

*Newnes*

# Dictionary of Electronics

Fourth Edition

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Newnes

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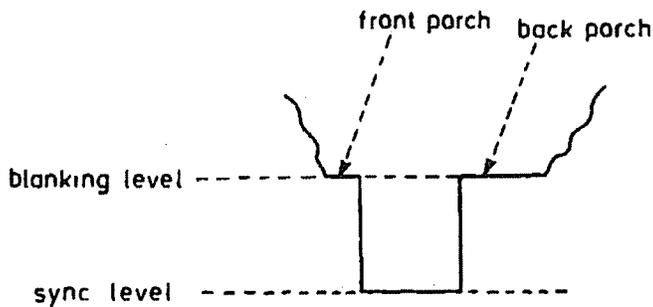


Figure L.8 Waveform of television line sync signal

**line time base** In TV the circuits responsible for generating the signals causing horizontal deflection of the *scanning beam*. In modern TV receivers the line output stage generates, in addition to the line scanning current, a direct voltage to boost the supply to the output stage, the heater supply for the picture tube, the EHT supply for the picture tube and possibly a low-voltage supply for early stages in the receiver.

**liquid crystal display (LCD)** A display system consisting essentially of a very thin layer of liquid sandwiched between two conducting glass plates between which the control voltage is applied. One way in which the applied voltage controls the light transmission of the device is by varying the light scattering in the liquid which is specially chosen because of its long-molecule construction. The conducting areas of the plates are such that, by applying voltages to certain of the leads, specified areas of the display can be illuminated by light transmitted through the device or reflected at the rear glass plate. Thus a seven-segment pattern can be used to give a numerical display.

Liquid crystal displays consume very little electrical power compared with *light-emitting diode* displays and have superseded LEDs in battery-operated calculators and digital watches.

**Lissajous figures** Patterns generated on the screen of a *cathode ray tube* when the *electron beam* is deflected horizontally and vertically by sinusoidal signals with a simple relationship between their frequencies. Some typical patterns are shown in Figure L.9.

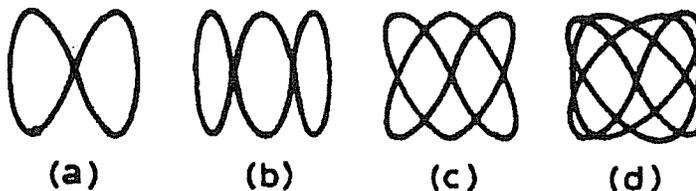


Figure L.9 Some typical Lissajous figures

**Litz wire** See *skin effect*.

**L-network** A network consisting of one series and one shunt element. See Figure L.10.

**load** (1) Of any signal source the circuit connected across its terminals and into which it delivers power. See *anode load*. (2) In computers and data