



---

# HP DraftMaster I and II Plotters

## Technical Data

### Features

- Exceptional performance
- Superb line quality
- Accommodates A4/A through A0/E media
- HP 7580 series software emulation
- International design
- One-year on-site warranty
- Low on-site service contract prices

In addition, the DraftMaster II offers

- Roll-feed capability
- Long-axis plotting

The quality and performance you expect from HP's premier pen plotters

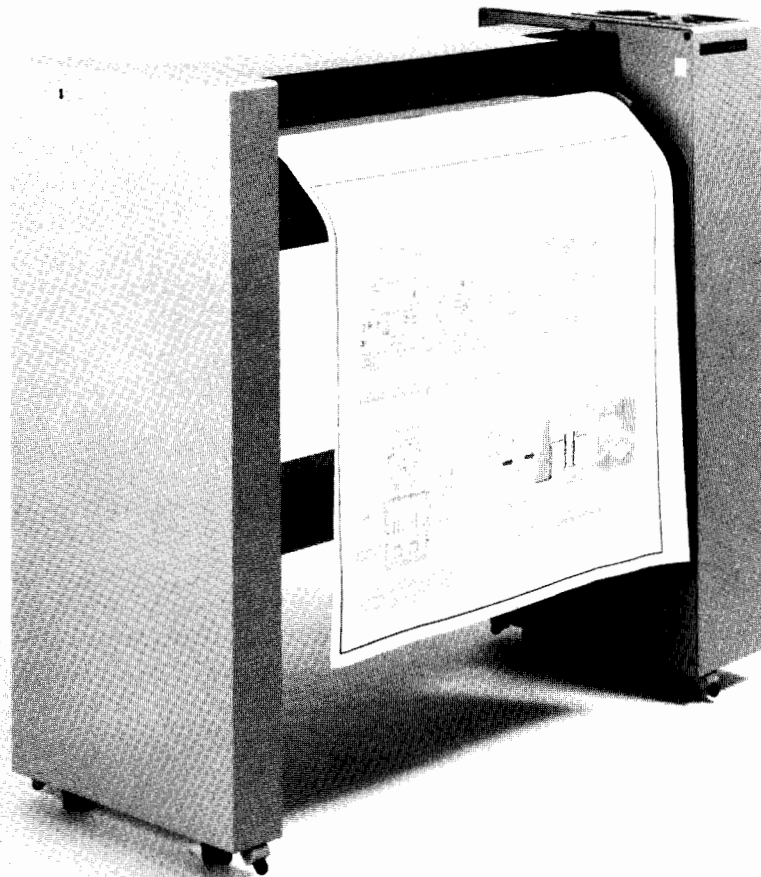
---

Hewlett-Packard has created a second generation of drafting plotters to meet the high-performance requirements that today's CAD environments demand—the A0/E-size DraftMaster I (HP 7595A) and the A0/E and roll-feed DraftMaster II (HP 7596A) plotters.

### High Performance

The DraftMaster plotters have a maximum pen speed of 60 cm/s (24 in./s), acceleration of up to 5.7 g, and a host of built-in intelligence features.

HP's pen sorting function trims plotting time by minimizing pen changes. The DraftMaster plotter scans a plot program to combine pen-up/pen-down moves wherever possible. The bi-directional plotting feature further increases drawing efficiency by automatically starting the next line segment at its nearest endpoint. And the powerful 10 MHz 16-bit microprocessor enables the HP DraftMaster to draw numerous short lines quickly, a real advantage in lettering.



---

### **Excellent Line Quality**

With an addressable resolution of 0.025 mm (0.001 in.), repeatability of 0.10 mm (0.004 in.), and a unique "smooth curve generator," the DraftMaster plotters offer professional, high-quality output.

### **Media and Pen Flexibility**

With the HP DraftMaster plotters, users can choose from vellum, polyester film, tracing bond, and plotter or glossy paper, in A4/A-through A0/E-size cut sheets, and A4/A-size transparency films. HP's DraftMaster plotters support fiber-tip (paper and transparency), roller-ball, disposable liquid-ink, and refillable liquid-ink pens.

### **DraftMaster II Roll-feed Capability**

HP's Draftmaster II is designed for high-volume, unattended operation, continuous feed, and long-axis plotting. Drawings can be stored neatly on a take-up roll or cut off one at a time with the built-in media cutter.

---

### **Convenient Pen and Media Handling**

DraftMaster plotters sense media size and can automatically scale the plot size to fit. And pens are always capped automatically to prevent ink from drying out.

Users won't have to reset pen speed and force when changing pen types, either — HP DraftMaster plotters have a unique adjustable carousel. Simply twist the barrel to the desired setting. DraftMaster will automatically adjust speed and force for optimum results.

### **Triple Interface**

For maximum hardware compatibility, all HP DraftMaster plotters come with a triple interface—RS-232-C Serial, HP-IB (IEEE 488-1978), and RS-422-A (for longer distance computer connections). And HP DraftMaster plotters have full eavesdrop capability (dual serial I/O for terminal configurations).

### **HP 7585B and HP 7586B Software Emulation**

There's a tremendous amount of software already available for the DraftMaster plotters because all of the software written for the HP 7585B and 7586B drafting plotters will run on the HP DraftMaster I and II. Just the touch of a button engages HP's proprietary software emulation feature.

### **International Symbols and Languages**

The 32-character LCD menu can prompt in any of six languages: English (default), French, German, Italian, Spanish, and Japanese. The front-panel buttons are labeled with symbols instead of words. And when programming with HP-GL (Hewlett-Packard Graphics Language) commands, users can select from over 20 international character sets in three fonts.

### **Technical Information Media Sizes**

Ranges include ISO sizes A0 through A4, ANSI sizes A through E, and architectural sizes, as well as oversized media.

DraftMaster I (sheets only): acceptable media widths, 207.0-381.0 mm (8.15-15.0 in.), 539.0-713.0 mm (21.22-28.07 in.), 753.0-927.0 mm (29.65-36.5 in.)

DraftMaster II (same sheet sizes as listed above, plus these roll sizes): width, 609.6 mm (24.0 in.), 914.4 mm (36.0 in.); length, 46.0 m (150.0 ft.).

### **Pens**

Number: 8 in carousel  
Type: Fiber-tip (paper and transparency), roller-ball, liquid-ink (refillable and disposable)

### **Media**

Vellum, double-matte polyester film, tracing bond, transparency film, paper (regular and glossy)

### Character Sets

(Each in three fonts)  
French/German, HP 9825,  
Scandinavian, Spanish/Latin  
American, Roman Extensions,  
Special Symbols, and these ISO  
registered sets: ANSI ASCII  
(006), French (025), French  
(069), German (021), Interna-  
tional Reference Version (002),  
Italian (015), JIS ASCII (014),  
Katakana (013), Norwegian I  
(060), Norwegian II (016), Por-  
tuguese (016), Spanish (017),  
Swedish (010), Swedish for  
Names (011), United Kingdom  
(004),

### Resolution

Addressable: 0.025 mm  
(0.001 in.)

Mechanical: 0.00625 mm  
(0.00025 in.)

### Repeatability

For a given pen: 0.10 mm  
(0.004 in.)  
(These specifications are for  
0.08 mm (0.003 in.) paper,  
vellum, or polyester film.)

### Accuracy

0.09% of the move or 0.25 mm  
(0.01 in.), whichever is greater.  
(These specifications are for  
0.08 mm (0.003 in.) polyester  
film.)

### Pen Velocity

Pen down: 60 cm/s (24 in./s)  
independent of vector direction

Pen up: 60 cm/s (24 in./s)  
regardless of pen-down speed

### Acceleration

Maximum: 5.7 g (55.5 m/s,  
182.4 ft./s) on diagonal, 4 g  
per axis

Programmable: 2 or 4 g (19.4 or  
39 m/s)

### Pen Force

Programmable or front panel  
selectable: 15-66 grams

### Margins (sheets only)

Expanded mode: three margins  
approx. 5.0 mm (0.2 in.) each,  
fourth margin approx. 29.0 mm  
(1.14 in.)

Normal mode: three margins  
approx. 15.0 mm (0.59 in.)  
each, fourth margin approx.  
39.0 mm (1.54 in.)

### Buffer Size

25K (configurable)

### Environmental Range

#### Temperature

Operating: 0 to 55 degrees C  
(32 to 131 degrees F)

Storage: -40 to 75 degrees C  
(-40 to 167 degrees F)

#### Humidity

Sheets: 5 to 95% (in 0 to 40  
degrees C)

Rolls: 30 to 70% (in 10 to 30  
degrees C)

### Power Requirements

Source: 100, 120, 220, 240 V,  
~+10%, -10%

Frequency: 48-66 Hz

Consumption: less than 105 W  
maximum

### Physical Specifications

Height: 119.4 cm (47.0 in.)

Width: 134.6 cm (53.0 in.)

Depth: 50.8 cm (20.0 in.)

#### DraftMaster I:

Net weight: 73.0 kg (160.0 lb)

Shipping weight: 90.0 kg  
(200.0 lb)

#### DraftMaster II:

Net weight: 75.0 kg (164.0 lb)

Shipping weight: 92.0 kg  
(205.0 lb)

### Interface and Cable Requirements

| System  | Cable  |
|---|--|
| HP Vectra PC with HP 24540A/B<br>serial/parallel interface card or<br>HP 24541A/B dual serial interfa<br>card using 9-pin connector | HP 24542G  |
| HP Vectra PC with HP 24541A/B<br>dual serial interface card using<br>25-pin connector   | HP 17255M  |
| HP Touchscreen PC using serial<br>interface   | HP 17255M  |
| HP Touchscreen PC using HP-IB<br>interface  | HP 10833A (1.0 m)<br>HP 10833B (2.0 m)<br>HP 10833C (3.0 m)<br>HP 10833D (0.5 m) |
| IBM PS/2, PC, PC-XT, and<br>compatibles   | HP 17255D  |
| IBM AT and compatibles  | HP 24542G  |
| Apple Macintosh 128K and 512K   | HP 92219M  |
| Apple Macintosh SE and<br>Macintosh Plus  | HP 92219M and<br>Apple P/N M0199   |
| Apple IIe   | HP 17355M  |

### Ordering Information

#### Standard Units

7595A  
HP DraftMaster I Large-format  
drafting plotter

7596A  
HP DraftMaster II Large-format  
roll-feed drafting plotter

**Note:** Interface cables must be  
ordered separately.

**United States:**

Hewlett-Packard Company  
4 Choke Cherry Road  
Rockville, MD 20850  
301 670 4300

Hewlett-Packard Company  
5201 Tollview Drive  
Rolling Meadows, IL 60008  
312 255 9800

Hewlett-Packard Company  
5161 Lankershim Blvd.  
No. Hollywood, CA 91601  
818 505 5600

Hewlett Packard Company  
2015 South Park Place  
Atlanta, GA 30339  
404 955 1500

**Canada:**

Hewlett-Packard Ltd.  
6877 Goreway Drive  
Mississauga, Ontario L4V1M8  
416 678 9430

**Australia/New Zealand:**

Hewlett-Packard Australia Ltd.  
31-41 Joseph Street  
Blackburn, Victoria 3130  
Melbourne, Australia  
03 895 2895

**Europe/Africa/Middle East:**

Hewlett-Packard S.A.  
Central Mailing Department  
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  
5 848 7777

**Japan:**

Yokogawa Hewlett-Packard Ltd.  
29-21, Takaido-Higashi 3-chome  
Suginami-ku, Tokyo 168  
03 331 6111

**Latin America:**

Latin American Region Headquarters  
Monte Pelvoux Nbr. 111  
Lomas de Chapultepec  
11000 Mexico D.F., Mexico  
905 596 79 33

**Accessories Included with  
DraftMaster I and II**

User's Guide (language appropriate to plotter destination)

Power cord (appropriate to plotter destination)

Paper sampler

Adjustable pen carousels (2)

Fiber-tip pens (10)

Roller-ball pens (4)

Disposable drafting pens for vellum with adapters (4)

Grit wheel brush

Plotter supplies catalog

**Additional Accessories  
Included with DraftMaster II**

Paper roll sampler, 914.4 mm  
(36.0 in.) wide, 13.72 m  
(45.0 ft.) long

Take-up spool, 914.4 mm  
(36.0 in.)

Media cutters (2)

**Accessories Available**

|             |   |
|-------------|---|
| 17520A      | Roll-feed Upgrade Kit (DraftMaster I only; must be installed by a qualified service representative) |
| 07595-90001 | Programmer's Reference (English only)   |
| 07595-90003 | Programmer's Pocket Guide (English only)  |
| 07595-90000 | Hardware Support Manual   |
| 5062-1576   | Additional pen carousels  |

For a complete list of available supplies, check the current version of the plotter supplies catalog or the Hewlett-Packard PC Peripherals Price Guide.

HP-GL is a trademark of Hewlett-Packard Company

**Technical information in this document is subject to change without notice.**

**Copyright © 1989  
Hewlett-Packard Company**

**Printed in USA 2/89  
5957-3783**