P&L) by using the Manual Fills feature.

Complete the following entry fields in the **Manual Fills** dialog box:

Field	Entry
Exchange	Select the exchange where the trade took place. You must be logged onto the exchange before you can select an exchange here.
Product	Lists products on the selected exchange.
Product Type	Select from the list. Depends on products supported by the exchange.
Expiration	Lists instruments of the selected product type and product supported by the exchange.
Currency	Displays the currency of the selected instrument.
Action	Lists the possible trade: Buy (B) or Sell (S)
Strike	Select from the list of traded products.
Quantity	Enter the amount of the quantity traded.
Price	Enter the price of the product traded.
Account	Enter the account number of the customer.
Add Fill	Select to transfer manual trade to Fill pane. This button enables only after you complete all mandatory steps.
Lock	Allows you to ensure the fill is correct before adding it. If enabled, you receive a dialog box that displays Add Fill.
OK	Closes the Manual Fill dialog box when you are finished entering manual fills.
Status Bar	Allows you to review the state of the dialog box or that you successfully added a new manual fill.

Adding a Manual Fill

Notes:


- You now have the ability to add manual fills for future spreads and options strategies as well as outright futures and options.
- If you open one (1) Manual Fill dialog box and try to open a second dialog box, the system displays a message box. If you would like to override the current settings with the new specified fill, click OK. The Manual Fill dialog box displays in the foreground and the fields contain the data from the new fill.
- You can manually add all order executed through a source other than X_TRADER® to calculate your true position and profit and loss (P&L) by using the Manual Fills feature.

► To add a manual fill to the Fill pane:

1. Open the **Fill** window.
2. To display the context menu, right-click in the **Fill** window.
3. Click **Add Manual Fill**.
 - If you place your cursor on a specific fill in the **Fill** pane to access the **Manual Fill** dialog box, that order information populates the **Manual Fills** dialog box.
 - If you open the **Manual Fills** dialog box via the **Position** pane context menu, all fields remain blank.
4. In the following order, select the **Exchange**, **Product** and **Product Type**.
5. Select the **Expiration**.
6. Select an action (**Buy** or **Sell**).
7. Type the appropriate values in the **Quantity** and **Price** fields.
8. After you complete the mandatory fields, **Add Fill** enables. To add the fill, click the button. The status bar informs you that a fill was added.

If you want to see the formatted fill before you add it, click the **Lock** checkbox before clicking **Add Fill**.

Deleting a Manual Fill

 **Tip:** Manual Fills persist even if you lose connectivity to X_TRADER®. Therefore, in case of an emergency or automatic shutdown of X_TRADER®, you do not lose manual fills. However, you must then *manually delete* manual fills when you need to.

▶ **To delete a manual fill from the Fill pane:**

1. From the **Fill** pane, select the manual fill trade (indicated by the 'm' in the **Open/Closed (O/C)** column).
2. To access the context menu, right-click.
3. Click **Delete Manual Fill**. The **Fill** and **Position** panes update to reflect the fill deletion.

Fast Fills Pane

The lower pane of the **Fill** window contains the **Fast Fills** display. Fast fills—in which only partial information about the order is supplied—are offered by only some exchanges.

X_TRADER® provides fast fill information to mitigate the potentially significant delays that may occur while waiting for a guaranteed fill. For example, fast fills for Eurex are composed of two items:

- Immediate executed quantities resulting from an order entered via X_TRADER®.
- Eurex Trade Confirmations sent to X_TRADER® for resting orders (which are typically sent immediately after a match occurs).

Inherent issues exist with the use of fast fills:

- Fast fills are typically not guaranteed by the exchange.
- Fast fills are sent to all traders with the same Group ID.
 - Example: With a Trader ID = AAAAABBB001
 - AAAAA represents the Exchange Member ID
 - BBB represents the Group ID
 - 001 represents the Trader ID
- Fast fills are NOT reflected in the position calculations.
- Fast fills are removed from the **Fast Fill** pane upon receipt of the guaranteed fill from the exchange.
- Fast fills do NOT cause the **Order Book** to update because a given order cannot be tied to the limited information contained in the Fast Fill.
- The **Fast Fills** pane is disabled when you are using **Fill** window filters. The **Position** pane column, **FFNet (Fast Fills Net Quantity)**, is also disabled when filters are applied.

When all filters are cleared, the **Fast Fill** pane and **FFNet** column are again enabled. All fast fills that arrived while the filters were in use now display, and the **FFNet** column automatically updates.

► **To remove Fast Fills from a position (refresh a position):**

1. Right-click a cell in the **Position** pane to access the context menu.
2. Click **Remove Fast Fills from Position**.

Fast Fills Pane Context Menu



The **Fast Fill** pane context menu lists these additional options:

Menu	Description
Find Control Panel	Brings the X_TRADER® Control Panel to the foreground of your workspace.
Show Fast Fills	Displays fast fills in the Fast Fills pane.
Scroll To End	The Fill and Position panes immediately display new fills at the bottom of the window so that you can review the most recent fill.

Eurex Fast Fill Information

P/L is calculated using only confirmed fills. Eurex fast fills are not included anymore in net position calculations. However, TT™ representatives can configure the TT™ Eurex Gateway to convert fast fills into confirmed fills automatically.

Using the following two columns, a Eurex trader can monitor position updates:

- **FFNet (Fast Fills Net Quantity)** column: Displays the fast fill net quantity. As fast fills are received, the FFNet column updates and reflects the new fast fill position.
- **NetQty (Net Quantity)** column: Reflects the position based only on confirmed fills. The NetQty column updates and reflects the new confirmed position.

When the **Fill** window is opened, the **FFNet** column synchronizes with **NetQty**. Under normal trading situations, the **FFNet** column updates slightly ahead of the **NetQty** column, because fast fills are received before confirmed fills.

FFNet and Filters

Using filters disables the **Fast Fills** pane and the **FFNet** in the **Position** pane. When you clear all filters, the **Fast Fill** pane and **FFNet** column are again enabled. All fast fills that arrived while the filters were in use display in the **Fast Fills** pane, and the **FFNet** column automatically updates.

FFNet and NetQty Synchronization

The Eurex trader can easily identify when **NetQty** and **FFNet** are out of synchronization (do not match) for an extended period. The following may result in an out of synch occurrence:

- Errant or erroneous fast fill.
- Changing a working order that gets filled immediately.
- If a fast fill has been received, clearing all filters results in reinitializing the **NetQty** and **FFNet**, so that they are the same. Receipt of the confirmed fill causes an out of synch occurrence.

If you think that the fast fill position reflects errant or erroneous fast fills, you can resynchronize the fast fill position with the confirm fill position by using the **Remove Fast Fills From Position** option on the **Position** pane context menu.

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Chapter 8

LIFFE Wholesale Trading

The LIFFE Wholesale system is a reporting mechanism for transactions negotiated outside the LIFFE market.

They must also decide which firm executes the order. The executing member submits the order. Because the counter member does not submit an order, no counter member information exists in the order. The counter member does not receive order acknowledgment or fills. Once a wholesale order has been submitted, it cannot be cancelled, revised, or handed off to a different trader.

For a given wholesale order that is approved and executed, LIFFE sends two trade confirmations.

Wholesale orders appear in the **Audit Trail**, the **Total Traded Quantity** column of the **Market Grid** and the **Fill** window. Wholesale orders do not appear in the **Order Book**.

Opening the Wholesale Trade Window

Open the Wholesale Trade windows within the X_TRADER® application, after you have selected the exchange product and opened a **Market** window.

▶ **To open a Wholesale Trade window:**

1. Log onto one of the exchanges that support wholesale trades.
2. Open the **Market Explorer** and select a product.
3. Open a **Market** window for the selected product.
4. In the **Market** window, click the row containing the product.
5. To access the **Market Grid** context menu, right-click in the specified product row.
6. Click **Wholesale** to select it. A submenu displays the following options:
 - Basis
 - Block
 - Against Actual
 - Flex Options
7. To open the appropriate wholesale submission window, select a submenu item.
The appropriate dialog box displays.

Wholesale Trading Types

LIFFE Wholesale trades are defined as follows:

- **Block trades:** High volume trades in any outright or strategy product.
- **Basis trades:** Strategies for long-term bond markets that incorporate a futures leg and an underlying (or cash) leg. Only the future leg is traded at the LIFFE exchange. The cash leg is traded on a separate exchange, which may be executed through X_TRADER® or another method.

Against Actuals trades: Strategies for commodities markets that incorporate a futures leg and an underlying commodity leg. Only the future leg is traded at the LIFFE exchange. The cash leg is traded on a separate exchange, which may be executed through X_TRADER® or another method. Against Actual orders are only valid for commodities contracts

- **Flex Options trades:** FTSE 100 options, except that any expiration day and exercise price can be specified. Flex Option orders are only valid for the ESX contract at LIFFE.

The following table describes Wholesale Trading types and the exchanges that support them:

Exch	Wholesale Orders Supported						Acct Codes Required	CTI Codes Required	Posting Codes Required
	Against Actuals	Basis	Block	Flex Options	Guaranteed Cross	Mkt Maker Cross			
LIFFE	X	X	X	X			X		
NQLX			X			X	X	X	
Euronext (Paris)	X	X	X		X		X		X
Euronext (Brussels)			X				X		X

Audit Trail Messages

The two firms negotiate the terms of the transaction outside the market. They must decide which firm executes the order. The executing member submits the order. Because the counter member does not submit an order, no counter member information exists in the order. The counter member does not receive order acknowledgement or fills. Once a wholesale order is submitted, it cannot be cancelled, revised, or handed to a different trader.

Event	Message Indicates
Order Submission	Wholesale order has been submitted to the exchange.
Order Receipt	Wholesale order has been received by the exchange.
Fill Message	One fill message is sent for the buy side of the order.
Fill Message	One fill message is sent for the sell side of the order.
Order Reject	Order is rejected by the exchange.
Error Message	TTORD Traders are not permitted to send wholesale orders. Any open Wholesale Trading window immediately closes.

Strategy Wholesale Trades

The screenshot shows a 'Block Strategy Trade' window. It features a 'Send' button and a 'Cancel' button. Below these buttons is a table with the following structure:

Leg	Qty	Price
FIDESLANDS		
FIDESLANDS		

Above the table, there are several input fields for 'Buyer', 'Seller', 'Account', 'Open/Close', 'TI', and 'Posting Code'. The 'Buyer' and 'Seller' fields contain the value 'HMD'. There are also radio buttons for 'Block', 'Market Order', and 'Market Order'.

You can trade strategies using the LIFFE Wholesale Trading windows. You can trade **Against Actual, Basis and Block** trades.

Wholesale trades for strategies are supported on the following exchanges:

- LIFFE exchange
- Euronext (Paris) exchange
- Euronext (Brussels) exchange

► **To display the Strategy trade window:**

1. Log onto the appropriate exchange.
2. Open the **Market Explorer** and select a product.
3. Create or drag and drop a strategy into the **Market Grid**.
4. Open a **Market** window for the selected product.
5. In the **Market** window, click the row containing the product.
6. Right-click in the **Market Grid** to display the context menu.
7. Click **Wholesale**.
8. From the submenu, select **Against Actual, Basis** or **Block**.

The appropriate *Strategy Trade* dialog box displays. The **Series** and **AMR** fields display data from the selected **Market Grid** cell.

9. The legs of the strategy display in the **Strategy** field.
10. Type values in the **Buyer** and **Seller** fields.

Refer to the **Wholesale Trading Chart** for more information about the following fields:

- **Block, Market Maker Cross, Guaranteed Crossing**
- **Account**
- **Open/Close**
- **CTI**
- **Posting Code**

11. Specify a **Qty** and a **Price** in each strategy leg.
12. Click **Send** to submit the information to the market.

NQLX and Market Maker Cross

The screenshot shows a 'Block Trade' dialog box with the following fields:

- Buy Column:** Symbol, Month, AMP, Price, Quantity
- Sell Column:** Symbol, Month, AMP, Price, Quantity
- Central Column:** Trader, App Code, Open/Close, Order Code, Posting Code, Account
- Bottom:** Send, Cancel buttons and radio buttons for Block, Market Maker Cross, and Guaranteed Crossing.

NQLX is the joint venture between Nasdaq and LIFFE. It is a wholly electronic exchange offering single stock contracts based on the most actively traded equities on NASDAQ and the New York Stock Exchange. NQLX is an independent exchange and uses LIFFE Connect™'s trading platform.

The NQLX supports **Block Trading**. NQLX also supports the **Market Maker Cross** feature. To use this feature, you must be recognized by the exchange as a Market Maker.

Note: Refer to the Wholesale Trading Chart for more information on Wholesale Trading types and the exchanges that support them.

► To send a Block Trade Using the NQLX Exchange:

1. Log onto the NQLX exchange.
2. Open the **Market Explorer** and select a product.
3. Open a **Market** window for the selected product.
4. In the **Market** window, click the row containing the product.
5. Right-click in the **Market Grid** to display the context menu.

6. Point to **Wholesale Orders** and click **Block**.

The **Block Trade** dialog box displays. The **Series**, **Month** and **AMR** fields populate using the contract data from the **Market Grid** cell.

7. Type values in the **Price** and **Quantity** fields.
8. Type values in both **Acc Code** fields.

Note: Each exchange maintains a different set of Account codes. You must complete the following requirements before your trade is accepted by the exchange. You must manually type only the Account Codes accepted by the exchange in the field.

Valid account codes for NQLX for those clearing through a securities firm include:

- M: Market Maker
- F: Firm
- C: Customer

Valid account codes for NQLX for those clearing through a futures clearing firm include:

- B: Broker
- P: Proprietary
- T: Trader

9. Type values in **Open/Close** field.
10. Type the correct code in the **CTI** field.
 - **CTI:** Valid codes include: 1, 2, 3, 4.
 - U for unassigned and A for allocation may also be used.

Note: NQLX does not use **Posting Code**.

11. Optional. Click the **Market Maker Cross** checkbox.
12. Optional. Type account numbers in the **Account#** fields.
13. Click **Send**. The **Audit Trail** shows that you submitted the trade.

Euronext and Guaranteed Crossing

Euronext Paris exchange supports **Against Actual, Basis, Block** trade orders.

Euronext Brussels exchange only supports **Block** trade orders.

If you trade products on the Euronext (Paris) exchange, the **Guaranteed Crossing** feature is available. When you use this feature, the order is sent as a cross order. If the exchange accepts the order, the two (2) sides are guaranteed to match with one another and not a different order in the market. Guaranteed Cross orders are validated automatically.

Note: Refer to **Wholesale Trading Chart** for more information on Wholesale Trading types and the exchanges that support them.

► To complete a wholesale trade in the Euronext exchange:

Note: The following example applies to the **Block Trade** dialog box.

1. Log onto the Euronext exchange.
2. Open the **Market Explorer** and select a product.
3. Open a **Market** window for the selected product.
4. In the **Market** window, click the row containing the product.
5. Right-click in the **Market Grid** to display the context menu.
6. Point to **Wholesale Orders**.
7. Select the appropriate wholesale trading type.

The **Block Trade** dialog box displays. The **Series, Month, and AMR** fields populate using the contract data from the **Market Grid** cell.

Complete the following fields for both the **Buyer** and the **Seller**.

8. Type the agreed-upon values in the **Price** and **Quantity** fields.
9. Optional. Click the **Guaranteed Crossing** checkbox.

10. Type values in **Acc Code** fields.

Note: Each exchange maintains a different set of account codes.

Valid account codes for Euronext include:

- C: Customer
- H: House
- M: Market Maker

11. Type values in the **Open/Close** field.

Note: Euronext does not use CTI field.

12. **Posting Code:** Valid values include M = Manual Posting, A = Automatic Posting, G = Give-up Posting.

13. Optional. Type values in the **Account#** fields.

14. Click **Send**. The **Audit Trail** shows that you submitted the trade.

Against Actuals Trade

Note: Refer to Wholesale Trading Chart for more information on Wholesale Trading types and the exchanges that support them.

Against Actuals are strategies for commodities markets that incorporate a futures leg and an underlying commodity leg. For **Against Actual** trades, only the future leg is traded at the exchange. The cash leg is traded on a separate exchange, which may be executed through X_TRADER® or another method.

The details of the actual buyer and seller are resolved between the exchange and the executing member via a phone call. For an **Against Actual** trade, sends trade/fill information for both the buy and sell side of the futures leg. A fill is not sent for the cash leg.

Against Actual trading is not subject to normal X_TRADER® credit risk limitations. The trader submitting the order will be notified by the exchange if it is approved. Wholesale orders appear in the **Audit Trail**, the **Total Traded Quantity** column of the **Market Grid** and the **Fill Window**. Wholesale orders do not appear in the **Order Book**.

Note: The window and associated fields that appear in an **Against Actuals** trade window vary depending on the type of product or strategy being traded. If the product is a strategy, the associated legs for that strategy list in a set of fields in the lower half of the **Against Actuals** window. The **Quantity** and **Price** fields must be filled for each and every leg of the strategy in order for the trade to be accepted.

Field Entry Name	Entry Characteristics
Series	Name and identification of the contract future series. Automatically filled from the product selection in the Market window.
Month	Maturity month of the futures contract. Automatically filled from the product selection in the Market window.
AMR	Auto Market Reference—unique LIFFE exchange-specific product identifier. Automatically filled from the product selection in the Market window.
Price	Price of the product.
Quantity	Quantity of the product to be traded.
Buyer Entry Fields	
Trader	Exchange identifying number for the trader submitting this trade.
Account	Account code for this trade. Can be one of the following: H (House), L (Local), S (Segregated), or N (Non-segregated).
Open/Close	Indicates whether this trade opens or closes a given position. Default is blank, which is acceptable.
ISIN	International Security Identification Number. Uniquely identifies a given product.
Cash Price	Price for the underlying that is agreed to by buyer and seller.
HR	Hedge Ratio. One character that identifies the methodology used to determine the price for the underlying component.
Reference	Used to identify the underlying product (order number, selling/buying code, etc., from the other exchange).
CTI	Clearing code.
Posting Code	For Euronext products only.
Seller Entry Fields	
Trader	Exchange identifying number for the trader submitting this trade.
Account	Account code for this trade. Can be one of the following: H (House), L (Local), S (Segregated), or N (Non-segregated).
Open/Close	Indicates whether this trade opens or closes a given position. Default is blank, which is acceptable.

Field Entry Name	Entry Characteristics
ISIN	International Security Identification Number. Uniquely identifies a given product.
Cash Price	Price for the underlying that is agreed to by buyer and seller.
HR	Hedge Ratio. One character that identifies the methodology used to determine the price for the underlying component.
Reference	Used to identify the underlying product (order number, selling/buying code, etc., from the other exchange).
CTI	Clearing code.
Posting Code	For Euronext products only.
Send Button	Once the window has been filled out, this sends the trade to the exchange.
Cancel Button	Cancels all entries in the window and closes it.

► **To submit an Against Actual trade:**

1. Log onto the appropriate exchange.
2. Open the **Market Explorer** and select the product to be traded.
3. Open a **Market** window for the selected product.
4. In the **Market** window, click in the row containing the product.
5. Right-click in the product row to bring up the **Market Grid** context menu.
6. Click **Wholesale** to select it.
7. From the submenu, select **Against Actual**.

The **Against Actual** window displays. The **Series**, **Month**, and **AMR** fields display the data from the selected **Market Grid** cell.

8. Type data into the **Price**, **Quantity**, and **Buyer/Seller** fields.
9. Type values in both **Account** fields.
10. Type values in **Open/Close** field.
11. Type the correct code in the **CTI** field.
 - CTI: Valid codes include: 1, 2, 3, 4.
 - U for unassigned and A for allocation may also be used.

Note: NQLX does not use **Posting Code**.

12. Click **Send** to submit the information to the market.

Basis Trade

Basis trades are strategies that incorporate a futures leg and underlying (or cash) leg. For basis trades, only the future leg is traded at the exchange. The cash leg is traded on a separate exchange, which may trade through X_TRADER® or another method.

In a basis trade, the exchange sends trade/fill information for both the buy and sell side of the futures leg. A fill is not sent for the cash leg.

Note: The window and associated fields that appear in a **Basis** trade window vary depending on the type of product or strategy being traded. If the product is a strategy, the associated legs for that strategy are listed in a set of fields in the lower half of the **Basis** window. The **Quantity** and **Price** fields must be filled for each and every leg of the strategy in order for the trade to be accepted.

Field Entry Name	Entry Characteristics
Series	Name and identification of the contract future series. Automatically filled from the product selection in the Market window.
Month	Maturity month of the futures contract. Automatically filled from the product selection in the Market window.
AMR	Auto Market Reference—unique LIFFE exchange-specific product identifier. Automatically filled from the product selection in the Market window.
Price	Price of the product.

Field Entry Name	Entry Characteristics
Quantity	Quantity of the product to be traded.
Buyer Entry Fields	
Trader	Exchange identifying number for the trader submitting this trade.
Account	Account code for this trade. Can be one of the following: H (House), L (Local), S (Segregated), or N (Non-segregated).
Open/Close	Indicates whether this trade opens or closes a given position. Default is blank, which is acceptable.
ISIN	International Security Identification Number. Uniquely identifies a given product.
Cash Price	Price for the underlying that is agreed to by buyer and seller.
HR	Hedge Ratio. One character that identifies the methodology used to determine the price for the underlying component. Hedge Ratio Codes include: <ul style="list-style-type: none"> • P: Price factor or duration method • M: (Modified) Duration method • S: Sensitivity spread ratio • D: Delta neutral ratio
Reference	Used to identify the underlying product (order number, selling/buying code, etc., from the other exchange).
CTI	Clearing Code.
Posting Code	For Euronext products only.
Seller Entry Fields	
Trader	Exchange identifying number for the trader submitting this trade.
Account	Account code for this trade. Can be one of the following: H (House), L (Local), S (Segregated), or N (Non-segregated).
Open/Close	Indicates whether this trade opens or closes a given position. Default is blank, which is acceptable.
ISIN	International Security Identification Number. Uniquely identifies a given product.
Cash Price	Price for the underlying that is agreed to by buyer and seller.

Field Entry Name	Entry Characteristics
HR	Hedge Ratio. One character code that identifies the methodology used to determine the price for the underlying component.
Reference	Used to identify the underlying product (order number, selling/buying code, etc., from the other exchange).
CTI	Clearing Code.
Posting Code	For Euronext products only.
Send Button	Once the window has been filled out, this sends the trade to the exchange.
Cancel Button	Cancels all entries in the window and closes it.

 **To submit a basis trade:**

Note: Basis trading is not subject to normal X_TRADER® credit risk limitations. The trader submitting the order will be notified by the exchange if it is approved. Wholesale orders appear in the **Audit Trail**, the **Total Traded Quantity** column of the **Market Grid** and the **Fill** window. Wholesale orders do not appear in the **Order Book**.

1. Log onto the appropriate exchange.
2. Open the **Market Explorer** and select the product to be traded.
3. Open a **Market** window for the selected product.
4. In the **Market** window, click in the row containing the futures product.
5. Right-click in the product row to display the **Market Grid** context menu.
6. Click **Wholesale** to select it.
7. From the submenu, select **Basis**.

The **Basis Trade** window appears. The **Series**, **Month**, and **AMR** fields display data from the **Market** window.

8. Type values into the **Price**, **Quantity**, and **Buyer/Seller** fields.
9. Type values in both **Account** fields.
10. Type values in **Open/Close** field.
11. Type the correct code in the **CTI** field.
 - CTI: Valid codes include: 1, 2, 3, 4.
 - U for unassigned and A for allocation may also be used.

Note: NQLX does not use **Posting Code**.

12. Click **Send** to submit the information to the market.

Block Trade

Block trades are high volume trades in any outright or strategy product.

Note: The window and associated fields that appear in a **Block Trade** window vary depending on the type of product or strategy being traded. If the product is a strategy, the associated legs for that strategy are listed in a set of fields in the lower half of the Block window. The **Quantity** and **Price** fields must be filled for each and every leg of the strategy in order for the trade to be accepted.

Field Entry Name	Entry Characteristics
Series	Name and identification of the contract future series. Automatically filled from the product selection in the Market window.
Month	Maturity month of the futures contract. Automatically filled from the product selection in the Market window.
AMR	Auto Market Reference—unique exchange-specific product identifier. Automatically filled with the product selection in the Market window.
Price	Price of the product.
Quantity	Quantity of the product to be traded.
Buyer Entry Fields	
Trader	Exchange identifying number for the trader submitting this trade.
Acc Code	Account code for this trade. Can be one of the following: H (House), L

Field Entry Name	Entry Characteristics
	(Local), S (Segregated), or N (Non-segregated).
Open/Close	Indicates whether this trade opens or closes a given position. Default is blank.
CTI	Clearing code.
Posting Code	It does not apply to LIFFE. For EuronextEuroncxt_and_Guaranteed_Crossing products only.
Account#	Optional free form text field. Type an account number in this field up to 8 digits.
Seller Entry Fields	
Trader	Exchange identifying number for the trader submitting this trade.
Acc Code	Account code for this trade. Can be one of the following: H (House), L (Local), S (Segregated), or N (Non-segregated).
Open/Close	Indicates whether this trade opens or closes a given position. Default is blank, which is acceptable.
CTI	Clearing code.
Posting Code	It does not apply to LIFFE. For Euronext and Guaranteed Crossing products only.
Account#	Optional free form text field. Type an account number in this field up to 8 digits.
Send Button	Once the window has been filled out, this sends the trade to the exchange.
Cancel Button	Cancels all entries in the window and closes it.
Block	Indicates that you are sending a Block trade
Market Maker Cross	Refer to the NQLX and Market Maker Cross section of this chapter for more specific information.
Guaranteed Crossing	Refer to the Euronext and Guaranteed Cross section of this chapter for more specific information.

► **To submit a block trade:**

Notes: Block trading is not subject to normal X_TRADER® credit risk limitations. The trader submitting the order will be notified by the exchange if it is approved. Wholesale orders appear in the **Audit Trail**, the **Total Traded Quantity** column of the **Market Grid** and the **Fill Window**. Wholesale orders do not appear in the **Order Book**.

1. Log onto the appropriate exchange.
2. Open the **Market Explorer** and select the product to be traded.
3. Open a **Market** window for the selected product.
4. In the **Market** window, click in the row containing the futures product.
5. Right-click in the product row to bring up the **Market Grid** context menu.
6. Click **Wholesale** to select it.
7. From the submenu, select **Block**.

The **Block Trade** dialog box displays. The **Series**, **Month**, and **AMR** fields display data from the selected **Market Grid** cell.

8. Type values into the **Price**, **Quantity**, and **Buyer/Seller** fields.
9. Type values in both **Acc Code** fields.
10. Type values in **Open/Close** field.
11. Type the correct code in the **CTI** field.
 - CTI: Valid codes include: 1, 2, 3, 4.
 - U for unassigned and A for allocation may also be used.

Note: NQLX does not use **Posting Code**.

12. Optional. Type values in the **Account** fields.
13. Click **Send** to submit the information to the market.

Flex Options

FLEX Option Trades

Strategy Code: Delta (0-100):

Component List

Leg	Commodity	Exercise Pr	Contract Type	Expiry Date	Buy/Sell	Qty	Price

Send Cancel

FLEX® orders are essentially *FTSE 100 options*, except that any expiration day and exercise price can be specified. The trade submission and authorization process is semi-automated. Therefore, completing a flex options trade requires manual intervention by an exchange official.

Descriptions of the fields follow:

- Strategy Code: Any LIFFE recognized strategy code.
- Delta: Delta of the option. If the trade contains the underlying component LFZ (FLX), it's value should be 1-100. If not, its value should be zero.
- Legs: Up to 5 components can be defined in a FLEX trade. For each, the following parameters can be defined:
- Commodity: The Commodity code. Z for FTSE 100; FLX for the underlying.
- Exercise Price
- Contract Type: Call, Put or Future.
- Expiration Date: Date of expiration for the particular leg.
- Buy/Sell
- Qty
- Price

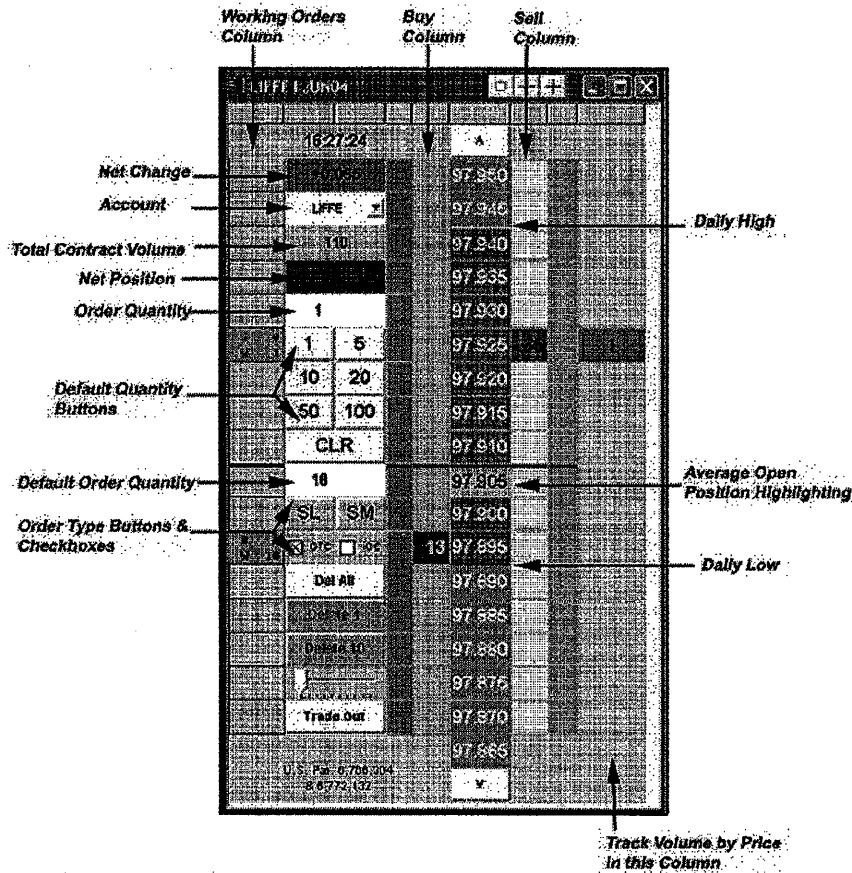
▶ **To submit a Flex Option trade:**

1. Open a **Market Grid** for the selected product.
2. Right-click in the **Market Grid** to display the context menu and select **Wholesale Orders**.
3. Click **Flex Options**. The **Flex Options** dialog box displays.
4. Type values in the **Flex Options Trade** dialog box.

Note: Wholesale orders appear in the **Audit Trail**, the **Total Traded Quantity** column of the **Market Grid** and the **Fill Window**. Wholesale orders do not appear in the **Order Book**.

Chapter 9

MD Trader™



Note: MD Trader™ is protected by U.S. Patents Nos. 6,766,304 & 6,772,132.

MD Trader™ allows the trader to buy or sell products using one click of the mouse. It offers a trader the ability to one-click trade across the depth of a market for either a buy or sell order. The grid format dynamically displays the market depth for a given product, and enables the trader to enter orders quickly by simply clicking in specific cells of the grid.

MD Trader™ features include:

- Ability to rename MD Trader™ window.
- Ability to continually send **Good to Cancel (GTC)** orders by enabling the GTC checkbox..



- Ability to globally recenter all MD Trader™ windows using the **Participate in Global Recentering** property. When you recenter one MD Trader window, all open MD Trader windows recenter as well.

Note: This property defaults to **ON**. New and existing workspaces are automatically affected by the property.

Other MD Trader™ features and characteristics include:

- Display Implieds.
- Display of daily High and Low trades.
- Display of the contract's price range.
- Bar chart or text of volume by price.
- Designate a second default quantity for your right-click trading.
- Ability to align text in your Bid and Ask columns to the left, center, or right.
- One-click buy or sell trading from the grid.
- Ability to open multiple MD Trader™ windows. (Subject to the restriction that only one window can exist per series contract.)
- Ability to choose your customer profiles.
- One-click centering of MD Trader™ grid on the market.
- Detailed customization of color coding, mouse wheel behavior, and sound notifications.

Opening MD Trader™

► To open MD Trader™:

1. Right click in a product row in the **Market Grid** window to open the context menu.
2. Click MD Trader™.

An MD Trader™ window immediately displays.

MD Trader™ Context Menu

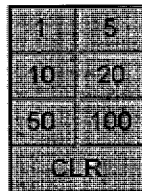


In MD Trader™, right-click to access additional functionality. However, you cannot access the context menu from the following locations in the MD Trader™ window:

- Last Traded Quantity column
- Delete Bids or Delete Offers quantity buttons



- Numerical quantity buttons



The MD Trader™ context menu provides these additional commands:

Command	Description
Find Control Panel	Brings the X_TRADER® Control Panel to the foreground of your workspace.
Rename Window	To help you easily identify your MD Trader™ windows, this option allows you to rename your MD Trader windows. When you click on the option, the Set Text dialog box displays. Type the unique name in the field and click OK . When you rename your window, you may only use letters, numbers and the underscore symbol. The dialog box does not allow you to use special characters or the space bar when you rename the window.
Properties	Opens the MD Trader™ Options dialog box. Use this dialog box to set custom trading parameters and the appearance of MD Trader™.

MD Trader™ Field Descriptions

The MD Trader™ window maintains default settings that can be modified in the MD Trader™ Options dialog box. Enabling the **Show Tooltips** option in the **Options** dialog box makes identifying some fields easier. Tooltips provide a small text description of certain fields in the MD Trader™ window when the cursor is held over the field.

Click on the appropriate item listed below for a description of the columns' contents:

- Column 1
- Column 2 and 3 (Combined)
- Column 4
- Column 5
- Column 6
- Column 7
- Column 8
- Column 9
- Additional Fields



Tip: Although certain columns and options boxes do not appear in the MD Trader™ window by default, for illustration purposes, this diagram displays all available options and columns.

Col 1	Col 2 & 3	Col 4	Col 5	Col 6	Col 7	Col 8	Col 9
							97.930
							97.945
							97.940
							97.935
							97.930
							97.925
							97.920
							97.915
							97.910
							97.905
							97.900
							13 97.895
							97.890
							97.885
							97.880
							97.875
							97.870
							97.865

Note: MD Trader™ is protected by U.S. Patents Nos. 6,766,304 & 6,772,132.

Field	Description
Column 1 Section	
Working Quantity Column	Functions as the Order Book for the MD Trader™ window. Displays all working quantities (W) and executions (S or B) on that particular Bid or Offer. When an order is completely filled, the values clear.
Columns 2 & 3 Section	
System Clock	Displays the current time according to the NT system clock.
Net Change	Displays only when a net change occurs. Difference between last traded price and settlement price.
Customer List	Displays all customers from X_TRADER®'s customer list
Total Contract Volume	Displays the total volume traded for that contract.
Net Position	Displays your net position. Use the Net Position field to trade out your position. Click in the Net Position field. Your net position populates the Order Entry field so you can flatten out your position.
Order Quantity	Indicates the order quantity that is sent to market. After you submit the first trade of the day, this field populates with the value in the Default Quantity field. A value can be manually entered in this field by clicking in the field and entering the value.
1 / 10 / 50 / 5 / 20 / 100	Preset order quantity buttons. To customize a pre-set order quantity, right-click a button. Enter a value using the keyboard, and press Enter .
CLR	Clear button. Clears the Order Quantity field.
Default Order Quantity	After each trade, the value of the Default Quantity field automatically populates the Order Quantity field. Customize your value by clicking in the field and typing it.
SL	Stop Limit Order flag. Click this button to submit your next order as a Stop Limit Order.
SM	Stop Market Order flag. Click this button to submit your next order as a Stop Market Order.

Field	Description
GTC	Good to Cancel. Click this checkbox to submit your next orders as a Good to Cancel order. The GTC checkbox remains enabled so you are able to continually send GTC orders. (Enable this feature in the Options dialog box.)
IOC	Immediate or Cancel. Select this checkbox to submit an order as Immediate or Cancel (IOC). The IOC checkbox remains enabled so you are able to continually send IOC orders. (Enable this feature in the Options dialog box.)
Del All	<p>Deletes all working orders for this series of contracts. Order include:</p> <ul style="list-style-type: none"> • All working orders • All order in a "Hold" status including Blotter orders • All Stop orders <p>This feature behaves differently for an Exchange trader versus a Proxy (TTORD) trader:</p> <ul style="list-style-type: none"> • At this time, only LIFFE supports this feature. • It is available via the Market Grid or MD Trader™ • If an exchange trader uses this feature, all working for that contract for all sponsored proxy traders are deleted • If a TTORD trader attempts to use this feature, it converts one message into to multiple individual delete requests by the client application to prevent a trader from deleting the exchange trader's working orders (for that contract).
Total Offers Text Box	Displays your total working offers.
Del Offers	Deletes all offers from the market.
Total Bids Text Box	Displays your total working bids.
Del Bids	Deletes all bids from the market.
Price Consolidation Slider	Consolidates price depth in the Price column. Slide the slider to the right to consolidate price levels, and slide it to the left to flatten your price depth.

Field	Description
Trade Out	<p>Use this feature to flatten your position.</p> <p>When you use the TradeOut button, MD Trader™ deletes all working orders on both sides of the market and sends an order that allows you to exit from your position regardless of your credit limit. Therefore, it does not matter if your position is long or short, MD Trader™ deletes all working orders on both sides of the market before sending an offsetting order to flatten your position.</p>
Column 4 Section	
Bid Indicator Column	<p>Indicates price settings. A value may be pasted in the column from an Excel spreadsheet using copy and paste. The value of the Excel Spreadsheet displays in the Bid Indicator column as a white box.</p>
Column 5 Section	
Buy Column	<p>Displays current market bids.</p> <p>Displays current implied bid outright prices, implied bid spread prices and implieds from implieds bid values.</p> <p>For more information about implied pricing capabilities in X_TRADER® and MD Trader™, go to the Properties Trading tab.</p> <p>When Keyboard Trading is enabled, a colored cursor appears in the Buy column that indicates the current price level for an order.</p>
Column 6 Section	
Price Column	<p>Indicates market price and depth. Arrows appear at the top and bottom of this column. These arrow buttons allow you to page up or page down to view more prices:</p> <ul style="list-style-type: none"> • To move the market view up, click the up arrow:  • To move the market view down, click the down arrow:  <p>A <u>yellow line</u> indicates the highest price of the day. A <u>red line</u> indicates the lowest price of the day. A darkened background indicates that the prices fall between the high and low.</p> <p>If no other price is available, but you still want to scroll up and down, use the arrow keys on your keyboard.</p>

Field	Description
Column 7 Section	
Sell Column	<p>Displays current market offers.</p> <p>Displays current implied offer outright prices, implied offer spread prices and "implied from implied" offer values.</p> <p>For more information about implied pricing capabilities in X TRADER® and MD Trader™, go to the Properties Trading tab. When Keyboard Trading is enabled, a colored cursor appears in the Sell column that indicates the current price level for an order.</p>
Column 8 Section	
Ask Indicator Column	<p>Indicates price settings. A value may be pasted in the column from an Excel spreadsheet using copy and paste. The Excel Spreadsheet value displays in the Ask Indicator column as a white box.</p>
Column 9 Section	
Last Traded Quantity Column	<p>Indicates the last traded quantity at that price. Also, you can configure this column to display Volume by Price in bar, text, or tool tip format. Go to the Options dialog box.</p>
Additional Fields Section	
Scroll Bar	<p>Indicates that there are orders above or below what is visible in the window. Use a mouse to scroll up or down MD Trader™.</p>
Market Mid-Point Bar	<p>MD Trader™ uses a bold black line to designate the midpoint of the inside market.</p>

Using MD Trader™ Window

MD Trader™ allows the trader to buy or sell products using one click of the mouse. It offers a trader the ability to one-click trade across the depth of a market for either a buy or sell order. The grid format dynamically displays the market depth for a given product, and enables the trader to enter orders quickly by simply clicking in specific cells of the grid.

Once the quantity has been set for an order, you use the left or right mouse button to perform various trades. The discussion below describes the distinctions between left and right clicking on grid cells.

► **To use MD Trader™, follow these steps:**

1. Open MD Trader™.
2. To open the **Options** dialog box, right-click anywhere in MD Trader™.
3. In the **Order Parameter** section, enter a **Maximum Order Quantity**.
4. Click **OK** to close the **Options** dialog box and return to MD Trader™.
5. Select a customer profile.
6. Enter an order quantity.
7. Use click-trading to enter orders.

Left Click in the Buy or Ask Columns

A left-click in a grid cell in the **Buy** or **Ask** columns immediately sends a buy or sell order to the market. The quantity for the order is taken from the quantity field. The price is taken from the same row as the grid cell that is clicked. If you *left* click on a grid cell in the:

Action	Position	Market Result
Buy	Next to populated grid cell in the Sell column:	Send a buy order to the market (lifting the ask).
Sell	Next to populated grid cell in the Buy column:	Send a sell order to the market (hitting the bid).

Action	Position	Market Result
Buy	In a grid cell that is populated by a bid quantity:	Sends a buy order to the market (you are joining the bid).
Sell	In a grid cell that is populated by an offer quantity:	Sends a sell order to the market (you are joining the offer).

Right Click in the Buy or Ask Columns

A right click in a grid cell in the **Buy** or **Ask** columns immediately sends a 'sweeping' buy or sell order to the market. The price is taken from the same row as the grid cell that is clicked. If you *right* click on a grid cell in the:

Action	Position	Market Result
Buy	Directly to the left of populated grid cell in the Sell column:	Sends in a buy for as many contracts as exist from the best ask price up to that price level.
Sell	Directly to the right of a populated grid cell in the Buy column:	Sends in a sell for as many contracts as exist from the best bid price down to that price level.

A right-click on a grid cell that is populated with either a bid or offer results in no orders being sent to market.

Average Price Highlighting

When enabled, the average price highlighting feature available in the **MD Trader™** window automatically displays the average open price short and long. This display property is enabled from the **Options** dialog box. The default is enabled. The average open price short is highlighted in **bold blue**, while average open price long is highlighted **bold red**.

Note: MD Trader™ average price rounds longs up and shorts down.

Average Price of Open Position

The average price of the open position is the average price of your long or short position. When an order is traded at an exchange, it is possible to receive fills at different price levels. You can use this price point to gauge whether trading out of your position will provide you with a realized gain, loss, or scratch.

When you first open **MD Trader™**, the value of the open position is based on the current open position for the product. If no open position exists, then the average price equals zero.

To determine the price of the open position, a **First In First Out (FIFO)** method is used for filled orders. The first fills received are the first fills discarded when determining the average price.

Note: MD Trader™ average price rounds longs up and shorts down.

Using the Mouse to Center the Market

You can use the mouse to 'center the market' by clicking anywhere within the **MD Trader™** window. This automatically shifts the grid to show the center of the market.

Deleting Orders

There are several ways to delete your orders:

▶ **To delete all of your orders:**

If you have the **Options** dialog box set to do so, a left or right click on any grid cell in the **Last Traded Quantity** column deletes all of your working bids and offers.

Or:

Click the **Delete All** button.

▶ **To delete single orders:**

To delete a single order, click its cell in the **Working Quantity** column.

▶ **To delete all Bids or all Offers:**

To delete all of your bids or all of your offers, you must have the **Del Bids** or **Del Offers** buttons enabled in the **Options** dialog box.

If these buttons are present in the **MD Trader™** window:

- Click **Del Bids** to delete all working bids
- Click **Del Offers** to delete all working offers

Displaying the Mid-Point of Inside Market

To make it easier to identify the mid-point of the inside market, **MD Trader™** now places a bold line in the **MD Trader™** grid at the mid-point. The mid-point line appears midway between the best bid and best offer in the market. If there is a one-sided market the mid-point line appears directly above or below the best bid or offer in the market, respectively. If there is no market, then the line appears at the last trade price.

If the number of price rows (or ticks) between the best bid and best offer is an odd number, then the mid-point line appears in the upper cell of the middle value. If the number of price rows is an even value (or zero), then the mid-point appears between the middle values.

This is a property that can be enabled (default) or disabled via a checkbox on the **MD Trader™ Options** dialog box. To disable it, uncheck the **Highlight Midpoint of Last Recenter** checkbox.

Implieds in MD Trader™

Implied prices and quantities are derived from direct orders in a combination of outright contracts and spreads/strategies. Implied pricing evolved at exchanges that trade different contract months of a product as well as spreads and strategies involving different combinations of the contract months. For example, a bid in 1 contract month and an offer in a 2nd contract month can be combined to "imply" a bid in the spread between the 2 months.

By calculating and displaying implied prices and quantities, exchanges found that they could sometimes improve the best bid/ask price or add liquidity to certain contracts or strategies.

Use the **Properties Trading** tab, to calculate implieds in **MD Trader™** (as well as the **Market Grid**, **Autotrader™** and **Autospreader™**):

- **Calculate Implieds for spreads instead of using Exchange Implieds.**

Because some exchanges only display implied pricing data when the implied prices and quantities are at the best price in the market, you may not see some implied values.

This new feature calculates and displays implied pricing in Market Depth as well as the inside market.

To enable this feature, open the Properties Trading tab and the click **Calculate Implieds instead of using Exchange implieds** option.

- **Implieds From Implieds:** After you enable **Calculate Implieds instead of using Exchange Implieds**, you can enable the **Implieds From Implieds** option. X_TRADER® also calculates and displays implieds from implieds values (sometimes called 2nd generation implieds).
- **Include Implieds for spreads in Market Columns and in Depth.** Displays Implied price and quantity data in the same columns as direct price and quantity data.

To enable this feature, open the Properties Trading tab. Click **Include Implieds in Market columns and in Depth** option.

Displays implied outright, implied spread, and implieds from implieds quantities and prices in market data columns.

Net Change Indicator

The **Net Change** indicator displays a net change in price for a traded product in the current day measured against the previous day's settlement price.

The net change is color coded: **red** for a negative change; **green** for a positive change.

The unit of measure is in tick increments for the product. The net change indicator is a small box immediately above the system clock on the **MD Trader™** window.

Selecting a Customer Profile

The customer profile is one of any in the **Customer List**. To create and maintain the Customer List, from the **Control Panel**, point to the **Settings** menu and click **Customer Defaults**.

Note: Certain markets require that a customer name be selected from this list before any trades enter the market. These include: **CME**, **ENxtFut**, and **ENxtOpt**

► To select a customer profile in MD Trader™:

1. Click on the arrow in the **Customer List** box.
2. Choose a customer name from the list.

Setting the Default Quantity

Setting the **Default Quantity** is not required, but once an initial order has been sent to the market, the **Order Quantity** field continually resets itself to the **Default Quantity** after each trade. This field can be manually edited.

▶ **To set the Default Quantity:**

1. Left-click in the **Default Quantity** field of **MD Trader™**.
2. Use the **Delete** key on the keyboard to clear the contents of the field.
3. Enter a value for the **Default Quantity**.
4. Press **ENTER** to set the Default Quantity.

The maximum quantity for any trade is now enforced by the maximum order quantity value. However, the restrictions established by Guardian take precedence over the maximum trade quantity defined for the **MD Trader™**.

Setting the Trade Quantity

MD Trader™ requires setting an order quantity to trade. This is defined in the **Order Quantity** field of **MD Trader™**. Once an initial order goes to the market, the **Order Quantity** field continually resets itself in the **Default Quantity** field after each trade. The **Default Quantity** field can be manually edited.

Note: The size of the order is limited by the order quantity restriction that may have been set in the maximum trade quantity field. However, the restrictions established by Guardian take precedence over the maximum trade quantity defined for **MD Trader™**.

Text and Grid Colors

Many of the grids, text boxes, and indicators in **MD Trader™** are color coded to give you a visual indication of market position and other information. The grid below gives a summary of the default colors associated with columns in **MD Trader**:

Column or Text Box	Associated Colors
Working Quantity Column	Foreground color: Gray Working Sell Text: Red Font Working Buy: Blue Font Executed Sell: Blue Font Executed Buy: Red Font
Net Position Box	Background color: Red or Green depending on position. Short Position: Red Font Long Position: Green Font
Bid Column	Foreground color: Blue Font Color: White
Sell Column	Foreground color: Red Font Color: Black
Last Traded Quantity Column	Foreground color: Gray Offer Lifted: Red Font Bid Hit: Blue Font

You also have the option of using a customized set of colors in **MD Trader™**, which can be set using the Color tab of the X_TRADER® Properties dialog box. Using this tab, you can individually set the color display for the following **MD Trader™** features:

- MD Trader™ LTQ Up Background
- MD Trader™ LTQ Up Text
- MD Trader™ LTQ down Background
- MD Trader™ LTQ down Text
- MD Trader™ LTQ No Change Background
- MD Trader™ LTQ No Change Text
- MD Trader™ Net Long Position Background
- MD Trader™ Net Long Position Text
- MD Trader™ Net Short Position Background
- MD Trader™ Net Short Position Text
- MD Trader™ Net Position Flat Background
- MD Trader™ Net Position Flat Text
- MD Trader™ Blank Spaces Bid Column Background
- MD Trader™ Blank Spaces Ask Column Background
- MD Trader™ Working Orders Sell Background
- MD Trader™ Working Orders Sell Text
- MD Trader™ Working Orders Buy Background
- MD Trader™ Working Orders Buy Text
- MD Trader™ Bid Column Buy Background
- MD Trader™ Bid Column Buy Text
- MD Trader™ Ask Column Buy Background
- MD Trader™ Ask Column Buy Text
- MD Trader™ Average Price of Long Position Background
- MD Trader™ Average Price of Long Position Text
- MD Trader™ Average Price of Short Position Background
- MD Trader™ Average Price of Short Position Text

Using Drag-and-Drop to Change Working Orders

You can use the drag-and-drop technique to move working orders from one location to another in MD Trader™.

► To use drag-and-drop to move a working order:

1. Right-click and continue holding down any price and working cell information in the **Working Quantity** column. (Be very careful here, since a right-click and release will result in deleting the order from the market!)
2. Drag and drop the price/quantity to the empty cell where you want to place the order and release the button.

Using Stop Order Feature

MD Trader™ supports the stop market and limit order types for the products traded through it. In the case of the stop limit order, you can also set the number of ticks from the stop entry price. These stop order types are enabled or disabled via a property on the MD Trader™ Options dialog box.

► To enable the Stop Market feature:

1. Right-click in MD Trader™ to open the context menu.
2. Click **Properties** to open the **Options** dialog box.
3. Put a check in the box before the **Enable Stop Market Orders** listing in the **Stop Orders** section of the dialog.
4. Click **OK** to return to MD Trader™.

A button labeled **SM** appears in MD Trader™.

► To enable the Stop Limit feature:

1. Right-click in MD Trader™ to open the context menu.
2. Select **Properties** to open the **Options** dialog box.
3. Put a check in the box before the **Enable Stop Limit Orders** listing in the **Stop Orders** section of the dialog.
4. Optional: Set the stop limit price tick entry from stop entry price.
5. Click **OK** to return to MD Trader™.

A button labeled **SL** appears on MD Trader™.

▶ **To set a stop market order:**

1. Select a quantity to go into the market.
2. Left-click on the **SM** button in **MD Trader™**. It turns yellow.
3. Continue to hold the left button down and drag the indicator (labeled stop in yellow) to the price **Buy** or **Sell** column opposite the tick value where you want to put the stop.
4. Release the button. The stop is placed and indicated in the **Working Quantity** column as a stop.

▶ **To set a stop limit order:**

1. Select a quantity to go into the market.
2. Left-click on the **SL** button in **MD Trader™**. It turns yellow.
3. Continue to hold the left button down and drag the indicator (labeled stop in yellow) to the price buy or sell column opposite the tick value where you want to put the stop.
4. Release the button. The stop is placed and indicated in the **Working Quantity** column as a stop.

MD Trader™ Options Dialog Box

IMPORTANT: The "Enable Drag/Drop of Working Orders" property has been REMOVED. This option is now a standard feature with MD Trader.

"Participate in Global Recentering" defaults to ON

"Volume By Price" now defaults to OFF

"Bid/Ask Text Justification" Ask Text Justifies to RIGHT (R)

The screenshot shows the 'MD Trader Options for EUREXUS-A FTNM JUN04' dialog box. It is organized into several functional areas:

- GUI Options:** A list of checkboxes for interface elements like 'Show Tooltips', 'Show Clock', 'Show Customer Account Name', 'Show IQC Checkbox', 'Show GTC Checkbox', 'Show Delete All Button', 'Show TradeOut Button', 'Show Bid Indicator Column', 'Show Ask Indicator Column', 'Color Code Blank Spots', 'Keep MD Trader on Top', 'Do "Delete All" when LTIQ Column Clicked', 'Left Button actions on Mouse DOWN', 'Allow only one order per side of market', 'Use Inside Market Prices', 'Enable Keyboard and Function Key Trading', 'Highlight Midpoint of Last Recenter', 'Enable Average Price', 'Show Bold Text on Bid/Ask Column', 'Set row height', 'Show High/Low Display', 'Recenter on Price Col Left Double Click', and 'Participate in Global Recentering'.
- Format:** Text boxes for '# digits for Working/Exec' (set to 3) and '# digits for Price Display' (set to 11). Includes 'OK' and 'Cancel' buttons.
- Price Consolidation:** '# Prices per line' (set to 1) and 'Offset' (set to 0). Includes 'Show Slider Control, Increment(Ticks)' (set to 1).
- Order Parameters:** 'Maximum Order Quantity' (set to 0).
- TradeOut Method:** Radio buttons for 'Using LIMIT Order' (selected) and 'Using MARKET Order'. Includes '# of ticks to skew' (set to 0).
- Implied Quantity Display:** Checkboxes for 'Display Total Quantity', 'Display Implied Quantity Indicator (!)', and 'Display Implied Quantity Columns'.
- Volume By Price:** 'Enable' checkbox (unchecked). Includes 'L C R' and 'Per Qty' (set to 30) options.
- Stop Orders:** 'Enable Stop Market Orders' (checked). Includes 'Enable Stop Limit Orders' (unchecked) and 'Set Stop limit price' (set to 3 ticks from stop entry price).
- Right Click Action in Buy/Sell Column:** 'Enable' checkbox (unchecked). Includes 'Sweep w/Max Qty' (checked) and 'Use 2nd Default Qty' (set to 10).
- Bid/Ask Text Justification:** 'Bid: L' and 'Ask: L' with 'J R' justification options.

Use the MD Trader™ Options dialog box to set custom trading parameters and the appearance of MD Trader™. You can save the customized windows as workspaces.

When you are done making changes to the MD Trader™ Options dialog box, click **OK** to save your configuration and close the window.

Clicking **Cancel** closes the MD Trader™ Options dialog box without saving changes.

Section	Description
GUI Options Section	
Show Tooltips	Whenever you hover the cursor over an MD Trader™ button or field, a popup explanation appears.
Show Clock	Displays the System Clock .
Show Customer Account Name	Displays the Customer List box.
Show IOC Checkbox	Displays an IOC (Immediate or Cancel) check box.
Show GTC Checkbox	Displays a GTC (Good to Cancel) check box.
Show Delete All Button	Displays a Delete All button.
Show TradeOut Button	Displays Trade Out button in MD Trader™ .
Show Bid Indicator Column	Displays the Bid Indicator column. You can paste an Excel link into this column to display a theoretical price indicator for your bids.
Show Ask Indicator Column	Displays the Ask Indicator column. You can paste an Excel link into this column to display a theoretical price indicator for your offers.
Color Code Blank Spots	Allows for color coding of blank spots. To set colors, go to X_TRADER® 's Properties Color tab.
Keep MD Trader™ on Top	Displays MD Trader™ always on top of desktop.
Do "Delete All" when LTQ Column Clicked	Sets MD Trader™ to delete all of your working orders by clicking in the Last Traded Quantity column.
Left Button actions on Mouse DOWN	Actions performed with left mouse button immediately activate.
Allow only one order per side of market	A new order submission replaces any existing order in the market.
Use Inside Market Prices	In slow markets, feature uses inside market to update MD Trader™ information.

Section	Description
Enable Keyboard and Function Key Trading	Enables Keyboard Trading functionality in MD Trader™ . Adds colored cursors to the Buy and Sell columns that determine the price level for entering orders.
Highlight Midpoint of Last Recenter	Highlights the midpoint of the last price recentering.
Enable Average Price	Highlights average open price long and short. MD Trader™ average price rounds longs up and shorts down.
Show Bold Text on Bid/Ask Column	Text in the bid and ask columns is bolded.
Set row height	Sets row height for display.
Show High/Low Display	Adds yellow and red lines to designate the day's highest and lowest prices (respectively) at which the contract traded. All prices between the high and low are displayed in a darker gray color.
Recenter on Price Col Left Double Click	Double-click the Price column to re-center the MD Trader™ grid.
Participate in Global Recentering	<p>The property for this setting defaults to ON. New and existing workspaces are automatically affected by the property.</p> <p>Ability to globally recenter all MD Trader™ windows. Therefore, when you recenter one MD Trader all MD Trader windows automatically recenter.</p> <p>If you manually disable this property for a particularly window, that window does not recenter when your other MD Trader windows recenter and will only recenter when you manually recenter it.</p> <p>This property works independently of the Automatic Grid Centering feature.</p>
Implied Quantity Display Section: Allows you to choose how the quantity of the ¼ 32nd price displays when it is available.	
Display Total Quantity	MD Trader™ window displays entire quantity at the correct tradable price, rounding bids down and offers up.
Display Implied Quantity Indicator (*)	<p>MD Trader™ window displays the entire quantity, rounding bids down and offers up, with an asterisk (*) next to the closest price.</p> <p>This is the default.</p>

Section	Description
Display Implied Quantity Columns	MD Trader™ window displays the available quantity at the ¼ tick better price in separate columns for bid and ask quantities. These columns display in the same color as Bid and Ask columns, but display the better quantity in a smaller font.
<p>Volume By Price Section</p> <p>Each setting in this section is complementary. You can select all available manners of displaying Volume By Price. MD Trader™'s Volume by Price feature only tracks volume from the time you opened MD Trader™. The values that MD Trader™ generates and displays are <i>approximations</i>. They are not guaranteed to be the exact trading volumes for any given trading period. Incorrect or under-reported actual volume may occur due to price consolidations at the exchange or Gateway levels.</p>	
Enable	Enables the <i>volume by price</i> display in the Last Traded Quantity column.
Text	Displays total <i>volume by price</i> in text. The slide bar to the right sets the text alignment.
Bars	Displays total <i>volume by price</i> in bar chart format. The slider bar to the right sets the bar alignment.
Mouse Tooltips	Displays total <i>volume by price</i> as text in a tool tip when you hover the mouse cursor over the particular cell in the Last Traded Quantity column.
Bar Qty	<p>Sets the number of trades each bar represents:</p> <p>A lower number increases the number of bars displayed when several trades have occurred at that price.</p> <p>A higher number decreases the number of bars displayed when several trades have occurred at that price.</p>
Change By	<p>Sets the number that the Bar Qty changes when you press CONTROL and the ARROW RIGHT or ARROW LEFT keys.</p> <p>The CONTROL and ARROW RIGHT combination lowers the Bar Qty by the value you type in this box.</p> <p>The CONTROL and ARROW LEFT combination increases the Bar Qty by the value you type in this box.</p> <p>In this manner, you can adjust the bar size while trading without reentering the MD Trader™ Options dialog box.</p>

Section	Description
Format Section	
# digits for Working/Exec.	Sets the number of digits displayed for the working/executed display. Left side digits are truncated. Maximum number is 11.
# digits for Price Display	Sets the number of digits displayed in the price column. Left side digits are truncated. Maximum number is 11.
Price Consolidation Section	
# Prices per line	Enter the number of rows to use when consolidating price information. You can consolidate prices in MD Trader™ using the Price Consolidation slider. See the option called Show Slider Control .
Offset	Enter the Offset to use when consolidating rows.
Show Slider Control	Shows a slider control in MD Trader™ . Use this slider to consolidate prices by the number of ticks you set in the Increment (Ticks) option.
Increment (Ticks)	Type the number of ticks the Price column consolidates prices for each movement of the slider control.
Order Parameters Section	
Maximum Order Quantity	Enter your maximum order quantity permitted during trading. To use MD Trader™ , you must type a number greater than zero (0) in this box.

Section	Description
<p>TradeOut Method Section</p> <p>Trade Out feature allows you to flatten your position. Before MD Trader™ submits an offsetting order, it sends <i>delete requests</i> for all working orders for that contract. A second trade out request may be required if an existing working order was filled.</p>	
<p>Using LIMIT Order</p>	<p>Default. Indicates that the Trade Out method is by LIMIT order.</p> <p>Using a LIMIT order to trade out does not guarantee that your order will be executed because the market may move before you enter the order.</p>
<p># of ticks to skew</p>	<p>MD Trader™ determines your position (long or short) and then calculates the ticks to skew off the inside market price at which your position is flattened. If long, the bid price is evaluated, and if short, obviously the ask is key.</p> <p>Assigning a specific number of ticks to skew assures that your order, once entered, (<i>not necessarily executed</i>) is only a pre-determined distance from the inside market <i>at the time you submitted the order</i>. Therefore, upon selecting the TradeOut button, the <i>current</i> inside market is reviewed and MD Trader™ enters an order based on the price at that time. If the market is moving rapidly and the offsetting price is no longer available, the system leaves this order as a working limit order at the price determined at the time the TradeOut button is clicked.</p>
<p>Using MARKET Order</p>	<p>Indicates that the Trade Out method is Market order.</p> <p>In Market Order mode, there are no "# of ticks to skew" to evaluate. A market order seeks out the available offsetting order and executes against it.</p>
<p>Automatic Grid Centering Section</p> <p>This feature works independently of the Participate in Global Recentering feature.</p>	
<p>Enable Automatic Grid Centering</p>	<p>Enables MD Trader™ to automatically recenter itself based upon the parameters you set.</p>
<p>Every X seconds</p>	<p>MD Trader™ recenters automatically after the number of seconds that you type in this box.</p>
<p>Last Traded Price Within X rows from top to bottom</p>	<p>The last traded price highlights on the set number of rows from top to bottom of the grid. You can set the time duration with the spin control.</p>

Section	Description
Inside Market Within X rows from top to bottom	The inside market highlights on the set number of rows from top to bottom of the grid. You can set the time duration with the spin control.
Enable Grid Recenter warning	Before MD Trader™ recenters, it flashes.
Stop Orders Section	
Enable Stop Market Orders	Enables stop market order button on the MD Trader™ window (the default).
Enable Stop Limit Orders	Enables stop limit button on the MD Trader™ window.
Set Stop limit price X ticks from stop entry price	Sets the number of ticks the stop limit price is from the stop entry price.
Delete Buttons/Working Quantity Totals Section	
Display Delete Buttons/ Working Quantity Totals	Enables you to select how your delete buttons are configured and how your working orders are displayed using the options listed in this section.
Display Working Buys/Sells - Text Only	Displays your working bids and offer in text windows.
Delete Total Working Buys/Sells - Quantity on Button	Displays separate delete buttons for your working bids and offers. These buttons display the total working quantities for each.
Delete Bids/Offers - Button Only	Displays separate delete buttons for your working bids and offers. These buttons are labeled Delete Offers and Delete Bids .
Display Working Buys/Sells as Text and Delete Bids/Offers as buttons	Displays your total working quantity of bids and offers in a text box to the left of your Delete Offers and Delete Bids buttons.
Right-click Action In Buy/Sell Column Section	
Enable	Enables a right-click function other than the context menu. When enabled, the right-click function (sweep or second default quantity) is accessible only by right-clicking in the Bid or Ask columns.
Sweep w/Max Qty	Sets the right-click to sweep the market using your Maximum Order Quantity.
Use 2nd Default Qty	Sets the right-click to submit a second default quantity in the Bid or Ask column at the price where you right-click. When using this option, you must type a quantity in the box to the

Section	Description
	right of the option.
Bid/Ask Text Justification Section	
Bid	Aligns the text in the Buy column to the right or left.
Ask	Aligns the text in the Sell column to the right or left.

MD Trader™ Always on Top Feature

Users of the X_TRADER® application should note that, when a number of windows are open at any one time, clicking on any one window with the mouse brings the window to the foreground of their desktop. Any window that has focus is the one in which keyboard or mouse actions take effect.

For some users of MD Trader™, the fact that changing focus has the effect of obscuring the trading window means that they cannot access the window easily (since MD Trader™ is enabled from the context menu of the Market window). To prevent this situation from occurring, MD Trader™ has a property in the Options dialog box that serves to keep MD Trader™ always on top of the desktop. When enabled, although focus can shift from MD Trader™ to another window, the window itself remains visible and on the top of the desktop.

To enable the **Always on Top** feature, click the **Keep MD Trader™ on Top** checkbox on the **Options** dialog box. The window now remains on top of the desktop.

Auto Centering

When enabled, the auto centering feature available in **MD Trader™** automatically centers the grid display. This display property must be enabled from the **MD Trader™'s Options** dialog box. When enabled, the grid can also be set to flash before recentering. Refer to the **MD Trader™ Options** dialog box for further information on Auto Grid Centering.

Note: This feature works independently of the **Participate in Global Recentering** option in the **Options** dialog box

Setting the Maximum Trade Quantity

MD Trader *requires* a maximum trade quantity to trade. Define a maximum trade quantity in the **Options** dialog box. Once entered, this quantity prevents you from entering any order that is larger than the preset amount.

For example, if the maximum trade quantity were set to '50', attempting to sweep the market with an order quantity of '300' is not permitted. Instead, the order is entered as a 50 lot, unless you enable TradeOut.

The maximum quantity for any lot is now enforced by the maximum order quantity value. However, the restrictions established by Guardian take precedence over the maximum trade quantity defined for **MD Trader™**.

▶ **To set the maximum trade quantity:**

1. Open the **Options** dialog box.
2. In the Order Parameter section, enter a **Maximum Trade Quantity**.
3. Click **OK** to close the **Options** dialog box.

Price Consolidation

Price Consolidation condenses the display of price information in the static price column. You view a greater range of prices without inhibiting your view of the total quantity available.

The price consolidation feature may be configured to select an offset and an order distribution method (join the bid or offer) that enters orders for the consolidated price rows.

The *right MD Trader™* screen in the following screen shot displays a consolidated price.

Price	Quantity
750	1750
725	1625
700	1500
675	1375
650	1250
625	1125
600	1000
575	875
550	750
525	625
500	500
475	375
450	250
425	125
400	0
375	125
350	250
325	375

Note: MD Trader™ is protected by U.S. Patents Nos. 6,766,304 & 6,772,132.

► To consolidate your prices in MD Trader™:

1. Right-click in MD Trader™ to open the **Options** dialog box.
2. Go to the **Price Consolidation** section of the **Options** dialog box.
3. Complete the fields.
4. To close the **Options** dialog box, click **OK**.

Trading Out a Position Using One-Click

MD Trader™ makes it easy for you to flatten out your position. You can use your mouse or the keyboard.

► **To Trade Out using your mouse:**

1. Right-click in MD Trader™ to display the **Options** dialog box.
2. Click **Show TradeOut Button** to enable it.
3. Click **Apply**.

The **TradeOut** button automatically displays in MD Trader™.

4. Go to the **TradeOut Method** section of the **Options** dialog box and choose your trade out method:
 - Using **LIMIT Order <n#>** of ticks to skew
 - Using **MARKET Order**
5. Click **OK**.
6. Complete the trade and MD Trader™ automatically trades out your position.

Before sending the offsetting order, MD Trader™ sends delete requests for all working orders for that contract. MD Trader™ then sends an order that allows you to exit from your position regardless of your credit limit.

Customizing MD Trader

Adding Sound

If your desktop machine is equipped with a sound card and speakers, you can set X_TRADER® to make sounds corresponding to a left or right click. These sounds can only be heard when you click on the action columns:

- Buy Side
- Sell Side
- Working Quantity
- Last Traded Quantity

These sounds are associated from the **Properties** dialog box, as are all the action sounds with the application.

Customizing the Default Quantity Buttons

Each preset order quantity button in the MD Trader™ window may be customized. This information is stored as part of a workspace so that re-opening the workspace sets the default quantity buttons to their custom value.

▶ **To define a custom preset order quantity:**

1. Right-click the **Preset Order Quantity** button.
2. Type a value using the keyboard.
3. Press **Enter**.

Resizing the Window

► To resize the grid—that is, view more grid rows—in MD Trader™:

Use the X_TRADER® Frame Command Bar.

Or:

Use the mouse to resize the bottom or top frame of MD Trader. Pulling down on the bottom of the frame displays more rows at the bottom of the grid. Pulling up on the top of the frame adds more rows to the bottom of the window.

Using Drag and Drop to Move Grid Columns

You can use the mouse to drag-and-drop the columns in the MD Trader™ window to a different location in the grid.

► To drag and drop columns to different location in MD Trader™:

1. Left click at the top of the column and hold down the mouse button. A box outline appears beneath the mouse pointer.
2. Move the column left or right to the desired position. A red line indicates where the column is moving.
3. Release the mouse button. The column remains in its new location.

Using the Mouse to Control the Zoom Feature

► To zoom the view in or out using the mouse wheel:

1. Hold down the Ctrl key on the keyboard.
2. Depress and use the mouse wheel to zoom MD Trader™ in or out.
Releasing the Ctrl key freezes the view in its last position.

Excel Links and Indicator Columns



A value may be pasted in the cell from an Excel spreadsheet using copy and paste. When a price appears in the price column that matches the pasted value in the buy or sell indicator column, a marker appears next to this price value. Indicators are saved as part of X_TRADER® workspaces.

This feature allows you to indicate price points based on a proprietary algorithm. For example, you may paste the **Last Traded Price** for a product from the X_TRADER® grid into an Excel spreadsheet. This Excel spreadsheet may then be used to perform a proprietary calculation and produce a new price value. When you cut and paste this value into the **Buy or Sell Indicator** columns of MD Trader™, you may base buy and sell decisions on the value and indication.

You may paste a link for both the **Buy or Sell Indicator** columns individually. You may paste a new link into the **Indicator** column, which overwrites the existing link. You may also clear the link, which removes the indicator from the column. Links are not retained if the **Buy or Sell** column is hidden. Links are also not saved with X_TRADER® workspaces.

► **To paste a link from Excel into the MD Trader window:**

1. Select the cell in the Excel spreadsheet you wish to copy.
2. Right-click and click **Copy**.
3. Right-click in MD Trader™ to access the context menu.
4. Click **Paste Link**. An indicator appears opposite the price level of the pasted value.

► **To delete a link from MD Trader™:**

1. Right-click in MD Trader™ to access the context menu.
2. Click **Delete Link**. The indicator is removed from MD Trader™.

Using the Mouse Versus the Keyboard

Mouse Click Operation in the Working Quantity Column

A left or right click on any grid cell in the **Working Quantity** column deletes the working quantity of all orders at that price level. If the working quantity is for 50 orders, for example, in five separate 10-lot orders, all five orders are deleted. If there is only a single 50-lot order, then this single order is deleted.

Using the Mouse to Control Order Quantity

Most users use the keyboard to enter order quantity amounts in the **Order Quantity** text box. However, you can also use the mouse wheel to increase order quantity.

Using the mouse wheel to increase or decrease order quantity is subject to two constraints:

You cannot increase the order quantity above the preset figure in the maximum trade quantity field (if any). However, the restrictions established by Guardian take precedence over the maximum trade quantity defined for **MD Trader™**.

Orders increase or decrease in the **Order Quantity** field by a quantity of ten orders.

▶ **To use the mouse wheel to increase or decrease order quantity:**

1. Hold down the **Shift** key on the keyboard.
2. Move the mouse wheel to increase or decrease the order quantity.

Keyboard Trading in MD Trader™

In addition to click trading in MD Trader™ using a mouse, this version of X_TRADER® allows you to use the keyboard to perform a variety of ordering functions. Keyboard trading functionality is mapped to default keys on the keyboard and to use the keyboard features they must be turned on from within the **Options** dialog box. Enabling the keyboard trading functionality does not disable the mouse functionality, it only provides an alternative to entering the information and executing a variety of orders. The keyboard trading functionality only works in MD Trader™ and is no related to the keyboard entry window available from the **Market** window.

Note: You do not need to enable the keyboard to perform some functions in MD Trader™.

Enabling Keyboard Trading

Keyboard trading is disabled for MD Trader™ when X_TRADER® is opened on the desktop. You must enable it manually from within MD Trader™.

Note: You do not need to enable the keyboard to perform some functions in MD Trader™.

▶ **To enable keyboard trading in MD Trader™:**

1. Open an instance of MD Trader™.
 2. Right-click in the window to open the context menu and select **Properties**.
 3. In the **Options** dialog box put a checkmark beside the entry **Enable Keyboard Trading**.
- Keyboard trading will be enabled for MD Trader™.

Default Keyboard Mapping

The following main keyboard keys are mapped to specific MD Trader™ functions:

X TRADER Functionality	Definition of Functionality	Default Keyboard Mapping
Enter Buy Order	A buy order will be entered @ specified price (determined by buy side cursor)	A
Enter Sell Order	A sell order will be entered @ specified price (determined by sell side cursor)	;
Delete Working Bid(s)	Delete the working bid(s) @ specified price (determined by buy side cursor)	S
Delete Working Sell(s)	Delete the working sell(s) @ specified price (determined by sell side cursor)	L
Delete All Bids	Delete all bids for a product	Shift+V
Delete All Offers	Delete all offers for a product	Shift+N
Sweep the offers	Buy order(s) will be entered to sweep the market from inside market up to specified price (determined by buy side cursor)	Ctrl+A
Sweep the bids	Sell order(s) will be entered to sweep the market from inside market down to specified price (determined by sell side cursor)	Ctrl+;
Trade Out	Deletes all working bids and offers and gets trader flat	Shift+T
Increase Buy Side Cursor	Cursor will increase one price level	D
Decrease Buy Side Cursor	Cursor will decrease one price level	C
Center Buy Side Cursor	Moves buy side cursor to best bid in market; if no bids, cursor will move to center of MD Trader™ grid	E
Increase Sell Side Cursor	Cursor will increase one price level	K
Decrease Sell Side Cursor	Cursor will decrease one price level	M
Center Sell Side Cursor	Moves sell side cursor to best offer in market; if no offers, cursor will move to center of MD Trader™ grid	I
Bring Focus to Order Qty Entry Field	Focus will be applied to the Order Qty field in MD Trader™	Q
Load Net Position in Order	Loads the trader's current net position into the Order Qty	P

X_TRADER Functionality	Definition of Functionality	Default Keyboard Mapping
Qty Entry Field	Entry Field	
Center the Market	The MD Trader™ grid will be centered based on the inside market.	Space Bar

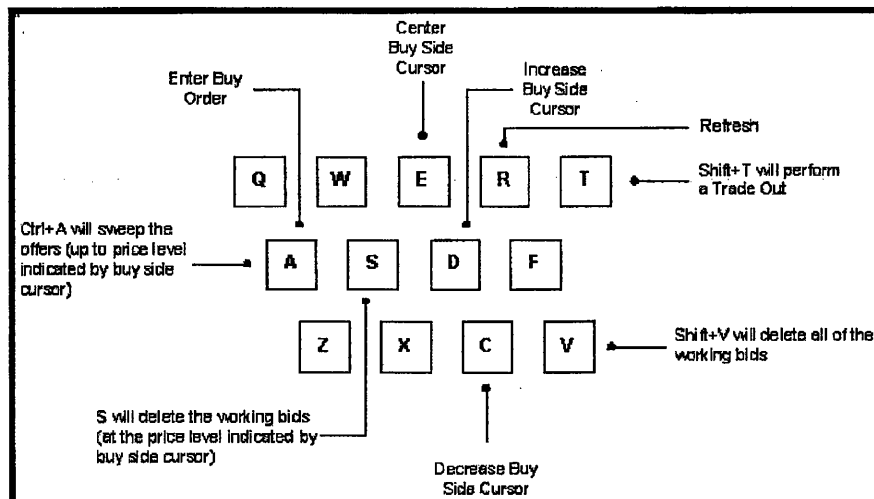
Hot (Function) Key Mapping

The following Function (F 1-12) keys are mapped to specific MD Trader™ functions:

X_TRADER Functionality	Definition of Functionality	Default Keyboard Mapping
Delete All	All of the working orders will be deleted from the market	Esc
Join the Bid	A buy order will be entered @ the best bid price in the market	F4
Dime the Bid (a.k.a. Best/Better the Bid)	A buy order will be entered one tick above the best bid	F3
Lift the Offer (a.k.a. Take the Offer)	A buy order will be entered @ the best offer price in the market	F1
Delete the Bids	All of the working bids will be deleted from the market	F5
Combo join both the Bid & Offer	An buy and sell order will be entered to join the best bid and offer, respectively	F6
Dime both the Bid & Offer	An buy and sell order will be entered to dime the best bid and offer, respectively	F7
Delete the Offers	All of the working offers will be deleted from the market	F8
Join the Offer	A sell order will be entered @ the best offer	F9
Dime the Offer (a.k.a. Best/Better the Offer)	A sell order will be entered one tick below the best offer	F10
Hit the Bid	A sell order will be entered @ the best bid price in the market	F12
Market Buy	A market buy order will be entered	Shift+F1
Market Sell	A market sell order will be entered	Shift+F12

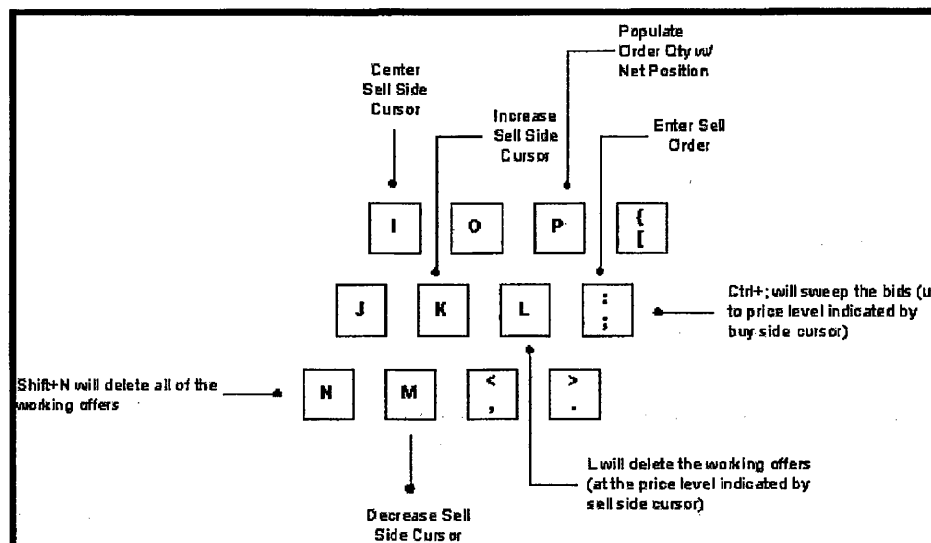
Buy Side Keyboard Mapping

The following keys are mapped for buy side functions on the main keyboard.



Sell Side Keyboard Mapping

The following keys are mapped for sell side functions on the main keyboard.



Disabling Specific Keyboard Trading Functionality

Even if keyboard trading has been enabled through the **Options** dialog box, it is possible to disable specific functions so that pressing a key will not cause the action to be performed. The following specific functions can be disabled through the **Options** dialog box:

Keyboard functionality	To disable this functionality
Delete All, Delete All Bids, Delete All Offers	Uncheck the Show Delete Buttons option in the Options dialog box.
Trade Out Functionality	Uncheck the Show Trade Out option in the Options dialog box
Sweep Bids/Offers	Uncheck the Do Sweep on Right Click option in the Options dialog box

Entering a Buy Order using the Keyboard

Once keyboard trading has been enabled through the **Options** dialog box you enter a buy order using the following actions:

► **To enter a buy order:**

1. Use the **D** and **C** keys to move the price level cursor to the desired limit price.
2. Use the **Q** key to focus keyboard entry on the **Order Quantity** field.
3. Type in the desired quantity of the buy order on the keypad.
4. Use the **A** key to send the buy order.

Entering a Sell Order using the Keyboard

Once keyboard trading has been enabled through the **Options** dialog box you enter a sell order using the following actions:

► **To enter a sell order:**

1. Use the **K** and **M** keys to move the price level cursor to the desired limit price.
2. Use the **Q** key to focus keyboard entry on the **Order Quantity** field.
3. Type in the desired quantity of the sell order on the keypad.
4. Use the **;** key to send the sell order.

Setting the Limit Price using the Keyboard

Once keyboard trading has been enabled through the **Options** dialog box, the limit price (position of the cursor) for either the buy or sell side is set with the following keys:

Key	Buy Side	Sell Side
E	Center buy side cursor	
D	Increase buy side cursor	
C	Decrease buy side cursor.	
I		Center sell side cursor
K		Increase sell side cursor
M		Decrease sell side cursor.

Using the Keyboard to Enter the Order Quantity

To manually enter an order quantity into the **Order Quantity** field of **MD Trader™** use the numeric keys on the keyboard. The **Order Quantity** field is immediately enabled and a cursor appears in the **Order Quantity** field. Any numbers entered through the keyboard display in this field. To return to normal keyboard trading, you must press **Enter**.

Using the Keyboard to Load the Net Position in the Order Entry Field

To populate the **Order Entry** field in **MD Trader™** with the net position (in order to go flat in the market) use the **P** key.

Deleting All Working Bids using the Keyboard

Once keyboard trading has been enabled through the **Options** dialog box, use the **Shift** key plus the **V** key to delete all working bids from the market.

Deleting all Working Offers using the Keyboard

Once keyboard trading has been enabled through the **Options** dialog box, use the **Shift** key plus the **N** key to delete all working offers from the market.

Deleting All Orders using the Keyboard

Once keyboard trading has been enabled through the **Options** dialog box, use the **Shift** key plus the **Esc** (Escape) key to delete all orders in the market.

Sending a Market Order using the Keyboard

Once keyboard trading has been enabled through the **Options** dialog box, you can enter a market order using the **Shift** key in combination with the **F 1** key. The only time in force supported is a Good Till Day (GTD) order, and the only order restriction you can use is Immediate or cancel (IOC), available from the button in **MD Trader™**. The quantity sold would be based on the amount in the order quantity field or on the preset default order quantity.

Trading Out of a Position using the Keyboard

Once keyboard trading has been enabled through the **Options** dialog box, use the **Shift** key plus the **T** key to trade out of a position in the market.

Sweeping the Market using the Keyboard

Once keyboard trading has been enabled through the **Options** dialog box, you can use the keyboard to sweep all the buys or sells up to a specified point set by the buy or sell side cursor.

▶ **To sweep the buys or sells in the market up to specified price point:**

Buy side:

1. Use a combination of the **D + C** keys to set the position of the buy side cursor.
2. Use the combination of the **Ctrl + A** keys to sweep the offers up to the price level indicated by the buy side cursor.

Sell side:

1. Use a combination of the **K + M** keys to set the position of the sell side cursor.
2. Use the combination of the **Ctrl (Control) + ;/;** keys to sweep the bids up to the price level indicated by the sell side cursor.

Centering the Market using the Keyboard

Once keyboard trading has been enabled through the **Options** dialog box, you can center the market by tapping the **Space Bar**. This will center the market in the **MD Trader™** grid display, but does not affect the position or location of the buy or sell side cursors, which are adjusted using a different set of mapped key strokes.

Hitting the Bid Using the Keyboard

Once keyboard trading has been enabled through the **Options** dialog box, you can "hit the bid" using the **F12** key. A sell order would be entered into the market at the current best bid in the market. The quantity sold would be based on the amount in the order quantity field or on the preset default order quantity.

Taking the Offer Using the Keyboard

Once keyboard trading has been enabled through the **Options** dialog box, you can "lift the offer" using the **F1** key. A buy order would be entered into the market at the current best offer in the market. The quantity sold would be based on the amount in the order quantity field or on the preset default order quantity.

Dime the Offer Using the Keyboard

Once keyboard trading has been enabled through the **Options** dialog box, you can "dime the offer" using the **F10** key. A sell order would be entered into the market one tick below the current best offer in the market.

Dime the Bid Using the Keyboard

Once keyboard trading has been enabled through the **Options** dialog box, you can "dime the bid" using the **F3** key. A buy order would be entered into the market one tick above the current best bid in the market.

Join the Bid Using the Keyboard

Once keyboard trading has been enabled through the **Options** dialog box, you can "join the bid" using the **F4** key. A buy order would be entered into the market at the current best bid in the market. The quantity sold would be based on the amount in the order quantity field or on the preset default order quantity.

Join the Offer Using the Keyboard

Once keyboard trading has been enabled through the **Options** dialog box, you can "join the offer" using the **F9** key. A sell order would be entered into the market at the current best offer in the market. The quantity sold would be based on the traders current position or on the preset default order quantity.

Using the Keyboard to Combo Dime the Bid or Offer

Once keyboard trading has been enabled through the **Options** dialog box, you can "combo dime the bid and offer" using the **F7** key. A sell order would be entered one tick better than the current best offer in the market and a buy order is sent one tick better than the current best bid price in the market. The quantity sold would be based on the amount in the order quantity field or on the preset default order quantity.

Using the Keyboard to Combo Join the Bid and Offer

Once keyboard trading has been enabled through the **Options** dialog box, you can "combo join the bid and offer" using the **F6** key. A sell order would be entered at the current best offer in the market and a buy order is sent at the current best bid price in the market. The quantity sold would be based on the amount in the order quantity field or on the preset default order quantity.

Game Pad Control

It is possible with keyboard functionality enabled to use a game pad control, which emulates keyboard key presses. In effect, using a gamepad maps the buttons on the gamepad to specific key strokes on the keyboard which, in turn, are mapped to specific **MD Trader™** window trading functionality. The gamepad plugs into the keyboard port on the workstation.

Note: Trading Technologies® has tested gamepad functionality in connection with keyboard mapping using the following product by Suncom. Trading technologies will **not** provide instructions on how to set up the gamepad with a keyboard nor does the company support users who do attempt to use this add-on in their trading. Traders wanting to use this functionality are encouraged to contact the gamepad manufacturer for specific instructions on how to connect this add-on into their system.

Unrestricted Keyboard Functions

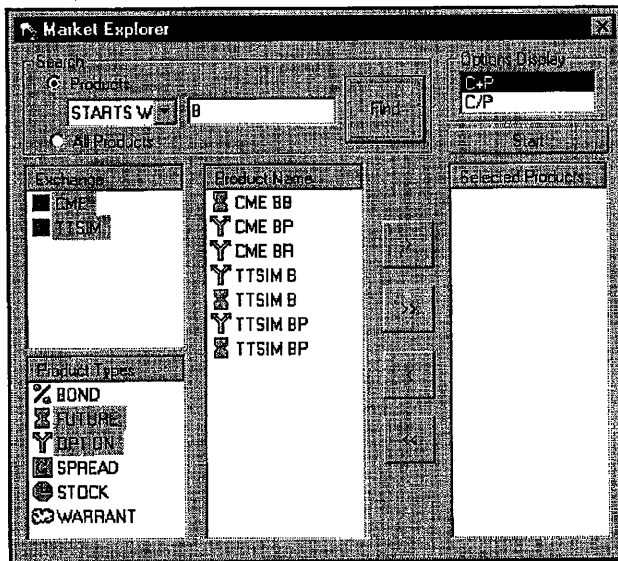
Certain keyboard functions can be used with *or* without the **Enable Keyboard and Function Key Trading** property enabled in the Options dialog box. If you press the keys specified below, **MD Trader™** performs certain functions. The list that follows describes the key and its related action.

If;	Then;
You press the numeral keys; This does not refer to the number keypad.	MD Trader™ enters the order quantity in the Order Quantity field. For example, pressing the numeral 2, then 5 loads a 25 lot in Order Quantity field.
You press the P key;	MD Trader™ loads your current position in the Order Quantity field.
You press the Space bar;	MD Trader™ centers the grid.
You press the up arrow;	MD Trader™ scrolls the grid up.
You press the down arrow;	MD Trader™ scrolls the grid down.
You press the Page Up key;	MD Trader™ grid pages up. You may no longer see available prices because it paged up too far.
You press the Page Down key;	MD Trader™ grid pages down. You may no longer see available prices because it paged down too far.

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Chapter 10

Market Explorer



The **Market Explorer** is used to select markets and products you wish to trade from one or more available exchanges. By selecting an **Exchange** and **Product Type**, you select individual product(s) by **Product Name** and move them into one or more **Market** windows for trading.

Use the **Search** feature to quickly find a specific product. Select the **Exchange** and **Product Type**, and then enter one or more characters of the product name. Choose a search method (for example **STARTS WITH**) and then click **Find**. **Market Explorer** automatically displays the search results in the product name box. If you are logged on to only one exchange, you do not need to select the exchange. Alternatively, you can opt to display **All Products** for the selected exchange.

Use **Selected Products** to select a product or a range of products to display for trade in the **Order Entry** pane. You can also use the drag-and-drop functionality to drag a product from the **Market Explorer** into the **Order Entry** pane.


Use the **Market Explorer** to set the default display for options that appear in the **Market Grid** pane of the **Order Entry** window.

Market Explorer Field Descriptions

Field/Button	Purpose
Search Products Button	The dropdown list in the search box offers a choice of filter criteria. You then enter a product name, description, or alias to search for.
Find Button	Applies the selected filter to the product name, description, or alias and then displays the results in the Product Name box.
All Products Button	Displays all products for the selected exchange and Product Type in the Product Name box.
Exchange Box	Lists all exchanges that you have logged into.
Product Types Box	List of product types for the selected exchange.
Product Name Box	List of all products for the selected exchange and Product Type after any filters have been applied.
Options Display Box	Choose the method used to display options in the Market grid and Order Entry pane of the Market window.
Start Button	Opens the Market window and transfers the Selected Products to the Market Grid.
Selected Products Box	Shows all products that have been selected in the Product Name box.
Transfer buttons	Transfers items to and from the Product Name and Selected Products boxes.

Opening Market Explorer

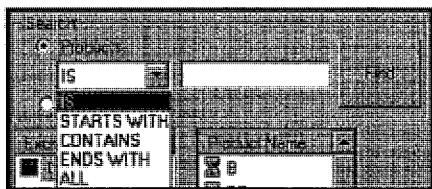
► To open the Market Explorer use either of these methods:

From the **Control Panel**, click the **Market Explorer** button .

Or:

From the **Control Panel**, open the **Window** menu and click **Market Explorer**.

Using the Search Feature



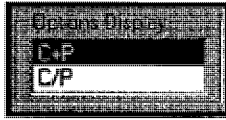
► **To use the search feature on the Market Explorer window:**

1. From the **Control Panel**, open the **Window** menu and click **Market Explorer**
Or
From the **Control Panel**, click the **Market Explorer** button.
2. Select an exchange in the **Exchange** box.
3. Select the **Products** button in the **Search** box. The **Search** filters drop-down list and text entry box become operable.
4. Select a filter category from the drop-down list.

Option	Filters Characteristic
IS	Product name entered in text box is identical with exchange name/symbol.
STARTS WITH	Product name entered in text box starts with the first letter of the exchange name/symbol.
CONTAINS	Product name entered in text box is contained in the exchange name/symbol.
ENDS WITH	Exchange name/symbol ends with the letter(s) entered in text box.
ALL	Selects all available products for this exchange.

5. Enter the letter(s) in the text box to which the filter is to be applied.
6. Click the **Find** button to display the matching products in the **Product Name** box.

Changing the Options Display



There are two separate views available to see options in the **Market Explorer**. The **Options Display** box is located in the top right-hand corner of the **Market Explorer**. Each selection represents a way to display options in the **Market Grid**.

C+P	Market Grid displays each strike on a single line of the Order Entry pane, with the calls on the left side and the puts on the right.
C/P	Market Grid displays each strike on two lines of the Order Entry pane, with the calls placed directly over the puts.

Use the mouse to select the **Options Display** (default is C+P). After you click the **Start** button the selected option product will appear in the **Market Grid**.

Opening Market Window for One Product

► **To open a Market window for a single product:**

1. From the **Control Panel**, open the **Window** menu and click **Market Explorer**
Or:
From the **Control Panel**, click the **Market Explorer** button.
2. Select an exchange in the **Exchange** box.
3. Select a product using the **Search** filters or from the **Product Name** box (with **All Products** displayed).
4. Click **Find**. Products display in the **Product Name** field.
5. Use the transfer button to transfer the product from the **Product Name** box to the **Selected Products** box.
6. Click **Start** to open the **Market** window and populate the **Market Grid** with the product.

► **To use drag-and-drop to populate the Market Grid (a Market window must already be open to use this feature):**

1. From the **Control Panel**, open the **Window** menu and click **Market Explorer**
Or:
From the **Control Panel**, click the **Market Explorer** button.
2. Select an exchange in the **Exchange** box.
3. Select a product using the **Search** filters or from the **Product Name** box (with **All Products** displayed).
4. Click **Find**. Products display in the **Product Name** field.
5. Click and hold the left mouse button with the cursor over the selected product in the **Product Name** box. Continue holding the mouse button and move the mouse.
6. The cursor changes to a circle with a diagonal line through it.
7. Drag the cursor to the open **Market Grid** while continuing to hold the left mouse button down.
8. Release the left mouse button with the cursor in the open **Market Grid**. The product will be added to the **Market Grid**.

Opening a Market Window for Multiple Products

► **To open a Market window with multiple products:**

1. From the **Control Panel**, open the **Window** menu and click **Market Explorer**

Or:

From the **Control Panel**, click the **Market Explorer** button.

2. Select an exchange in the **Exchange** box.
3. Select a product using the **Search** filters (or with **All Products** displayed).
4. Click **Find**. Products display in the **Product Name** field.
5. To select multiple products from the **Product Name** box, press and hold the **CTRL** key before you select the first instrument. Select additional products as desired.
6. Continue pressing the **CTRL** key until you have selected all of the products you want to trade.
7. Use the transfer button to transfer the products from the **Product Name** box to the **Selected Products** box.
8. Click **Start** to open the **Market** window and populate the **Market Grid** with the selected products.

All products that you select while continuously holding down the **CTRL** key are displayed in one **Market Grid** pane.

► **To use the Market Explorer with drag-and-drop to populate the Market Grid:**

1. From the **Control Panel**, open the **Window** menu and click **Market Explorer**

Or:

From the **Control Panel**, click the **Market Explorer** button.

2. Select an exchange (or exchanges) in the **Exchange** box.
3. Select products using the **Search** filters (or with **All Products** displayed).
4. Click **Find**. Products display in the **Product Name** field.
5. Select products from the **Product Name** box. Press and hold down the **CTRL** key before you select the first instrument. Continue pressing it while scrolling through the **Market Explorer** until you have selected all of the products you want to trade.
6. Click and hold the left mouse button with the cursor over the selected products in the **Product Name** box. Continue holding the mouse button and move the mouse.
7. The cursor changes to a circle with a diagonal line through it.
8. Drag the cursor to the open **Market Grid** while continuing to hold the left mouse button down.
9. Release the left mouse button with the cursor in the open **Market** window. The products are added to the **Market Grid**.

All products that you select while continuously holding down the **CTRL** key are displayed in one **Market Grid** pane.

Using Drag-and-Drop to Populate the Market Grid

Drag-and-drop is a method that you can use to select a product or products from the **Market Explorer** and then drag them into the **Market Grid** pane of the **Market** window. You perform this action using by the left mouse button to select the product, and then continuing to hold the left mouse button down while moving the cursor. You must have both the **Market Explorer** and **Market** windows open when using this method.

▶ **To use the Market Explorer with drag-and-drop to populate the Market window:**

1. From the **Control Panel**, open the **Window** menu and click **Market Explorer**.

Or:

From the **Control Panel**, click the **Market Explorer** button.


2. Select an exchange in the **Exchange** box.
3. Select a product or products from the **Product Name** box. If you are selecting multiple products, you may press and hold the **CTRL** key and use the left mouse button to select multiple products that are not displayed successively. Continue pressing the **CTRL** key while scrolling through the **Market Explorer** until you have selected all the products you wish to trade.
4. Click **Find**. Products display in the **Product Name** field.
5. With the cursor over one of the selected products in the **Product Name** box, click and hold the left mouse button. Continue holding the mouse button and move the mouse.
6. The cursor changes to a circle with a diagonal line through it.
7. Drag the cursor to the open **Market Grid** while continuing to hold the left mouse button down.
8. Release the left mouse button with the cursor in the open **Market** window. The products are added to the **Market Grid**.

Drag-and-drop also works with products in the **Selected Products** box in the **Market Explorer**.

Chapter 11

Market Maker

Trading Technologies®' **Market Maker** is designed to provide you with a market making screen that allows you to enter two-sided orders with a single send command, as well as other market making features.

You access the **Market Maker** windows through the MM button  on the X_TRADER® **Control Panel**.

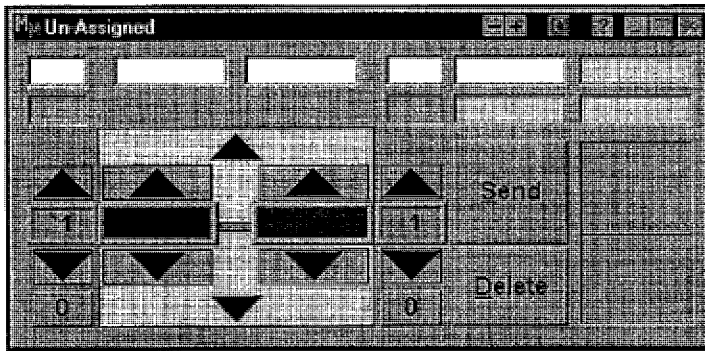
Note: Because of the multiple possibilities present in using mouse and click actions to trade in **Market Maker**, it is strongly recommended that trading be practiced in a simulation environment.

Market Maker Features

Market Maker has the following features:

- Provides a market making window that allows you to enter two-sided limit orders with a single keyboard or mouse command.
- Allows you to enter, change, and delete orders, and view position information from a single window.
- Allows you to set predetermined default trading quantities and spread values for order entry.
- Tracks price movement in a bar graph with user-defined timing options.
- Provides basic position limit and maximum lot size settings.
- Allows selection of an individual separate account for each window.

Opening Market Maker



You use **Market Maker** to trade and make a market, you must open the application. This can be done in one of two ways.

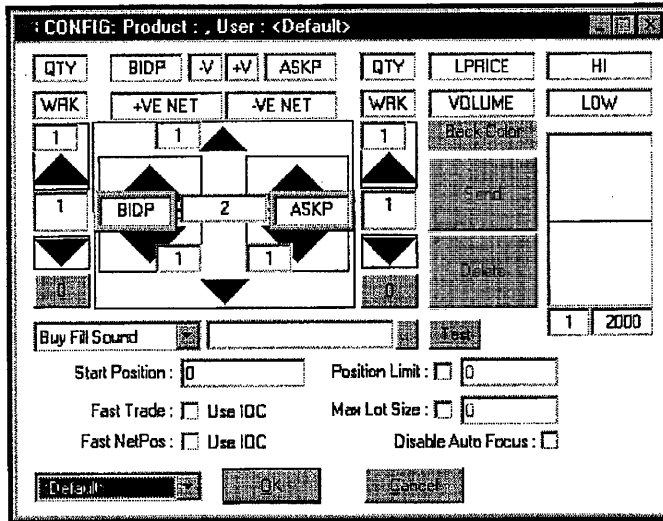
► Use the following steps to open **Market Maker** from the **Control Panel**:

1. From the **Control Panel File** menu, select **Plugin**, then **Market Maker**.
2. The **Trading** window opens.
3. Use the **Configuration** dialog box to define settings for **Market Maker**.
4. Use the drag-and-drop method to put a product into the window from the **Market Explorer**.

► Use the following steps to open **Market Maker** from the **Market Grid** of the **Market Window**:

1. Click to select a product in the **Market Grid**.
2. Right-click in the grid to bring up the context menu.
3. Select **Plugin**, then **Market Maker**.
4. Use the **Configuration** dialog box to define settings for **Market Maker**.

Configuration Dialog Box



You configure each **Trading** window using the **Configuration** dialog box to customize trading preferences and appearance.

You access the **Configuration** dialog box from the individual **Trading** window by clicking the **C** button on the **Title** bar.

The **Configuration** dialog box is used to define default trading quantities, spread values for order entry, sounds, starting position, and position limit. You can also format the background colors using the **Configuration** dialog box.

The **Configuration** dialog box also provides printed field names for those fields that show in the actual **Trading** window.

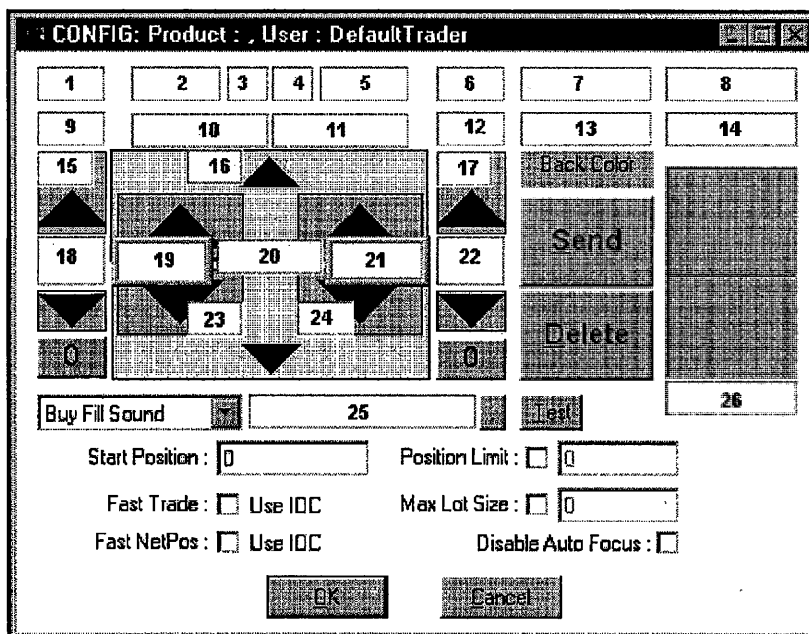
Configure the following fields:

- Default Bid Quantity
- Dual Multiplier
- Default Ask Quantity
- Minimum Spread value
- Bid Multiplier
- Ask Multiplier

You can also configure the window for:

- Select a given customer for each open **Market Maker** window
- Color for both the background grid and the text
- Sound; associating or disassociating with various changes in market position and mouse actions
- Position limits and starting values
- Maximum lot size
- Time limits for the **Trading** window **Trend Graph**

Configuration Dialog Box Field Descriptions



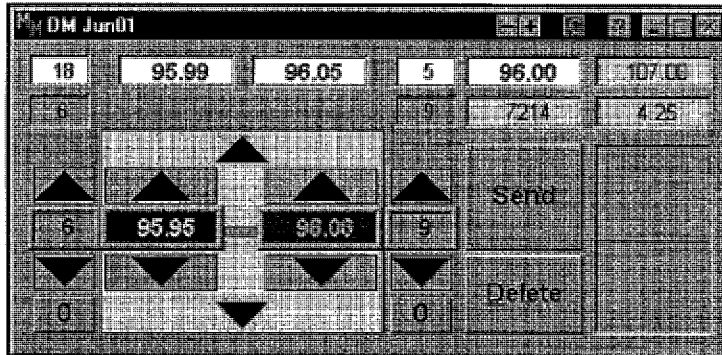
The fields in the **Market Maker Configuration** dialog box include:

Field	Definition
1 (Quantity)	Market Bid Quantity
2 (Bid Price)	Market Bid Price
3 (Color Selection)	-V Highlight Color
4 (Color Selection)	+V Highlight Color
5 (Ask Price)	Market Ask Price
6 (Quantity)	Market Ask Quantity
7 ((Last Traded Price)	Last Traded Price
8 (High)	Market High
9 (Working Buys)	Working Buys
10 (+ VE Net)	+VE Net long position
11 (- VE Net)	-VE Net short position

Field	Definition
12 (Working Sells)	Working Sells
13 (Volume)	Market Volume
14 (Market Low)	Market Low
15 (Bid Multiplier)	Bid Multiplier. Defines the Bid Quantity increment (in ticks).
16 (Dual Multiplier)	Dual multiplier. Defines price increments for both prices (in ticks).
17 (Ask Multiplier)	Ask Multiplier. Defines the Ask Quantity increment (in ticks).
Back Color	Background Selection Color Box.
18 (Default Bid Quantity)	Default Bid Quantity
19 (Bid Price)	Default Bid Price
20 (Minimum Spread)	Minimum Spread. Identifies the lowest spread price allowed (in ticks).
21 (Ask Price)	Default Ask Price
22 (Ask Quantity)	Default Ask Quantity
23 (Bid Multiplier)	Bid Multiplier. Defines Bid price increment (in ticks).
24 (Ask Multiplier)	Ask Multiplier. Defines Ask price increment (in ticks).
Sound Selector	Dropdown list of events to associate with a sound.
25 File Selection)	Sound File – Click on adjacent Browse button to open File search box to locate sound files.
Test Button	Tests sounds once they are associated with an event.
Consolidate Tick Increment Box	Tick multiplier used to consolidate the scale of the market ticker graph.
26 (Ticker Speed Selection)	Ticker Speed – Sets Trend Graph refresh rate (in milliseconds).
Start Position Window	Brings existing overnight position into the +VE or –VE net indicator.

Field	Definition
Position Limit (Box)	Check this box to bring the value in the field into the net position limit for this market.
Fast Trade (Use IOC)	Enables right-click trading, Immediate or Cancel.
Fast NetPos (Use IOC)	Default is checked. Immediate or Cancel.
Max Lot Size (Box)	Sets maximum lot size to be sent to market.
Disable Auto Focus Checkbox	When checked, disables auto-focus of mouse when cursor is placed over a field in the Trading window.
Customer Selection Dropdown Box	Shows list of customers from Customer Defaults dialog box. A different customer can be assigned for each Market Maker window.
OK Button	Closes the Configuration dialog box and saves the parameters.
Cancel Button	Cancels the Configuration dialog box.

Display Color Definitions



When you initially open **Market Maker**, and set up a trading environment, there are no colors set up in the **Trading** window. You set the colors from the **Configuration** dialog box to suit your preferences. Doing so, however, will also change the colors of associated grid cells in the **Trading** window and each instance of the **Market Maker** from that time forward will display the new colors you have selected.

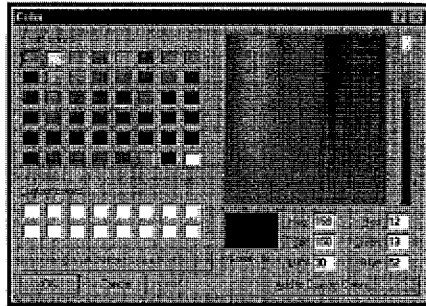
The grid fields and their associated color relationships are:

Grid Field Activity	Association/Display
No Working Orders	Zero displayed and quantity tick arrow color scheme.
Outstanding Orders	Working color, with quantity and price tick arrows in the same color.
Price (at or better than market)	Market price colors.
Bid Price (below market)	Bid price colors.
Ask Price (above market)	Ask price colors.
Market Price Change	Color changes to color defined as +V (for increase) or – V (for decrease) for a half-second, then reverts to normal color.

Modifying the Display Color Definitions

The color scheme for the **Trading** window may be modified using the **Configuration** dialog box. You access the **Configuration** dialog box from the individual **Trading** window by clicking the **C** button on the title bar.

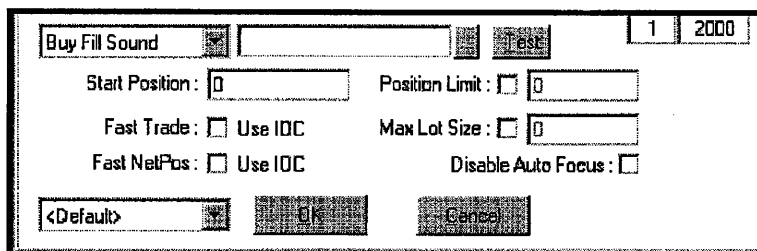
Clicking various controls and fields in the **Configuration** dialog box allows you to modify the color scheme. The **Color** dialog box is used to define custom colors.



► Use the following steps to modify the display color:

1. Open the **Configuration** dialog box from the individual **Trading** window by clicking the **C** button on the **Title** bar.
2. Left-click in a text box to define the foreground color.
3. Right-click in a field or text box to define the background color.
4. Right-click in an arrow to define the background color.
5. Left-click in the **Trend Graph** to define the line color.
6. Right-click in the **Trend Graph** to define the background color.
7. Left-click in the **+V** field to define the temporary color used to define a price increase.
8. Right-click in the **+V** field to define the background color.
9. Left-click in the **-V** field to define the temporary color used to define a price decrease.
10. Right-click in the **-V** field to define the background color.
11. Left-click in the **+VE** field to define the color used to define a positive position.
12. Right-click in the **+VE** field to define the background color.
13. Left-click in the **-VE** field to define the color used to define a negative position.
14. Right-click in the **-VE** field to define the background color.
15. Click **OK** to close the **Configuration** dialog box and save the color settings.

Adding Sound



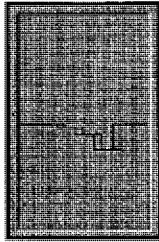
If you have a sound card and speakers attached to your workstation you can associate sounds to some of the trading actions that occur when you are using **Market Maker**. You can associate sounds to the following events:

- Buy Fill Sound
- Sell Fill Sound
- Send Order Sound
- Value Change Sound

► To add sound to an event in the Trading Window:

1. Click **C** on the title bar of any open **Trading** window.
2. In the **Configuration** dialog box, click on the dropdown arrow in the **Sound Selector** field and select an event.
3. Click on the **Sound file browse** button to bring up an **Open File** selection box.
4. Navigate through the drives in the **Open File** selection to find a sound .wav file you want to associate with the event and select it.
5. Click **OK** to close the **Open File** selection box.
6. Click **Test** to verify the sound is assigned to the event.
7. Click **OK** in the **Configuration** dialog box. The sound will now be associated with the event.

Trend Graph



The **Trend Graph** provides a visual indication of price movement. The **Trend Graph** does not have a scale or grid, and cannot be saved as part of the X_TRADER® Workspace.

The horizontal line in the center of the **Trend Graph** is always the **Last Traded Price**.

If the **Last Traded Price** is higher than the previous **Last Traded Price**, a blue line will connect the two prices in the **Trend Graph**.

If the **Last Traded Price** is lower than the previous **Last Traded Price**, a red line will connect the two prices in the **Trend Graph**.

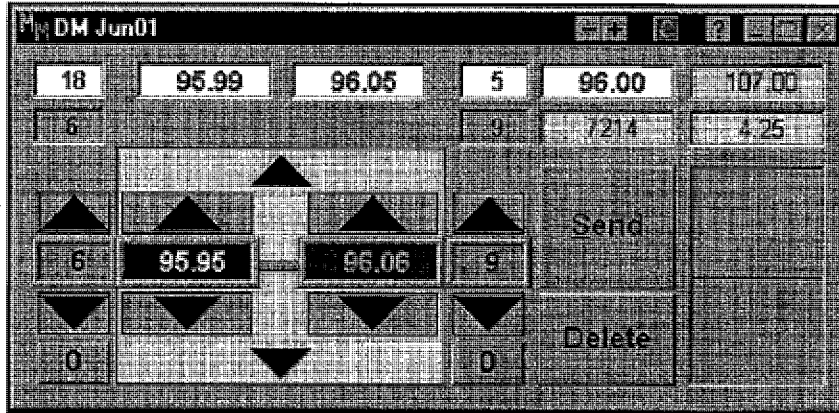
Setting the Update Rate on the Trend Graph

The **Trading** window displays a **Trend Graph** in the lower right hand portion of the window. This displays the last price movement to give you a visual indication of market trend for the product. You can set the update rate for the **Trend Graph** through the **Configuration** dialog box.

▶ To set the update rate in the Trend Graph:

1. Click **C** on the **Title** bar of any open **Trading** window.
2. In the **Configuration** dialog box, click on the box displayed beneath the bar graph to highlight the displayed number. The default is 2000 (milliseconds) or 1 update every 2 seconds.
3. Enter a value to increase or decrease the update rate.
4. Click **OK** to return to the **Trading** window.

Market Maker Trading Window



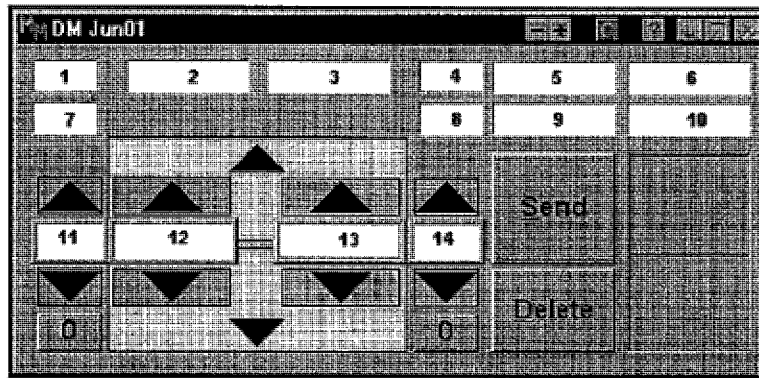
Trading for each product in **Market Maker** is done using the **Trading** window. One **Market Maker Trading** window is created for each product, allowing you to track multiple products during any one trading session. In order to create a working **Trading** window, you must first open the window, then populate and configure a **Trading** window for each product and account you want to trade.

Note: Because of the multiple possibilities present in using mouse and click actions to trade in **Market Maker**, it is strongly recommended that trading be practiced in a simulation environment.

► In order to begin trading you follow this sequence:

1. Open X_TRADER®.
2. Open a **Market** window in X_TRADER®.
3. From the **File** menu on the **Control Panel** open the **Market Maker** plugin.
4. Drag a product from the market or the **Market Explorer** window of X_TRADER® into the **Trading** window of **Market Maker**.
5. Click the **C** button on the **Market Maker Trading** window title bar to open the **Configuration** dialog box.
6. Configure the product **Trading** window to suit preferences on display, colors, sounds, and product trading parameters.
7. Click **OK** to save the settings in the **Configuration** dialog box.
8. Begin trading.

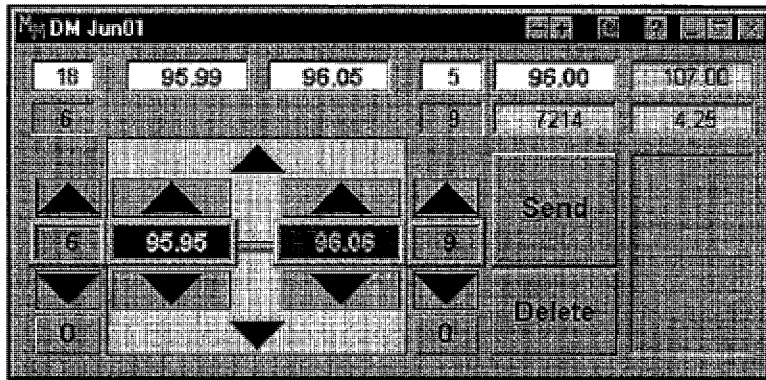
Trading Window Field Descriptions



Field	Equal to Mouse Control Function
1	Market Bid Quantity
2	Market Bid Price
3	Market Ask Price
4	Market Ask Quantity
5	Market Last Traded Price
6	Market High
7	Working Buys
8	Working Sells
9	Market Volume
10	Market Low
11	Default Bid Quantity
12	Default Bid Price
13	Default Asking price
14	Default Ask Quantity
Send	Sends the order to market.
Delete	Deletes all orders from the market (both sides)
Trend Graph	Indicates upward or downward movement in the market.

Field	Equal to Mouse Control Function
0	Zero Bid Quantity
0	Zero Ask Quantity

Generating a Buy or Sell Order



You generate a buy or sell order through a combination of mouse clicks or keyboard entries in the **Trading** window. It is necessary to first configure the **Trading** window to set your favored trading parameters, then use your mouse or keyboard to trade from the **Trading** window for each product in which you are creating a market.

Fast Orders

To allow for fast trading, **Market Maker** makes use of pre-determined trading quantities and spread values to allow for rapid order entry. By using the left and right mouse buttons, an order may be submitted to the market extremely rapidly. This allows you to keep pace with rapidly changing market conditions.

▶ **To enter Fast Orders:**

- Right-click in the **Bid Price** field to immediately send an order for the quantity defined in the **Default Bid Quantity** field. The **Bid Price** is automatically adjusted to maintain the spread defined in the **Min. Spread** field of the **Configuration** dialog box.
- Right-click in the **Ask Price** field to immediately send an order for the quantity defined in the **Default Ask Quantity** field. The **Ask Price** is automatically adjusted to maintain the spread defined in the **Min. Spread** field of the **Configuration** dialog box.
- To send an order which buy or sell the current market bids/offers, right-click in either **Market Quantity** field.
- To trade out of the current position, right-click in the **+VE Net Pos** or **-VE Net Pos** field. The **Order Quantity** is updated based on the **NetPos** value, the **Market Price** field is updated accordingly, and the order is submitted.

Deleting Orders from the Market

▶ **To delete all orders from a single market:**

Click on the **Delete** button located on the particular market's **Trading** window. Choosing the **Delete** button on the **Trading** window pulls both working orders (if there are any) from the market. Pressing the **Delete** key on the keyboard has the same effect.

Or:

Close the particular market's **Trading** window.

Or:

Send an order with a zero quantity to pull an order from the market.

Removing Order from the Market

Any adjustments made to the 'Bid Price' or 'Ask Price' in a **Trading** window will immediately remove the respective order from the market. Adjustments to the quantity field are not updated until the next explicit **Send** command.

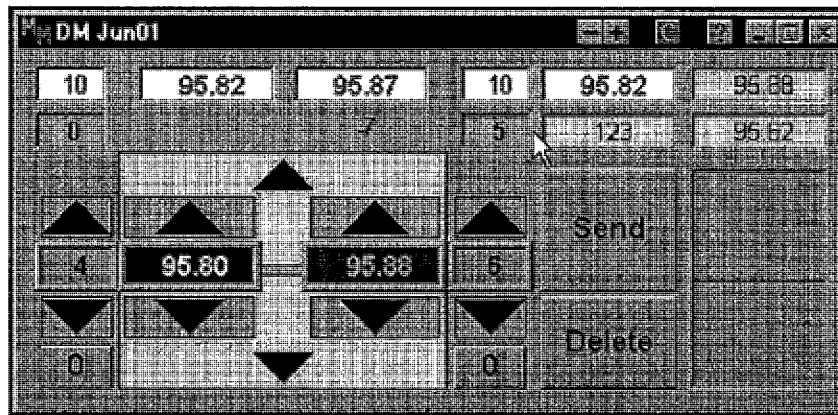
Using Keyboard to Control the Market Maker Window

Although using a mouse is the preferred method to send orders to the market in **Market Maker**, you can also use the keyboard as an alternative to certain mouse actions. Keyboard keys and the functions they control are listed in the table below.

Keyboard key to entry field mapping:

Keyboard Key	Equal to Mouse Control Function
Number Pad 0	Send Order to Market
Number Pad 1	Down Bid Price
Number Pad 2	Down Both Price
Number Pad 3	Down Ask Price
Number Pad 7	Up Bid Price
Number Pad 8	Up Both Price
Number Pad 9	Up Ask Price
Multiply	Ask Price
Add	Up Bid Quantity Up Ask Quantity
Subtract	Down Bid Quantity Down Ask Quantity
Decimal	Delete
Divide	Bid Price

Net Position Indicators



The net position in the **Market Maker Trading** window is indicated by the presence of a number that appears above the trading grid. Display of a number in either field is contingent on market position at the time. The two fields are identified as **+Ve Net Pos** and **-Ve Net Pos** respectively and, depending on the market position, only one or the other is visible at any one time.

These fields have a default color setting for both the background and the font, although this can be altered through the **Configuration** dialog box.

Ticking Price Values for both Bid and Ask

To simultaneously set the price values for both bid and ask, click on either of the large arrows in the **Trading** window. This will reset the values either upward or downward by the tick value (which is set in the **Configuration** dialog box).

Using Send Key to Update Orders

Once you have entered the trading values in the fields on the **Trading** window using the mouse or keyboard entry, choosing the **Send** button will update the current orders with the value requested.

Sending an order with a zero quantity has the effect of deleting the order.

A right-click on any of the arrows has the same effect as choosing the **Send** button. This allows you to use a left-click to adjust the value, followed immediately with a right-click to send in the order.

Setting Quantity Fields to Zero

Clicking on either of the **0** fields in the **Trading** window automatically sets the associated quantity field to zero.

Mouse Operations in Market Maker

Most trading operations conducted with **Market Maker** are designed to be performed using the mouse and a combination of right and left clicks to adjust trading quantity, pricing, and order placement. Once the products have been populated in the **Trading** window, a trader may use the mouse to perform almost all trading operations.

Any of the general mouse click actions listed below perform the action in the **Trading** window:

Left Click Mouse Trading

Positioning the mouse cursor over one of the fields in the **Trading** window and then using a **left-click** results in the following actions:

Left-click in field	Results in the action
Bid Price	Populates price field with contents of Bid Price cell.
Ask Price	Populates price field with contents of Ask Price cell.
Bid Quantity	Populates order Quantity field with current outstanding order quantity.
Ask Quantity	Populates order Quantity field with current outstanding order quantity.
Wrk Quantity field(s)	Populates order Quantity field with current outstanding order quantity. If there are no outstanding orders, field will reset to the default quantity.
-Ve NetPos	Populates Order Quantity field to trade out of this position.
+Ve NetPos	Populates Order Quantity field to trade out of this position.

Right-click Mouse Trading

In the **Trading** window, positioning the mouse cursor over one of the fields listed below and then right-clicking results in a variety of trading results.

Right-clicking on the:

- **Bid Price** field: Immediately sends an order to sell 'Req. Ask Qty' contracts @ 'Mkt Bid Price'. In the process of doing this, it will adjust the 'Req Bid Price' to be 'min spread' ticks (configured from the **Configuration** dialog box) lower than the order price in order to maintain the traders usual spread. The bid side is not sent to market at this point.
- **Ask Price** field: Works in the opposite manner. It will immediately send an order to buy 'Req. Bid Qty' contracts @ 'Mkt Ask Price', and adjust the 'Req. Ask Price' to above the new 'Req. Bid Price'.
- Either **Market Qty** field extends this to send an order designed to buy/sell out the current market.
- Either **+Ve NetPos** or **-Ve NetPos** field (whichever is displayed), will send an order to market to trade out of the current position at the current market price. It will update the order qty to the **NetPos** value, update the current market price, and then submit the order.

Using the Mouse to Adjust Tick Values

If your mouse setup includes a center wheel, placing the cursor over one of the tickable fields or its associated arrows will allow you to adjust the field values with the mouse wheel. You can also make entries in these fields by placing the cursor over the field and then making entries via the keyboard.

Using the Mouse Wheel to Adjust Field Values

If your mouse setup includes a center wheel, placing the cursor over either of the large **Tick Both** arrows, the **Send**, **Delete**, or **Zero Quantity** fields or buttons allows you to adjust both bid and ask prices using the wheel. Any adjustments made to the bid or ask price, will immediately pull the order from the market (if there is one).

Because of the multiple possibilities present in using mouse and click actions to trade in **Market Maker**, it is recommended that click trading be practiced in a simulation environment.

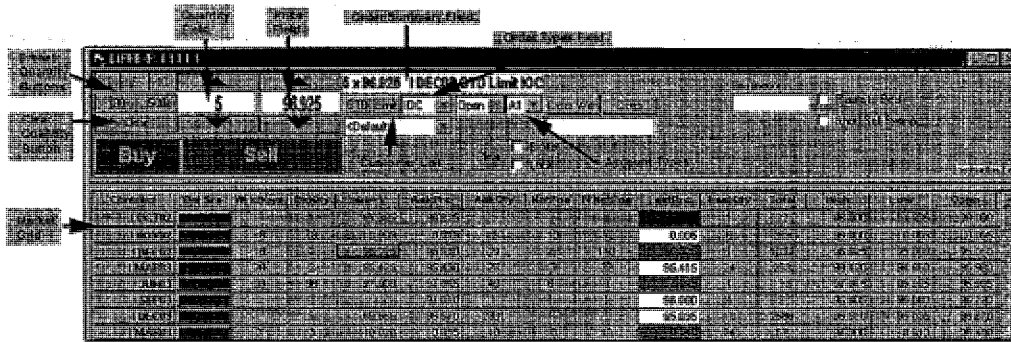
Adjustments to the quantity will not be updated until the next explicit **Send** command.

Click	To Perform
Left on any small arrow button	Tick up or down the associated value, using the tick multiplier set during configuration.
Left on any large arrow button	Tick up or down both price values together.
Left on either '0' button	Sets respective quantity field to zero.
Right on any arrow	Same action as choosing the Send button.

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Chapter 12

Market Window



When you select a product from the **Market Explorer** window, the **Market** window opens. It is composed of two panes:

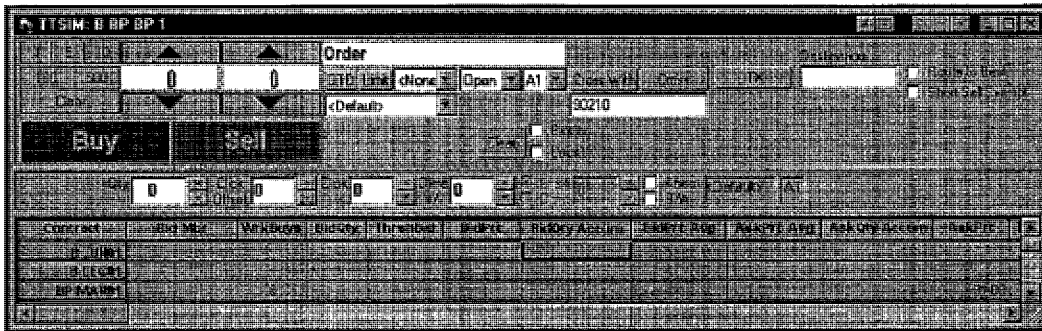
- **Order Entry** pane where you enter orders.
- **Market Grid** displays contract information.

The **Order Entry** pane and **Market Grid** are the principal trading tools that allow you to monitor the current market and place orders.

Features of the X_TRADER® Market window include, but are not limited to, the following list:

- **Include Implieds for spreads in Market Columns and in Depth.** Displays Implied price and quantity data in the same columns as direct price and quantity data.
- Option to display implied outright, implied spread, and implieds from implied quantities and prices in the direct market columns and/or Implied Data columns.
- **Order Entry** pane displays pre-set fields, properties, and buttons that allow you to trade quickly and efficiently.
- **Market Grid** displays real-time contract and price information for selected products. Use one or more **Market Grids** to display single or multiple products from one or more exchanges.
- Ability to **Click Trade** which sends orders using just one click of the mouse.
- Create personalized customer lists and **Customer Defaults** that maintain customer data and account preferences.
- Display a single **Floating Order Entry** window instead of opening a new Market Grid.

Click Trading Introduction



Click Trading allows you to right-click the bid price to send a limit sell order or right-click the ask price to send a limit buy order.

Notes:

- When **Click Trading** is enabled, ALL safety measures are removed.
- The **Lock** and **Blotter** features are not available when click-trading.

Enabling/Disabling Click Trading

► To turn click trading on and off from the Market Grid Context menu:

1. To access the Market Grid's context menu, right-click.
2. Left-click the **Click Trade On** option. A check mark (√) indicates that the feature is ON. When turned on, the **Click Trading** pane opens above the **Market Grid**.

Setting Default Properties for Click Trading

You have several default properties available to you in **Click Trading**, which are used to control the mouse settings and other restrictions. Maintain these features in **Properties Trading** tab.

► To set the properties for click trading:

1. From the **Control Panel**, open the **Settings** menu and click **Properties**.
2. In the **Properties** dialog box, click the **Trading** tab.
3. For **Mouse Type**, if you use a two-button mouse, click that option button. A three-button mouse is the default setting and is necessary for sending all types of **Click Trading** orders to market in the quickest manner possible.
4. **Click** and **Dime** order restrictions are set separately. To change the default to **GTD**, click the **GTD** option button. Any **GTD** orders still working at the end of your trading session are automatically be deleted. **IOC** orders allow a partial fill before the balance is cancelled.
5. Click **OK** to exit the **Properties** dialog box and save the selected options.

Using Click Trading Feature in the Market Grid

► To use the Click Trading feature in the Market Grid:

1. Enable the **Click Trading** feature.
2. Enter the required quantities and information from the table below:

Field	Description
Qty	Enter your Click Trading order quantity.
Click Offset	<p>Field based on the last traded price.</p> <p>Enter the maximum number of ticks that the price can move from the last traded price. Click Offset protects you from sending an order that is too far away from the last traded price.</p> <p>Click Offset and Click +/- are mutually exclusive.</p>
Click +/- (Plus/Minus)	<p>Field based on the current inside market.</p> <p>Enter the maximum number of ticks the price can move from the prevailing inside market price. Click +/- allows you to chase a fast moving market. For example, if the Click +/- value is two ticks where the tick value for the product is .01 and clicked bid price is 115.99, the worst price that will be accepted is 115.97. If a better price is available, the order will be filled (e.g., 115.98 or 115.99).</p> <p>This example assumes that theoretical prices are not being used.</p>
Dime +/-	<p>When you 'dime' the market, the action implies order <u>entry</u>, not necessarily order <u>execution</u>. This feature allows you to enter orders 'off' the market using the Click Trading feature without having to use the Price and Quantity fields in the Order Entry pane. The value you enter in Dime +/- defines at what price, based on the current inside market, the order is entered at. The feature is limited to values up to 99.</p> <p>For example, if you enter 1 and middle-click the mouse with the cursor on the current market bid, an order 1 tick better than the prevailing prices is entered. Conversely, if you enter a -1, an order 1 tick worse is entered.</p>

Field	Description
Click vs. Dime options	<p>The Click and Dime buttons appear enabled only when a two-button mouse is selected from the Properties Trading tab.</p> <p>Using a two-button mouse, select between Click or Dime to define what action occurs when you right-click – does it execute a trade (Click) or does it enter an order (Dime).</p> <p>For more information, review the Click +/- and Dime +/- descriptions.</p> <p>If these options are disabled (grayed out), a three-button mouse has been selected as your default Click Trading mouse style.</p>
Theo & B/A (Bid/Ask)	<p>These options relate to the Opportunity Check feature that you enable in the Properties Trading tab.</p> <p>To use these options:</p> <ol style="list-style-type: none"> 1. In the Properties Trading tab, enable Opportunity Check and Highlight Border on Change. 2. In the Market Grid, right-click to display the context menu. 3. Click Hide/Show columns. 4. In the Hide/Show dialog box, enable the TheoPrc, TheoBid, and TheoAsk columns to view them. 5. To evaluate opportunities in the market, enable the Theo field if you want to use your theoreticals pasted in the TheoPrc column. <p>Or:</p> <p>To evaluate opportunities in the market, enable the B/A field if you want to use your theoreticals pasted in the TheoBid or TheoAsk columns.</p>
Account (Default)	Refers to the accounts set up in the Customer Defaults dialog box.
A1	Displays account code.

► **To send a trade to market using Click Trade:**

- Right-click the bid price to send a limit sell order.
- Right-click the ask price to send a limit buy order.

Note: When **Click Trading** is enabled, ALL safety measures are removed.

Cross Orders

The cross trading feature allows a trader to cross a prearranged order; either with a party within the trading firm itself or with a specified party outside the firm. You enable the **Cross Trading** features through the **Trading** tab in the **Properties** dialog box:

Cross Order Type: Sequential Fast or Sequential Guaranteed. This controls how cross orders are submitted to the exchange. X_TRADER® processes both sides of a cross order by sending them sequentially.

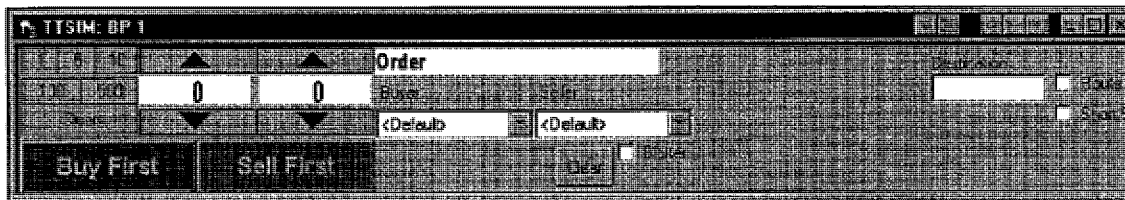
- **Sequential Fast order type:** Default. Both orders (buy and sell) are immediately submitted, one after the other. Under normal market conditions the crossing tool sends orders into the market in the correct sequence, according to your selection of performing the buy or sell transaction first. However, there are occasions when heavy network traffic results in routing the orders through different order routers. As a result, different data lines to the exchange may be used to transmit the cross orders and cause the wrong leg to arrive at the exchange host first.
- **Sequential Guaranteed order type:** Waits for an acknowledgement from the exchange after sending the first order. Only then is the other side submitted. Due to the delay in sending the second order, it is possible for a third party to take the offer or bid before both sides are matched.

In both cases, if the first side of the order is filled (partially or completely), the second side of the cross order will still be submitted.

Order Crossing: When enabled, **Cross** and **Cross With** are added to the **Order Entry** window.

ITX: When enabled, ITX is added to the right side of the **Order Entry** window. See **Order Entry Field Descriptions** for a full discussion of **Intention To Cross**. When you enable this feature, ITX displays on the right-hand side of the **Order Entry** window:

Screen Controls in Cross Trading



The following controls are added or deleted after you click **Cross** in the **Properties Trading** tab:

- Buyer and Seller **Customer Account** lists appear when **Cross** is selected. However, you must have previously established customer defaults for the buyer and seller.
- **Buy First** and **Sell First** buttons appear when **Cross** is selected. Use to send the buy or sell order first for a straight cross trade. The order variables (order type, open/closed, acct type, and account #) are removed. Cross trades are always GTD orders.

Executing a Cross Trade

The cross trading feature allows a trader to cross a prearranged order; either with a party within the trading firm itself or with a specified party outside the firm. You enable the **Cross Trading** features through the **Trading** tab in the **Properties** dialog box:

▶ To execute a Cross trade, use the following steps:

1. In the **Order Entry** pane, click **Cross**.

Note: If your **Order Entry** pane does not display **Cross** and **Cross With**, then the **Order Crossing** feature is disabled. Go the **Properties Trading** tab and enable **Order Crossing** option. Return to the **Order Entry** pane.

2. Select your buyer or seller from the list boxes that appears. Remember that you must have previously set up customer defaults for each client.
3. In the **Market Grid**, select a contract.
4. Enter the quantity and price in the appropriate fields.
5. Click **Buy First** or **Sell First** to execute the trade.

Executing a Cross-With Trade

Use **Cross With** for LIFFE CONNECT cross trades to indicate a specific counter party by entering the Trader ID. Support of this feature is exchange-specific. If the exchange does not support it, the message **Order Format Invalid** displays in the **Audit Trail**.

▶ To execute a **Cross-With** trade, follow these steps:

1. In the **Order Entry** window, click **Cross With**.

Note: If your **Order Entry** pane does not display **Cross** and **Cross With**, then the **Order Crossing** feature is disabled. Go the **Properties Trading** tab and enable **Order Crossing** option. Return to the **Order Entry** pane.

2. Select your **Cross With** buyer or seller from the **Cross w/** field that appears. Remember that you must have previously set up customer defaults for each client.
3. In the **Market Grid**, select a contract.
4. Enter the quantity and price.
5. Click **Cross Buy** or **Cross Sell** to execute the trade.

Cross Order Execution and eCBOT

Because of a rule implemented by eCBOT, cross orders experience a time delay. The X_TRADER® system complies with the time delay rule and manages your cross orders so they are accepted by the exchange.

When you execute your cross trade, you send both orders at the same time. However, X_TRADER®'s gateway system holds the second leg of your cross order and adheres to the following rules so your order is not rejected:

- 5 seconds between the legs for futures contracts and their associated spread contracts.
- 15 seconds between the legs for options contracts and their associated spread contracts.

Notes:

- If the first leg is only partially filled, the second leg is submitted with the original quantity. No adjustments are made to the second leg.
- If the first leg is completely filled, the second leg still goes to the exchange.
- X_TRADER®'s gateway system rejects Sequential Fast cross orders.

Eurex Block Order

The Eurex Block Order feature in X_TRADER® provides a method to enter a buy and acknowledge a purchase of a large block trade into the Eurex exchange. Block orders are defined as those product trades which involve high-volume and whose traded price have been separately agreed to by both parties outside of the normal exchange trading methods.

Block trade limits (minimum threshold that defines what constitutes a block trade for any given product) are defined by the exchange and vary depending on the product to be traded. In all cases of block trading, the requirement that there is a private agreement on price and number of products to be traded is the determining factor. In all such cases, the trade must be reported to the exchange.

There are two defined roles in Eurex block trading, corresponding to each side of the trade. The roles and responsibilities of these traders are:

- **Buyers:** Trader who is buying the product. Buyers in a block trade are the only individuals who can initiate (enter) a block trade. They also are the only side of a trade that can add, modify, or delete the given block trade.
- **Sellers:** Trader who is selling the product. Sellers in a block trade can only receive and accept a block trade.

Submitting a Eurex Block Order (Buy Side)

The Eurex Block Order feature in X_TRADER® provides a method to enter a buy and acknowledge a purchase of a large block trade into the Eurex exchange. Block orders are defined as those product trades which involve high-volume and whose traded price have been separately agreed to by both parties outside of the normal exchange trading methods.

There are two defined roles in Eurex block trading, corresponding to each side of the trade. The roles and responsibilities of these traders are:

- **Buyers:** Trader who is buying the product. Buyers in a block trade are the only individuals who can initiate (enter) a block trade. They also are the only side of a trade that can add, modify, or delete the given block trade.
- **Sellers:** Trader who is selling the product. Sellers in a block trade can only receive and accept a block trade.

It is assumed in the below procedure that both parties involved in a block trade are in communication with each other. Only the buyer can enter a block trade using the following procedure.

► To enter a block trade into the Eurex Exchange (Buyer initiated):

1. From the **Market Grid** pane in the **Market** window select a product to populate the upper pane of the window.
2. Select **Block** as a restriction from the drop-down list. Sell in the upper pane will be grayed out.
3. Select **Open** as a position from the drop down list.
4. Enter the amount to be traded and price for the whole trade.

Note: The minimum volume for block trades varies according to product.

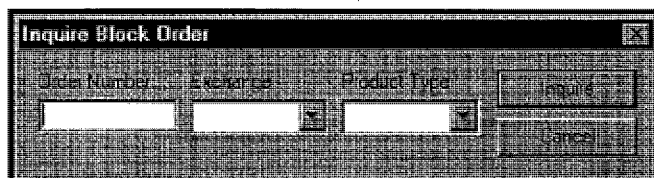
5. Enter the identifying information for the counterparty to the trade in the **Destination** box.
6. Click **Buy** to initiate the trade.

The above procedure results in the following actions:

- The block trade is entered in the **Order Book** and is assigned a unique identifying number. The status is "Waiting for Approval."
- A message appears in the **Audit Trail** indicating that the trade has been sent to the exchange.

Note: Although block trading is defined as a trade between two parties outside of the normal exchange market, in fact a third party (EUREX exchange) is involved in the trade. After checking on the trade's quantity, price, and other information, the trade will or will not be approved. When the exchange has reviewed the trade the counterparty (the Seller) can complete their side of the transaction.

Accepting a Eurex Block Order (Sell Side)



The Eurex Block Order feature in X_TRADER® provides a method to enter a buy and acknowledge a purchase of a large block trade into the Eurex exchange. Block orders are defined as those product trades which involve high-volume and whose traded price have been separately agreed to by both parties outside of the normal exchange trading methods.

There are two defined roles in Eurex block trading, corresponding to each side of the trade. The roles and responsibilities of these traders are:

- Buyers: Trader who is buying the product. Buyers in a block trade are the only individuals who can initiate (enter) a block trade. They also are the only side of a trade that can add, modify, or delete the given block trade.
- Sellers: Trader who is selling the product. Sellers in a block trade can only receive and accept a block trade.

Sellers should be in communication with the opposite side of the block trade and know that the trade has been initiated from the buyers side through X_TRADER®. Certain information that is only available to the Buy side of the trade is required to complete the block trading process.

Note: Although block trading is defined as a trade between two parties outside of the normal exchange market, in fact a third party (EUREX exchange) is involved in the trade. After checking on the trade's quantity, price, and other information, the trade will or will not be approved. When the exchange has reviewed the trade the counterparty (the Seller) can complete their side of the transaction.

► To accept a block trade that has been entered into the Eurex Exchange (Seller acceptance):

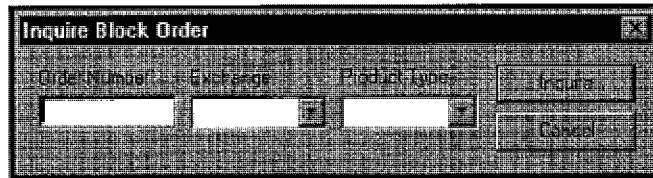
1. With **X_TRADER®** open and logged into the Eurex exchange, open the **Order Book**.
2. Right-click anywhere in the **Order Book** grid pane to bring up the context menu.
3. Click **Inquire Block Order** to display the **Inquire Block Order** dialog box.
4. Enter the order number of the trade that has been initiated by the buyer in the **Order Number** field.

Note: This information must be obtained from the buy (initiating) side of the block trade.

5. Select an exchange from the drop-down list in the **Exchange** field.
6. Select a product type from the drop-down list in the **Product Type** field.
7. Click **Inquire**. In the **Order Book**, **Submit** changes its label to **Accept**.
8. Click **Accept**.

The **Order Book** and **Fill** window will now indicate the accepted trade information.

Inquire Block Order Dialog Box



The **Inquire Block Order** dialog box is used to receive and validate orders for the sell side of a Eurex block trade. This dialog is accessed from the context menu of the **Order Book** window.

Field Name	Entry
Order Number	Order number assigned to the block trade by the Eurex exchange. This number appears on the order book of the buy side trader and is told to the sell side through verbal or other communication.
Exchange	A drop-down list indicating the exchange from which information on the block trade is to be received. In this case Eurex.
Product Type	The product type for the block trade.
Inquire	Click to do an exchange inquiry on the block trade.
Cancel	Click to cancel the block trade inquiry.

Modifying a Eurex Block Order Trade

The Eurex Block Order feature in X_TRADER® provides a method to enter a buy and acknowledge a purchase of a large block trade into the Eurex exchange. Block orders are defined as those product trades which involve high-volume and whose traded price have been separately agreed to by both parties outside of the normal exchange trading methods.

There are two defined roles in Eurex block trading, corresponding to each side of the trade. The roles and responsibilities of these traders are:

- **Buyers:** Defined as the trader who is buying the product. Buyers in a block trade are the only individuals who can initiate (enter) a block trade.
- **Sellers:** Defined as the trader who is selling the product. Sellers in a block trade can only receive and accept a block trade.

Modifications to a block trade order on the Eurex exchange can only be performed by the buy side of the transaction. They are the only side of a trade that can add, modify, or delete the given block trade. A modification to a block trade (change or price or quantity, new counterparty, etc.) is identical to any other X_TRADER® modification and is done from the **Order Book** window in X_TRADER®.

Implied Prices and Quantities

Implied prices and quantities are derived from direct orders in a combination of outright contracts and spreads/strategies. Implied pricing evolved at exchanges that trade different contract months of a product as well as spreads and strategies involving different combinations of the contract months. For example, a bid in 1 contract month and an offer in a 2nd contract month can be combined to "imply" a bid in the spread between the 2 months.

By calculating and displaying implied prices and quantities, exchanges found that they could sometimes improve the best bid/ask price or add liquidity to certain contracts or strategies. Exchanges like LIFFE legitimized the use of implied pricing by guaranteeing the execution of spreads and strategies against implied prices, thereby eliminating leg risk. The CME will also be adding implied display and matching capability with the launch of their Eagle platform in 4th quarter of 2002.

There are 3 major types of implied pricing:

- Implied In
- Implied Out
- Implieds From Implieds – Sometimes called 2nd generation implieds

Note: Implied data does not display for Condor Matrices because LIFFE does not match implieds from Condor Matrices.

Implied In

An **implied in (implied spread)** occurs when you combine 2 outright legs to imply the spread between the legs.

- Bid Price Spread AB= Bid Price Leg A – Ask Price Leg B
- Ask Price Spread AB= Ask Price Leg A – Bid Price Leg B

The following chart provides a simple example:

Contract	Bid	Ask
Leg A	50	53
Leg B	45	50
Spread AB	?	?

The implied bid price for Spread AB= $50-50=0$.

The implied ask price for Spread AB= $53-45=8$.

Implied Out

An **implied out (implied outright)** occurs when you combine direct prices of 1 leg and the spread between the legs to imply a price in the 2nd leg.

For example:

Given the ask price in the Spread AB and an Ask price in the Leg B, we can imply an ask price in Leg A:

Ask Price Leg A = Ask price Spread AB + Ask price of leg B

Contract	Bid	Ask
Leg A	50	?
Leg B	45	50
Spread AB	0	6.5

Ask Price of Leg A = $6.5 + 50 = 56.5$. So the **implied ask price for Leg A is 56.5**.

If someone were to enter a buy order in Leg A for 56.5:

The exchange would match Leg A; buy the 50 offer in Leg B. Thereby, filling the offer in Spread AB at 6.5.

Implieds From Implieds

Implieds from Implieds (2nd generation implieds) occur when one (1) of the prices you are using to imply another price is itself an implied price.

Most exchanges do not guarantee implieds from implieds and do not display them in the book. However, TTTM supports implieds from implieds that we have determined match consistently in exchange simulation testing.

The following chart provides a simple example of an implieds from implieds:

Contract	ImpBidQty	BidQty	BidPrice	AskPrice	AskQty	ImpAskQty
Mar		1	9590			
Jun				9535		1
Sep				9483	1	
Mar-Jun	1		55			
Mar-Sep	X		X			
Jun-Sep				52	1	

From the **Jun-Sep** spread ask price/qty and the **Sep** outright ask price/qty, we can imply an ask price/qty in the **June outright contract**.

Combining the **outright bid in March** with the implied ask in **Jun**, we can calculate an implied from implied bid in the **Mar-Jun** calendar.

Keyboard Validation Mode

Keyboard Validation Mode allows you to utilize a keyboard other than your mouse to enter orders.

► **To enable Keyboard Validation Mode:**

1. On the **Control Panel**, open the **Settings** menu and click **Properties**.
2. In the **Properties** dialog box, **Order Entry Window Style**, click the **Keyboard Validation Mode** option button.
3. Click **OK**.
4. All **Market** windows and open **Order Entry** panes now contain the **Keyboard Validation Mode Order Entry** pane.

To populate the **Keyboard Validation Mode Order Entry** pane, use the middle or left mouse button and click in the **Bid Prc** or **Ask Prc** column of the **Market Grid**. Using the mouse buttons, an order may be entered to buy or sell a contract or product appropriately.

► **To place an order using the Keyboard Validation Mode Order Entry pane:**

1. Left-click in the **Market Grid Bid Prc** cell to define a **SELL** order.
2. Left-click in the **Market Grid Ask Prc** cell to define a **BUY** order. The order quantity is populated by the contents of the **Default Quantity** box.
3. Press **ENTER** to submit the order.

Or:

Press **ESC** to clear the order without submitting it to the market.

Alternatively:

1. Middle click in the **Market Grid Bid Prc** cell to define a **BUY** order.
2. Middle click in the **Market Grid Ask Prc** cell to define a **SELL** order.
3. The order quantity is populated by the contents of the **Default Quantity** box.
4. Press **Enter** to submit the order.

Or:

Press **ESC** to clear the order without submitting it to the market.

After the price field is populated, the contents of the **Default Qty** field are used to populate the **Quantity** box, and this value may be modified using the spin buttons adjacent to the box.

The **Diming Offset** is added to the price when the **Keyboard Validation Mode Order Entry** pane is populated from the **Market Grid** using the middle mouse button. This allows you to "Dime the Bid" or "Dime the Offer" automatically using the value of the **Diming Offset**. The **Diming Offset** may be edited in the **Keyboard Validation Mode Order Entry** pane.

Note: The **Diming Offset** function requires the use of the middle mouse button.

► **To set the Diming Offset value for new instances of the Order Entry pane:**

1. On the **Control Panel**, open the **Settings** menu and click **Properties**.
2. In the **Properties** dialog box, set the **Order Entry Style** to **Keyboard Validation Mode**.
3. When **Keyboard Validation Mode** is selected, the **Default Diming Offset** is enabled in the **Properties** dialog box.
4. Enter a value for the **Diming Offset**.
5. Click **OK** to exit the **Properties** dialog box and save the settings.

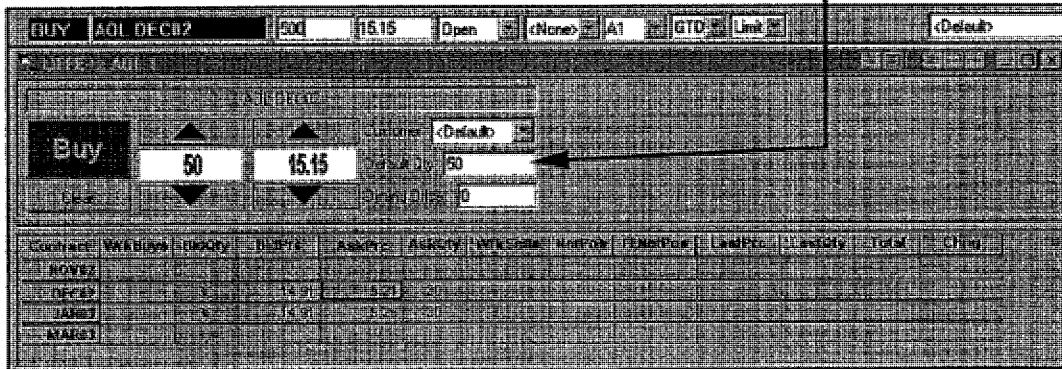
For a value in the **Bid Prc** column, the offset is added to the price if the offset is positive, and subtracted from the price if the offset is negative. Click the middle mouse button in the **Bid Prc** cell to activate this feature.

For a value in the **Ask Prc** column, the offset will be from the price if the offset is positive, and added to the price if the offset is negative. Click the middle mouse button in the **Ask Prc** cell to activate this feature.

The value that is added or subtracted is based on the tick value of the product being traded.

Using the Keyboard to Enter Orders

When using Keyboard Validation Mode, the quantity you type in the Default Qty field overrides the quantity you typed in the Default Qty field in the Properties Trading tab.



If you prefer to use a keyboard instead of a mouse, you can access a keyboard entry dialog box by making the **Market Grid** active.

Note: In order to use the keyboard to execute trades, you must first enable this feature.

To make the **Market Grid** active, click any **Market Grid** cell. Press the **Insert** key for **Buy** orders and the **PageUp** key for **Sell** orders.

The **Keyboard Entry** window appears at the top of the **Order Entry** pane. After entering the order data, press **ENTER** to review the order. Press **ENTER** a second time to send the order to market.

▶ **To enable the Keyboard Validation Mode:**

1. To display the **Properties** dialog box, click **Settings** on the **Menu Bar** and select **Properties**.
2. In the **Trading** tab, review the **Order Entry Window Style** section and click **Keyboard Validation Mode**.
3. To close the **Properties** dialog box and apply the changes, click **OK**.
4. The **Order Entry** pane automatically displays the **Keyboard Validation Mode** screen.

▶ **To open the Keyboard Entry window:**

1. To open the **Keyboard Entry** window, the **Market Grid** of the product you wish to trade must be the active window. To make the **Market Grid** active, click any **Market Grid** cell.
2. If the **Floating Order Entry** window is enabled, select a **Market Grid** row and click the **Insert** (Buy order) or **PageUp** (Sell order) key.

Or:

Select a **Market Grid** cell; click **Insert** (Buy order) or **PageUp** (Sell order).

▶ **To move among fields in this dialog box:**

- **Tab** moves the cursor left to right.
- **Shift** and **Tab** chosen simultaneously move the cursor from right to left.

▶ **To send an order to market:**

1. Press **ENTER** to review the order.
2. Press **ENTER** again to send the order to market.

▶ **To close the Keyboard Entry window:**

Prior to sending the order to market, click **ESC** to close the **Keyboard Entry** window. Doing this will also cancel the order.

Using the Keyboard to Control Price

The mouse or the spin buttons may be used to adjust the price in the price text box. However, you may also use the keyboard to manually enter a price.

► **To use the keyboard to manually enter a price:**

1. Select a **Market Grid** cell; press the **Insert** (Buy order) or **PageUp** (Sell order) button.

Or:

If the **Floating Order Entry** window is enabled, select a **Market Grid** row and click the **Insert** (Buy order) or **PageUp** (Sell order) key.

2. Use **TAB** or **SHIFT+TAB** to move the cursor to the price text box.
3. Use the keyboard to enter a value.
4. Press **ENTER** to review the order.
5. Press **ENTER** again to submit the order to the market.

The price must be increased or decreased by valid ticks.

Using the Keyboard to Control Order Quantity

The mouse or the spin buttons may be used to adjust the quantity in the quantity text box. However, you may also use the keyboard to manually enter a quantity.

► **To use the keyboard to manually enter a quantity:**

1. Select a **Market Grid** cell; press the **Insert** (Buy order) or **PageUp** (Sell order) button.

Or:

If the **Floating Order Entry** window is enabled, select a **Market Grid** row and press the **Insert** (Buy order) or **PageUp** (Sell order) key.

2. Use **TAB** or **SHIFT+TAB** to move to the quantity text box.
3. Use the keyboard to enter a value.
4. Press **ENTER** to review the order.
5. Press **ENTER** again to submit the order to the market

Market Grid Pane

Contract	List Sta	WADays	EXCHG	BEPT	MARKT	MARKY	MARKS	BEPOs	BEPTPos	LEHPO	LEHPO	FORM	EXPIR
MAR01		202	ABC	10.00						10.00	5	MAR01	MAR01
JUN01										10.00		JUN01	JUN01
SEP01										10.00		SEP01	SEP01
DEC01										10.00		DEC01	DEC01

When you select a product from the **Market Explorer** window, the **Market** window opens. It is composed of:

- **Order Entry** pane that allows you to enter and submit orders.
- **Market Grid** displays contract information.

The **Order Entry** pane and **Market Grid** are the principal trading tools that allow you to monitor the current market and place orders.

Features of the **Market Grid** include:

- Displays contract and real-time price information for the products you select.
- **Calculate Implieds for spreads instead of using Exchange Implieds.**

Because some exchanges only display implied pricing data when the implied prices and quantities are at the *best* price in the market, you may not see some implied values.

This new feature calculates and displays implied pricing in Market Depth as well as the inside market.

Enable this feature by clicking **Calculate Implieds instead of using Exchange Implieds** in the **Properties Trading** tab.

- **Implieds From Implieds:** After you enable **Calculate Implieds instead of using Exchange Implieds**, you can enable the **Implieds From Implieds** option. X_TRADER® also calculates and displays implieds from implieds values (sometimes called 2nd generation implieds).
- **Include Implieds for spreads in Market Columns and in Depth.** Displays Implied price and quantity data in the same columns as direct price and quantity data.

Enable this feature by clicking **Include Implieds in Market Columns and in Depth** on the **Properties Trading** tab.

You have the option to view implied outright, implied spread, and implieds from implieds quantities and prices in the direct market columns *and/or* Implied data columns.

In previous versions of X_TRADER®, the **Market Grid** did display implied outright prices and quantities. Now, the **Market Grid** displays implied spread and implieds from implieds prices and quantities.

- Ability to customize:
 - Include or exclude fields and columns by using the **Market Grid** context menu
 - You may also select **Default Visible Columns** from the X_TRADER® **Properties Trading** tab. The default visible columns impact all new Market windows.
 - Format options include fonts, colors, and borders.
 - Ability to save your customized workspaces.

Market Grid Pane Field Descriptions

The **Market Grid** pane provides real time price information about the products you select.

► **There are three ways to customize the columns that display in the Market Grid:**

- Define **Default Visible** columns via the X_TRADER® **Properties Trading** tab. Defining the default visible columns ensures that every new **Market** window displays only the default columns of information.
- X_TRADER® offers 5 pre-defined **Market Grid** layouts. Use the context menu to select a **Market Grid** layout. Select Market, Range, Depth, Implied, and/or Theos.
- Customize each **Market Grid** window to include or exclude the columns and rows. Use the context menu and select the **Hide/Show** columns option to select the columns that suit your trading environment and style.

Note: The Eurex exchange displays only four (4) digits in inside market. Therefore, the maximum **Bid/Ask Quantity** is 9999. This is a limitation of the Eurex API for UserDevices and MISSes. If the inside market is greater than 9999 and you wish to view that data, open Market Depth feature in the **Market Grid**.

Column	Description
Contract	Contract Symbol, Expiration Month/Year
Del Srs	<p>Deletes all working orders for this series of contracts. This includes:</p> <ul style="list-style-type: none"> • All of the working orders • All orders in a "Hold" status including "Blotter" orders • All Stop orders • A Delete All confirmation dialog box displays if you enable the Delete All Confirmation box option in the Properties Order Book tab. Click OK to delete working orders and close the box. <p>This feature behaves differently for an Exchange trader versus a Proxy (TTORD) trader:</p> <ul style="list-style-type: none"> • At this time, only LIFFE supports the feature. • It is available via the Market Grid or MD Trader™. • If an exchange trader uses this feature, all working orders for that contract for all sponsored proxy traders are deleted. • If a TTORD trader attempts to use this feature, it converts one message into to multiple individual delete requests by the client application to prevent a trader from deleting the exchange trader's working orders (for that contract.)
Depth	Displays an icon used to show or reveal Market Depth
Bid Mbr	Bid Member ID (If supplied by the exchange.)
WrkBuys	<p>Working Buys for Entire Group ID: Reflect the total number of working contracts for your entire group across all prices.</p> <p>Group ID from exchange login (for example, AAAAABBB001--AAAAA represents Member ID, BBB represents Group ID, and 001 represents Trader ID). One or more traders may be assigned the same Group ID.</p>

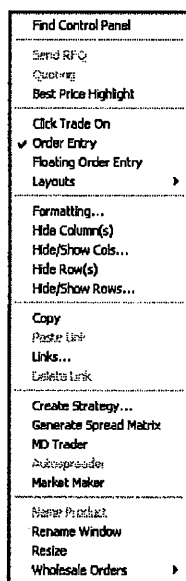
Column	Description
BidQty	<p>Bid Quantity</p> <p>The Eurex exchange displays only four (4) digits in inside market. Therefore, the maximum Bid/Ask Quantity is 9999. This is a limitation of the Eurex API for UserDevices and MISSEs. If the inside market is greater than 9999 and you wish to view that data, open Market Depth feature in the Market Grid.</p>
ThrshBid	<p>Threshold Bid Price. The exchange establishes the upper and lower price reasonability limits for Euronext Futures. If trading occurs outside the thresholds, the exchange ceases trading for the product. A frozen market requires manual release by the exchange.</p>
BidPrc	Bid Price
BidQty Accum	Accumulated Bid Quantity: Use only when you enable Market Depth information.
BidPrc Avg	Bid Price Average: Use only when you enable Market Depth information.
AskPrc Avg	Ask Price Average: Use only when you enable Market Depth information.
AskQty Accum	Accumulated Ask Quantity: Use only when you enable Market Depth information.
AskPrc	Ask Price
ThrshAsk	<p>Threshold Ask Price. The exchange establishes the upper and lower price reasonability limits for Euronext Futures. If trading occurs outside the thresholds, the exchange ceases trading for the product. A frozen market requires manual release by the exchange.</p>
AskQty	<p>Ask Quantity</p> <p>The Eurex exchange displays only four (4) digits in inside market. Therefore, the maximum Bid/Ask Quantity is 9999. This is a limitation of the Eurex API for UserDevices and MISSEs. If the inside market is greater than 9999 and you wish to view that data, open Market Depth feature in the Market Grid.</p>

Column	Description
WrkSells	Working Cells for Entire Group ID: Reflect the total number of working contracts for your entire group across all prices. Group ID from exchange login (for example, AAAAABBB001--AAAAA represents Member ID, BBB represents Group ID, and 001 represents Trader ID). One or more traders may be assigned the same Group ID.
Ask Mbr	Ask Member ID (If supplied by the exchange.)
NetPos	Net Position
FFNetPos	Fast Fill Net Position
LastPrc	Last Price
LastQty	Last Quantity: Behaves differently for each Gateway. CME and Euronext: A cumulative total of all trades at that particular price. It sums the last quantity, while it remains at the current trading price. Once the trade price changes, the last quantity resets. LIFFE: Treated per individual order. Eurex and Xetra: The last traded quantity.
Total	Total Traded Quantity
High	High Price
Low	Low Price
Open	Opening Price
Close	Closing Price
Settle	Settlement Price
Chng	Last Price - Settlement
TheoPrc	Theoretical Price
TheoBid	Theoretical Bid Price
TheoAsk	Theoretical Asking Price
QAct	Quote Action (Sends Individual Quotes)
BQQ	Test Bid Quote Quantity

Column	Description
BQP	Test Bid Quote Price
Mkt BQQ	Market Bid Quote Quantity
Mkt BQP	Market Bid Quote Price
Quote	Checkbox activates/deactivates contract for quoting
Market AQQ	Market Ask Quote Quantity
Market AQP	Market Ask Quote Price
AQP	Ask Quote Price
AQQ	Ask Quote Quantity
Imp BidQty	Implied Bid Quantity. For options, two sets of these columns (put and call sides) exist.
Imp BidPrc	Implied Bid Price. For options, two sets of these columns (put and call sides) exist.
Imp AskQty	Implied Ask Quantity. For options, two sets of these columns (put and call sides) exist.
Imp AskPrc	Implied Ask Price. For options, two sets of these columns (put and call sides) exist.
Gamma	Change in Delta Given 1 Point Change in Underlying
Delta	Options Theoretical Pricing Model (Theo Server) data categories: Change in Price Given 1 Point Change in Underlying
Vola	Options Theoretical Pricing Model (Theo Server) data categories: Percent Volatility
Vega	Options Theoretical Pricing Model (Theo Server) data categories: Price Change Given 1 % Change in Vola
Rho	Options Theoretical Pricing Model (Theo Server) data categories: Price Change Given 1 % Change in Interest Rate
Theta	Options Theoretical Pricing Model (Theo Server) data categories: Price Change for Every Day that Elapses
Click Trd	Activate/Deactivate Click Trading by Contract

Column	Description
S (Status)	Action, Closed Fast Mkt, Not Tradable, Pre-Trading, Tradable, S = Post Trading
Expiration	Expiration Month/Year

Using Market Grid Context Menu



The **Market Grid** context menu lists additional features that you can use to customize the **Market Grid** pane.

Menu Selection	Description
Find Control Panel	Brings the X_TRADER® Control Panel to the foreground of your workspace.
Send RFQ	Generates a dialog box that is used to send a Request for Quote for a specific contract with a specific quantity.
Quoting	Indicates whether quoting is enabled for this Market Grid . Quoting must first be enabled on the Properties Trading tab.
Best Price Highlight	Enables Best Price Highlighting .
Click Trade On	Enables Click Trading . Refer to the Click Trading section for more information.
Order Entry	If enabled, the Order Entry pane is automatically displayed with the Market Grid . Deselecting this option removes the

Menu Selection	Description
	Order Entry pane.
Floating Order Entry	Displays a Floating Order Entry window.
Layouts	<p>The Market Grid provides five pre-formatted layouts that display different data. Select multiple layouts to combine information. For more information, the Market Grid Field Descriptions section defines these layouts. Each layout includes the following columns.</p> <ul style="list-style-type: none"> • Market: Default layout. Displays WrkBuys, BidQty, ThrshBid, BidPrc, AskPrc, ThrshAsk, AskQty, WrkSells, Ask Mbr, NetPos, FFNetPos, LastPrc, LastQty, Total and Expiration. • Range: Adds High, Low, Open, Close, and Chng (Change) pricing data. • Depth: Adds the Market Depth feature to list the next best prices. • Implieds: Adds columns for Implied Bid Quantity, Implied Bid Price, Implied Ask Quantity, and Implied Ask Price. • Theos: Only available if you are using a theoretical server. <p>You can also select Default Visible Columns via the X_TRADER®. Selected columns display automatically for all new Market Grids.</p>
Formatting	Customizes fonts, colors, and borders.
Hide Column(s)	After you click a cell or multiple columns in the market, this option immediately hides the column(s). Changes affect only this window.
Hide/Show Cols	Select columns to hide or show from a dialog box listing. Changes affect only this window.
Hide Row(s)	After you click a cell or multiple rows in the Market Grid , this option immediately hides the row(s). Changes affect only this window.
Hide/Show Rows	Select rows to hide or show from a dialog box listing. Changes affect only this window.

Menu Selection	Description
Copy	After selecting the data to be copied, use this option to place the data on a clipboard. The data may then be pasted to another program (for example, Excel).
Paste Link	After copying data from another source (for example, Excel), you can paste the data into X_TRADER®. The Paste Link feature creates a dynamic link between the two programs so that data from one program automatically updates the data in the other. The Paste Link function is only valid to copy from Excel to the Market Grid . See Using Excel for Theoretical & Implied Pricing for additional information.
Links	Opens a dialog box listing all applications that have links to the Market Grid .
Delete Link	Removes an established link.
Create Strategy	The Spread Trading section provides detailed information.
Generate Spread Matrix	The Spread Matrix simplifies the tasks of monitoring and trading calendar spreads.
Generate Butterfly Condor Matrix	Butterfly Condor Matrix allows you to monitor spreads with three and four legs. Only LIFFE supports the trading of the Butterfly and Condor trading strategies.
MD Trader™	Opens MD Trader™ window.
Name Product	Rename a strategy by clicking one of the Market Grid cells in the spread's row, and entering the name of your choice.
Rename Window	The default window name lists exchange and product names. Use this option to enter a name you've selected.
Resize	Use this option to automatically resize your Market Grid window. It quickly widens or narrows your window after adding or deleting columns or rows.

Menu Selection	Description
Wholesale Orders	<p>Provides four options to submit Wholesale Orders on the LIFFE exchange:</p> <ul style="list-style-type: none">• Block trades are high volume trades in any outright or strategy product.• Basis trades are strategies for long-term bond markets that incorporate a futures leg and an underlying (or cash) leg.• Against Actual trades are strategies for commodities markets that incorporate a futures leg and an underlying commodity leg.• Flex Options trades are essentially FTSE 100 options, except that any expiration day and exercise price can be specified.

Using Best Price Highlighting in Market Grid

Contract	WkdyType	Qty	BidPrc	AskPrc	AskQty	WklySett	Method	FFNetBus	LastPrc	LastQty	Total	Chng
DOCT02									90.840	5		0.0005
NOV02									90.765	20	79	0.0005
NOV02		1000	90.800	90.800	1000				90.740	10	3725	0.0005
MAR02									90.660		1000	0.0005
MAR02									90.585	2000	2000	0.0005
SEP02									90.720		1000	0.0005
SEP02									90.530	200	200	0.0005
MAR02									90.735	2000	2000	0.0005
NOV02									90.725	2000	2000	0.0005
NOV02									90.710	1000	1000	0.0005
NOV02									90.695	5	10	0.0005

One of the features available in the **Market Grid** pane is **Best Price Highlighting**. When enabled, the highlighting surrounds the best **Bid/Ask Quantity** and best **Bid/Ask Price** columns. As the market changes and the bid or ask prices changes, the highlighting moves to the row with the new best price.

It is possible that more than one exchange displays the best price at any one time, and in this case more than one best price is highlighted. No assumptions should be made that any one market is showing as both the best bid and ask (assuming more than one exchange is being traded on).

▶ To enable Best Price Highlighting:

1. Right-click anywhere within the **Market Grid** pane to open the context menu.
2. Click **Best Price Highlight**.

The highlighting colors used with this feature can be changed or set from the **Properties** dialog box, **Color** tab.

Using the Order Change Dialog Box



The **Order Change** dialog box allows you to delete, cancel/replace or change a working order without accessing the **Order Book**.

Access the **Order Change** dialog box from any of the following X_TRADER® windows:

- Market Grid
- Spread Matrix
- Butterfly Condor Matrix

▶ To access the Order Change dialog box:

1. Double left-click in a cell where a working order exists. The **Order Change** dialog box displays and its fields populate with the order details. (A **Floating Order Entry** window may also display.)

Note: The order you entered first displays when you open the **Order Change** dialog box. You identify the order that you want to modify by reviewing the quantity



2. To select the correct order, use the **Page Up** or **Page Down** arrows to display other orders.
3. Make any changes to the order and click the appropriate button: **Delete**, **Cancel/ Replace** or **Change**.

You cannot change the LIMIT/Market or order type (i.e., **GTD**) fields.

Price Trend Indicators in the Market Grid

Often, it is useful to know if the last trade for a given product occurred on an uptick, downtick, or with no change in the price.

X_TRADER® provides this information in the **LastPrc** (Last Price) column in the **Market Grid**. The cell is highlighted in **green** to indicate an **uptick**; and is highlighted in **red** to indicate a **downtick**. If there was no change in the last traded price, the cell is white.

Using the Market Depth Feature

Contract	Depth	Bid Price	Wk Buy	Bid Qty	Thresh Bid	Bid Pct	Bid Qty	Bid Price	Bid Pct	Ask Price	Ask Qty	Ask Pct
B.MARK	5	0										
B.MARK	5	0										
B.MARK	5	0										
B.MARK	5	0										
B.MARK	5	0										

Not all exchanges provide market depth data. However, for those exchanges that do, X_TRADER® provides the **Market Depth** option in the **Market Grid** pane to display the aggregate market depth data for all orders at the same price level.

► To enable the Market Depth feature:

1. In the **Market Grid**, right-click a cell and from the context menu and click **Layouts**.
2. Select **Depth** to enable the feature.

Market Depth features and functions include:

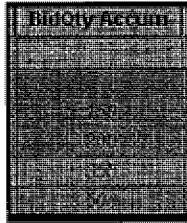
- Color-coded rows that allow you to immediately see the various levels of depth that are available. Customize these colors in the Properties Color tab.
- **Market Depth** icon: The **Depth** column in the **Market Grid** provides an icon after each contract identifier. When closed, all the working buy and sell quantities represent the sum of all price levels.

Note: Working buy and sell quantities reflect activity for all traders with the same Group ID.

- **Market Depth** rows: Trade on the **Market Depth** rows. Click-Trading quantity and offset settings apply.
- Arrow buttons: Allow you to open and close columns to disclose more information.
- Left-click: Expands the column to show or hide the aggregate best prices. The working buy and sell quantities for each price level display.
- Displays Implied In, Implied Out, Implieds From Implieds bid and ask quantities and prices in Market Grid columns and rows.

Adding Bid and Ask Price Averages to the Market Grid

Use the **Accumulation** columns to take all the outstanding bids/offers at the specified price or better.



▶ **To add Bid and Ask Price Averages and Accumulations to the Market Grid:**

1. Right-click on the **Market Grid** (excluding the bid/ask price if **Click Trading** is enabled) to access the **Market Grid** context menu.
2. Click **Show/Hide Columns**, and select the **BidQty Accum**, **BidPrc Avg**, **AskPrc Avg**, and **AskQty Accum** columns to display these columns.
3. Save your workspace with **Market Depth** option turned off to retain customized settings.

Using Excel for Theoretical and Implied Pricing

You can create one or more links between the **Market Grid** and Microsoft Excel.

You can link the X_TRADER® quoting tool to an Excel worksheet to calculate quotes using proprietary pricing models. To add, delete, or edit a theoretical server (non-Excel pricing model interfacing via API), refer to the **Properties** dialog box **Analytics** tab.

You can also use Excel to calculate implied prices and quantities.

Establishing a Link for Theoretical and Implied Pricing

You must have X_TRADER® and Excel open to perform this action.

The response time from Excel is affected by several variables, including:

- Workstation available memory (RAM)
- Microprocessor(s) speed
- Number and types of other applications running on the workstation

For example, if you meet X_TRADER®'s minimum hardware requirements, but are running a complex theoretical quote-generating program for multiple products/strikes, this will create a significant load on your microprocessor(s), which may slow the response time. Consult your System Administrator for assistance.

► **To create a link between X_TRADER® and an Excel worksheet:**

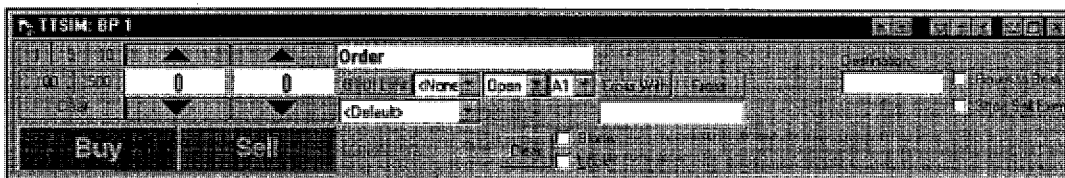
Note: To automatically open Excel when you open a saved workspace, you must create excel links *from* Autotrader™ *to* Excel. If you only have links *from* Market Grid *to* Excel, the links are saved, but do not automatically open when you open the workspace.

1. In order to copy and paste link one block of data, make sure that your **Market Grid** and Excel pricing model columns are in the same order, or repeat the steps below to copy and paste links for each column of data.
2. Select the pricing data from the **Market Grid** that you want to copy: Left-click the top left cell and hold the left mouse button down while dragging the mouse to the bottom right-hand cell of the desired data. All cells you choose are selected. Right-click within the selected area to access the context menu, and click **Copy**.
3. Open your **Excel** model and right-click in the top left cell where the data should be pasted. From the Excel right-click menu, click **Paste Special**. From the **Paste Special** dialog box, select the **Paste Link** option button. By default, the data is pasted as **Unicode Text**. Click **OK** to close the dialog box.
4. Run your **Excel** model.
5. If you want to copy and paste a link for one block of data, make sure that the **Market Grid Theo Prc, Theo Bid, and Theo Ask (or implied price and quantity)** columns are in the same order as your Excel model. Or, you can repeat the steps below to copy and paste links for each column of data.
6. To display these columns, right-click anywhere on the **Market Grid** (excluding bid/ask price if **Click Trading** is enabled) to access the context Menu and click **Hide/Show Columns**. A checkmark appears next to the **Theo Prc, Theo Bid, and Theo Ask** columns. Make sure that your **Market Grid Theo** columns are in EXACTLY the same order as your Excel worksheet columns.
7. Select the **Excel** cells to be copied to X_TRADER®. Right-click within the selected area to access the Excel context menu, and click **Copy**. In the X_TRADER® **Market Grid**, right-click the top left cell of the area where you will be pasting the Excel data, and click **Paste Link** from the **Market Grid** context menu.

Your Excel data now appears in your **Market** window. The **Paste Link** command ensures that numbers updated in Excel will also be updated in X_TRADER®.

To quickly identify the **Market Grid** cells that are being fed from the Excel model, you can select a distinctive background color (the default is light blue with black text). You can set a default background color from the X_TRADER® **Properties Color** tab. Select **Excel Link** from the displayed list and click a color from the palette. Click **OK** to apply the color and exit the **Properties** dialog box. Since this is the default setting all new links will also be identified by this background color.

Order Entry Pane



When you select a product from the **Market Explorer** window, the **Market** window opens. It is composed of a top pane, the **Order Entry** pane, and a bottom pane, the **Market Grid**, which displays contract information. The **Order Entry** pane and **Market Grid** pane are the principal trading tools that allow you to monitor and place orders in the current market.

The **Order Entry** window has many pre-set fields, properties, and buttons that help you to trade quickly and efficiently.

You can also display a **Floating Order Entry** window instead to open independently of the **Market Grid**, and/or disable the **Order Entry** pane as part of the **Market Grid**.

Order Entry Pane Field Descriptions

Field	Description
Quantity Buttons	<p>These pre-set buttons, located in the upper left-hand corner, allow you to quickly enter and increment a quantity. The quantity defaults are 1, 5, 10, 100, and 500.</p> <p>You can edit these buttons to reflect customized quantities: right-click a button, input the desired quantity, and press ENTER. The button immediately changes to the new quantity. The edited quantity button is saved with your workspace.</p>
Clear	<p>Located below the quantity buttons clears the Quantity field (only). To clear the entire Order Entry window, click Clear below the account type field.</p>
Quantity/Price Fields	<p>The Order Quantity field appears on the left; the Price field appears on the right.</p> <p>You can use Clear located below the Quantity buttons to clear the Quantity field, but not the Price field. Each field has its own spin button (the up and down arrows). Choose the spin button to increase or decrease the quantity and/or price. You may also use the keyboard to manually enter a value in the field. The Price and Quantity fields may also be increased using a right-click or decreased using a left-click.</p>
Order Information	<p>This field automatically reflects the contract information provided when you left-click any row in the Market Grid: quantity, price, product, month/year, and order restriction type. This field also displays a "C" for call or "P" for put.</p>
GTD/GTC/Date Button	<p>Click this button to toggle among GTD, GTC, and Date.</p> <p>The default selection is GTD: the order is valid only for the current trading session.</p> <p>GTC indicates that the order is valid until you cancel the order or the contract expires.</p> <p>Date allows you to select an order expiration date. Choosing Date opens a calendar with the current date circled in red. Select the expiration month and day for the order and click OK.</p>
Limit (Market) Button	<p>Click this button to toggle between Limit (default) and Market orders.</p>
Order Restrictions	<p>*Available restrictions include None, DiscQty, FOK, IOC, MOO, MV, and STOP.</p>
Open/Close	<p>Open position or Close position (annotation for use by the trader).</p>

Field	Description
Acct	<p>Select one of the following account types.</p> <ul style="list-style-type: none"> • A1: First Agent Account (e.g., broker) • G1: Pre-Designated Giveup Trade • G2: Designated Giveup Trade • M1: First Market Maker Account • M2: Second Market Maker Account • P1: First Principal Account (e.g., proprietary trader) • P2: Second Principal Account • U1: Unallocated. For orders that have not been allocated to a customer account or where allocation is a middle/back office function.
Cross With	<p>This button displays if you enable Order Crossing from the Trading tab in the Properties dialog box. Click the Cross With button to trade with a specific counter party. Enter the counter party's Trader ID where indicated. Support of this feature is exchange specific. If the exchange does not support use of this feature, the message "Order Format Invalid" displays in the Audit Trail.</p>
Cross	<p>This button displays if you enable Order Crossing from the Trading tab in the Properties dialog box. Click the Cross button to perform a cross trade. The Order Entry pane will change to display the appropriate fields to perform a cross trade—including BUYER and SELLER lists of customer accounts. In addition, the BUY and SELL buttons will be replaced by BUY FIRST and SELL FIRST buttons. By default, order crossing is enabled. This feature may be disabled from the Properties dialog box Trading tab. Deselecting Order Crossing will remove the Cross With and Cross buttons from all Order Entry windows.</p>
ITX	<p>This button displays if you enable Order Crossing and ITX from the Trading tab in the Properties dialog box. This button displays on the right side of the Order Entry window. Some exchanges require a trader to send an Intention to Cross notification. Choosing ITX sends the intention to cross notification to the exchange (However, this is rejected for markets that do not support this announcement). After you click the ITX button, a 15-second (default) countdown displays on its face (This timer is for informational purposes only and does not trigger a cross order when it gets down to zero.). You can set the number of seconds from the Properties dialog box. X_TRADER® does not time cross orders for markets that require a time interval between sides of the cross being submitted. You must manage this manually.</p> <p>Do not confuse Intention to Cross with a cross order per se, or with the LIFFE ITX function; Intention to Cross is an announcement of the desired intention to cross. The LIFFE ITX is a cross order, not an announcement.</p>

Field	Description
Customer Selection Field	This field displays the current customer defaults profile in use. The drop list contains all customer accounts for which the SEL box is selected from the Customer Defaults window. X_TRADER® is installed with a default account. The default profile specifies placing GTD limit orders for an agent account. No other information is assumed. You may immediately trade with the default account. Other order types (e.g., GTD Market) can be placed by manually changing the order parameters.
Customer Account	You may manually enter a customer account (e.g., EUREX ACCOUNT #, back office account) or select an account from the drop list by clicking the arrow. Your middle/back office may define a specific code for each customer to facilitate the association of each trade with a specific account. The account information displayed is taken from the Customer Defaults Account # field. Use this Order Entry field to change or add the client account for the current order.
Buy and Sell Buttons	<p>Choose these buttons to send an order to market. In Broker Mode, clicking on the bid side will enlarge the size of the Sell button; clicking on the ask side will enlarge the size of the Buy button. The oversized Buy or Sell buttons provides an immediate visual confirmation as a result of clicking the bid or ask. If you are using Order Entry Style 2 (replication of OVMS client Order Entry window), the buy or sell confirmation is appears next to the order price and quantity fields. Broker Mode and Order Entry Style 2 settings are selected via the Properties dialog box Trading tab.</p> <p>If you are working with an auction product the Buy and Sell buttons have additional functionality.</p>
Apply Buy or Apply Sell	Click the appropriate button to confirm the order and send the order to market. To cancel the order (prior to sending it to the market), click the Clear button.
Clear	<p>The Clear button located to the left of the Lock and Blotter check boxes will clear all contract, price, and quantity data without sending the order to market.</p> <p>The Quantity Clear button is located below the quantity buttons. This button will change the quantity to zero without impacting the other fields.</p>
Blotter	When the Blotter box is checked, the order will be retained in the Order Book (not sent to market). The Order Book acts as a location to hold the order until the user decides to send it on to market at some later time. The change to the order is reflected in the TT™ Status column in the Order Book .
Lock	When the Lock box is checked, a buy or sell confirmation is requested before sending an order to market. After choosing the buy or sell button, the appropriate button title will change to Apply Buy or Apply Sell . Use the Properties Trading tab to enable this feature for every Order Entry window.

Field	Description
Destination	A left-click in the in the Bid MBR or Ask MBR columns of the Market Grid will fill price and quantity fields of the Order Entry pane and the name of the Market Maker or ECN appears in this box. If the order is to use the NASDAQ SelectNet System, you must choose a Market Maker and enter the name in this box.
Route to Best	Certain exchanges permit an order to be matched outside the exchange if it cannot be matched within. When checked, this indicates that an away market can be used for the current order. In the case of some exchanges, the name of the away market must also be entered in the Destination field.
Short Sell Exempt	Some markets exempt certain traders from short-sell notifications for some trading types. Traders with this exemption should indicate the exemption by a check mark in this box.

* Order restrictions include:

- **None:** No additional restrictions on the order.
- **DiscQty:** Disclose Quantity disguises trading volume. Discloses partial amount of total quantity. Quantity box opens.
- **FOK:** Fill or Kill. Immediate fill of entire quantity or immediate cancellation of order.
- **IOC:** Immediate or Cancel. Immediate partial fill before balance is cancelled.
- **MOO:** Market On Open Order (MOO). MOO orders are valid only during the pre-opening period for the LIFFE gateway, and are intended for execution at the opening market price.
- **MV:** Minimum Volume. Minimum volume of partial fills; default is zero. The Minimum Volume Order type is not supported by all exchanges (i.e., LIFFE supports MV and EUREX does not). When this restriction is chosen, a field labeled Min Vol will appear in the Order Entry pane. Enter the minimum volume quantity, and place the order.
- **STOP.** The Stop order establishes a trigger price for a market buy or sell order. You can perform all normal operations (hold, submit, change, cancel, replace, and delete) on a stop order. When you choose the STOP restriction, a field labeled Stop Prc displays. Enter the trigger price, and place the order. A stop order displays in the Order Book with a Working status, but it is not actually in the market. A negative order number (-###) displays, indicating that it is a "synthetic" order. When the stop triggers, the order becomes the native order type and remains in the Order Book until filled.

If the trader who originated the order is not logged in (in other words, has no order router), when the order is triggered, the order is sent to market with the trader ID of another trader with the same Group ID. If another trader in the same group is not available (no one from his group is logged on), the order status changes from Working to Hold and does not trigger until the order is resubmitted by the original trader, or by a trader with the same Group ID.

A Stop Limit order is accepted by the LIFFE Gateway only if the limit price meets these criteria:

TRIGGER price \leq BEST ASK price, for a SELL STOP LIMIT

TRIGGER price \geq BEST BID price, for a BUY STOP LIMIT

And

TRIGGER price \leq LIMIT price, for a BUY STOP LIMIT

TRIGGER price \geq LIMIT price, for a SELL STOP LIMIT

X_TRADER® enforces only the second set of limits. A stop limit order is triggered only if the last traded price is within the trigger range. The trigger conditions are:

LAST TRADED price \leq TRIGGER price, for a SELL STOP order

LAST TRADED price \geq TRIGGER price, for a BUY STOP order

If multiple stop orders are in place for the same product at the same trigger price (for the same trader or multiple traders), they are processed in a FIFO (first in, first out) order.

If the Order Server of the LIFFE Gateway goes down, all stop orders must be moved to a hold status (in other words, they will not trigger). Held stop orders are not automatically resubmitted when the Gateway recovers. You must do this manually. Audit trail messages will show you that the orders have been held. In the event that an Order Router goes down, and the stop order triggers, but cannot be sent (because the Order Router is down), the Order Router of another trader in the same group as the trader who entered the order will be used to send the order to market. If no such Order Router is available, the stop order is put into a hold status and an audit trail message is generated.

Note: Support of order restrictions is determined by each exchange. The definition and use of the restriction may differ between exchanges and marketplaces. If the order type is not supported the Audit Trail displays an error message from the exchange. Refer to each exchange's Market Rules for additional information.

Changing the Style and Appearance of the Order Entry Pane

There are three **Order Entry** window styles available. Style 1 is pictured above. These styles are changed from the **Trading** tab of the **Properties** dialog box:

Style	Description
Order Entry Style 1	The default. Order Entry Style 1 is pictured throughout this documentation. It was designed for the Windows NT version of X_TRADER®. The order entry window does not display the Cross Trading buttons unless you have enabled Cross Trading via the X_TRADER® Properties dialog box.
Order Entry Style 2	Closely resembles the design of the original X_TRADER® OpenVMS product.
Keyboard Validation Mode	Keyboard Validation Mode enables a new Order Entry Style .

► **To select an Order Entry window style:**

1. From the **Control Panel**, open the **Settings** menu and click **Properties**.
2. In the **Order Entry Window Style** box select the appropriate option: **Order Entry Style 1** (the default), **Order Entry Style 2**, or **Keyboard Validation Mode**.
3. Click **Apply** and **OK**. The **Order Entry** window style immediately changes all open windows. All new windows open in this style.

Executing an Order in the Order Entry Pane

► To execute an order in the Order Entry pane:

1. Choose a customer account. This assumes that you have set up one or more **Customer Default** profiles.
2. One **Customer Defaults** profile (titled **Default**) is provided so that you can immediately trade. The Default profile specifies GTD limit orders for an agent account. No other information is assumed. You can place other order types and restrictions (for example, GTD or Market) by manually changing the order parameters. To create customized customer profiles so that manual changes are not necessary, create **custom Customer Defaults**. Refer to the **Customer Defaults** section for information.
3. Click any cell in the appropriate expiration/strike row on the bid or ask side of the screen.
4. The default options **Market** window displays the **Calls** on the left and the **Puts** on the right. Click the quantity to display the current quantity and price information (limit orders only). Clicking the price displays the current price with a zero quantity (limit order). The contract information immediately appears in the **Order Summary** field.
5. Add or change any necessary information, for example: quantity, price, order type/restriction.
6. To execute, click **Buy** or **Sell**.

Executing a Mutual Offset Order

The **Mutual Offset System (MOS) Agreement** created between the Chicago Mercantile Exchange (CME) and the Singapore Exchange (SGX) in 1984 enables you to open a futures position on one exchange and liquidate it on the other. In this way, you manage your overnight risk.

The agreement now includes four contracts:

- Eurodollars
- Euroyen TIBOR
- Euroyen LIBOR
- Japanese Government Bonds

You must first designate a trade as a MOS trade prior to execution. X_TRADER® allows you to execute MOS orders.

For more information about Mutual Offset trades, go to the CME web site: <http://www.cme.com/clr/clring/ctrctspecs/mosa2400.html>

▶ **The following procedures describes how to execute this type of trade:**

1. From the **Control Panel**, click **Settings** and select **Customer Defaults**.
2. Find **Customer Default** row you want to designate as Mutual Offset trades and set the **Acct** column to **G2**.
3. In the **Give Up** column, you must specify the Mutual Offset order by completing the following two steps:
 - Type **sx** as the first two letters.
 - Type the clearing firm number. (This is a number between 1 and 5 digits.)

For example: You set the **Give Up** column to **SX12345**, where **12345** is the mutual offset for Eurodollars.

4. Close the **Customer Defaults** dialog box.
5. Open a **Market Grid** with the contract you want to trade.
6. In the **Default** field, select the **MOS Customer Default** from the list.
7. Send your order.

Using the Mouse to Control Order Quantity

Most users use the keyboard or the spin buttons to enter order quantity amounts in the quantity text box. However, you may also use the mouse to increase or decrease order quantity.

► **To use the mouse to increase or decrease order quantity:**

1. Populate the **Order Entry** pane from the **Market Grid**.
2. Click in the **Order Quantity** text box.
3. Right-click to increase order quantity.

Or:

Left-click to decrease order quantity.

Using the Mouse to Control Price

Most users use the keyboard or the spin buttons to adjust the price in the price text box. However, you may also use the mouse to increase or decrease price.

► **To use the mouse to increase or decrease price:**

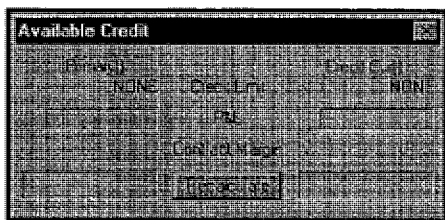
1. Populate the **Order Entry** pane from the **Market Grid**.
2. Click in the **Price** text box.
3. Right-click to increase price.

Or:

Left-click to decrease price.

The **Price** field increments and decrement by ticks.

Establishing Available Credit



If your trading environment uses the **Guardian Risk Management** tool, the **Available Credit** dialog box displays available credit information in the primary currency and the margin account currency, including Credit Limits, Profit/Loss, and Contract Margin. The X_TRADER® Administrator uses Guardian to select both currencies. The primary currency is selected from the **Currency Table Setup**, and the margin account currency is selected via the **Guardian Trader Setup** window.

Totals in green indicate a positive available balance; totals in red indicate a deficit. When the risk controls are enabled, a zero or negative credit limit disallows trading.

► **To access the Available Credit dialog box:**

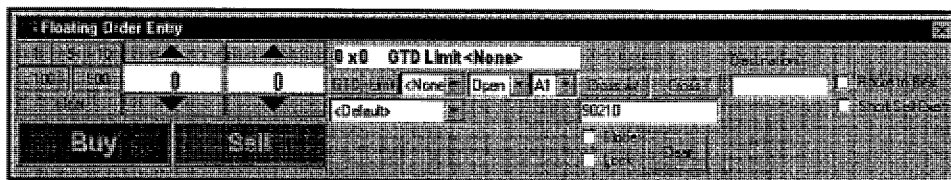
1. From the **Control Panel**, open the **Window** menu and click **Available Credit**.
2. Click **Recalculate**. You must click **Recalculate** in order to display the current total. This allows X_TRADER® to reserve processing power for high priority actions such as order processing.

Closing the Order Entry Pane above the Market Grid

► **To close the Order Entry pane:**

Right-click the **Market Grid** (excluding **Bid/Ask Price** cells if **Click Trading** is enabled) to access the context menu. Click **Order Entry** to remove the check mark.

Using the Floating Order Entry Window



The **Floating Order Entry** window opens independently of the **Market Grid**, allowing you to further customize your workspace. Because the **Floating Order Entry** window is detached from the **Market Grid** you can place it anywhere on your screen. This is useful when you have multiple **Market Grids** open to monitor several products and exchanges.

You may use the standard **Order Entry** window (opens with the **Market Grid**), the **Floating Order Entry**, or a combination of both. By default, both the **Order Entry** and **Market Grid** open as one window.

The **Floating Order Entry** window is populated with data from any and all active windows. For example, if you have both the standard **Order Entry** window and a **Floating Order Entry** window open, when you click a contract bid price, both windows will reflect the contract information, including the price. Only the **Quantity** field is independent. Entering a quantity in one window does not populate the **Quantity** field of the other **Order Entry** window.

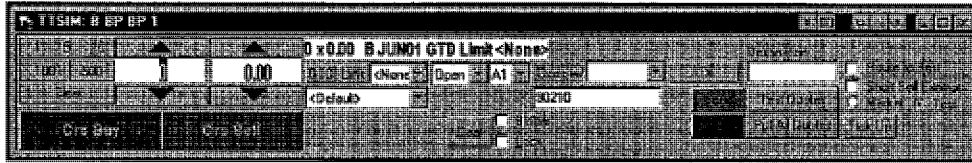
To populate multiple **Order Entry** windows with the same **Customer Default** trade information, use the **Customer List**. This is especially useful when you are monitoring multiple products and markets and placing orders for the same customer.

► To enable/disable the Floating Order Entry window (Disabled By Default):

1. To enable/disable **Floating Order Entry**, right-click anywhere in the **Market Grid** (excluding the bid/ask price column if Click Trading is enabled) to access the context menu. **Floating Order Entry** is enabled if it is checked.
2. Select the **Floating Order Entry** option to enable the feature.

Clicking (X) in the top right corner of the **Floating Order Entry** window does not disable the feature. The first time you click a **Market Grid** cell, the floating window will display. To turn off the feature, you must follow the instructions above.

Quoting



You can generate quotes through:

- Proprietary theoretical pricing model.
- X_TRADER® Spread Table(s) and Product Group(s).
- Manually entering individual quotes.

You can respond to RFQs manually or enable autoquoting to automatically send a response.

Before you can use the quoting features within X_TRADER®, you must first complete a number of steps. These prepare the application to send and accept quotes and activate various functions on the X_TRADER® windows.

► To setup the quoting features you must:

1. Create Quoting Preferences.

In order to use the quoting feature, you must first indicate your quoting preferences. X_TRADER® quoting requires **ALL** of the following:

- **One or more Spread Tables:** Spread Tables allow you to define how wide quote spreads should be, based on a product's time to expiration and price. Multiple spread tables provide flexibility within the quoting system. For more information, refer to the **Spread Tables** section.
- **One or more Product Groups:** Product Groups allow you to define how the bid/ask values are calculated. You can specify the quote type, spread table, delete time, account, as well as other parameters. You can enable or disable Autoquoting via your Product Groups. For more information, refer to the **Product Group** section.
- **Each quoted product must be "associated" or assigned to a Product Group:** It is the **Product Group** that determines how a quote is generated. Therefore, in order to generate quotes, each product must be associated with one (and only one) product group. For more information, refer to the **Associating Products** section.

2. Enable quoting within X_TRADER®.

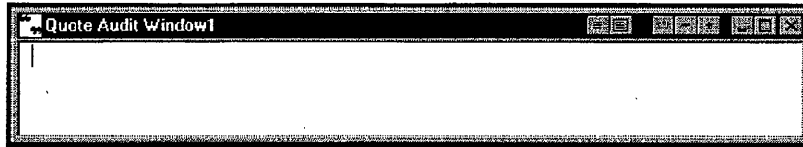
Quoting must be enabled within X_TRADER® to use the quoting features. Complete the following steps:

- **Enable Global Quoting:** Quoting is enabled for X_TRADER® as a whole via the **Properties Trading** tab.
- **Enable Quoting for individual Market windows:** This is done on a per window basis through the context menu of the individual window.

3. Tracking Quote Creation


X_TRADER® uses a specialized window, the **Quote Audit Trail**, to monitor quoting activity. The **Quote Audit Trail** displays messages related to quoting from the exchanges. You can also use this message window to monitor incoming and outgoing RFQs, as well as manual and autoquoting responses to RFQs.

Quote Audit Trail



All exchange messages relating to quoting display in the **Quote Audit Trail**. Use this window to confirm outbound quoting events and monitor inbound quoting events (i.e., RFQs).

► To open the Quote Audit Trail:

From the **Control Panel**, click **Quote Audit Trail**. 

Or:

From the **Control Panel**, open the **Windows** menu and click **Quote Audit Trail**.

Enabling Quoting

Enabling the **Quoting** tool is a two-step process. You must:

- Enable Quoting as a feature.
- Turn Quoting on for each individual **Market** window.

▶ Step 1: Enable & Disable Quoting as a Feature:

1. From the **Control Panel**, open the **Settings** menu and click **Properties**. The **Properties** dialog box opens with the **Trading** tab displayed by default.
2. Click inside the **Quoting** box to enable or disable **Quoting**. A checkmark indicates that Quoting is enabled for all **Market** windows.

▶ Step 2: Turn Quoting ON for a single window:

1. Right-click anywhere (excluding the bid/ask price columns if **Click Trading** is enabled) in the **Market Grid** to access the context menu.
2. Click **Quoting**. If Quoting is **ON**, a checkmark immediately appears next to the **Quoting** menu item. The absence of a checkmark indicates that **Quoting** for this **Market** window is **OFF**.

Disabling Quoting

▶ Turn Quoting OFF for a single window:

1. Right-click anywhere (excluding the bid/ask price columns if **Click Trading** is enabled) in the **Market Grid** to access the **Context** menu. If **Quoting** is **ON**, a check mark appears next to **Quoting**.
2. Click **Quoting**. The check mark immediately disappears and **Quoting** is turned off for this **Market** window.

Quoting Additions to the Order Entry Pane



When you turn on the **Market** window's **Quoting** option from the **Context** menu, the following buttons are added to the **Order Entry** pane of the **Market** window:

Field	Description
Send	Sends mass quotes to market for all activated strikes/expiration. You can edit the test quote columns. Manually editing a quote and click Send and the information goes in the test quote columns. If you choose not to edit these columns, click Send to generate a new quote—which you need to confirm—based on current market conditions.
Test Quotes	Generates test quotes wherever possible.
Delete	Deletes mass quotes sent to market. Test quotes are still retained. Use this button to pull all live quotes. If any unusual occurrence causes your workstation or X_TRADER® to unexpectedly shutdown, immediately after restarting click Delete.
Pull All Quotes	Pulls all live quotes from the market.
Tick Up	Up or down ticks the bid offer by one tick.
Test	Sends test quotes to the market.
Market	Sends market quotes to the market.

Quoting Additions to the Market Grid Pane



When you turn on the context menu's **Quoting** option, these columns are added to your **Market Grid** pane when **Test** is activated (the default):

Column	Description
QAct	Sends a quote for a single strike/expiration. If the strike/expiration is activated, a confirmation dialog box appears, and you can edit the quote information or accept the generated quote. Click Add to send the quote, Delete to delete the quote, or Cancel to cancel the action.
BQQ	Bid Quote Quantity (test quote)
BQP	Bid Quote Price (test quote)
Quote	<p>The quote column box indicates the active (checked) or inactive (unchecked) status of the strike/expiration. You must check this box to send a quote to market. An unchecked box denotes an inactive strike/expiration; therefore, no quote is sent.</p> <p>Deselecting this box deletes a quote from the market, if one exists.</p> <p>To select and activate/deactivate strikes/expiration, right-click anywhere in the Quote column to access the context menu. From this menu, click Select All, Calls, Puts, 2-Sided Mkts, or Last Prc. Then click Activate or Deactivate. All checked boxes in the Quote column are active strikes/expiration; all others are deactivated. Refer to the Activating a Strike or Expiration section for additional information.</p>
AQP	Ask Quote Price (test quote)

Column	Description
AQQ	<p>Ask Quote Quantity (test quote) The above test quote columns display when you click Test Quotes.</p> <p>Market quotes display when you click Market Quotes or Send. If the Market Quote columns currently display, click Test Quotes to automatically change to the Test Quotes environment; the reverse is also true.</p> <p>When these column headings display, only the test quote environment is viewed. The quantities always match those set in the product group dialog box immediately after quote generation, although they may change if you manually edit them.</p> <p>When mass quotes are sent, the market quote columns (defined below) automatically display. However, sending a single market quote maintains the test quote display, provided that the test quote environment was active when the individual market quote was sent. The cells for the currently sent market quote are selected in blue to let you know that the quote hit the market.</p>

These columns are added to your **Market Grid** pane when **Market** is activated:

Column	Description
Mkt BQQ	Market Bid Quote Quantity
Mkt BQP	Market Bid Quote Price
Mkt AQP	Market Ask Quote Price
Mkt AQQ	Market Ask Quote Quantity. These columns display all active quotes in the market and are updated according to price and quantity.

Activating a Strike or Expiration

You must activate the strike/expiration before sending the quotes to market. If a quote is not activated, test quotes are generated, but are not sent to market.

The **Market Grid Quote** column indicates the status of the strike/expiration:

- A checked box in the **Quote** column indicates an **ACTIVATED** strike/expiration. Generated or manually entered quotes are sent to market.
- An unchecked box in the **Quote** column indicates a **DEACTIVATED** strike/expiration. Generated and manually entered quotes are **NOT** sent to market.

▶ **Manually Activating or Deactivating an Individual Strike or Expiration:**

1. Each strike or expiration can be activated or deactivated by clicking the box in the **Quote** column.
2. If the box is checked, the strike/expiration is activated and quotes are sent to market. An unchecked box indicates that the strike/expiration may have test quotes generated, but the quote will not be sent to market.
3. Deactivating (Deselecting) a strike/expiration deletes a quote from the market, if one exists.

Activating/Deactivating Multiple Strikes or Expirations

When viewing quotes from multiple windows, a second quoting **Market** window with the same contract does not display all existing quotes. The second window only sees data about live quotes after the workstation receives an update.

Additionally, if you send a new quote with only a single changed parameter, the first window displays the entire quote, but the second window only receives an update of changed information. Therefore, the second window only receives the changed parameters. This information also applies to a trader who is logged onto more than one workstation.

▶ Activating or Deactivating Multiple Strikes or Expirations:

1. Right-click anywhere in one of the **Quote** columns (**BQQ**, **BQP**, **Quote**, **AQQ**, or **AQP**) to access the context menu.
2. Click **Select** to click which strikes/expirations to activate/deactivate. These are your selections:
 - **All:** All strikes/expirations will be selected.
 - **Calls:** Only calls will be selected.
 - **Puts:** Only puts will be selected.
 - **2-Sided Mkts:** Only 2-sided markets will be selected.
 - **Last Prc:** Only strikes/expirations with a last price will be selected.
3. From the context menu, click **Activate** or **Deactivate**.
4. Left-click outside the context menu to exit.

Editing, Generating, and Sending Quotes

To generate quotes click **Test Quotes**. If **Market Quotes** is selected, choosing **Test Quotes** also changes the operation to **Test Quotes**.

► **Use either of the methods below change pricing or other information:**

1. Directly from the **Market Grid**, double-click the **BQP (Bid Quote Price)** or **AQP (Ask Quote Price)** and edit the price in the **Send Quote** dialog box.
2. Send a single quote by clicking **QAct**. You are given the opportunity to change or confirm the quote before it goes to market.

► **To generate a single quote:**

1. Click **QAct** to send an individual quote to market.
2. The **Send Quote** dialog box opens so that you can edit and confirm the quote.
3. Click **Add** and the quote is sent to market.

The test quote columns continue to display, but the cell for the sent quote is displays in blue to indicate that the quote hit the market.

► **To send mass quotes:**

1. Click **Send** in the **Order Entry** pane to send the test quotes to market.
2. Click **Send** to regenerate unedited quotes based on current market conditions.

The new quotes are sent to market. When you send mass quotes the market quote columns automatically display.

Deleting Mass or Individual Quotes

► **To delete mass quotes (all quotes in market):**

Click **Delete** to delete all quotes from the market.

► **To delete a single quote:**

1. Uncheck the **Quote** column box of the strike/expiration. This deactivates the strike/expiration and deletes the quote.
2. Click in the **Quote** column box (a check mark appears) to re-activate the strike/expiration.

Status of Quotes at X_TRADER® Shutdown

Status of working orders when X_TRADER® is shut down:

- **Normal Shutdown:** If you exit normally from X_TRADER® by choosing **File Exit**, by double-clicking the top left icon, or by clicking the "X" frame button, X_TRADER® does not pull working orders from the exchange.
- **Abnormal Shutdown:** When X_TRADER® experiences an abnormal shutdown, the live quotes cannot be pulled from the market. Since quoting data is tracked by X_TRADER® on the local workstation, there is no record of active quotes. Since the quotes remain active in the market, they may unknowingly be filled.

If this occurs, restart X_TRADER® as soon as possible and click **Delete** from the quoting **Market** window. This pulls all live quotes from the market.

Product Groups

The screenshot shows a software window titled "Product Group Information". At the top, there are several input fields and buttons. Below this is a table with the following columns: Quote Type, Spread Table, Restriction, Delete Time, Bid Cpt, Ask Cpt, Special Type, Minimum Spread, Bid, Ask, Bid/Ask Ratio, Bid/Ask Ratio, and Order Type. The table is currently empty.

Product Groups allow you to define how the bid/ask values are calculated. You can specify the quote type spread table, and delete time account, and other parameters. **Autoquoting** is enabled/disabled via your **Product Groups**.

After adding, deleting or changing product group information, click the appropriate button (**Add**, **Change**, **Delete**). Associate the products. Close the product window to ensure that your changes are saved.

Creating a Product Group

► To add a Product Group:

1. From the **Control Panel**, open the **Settings** menu and click **Product Group Setup**.
2. Enter your product group name in the text box at the top of the window.
3. Choose a quote type: You can construct the quote according to the following guidelines:
 - **Dime:** A tick better on both bid and ask.
 - **Join:** Current price of both bid and ask.
 - **Mkt Ave:** The average between bid and ask is the mid-point for calculating the spread. The Maximum or Percent spread is divided by 2. This figure is added and subtracted from the Market Average to define the upper and lower limits.
 - **Theo:** Similar to the Mkt Ave except the theoretical price is used as the mid-point for calculating the spread.
 - **Theo Bid/Ask:** Current theoretical bid and ask.
4. Associate the product group with a pre-defined **Spread Table** for time, price, and spread limits. Choose any spread table from the list.
5. Delete (delete the quote after a specified number of seconds) or GTC.
6. If you choose the **Delete Restriction**, the **Delete Time** is the number of seconds the quote remains in the market. The quote is automatically deleted after the specified number of seconds. (The minimum time for EUREX is 20 seconds.)
7. Enter the **Bid Quantity** to be quoted. (The minimum quantity for EUREX is 50.)
8. Enter the **Ask Quantity** to be quoted. (The minimum quantity for EUREX is 50.)

9. Select a **Spread Type**:

- **Maximum:** The spread defined in the spread table is used to generate the quote. If the center price used for the calculation is 50 and the spread is 4 ticks, the quote will be 48-52.
- **N/A:** The spread type is inconsequential when the quote type is Dime Join or Theo Bid/Ask. When set to one of these quote types, the spread type defaults to N/A (not applicable).
- **Percent:** The chosen percentage of the price is used to calculate the spread. The +/- % field is used to define the exact percentage.
- The **Percent Spread Type** is also subject to the Spread Table's defined Maximum Spread and the Product Group's defined Minimum Spread.
- If the calculated quote is greater than the **Maximum Spread**, the **Maximum Spread** is quoted. For example, if the **Percent** calculated is 6 ticks and the **Spread Table Maximum Spread** is 4 ticks, then the **Spread Table Max** of 4 ticks will be used.
- This field is not applicable for **Dime Join** and **Theo Bid/Ask** Quote Types.

10. Use the **Minimum Spread**--expressed as the total number of ticks--to generate a quote. If the calculated quote is less than the minimum defined, then this minimum will be used to generate the quote. For example, if the calculated spread is 1 tick and your minimum is 2 ticks, the quote will have a 2-tick spread. Not applicable for **Dime Join** and **Theo Bid/Ask** Quote Types.

11. If you choose the **Percent Spread Type**, define the percentage of the price that will be used to calculate the spread.

Not applicable for Dime Join and Theo Bid/Ask Quote Types.

12. Select **On** or **Off** for automatic quoting in response to an RFQ.

13. Enter the number of seconds the quote should be delayed before being sent to the market after a Request for Quote is received.

14. Enter your clearing member ID.

15. Enter the account type.

- **A1:** Agent 1
- **G1:** Pre-designated Giveup Trade 1
- **G2:** Designated Giveup Trade 2
- **M1:** Market Maker 1
- **M2:** Market Maker 2
- **P1:** Principal 1
- **P2:** Principal 2
- **U1 Unallocated:** For orders that have not been allocated to a customer account or where allocation is a middle/back office function.

16. The following checks are optional when you use the **Quote Viability Checks** option:

- **Cross Check:** The quote is not sent to the market if the constructed bid is greater than the current market ask price, or the constructed ask is less than the current market bid.
- **Inside Check:** The quote is not sent to the market if the constructed bid is greater than the current bid, or the constructed ask is less than the current ask. This check does not apply when the Dime Quote Type is selected.
- **At Mkt Check:** The quote is not sent to the market when the constructed bid and/or ask are equal to the current market price.
- **Price Check:** The quote is not sent to the market if there is no current bid or ask price.

17. Click **Add Group** before closing the window. The new **Product Group** displays in the bottom portion of the window.

After adding, deleting, or changing product group information, click the appropriate button (**Add, Change, Delete**). Associate the products. Close the product window to ensure that your changes are saved.

Changing a Product Group

▶ **To change a Product Group:**

1. From the **Control Panel**, open the **Settings** menu and click **Product Group Setup**.
2. Select the product group (single click in any cell on the bottom half of the **Product Group Information** dialog box). The entire row is selected and all the **Product Group** settings display in the top half of the window.
3. Make any desired changes in the entry section of the window (top half).
4. Click **Change Group** and **OK** to save and exit. The changes are not saved until you close the **Product Group** dialog box.

Deleting a Product Group

▶ **To delete a Product Group:**

1. From the **Control Panel**, open the **Settings** menu and click **Product Group Setup**.
2. Select the product group (single-click in any cell on the bottom half of the **Product Group Information** dialog box). All the product group settings display in the top half of the window.
3. Click **Delete Group** and **OK** to save and exit.

Associating a Product to a Product Group

Each quoted product must be "Associated" or assigned to a Product Group that you have created. It is the **Product Group** that determines how a quote is generated. Therefore, each product must be associated with **one** (and only one) product group in order to generate quotes.

► **To associate a Product to a Product Group:**

1. From the **Control Panel**, open the **Settings** menu and click **Product Group Setup**.
2. Select the **Product Group** (single-click in any cell on the bottom half of the **Product Group** window). All the **Product Group** settings will be displayed in the top half of the window.

Note: Product Groups are created by the trader. If no **Product Groups** are displayed, you must create a custom **Product Group** before products can be associated. Refer to the **Product Groups** section.

3. Click **Associate Products**. If this button is grayed out, a **Product Group** has not been selected. The box in the lower half of the window will list all added Product Groups. The **Product Group** name appears in the far left-hand column. Left-click anywhere on the Product Group row. The entire row is selected, and **Associate Products** is enabled.
4. Select the appropriate exchange from the list.
5. Select the product from the drop list.
6. Click **Add to List**, and the exchange and product now display on the product list. You can associate other products with this Product Group in the same manner.
7. Click **OK** to complete the association and exit.

Each product can be associated with only one **Product Group** at a time. If you require quotes for the same product to be constructed using different parameters (for example, max vs. percentage or a different clearing member), you must first disassociate the product and then re-associate it with another **Product Group**.

Disassociating a Product from a Product Group

► **To disassociate a Product from a Product Group:**

1. From the **Control Panel**, open the **Settings** menu and click **Product Group Setup**.
2. From the **Product Group Information** dialog box (lower portion of the window) select a product group and click **Associate Products**.
3. If this button is grayed out, a product group has not been selected. The box in the lower half of the window will list all added product groups. The product group name appears in the far left-hand column. Left-click anywhere on the product group row. The entire row is selected and **Associate Products** is enabled.
4. Click the product to be removed. It should become selected.
5. Click **Remove** and click **OK** to exit.

Spread Matrix

Use Net Change Color Scheme with Actual Prices Property:
 - Pink background display negative prices
 - Light green background display positive prices

Last Traded Price or Net Change and Position Rows

The screenshot shows a window titled 'Spread Matrix' with a grid of data. The grid has columns for different expirations (e.g., Jun 04, Jul 04, Aug 04, Sep 04, Oct 04, Nov 04, Dec 04, Jan 05, Feb 05, Mar 05, Apr 05, May 05, Jun 05, Jul 05, Aug 05, Sep 05, Oct 05, Nov 05, Dec 05) and rows for different strikes. Each cell contains bid and ask prices. A context menu is open over the grid, listing options like 'Find Control Panel', 'Click Trade', 'Hide Header Rows', and 'Show Top Outrights as Net Change'. A 'Find Control Panel' is also visible on the left side of the window.

The **Spread Matrix** window allows you to observe the prices of the components and the current markets (bid/ask) for ALL combinations of the expirations listed at the exchange. Using one window, you are able to trade any calendar (2 month) spread instead of accessing the **Spread** window or trading the individual products in the **Market Grid**. Therefore, the **Spread Matrix** feature allows you to lower your risk when trading spreads.

Note: The system does not recreate strategies.

Features of the Spread Matrix include:

- **Use Minimum Highlighting Mode.** When you enable this option in the **Properties Spread Matrix** tab, the behavior of the Spread Matrix depends on the following market characteristics:
 - Spread Matrix only highlights when both the quantity and price change.
 - Highlighting of the bid or ask depends on whether the Last Traded Price is on the bid or ask.
 - If the Last Traded Price was not on the bid or ask, the matrix does not highlight.
- **Use Net Change Color Scheme with Actual Prices:** When you enable this option, **Net Change Color Scheme** colors are used when prices display in the standard format (actual prices).
- **Show Last Traded Price/Net Change:** When you enable this property, a row designated by a [L] displays at the top of your Spread Matrix.

Note: If you display Spread Matrix prices in the standard format using actual prices, this row displays Last Traded Price.

Or:

If you display Spread Matrix prices as Net Change (using context menu options), this row displays in Net Change.

- You can **Show Net Position** in the Spread Matrix.
- **Hide Header Rows:** When you enable this option, the Header rows displaying **Bid Prc/ Ask Prc** and **Bid Qty/ Ask Qty** are hidden.
- **Display Prices** option. You now have the ability to display Spread Matrix prices as **Net Change** (versus actual prices). When you choose one of these display price options, a new default color scheme is used.
- Displays calculated **Implied in**, **Implied out**, and **Implieds from Implieds** data even when its not at the *best* price. Enable this feature in the **Properties Trading** tab.
- Display of outright prices along the top, diagonally along the bottom or both. To select how outright prices display in your Spread Matrix, go the **Properties Spread Matrix** tab.
- Displays an **Order Change** dialog box that allows you to change working orders without having to open the **Order Book**.
- Ability to click-trade directly from the Spread Matrix and Butterfly Condor Matrix windows to submit orders.
- Display of contract months for the selected product.

- Allows you to select the outright price as the Best Price (default), the Implied Price, or the Direct Price using the context menu.
- Allows you to select the spread price as the Best Price (default), the Implied Price, or the Direct Price using the context menu.
- Display of multiple spread matrices simultaneously. Select various contract months and generate a Matrix for each. Although you can create multiple matrices, a single **Floating Order Entry** window opens to submit each order.
- Allows you to save your Spread Matrix within your workspace. When you re-start the system and open the Workspace, the spread displays.

Generating a Spread Matrix

▶ To generate a Spread Matrix:

1. Open a **Market** window for the product.
2. Left-click within the **Contract** column of the **Market Grid** to select a contract.
3. Press the **CTRL** key of the other desired contracts.
4. Right-click and select **Generate Spread Matrix**.

▶ To select any successive contracts in a row:

1. Left-click and drag the cursor over the contracts to highlight them.
2. Right-click and select **Generate Spread Matrix**.

The **Spread Matrix** displays. The month selected from the **Market Grid** displays as the first month in the **Spread Matrix**.

Note: Access the Butterfly Condor Matrix by clicking on the **Butterfly** tab.

3. Create multiple matrices by repeating Steps 1 and 2.

Spread Matrix Context Menu

► To access the context menu:

Right-click within the **Spread Matrix** window to access the context menu.

Menu	Description
Find Control Panel	Brings the Control Panel to the foreground.
Click Trade	Enables click trading from the Spread Matrix window and immediately displays the Click Trade dialog box.
MD Trader	Opens a MD Trader™ window.
Mouse Tooltips	When you hover over a cell with your mouse, a simple description of the cell displays.
Create Spread	Allows you to create a spread. Only the LIFFE exchange supports the trading of Butterfly and Condor Matrices as a product.
Outright Price	Use option to display spread prices as: <ul style="list-style-type: none"> • Best Price (default) • Implied Price • Direct Price
Spread Price	Use option to display spread prices as: <ul style="list-style-type: none"> • Best Price (default) • Implied Price • Direct Price
Formatting	Allows you to format a grid's text font, foreground and background color and borders.
Undo Formatting	Returns formatting to the default.
Hide/Show Series	Allows you to hide or show a contract and create a Spread Matrix with the selected list of contracts only. Therefore, you are now able to display any combination of legs.

Menu	Description
Display Prices	<p>You now have the ability to display Spread Matrix prices as Net Change (versus actual prices). When you choose one of these display price options, a new default color scheme is used. The new color scheme displays the following:</p> <ul style="list-style-type: none"> • Negative prices display in pink. • Negative prices display in pink. • Positive prices display in light green. • Prices with not change display in white. <p>Select from one or more of the following:</p> <ul style="list-style-type: none"> • Show Top Outrights as Net Change • Show Bottom Outrights as Net Change • Show Spread Prices as Net Change • Show Outright Last Traded Price as Net Change
Hide Header Rows	<p>When you enable this option, the Header rows displaying Bid Prc/ Ask Prc and Bid Qty/ Ask Qty are hidden.</p>

Customizing the Spread Matrix

Customize and format the **Spread Matrices** using the:

- Context menu to format a grid's text font, background and foreground color and borders.
- **Properties Spread Matrix** tab.
- **Properties Color** tab which provides more options to customize your Spread or Butterfly Condor Matrix windows.

Matrix Calculations

The calculations that create a **Spread Matrix** follow:

Outright Prices:

- Spread Ask = Front Month Ask – Back Month Bid
- Spread Bid = Front Month Bid – Back Month Ask

Outright Quantities:

- Best Price Outright Quantity = Lesser of the Front Month quantity and Back Month quantity
- Best Price Spread Quantity = Spread quantity
- Outright Price and Spread Price are equal = Lesser of the Front Month quantity and the Back Month quantity + the Spread quantity.

Trading with the Spread Matrix

The screenshot shows a trading interface with a 'Floating Order Entry' window. The window title is 'Floating Order Entry' and it contains the following fields:

- Price: 0.245
- Quantity: 300
- Order Type: Buy
- Calendar: 1st DEC 04 - 1st MAR 05
- Buttons: Buy, Sell, Clear, EIRO, Show Sell Entry, Lock, Close

 Below the window is a 'Spread Matrix' grid. The grid has columns for months from June 04 to Dec 04 and rows for various price levels. The selected cell in the matrix is at the intersection of the price 0.245 and quantity 300 for the month of Sep 04.

Selecting a price or quantity from the **Matrix** automatically opens a **Floating Order Entry** window. The **Price**, **Quantity**, and **Order Summary** fields display values using the selected cell.

► **To trade with the Spread Matrix:**

1. Click any of the price or quantity cells to populate data in the **Floating Order Entry** window.
2. Use the **Floating Order Entry** window to submit your order.

▶ **To enable Click Trading:**

1. Right-click in the **Matrix** to display the context menu.
2. Select **Click Trade**. The **Click Trade** window displays.



3. Right-click in a **Price** cell (**Ask Prc** or **Bid Prc**) to submit orders.

If you right-click in a **Quantity** cell, only the context menu displays and no orders are submitted.

Butterfly Condor Matrix

A Butterfly is a trading strategy that involves the following trades:

- Buy (or Sell) of one contract in near Calendar month;
- Sell (or Buy) of 2 contracts in a far month;
- Buy (or Sell) of one contract in an even later month.

The combined price of the two contracts being sold (bought) is subtracted from the combined price of the two contracts being bought (sold).

A Condor is a trading strategy that involves the following trades:

- Buy (or Sell) of one contract month in the first month of the strategy;
- Sell (or Buy) of one contract in a far month;
- Sell (or Buy) of one contract in a further month;
- Buy (or Sell) of one contract in an even later month.

The pricing of the Condor Matrix =

$$(\text{Month 1} - \text{Month 2}) - (\text{Month 3} - \text{Month 4})$$

Note: Implied data does not display for Condor Matrices because LIFFE does not match implieds from Condor Matrices.

Features of the **Butterfly Condor Matrix** include:

- **Use Minimum Highlighting Mode.** When you enable this option, the behavior of the Butterfly Condor Matrix depends on the following market characteristics:
 - Butterfly Condor Matrix only highlights when both the quantity and price change.
 - Highlighting of the bid or ask depends on whether the Last Traded Price is on the bid or ask.
 - If the last traded price was not on the bid or ask, the matrix does not highlight.
- **Use Net Change Color Scheme with Actual Prices:** When you enable this option, **Net Change Color Scheme** colors are used when prices display in the standard format.
- **Show Last Traded Price/Net Change:** When you enable this property, a **Last Prc** column displays in your Butterfly Condor Matrix.

Note: If you display Butterfly Condor Matrix prices in the standard format using actual prices, this row displays Last Traded Price.

Or:

If you display Butterfly Condor Matrix prices as Net Change (using the context menu options) this row displays prices in net change.

- **Show Net Position** in the Butterfly Condor Matrix using the **Properties Spread Matrix** tab. When you enable this option, a **Net Pos** column displays in the Butterfly Condor Matrix.
- The context menu includes a **Display Prices** option. You have the ability to display Butterfly Condor Matrix prices as Net Change (versus actual prices). When you choose one of these display price options, a new default color scheme is used.
- Display of contract months for the selected product.
- Display of an **Order Change** dialog box that allows you to change working orders without having to access the **Order Book**.
- Displays calculated Implieds from Implieds data. Enable this feature in the **Properties Trading** tab.
- Display of outright prices along the top, diagonally along the bottom or both.

- Display of multiple spread matrices simultaneously. Select various contract months and generate a matrix for each. Although you can create multiple matrices, a single **Floating Order Entry** window opens to submit each order.
- Ability to click-trade directly from the matrix window to submit orders.
- Allows you to save your Butterfly Condor Matrix within your workspace. When you re-start the system and open the workspace, the Butterfly Condor Matrix displays.

Butterfly Condor Matrix Context Menu

Menu Item	Description
Find Control Panel	Displays the Control Panel in the foreground.
Click Trade	Enables Click-Trading directly from the Spread Matrix .
MD Trader	Opens MD Trader™ window.
Mouse Tooltips	When you hover over a cell with your mouse, a simple description of the cell displays.
Create Spread	Only LIFFE exchange supports the trading of Butterfly and Condor Matrices as products.
Outright Price	Use this option to display outright prices as: <ul style="list-style-type: none"> • Best Price (Default) • Implied Price • Direct Price
Calendar Price	Use this option to display calendar spread prices as: <ul style="list-style-type: none"> • Best Price (Default) • Implied Price • Direct Price
Butterfly Price	Use this option to display Butterfly spread prices as: <ul style="list-style-type: none"> • Best Price (Default) • Implied Price • Direct Price

Menu Item	Description
Condor Price	Use this option to display Condor spread prices as: <ul style="list-style-type: none"> • Best Price (Default) • Implied Price • Direct Price
Formatting	Allows you to format a grid's text font, background color and borders.
Undo Formatting	Returns window to default formatting.
Hide/Show Series	Allows you to hide or show a contract and create a Butterfly Condor Matrix with the selected list of contracts only. Therefore, you are now able to display any combination of legs.
Display Prices	You have the ability to display Butterfly Condor Matrix prices as Net Change (versus actual prices). When you choose one of these display price options, a new default color scheme is used. The new color scheme displays the following: <ul style="list-style-type: none"> • Negative prices display pink • Positive prices display light green • Prices with no change display white Select from one of the following options: <ul style="list-style-type: none"> • Show Outrights as Net Change • Show Spread Prices as Net Change • Show Outright Last Traded Price as Net Change

Customizing a Butterfly Condor Matrix

Customize and format the **Spread** Matrices using the:

- Context menu to format a grid's text font, background and foreground color and borders.
- **Properties Spread Matrix** tab.
- **Properties Color** tab to change the color of matrix features. The following lists the new color customizable features.

Matrix Calculations-Butterfly Matrix

Price:

Implied **Bid** Price = 1st Leg (Front Month) **Bid** Price

minus [-]

(2) x [2nd Leg (Middle Month) **Ask** Price]

plus [+]

3rd Leg (Back Month) **Bid** Price

Implied **Ask** Price = 1st Leg (Front Month) **Ask** Price

minus [-]

(2) x [2nd Leg (Middle Month) **Bid** Price]

plus [+]

3rd Leg (Back Month) **Ask** Price

Quantity:

Implied **Bid** Quantity = Lesser of 1st Leg (Front Month) **Bid** Quantity

and

[2nd Leg (Middle Month) **Ask** quantity] / 2 (divided by 2)

and

3rd Leg (Back Month) **Bid** Quantity

Implied **Ask** Quantity:

Lesser of 1st Leg (Front Month) **Ask** Quantity

and

[2nd Leg (Middle Month) **Bid** quantity] / 2 (divided by 2)

and

3rd Leg (Back Month) **Ask** Quantity

Generating a Butterfly Condor Matrix

Note: Implied data does not display for Condor Matrices because LIFFE does not match implieds from Condor Matrices.

▶ **To generate a Butterfly Condor Matrix:**

1. Open a **Market** window for the product.
2. Left-click within the **Contract** column of the Market Grid to select a contract.
3. Press the **CTRL** key of the other desired contracts.
4. Right-click and select **Generate Spread Matrix**.

Or:

To select any successive contracts in a row, left-click and drag the cursor over the contracts to highlight them.

5. Right-click and select **Generate Spread Matrix**.
6. Click the **Butterfly** tab. The **Butterfly Condor Matrix** displays.

Switch from the **Butterfly Condor Matrix** to a calendar **Spread Matrix** by simply clicking the **Spread Matrix** tab.

Using the Butterfly Condor Matrix to Trade

Note: Implied data does not display for **Condor** Matrices because LIFFE does not match implieds from **Condor** Matrices.

Select a price or quantity from the Matrix to automatically open a **Floating Order Entry** window. The **Price**, **Quantity**, and **Order Summary** fields populate the appropriate fields with the correct data.

▶ To trade using the Butterfly Condor Matrix:

- Click any of the price or quantity cells to populate data to the **Floating Order Entry** window.
- Use the **Floating Order Entry** window to submit your order.

The **Click Trading** feature is also available from the Spread Matrix and Butterfly Condor Matrix windows.

▶ To enable Click Trading:

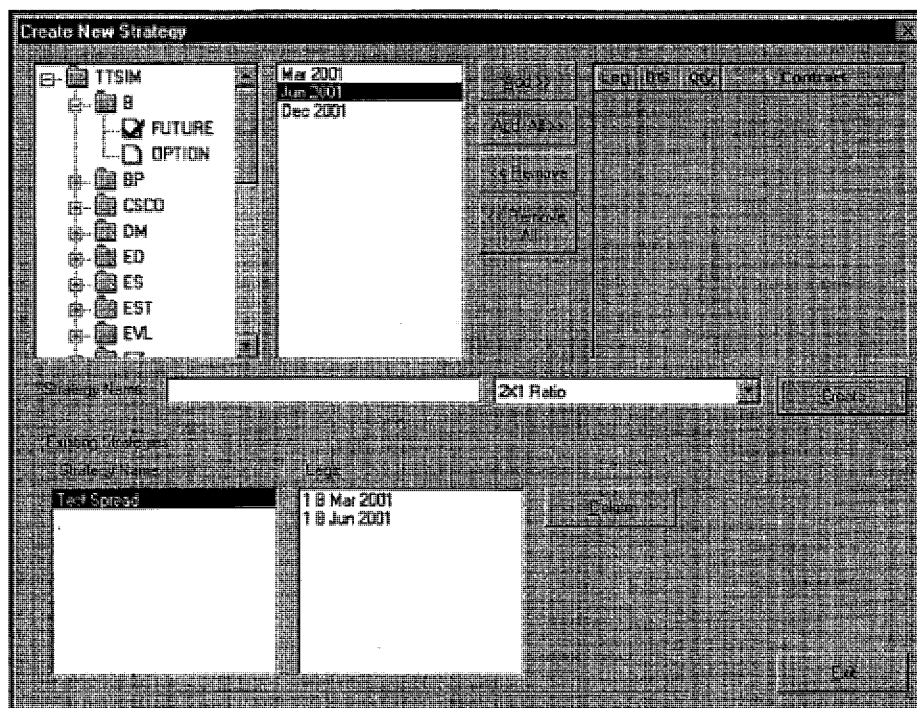
1. Right-click in the matrix to display the context menu.
2. Click **Click Trade**.
3. The **Click Trade** dialog box displays. Orders are submitted using one click of the mouse.
 - Right-click in a **Bid Price** cell to send a limit **sell** order.
 - Right-click in an **Ask Price** to cell send a limit **buy** order.

If you click in a quantity cell, the context menu displays. No trade is submitted.

Spread Strategies

X_TRADER® supports the creation of intra-product spreads, as permitted by LIFFE CONNECT. For additional information about LIFFE CONNECT STIR (Short-Term Interest Rate) strategies, refer to documentation provided by the exchange or visit the Internet site at www.liffe.com.

Creating a New Spread/Strategy



X_TRADER® supports the creation of intra-product spreads, as permitted by LIFFE CONNECT. For additional information about LIFFE CONNECT STIR (Short-Term Interest Rate) strategies, refer to documentation provided by the exchange or visit the Internet site at www.liffe.com.

▶ **To create a new spread:**

1. Open the **Create New Strategy** dialog box. Click **Control Panel**, or right-click the **Market Grid** to access the context menu, and click **Create Strategy**.
2. Select a product. The available contract months are displayed to the right.
3. Click **Add**, **Add All**, **Remove**, and **Remove All** to add or delete one or more legs, or double-click the contract when adding one leg at a time.
4. Edit the spread data. Click **B/S** to toggle between Buy and Sell. You can also edit the number of contracts per leg—where permitted.
5. Enter the name of your choice in the **Strategy Name** box. If you leave this box blank, the name will be the spread type followed by the quantity and contract month for each leg.
6. Select a **spread type**. Available types include the following: 2X1 Ration, Box, Bundle, Butterfly, Calendar 1, Combo, Condor, Conversion/Reversion, Diag Calendar, Diag Strad Calendar, Guts, Iron BFly, Ladder, Misc. Call/Put Spread, Pack, Strad Calendar, Straddle, Strangle, Strip, or Volatility Combo, **Reduced Tick Spread (for eCBOT) and Delta-neutral strangles (available with LIFFE API 8.0)**.
Refer to the **specific exchange documentation** for strategy definitions.
7. Select **Create**. If the spread data is valid, the spread is created and immediately displayed in the **Existing Strategies** section of the **New Strategy** dialog box.

Adding a Spread or Strategy to the Market Window

▶ **To add a newly created spread or strategy to the Market Window:**

1. From the **Control Panel**, click **Market Explorer**.
2. Select the exchange.
3. In the **Product Type** field, select **Spread** by clicking on it. The **Product Name** field displays the list of existing spreads.
4. Click the appropriate **Transfer** button.
5. Click **Start** to open the **Market Grid**.

Trading with a Spread or Strategy

There are no differences to trading an existing spread with X_TRADER®. From the **Market Explorer**, view the product and select the **Spread** product type. You can open one or more products and product types (for example, spread and future) in the same **Market Window**.

The spread name you entered appears in the **Product** column. If you did not enter a personalized name, the default name is the spread type/spread ratio/contract months of the legs.

Note: As always, refer to the exchange's Market Rules for trading information specific to that exchange.

Trading Strategies with a Maximum Order Quantity Limit

If your trading environment is using the **Guardian Risk Management** (Credit Controls), the **Maximum Order Quantity** limit impacts trading in the following manner:

- Strategies that result in a net position of zero are not restricted by the **Maximum Order Quantity** limit. Calendar, Condor, and Butterfly strategies net to a zero position (neither long nor short) and may be traded in any quantity. For example, if the **Maximum Order Quantity** is 100 lots, you may trade beyond the 100-lot limit because the net position for the order is zero.
- Orders for strategies that result in a net long or short position are subject to the **Maximum Order Quantity** limit. For example, a trader with a 100-lot **Maximum Order Quantity** who is trading strip strategies reaches his maximum order quantity with a 25-lot order. In this case, the 100-maximum quantity is equivalent to the 25 lots * 4 legs per strip. Orders for 1-25 lots of a strip strategy are accepted. Orders over 25 lots are rejected for exceeding the specified **Maximum Order Quantity** limit of 100.

Trading with an Expired Strategy

Attempting to trade an expired strategy results in the error message, "**This product does not currently exist in the order router's product table.**" The Simulation environment also receives this message if the strategy was deleted at the exchange due to a host failure.

Renaming an Existing Strategy

► **To rename an existing strategy:**

1. In the **Market Grid Product** column double-click the spread name.

Or:

Right-click a cell in the spread row to access the context menu.

2. Click **Name Product**.
3. Enter the new spread name, and click **OK**. You can revert to the original name (spread type, ratio, legs expirations) by selecting **Restore**.

Deleting a Created Spread or Strategy

► **To delete a created spread or strategy:**

1. Open the **Create New Strategy** dialog box. Click **Control Panel**.

Or

Right-click the **Market Grid** to access the context menu, and click **Create Strategy**.

2. Select the spread name in the **Existing Spreads** section. The legs of the selected spread name display.
3. Click **Delete**. The spread is immediately deleted.

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- Default setup includes a different set of columns. To display columns use the Hide/Show Columns dialog box.
- **Order Block** is a part of X_TRADER®. You do not need an X_TRADER® Pro license to run it.

Because **Order Block's** procedures, dialogs, and windows are identical to Autotrader™ (except for the bullet points above), there is not a separate **Order Block** Help module. Instead, refer to the Autotrader™.

▶ **Opening the Order Block Window - Procedure 1:**

1. Using the **Exchange Login** dialog box, log into Exchanges.
2. Populate the **Market Explorer** window with all needed futures exchanges and contracts.
3. On the X_TRADER® **Control Panel**, click the **Order Block** button.

▶ **Opening the Order Block window - Procedure 2:**

1. Using the **Exchange Login** dialog box, log into Exchanges.
2. Populate the **Market Explorer** window with all needed futures exchanges and contracts.
3. In the X_TRADER® **Control Panel**, on the **Window** menu, click **Order Block**.

You can define trading parameters to use when calculating Bid and Ask offsets and quantities. You must have at least one **Trading Profile** created.

Chapter 14

Order Book

Trf	Deal	Status	US	OCC	CIP	Cty	Product	MMAY	Price	Stop
M1	YHOO	Waitng	S	D	C	100	YHOO	11.00	100	11.00
M2	YHOO	Waitng	S	D	C	100	YHOO	11.00	100	11.00
M3	YHOO	Waitng	S	D	C	100	YHOO	11.00	100	11.00
M4	YHOO	Waitng	S	D	C	100	YHOO	11.00	100	11.00
M5	YHOO	Waitng	S	D	C	100	YHOO	11.00	100	11.00
M6	YHOO	Waitng	S	D	C	100	YHOO	11.00	100	11.00

The **Order Book** provides information about your current open orders. Traders in the same Group share the **Order Book** and are able to view one another's working orders.

You can use the **Order Book** to change, cancel and replace, hold, or delete orders. You can also perform an inquiry to determine the status of an open order.

You can use one or more filters to quickly sort and display data. If you are part of a Group and you want to view only your open orders, you can filter using your Trader ID. However, you must first record an open order before your Trader ID is available as a filter (Place an order far off the market, filter using your Trader ID, and then delete the order).

You can customize the **Order Book** to include or exclude any of the columns in the **Grid Pane** of the **Order Book**. After customizing your **Order Book**, save your workspace.

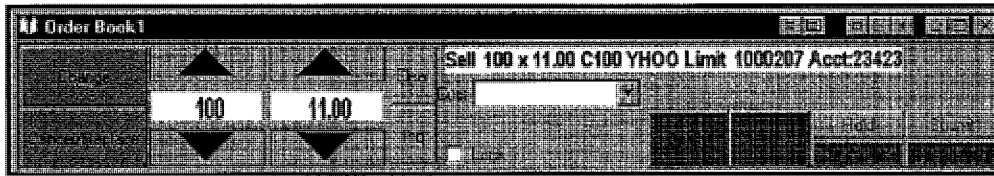
Trader ID's

The Trader ID is a combination of the Exchange Member ID, a Group ID, and a Trader ID. The exchange supplies the Member ID; the administrators of your trading environment assign the Group and Trader IDs.

Using Trader ID AAAAABBB001 as an example:

- **AAAAA** is the Exchange Member ID. The exchange assigns this number to their trading member.
- **BBB** represents the Trader's Group ID. All traders sharing the same Group ID share the **Order Book, Fill** window, and **Audit Trail**.
- **001** represents the Trader ID. This ID uniquely identifies a specific trader.

Top Pane Field Descriptions



The top pane in the **Order Book** is used to make changes in existing orders that have been submitted to an exchange through the **Order Entry** window. This process is done in conjunction with the bottom **Grid** pane.

Field	Description
Change	Using Change on an order that is in the Order Book will cause the order to lose its place in the queue when the quantity of the order is increased or decreased, and also when a customer account number is changed. The results of using the Change button are exchange-dependent.
Cancel/Replace	The order is deleted and a new order is sent to market. The original order's place in the queue is lost. If you are only decreasing the order quantity, using the Change button to keep the order's place in queue. Depending on the exchange, if you want a change other than decreasing the price, you may need to use the Cancel/Replace button.
Quantity & Price	The Order Quantity field appears on the left; the Price field appears on the right. After selecting an order, enter the price and/or quantity with the keyboard or use the spinners (up and down arrows).
Clear	Removes data from the Quantity , Price , and Customer fields. It cancels any changes not already processed.
Inq (Inquire)	Sends an Inquiry to the exchange for the status of an order. A message in the Audit Trail confirms the order information.
Order Information	Clicking any Order Book cell displays the order data.
Cust	Customer Selection field. Displays the current customer profiles in use. The list contains all customer accounts for which the SEL box is selected in the Customer Defaults window.
Lock	A safety measure. When you select the Change button, the Apply Change confirmation button displays. Likewise, when you use the Cancel/Replace button, the Apply Cancel confirmation button displays.
Delete	Deletes selected orders. Confirmation messages appear in the Audit Trail .

Field	Description
Delete All	<p>If enabled, the buttons Delete All visible orders, Delete All Bids, or Delete All Asks in the Order Book. This button is enabled from the context menu. The default is enabled. (Right-click in the Order Book grid. Click Delete All to enable/disable the feature). Use Delete All to cancel all visible working orders.</p> <p>Orders hidden due to filters will NOT be deleted. To ensure the deletion of all orders in the Order Book—visible and filtered—use the context menu's Clear All Filters option (Access the context menu by right-clicking any cell in the Order Book grid. Select Clear All Filters). This is the only method of ensuring that all filters are removed.</p>
Hold	<p>A Held order is deleted from the market and the order information is stored on the TTTM Gateway. Held orders are stored in short-term memory. If the Gateway Order Server process goes down, the held order information is lost. You can change, cancel, replace, delete, or resubmit held orders. In every case—except for submit—the order remains held and out of the market. In every case, you will also see a hold message in the Audit Trail when an order is held, but in actuality, the order is deleted from the market and held only by the Gateway. The Hold button is disabled if you select a single row for an order that is already held. If you select multiple orders and then click Hold, only orders that are not already held are put on hold. In the event that an order is held that is already in the hold state, the Gateway gives you an error message.</p>
Submit	<p>You can resubmit hold orders to the exchange.</p> <p>If the LIFFE CONNECT (futures and equity options) connection is lost between the exchange host and TTTM Gateway, the exchange changes the status of all working orders to hold. Upon reconnection, each order will have a hold status. You can use the Submit button to resubmit these orders to the exchange. When an order is resubmitted after being held, it receives a new order number; it is really a new order because it was previously deleted from the market. If a submit fails for a held order, it remains in the hold state and the Audit Trail indicates that the submit failed. The Audit Trail will also give you an explanation of why it failed. If you select multiple orders and click Submit, only orders that are already held are submitted.</p>
Del All Bids	Deletes all bids in the Order Book .
Del All Asks	Deletes all asks in the Order Book .

Bottom Pane Column Descriptions

Exch	Delete	TTStatus	B/S	O/C	C/P	Qty	Product	MMY	Strike	Price	Stop
		Working	S			100	S-100	12-01	100	10.00	
		Working	S			100	S-100	12-01	100	10.00	
		Working	S			100	S-100	12-01	100	10.00	
		Working	S			100	S-100	12-01	100	10.00	
		Working	S			100	S-100	12-01	100	10.00	
		Working	S			100	S-100	12-01	100	10.00	
		Working	S			100	S-100	12-01	100	10.00	
		Working	S			100	S-100	12-01	100	10.00	

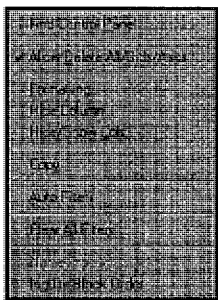
The data in the **Grid Pane** displays all orders entered by members of the group. You can filter this information and change the orders using the controls in the **Top Pane** of the **Order Book**.

Column	Description
Exch	Exchange
Delete	Allows you to delete a single line order.
TTStatus	Working, Change, Deleting, Inquiry
B/S	Buy/Sell
O/C	Open/Close a Position
C/P	Call/Put
Qty	Order Quantity
Product Type	Bond, Future, Option, Spread, Stock, Warrant.
Product	Exchange Symbol or product name
MMYY	Expiration Month/Year
Strike	Exercise price of an option
Price	Limit Price
Stop Prc	Stop Trigger Price
Type	Limit/Market
TIF	Time in Force
Rstr (Restriction)	Stop, MV,

Column	Description
RstrQty	Restriction Quantity
Exe Qty	Executed Quantity
Work Qty	Working Quantity
Account #	Back Office Account Number or Acct Name
Action	Possible actions include Add (A), Change (C), Delete (D), Delete all your orders (E), Hold (H), Inquire (I), Update (U), Replace/Cancel button (R), Resubmit to remove from hold (S)
FFT2 & FFT3	Free Form Text Field #2 & Free Form Text Field #3
Exch Date	Exchange Order Date
Acct	Agent, Market Maker, Principal, Give-Up, Unallocated
Time Sent	Time Sent from Server
Expiry	Expiration Month/Year
Order No	Order Number Assigned by Exchange
TT Order Key	Unique order number assigned to this order.
Version	Version Number
Exch Time	Exchange Time (Ord Received or Confirmation Sent)
Exch Mbr	Exchange Member ID
Exch Grp	Risk Mgt Direct User's Group ID (Broker's Trader ID = PRD)
Exch Trd	Risk Mgt Direct User's Trader ID (Broker's Trader ID = 001)
Trd Mbr	Risk Mgt Proxy User Member's ID (Broker's Client = TTORD)
Trd Grp	Trader's or Risk Mgt Proxy User's Group ID (Broker's Client = SIM)
Trd ID	Trader's or Risk Mgt Proxy User's Trader ID (Broker's Client = 666)
Clr Mbr	Trader's Clearing Member

Column	Description
Time Recvd	Time Received by TT™ Gateway These fields may be blank after re-establishing connectivity to LIFFE CONNECT. The trading host or TT™ Gateway does not retain this information.
Time Procsd	Time Processed by TT™ Gateway
IP Address	IP Address of the workstation submitting the order.

Order Book Context Menu



The **Order Book** context menu lists additional available functions that you use to customize your X_TRADER® settings. To open the context menu, right-click anywhere in the **Grid Pane** of the **Order Book** window.

Menu	Description
Find Control Panel	Brings the Control Panel to the foreground of your workspace.
Allow Delete All/Bids/Asks	Enabled by default. Enables all the delete buttons (Delete All , Delete All Bids/Delete All Asks).
Formatting	Options for customizing fonts, colors, and borders.
Hide Column	Hides the column(s) you select.
Hide/Show Cols	Allows you to select which columns to hide or show.
Copy	After selecting the data to be copied, select this option to place the data on a clipboard. You can then paste the data into another program (for example, Excel).
Auto Filters	Use this option to enable Auto Filters which filters the Order Book data by selecting a customer from the Customer List window.
Clear All Filters	Use this option to quickly clear all filters. As a result, all available data displays in the Order Book .
Name Product	Allows you to change the name of the selected product.
Inquire Order Block	Brings up the Inquire Order Block dialog box, which is used to accept Eurex block trades.

Order Status Inquiries

▶ **To inquire or request an order's status:**

1. Select the order by clicking a cell in the appropriate row to highlight it.
2. Click the **Inq** button.

▶ **After the inquiry is requested:**

1. The **TTStatus** column temporarily changes to **Inquire**.
2. The **Audit Trail** window displays two messages. The first confirmed that an inquiry request was received by the exchange. The second message confirms that the order status information has been provided.

Removing Stale Orders

It is possible for stale (filled) orders to remain in the **Order Book**. Stale orders may remain in the Order Book:

- If a confirmed fill arrives at the same time that you used the **Inquire** button to request status for an order

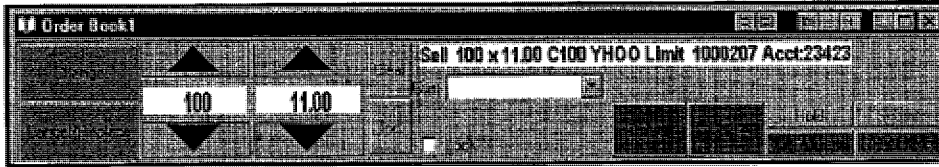
Or:

- You clicked the **Change** button to modify the order

▶ **To remove a stale order from the Order Book:**

Use the **Inquire** feature to remove a stale order from the **Order Book**. This confirms and updates the status of an order; and any stale order is removed from the **Order Book**.

Using the Change Function



In theory, the **Change** button changes a working order without losing its place in the queue. However, keeping the order's place in the queue is dependent on the type of change requested and the exchange's Market Rules.

When a **Change** request violates the exchange's rules, the request may be rejected or the exchange may execute the request as a **Cancel/Replace** order. The new order returns to the back of the queue and a new order number is usually—but not always—assigned.

To ensure that the order does not lose its place in the queue, only use the **Change** button to decrease the order quantity:

► To decrease the order quantity:

1. Select the order to be changed by clicking any cell in the appropriate row.
2. Decrease the original quantity—NOT the working quantity. If you have been filled on 6 of 10 and now want a total of 8 contracts, the change request should be for a total of 8 contracts. This automatically changes the working order from 4 to 2 contracts. If you base your change request on the working quantity (requesting a change to 2 contracts), the request is rejected.
3. Click the **Change** button. The order's place in queue is retained and the order number does not change.

If a change, cancel/replace, or delete attempt results in an **ORDER DELETED OR FILLED** message in the **Audit Trail** window, the exchange has rejected the request because the order has already been successfully deleted or filled. If the receipt of the confirmed fill is delayed, the **Order Book** cannot remove filled orders in a timely manner. It is also possible to request a change/delete at the same moment that a confirmed fill is being received. Either occurrence results in the trader receiving the above message.

Using the Cancel/Replace Function

Using the **Cancel/Replace** button deletes the original order and sends a new order to market. The original order's place in queue is lost and a new order number is assigned.

You use the **Cancel/Replace** button for a number of reasons:

- To delete the original order and send a new order in its place. The new order moves to the back of the queue and may—depending on the exchange—receive a new order number.
- To increase the quantity of the order, and/or adjust the price.

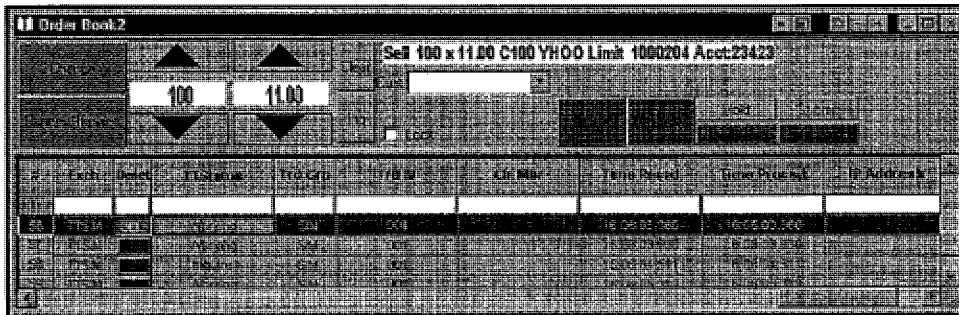
If the second half of a **Cancel/Replace** order fails, the order is deleted from the **Order Book** and from the market. You should also be aware that if any part of that order is filled before a successful **Cancel/Replace** happens, you are still responsible for the position incurred.

If a change, cancel/replace, or delete attempt results in an **"ORDER DELETED OR FILLED"** message, the exchange has rejected the request because the order has already been successfully deleted or filled. If the receipt of the confirmed fill is delayed, the **Order Book** cannot remove filled orders in a timely manner. It is also possible to request a change/delete at the same moment that a confirmed fill is being received. Either occurrence results in the trader receiving the above message.

▶ To use the **Cancel/Replace** button:

1. Select the order to **Cancel/Replace** by clicking any cell in the appropriate row.
2. Change the order information as necessary.
3. Click the **Cancel/Replace** button. The original order's **Status** temporarily displays "Replaced". The **Audit Trail** receives the first of two messages that reflects the deleted order with a zero working quantity. The second message details the new order information and the new order number.

Deleting Orders



You can delete any order that has not been filled. Because there is a short delay before you receive notice of a filled order, it is possible for you to request to delete an order that has already been filled. If this occurs, the **Audit Trail** sends you an **ERR** (error) message, informing you that the order has already been filled.

If a change, cancel/replace, or delete attempt results in an **ORDER DELETED OR FILLED** message, the exchange has rejected the request because the order has already been successfully filled. If the receipt of the confirmed fill is delayed, the **Order Book** cannot remove filled orders in a timely manner. It is also possible to request a change/delete at the same moment that a confirmed fill is being received. Either occurrence results in the trader receiving the above message.

▶ To delete a single order:

1. Select the order to be deleted by clicking any cell in the appropriate row to highlight it.
2. Select the **Delete** button in the top pane. The **Audit Trail** message specifies the order was deleted.

Or:

Click on the **Delete** button in the appropriate row. The **Audit Trail** message specifies the order was deleted.

▶ To delete multiple orders:

1. Select multiple orders with a left-click on the first and hold the button down while you move the mouse across the order rows;

Or:

Hold the **CTRL** button down while single clicking each order.

2. Select the **Delete** button in the top pane. The **Audit Trail** message specifies the order was deleted.

▶ **To delete ALL working orders:**

Use the **Delete All** button to cancel all visible working orders.

After the Delete Request is sent:

- The original order's status temporarily changes to **Deleting** before being removed from the **Order Book**.
- The **Audit Trail** displays two messages. The first is confirmation that the exchange has received the request. The second message confirms that the request is processing.

▶ **To enable/disable the Delete All button:**

1. The **Delete All** button is enabled by default. Right-click anywhere in the **Order Book** grid to access the **Context** menu.
2. Left-click **Allow Delete All/Bids/Asks** to enable/disable this feature. A checkmark indicates the feature is enabled.

Using the **Delete All** button to empty your **Order Book** does NOT delete any orders that have been hidden by filters. To ensure that all orders in the **Order Book** are deleted: visible as well as filtered: use the context menu's **Clear All Filters** option:

Right click on any cell in the **Order Book** grid. Click **Clear All Filters** from the menu. This is the only way to ensure that all the filters have been removed.

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Chapter 15

Time and Sales

Time	Exchange	Contract	Type	Price	Qty
10:34:19	CBOT-A	ZB Sep02	A	10910	16
10:34:19	CBOT-A	ZB Sep02	L	10910	1
10:34:07	CBOT-A	ZB Sep02	A	10910	17
10:34:07	CBOT-A	ZB Sep02	B	10906	1
10:34:07	CBOT-A	ZB Sep02	L	10910	1
10:34:05	CBOT-A	ZB Sep02	A	10906	1
10:33:55	CBOT-A	ZB Sep02	A	10910	18
10:33:45	CBOT-A	ZB Sep02	B	10900	7
10:33:45	CBOT-A	ZB Sep02	L	10900	3
10:32:07	CBOT-A	ZB Sep02	A	10905	1
10:32:59	CBOT-A	ZB Sep02	A	10910	18
10:32:59	CBOT-A	ZB Sep02	L	10910	1
10:31:19	CBOT-A	ZB Sep02	A	10910	19
10:31:19	CBOT-A	ZB Sep02	L	10910	1
10:30:31	CBOT-A	ZB Jun02	A	10906	4
10:30:31	CBOT-A	ZB Jun02	L	10906	23
10:30:31	CBOT-A	ZB Mar02	A	10803	4
10:30:21	CBOT-A	ZB Jun02	A	10906	27

Added ZN Dec02 File Status 0% used

Time and Sales provides X_TRADER® users with the ability to track, record, and save time and sales information for products traded through X_TRADER®. You populate a **Time and Sales** window with one or more products by the drag-and-drop process from the X_TRADER® **Market Grid** pane of the **Market** window.

To open the **Time and Sales** window, click the **T&S** button on the **Control Panel**.

Note: **Time and Sales** uses the price feed to show and record product sales information. This means that it does **not** query the market for **Time and Sales** information. It is possible that some information shown in the **Time and Sales** window will be incomplete, since some markets do not include every trade in their real time price feeds, but instead provide a separate interface to query this information from the market (Eurex, CBOT, and ISE are examples).

Opening Time and Sales Window

Time and Sales provides X_TRADER® users with the ability to track, record, and save sales and time information for products traded through these client applications. You populate a Time and Sales window with one or more products by the drag-and-drop process from the X_TRADER® **Market Grid** pane of the **Market** window.

Time and Sales is packaged and distributed as a component of the X_TRADER® install. The following procedure assumes that you have X_TRADER® open and are logged into an exchange through that application.

▶ To log into **Time and Sales**, use the following steps:

1. Open X_TRADER® from the desktop.
2. Once the application presents you with the **Exchange Login** dialog box, log into the exchange market(s) of your choice and click **Close**.
3. Chose a product(s) from the **Market Explorer** and open a **Market** window.
4. Click to open the **Time and Sales** window from the **Control Panel** button.
5. Drag-and-drop a product to the open **Time and Sales** window to populate it.

You can now use the **Time and Sales** window in concert with X_TRADER®.

Grid Column Descriptions

The **Time and Sales Grid** has the following column names:

Column Heading	Description
Time	Time the event took place (drawn from the workstation, not the exchange).
Exchange	Name of the exchange where the event occurred.
Contract	Name of the product as drawn from the X_TRADER® Market Grid .
Type	Type of update: B (Bid) , A (Ask) , +/- , or L (Last Trade) .
Price	Buy/Sell price of the product.
Quantity	Quantity of the product that was bought/sold.

Using Drag-and-Drop to Populate

After you open a **Time and Sales** window on the desktop, you must populate its **Grid**. This **Grid** is used to display information on a time line as it is recorded in X_TRADER®. You populate the **Grid** with one or more products by the drag-and-drop process from the X_TRADER® **Market Grid** pane of the **Market** window.

The informative text in the lower left corner of the **Time and Sales** window can also tell you the **Exchange is not available**, that the application is **Unable to drop a product**, or **Added** (contract information):

Typically, once a product has been dropped, a short period elapses before it is actually added to the file. This may result in the informative text stating **Dropped** (contract information).

► To populate a product into the Grid:

1. Open a **Market** window from X_TRADER®.
2. Navigate in the **Market Grid** pane for a product.
3. Left-click on the selected product and hold down the mouse button. The cursor will change to a circle with a line through it.
4. Drag the cursor into the Grid of the **Time and Sales** window and release the button.
5. The name of the product appears in the Grid, and other associated information will populate the other relevant columns (**Exchange, Price, Quantity, and Time**). In addition, at the lower left corner of the **Time and Sales** window, informative text will appear which describes the current status of the drag-and-drop. Once the product has been added, this text reflects that with the message: **Added** (contract information).

Color Coding for Grid Rows

Each row in the **Time and Sales** window **Grid** displays information about a single trade for the product used to populate the grid. The row information is color-coded to make it easy to define the activity for this particular product and trade. These colors are the defaults within the **Time and Sales** application on installation (and cannot be changed).

Row Information	Background and Text Color
Bid Price	Blue text on a white background.
Ask Price	Orange text on a white background.
Uptick on the Last Traded Price	Green text on a white background.
Downtick on the Last Traded Price	Red text on a white background.
No Change	Black text on a white background.
Status +/-	Black text on a white background.

Scrolling Options and Product Display

Time	Exchange	Contract	Type	Price	Qty
08/17/01	TTSIM	DM Jun01	L	95.50	22
08/17/01	TTSIM	DM Jun01	B	95.50	22
08/17/01	TTSIM	DM Jun01	A	95.50	22
08/17/01	TTSIM	DM Dec01	L	95.50	22
08/17/01	TTSIM	DM Dec01	A	95.50	22
08/17/01	TTSIM	DM Mar01	A	95.50	10
08/17/01	TTSIM	DM Mar01	L	95.50	22
08/17/01	TTSIM	DM Mar01	A	95.50	23
08/17/01	TTSIM	DM Mar01	B	95.50	22
08/17/01	TTSIM	DM Mar01	A	95.50	32
08/17/01	TTSIM	DM Mar01	A	95.50	31
08/17/01	TTSIM	DM Mar01	L	95.50	1
08/17/01	TTSIM	DM Mar01	B	95.50	1
08/18/01	TTSIM	DM Dec01	B	95.50	22
08/18/01	TTSIM	DM Dec01	+	95.50	22
08/18/01	TTSIM	DM Jun01	B	95.50	24
08/18/01	TTSIM	DM Jun01	+	95.50	22

A running record is kept for each product that has been added to the **Time and Sales** window in the chronological order that the entry is received from X_TRADER®. Each new entry is added to the top of the **Grid** and, as the entry is received, the window will auto-scroll downward (the bottom product row disappears off the screen). A red line will appear at the top of the **Grid** to indicate that there is additional information to be viewed at the top of the **Grid**.

Although the information is not visible, the entire array of all received information is available to be viewed by using the scroll bars to the left of the window to scroll through the list to find a selection. All the information is still automatically saved to a file.

Once the **Grid** has been scrolled to review older data, however, the window **Grid** will remain in that position. That is, the window will no longer auto-scroll as new information is added to **Time and Sales**. A red line will appear at the top of the **Grid** to indicate that there is additional information to be viewed at the top of the **Grid**. To return to auto-scrolling, use the scroll bar to move to the top of the window. The **Grid** will now return to auto-scrolling as new entries are received.

Note: Entry information from each row is subject to whatever filters may have been applied to the **Time and Sales** window **Grid**. If filters have been applied to the information, any product information that fits the filter criteria will display, but information that does not meet the filtering constraints will not be shown in the **Grid**. The information will, however, still be stored in a file and can be retrieved later.

Saving Information to a File

When opened in tandem with a client application, **Time and Sales** displays trading for all products that have been populated into its display **Grid**. It also saves this data in the form of a file that is saved to the TT™ directory on the hard drive. This **Time and Sales** history file can be opened within Excel for later viewing or data manipulation.

The size of the saved data files can become quite large, depending on the amount the number of products tracked through **Time and Sales**. A number of options are available to you for saving and storing them.

The following parameters control the configuration of the automatically saved time and sales information:

- **Time and Sales** data will be saved only for the time period in which you are subscribed for a particular product through **Time and Sales** (for example, if the application is open for only four hours, only four hours of data will be automatically saved).
- The size of the time and sales data file that is saved is configurable through the **Time and Sales** tab in the Properties dialog box. If the amount of data exceeds the configured limit during any time period, the **Time and Sales** window will continue to update, but the data will **not** be saved to the file. The default size for the data file (without configuration) is 250 Megabytes.
- A **File Status** box appears on the **Time and Sales** window that lists saved information as a percentage how much of the configured data file size has been filled.
- Past historical **Time and Sales** data files are saved once per day. The number of saved data files for any given time period is configurable through the **Time and Sales** tab in the Properties dialog box. The default number of saved data files is 5 (without configuration).

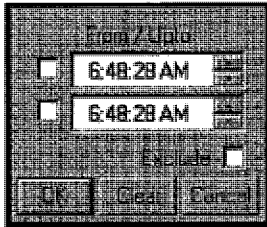
Note: **Time and Sales** files older than the configured/default limit will be deleted at startup. You have the option of manually archiving these files before they are deleted.

File Status Bar

At the bottom of the **Time and Sales** window is a **File Status** box. As time and sales information is received in the window, this box lists saved information as a percentage how much of the configured data file size has been filled. This figure is dynamic, in the sense that changing the size of the saved file through the **Time and Sales Configuration** dialog box will also alter how the percentage figure is shown. Doubling the size of the saved file from 5 MB to 10 MB, for example, will halve the percentage that is recorded as being saved to the data file.

An alert box will appear when the size of the saved file passes 100%. When the file size passes the configured limit, the **Time and Sales** window continues to update, but the data is no longer saved to a file.

Filtering Options

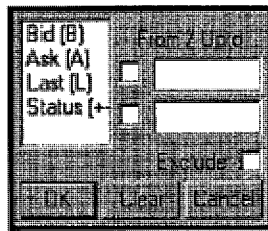


All the columns in the **Time and Sales Grid** can be filtered using a selection of criteria from a drop-down list. The presence of an applied filter is indicated by a red color code in the cell immediately below the column heading.

Entry information from each row is subject to whatever filters may have been applied to the **Time and Sales window Grid**. If filters have been applied to the information, any product information that fits the filter criteria will display, but information that does not meet the filtering constraints will not be shown in the **Grid**. The information will, however, still be stored in a file and can be retrieved later.

Column Heading	Available Filtering Criteria
Time	From, Up to, or exclude.
Exchange	Show one or multiple exchanges.
Contract	Show one or multiple contracts
Type	Show bids, asks, last price, status or any combination.
Price	Show Bids, Asks, or any combination of these choices.
Quantity	Show Bids, Asks, or Trade or any combination of these choices.
All Columns	Range (to and from) for any column.

Setting a Column Filter



► **To set a column filter:**

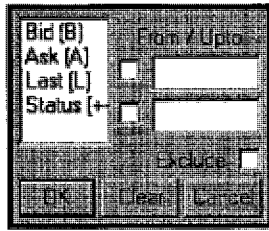
1. Open the box immediately below any column heading. A list of all currently referenced variables for the selected column displays.
2. Select one or more of the variables to set the filter.
3. Click **OK** to activate the filter.
4. When you set a filter, the box below the column heading turns red and displays the filter you selected. If you selected multiple filter variables, a row of asterisks displays.

Or:

Double click a cell to select that variable as a filter

Entry information from each row is subject to whatever filters may have been applied to the **Time and Sales Grid**. If filters have been applied to the information, any product information that fits the filter criteria will display, but information that does not meet the filtering constraints will not be shown in the **Grid**. The information will, however, still be stored in a file and can be retrieved later.

Clearing a Column Filter



► **To clear a column filter:**

1. Left-click the red column box at the top of the column. A list of all currently referenced variables for the selected column displays.
2. Select one or more of the variables to remove the filters.
3. Click **Clear** and **OK** to remove the filter.

The filters box changes from red to gray.

Chapter 16

Trade Book

The screenshot shows the TT TradeBook 1 window. The top pane, labeled 'Summary', displays a table of filled orders. The bottom pane, labeled 'Detail', displays a table of detailed order information for a selected summary line.


	Exch	B/S	Filled Qty	Avg Prc	Cur	Product	TT Order Key
1	TISM	B	100	2952.4	ELR	FDAX	0000004642
2	TISM	S	100	2948.6	ELR	FDAX	0000001690
3	TISM	B	100	2951.9	ELR	FDAX	0000009448
4	TISM	S	100	2946.9	ELR	FDAX	0000015981

	Exch	B/S	Qty	Price	Cur	Product	MIMMY
1	TISM	B	9	2952.5	ELR	FDAX	Jun03
2	TISM	B	2	2951.5	ELR	FDAX	Jun03
3	TISM	B	1	2950.6	ELR	FDAX	Jun03
4	TISM	B	6	2950.5	ELR	FDAX	Jun03
5	TISM	B	10	2953.0	ELR	FDAX	Jun03

The **Trade Book** window is used to present aggregate fill information for a single order. The window is composed of two panes. The **Summary** pane displays a single line of information for each filled order in the top half of the window. The **Detail** pane is the bottom half of the window and displays detailed information for any summary line selected in the top pane.

Opening the Trade Book Window

- ▶ Open the Trade Book window using either of these methods:

From the **Control Panel**, use the **Trade Book** button .

Or:

From the **Control Panel**, open the **Window** menu and click **Trade Book**.

Summary Pane Column Descriptions

The **Trade Book** window provides a method to access summary and detailed aggregate fill information about a particular order number. Each line of information in the top, or **Summary** pane, displays information relating to a unique order number. It is possible, however, that when multiple fills are received for a spread they will continue to show in this window as separate legs.

Column Name	Description
Row Numbers	Row Number
Exch	Exchange
B/S	Buy/Sell
O/C	Open/Close a Position
Filled Qty	Order Quantity filled
Avg Prc	Average price of the fill
Cur	Currency
Product	Exchange Symbol for displayed product
C/P	Call/Put
MMYY	Expiration Month/Year
Strike	Exercise Price of an Option
Version	Version
Account #	Back office account number or account name
FFT2	Free Form Text Field 2
FFT3	Free Form Text Field 3
Clr Mbr	Clearing member
Exch Mbr	Exchange member ID
Exch Grp	Risk Manager Direct User's Group ID
Exch Trd	Risk Manager Direct User's Trader ID

Column Name	Description
Trd Mbr	Trader's or Risk Manager's Proxy User's member's ID (e.g., Broker's client=TTORD)
Trd Grp	Trader's or Risk Manager's Proxy User's member's ID (e.g., Broker's client=SIM)
Trd ID	Trader's or Risk Manager's Proxy User's member's ID (e.g., Broker's client=666)
Acct	Agent, Market Maker, Principal, Give-up, Unallocated
Exch Time	Transaction Time—at the exchange
Type	Limit/Market
GU	Give-up Member ID
PF	Partial Fill*
Rstr (Restriction)	Disc Qty, FOK, IOC, MOO, MV, STOP
Fee	Associated Fee
P/A	Brokertec only. Designates whether your order was filled as a Passive or Aggressive order. This allows you to determine fees based on a specific order.
Order No	Order Number assigned by exchange
TT Order Key	Unique number applied to this order
Trans ID	Unique transaction ID assigned to each fill and partial fill
Exch Date	Exchange Date
Ord Time	Workstation Order Time
Ord Date	Workstation Order Date
C	Confirmed by operator
Conf Mbr ID	Confirmed Member ID
Conf Group ID	Confirmed Group ID
Conf Trader ID	Confirmed Trader ID
Conf Time	Time order was Confirmed

Column Name	Description
Conf IP	Confirmed IP Address
Cntr Party	Counter Party

Detail Pane Column Descriptions

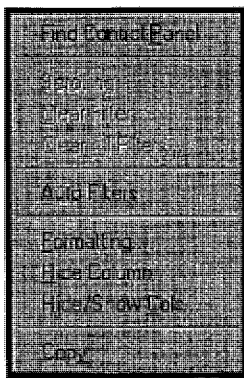
The **Trade Book** window provides a method to access summary and detailed aggregate fill information about a particular order number. The bottom, or **Detail** pane, includes the history of a given order including submission information and if the order was ever canceled or replaced. It can also display partial fills for an order, in the event that this order was only partially filled.

Column Name	Description
Row Numbers	Row numbers
Exch	Exchange
B/S	Buy/Sell
O/C	Open/Close a Position
Qty	Order Quantity
Price	Price of the fill
Cur	Currency
Product	Exchange Symbol for displayed product
C/P	Call/Put
MMYY	Expiration Month/Year
Strike	Exercise Price of an Option
Version	Version
Account #	Back office account number or account name
FFT2	Free Form Text Field 2
FFT3	Free Form Text Field 3
Clr Mbr	Clearing member

Column Name	Description
Exch Mbr	Exchange member ID
Exch Grp	Risk Manager Direct User's Group ID
Exch Trd	Risk Manager Direct User's Trader ID
Trd Mbr	Trader's or Risk Manager's Proxy User's member's ID (e.g., Broker's client=TTORD)
Trd Grp	Trader's or Risk Manager's Proxy User's member's ID (e.g., Broker's client=SIM)
Trd ID	Trader's or Risk Manager's Proxy User's member's ID (e.g., Broker's client=666)
Acct	Agent, Market Maker, Principal, Give-up, Unallocated
Exch Time	Transaction time at the exchange
Type	Limit/Market
GU	Give-up Member ID
PF	Partial Fill*
Rstr (Restriction)	Disc Qty, FOK, IOC, MOO, MV, STOP
Fee	Associated Fee
G	Not Used at this time (zero fill)
Order No	Order Number assigned by exchange
TT Order Key	Unique order number applied to this trade
Trans ID	Unique transaction ID assigned to each fill and partial fill
Exch Date	Exchange Date
Ord Time	Workstation Order Time
Ord Date	Workstation Order Date
C	Confirmed by operator
Conf MbrID	Confirmed Member ID
Conf GroupID	Confirmed Group ID

Column Name	Description
Conf TraderID	Confirmed Trader ID
Conf Time	Time order was Confirmed
Conf IP	Confirmed IP Address
Cntr Party	Counter Party

Trade Book Context Menu



The Trade Book context menu lists these additional features and options:

Menu	Description
Find Control Panel	Brings the Control Panel to the foreground of your workspace.
Scrolling	Enabled by default. A new entry into the window will cause the window view to scroll to that entry.
Clear Filter	Right-click in the column that contains a filter and click Clear Filter to remove the filter.
Clear All Filters	Right-click in the grid and click Clear All Filters to quickly remove all filters in the Trade window.
Auto Filters	Enables Auto Filters, which then filters the data by the selected customer in the Customer List window.
Formatting	Options for customizing fonts, colors, and borders.
Hide column	After selecting a cell in a pane or selecting multiple columns, this option immediately hides the column(s).

Hide/Show Columns	Allows you to select which columns to hide or show. Use this option to show columns hidden by "sliding" them closed in the window.
Copy	After selecting the data to be copied, choose this option to place the data on a clipboard. You can then paste the data into another program (for example, Excel).

Displaying Fill Details

Exch	B/S	O/C	Filled Qty	Avg Pric	Cur	Product
TSM	B	C	3	41.5 USD		MS
TSM	B	C	15	11.00 USD		YHOO
TSM	B	C	5	970.00 USD		FGEM
TSM	B	C	5	970.00 USD		FGEM
TSM	B	C	5	970.00 USD		FGEM
TSM	B	C	5	970.00 USD		FGEM
TSM	B	C	15	11.00 USD		MS
TSM	B	C	15	11.00 USD		MS
TSM	B	C	15	11.00 USD		YHOO

The **Trade Book** window provides a method to access summary and detailed aggregate fill information about a particular order number. Each line of information in the top, or **Summary** pane, displays information relating to a unique order number. It is possible, however, when multiple fills are received for a spread that they will continue to show in this window as separate legs.

The bottom, or **Detail** pane, includes the history of a given order including submission information and if the order was ever canceled or replaced. It can also display partial fills for an order, in the event that the order was only partially filled.

► To display detailed fill information about an order:

1. Click on a row in the top, or **Summary** pane, of the **Trade Book** window.
2. The detailed information will be displayed in the bottom or **Detail** pane.

If the default color-coding is enabled the rows in the **Summary** pane will appear in different colors, depending on whether the fill is complete, partial, etc. Specifying the color values in the **Trade Book** window (as well as most other windows in X_TRADER®) is done through the **Color** tab in the **Properties** dialog box.

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Appendix A

BrokerTec Functionality

Note: X_TRADER® rejects orders from TTORD traders!

The following section describes the new features and functionality within X_TRADER® that support BrokerTec.

Products

The following BrokerTec products are available to trade with the initial launch:

- 2 year treasuries ("On the Run" FF (FIFO) and When Issued (WI) FF)
- 3 year treasuries ("On the Run" FF and When Issued (WI) FF)
- 5 year treasuries ("On the Run" FF and When Issued (WI) FF)
- 10 year treasuries ("On the Run" FF and When Issued (WI) FF)
- 30 year treasuries ("On the Run" FF and When Issued (WI) FF)

Order Types

Note: X_TRADER® supports the execution of **Aggressive** orders only.

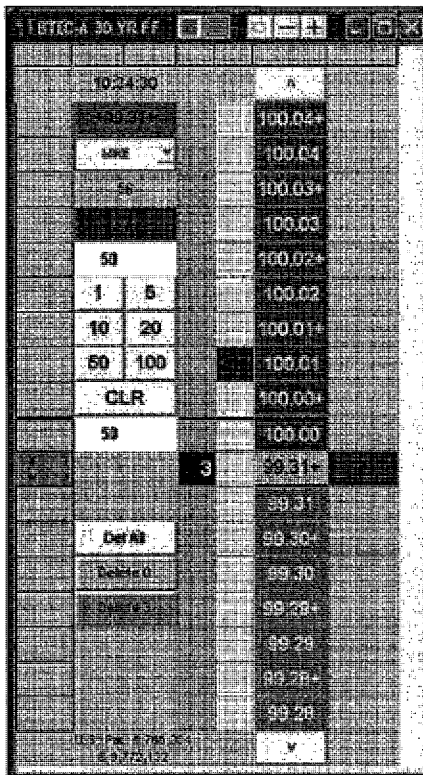
The following list describes the order types that X_TRADER® supports with the initial launch. The first column describes the BrokerTec order type and the second column lists its associated X_TRADER® order type. If you enter orders using an order type that is not supported by X_TRADER®, the orders are rejected.

BrokerTec Order Type	Associated TT™ Order Type
FaS: Fill and Save. Fills as much as possible and saves the remaining quantity.	Limit Due to the functionality of the BrokerTec system, the resting quantity of a Limit order becomes Passive . In other words, it fills what it can, then changes to Passive .
FoK: Fill or Kill. Fill completely or cancel immediately. Partial fill not accepted.	FOK
FaK: Fill and Kill. Fill what is possible and cancel the rest immediately. Partial fill is accepted.	IOC
Order with hidden size.	Disclosed Quantity Due to the functionality of the BrokerTec system, the resting quantity of a Disclosed Quantity becomes Passive . In other words, it fills what it can, then changes to Passive .

In this example, if you submit a limit order through X_TRADER® to sell 10 @ 99.31+, it receives a partial fill of 7. The mode of the remaining order for 3 @ 99.31+ changes to Passive.

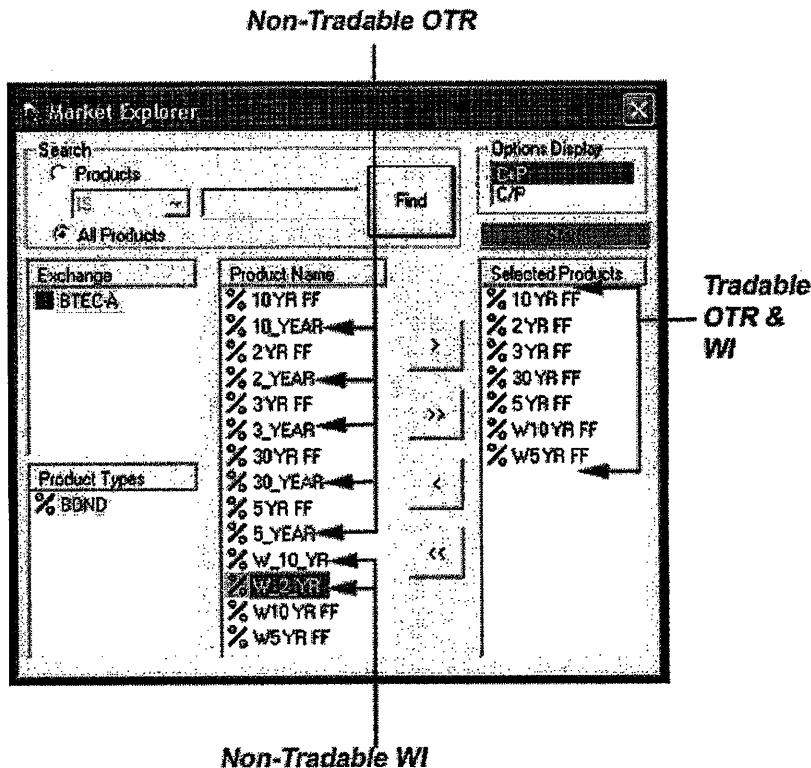
In this example, if an order to buy 3 @ 99.31+ is entered, the remaining order is filled.

Note: The P/A column in the Fill window, Trade Book and Audit Trail indicates whether a fill is Aggressive or Passive.



Note: MD Trader™ is protected by U.S. Patents Nos. 6,766,304 & 6,772,132.

Non-Tradable Products

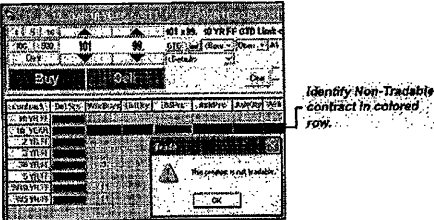


Note: "On the Run" contracts are also referred to as Actives.

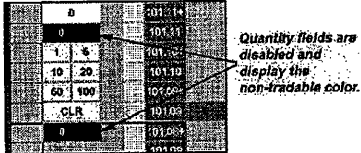
X_TRADER® supports trading in the BrokerTec FIFO market only. The BrokerTec GUI, however still supports trading in the Work-Up market:

- Tradable products include: 2, 3, 5, 10, 30 Year "On the Run" FIFO and When Issued FIFO
- Non-tradable products include: 2, 3, 5, 10, 30 Year "On the Run" Work-Ups and When Issued Work-Ups
- Although X_TRADER® does not support the trading of products and their associated contracts in the Work-Up market, it still displays these products in the following X_TRADER® windows:

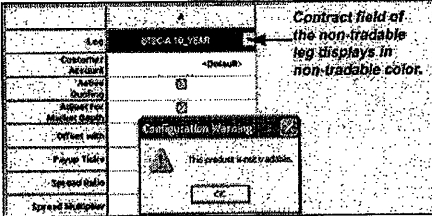
- Market Grid (and associated Market Depth)



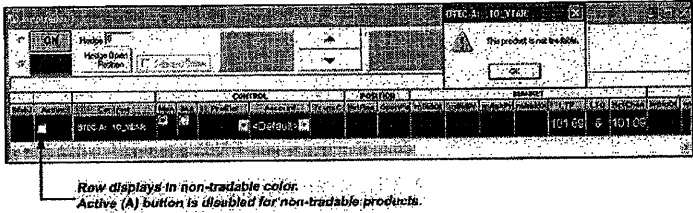
- MD Trader™



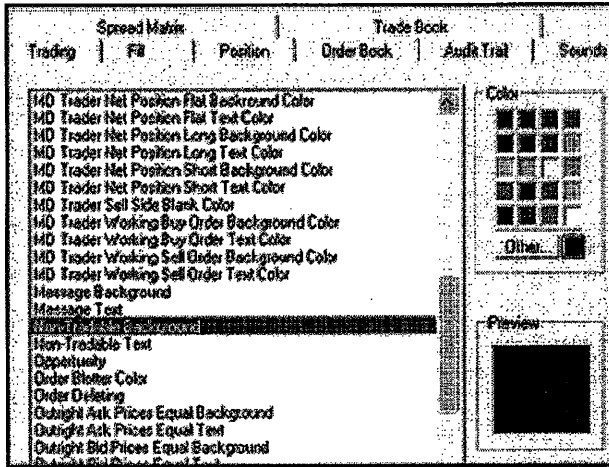
- Autospreader™



- Autotrader™



You can change the default background and foreground display color of non-tradable products by going to the Properties **Color** tab and scrolling down to the non-tradable options.



Because X_TRADER® displays products that are non-tradable in X_TRADER®, it alerts you when you work with these products:

- Using drag and drop to populate windows with products:

If you drag a non-tradable product into **Autospreader™**, a **Warning** dialog box displays with the message: "This product is not tradable." X_TRADER® then allows you to complete the action.

If you drag a non-tradable product into **Autotrader™**, a **Warning** dialog box displays with the message: "This product is not tradable." X_TRADER® then allows you to complete the action. The **Active** button in the row containing the product is disabled.

If you drag a non-tradable product into **MD Trader™**, a **Warning** dialog box displays with the message: "This product is not tradable." X_TRADER® then allows you to complete the action.

- Using direct order entry to enter a trade:

If you attempt to enter a trade for a non-tradable product using **Market Grid**, **MD Trader™**, **Floating Order Entry** window, a dialog box displays with the message: "This product is not tradable."

- Using **Autospreader™**:

If you enter an order for non-tradable products using the automated functionality in **Autospreader™** X_TRADER® displays a message in **Audit Trail** indicating that this is a non-tradable product.

- It is not possible to enter an order for a non-tradable product using **Autotrader™**.

Pricing Format

The **Market Grid**, **MD Trader™**, **Autospreader™** and **Autotrader™** display prices for BrokerTec products in the following manner:

- 2, 3, and 5 year Actives trade in quarter of 1/32.
- **For example:** 34.00, 34.002, 34.00+ ,34.006, 34.01, 34.012, 34.01+, 34.016, etc.
- 10 and 30 year Actives trade at half of 1/32.
- **For example:** 34.00, 34.00+, 35.01, 35.01+, etc.
- 2, 3, 5, 10, 30 When Issued contracts trade in yield.

Note: No trailing zeros display for Actives pricing formats.

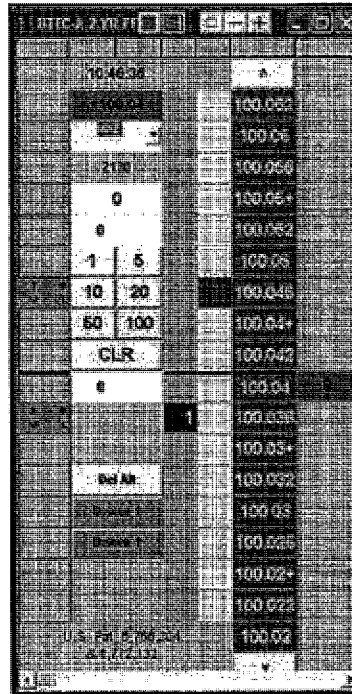
The notation represents the following:

- 0 => 0/8 = 0
- 2 => 2/8 = 1/4 = 0.25
- + => 4/8 = 1/2 = 0.50
- 6 => 6/8 = 3/4 = 0.75

The CBOT and EurexUS use the following notation for futures:

- 0 => 0.00
- 2 => 0.25
- 5 => 0.50
- 7 => 0.75

The two notations are equivalent.



Note: MD Trader™ is protected by U.S. Patents Nos. 6,766,304 & 6,772,132.

Determining the DV01 for When Issued Products

DV01 is the dollar value of a basis point, which is also a function of a coupon. The coupon of a When Issued product is not known. Therefore, an approximation of the coupon must be made in order for X_TRADER® to calculate P/L in currency correctly.

The risk administrator may choose to use the prior day's closing yield for the coupon. Since this is only an approximation, the resulting P/L is not completely accurate. Your risk administrator may determine the DV01 using different values as well.

Once you determine the DV01, the point value can be calculated as:

$$\text{Point Value} = \text{DV01} * 100$$

Use these values to populate the **Product Table** of **Guardian**. Whenever point values are updated, the product table must be published.

Manual Order Entry

When you enter or change orders through the **Market Window's** Order Entry pane, **Floating Order Entry** window or the **Order Book**, you can use the "+" to indicate the ½ tick.

Excel Links

You have the ability to link into X_TRADER® using **Market Grid**, **Autotrader™**, or **MD Trader™**:

- For prices imported from Excel, X_TRADER® interprets the digit 4 used in place of the "+" sign as a "+" sign.
- When you link from X_TRADER® into Excel, X_TRADER® converts the "+" sign into a four (4).

Note: You must be careful when using BrokerTec prices within Excel calculations. The 4 and 6 will not be interpreted by Excel as ½ and ¾ respectively.

Market Grid

In order to trade fixed income products, you should be aware of the following changes and additional features to X_TRADER®'s **Market Grid**:

- If you select a When Issued product when none exist from the **Market Explorer**, the **Market Grid** opens with a blank grid. As soon as a When Issued product is created, it displays in the **Market Grid**.
- **Market Grid Status** column displays N/A for non-tradable products.
- Market Depth displays for both tradable and non-tradable products.
- When Issued products trade in yield which is inversely related to price. When you display the Market Depth of these products, the higher number displays at the bottom of the grid. Other exchange prices display with the higher numbers in descending order.

MD Trader™

Features in MD Trader™ that support BrokerTec products include:

- Supports the "+" sign in the **Price** column.
- Displays When Issued prices with the higher numbers near the bottom (ascending order) because When Issued products trade in yield which is inversely related to price. Other exchange prices display with the higher numbers in descending order.

1	3			
10	20			
50	100			
CLR				
0				
5L	5M			
CM				

Because When Issued products trade in Yield, prices display with the highest numbers at the bottom of the MD Trader window (and the Market Grid's Market Depth display).

Autotrader™

Autotrader™ supports the use of "+" sign in automated order entry.

Autospreader™

Features in **Autospreader™** that support BrokerTec products include:

- Ability to create a spread using an Active contract and When Issued contract.
- Ability to create a spread using a non-tradable product. For more information, review the **Non-Tradable Products** section.
- If you create a spread using a non-tradable product, the **Contract** field of the non-tradable leg displays the default non-tradable color to help you identify it.
- Cannot save **Autospreader™ Configuration** dialog box with **Quoting** enabled for a non-tradable product. If **Quoting** is enabled, a dialog box displays with the message: "Cannot quote non-tradable products."

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Appendix B

EurexUS Functionality

The following section describes the new features and functionality within X_TRADER® that support the EurexUS exchange.

Products

The following EurexUS products are available to trade with the initial launch:

- 2-year Treasury Note Futures (FTNS)
- 5-year Treasury Note Futures (FTNM)
- 10-year Treasury Note Futures (FTNL)
- 30-year Treasury Bond Futures (FTBX)

Note: Associated calendar spread strategies are also supported.

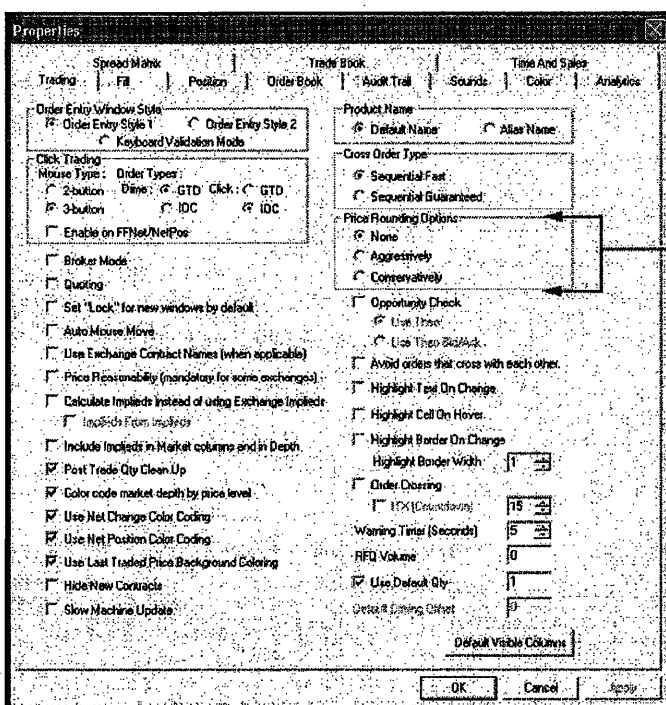
Non-Tradable $\frac{1}{4}$ Tick Prices

Because the tick size of the 5, 10, and 30 year outright is twice the size of their associated calendar spreads *and* implied pricing is supported between the outright and the calendar spreads, the calendar spreads can imply prices in the outright on the $\frac{1}{4}$ tick that are not tradable.

Market Grid and Order Entry Pane, Floating Order Entry Pane and Order Book

The Properties **Trading** tab includes a new property that allows you to choose your 1/4 32nd rounding option. When you change the default (**None**), the rounding option applies to all orders you enter through X_TRADER®. This property does not apply to Autosreader™ and Autotrader™.

Note: This property does exclude Stop orders that always round *away* from the market.



Allows you to choose your 1/4 32nd rounding option.

None: Sends order at your selected price even if non-tradeable. The exchange rejects the trade.

Aggressively: Rounds 1/4 tick prices towards the market.

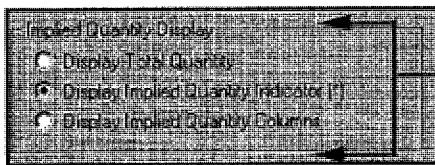
Conservatively: Rounds 1/4 tick prices away from the market.

MD Trader™

In order to handle the non-tradable ¼ tick prices of some EurexUS products, MD Trader™ rounds:

- Last Traded Price, Last Traded Quantity, Net Change and Volume at Price *away* from the inside market.
- High and Low prices *towards* the inside market.

The MD Trader™ Options dialog box includes a new property that allows you choose how the quantity available at the ¼ 32nd price displays when it's available.



Allows you to choose how the quantity of the 1/4 32nd price displays when it is available.

The options in the **Implied Quantity Display** property follow:

- **Display Total Quantity:** MD Trader™ window displays entire quantity at the nearest tradable price, rounding bids down and offers up.
- **Display Implied Quantity Indicator (*):** MD Trader™ window displays the entire quantity, rounding bids down and offers up, with an asterisk (*) next to the nearest tradable price. This is the default setting for this property.

50	100		113185
CLR			113180
20	*31		113175
SM	102		113170
	70		113165

Displays entire quantity with an asterisk () next to nearest tradable price. This is the default setting for the property.*

- **Display Implied Quantity Columns:** MD Trader™ window displays the available quantity at the ¼ tick better price in separate columns for bid and ask quantities. These columns display in the same color as Bid and Ask columns, but display the better quantity in a smaller font.

	10	20		113100	
	50	100		113150	11
CLR			10	113180	133
	20		20	113175	

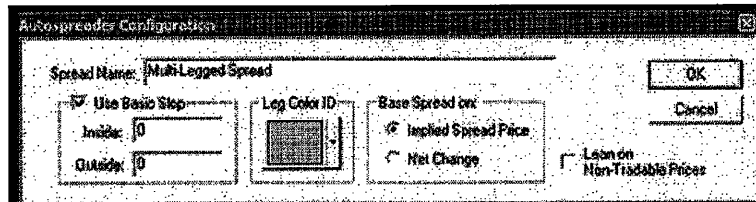
Window displays the available quantity at the 1/4 tick better price in separate columns for bid and ask quantities.

Autospreader™

The Autospreader™ Configuration dialog box now includes a new property that allows you to choose whether to lean on the quantity at the ¼ 32nd better price when quoting and hedging.

Click **Lean on Non-Tradable Prices** to choose this order entry option.

When this option is selected, Autospreader™ considers the quantity available at ¼ tick better price when selecting the ideal quoting price. In addition, Autospreader™ rounds toward the market when hedging if a ¼ tick better quantity is available.



Fill Window

In order to display P/L correctly, the **Position** pane of the **Fill** window:

- Displays correct P/L when the **Last Traded Price** is on a ¼ 32nd tick.
- Displays P/L by ticks in ¼ 32nd ticks.

Appendix C

Reduced Tick Spreads

The eCBOT platform released by the CBOT affects the X_TRADER® system. The following information is provided to help you understand the changes and how they interact with the X_TRADER® system.

Characteristics

The following list provides an overall description of Reduced Tick Spreads:

- Reduced Tick Spreads will now be treated as a strategy, not a separate product. The Reduced Tick Spread strategy is available in a smaller tick size from other strategies and outright months within the same product. For example, ZB3 is now ZB Reduced Tick Spread.
- Reduced Tick Spread orders are matched only with other Reduced Tick Spread orders.
- For example, ZB Reduced Tick Spread orders do not match ZB outright orders.
- When a Reduced Tick Spread is traded, the volume of the outright legs is updated, but the price is not.
- Reduced Tick Spread legs may get filled in $\frac{1}{4}$ ticks (when appropriate) even though the outright product does not trade in $\frac{1}{4}$ ticks.
- Reduced Tick Spreads send volume updates *only* for trades to the outright legs. They do not update traded leg prices in the respective outright months.
- Reduced Tick Spreads trade in the same denominator as the other strategies and outrights. Therefore, the denominator for both is 32, but the Reduced Tick Spread trades in $\frac{1}{4}$ 32nds.
- Reduced Tick Spread strategies do not support Implied In and Implied Out prices.
- Reduce Tick Spreads do not settle in a tick size less than the outright markets.

Products

The products that need to be reconfigured to include **Reduced Tick Spreads** include:

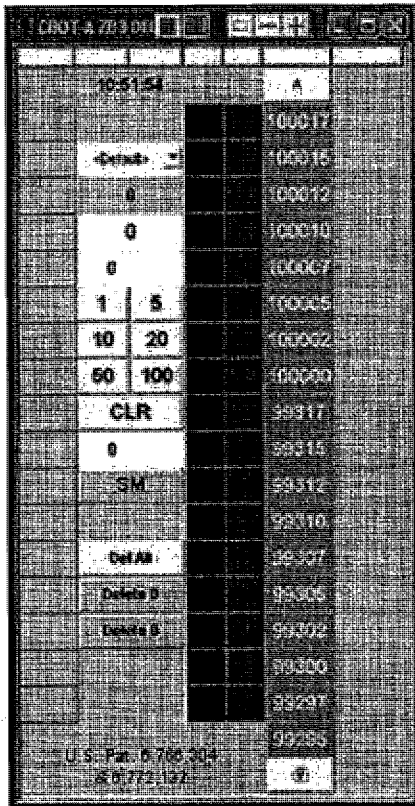
- US Bond Futures (ZB): $\frac{1}{4}$ of $1/32^{\text{nd}}$
- 10 Year Note Futures (ZN): $\frac{1}{4}$ of $1/32^{\text{nd}}$
- 5 Year Note Futures (ZF): $\frac{1}{4}$ of $1/32^{\text{nd}}$
- 5 Year Agency Note Futures (AF): $\frac{1}{4}$ of $1/32^{\text{nd}}$
- 10 Year Agency Note Futures (AN): $\frac{1}{4}$ of $1/32^{\text{nd}}$
- 10 Year Interest Rate SWAP Futures (SR): $\frac{1}{4}$ of $1/32^{\text{nd}}$
- 5 Year Interest Rate SWAP Futures (SA): $\frac{1}{4}$ of $1/32^{\text{nd}}$

Reduced Tick Spread Pricing

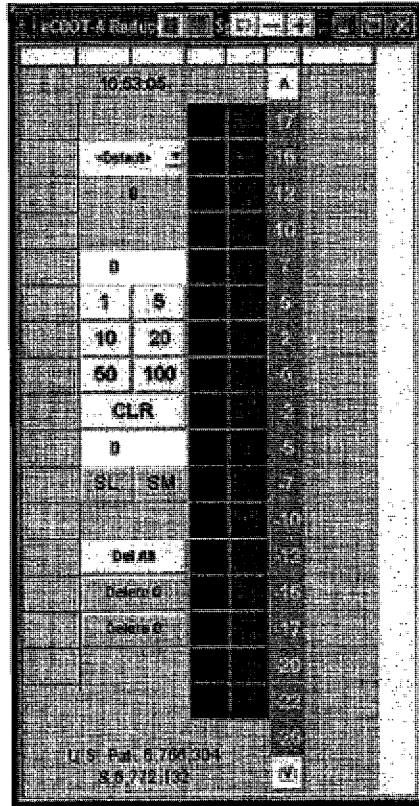
Unlike on the A/C/E platform, orders for **Reduced Tick Spreads** on eCBOT are always entered as a single positive or negative price representing the tick differential between the front month and the back month of the spread.

In order to compare display differences between the A/C/E platform and the eCBOT platform, the following screen shots display the ZB product on each.

ZB3 Product on A/C/E



ZB Reduced Tick Spread on eCBOT



Note: MD Trader™ is protected by U.S. Patents Nos. 6,766,304 & 6,772,132.

Leg Pricing

Leg prices for Reduced Tick Spread fills will be based on an **Indicative Market Price** as follows:

- The front month leg will be priced at the **Last Traded Price**. If the **Bid** is above the **Last Traded Price**, or the **Offer** below the **Last Traded Price**, it will be priced at a midpoint of the Bid and Offer.
- The back month leg will be based off of a spread differential from the front month leg price, which takes into consideration the previous day's spread differential.

Implications for X_TRADER®

Note: If you have any questions about these changes, please contact your account manager.

The following information describes the affects of the **Reduced Tick Spread** on the X_TRADER® system:

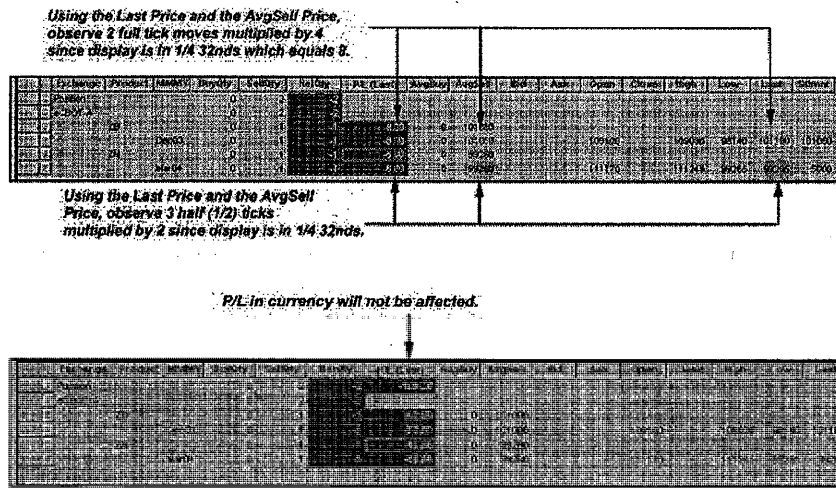
- **Trailing Zero (0):** Added a Trailing zero to the prices of Bond (ZB), calendar spreads and outrights. This trailing zero allows for 1/4 tick display required by the ZB Reduced Tick Spread.

1010600	1010670	1010700	1010650	1010400
---------	---------	---------	---------	---------

Trailing Zero allows for 1/4 tick display.

Note: In the Market Grid, if you manually enter the price, you *must* include the trailing 0. If you do not include the trailing 0, you may enter an order that is way off the market.

- P/L in X_TRADER®: P/L by tick for **Reduced Tick Spread** strategies and the associated calendar spreads and outrights reflect the quarter ticks.



Implications for Autotrader™

- If you use CBOT prices in Excel formulas or **Autotrader™** formulas, these formulas may need to be adjusted. Formulas must consider the trailing 0 or the new price format for **Reduced Tick Spreads**.
- Additional formulas may be required for reduced tick spread strategies in Excel or **Autotrader™**.

Certain eCBOT products tick in a non-linear fashion and may need some special handling when you are quoting in **Autotrader™**.

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