



Glossary

Number of units.

°C Degree(s) Celsius.

°F Degree(s) Fahrenheit.

A 1. Amp(s).

2. A pressure of one atmosphere, commonly used as a reference level in assessing sound pressure.

AC Alternating current.

Accuracy Calibration X-axis calibration.

ADC Analogue to Digital Converters.

Addressable DPI A resolution higher than the nominal value of the cartridges, giving a finer grid on which the plotter can selectively position dots and improve print quality.

Ambient Temperature The surrounding temperature.

ASIC Application-Specific Integrated Circuit.

Banding A type of printing fault when you see repetitive horizontal bands within the printed image (these may appear as light or dark bands).

Baud Rate For the RS-232-C interface, the data transmission rate between the computer and the plotter (bits per second).

Bidirectional Print Mode A print mode in which plotting is performed while the carriage is moving in either direction.

Binding Obstruction to movement.

Bi-Tronics A parallel interface standard.

°C Degree(s) Celsius.

CAD Computer-Aided Design.

Calib. Calibration.

CAM Computer-Aided Manufacturing.

Carriage Axis The axis along which the carriage moves. (Y-axis.)

Carriage LED Line sensor.

Cartridge Print cartridge (pen).

Centronics A parallel interface standard.

Checkout Of nozzles: testing of nozzles by firing them one by one.

Checksum A programming method used to minimize data errors when data are transferred. ... (Part of a definition from *The Harper Collins Dictionary of Computer Terms*, © Ian R. Sinclair 1991.)

CM Centimeter(s).

Customer Engineers HP field support engineers.

D/A1-Size Plotters Models C3190A and C4694A.

Data Display Service monitor.

dB Decibel(s).

DC Direct current.

Depletion The selective reduction of the number of drops placed on the media, in order to prevent an excess of ink on the media.

Display Data Service monitor.

Display List An internal logical map, in swath format, containing data representing graphical objects.

DOS (MS-DOS.) MicroSoft Disk-Operating System.

dpi Dot(s) per inch, the plotter's resolution of raster images on the media.

DRAM Dynamic Random-Access Memory.

Drive Roller Platen roller.

Drive-roller Gear Helical gear at right-hand side of drive roller.

Driver 1. An electronic circuit that provides input to another electronic circuit, (from *Webster's Ninth New Collegiate Dictionary*, © Merriam-Webster 1991).
2. Configuration data used by software to control input and output between the computer and the plotter.

DTR Data Terminal Ready.

Duty Cycle The amount of use a plotter should withstand without undue maintenance.

E/A0-size plotters Models C3191A and C4695A.

ECP Extended Capability Port. (A Bi-Tronics operating mode.)

EEROM Electrically Erasable Read-Only Memory.

Electronics Module The equivalent of the *electronics enclosure* of previous models in the DesignJet series.

EPROM Erasable Programmable Read-Only Memory.

ESD Electrostatic discharge.

°F Degree(s) Fahrenheit.

Firmware

Film A type of media.

Flow Mode The plotting of images that have already been rasterized by computer software and do not need to be rasterized by the plotter itself.

ft foot/feet

Halftoning The placement of dots to create a visual effect of different colors or different shades of gray.

Hard Disk Held in the Electronics Module in a moulded foam. It has 2GB of memory.

Helical Gear Right-hand drive-roller gear.

HP Hewlett-Packard.

HP-GL Precursor of HP-GL/2.

HP-GL/2 Hewlett-Packard's standard graphics language for its plotters.

HP-RTL Hewlett-Packard Raster Transfer Language.

Hz Hertz.

IC Integrated Circuit.

IEEE Institute of Electrical and Electronics Engineers.

in Inch(es).

Interconnect Cable Black cables located at the rear of the printer. These connect the Service Station and the Refill Interconnect PCA to the Main PCA.

Ink Cartridge Part of the Ink Delivery System. Each ink cartridge is a large capacity ink supply that refills the printhead whenever the ink volume in the printhead drops below a minimum level.

Ink Delivery System The ink system used in this printer is made of three separate parts: Ink Cartridge, Printhead, Printhead Cleaner.

I/O Input/Output

IPA Isopropilic alcohol.

ips Inch(es) per second.

K Kilobyte(s)

Kana-8 A Japanese character set.

Kanji A Japanese character set.

Kbyte Kilobyte

kg Kilogram(s).

Kg Kilogram(s).

LAN Local Area Network.

lb Pound(s).

LED Light-Emitting Diode.

Line Sensor Carriage LED.

Main PCA The printed circuit board contained in the Electronics Module.

m Meter(s)

Margin Part of the media on which the plotter is incapable of printing.

Mbyte Megabyte.

Media (Used instead of medium.) The material on which the graphics are plotted: paper, translucent material, vellum, film, or special paper.

Media Axis The axis along which the media moves. (X-axis; paper axis.)

Media Jam A situation in which media becomes blocked in the plotter mechanisms.

Media-jam Lever Pinch-arm lever.

Media-length Calibration Media-sensor calibration.

Media-sensor Calibration Media-length calibration.

mil 1/1000 of an inch.

Minimum Pass Time The time necessary for ink to dry sufficiently before the plotter can place more ink adjacent to it.

MIO Modular Input/Output.

mm Millimeter(s).

Monitor Mode Service monitor.

MS-DOS MicroSoft Disk-Operating System

Nesting Placing two or more images side-by-side to avoid wasting the media.

No Negative Motion An RTL command that indicates to the plotter that it will receive all data already in the order in which it should be plotted.

Nozzles 240 holes in the printhead through which ink is fired onto the media.

Off-axis Ink System A system whereby ink is pumped to the cartridges from a reservoir that does not move with the carriage.

PAL Programmable Array Logic.

Palette A set of pens for which width and % shading are defined using the setup sheet or the graphics software.

Paper Axis Media axis (X-axis).

Parity An error-checking method for information transfer between a computer and a peripheral device. Parity is used to check the accuracy of binary data.

Pass A movement of the carriage from left to right, or from right to left, as it plots the graphic.

Pass Advance The distance that the media advances between carriage passes.

PC Personal Computer.

PCA Printed Circuit Assembly.

Pen 1. Even though the inkjet plotter has no physical pens, the lines it draws match the attributes for pens numbered 1 through 8 in the application software. (See also "palette.")
2. Sometimes used instead of "print cartridge."

Pinch-arm Lever Pinch-wheel lever, media-jam lever.

PJL Printer Job Language, developed by Hewlett-Packard to give software applications more job-level device control and to provide device status information to the application.

Platen Roller Drive roller.

Plot Quality Print quality.

PML Printer Management Language.

P/N Part Number.

Power Cycle The switching of the plotter off and then on again.

Preventive Maintenance Counter This is a count of the swaths the printer has performed. From this count the maintenance requirements can be calculated.

Primary Colors cyan, magenta, yellow, black.

Printhead Part of the ink delivery system. The printhead has a 600 dpi thermal inkjet head for firing ink droplets onto the media and a reservoir which holds enough ink for a large number of prints. The actual number of prints depends on the size and type of image being printed

Printhead Cleaner The printer uses the printhead cleaner to clean and to maintain the printhead. It also seals the printhead to prevent it from drying out.

Print Quality Quality of the Image.

Product Line 30 Hewlett-Packard's product line of large-format, pen and thermal-inkjet plotters.

PWM Pulse-Width Modulation.

RAM Random-Access Memory.

Raster 1. A matrix of dots, or pixels, where each pixel is defined by a bit. A bit that is "on" will print a dot on the paper. A bit that is "off" will leave the area blank.
2. A method for defining a plot directly in terms of the pixels rather than as vectors.

Raster Image Processor Software that converts graphics data to pixel format.

Refill Interconnect PCA The PCA located on the left hand side chassis. It connects the Refill Assembly, the Elevator Assembly, Bail Motor and the Y-axis Assembly all on to one PCA, this is then connected to the main PCA via the Refill Interconnect Cable.

Refill Interconnect Cable This connects the Refill Interconnect PCA to the Main PCA.

Relative Humidity The ratio of the amount of water vapor actually present in the air to the greatest amount possible at the same temperature, (from *Webster's Ninth New Collegiate Dictionary*, © Merriam-Webster 1991).

Resolution A measure of image sharpness expressed as a number of lines per unit length. When referring to plotters, addressable resolution means the smallest move the plotter can make programmatically.

RIP Raster Image Processor.

RMS Root mean square.

ROM Read-Only Memory.

Roman A character set based on the Latin alphabet.

RS-232-C interface A serial interface standardized by the Electronic Industries Association Standard RS-232-C.

RTL see "HP-RTL."

SAD Swath Axis Direction

Sec Second(s).

Secondary Colors Red, blue, green.

Service Monitor Data display; display data; monitor mode.

SIMM Single In-line Memory Module.

Skew Misalignment.

Special Paper A paper specifically developed by HP, for HP inkjet plotters.

SPROC Servo-Processor Code.

Stepper Motor Small motors used in the Service Station, Refill Assembly and the Elevator Assembly

Swath That portion of a drawing plotted between advances of the drive roller in **Fast** mode. (In **Best** mode, the drive roller advances half a swath at a time; in **Normal** mode, it may advance a full swath or half a swath, depending on whether the plot is color or monochrome.)

TCP/IP Transmission Control Protocol / Internet Protocol.

Theta-z Error A print-quality error caused when the nozzles on a printhead are not perpendicular to the carriage axis. The error shows up as jagged vertical lines.

Troubleshoot The system of finding the component(s) which have failed.

Translucent Describes a type of media through which light passes.

UART Universal Asynchronous Receiver Transmitter.

Unidirectional Print Mode A print mode in which plotting is performed while the carriage moves in one direction, and no plotting is performed while the carriage moves in the opposite direction.

Vellum A type of strong paper.

VLS Vertical-line straightness.

X-axis Media axis.

X-axis calibration Accuracy calibration.

Y-axis Carriage axis.