

HP DesignJet Monochrome Inkjet Plotter

Technical Data

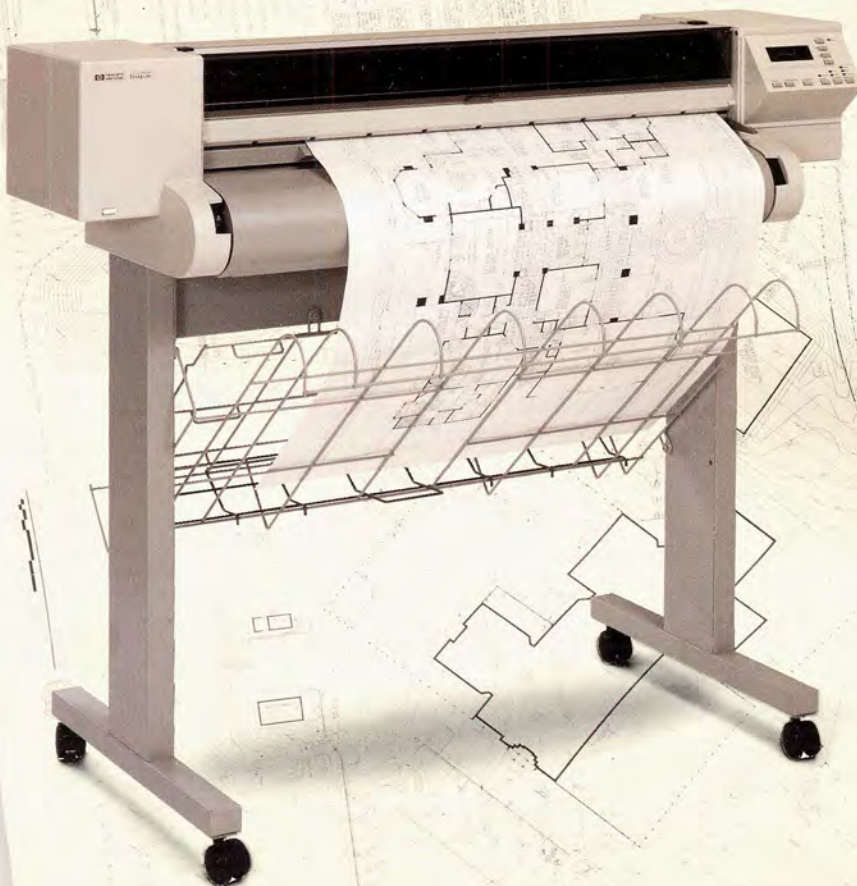
**For designers who have
outgrown their pen plotter
but not their pen plotter
budget.**

Features

- A4- through A0- (A through E) size media
- A0- (E) size paper plots in less than six minutes (actual plotting time)
- Plots on commonly available media
- Quiet operation
- High quality output
- Simple loading of roll and sheet media
- Automatic cutter and output bin for unattended plotting
- Standard RISC-based rasterizer
- Replaceable print cartridge system
- Automatic cartridge maintenance
- Optional TCP/IP Ethernet, Novell Ethernet, and HP-IB interfaces
- Supports HP-GL/2, HP-GL, and HP RTL languages
- One-year onsite warranty

The HP DesignJet monochrome inkjet plotter is the ideal solution when your output needs are outgrowing your pen plotter's capabilities. HP DesignJet delivers fast, high-quality output, requires minimal supervision, and costs little more than a pen plotter.

The HP DesignJet plotter brings the speed, reliability, and simplicity of HP's proven inkjet technology to large-format plotting.



Productivity

If your output volume is growing or the complexity of your plots is increasing—but your budget isn't—you need the HP DesignJet monochrome inkjet plotter. You'll spend less time handling media and pens. And the more complex your plots are, the more time you'll save when you use the HP DesignJet.

Fast, Reliable Plotting

Actual plotting time for final-quality, complex A0 (E) size drawings on paper is less than six minutes, plus data transmission time. On vellum, translucent, and film, two passes over each line ensure high-contrast blacks, but also increase plotting time. For the fastest throughput, use the HP DesignJet plotter's Centronics interface and an HP-GL/2 software driver. On a network, use one of HP's network interface cards.

Draft and Final Plotting Modes

Use the HP DesignJet plotter's front panel to choose the combination of speed and quality that suits your needs for each drawing. Use Draft mode to save time and ink on all media except film; select Final mode for the best line quality on all media types.

Rasterizer and Expandable RAM

The HP DesignJet plotter's rasterizer, built on Intel's i960™ 32-bit RISC microprocessor, provides simultaneous rasterization and printing plus plot management capabilities. The HP DesignJet plotter's two memory slots let you expand beyond the standard two megabytes of RAM. If your plot files require additional memory, expand RAM in one- or four-MB increments up to a total of 10 MB.

Quiet Operation

Unlike noisy output devices that contribute to the disruption in an already busy workplace, the HP DesignJet plotter's whisper-quiet operation lets you concentrate on your work without intrusion from your plotter.

Convenience

Media Compatibility

There's no need to purchase special bond paper for the HP DesignJet plotter. You'll get clear, crisp lines on most commonly available papers, vellums, and transluents. HP DesignJet also uses the same media as HP pen plotters. For polyester film users, we provide special HP inkjet-compatible film.



Clean, Easy-to-use Print Cartridges

The HP DesignJet plotter uses the proven inkjet print cartridges used in the award-winning HP DeskJet printer family. These cartridges require no cleaning, filling, or priming; the plotter performs all maintenance and storage. All you do is replace the cartridges. And between plots, the plotter checks for clogged nozzles and proper electrical connections to help ensure complete, skip-free plots.

High-Quality Output

The HP DesignJet plotter delivers the fine lines and clear text that your designs deserve.

Selectable Line Widths

To fine-tune your drawing with line differentiation and shading, HP DesignJet provides a selection of line widths and shades that are accessible from the front panel or through your software. Choose lines as fine as 0.13 mm, thinner than most pen plotter drafting pens. Or increase line widths up to 12 mm and be assured of smooth, solid black lines.

Complete Media Handling

You need a plotting solution that handles the details for you. Slip sheets into the HP DesignJet plotter's automatic friction-feed mechanism—there's no threading media in complicated maneuvers. Then the HP DesignJet plotter automatically detects media size, so you don't have to.

Sheets or Rolls

The HP DesignJet plotter accepts sheet media in standard and odd sizes from A4 through A0 (A through E), including architectural sizes. Use rolls of media in either 24- or 36-inch widths, and the media cutter will trim your plots to the appropriate length.

Unattended Plotting

When you need unattended or overnight plotting, the HP DesignJet plotter can cut and stack up to 20 drawings without operator intervention. The cutter automatically trims off each plot as it finishes, then the plot slides into the output bin. The media bin accepts drawings in lengths from 22 to 51 inches.

Front-Panel Access to Advanced Features

The front panel complements your software by providing easy access to the plotter's advanced features in a simple design. Immediate action buttons let you control the print mode, select media type, and replot or cancel plots. The interactive menus are simple to follow; the display is easy to read in any lighting level. All menus and overlays are available in English, German, French, Italian, Spanish, and Japanese Katakana.

Plot Customization

The HP DesignJet plotter can help you tailor your output to meet your special needs. From the front panel, you can set line widths, establish shading density, and even rotate or mirror the image of a plot.

System Compatibility

The HP DesignJet plotter is designed to be compatible with a wide range of computers. It supports top plotter languages as well as providing several interface options.

HP-GL/2

HP-GL/2 is HP's newest standard graphics language. It provides faster throughput and simple software access to advanced features such as screened lines and shading. A single HP-GL/2 driver can support a variety of plotters and technologies.

HP-GL/2 is rapidly emerging as a new standard for CAD peripherals. Leading vendors of PC, workstation, and large system software provide support for HP-GL/2 plotters. In fact, an HP-GL/2 driver for AutoCAD™ is included with each HP DesignJet plotter¹.

A 7586B HP-GL emulation mode is provided for software packages that do not support HP-GL/2.

While the DesignJet plotter works with HP-GL, HP recommends using an efficient HP-GL/2 driver to get the most from your plotter.

Hewlett-Packard Raster Transfer Language (HP RTL)

This new language complements HP-GL/2 for large format raster data transfer. It provides many powerful features, including the ability to merge vector and raster data to appear in one plot. The HP DesignJet plotter can plot data imported in HP RTL format from scanned line drawings, or other raster applications.



Three Interfaces

The HP DesignJet can easily connect to almost any computer system with its two built-in interface options—Centronics and serial—plus a modular I/O (MIO) slot. The MIO slot expands your options by accepting HP interface cards for workstation and PC networking or HP-IB connections, as well as third-party cards.

Networking Options

Locate the HP DesignJet plotter anywhere on your network and achieve maximum speed and efficiency with one of HP's interface cards. Choices include the TCP/IP Ethernet card for HP-UX and Sun SPARCstation workstations, and the Novell Ethernet card for PC LANs. Installation is as easy as adding a new PC or workstation to your network.

Traditional HP Reliability

HP knows that product reliability means less down time, lower service and support costs, and improved productivity. That translates into a significantly lower overall cost of ownership to you. And that's why we design reliability into all of our plotters.

Extensive Testing

The HP DesignJet plotter has been subjected to dozens of tests, including vibration, shock, and extreme temperature cycling—all to ensure that you get reliable, consistent plotting.

One-Year Warranty

We stand behind our reliability with a one-year onsite warranty and low service contract prices for continued assurance of HP reliability.

Post-Sales Support

If you do need information or service, more than 415 sales and service facilities provide authorized HP service in 76 countries around the world. And Hewlett-Packard guarantees the availability of parts, service, and support for at least five years after your purchase.

¹ Real Mode and Protected Mode HP-GL/2 ADI Drivers for the DOS versions of AutoCAD Releases 10.0 and 11.0

Technical Information

| Performance Characteristics | |
|---|---|
| Technology | Monochrome inkjet (2 cartridges) |
| Maximum Image Width | 35.7 inches (90.7 cm) |
| Margins | |
| <i>Front and Rear</i> | 0.67 inches (17 mm) |
| <i>Sides</i> | 0.2 inches (5 mm) |
| Resolution | |
| <i>Final Mode and Film Draft Mode</i> | 300 dpi |
| <i>Draft Mode (all media except film)</i> | 300 × 150 dpi |
| Maximum Accumulated Error | ± 0.38 mm (0.015 in) or ± 0.2% of the specified vector length, whichever is greater. ¹ |
| Plot File Memory (RAM) | |
| <i>Standard</i> | 2 MB |
| <i>Maximum Capacity</i> | 10 MB |
| Interfaces | Centronics parallel, RS-232-C, and HP Modular I/O to accommodate optional interface cards. |
| Media Types | Bond paper, vellum, translucent paper, HP inkjet polyester film |
| Media Sizes | |
| <i>Maximum Width</i> | 36.1 inches (91.7 cm) |
| <i>Maximum Length</i> | Approx. 150 feet (45.7 m) |
| <i>Roll Dimensions</i> | |
| <i>Core</i> | 2 inches (50.8 mm) inside diam. |
| <i>Outside diameter</i> | 3.7 inches (95 mm) maximum |
| <i>Sheet Dimensions</i> | |
| <i>Minimum</i> | 8.3 × 8.3 inches (21 × 21 cm) |
| <i>Maximum</i> | 36.1 × 51 inches (91.7 × 130 cm) |
| Display | 2 × 16 characters; vacuum fluorescent display |

Environmental Ranges

Plotter

| | |
|-----------------------------|------------------------------|
| Temperature | |
| <i>Operating</i> | 0 to 55 °C (32 to 131 °F) |
| <i>Storage</i> | -40 to 70 °C (-40 to 158 °F) |
| Operating Relative Humidity | 20 to 80% |

Print Cartridges

| | |
|------------------------------|------------------------------|
| Temperature | |
| <i>Operating²</i> | 10 to 40 °C (50 to 104 °F) |
| <i>Storage</i> | -40 to 60 °C (-40 to 140 °F) |
| Operating Relative Humidity | 20 to 80% |

Power Requirements

| | |
|----------------------|-----------------------|
| Voltage Requirements | |
| <i>Source</i> | 100-240 V ± 10% |
| <i>Frequency</i> | 47-53 Hz and 57-63 Hz |
| Consumption | 90 watts maximum |

Physical Characteristics

| | |
|----------------------------------|---|
| Length × Width × Height | 55.1 × 28.0 × 46.5 in (140 × 71.1 × 118.1 cm) |
| Shipping Length × Width × Height | 60 × 30.5 × 34.4 in (152.4 × 77.5 × 87.4 cm) |
| Weight | 149 lbs (67.6 kg) |
| Shipping Weight | 225 lbs (102 kg) |

Acoustics

| | | |
|-----------------------------------|-----------------|--------------|
| (per ISO DP 7779 standard) | Plotting | Idle |
| Sound pressure level ³ | 54 dB(A) | <20 dB(A) |
| Sound power level | 6.5 Bels(A) | <3.6 Bels(A) |

Product Certifications

| | |
|------------------------------|--|
| Safety Approvals | CSA certified, UL listed, complies with EN 60950, NEMKO approved, DGN approved (pending, subject to approval). |
| Electromagnetic Interference | FCC certified Class B (FCC Class A when using C2059A optional I/O card), meets FTZ 1046/84 level B, meets EN 55022 Class B, EN55101-2, EN 55101-3, Registered VCCI-2, SABS licensed, DOC Class B |
| Telecom | Approved under General Approval NS/G/1234/J/100003 for indirect connection to public telecommunication systems within the United Kingdom. |

¹ At 23° C (73° F), 50 to 60% RH with HP inkjet polyester film.

² For best print quality, operate at 15-30°C, 20-80% relative humidity.

³ Typical emissions at one-meter bystander position.



Ordering Information

| Description | HP p/n |
|---|--------|
| HP DesignJet Monochrome Inkjet Plotter | C1633B |

Note: Interface cables must be ordered separately.

Accessories Included

Unpacking Instructions
Supplies Flyer/Supplies Source
AutoCAD HP-GL/2 driver disk¹
User's Guide
Quick Reference Guide
Configuration Guide
Setup Guide
Front-panel overlay
Pocket for Quick Reference Guide
Hardware kit for assembly
Power cord
Manual cutter
Cutter holder/guide
Roll-feed spindle
Ink cartridges (2)
Sample roll of paper
Sample sheet media: 5 sheets
A1-size bond paper, 1 sheet A1-size film

Literature Available

*Optional Interfaces for the
HP DesignJet Plotter*

Interfaces and Cables

*HP CAD Plotters Software/Hardware
Guide*

Supplies Available

| Description | HP p/n | Quantity |
|---|--------|----------|
| HP Inkjet Polyester Film 36 in × 125 ft (0.91 × 38.08 m) | 51637E | 1 roll |
| HP Inkjet Print Cartridges (regular capacity) (2 required) | 51608A | 1 |
| HP Inkjet Print Cartridges (high capacity) (2 required) | 51626A | 1 |

Accessories Available

| Description | HP p/n | Quantity |
|--|------------------|--------------|
| HP-GL upgrade for C1633A | C2854A | 1 |
| Single In-line Memory Modules (SIMMs) | C2063A C2065A | 1 MB 4 MB |
| HP Interface Cards | | |
| TCP/IP Ethernet | C2059T | 1 |
| Novell Ethernet | C2059A | 1 |
| HP-IB | C1642A | 1 |
| Manual Cutter | 17291C | 1 |
| Cutter guide/holder | C1633-40094 | 1 |
| Hardware Support manual | C1633-90000 | 1 |
| HP-GL/2 Reference Guide | 5959-9733 | 1 |
| HP RTL Reference Guide | 5960-3743 | 1 |
| HP-GL/2 Plotting Software for IBM Mainframe Systems | C1658A | 1 |

Interface and Cable Requirements

| System | Interface | Cable |
|---|----------------------|--|
| HP Vectra PC; IBM AT, Compaq 286, 386; or compatible with 9-pin serial or Centronics parallel interface card | RS-232-C Parallel | HP 24542G HP 92284A |
| HP Vectra PC with HP 24541 dual serial interface card using 9-pin connector | RS-232-C | HP 24542G |
| HP Vectra PC with HP 24541 dual serial interface card using 25-pin connector | RS-232-C | HP 17255M |
| IBM PC, PC-XT, or PS/2; Compaq Portable; or compatible using 25-pin serial port | RS-232-C Parallel | HP 17255D HP 92284A |
| Apple Macintosh Plus, SE, II Series | RS-232-C | HP 17302A |
| HP 150, Touchscreen PCs | RS-232-C HP-IB | HP 17255M HP 10833B/C |
| HP 9000 Series 300, 400 (HP-UX) 500, 700, 800 | HP-IB | HP 10833B/C |
| HP 9000 Series 400 (Domain) plus A1900A Serial HP-GL/2 Plotter Interface Kit | RS-232-C | Included with kit |
| HP 9000 Series 400 (Domain) plus A1901A or A1902A Parallel HP-GL/2 Plotter Interface Kit | Parallel | Included with kit |
| DEC VAX | RS-232-C | DEC BC22D or BC03M or equivalent plus HP 92224M |
| IBM Mainframe | * | * |

* For IBM Mainframe solution information, refer to HP p/n 5091-0629E, HP C1658A HP-GL/2 Plotting Software for IBM Mainframe Systems.

¹ Real Mode and Protected Mode ADI Drivers for the DOS versions of AutoCAD Releases 10.0 and 11.0

Hewlett-Packard peripherals and personal computers are available at HP authorized dealers worldwide. In North America, call toll-free for the HP authorized dealer nearest you:

United States
1-800-752-0900

Canada
1-800-387-3867

HP supplies and accessories are available at HP authorized dealers and many local computer or office supply stores. Check the yellow pages under Computer Supplies or Office Supplies or see your local HP authorized dealer.

For information outside North America, call the local HP sales office listed in your telephone directory, or refer to the list of HP regional offices below:

Australia/New Zealand:

Hewlett-Packard Australia Ltd.
31-41 Joseph Street
Blackburn, Victoria 3130
Australia (A.C.N. 004 394 763)
(03) 895 2895

Europe/Africa/Middle East

Hewlett-Packard S.A.
Marcom Operations Europe
P.O. Box 529
1180 AM Amstelveen
The Netherlands
(31) 20 547 9999

Far East:

Hewlett-Packard Asia Ltd.
22/F Bond Centre
West Tower
89 Queensway
Central, Hong Kong
(852) 848 7777

Japan:

Yokogawa-Hewlett-Packard Ltd.
15-7, Nishi Shinjuku 4 Chome
Shinjuku-ku
Tokyo 160, Japan
(03) 3331 6111

Latin America:

Hewlett-Packard
Latin America Region Headquarters
Monte Pelvoux No. 111
Lomas de Chapultepec
11000 Mexico, D.F.
(525) 202 0155

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**Printed in USA 3/92
5091-3357E**