NOTICE

The information in this guide is subject to change without notice.

COMPAQ 1024 COLOR MONITOR
INSTALLATION GUIDE

Compaq Computer Corporation

FEDERAL COMMUNICATIONS COMMISSION NOTICE

This equipment has been tested and found to comply with the limits for a Class digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful 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 or relocate the receiving antenna.

- Increase the separation between the equipment and the receiver.

- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

- Consult the dealer or an experienced radio or television technician for help.

Modifications

The FCC requires the user to be notified that any changes or modifications made to this device that are not expressly approved by Compaq Computer Corporation may void the user's authority to operate the equipment.

Cables

Connections to this device must be made with shielded cables with metallic RFI/EMI connector hoods to maintain compliance with FCC Rules and Regulations.

CANADIAN NOTICE

This equipment does not exceed the Class B limits for radiated emissions as described in the Radio Interference Regulations of the Canadian Department of Communications.

AVIS CANADIEN

Le présent appareil numérique n'énict pas de bruits radioélectriques dépassant les limites applicables aux appareils numeriques de la Classe B prescrites dans le Règlement sur le brouillage radioélectrique édicté par le Ministère des Communications du Canada.

GERMAN NOTICE

COMPAQ computers, when tested with the COMPAQ 1024 Color Monitor were evaluated for compliance to the requirements of ZHI/618 in the Text Mode (640 x 480) using MS-DOS Version 3.31 (or higher) and BASICA as published by Compaq Computer Corporation.

HINWEIS

Hiermit wird bescheinigt, daß der COMPAQ Series 460 und 461 in Übereinstimmung mit den Bestimmungen der BMPT-AmtsblVfg 243/1991 funk-entstört ist. Der vorschriftsmäßige Betrieb mancher Geräte (z.B. Meßsender) kann allerdings gewissen Einschränkungen unterliegen. Beachten Sie deshalb die Hinweise in der Bedienungsanleitung.

Dem Zentralamt für Zulassungen im Fernmeldewesen wurde das Inverkehrbringen dieses Gerätes angezeigt und die Berechtiguna zur Überprüfung der Serie auf die Einhaltung der Bestimmungen eingeräumt.

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COMPAQ 1024 COLOR MONITOR

This manual provides information necessary for you to install and operate the COMPAQ 1024 Color Monitor.

ABOUT THE MONITOR

The 1024 Color Monitor is a microprocessor based, intelligent scanning color monitor. It is best suited for applications from word processing to spreadsheets to CAD/CAE. Its microprocessor intelligence allows easy adjustment of screen configurations with various display modes.

Some of the features of the 1024 Color Monitor are as follows:

- Supports VGA standards, Super VGA (800 x 600), 8514/A (1024 x 768 interlaced), and 1024 x 768 non-interlaced mode.

- Analog input allows the monitor to display up to 256 colors.

- Front panel controls to adjust the Horizontal-size, Horizontal-position, Vertical-size, and Vertical-position in each display mode.

- Built-in automatic frequency control that eliminates the need of Horizontal-hold controls.

- Automatically scans the horizontal frequency from 30 to 58 KHz and the vertical frequency from 50 to 100 Hz.

- Monitors compliant with MPR 1990 Emissions Standards are identified by a statement on the product label.

INSTALLING THE MONITOR

All COMPAQ personal computers have integrated display adapters that work with the 1024 Color Monitor. If your computer requires a separate display adapter, install it before proceeding with these instructions.

To install the monitor, ensure that power to the monitor, computer system, and other attached devices is off and complete the following steps:

1. Connect the monitor AC power cord to a properly grounded AC outlet that is easily accessible and located as near the monitor as possible. Depending on your location, the power cord for your monitor could be different from the one in the illustration.

2. Connect the video cable on the monitor to the 15-pin video graphics connector and tighten the fastening screws.

IMPORTANT: Make sure the signal cable aligns with the video graphics connector. Do not force the cable onto the connector, or you may damage the video cable.
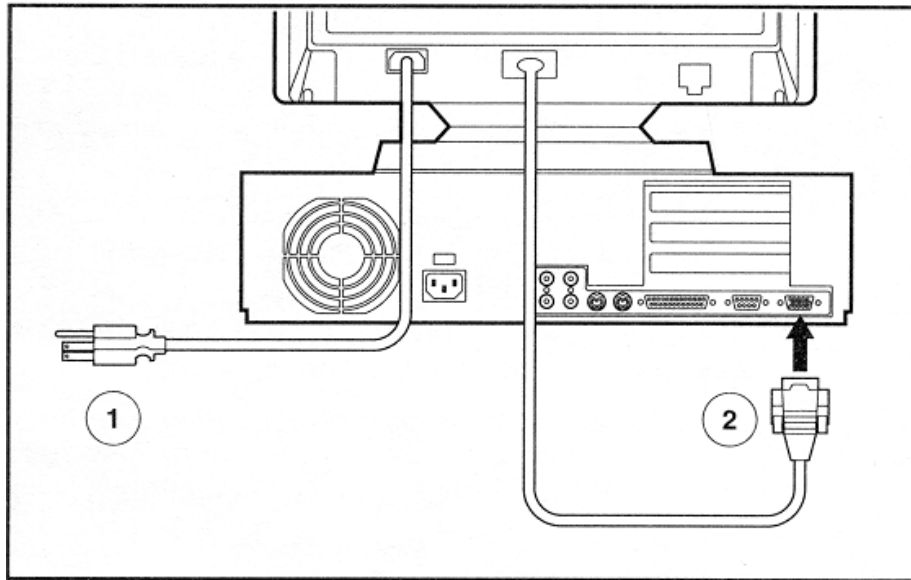
Rear Panel Connectors

> ⚠️ **WARNING:** This equipment is designed for connection to a grounded (earthed) outlet. The 3-prong grounding type plug is an important safety feature. To avoid risk of electric shock or damage to your equipment, do not disable this feature.

USING CONTROLS AND INDICATORS

This section describes the controls and indicators on the COMPAQ 1024 Color Monitor.

Front Panel Controls

The following illustration shows the front panel controls used to power on the monitor and adjust the contrast and brightness.
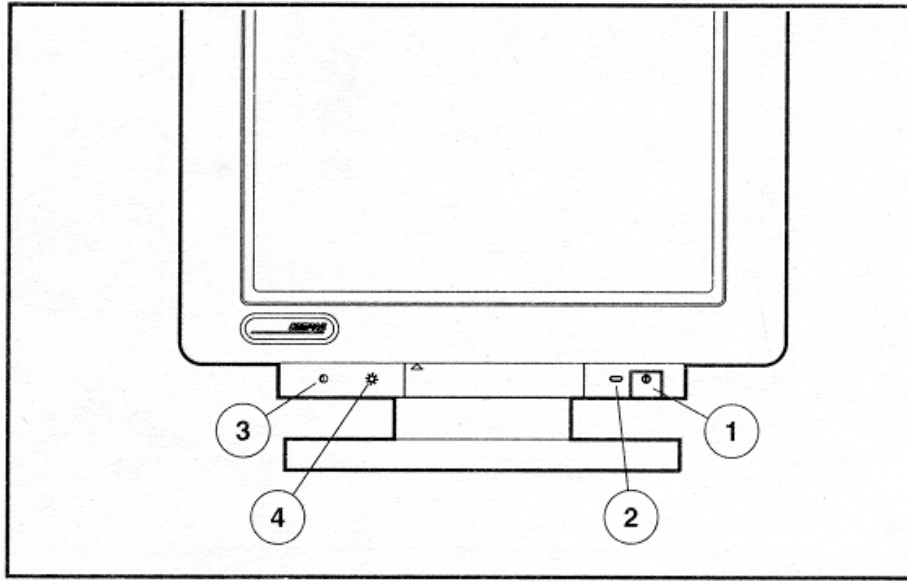
Front Panel Controls

1. Power Switch

2. Power-on Indicator

3. Brightness Control

4. Contrast Control

> △ **CAUTION:** To prevent damage to the monitor, wait at least three (3) seconds after turning off the monitor before you turn it back oil.

Display Adjustment Controls

The display adjustments on the 1024 Color Monitor are preset. Normally, you do not need to make any adjustments. If you need to make adjustments, press the panel marked PUSH on the front of the monitor. You can use this row of push buttons to change the settings shown below. The settings are automatically saved and recalled each time you change the monitor's mode.
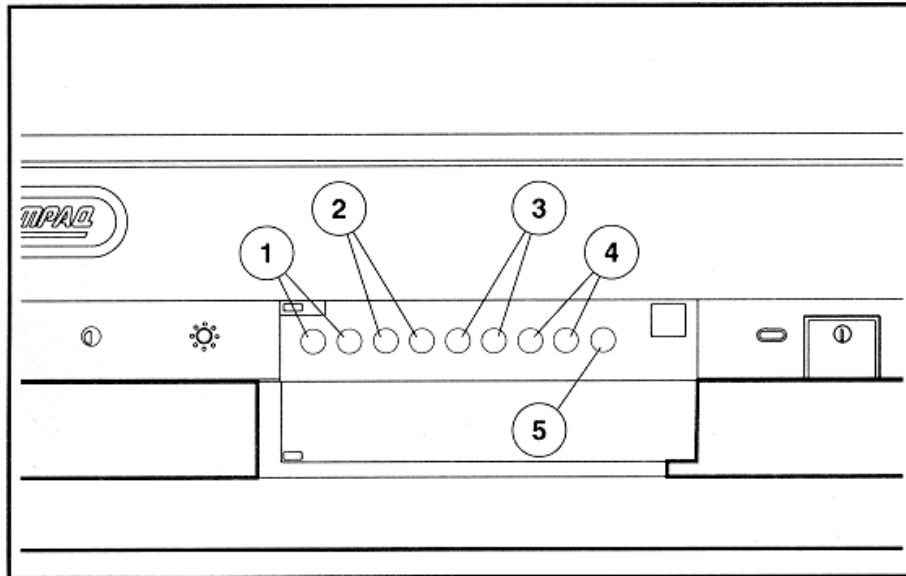
Display Adjustment Controls

1. Horizontal position

2. Horizontal width

3. Vertical height

4. Vertical position

5. Reset

CARE AND MAINTENANCE

- Use only a power source and connection appropriate for this monitor, as indicated on the marking label/back plate.

- When you connect the monitor to an outlet or extension cord, make sure the total ampere rating of the products connected to the outlet does not exceed the current rating of the electrical outlet, and the total ampere rating of the products connected to the cord do not exceed the rating of the cord.

- Install the monitor near an outlet that you can reach easily. Disconnect the product by grasping the plug firmly and pulling it from the outlet. Never disconnect it by pulling the cord.

- Unplug the monitor from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.

- Do not drop the monitor or place it on an unstable surface.

- Slots and openings in the cabinet are provided for ventilation; these openings must not be blocked or covered. Never push objects of any kind into cabinet slots or other openings.

- Do not allow anything to rest on the power cord. Do not walk on the cord.

- Keep the monitor in a well-ventilated area, away from excessive light, heat and moisture. Keep the monitor away from high capacity transformers, electric motors, and other strong magnetic fields.

- Do not open the monitor cabinet or attempt to service this product yourself. Adjust only those controls that are covered by the operating instructions. If the monitor is not operating properly, or has been dropped or damaged, contact your dealer.

APPENDIX

ADVANCED PICTURE ADJUSTMENTS

This section is intended for the experienced user only. It includes a brief description on adjusting the picture geometry, as well as the vertical and horizontal position and size.

NOTE: Specific test patterns and service experience may be required to perform these adjustments. If you have any problems adjusting the service controls, just press **Reset** and start again.

Changing Front Panel Control Functions

A set of DIP switches recessed on the front panel of the 1024 Color Monitor changes the functions of the front panel control buttons. Once set, the settings are automatically saved and recalled each time you change the monitor's mode

Both the DIP switches are set to Off at the factory, and you can use the front panel controls control the following user functions:
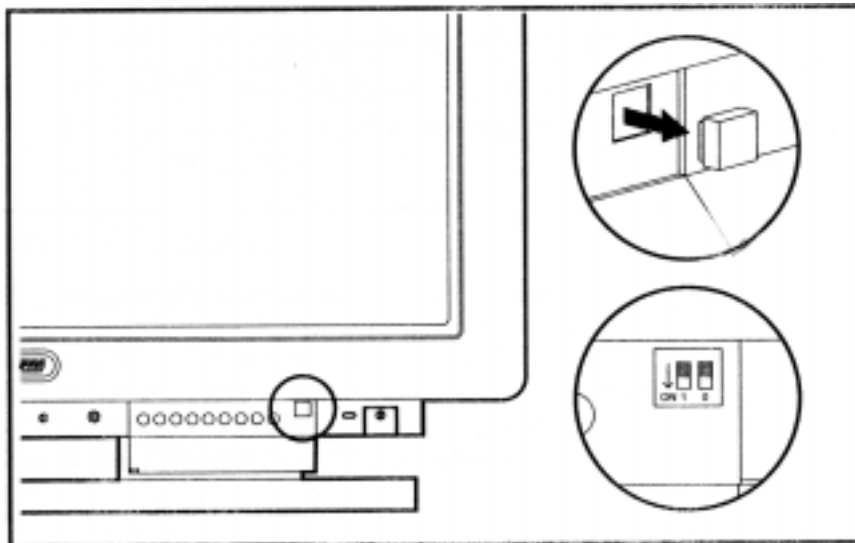
Removing tile Rubber Cap to Change the DIP Switch Settings

- Horizontal-position (1)
- Horizontal-width (2)
- Vertical-height (3)
- Vertical-position (4)

The following table shows the corresponding front panel control
functions in each of the DIP switch settings:

D 1	D 2		Adjustment	Remarks
Off	Off	1	Horizontal-position	User controls. This is the default setting. The monitor will always power on with the front panel controls performing these functions regardless of the actual DIP switch settings.
		2	Horizontal-width	
(↑)	(↑)	3	Vertical-height	
		4	Vertical-position	
Off	On	1	Vertical-linearity	Service controls.
		2	Vertical-S correction	
(↑)	(↓)	3	Vertical-compensation	
		4	Horizontal-compensation	
On	Off	1	E-W corner	Service controls.
		2	E-W parabola	
(↓)	(↑)	3	Trapezium	
		4	Horizontal -frequency	
On	On	4	AFC Off (Horizontal frequency only)	
(↓)	(↓)			

The function of each control may be described as follows:

1. Vertical linearity

   If a cross-hatch pattern is displayed on the screen, equal spacing between the horizontal bars at the top and bottom of the screen indicates good linearity. However, if the horizontal bars appear to be crowded at the top of the bottom, the vertical linearity controls can be used to correct the problem.

2. Vertical S-correction

   For a cross-hatch pattern displayed on the screen, if the horizontal bars appear to be crowded near the center but are of equal spacing at the top and bottom, the vertical S-correction controls can be used to correct the problem.

3. Vertical/horizontal compensation

   Together with the Horizontal compensation controls, these controls minimizes the "breathing" effect when the Brightness control is turned up or down with the Contrast control set at maximum.

4. East-west corner / east-west parabola

   Together with the East-west parabola controls, these controls can be used to correct pincushion and barrel distortions.

5. Trapezium correction

   Minimize the trapezium distortion of the display screen.

6. Horizontal frequency hold

   For input Horizontal-frequencies that are different from the preset timings, these controls may be used to synchronize the monitor with the input signal.

DIP Switch Defaults

The monitor always powers on with the front panel controls controlling the user functions regardless of the actual DIP switch settings. If the monitor is powered on with the DIP switch setting other than the default, reset the DIP switches to their default settings (Off) first before setting them again to change the front panel control functions.

Reset Button

The Reset button returns control of all the 12 user and service parameters to the factory default settings. The Reset button only recalls the factory defaults of the mode currently in use.

PRESET MODES

The following table lists the preset modes available for the 1024 Color Monitor:

Resolution	f_H, f_V
640 x 350	31.5 KHz. 70 Hz
640 x 400	31.5 KHz. 70 Hz
640 x 480	31.5 KHz. 60 Hz
640 x 480	45 KHz 75 Hz
800 x 600	48 KHz. 72 Hz
800 x 600	53.8 KHz. 72 Hz
1024 x 768	35.52 KHz 87 Hz/43.5 Hz
1024 x 768	57.5 KHz. 72 Hz
1024 x 768	57.8 KHz. 71.7 Hz

SPECIFICATIONS

CRT (Cathode Ray Tube)

Dot pitch	:	0.28 mm
CRT size	:	14 inch
Face treatment	:	dark glass, anti-glare electrostatic coating (MPR 1 990 models only)

Input Signals

Type	:	analog
Video signal	:	0.7 Vp-p
Sync signals	:	separate sync, TTL level

Deflection Characteristics

Horizontal-frequency	:	30 - 58 KHz
Vertical-frequency	:	50 - 100 Hz
Video Response	:	75 MHz

Recommended Resolution

- 640 x 480

- 800 x 600

- 1024 x 768 interlace

- 1024 x 768 non-interlace

Display Controls

- Power On/Off

- Brightness

- Contrast

- Reset Button

- Horizontal-position

- Horizontal-width

- Vertical-height

- Vertical-position

Power Requirements

- 85 Watts

- 90 - 264 Volts universal power supply

Dimension (W x H x L)

370.8 x 362 x 386 mm

Signal Connector

Pin 1	:	Red Video
Pin 2	:	Green Video/Sync on Green
Pin 3	:	Blue Video
Pin 4	:	Ground (Sense S2)
Pin 5	:	Open
Pin 6	:	Red - ground
Pin 7	:	Green - ground
Pin 8	:	Blue - ground
Pin 9	:	No connection (No Pin)
Pin 10	:	Ground
Pin 11	:	Open (Sense S0)
Pin 12	:	Open (Sense S1)
Pin 13	:	Horizontal-sync/Composite-sync
Pin 14	:	Vertical-sync
Pin 15	:	Ground (Sense S3)

Power Cord Set Requirements

The power cord set used with the AC adapter must meet the requirements of the country where you use the AC Adapter, whether it is 100-120 or 220-240 VAC.

The following information explains the requirements for power cord set selection.

- The cord set must be approved for the country in which it is used.

- The appliance coupler (that is, the connector to the device itself, not the wall plug) must have a configuration for mating with a CEE22/IEC 320 appliance inlet (Standard Sheet C14).

U.S. And Canada

1. The cord set must be UL Listed and CSA Certified.

2. The minimum specifications for the flexible cord are:

   - No. 18 AWG
   - Type SV or SJ
   - 3 conductor

3. The cord set must have a rated current capacity of at least 10 amperes.

4. The attachment plug must be an earth-grounding type with a NEMA 5-15P (15A, 125V) or NEMA 6-15P (15A, 250V) configuration.

JAPAN

1. All components of the cord set (cord, receptacle, and plug) must bear a "T" mark and registration number in accordance with the Japanese Dentori Law.

2. The minimum specifications for the flexible cord are:

   - .75mm2 conductors
   - Type VCT or VCTF
   - 3-conductor

3. The cord set must have a minimum rated current capacity of 7A.

4. The attachment plug must be a two-pole, earth-grounding type with a Japanese Industrial Standard C8303 (15A, 125V) configuration.

Other Countries

1. The cord set fittings must bear the certification mark of the agency responsible for evaluation in a specific country. Acceptable agencies include:

BSI (United Kingdom)	NAMKO (Norway)
CEBEC (Belgium)	OVE (Austria)
DEMKO (Denmark)	SEMKO (Sweden)
EANSW (Australia)	SEV (Switzerland)
SETI (Finland)	UTE (France)
IMQ (Italy)	VDE (Germany)
KEMA (The Netherlands)	

2. The flexible cord must be of a HAR (harmonized) type H05VV-F 3-conductor cord with a minimum conductor size of .03 square inches (1.0 square millimeter).

3. The cord set must have a current capacity of at least amperes and a nominal voltage rating of 125 or 250 VAC.

   For more information about power cord set requirements, contact your Authorized COMPAQ Reseller.