HP DraftMaster Plotters - A Quick Reference Guide, DraftMaster RX and RX Plus Plotters

NOTE: Information contained in this document is the same that is used by HP on-line technicians.

Demonstration Plot

The demonstration plot checks most of the mechanical and electrical workings of your plotter. The plot is a method of verifying that the plotter functions correctly.

HP DraftMaster RX Plotter

1. Load three fiber-tip pens in the carousel and configure the carousel to use fiber-tip pens. The following pen colors are suggested: stall 1 = Black, stall 2 = Red, stall 3 = Blue.

2. Load a sheet of HP plotter paper.

3. Press the **Next Display** button until the **Clear** menu displays as shown below:

4. Press the **Demo** function button (***f*** 4). When the message **Start Demo?** displays, press Yes (***f*** 3) to begin the plot.

HP DraftMaster RX Plus Plotter

1. Load a carousel with four fiber-tip pens in stalls one through four and load a sheet of HP plotter paper.

2. From the **Main Menu** use the **Up or Down arrow** keys to display **Demo Plot**.

3. Press **Enter**.

4. Press the **UP arrow** button (Yes) to the **Start Demo plot** message to begin the demonstration plot.

Default Serial Settings on Both HP DraftMaster RX and RX Plus Plotters

Baud Rate	9600
DataFlow	Remote/Standalone
Parity	0
Handshake	Hardwire: On
	XON/XOFF: On

Bypass	Off
Monitor	Off
Duplex	Full
Autodisconnect	Off

The factory default serial settings are recommended for most PC compatible software. Check software documentation for appropriate serial settings if necessary.

If uncertain of current settings and wish to return the plotter back to the factory default menu:

HP DraftMaster RX Plotters:

Hold down the Center Cursor Control button while turning the plotter on.

HP DraftMaster RX PLUS Plotters:

Choose Factory Reset from the Plotter Setup menu.

Cables For HP Plotters

	Serial (RS-232) cables	**Part Number**
	25-pin Male to 25-pin Female (3.9 ft)	C2913A
	25-pin Male to 25-pin Female (4.0 ft)	17255D
	25-pin Male to 9-pin Female (9.9 ft)	24542G
IBM Compatible, including HP Vectra PCs		
	25-pin Female to 9-pin Female (9.9 ft)	24542H (7550 only)
	Centronics Parallel cables	
	36-pin M/25-pin M (9.9 ft)	C2951A
	36-pin M/25-pin M (6.6 ft, heavily shielded and grounded)	C2950A

NOTE: 1. A straight through serial cable will NOT work properly. See the serial wiring diagrams below.
2. Note the computer/modem port of the HP 7550 Series plotters is a MALE serial interface and requires a FEMALE connector on the plotter end of the cable.
3. HP 7550 Series plotters use the same serial cable wiring configuration as other HP Plotters, HP LaserJet printers and HP DeskJet printers; however, the gender of the cable end that attaches to the HP 7550 series plotter is the opposite.

Cables and other supplies can be ordered by calling one of the following:

HP DIRECT at 800-538-8787
HP's Support Material Organization at 800-227-8164
An authorized HP dealer (Automated Dealer Locator Number: 800-243-9812)

RS-232-C SERIAL CABLE PIN OUTS

25-PIN TO 25-PIN CABLE

The wiring for 25-pin to 25-pin cables listed above are identical; only length and gender vary.

Plotter		Computer
Protective Ground	1----1	Protective Ground
Transmit Data	2----3	Receive Data
Receive Data	3----2	Transmit Data
Signal Ground	7----7	Signal Ground
Data Terminal Ready	20----5	Clear To Send
	|--6	Data Set Ready
	5----20	
	6--|	

25-PIN TO 9-PIN CABLE

The wiring for 25-pin to 9-pin cables listed above are identical; only gender varies.

Plotter		Computer
Request To Send	4----1	Received Line Signal Detect
Transmit Data	2----2	Receive Data
Receive Data	3----3	Transmit Data
Clear To Send	5----4	Data Terminal Ready
Data Set Ready	6--|	
Signal Ground	7----5	Signal Ground
Data Terminal Ready	20----6	Data Set Ready
	|--8	Clear To Send
Data Carrier Detect	8----7	Request To Send

Verifying Communication

1. Turn on the computer and load DOS.

2. At the DOS prompt, type in the following

MODE COM1:9600,N,8,1,P

Press the ENTER key on the computer keyboard. This will set your computer's

RS-232-C serial port for 9600 baud, no parity, 8 data bits, one stop bit and specify hardwire handshake with continuous retry.

3. Type the following:

ECHO IN;SP1;PA0,0;PD1000,1000;SP0;PG;>COM1

4. Press ENTER. The plotter should draw a diagonal line on the page.

NOTE: Type in the ECHO statement exactly as shown. The only space in this statement is after the word "ECHO."

5. If this works, there is a good probability that your plotter, cabling and communication ports are working correctly. If this does not work, please see the section, "If the ECHO communication test fails to work."

NOTE: The ECHO test will not test a cable's shielding and/or grounding. Larger amounts of information may reveal this type of problem.