## HP 82912A/HP 82913A Video Monitor Instruction Sheet

The video monitor is a high-resolution, monochrome display available with a 9-inch (HP 82912A) or 12-inch (HP 82913A) CRT.

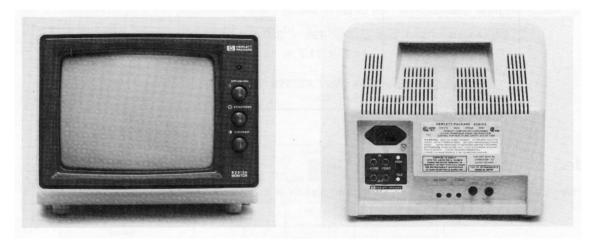
Features include a screen to reduce glare and reflections, a video bandwidth wide enough to display 24 lines of 80 characters each without distortion, and a 1-watt audio amplifier.

The following accessories are shipped with each monitor:

- Instruction Sheet.
- Power Cord.
- · Warranty and Service Information Sheet.

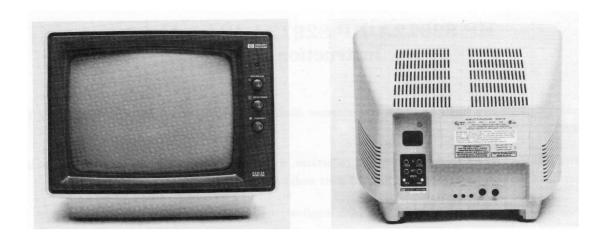
Three registration cards are included with the HP 82913A Video Monitor (120 Vac only). Please take the time to fill them out. You should retain one for your records, return one to Hewlett-Packard, and leave one with your dealer.

# **HP 82912A Video Monitor Specifications**



Input Impedance	$75\Omega$ or high-impedance, switchable.	
Display Capacity	24 lines with 80 characters each.	
Scanning Frequency	Horizontal: approximately 15.75 kHz.  Vertical: approximately 60 Hz.	
Power Supply	120 Vac $\pm$ 10% at 60 Hz. Option 001: 230 Vac $+$ 15%, $-$ 10% at 48-67 Hz.	
Power Consumption	28W.	
Dimensions	270 $\times$ 225 $\times$ 261 mm. 10.6 $\times$ 8.9 $\times$ 10.3 inches.	
Weight	4.8 kg. 10.58 lbs.	

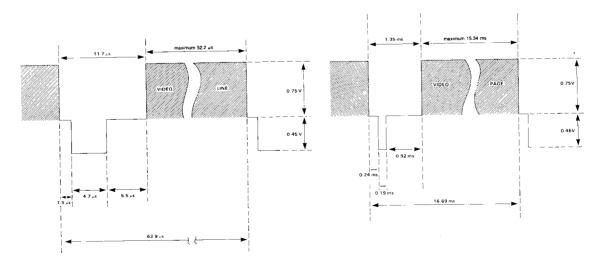
# **HP 82913A Video Monitor Specifications**



Input Impedance	75Ω or high-impedance, switchable.	
Display Capacity	24 lines with 80 characters each.	
Scanning Frequency	Horizontal: approximately 15.75 kHz.  Vertical: approximately 60 Hz.	
Power Supply	120 Vac $\pm$ 10% at 60 Hz. Option 001: 230 Vac $+$ 15%, $-$ 10% at 48-67 Hz.	
Power Consumption	30W.	
Dimensions	$360 \times 296 \times 330$ mm. $14.2 \times 11.7 \times 13.0$ inches.	
Weight	6.7 kg. 14.77 lbs.	

# **Video Input Signal**

The waveform and timing chart of recommended signals is as follows:



**Horizontal Composite Waveform** 

**Vertical Composite Waveform** 

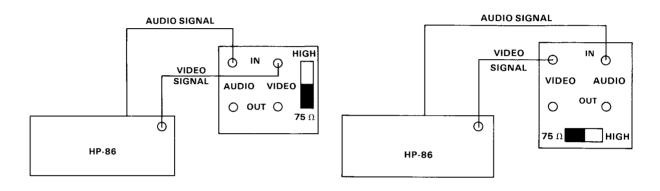
### Installation

**Note:** The video monitor audio connectors are included in the installation diagrams for use in connecting a computer that has audio capabilities.

To connect one video monitor to your computer, feed the video signal from the computer to the VIDEO-IN connector. The termination switch on the back panel should be set to  $75\Omega$ . (Maximum video cable length is 150 meters.)

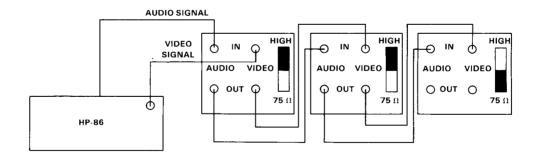
#### With an HP 82912A Video Monitor:

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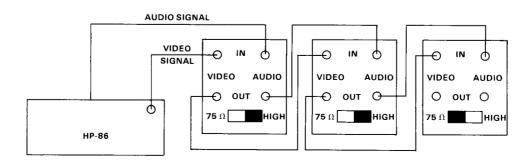


For more than one display, the termination switch should be set to HIGH on all video monitors except the last one. The switch on this last monitor should be set to  $75\Omega$ . Up to four displays can be connected.

#### With an HP 82912A Video Monitor:



### With an HP 82913A Video Monitor:



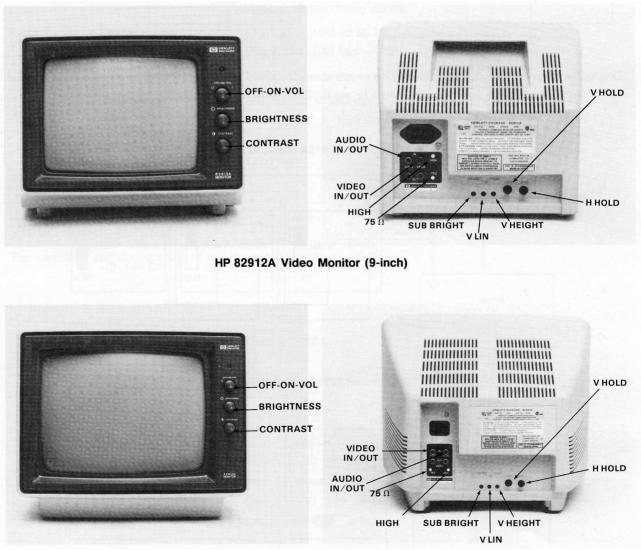
When connecting multiple displays, observe the following guidelines for **total** video cable length. To determine this total for your system, add together the lengths of any video cables attached to active VIDEO-IN or VIDEO-OUT connectors.

Maximum Video Cable Length	Number of Monitors
50 meters	2
30 meters	3
10 meters	4

### **CAUTION**

- a. Damage to the video monitor can result from exposure to rain or moisture, installation in an excessively hot location or near high-capacity transformers, motors, or other magnet-equipped apparatus.
- b. To prevent the video monitor from overheating, do not obstruct the air circulation vents built into the cabinet.

### **Controls and Switches**



HP 82913A Video Monitor (12-inch)

OFF-ON-VOL: To turn the monitor on, rotate this knob clockwise. Power is turned off with a counter-clockwise rotation.

BRIGHTNESS: This control is used to adjust the display if it is not bright enough or if it is too bright.

CONTRAST: This control allows adjustment of the contrast between the green phosphor image and the background.

H HOLD: If the picture tears toward the left or right, or appears as diagonal stripes across the screen, the horizontal hold should be rotated clockwise or counterclockwise until the picture stabilizes.

V HOLD: If the picture rolls upward or downward, the vertical hold should be rotated clockwise or counterclockwise until the picture stabilizes.

**75-OHM TERMINATION SWITCH:** This switch should be set to  $75\Omega$  when connected to equipment which has 75-ohm output impedance. The switch should be set to HIGH when connected to a higher output impedance or when using multiple monitors (refer to the installation diagrams).

VIDEO-IN and VIDEO-OUT Connectors: These connectors provide feed through of a video signal when it is desirable to display the video signal on more than one monitor. The composite video signal applied to the VIDEO-IN connector will also appear at the VIDEO-OUT connector. The video signal from a computer should be fed to the VIDEO-IN connector using the video cable (HP part number 8120-3760).

**AUDIO-IN and AUDIO-OUT Connectors:** When applicable the audio signal from a computer should be fed to the AUDIO-IN connector using a shielded cable.

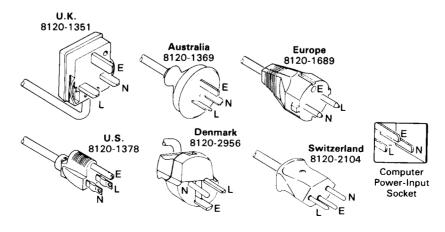
#### **CAUTION**

Damage to the screen could result if the same characters or graphics are shown for a long period of time with the BRIGHTNESS and CONTRAST controls set to maximum positions.

**Note:** Adjustments should always be made using the controls described first. If finer adjustments are required the following adjustments can be made on the back of the monitor by qualified service center personnel: V LIN (Vertical Linearity Adjustment), V HEIGHT (Vertical Height Adjustment), and SUB BRIGHT.

#### **Power Cords**

Power cords with different plugs are available for the video monitor. The part number of each cord is shown below.



The cord packaged with the machine depends on where the machine was delivered. To obtain a different power cord contact your dealer or:

#### In the United States:

#### Hewlett-Packard

Personal Computer Division 1010 N.E. Circle Blvd. Corvallis, Oregon 97330

Toll-free number (7:00 a.m. to 4:30 p.m., Pacific Time) Call (800) 547-3400 (except Oregon, Alaska, and Hawaii) Oregon, Alaska, Hawaii: Tel. (503) 758-1010

TTY users with hearing or speech impairments, please dial (503) 758-5566.

#### In Europe:

#### Hewlett-Packard, S.A.

7, rue du Bois-du-Lan P.O. Box CH-1217 Meyrin 2 Geneva Switzerland Tel. (022) 82 70 00

#### Other Countries:

#### **Hewlett-Packard Intercontinental**

3495 Deer Creek Rd.Palo Alto, California 94304U.S.A.Tel. (415) 857-1501

# **Warranty and Service Information**

**Note:** If your monitor requires servicing, Hewlett-Packard will replace it with a reconditioned monitor. The reconditioned monitor will be returned in the rear portion of the plastic case from your original monitor. Therefore, HP requests that you place any personal identification marks or labels on the rear portion of the plastic case. Also, to protect your monitor during shipment, it should always be shipped with the rear case intact.

The following procedures should be followed any time you suspect your monitor requires servicing.

Check to see if the power light is off and the power is turned on. If so, turn the power off. Unplug the power cord from the power outlet. Then, remove the power cord from the power cord receptacle on the back of the monitor. Inspect the power contacts on both the monitor and the power cord and clean them if necessary. Make sure the power cord is then securely plugged into the monitor and into a grounded ac outlet. Turn the power back on. If the power light fails to come on, the monitor requires service.

If the power light comes on but no cursor appears, adjust the display brightness. If the screen remains blank or behaves erratically, or if the computer keyboard fails to respond to keyboard commands, follow the recommended procedure for testing your computer. The warranty statement and procedures for obtaining repair service are contained on the Warranty and Service Information sheet shipped with your HP 82912A/HP 82913A Video Monitor. If you need additional information, please contact your authorized HP dealer or the nearest Hewlett-Packard sales and service facility. If you have questions concerning the warranty, please contact:

In the United States: One of the six Field Repair Centers listed on the service information sheet.

#### In Europe:

Hewlett-Packard, S.A.

7, rue du Bois-du-Lan P.O. Box CH-1217 Meyrin 2 Geneva Switzerland Tel. (022) 82 70 00

Other Countries:

**Hewlett-Packard Intercontinental** 

3495 Deer Creek Rd.Palo Alto, California 94304U.S.A.Tel. (415) 857-1501

### **General Shipping Instructions**

Should you ever need to ship your monitor, be sure it is packed in a protective package to avoid in-transit damage. Use the original shipping carton whenever possible. Shipping damage is not covered by the warranty. All customs and duties are the customer's responsibility. Hewlett-Packard recommends that you always insure shipments.

### Potential for Radio Frequency Interference

This equipment generates and uses radio frequency energy and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception. It has been type tested and found to comply with the limits for a Class B computing device in accordance with the specifications in Subpart J of Part 15 of the FCC Rules, which are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- · Reorient the receiving antenna.
- Relocate the monitor with respect to the receiver.
- Move the monitor away from the receiver.
- Plug the monitor into a different outlet so that the monitor and the receiver are on different branch circuits.

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions. The user may find the booklet, *How to Identify and Resolve Radio/TV Interference Problems*, helpful. It is available from the U.S. Government Printing Office, Washington, D.C. 20402, Stock No. 004-000-00345-4.



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