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Creative NOMAD Jukebox Digital Audio Player Review

[11/07/2000 12:00 AM | [Multimedia](#)]
by [Ilya Gavrichenkov](#)

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This is an MP3 player of a totally new generation. Due to a 6GB hard disk drive, it is capable of storing up to 100 hours of music. EAX support it features, should satisfy even the most pretentious listener.

Table of Contents

- [The Good](#)
- [The Bad](#)
- [Conclusions](#)


Pages: [1]

MP3 players will hardly surprise anyone today. After the legendary Diamond Rio 300, which has become a kind of pioneer in this very popular field, the market of MP3 devices and the like started growing incredibly fast. Every time a manufacturer introduced a new MP3 player, he claimed that only his new device was the one to represent a new generation of MP3 players. However, most enhancements dealt with adding new features such as microphone recording or a built-in electronic organizer. The major component of the player, the storage unit, remained unchanged. Usually it was the Flash memory of difference size. However, taking into account the price-to-performance ratio, Flash memory appeared a pretty expensive thing, even today its cost is quite high. That's why it's been really hard to provide an MP3 player with a large amount of Flash memory. At the same time, the memory size turned into the main bottleneck of all MP3 players, because it didn't allow storing enough MP3 music. This is one of the reasons, which pushed the developers towards CD-players capable of playing CD disks with MP3 files. But it isn't our today's topic.

The hero of our today's discussion is a new MP3 player from Creative, NOMAD Jukebox (D.A.P. Jukebox for Europe), which deserves being called a new generation MP3 payer. The feature that distinguishes this product from all the other PM3 players is a HDD used for files storing. Due to this fact as well as to a number of other exclusive cool features, NOMAD Jukebox can become a very popular digital audio-player. Especially since it looks much more attractive from some viewpoints than its existing mini-disk and CD brothers. However, very often a brilliant idea can be brought down to naught by inaccurate implementation and hence lose all its unique advantages. So, we decided to take a closer look at NOMAD Jukebox to find out what it was worth.

Creative NOMAD Jukebox specifications look as follows:

- 6GB hard disk drive capable of storing up to 100 hours of CD-quality sound;
- EAX technology support;
- Equalizers;
- Surround sound via headphones;
- Adjustable play speed;
- Four-channel line Out;
- Re-programmable firmware, which allows adding new functions and new formats support;
- Stereo line In;
- USB interface;
- Large memory buffer for 5-minute shock protection;
- Connector for the external power supply;



- WAV and MP3 support;
- Large LCD display (134x64 pixels);
- 4 AA batteries;
- Signal-to-Noise ratio: >90dB;
- Maximum output: 100mW;
- Frequency response: 20Hz-20KHz;
- Weight: 400g;
- Dimensions: 12x12x3cm.

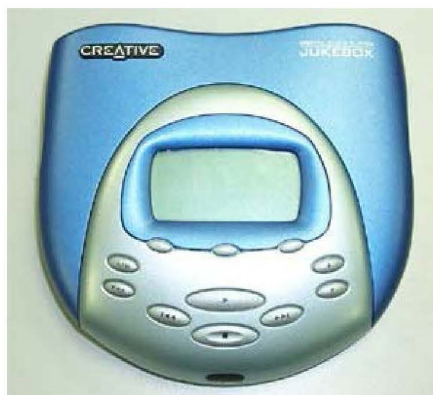
The package includes the following stuff:

- Creative NOMAD Jukebox player;
- USB cable to connect the player to the PC;
- Power supply unit;
- 1 4-pack AA NiMH rechargeable batteries and 1 spare 4-pack AA NiMH rechargeable batteries;
- Stereo headphones;
- Carrying pouch;
- Installation CD and manual.

And now let's take a closer look at this product, at its advantages and drawbacks.

The Good

Creative NOMAD Jukebox looks just like an ordinary CD player and is of nearly the same size.



However, this is just the exterior looks. And inside hides the major advantage of NOMAD Jukebox over other MP3 players - a hard disk drive. The today's Jukebox features a 6GB ATA/66 Fujitsu MHK2060AT HDD, just the same as you can see in some notebooks.



The HDD of high capacity like that allows storing up to 100 hours of music in MP3-files recorded with CD quality (at the bitrate of 128Kbit/s, or 50 hours at 256Kbit/s, which is now getting more and more popular).

As a result, Jukebox can become a portable music library, where you store not only your favorite music tracks, but just everything you may ever need. In other words, once uploaded to Jukebox, the MP3 files do not need to be removed every time you wish to upload something new. And this is an

indisputable advantage of this player compared to other MP3 players featuring little memory. By other players you have to upload the album anew if you want to listen to it, since most of them do not have enough room to store all your favorites. As for Jukebox, you can have over a hundred of albums stored and hence have a really rich choice. So, with the entire music collection on a single player, you will connect it to the PC not too often, only if your favorite singer records a new track or launches a new album.

The files are uploaded to the Jukebox via the USB bus. No wonder, since this is the today's fastest bus for external devices. Moreover, it's a really hard task to stuff 6GB of your Jukebox memory with music. The data is transferred from the PC to the player at approximately 500KB/sec.

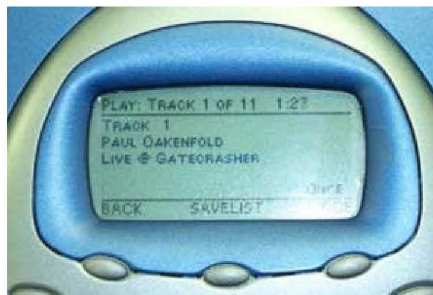
To upload the files you can use a special utility from Creative, PlayCenter 2.0, which allows uploading ready files from the PC hard disk drive as well as grabbing the tracks directly from the CD disk inserted into the CD ROM drive of your PC. It takes about 10 minutes to read, encode and upload to the Jukebox an average CD with music.

The interface of Creative PlayCenter 2.0 is very simple: two clicks are more than enough to move the files from the PC to the player.



Since one day your Jukebox may be filled with over 1000 tracks, the classification issue appears quite acute. We have to admit that the developers coped with this task really well. Even though the file system of the Jukebox is not hierarchical, there are three main criteria for sorting the tracks: albums, artists and genre. Creative PlayCenter 2.0 borrows these data from the CD Internet database, CDDDB2. If you like, you may fill in the necessary infos manually, no problem. Besides, the player also allows searching the tracks simply by name. All in all, you will hardly get lost in the bunch of files you have in your Jukebox.

The player has all the required controls, which are pretty cleverly implemented. The only thing it lacks is the possibility to rewind fast the track being played. All the info about the player status, hints and system notifications are shown on a seven-string LCD-display. Even at night you will be able to see what is going on there, because the display is provided with the backlight.



As far as the playback and decoding quality are concerned, Jukebox surely proves not bad at all. However, some of you may be not very happy with the MP3 algorithm and the files compressed following this method. If you are that hard to please, Jukebox can offer you the ordinary WAV format. With the 6GB HDD you will be able to store over 10 CDs in this primitive format. The same Creative PlayCenter 2.0 utility can also grab CD-tracks in WAV format.

One of the coolest advantages of the first MP3 players was the absence of moving parts in the player construction, which allowed giving up shock protection issue. As for Jukebox, it cannot boast the same

thing. Even though its HDD can stand the shock of 150G, shock protection is badly needed. So, the manufacturer had to provide Jukebox with the appropriate memory resources, namely with an 8MB DRAM buffer, which prevents the playback from interruption in any situation. This buffer is more than enough not only when listening to MP3 files, but also when playing the WAV-files.

We have to point out that even compared to CD and MD players, Jukebox still appears more attractive. The thing is that this player is also equipped with a digital signal processor (DSP), which allows adding sound effects in real time. First of all, we should mention the equalizer used to change the level of high, medium and low frequencies separately within the interval from -12dB to +12dB. Secondly, the player features surround sound option. Thirdly, you can adjust the play speed (note that this function is typical only of professional dictaphones). And finally, we should also mention Creative brand feature: changing environmental settings like by Sound Blaster Live! sound cards (EAX).

However, when designing its Jukebox, Creative didn't want to offer the world just a primitive player, but aimed at creating an additional MP3 device for your home stereo system. That's why Jukebox is provided with a four-channel line Out, so that you could connect it to five- or six-piece acoustic systems. Besides, NOMAD Jukebox also has a line-In. With the help of this Input port you can save incoming sound signals in WAV format to your Jukebox player. There is also an infra-red port, which isn't used now. However, Creative promises to design a remote control unit for this player, so the infra-red port got involved. As for headphones supplied together with the player, they are definitely of much higher quality than those accompanying other MP3 players.

An important peculiarity of NOMAD Jukebox is the possibility to update the player firmware. So, Creative has the chance not only to eliminate errors if there are any, but also to add some extra features and EAX effects.

The Bad

Unfortunately, Jukebox is not ideal and it also has its disadvantages. The major drawback of this device is the increased power consumption because of the HDD used in it. That's why 4 AA batteries will last Jukebox only an hour listening at the most. Therefore, Creative accompanies its offspring with two sets of high capacity AA rechargeable batteries, which last the player up to 4 hours. At first sight the problem seems to be solved, but... After about 40 minutes playing the batteries lose so much power that the player stops responding adequately to the external impacts, in particular it stops responding to button pressing though the music keeps playing fine. That's why it is a really difficult task to stop the player after 1.5-2 hours of continuous playback: all the buttons as well as the volume regulator stop working. The only thing that can help in this case is the "reset" button, which we were lucky to find on the player. Fortunately, there are no problems like that when using the player connected to the AC.

Although the DSP used in Jukebox allows implementing a number of interesting effects, it causes noticeable volume decrease if activated, i.e. if you activate the equalizer, surround sound or environmental audio extensions. As a result, you can listen to the sound with some effects applied to it only via the external speakers or audio system. To our great disappointment with the headphones on we could listen to music only in a quiet room in this case, and as for listening to music outdoors or in a bus, it appeared absolutely impossible because of the extremely low volume.

Since Creative NOMAD Jukebox isn't just a consumer electronic appliance, but a mini-computer, it can boast its own operation system. Although, this system is quite a slow one: it takes the player a bit long to respond to button pressing, and it takes the system about 15-20 second to load completely. Besides, the developers also remembered about such an important thing for systems with a HDD, as file defragmenting. So, with the time your Jukebox threatens to become as slow as a snail.

Moreover, Jukebox doesn't allow downloading the files from the player HDD back to your PC. Of course, the developers intended to eliminate the problem of music copyright violation. However, as a result your player turns out unable to serve as a removable storage unit which appears a definite drawback for it, since it has a 6GB HDD.

Though the previous Creative player, NOMAD II, featured a built-in FM-tuner, NOMAD Jukebox cannot boast this attractive trifle. The developers probably thought that 100 hours of music could replace the radio completely.

Certainly, we can't disregard the poor info displayed on the LCD-panel during the music playback. Jukebox doesn't show the bitrate, track format and the current bpm, while a lot of MP3 players from other manufacturers do provide this info.

The only thing that can justify this decision, is the possibility to update the player firmware. So, this gives us some hope that the drawbacks will be eliminated in the nearest future.

In conclusion we would like to touch upon the price issue. The recommended price for Creative NOMAD Jukebox makes \$500, while the players with 64MB memory cost \$200 at the most. We doubt

that Jukebox owes this huge price difference to the DSP and HDD. The most logical explanation here is Creative's ambitions. So, we think that the price should undoubtedly drop in the nearest future, when the company skims the first sales.

Conclusions

All in all, Creative NOMAD Jukebox is a very interesting and original device. However, unfortunately, this beautiful idea wasn't put into practice that beautifully and the player has a lot of significant drawbacks, which prevent you from enjoying it as a portable device. As for the stationary usage, Jukebox proves really cool.

Nevertheless, EAX support, huge storage capacity (up to 100 hours of music) and some other interesting features, make Jukebox an important stage in the development of digital audio players. That's why we really hope that new firmware versions will help remove some of the drawbacks and Jukebox wins the hearts of numerous MP3 fans.

Table of contents:

[Home >](#)

Pages: [1]



11

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