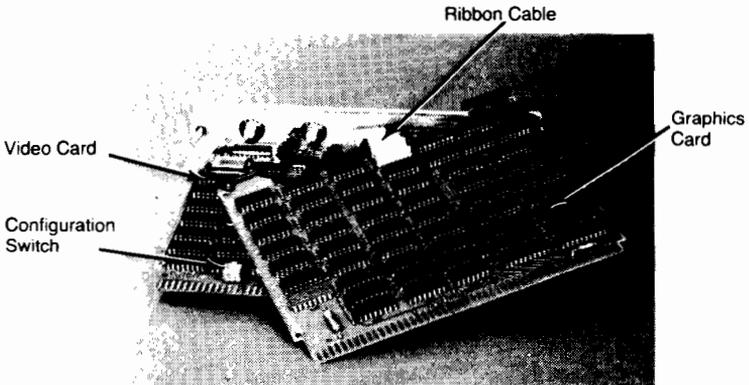| [hp] HEWLETT PACKARD | **Installation Note** |

The HP 98546A Display Compatibility Interface converts digital display data from HP 98580A, HP 98581A, HP 98582A, and HP 98583A computers into a composite video signal that is compatible with HP 35721A/B/C, HP 35731A/B and HP 35741A monitors.

Display Compatibility Interface

Unpacking and Handling

Keep the board in its protective plastic bag until you are ready to install it. Handle the card set by the edges only.

CAUTION

The Display Compatibility Interface contains circuits that are easily damaged by electrostatic discharge.
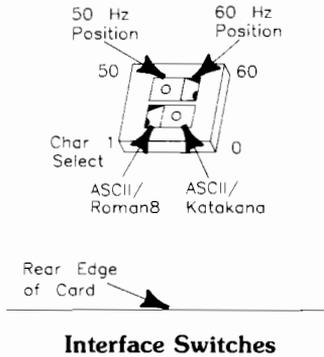

Carefully inspect both cards for damage during transit. If damage is discovered, report it immediately to the carrier. When possible, have a representative from the carrier present while unpacking the unit. If damage is found, file a claim with the delivering carrier, then contact your HP Sales and Service Office for assistance in obtaining a replacement while the claim is being processed by the carrier.

HP Computer Museum
www.hpmuseum.net

For research and education purposes only.

Configuring the Interface

Remove the Interface from the anti-static bag holding it by the edges only. Set it on an anti-static workstation or on top of the bag. Remove the foam block from between the two cards. The bottom card contains two switches located near the rear edge. The one nearest the edge selects the auxiliary type font. The other selects the refresh rate.

Interface Switches

The auxiliary type font switch selects Katakana or Roman 8. Use the Roman 8 position unless you have an Operating System previous to Revision 3.0 or you have a Katakana keyboard. The Katakana position produces the same character set as standard Series 200 Model 216/226/236 computers.

To select an auxiliary type font, depress the switch rocker on the end indicated (use a pointed tool such as a small screwdriver or ball-point pen to depress recessed switch rockers).
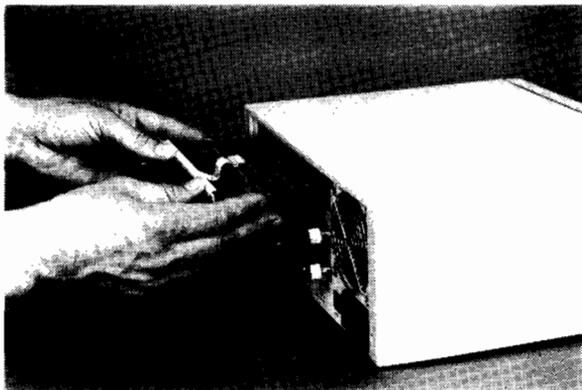
Set the 50/60 Hz configuration switch on the video card to 60 Hz. You may need to change it later if you are using 50 Hz power and have display flicker problems.

Installing the Interface

The installation procedures presented in this note assume that all other video display hardware is installed. If your hardware has not yet been installed, do so before starting any of these procedures.

1. Turn the computer power off and remove the power cord.

2

2. Remove one of the slot covers from a slot in the I/O backplane.

3. Slide the cards into adjacent slots, with the graphics card (the top card) in the slot above and slightly ahead of the video card.

Installing the Interface

4. Press the graphics card into its connector first. When the card is seated, its extractors are flush with the back of the computer frame.

5. Seat the video card into its connector by threading the knurled knobs into the computer until they are finger-tight. Do not overtighten.
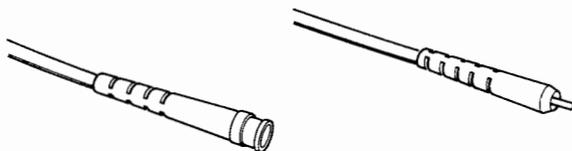
Connecting the Interface

The Display Compatibility Interface may be connected to either a monochrome or color monitor. It may be used with another video output board as well as by itself. It may also be used in conjunction with a high-resolution monitor.

The Interface is designed to be used in a wide variety of configurations. This kit includes cables for all of them. As a result, some cables are included which you will not need, depending on your configuration.

Computer
Museum

3

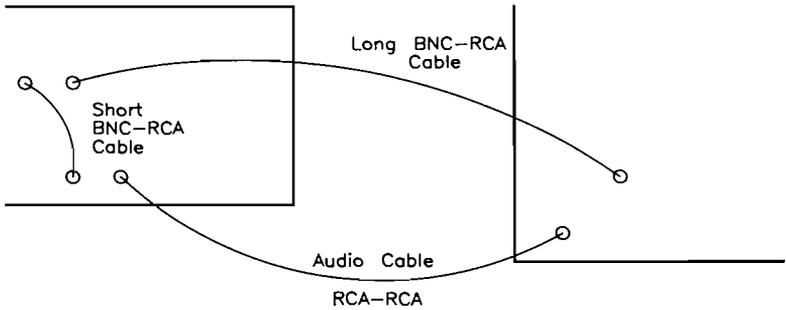## Connecting to a Monochrome Monitor

1. Find the long cable with a BNC connector on one end and an RCA connector on the other.

BNC Connector   **RCA Connector**

2. Connect the BNC connector of the long cable to the Interface connector marked **Monitor**.

3. Connect the RCA connector of the long cable to the monitor, removing any existing video cable from the monitor.

4. If you are using the Interface with another video output board, continue with Step 5. If not, continue with Step 11.

5. Find the short cable with a BNC connector on one end and an RCA connector on the other.

6. Connect the BNC connector of the short cable to the Interface connector marked **Video In**.

7. Remove the existing video cable from the video board (the other end of the cable removed in Step 3).

8. Connect the RCA connector of the short cable to the video board.

9. Find the cable with an RCA connector on each end.
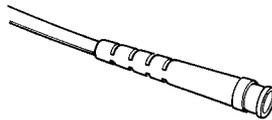
10. Replace the existing audio cable with this new cable.

4

Connecting to a Monochrome Monitor

11. Re-connect the power cord to the computer and turn the power on.
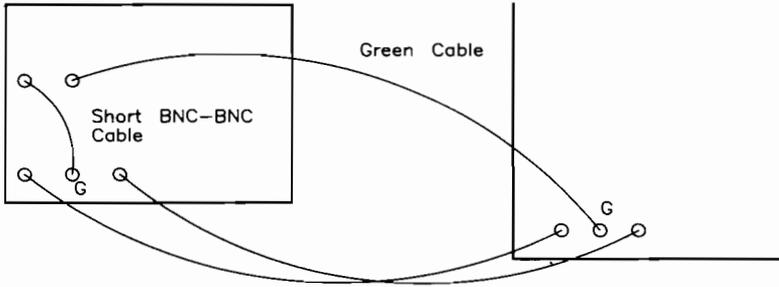
Connecting to a Color Monitor

1. Locate the video cable between the Green output terminal on the color video board and the Green input terminal on the monitor.

2. Disconnect it from the video board and reconnect it to the Display Compatibility Interface connector marked **Monitor**.

3. Find the short cable with a BNC connector on each end.

BNC Connector

4. Connect one end to the Compatibility Card connector marked **Video In**.

5. Connect the other end to the Green output on the existing color video board.
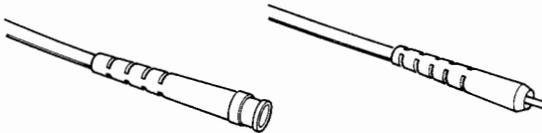
5

Connecting to a Color Monitor

6. Re-connect the power cord to the computer and turn the power on.

Using with a High-resolution Monitor

You may use the Display Compatibility Interface to drive a low- or medium-resolution monitor which is used in conjunction with a high-resolution monitor. If you are doing this, follow these instructions:
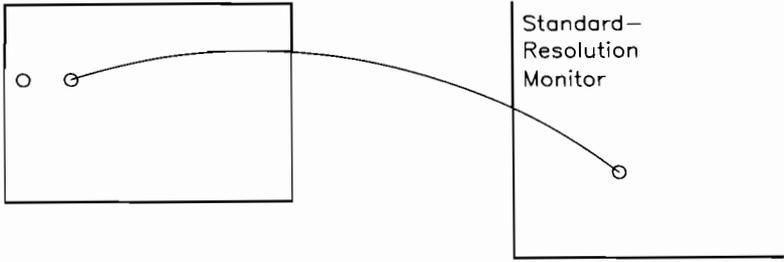
1. Find the long cable with a BNC connector on one end and an RCA connector on the other.

BNC Connector   **RCA Connector**

2. Connect the BNC connector to the Display Compatibility Interface connector marked **Monitor**.

3. Connect the RCA connector to the low- or medium-resolution monitor.

4. Leave the Interface connector marked **Video In** unconnected.

6

Standard—
Resolution
Monitor

Using with a High-resolution Monitor

5. Re-connect the power cord to the computer and turn the power on.

Adjustments

Apply power to the display. System self-test messages and boot ROM messages should appear on the display within 30 seconds. There are no adjustments on the Compatibility Card. Set horizontal and vertical hold, brightness and contrast controls on the display monitor to obtain a stable display. Refer to the monitor operating manual for additional instructions.

If you are using an HP 35721A/B/C monitor, you may experience horizontal hold problems when switching between separate alpha/graphics and bit-mapped video. If this happens, adjust the horizontal hold control to a point between the optimum adjustment for each.

Where to Go Next

When finished with the installation, place this Note behind the **Add-on Accessories** tab of your *Installation Reference*.

Now refer to the *Peripheral Installation Guide* for further information about configuring your system.

In Case of Difficulty

If the display monitor does not respond, check to see that all connections have been properly made. Then attempt to correct the problem with the monitor's controls.

If the alpha plane is displayed properly but the graphics plane is missing or garbled, turn the computer off and pull the alpha (bottom) card out a few inches. Then check that the ribbon cable to the graphics card is securely connected (see picture on Page 1).

If the monitor still does not operate properly, contact your HP Sales and Service Office for assistance.