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**GETTING STARTED
USING
CALCOMP'S 1040 SERIES PLOTTERS
WITH
VERSACAD ADVANCED**

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CALCOMP
A Sanders Company

Installing CalComp's 1040 Series Plotters for use with IBM PC's is simple and takes just a few minutes. The following steps guide you through the installation of your CalComp plotter for use with VERSACAD. For a detailed description of the features and operation of the Plotter, refer to the 1040 Series Plotter Operation manual.

Installation consists of the following steps:

- Connecting the plotter to the PC
- Setting the switches on the plotter
- Installing the ROMPACK and turning system power ON
- Selecting the baud rate, parity, bits per character, other communication and scaling parameters
- Loading pens and media
- Loading and configuring VERSACAD
- Plotting a VERSACAD drawing
- Removing the finished drawing

Connecting the plotter to the PC

1. Be sure that power to the plotter and to the PC is turned OFF. The power switch on the plotter is located just below the control panel (Figure 1). The OFF position is marked by a small red zero.
2. Connect the plotter to your PC's serial COM port using the CalComp supplied cable. Use the 25- to 9-pin adapter supplied by IBM when connecting to the COM port of the IBM PCAT: You should plug the other end into the connector marked P0903-TO DTE HOST on the rear interface panel (Figures 1 and 1A).

Setting the switches on the plotter

1. Set the plotter configuration switch, S1, to the position shown in Table 1. Note that the switch is numbered 1 through 8 from top to bottom and that pressing the left side will select a 0 (zero), while pressing the right side will select a 1 (one). The switch is located on the rear interface panel (Figures 1 and 1A).

Install the ROMPACK and turn system power ON

1. Insert the ROMPACK into the slot on the outside of the right pedestal (Figure 1). The small key blocks on the ROMPACK pin housing face the back of the plotter.
2. Plug the power cord into an electric outlet.
3. Turn the plotter power switch ON.
4. Turn the PC system power ON.

TABLE 1. 1040 PLOTTER S1 SETTINGS WHEN CONNECTED TO IBM PC, PCXT, PCAT USING VERSACAD

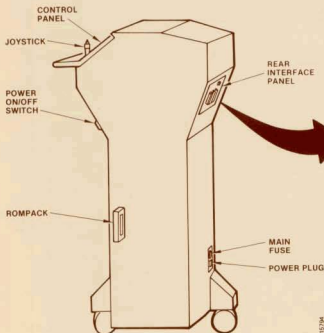
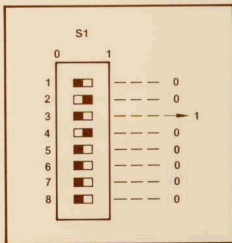
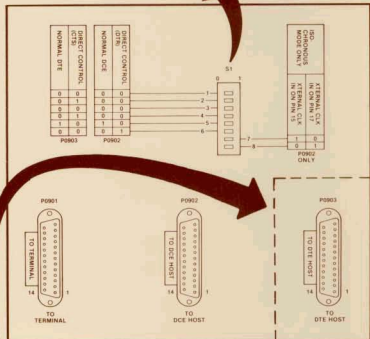


Figure 1. Right Pedestal



Use this connector to interface the PC to the plotter for VERSACAD.

Figure 1A. Plotter RS232 Interface Panel

Selecting the baud rate, parity, etc.

- After power is turned ON, the plotter performs some automatic diagnostics and initializations. The following messages are displayed briefly:

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Turret Init
Please Stand By

- The plotter pauses and in a few seconds displays the following message if the safety cover is down:

Ready
Please Load Paper

It displays the following if the cover is up:

Please Lower Cover
Please Load Paper

- Press the SET-UP key. The plotter displays:

Setup Number: ___
Press NEXT for MENU

- Press 7 then press ENTER. The plotter now displays:

Host Setup Number: ___
Press NEXT for MENU

You are now ready to scroll through the communication parameter settings.

- In this step, you learn how to scroll through the communication set-up menu and configure the plotter for use with VERSACAD.

By pressing NEXT, you can scroll through a menu of communication parameters numbered 0 (zero) through 8 (eight). The menu is circular, which means that if you press NEXT when you're at the end, it starts over. That way if you miss a parameter, you can always cycle back to it.

For example, the first time you press NEXT, the plotter displays the following:

Host Setup Number: ___
0 Parity & Bits/Char

Scroll through the menu using the NEXT key.

Stop when you return to the preceding menu item.

Select a menu item by pressing the ENTER key. The following message is displayed:

Par: 0 = NO, 1 = 0, 2 = E 0 0 { Displays different numbers
Bits/Char: 7/8 8 { depending on what was last saved.

The cursor is positioned under the parameter to be changed. To change the parameter, type in the new value and press ENTER. To leave it unchanged, just press ENTER. If you type in a value and make a mistake, you can erase the entry by using the CLEAR key or you can return to a previous entry by repeatedly pressing on the ENTER key.

NOTE

For entries requiring a YES/NO answer, use the ENTER key as YES. The plotter accepts your input immediately.

After the parameters have been entered, use the NEXT key to go on to the next Host Setup Number.

- Now that you've learned how to set the plotter communication parameters, you're ready to configure the plotter for use with VERSACAD.

Use the NEXT key to return to Host Setup Number 0 (zero), Parity & Bits/Char. Use the procedure in step 5, above, to set the communication parameters as per Table 2.

- When the communication parameters are complete, press the AUTO/MANUAL key twice.

- Set the plotter scale factor for use with VERSACAD.

Press SET-UP. The plotter displays the following message:

Setup Number: ___
Press NEXT for MENU

Press 1, then ENTER. A message similar to the following is displayed:

Scale = 0001 to 0001
Rotate = 000

After setting the scale factor, press the AUTO/MANUAL key twice.

- At this point you may wish to save these parameters in nonvolatile memory. To do so, press the SET-UP key followed by the SAVE key; type the user number (1, 2, 3 or 4), and press ENTER. Press RESET, then press YES. This ensures that the newly saved Host Setup Parameters are applied.

TABLE 2. IBM PC, PCXT, PCAT COMMUNICATIONS SET-UP 7 MENU FOR VERSACAD

MENU	CADPLAN AND CADVANCE
0 PARITY & BITS/CHAR	PAR = 0 (NO) BITS/CHAR = 8
1 STOP BITS & CLOCK	STOP BITS = 1 CLOCK = 0 (INT)
2 INTERFACE	INTERFACE = 0 (SERIAL)
3 HOST BAUD & MODE	HOST BAUD RATE = 9600 MODE = 0 = PCI
4 MUTING & CHECKSUM	TERM MUTING = NO CKSUM ENABLE = NO
5 ISOCRONOUS & EOM	ISOCRONOUS = NO EOM = 13
6 DIRECT CONTROL & XON	DIRECT CNTRL = NO XON/XOFF = YES
7 TERM BAUD & DUPLEX	TERM BAUD RATE = 9600 DUPLEX = 0 (FULL)
8 SYNC CODES & VALUES	SYNC CODES = 2 SYNC CODE VALUE = 126

Loading pens and media

1. Remove the pen turret from the plotter and insert the desired pens. Don't forget to remove the protective cap from the pen. The easiest way to load a pen is to insert the tip into the small rubber cap designed to keep the pen tip from drying out, push down gently, and rotate the pen body into the holder (Figure 2). Place the turret back on the plotter; turn the turret halfway around, and it will drop into place.
2. Insert a sheet of paper between the pinch rollers and the drum (Figure 2). Align the right edge of the paper with the alignment mark on the platen (Figure 3).
3. Raise the left pinch roller using the lever located behind it. Position the left pinch roller over the left edge of the paper. Lower the left pinch roller.

NOTE

Once the left pinch roller is positioned, and the plotter has gone through the initialization procedure described in steps 4 and 5 below, the roller should not be moved unless the plotter is RESET. The plotter uses the position of the left pinch roller to determine the plotting limits. The operator's manual describes the RESET function, which is used to reinitialize the plotter.

4. Lower the safety cover. The plotter displays:

Turret Init
Please Stand By

Ready
Please Load Paper

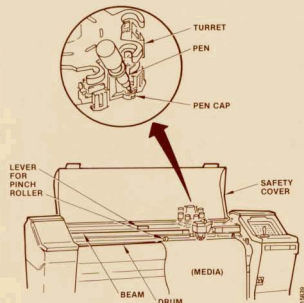


Figure 2. Pens, Turret and Media

5. Press LOAD/UNLOAD. The plotter lowers the pinch rollers and seeks the edges of the paper. When ready, the display reads:

Ready
Press AUTO to plot

6. Press AUTO. The plotter is now ready and the AUTO and plot times are displayed.

If you lift the cover at this point, the plotter enters Manual mode. You must press AUTO, after lowering the cover, to ready the plotter.

Loading and configuring for VERSACAD

1. Load VERSACAD on your PC.
2. Be sure you have configured the VERSACAD ENVIRO plotter for the CalComp PCI Controller.
3. Be sure that you've connected the plotter to the correct COM port.

Plotting a VERSACAD drawing

1. Use the VERSACAD software to select the drawing to plot and to set up the plot boundaries and scale.
2. Follow instructions in the VERSACAD manual to initiate the plot.

Removing finished drawings

1. When the drawing is finished the plotter pauses and the plot time display stops.
2. To unload the drawing, press AUTO/MANUAL followed by LOAD/UNLOAD.
3. Raise the cover.
4. To remove the drawing, simply hold it by the front edge and pull it toward you.

VERSACAD is a product of T&W Systems, Inc.

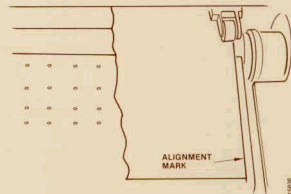


Figure 3. Media Alignment

1040 HOT LINE SUPPORT

NEED MORE HELP? CALL CALCOMP'S 1040 CUSTOMER SUPPORT HOT LINE AT
1-800 CALCOMP (6 a.m. — 5 p.m. PACIFIC TIME).

Questions pertaining to VERSACAD should be directed to
T&W Systems, Inc., Technical Support (714) 847-9960