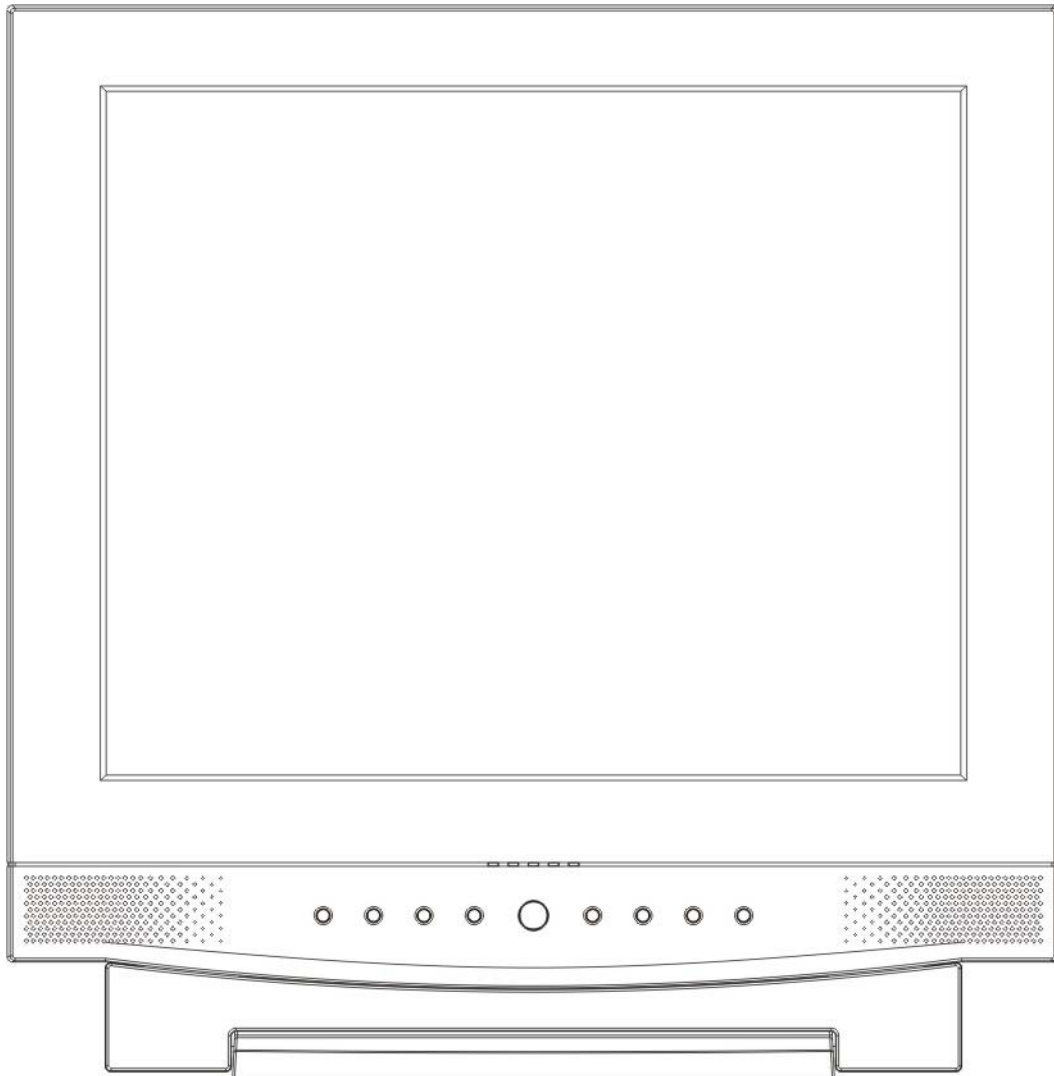



Installation and Operation Manual

17.0 –Inch–” Color TFT-LCD Monitor



Please read this manual thoroughly before use, and keep it handy for future reference.

PRECAUTIONS AND IMPORTANT SAFEGUARDS

1. **READ INSTRUCTIONS** – All of the safety and operating instructions should be read before the appliance is operated.
2. **RETAIN INSTRUCTIONS** – The safety and operating instructions should be retained for future reference.
3. **HEED WARNINGS** – All warnings on the unit and in the operating instructions should be adhered to.
4. **FOLLOW INSTRUCTIONS** – All operating and use instructions should be followed.
5. **CLEANING** – Unplug the unit from the outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning. See cleaning procedures under Maintenance.
6. **ATTACHMENTS** – Do not use attachments not recommended by the product manufacturer as they may result in the risk of fire, electric shock, or injury to persons.
7. **WATER AND MOISTURE** – Do not use this unit near water or in an unprotected outdoor installation, or any area which is classified as a wet location.
8. **ACCESSORIES** - Do not place this product on an unstable cart, stand, tripod, bracket, or table. The product may fall, causing serious injury to a child or adult and serious damage to the equipment. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer, or sold with the product. Any mounting of the product should follow the manufacturer's instructions and should use a mounting accessory recommended by the manufacturer. Wall or shelf mounting should follow the manufacturer's instructions and should use a mounting kit approved by the manufacturer.
9. A product and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the product and cart combination to overturn. 
10. **VENTILATION** – Slots and openings in the cabinet and the back or bottom are provided for ventilation and to ensure reliable operation of the equipment and to protect it from overheating. These openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. Equipment should never be placed near or over a radiator or heat register. This product should not be placed in a built-in installation, such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.
11. **POWER SOURCES** – This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supplied to your home, consult your product dealer or local power company. For products designed to operate from battery power or other sources, refer to the operating instructions.
12. **GROUNDING OR POLARIZATION** – The power supply supplied with this unit may be equipped with a polarized alternating-current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.
Alternately, this unit may be equipped with a 3-wire grounding-type plug, a plug having a third (grounding) pin. This plug will only fit into a grounding-type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the grounding-type plug.
13. **OVERLOADING** – Do not overload outlets and extension cords as this can result in a risk of fire or electric shock.
14. **POWER-CORD PROTECTION** – Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords and plugs, convenience receptacles, and the point where they exit from the appliance.

PRECAUTIONS AND IMPORTANT SAFEGUARDS

15. **OBJECT AND LIQUID ENTRY** – Never push objects of any kind into this unit through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the unit.
16. **SERVICING** – Do not attempt to service this unit yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.
17. **DAMAGE REQUIRING SERVICE** – Unplug the unit from the outlet and refer servicing to qualified service personnel under the following conditions:
 - a. When the power-supply cord or plug is damaged.
 - b. If liquid has been spilled, or objects have fallen into the unit.
 - c. If the unit has been exposed to rain or water.
 - d. If the unit does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the unit to its normal operation.
 - e. If the unit has been dropped or the enclosure has been damaged.
 - f. When the unit exhibits a distinct change in performance - this indicates a need for service.
18. **REPLACEMENT PARTS** – When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock or other hazards.
19. **SAFETY CHECK** – Upon completion of any service or repairs to this unit, ask the service technician to perform safety checks to determine that the unit is in proper operating condition.
20. **LIGHTNING** – For added protection of this unit during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the cable system. This will prevent damage to the unit due to lightning and power-line surges.
21. **OUTDOOR ANTENNA GROUNDING** – If an outside antenna or cable system is connected to the product, be sure the antenna or cable system is grounded so as to provide some protection against voltage surges and built-up static charges.
22. **POWER LINES** – An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.
23. **HEAT** – The product should be situated away from heat sources such as radiators, heat registers, stoves, or other products (including amplifiers) that produce heat.
24. **INSTALLATION** – Do not install the unit in an extremely hot or humid location, or in a place subject to dust or mechanical vibration. The unit is not designed to be waterproof. Exposure to rain or water may damage the unit.

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Features

- Versatile Professional Color TFT-LCD Monitor
- Bright, High Quality Pictures
- Thin and Lightweight
- Many Mounting and Installation Options
- Low-Power 12 volts DC Operation
- Flexible Input Connections

Installation

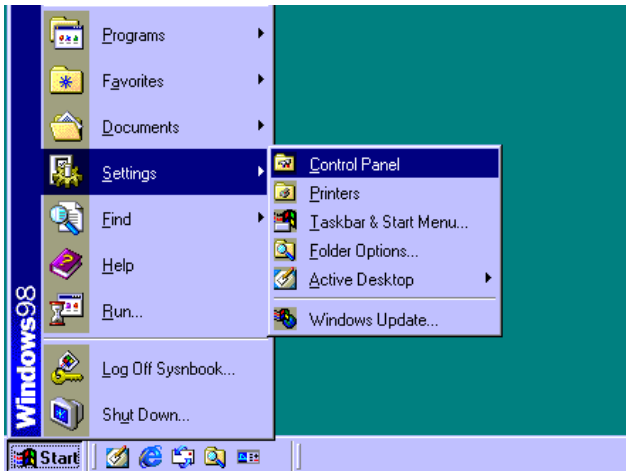
LCD Video monitors may be mounted in any position or orientation. Considerations for mounting include regard for how the monitor is going to be used, routing of connecting cords, and locations away from heat sources. Cooling is not required, but some airflow around the case will allow the small amount of heat generated to be dissipated. Power is required from a regulated supply (provided) or other 12 volts DC source.

Plug and Play

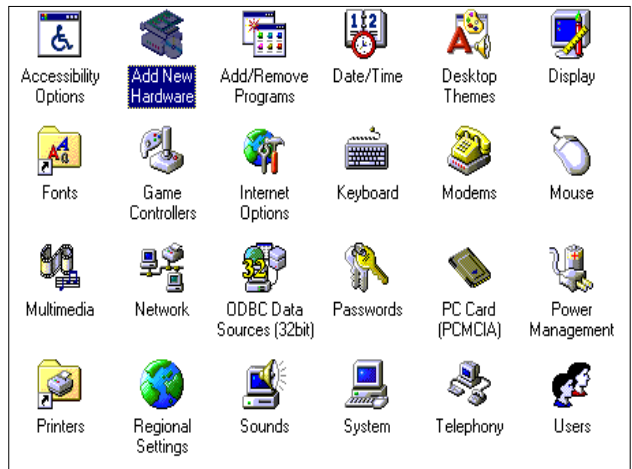
This monitor meets VESA Plug and Play standards, which eliminates complicated and time-consuming setup. It allows you to install your monitor in a Plug and Play compatible system without the usual setup hassles and confusion. Your PC system can easily identify and configure itself for use with your display.

Installing the Video Driver (Windows 95/98)

To install the Video driver, refer to the following sequence.



Select **Start/Setting/Control Panel**.



Click **Add New Hardware**.



Click **Next**.



Click **Next**.

Installation



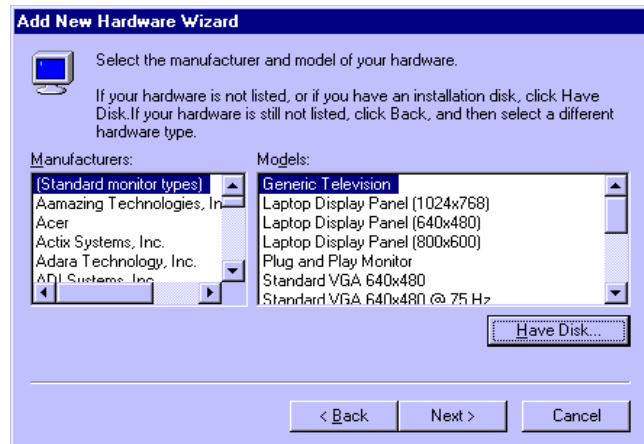
Click **Next** after selecting **No, the device isn't in the list.**



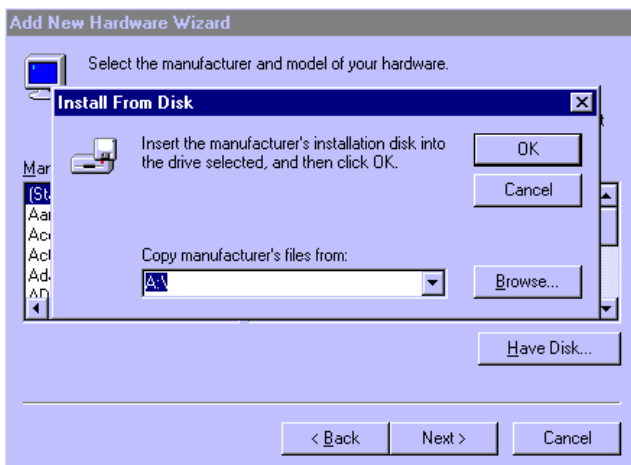
Click **Next** after selecting **No, I want to select the hardware from a list.**



Click **Next** after selecting **Monitors.**



Click **Have Disk...**



Insert the supplied 3.5" floppy disk in A:\ Drive. Select **OK.**



Select **Next** after selecting **17" LCD.**

Installation



Click **Finish**.

Microsoft® Windows® 2000 Operating System

1. Click **"Start"** , **"Setting"** , **"Control Panel"**.
2. Double click the **"Display"** Icon.
3. Choose the **"Settings"** tab and then click **"Advanced..."**.
4. Choose **"Monitor"**.
 - Case1: If the "Properties" button is inactive, it means your monitor is properly configured. Please stop installation.
 - Case2: If the "Properties" button is active, click the "Properties" button, then follow next steps.
5. Click **"Driver"** and then click on **"Update Driver..."** then click on the "Next" button.
6. Choose **"Display a list of the known drivers for this device so that I can choose a specific driver"** then click **"Next"** and then click **"Have disk"**.
7. Click the **"Browse"** button then choose A:.
8. Click the **"Open"** button, then click **"OK"** button.
9. Choose **17" LCD** and click the **"Next"** button then click **"Next"** button.
10. Click the **"Finish"** button then the **"Close"** button.

If you can see the **"Digital Signature Not Found"** window then click the **"Yes"** button.
And click the **"Finish"** button then the **"Close"** button.

Microsoft® Windows® Millennium Operating System

1. Click **"Start"** , **"Setting"** , **"Control Panel"**.
 2. Double click **"Display"** icon.
 3. Select the **"Settings"** tab and click **"Advanced Properties"** button.
 4. Select the **"Monitor"** tab.
 5. Click the **"Change"** button in the **"Monitor Type"** area.
 6. Choose **"Specify the location of the driver"**.
 7. Choose **"Display a list of all the drivers in a specific location..."** then click **"Next"** button.
 8. Click the **"Have Disk"** button
 9. Specify A: then click **"OK"** button.
 10. Select **"Show all devices"** and choose **17" LCD** and click **"OK"**.
 11. Continue choosing **"Close"** button and **"OK"** button until you close the Display Properties dialogue box.
- (You might see some other warning screen message, then click the appropriate option for your monitor.)

Installation

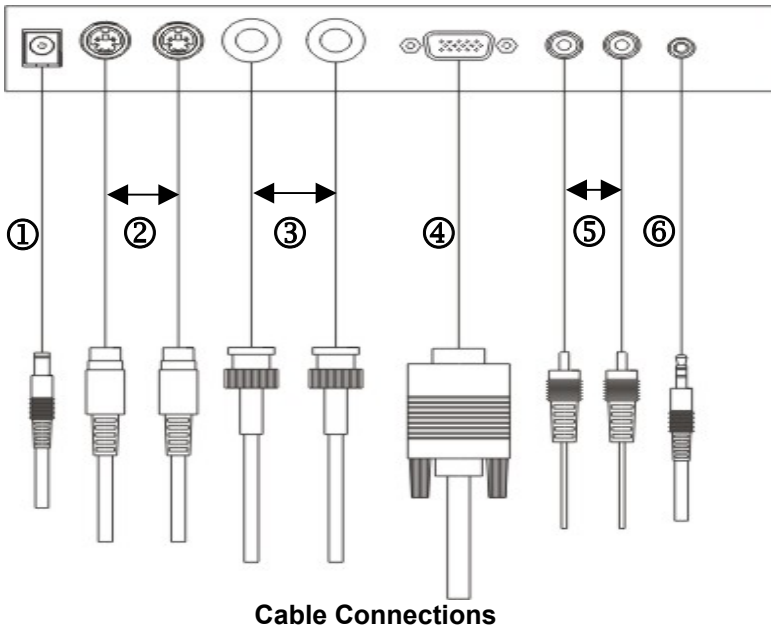
Microsoft® Windows® XP Operating System

1. Click "**Start**" —> "**Control Panel**" then click the "**Appearance and Themes**" Icon.
2. Click "**Display**" icon and choose the "**Settings**" tab then click "**Advanced...**".
3. Click the "**Properties**" button on the "**Monitor**" tab and select "**Driver**" tab.
4. Click "**Update Driver...**" and select "**Install from a list or..**" then click "**Next**" button.
5. Select "**Don't search, I will...**" then click "**Next**" and then click "**Have disk**".
6. Click the "**Browse**" button then choose A: and choose **17" LCD** and click the "**Next**" button.
7. If you can see following "**Message**" window.
This monitor driver is not certified MS logo, and this installation don't damage your system.
Then, click the "**Continue Anyway**" button followed by the "**OK**" button.
8. Click the "**Close**" button then click "**OK**" button until the installation is complete.
9. Monitor driver installation is complete.

Microsoft® Windows® NT Operating System

1. Click **Start, Settings, Control Panel**, and then double-click **Display** icon.
2. In Display Registration Information window, click Settings Tab and then click **All Display Modes**.
3. Select a mode that you wish to use (Resolution, Number of colors and Vertical frequency) and then click **OK**.
4. Click **Apply** button if you see the screen working normally after clicking Test. If the screen is not normal, change to a different mode (lower mode of resolution, colors or frequency).
Note: If there is no Mode at **All Display Modes**, select the level of resolution and vertical frequency by referring to the Preset Display Modes in the user guide.

Connections



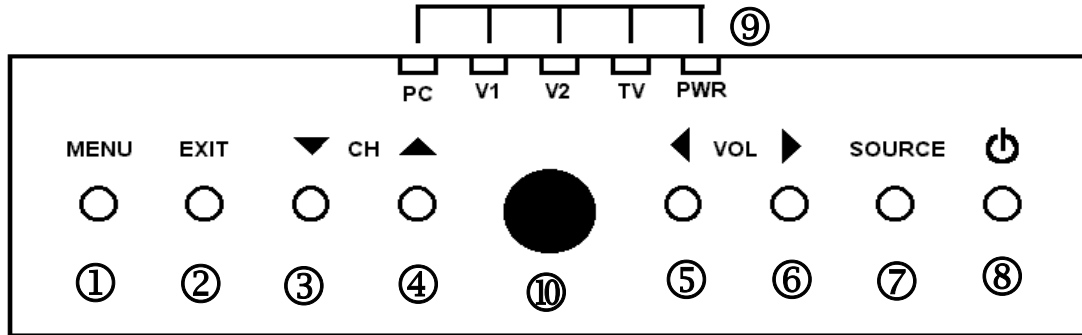
1. Connecting computer

- A. Connect the power cord to the DC Adaptor and connect the adaptor jack to the DC 12V power connector (-①-) on the back of the monitor.
- B. Connect the 15-pin D-SUB of the video signal cable to the PC video connector (-④-) on the back of the monitor.

2. Connecting VCR, /DVD or /Camera

- A. Connect BNC (-③-) or S-VHS (-②-) cable to the video output jacks of the VCR, /DVD or /Camera.
*Either left or right, BNC or Y/C socket, can be used for input or output.
The connectors have a auto-termination internal switches.*
- B. Connect RCA audio cables (-⑤-) to the audio output jacks of the VCR or /DVD.
- C. Headphones may be connected to the headphone output jack (-⑥-).

Operating Instructions – Controls



(Control Buttons, Video Monitor Front)

1 Menu

This button is used to display the OSD menu and select the highlighted function.

2 Exit

Exits from the OSD system and the selected function.

3 Down (▼)

Moves down the menu lists in the OSD.

4 Up (▲)

Moves up the menu lists in the OSD.

5 Left (◀)

Moves left in the OSD menu lists.

Decreases the value of the selected function or audio volume.

6 Right (▶)

Moves right in the OSD menu lists.

Increases the value of the selected function or audio volume.

7 Source

Selects video source.

8 Power

Turns the monitor on and off.

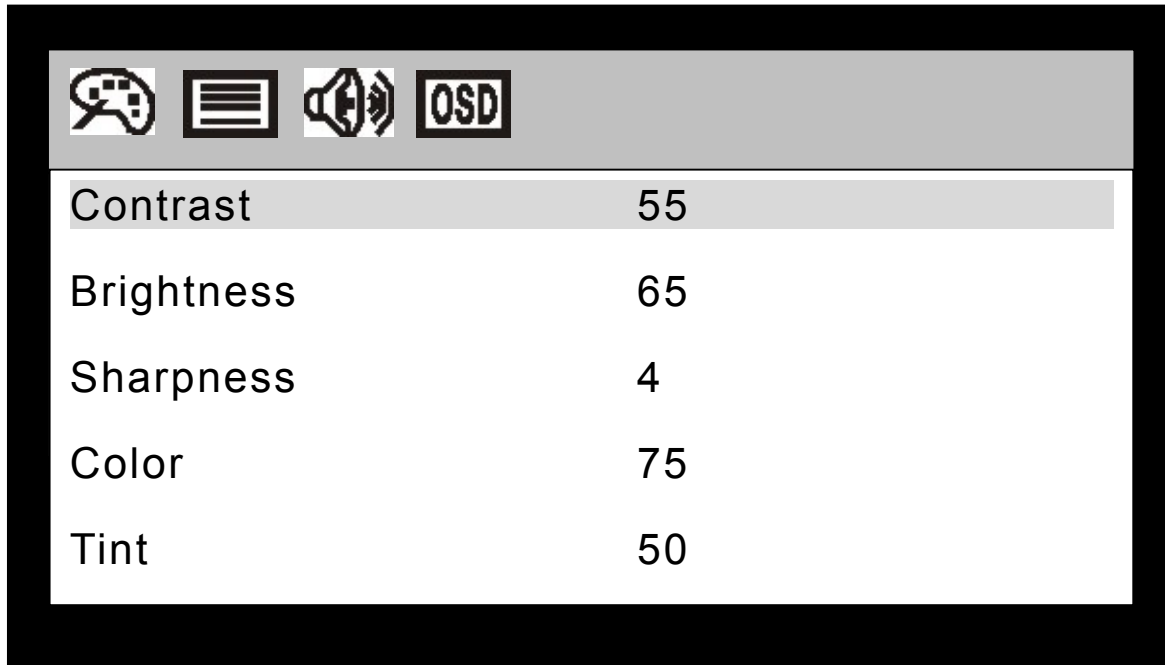
9 LEDs

Four source indicator LEDs at the top of the controls indicate current active video source.

PWR LED

- Green : Normal operation.
- Amber : Power saving mode.

User Controls - Menu Operations







Accessing the menu system

- 1 Press the **MENU** button to display the OSD menu.
- 2 Select an icon using the ◀ , ▶ buttons, and then press the **MENU** button to select a function.
- 3 Select the item that you want to adjust using the ▼ , ▲ buttons
- 4 Adjust the values of the chosen function using the ◀ , ▶ buttons.
- 5 To exit the OSD menu, press the **EXIT** button.

(This process stores the new settings that you have adjusted automatically.)





User Controls - Menu Operations

PC

Icon	Menu	Function Descriptions
	Brightness	Use to adjust the light output of the darkest areas of the picture to black
	Contrast	Use to adjust the light output of the brightest areas of the picture to white.
	Image Effect	Use to soften or sharpen the image.
	RGB Offset	Adjusts the video input range. When the bright areas of the picture is too high (low), increase (decrease) the RGB Offset value.
	Recall	Resets the monitor to the original factory settings.
	Auto	Allows the monitor to self-adjust to the incoming video signal. The values of clock, phase and position are adjusted automatically.
	Clock	Minimizes any vertical bars or stripes visible on the screen background. The horizontal screen size will also change.
	Phase	Adjusts the focus of the display. This item allows you to remove any horizontal noise and clear or sharpen the image of characters.
	H Position	Adjusts the horizontal position of the image on the monitor screen.
	V Position	Adjusts the vertical position of the image on the monitor screen.
	Volume	Controls the output of the internal speakers.
	Mute	Turns the volume of the internal speakers to zero.
	H Position	Adjusts the horizontal position of the OSD window.
	V Position	Adjusts the vertical position of the OSD window.
	Blending	Changes the opaqueness of the background of the OSD.
	Language	Selects OSD language displayed. (English, /Deutsch, /Français, /Italiano, /Español or /Polski)

User Controls - Menu Operations

V1(Video) / V2(S-Video)

Icon	Menu	Function Descriptions
	Contrast	Use to adjust the light output of the darkest areas of the picture to black
	Brightness	Use to adjust the light output of the brightest areas of the picture to white.
	Sharpness	Use to adjust the desired sharpening enhancement to the picture.
	Color	Adds coloring to the black and white picture content (of a color signal), and is usually set for pleasing facial skin tones.
	Tint (NTSC Only)	Used to adjust all the colors on the screen, but is most noticeable to the eye in reds and yellows, and is also usually set for pleasing facial skin tones.
	Motion Mode	Changes the scanning method of the LCD monitor. There are three methods which can be controlled.(Motion, /Still and /Progressive) Still and Progressive modes are both progressive scans but Progressive is better than Still for moving images and Still is better than Progressive for still images. Motion uses the interlace scan.
	Under Scan	Adjusts the image size.
	DVCO	Reduce unwanted vertical lines that flow horizontally. In some cases, vertical lines flowing to the right or left appear depending on the video source. When flowing vertical lines appear, it is convenient to reduce them by adjusting the DVCO .
	Filter	Adjusts Filter "ON" to reduce the video noise.
	AFC	AFC (auto frequency control) is used to adjust for the skew distortion of a video signal from a recorder (or other equipment). The options are NORMAL, SLOW and FAST.
	Recall	Resets the monitor to the original factory setting.
	Volume	Controls the output of the internal speakers.
	Mute	Turns the volume of the internal speakers to zero.
	H Position	Adjusts the horizontal position of the OSD window.
	V Position	Adjusts the vertical position of the OSD window.
	Blending	Changes the opaqueness of the background of the OSD.
	Language	Selects OSD language displayed. (English, /Deutsch, /Français, /Italiano, /Español and /Polski)

Troubleshooting

Screen is black and power indicator is off.

- Ensure that the power cord is firmly connected and the LCD monitor on.

“Check Signal Cable” message.

- Ensure that the signal cable is firmly connected to the PC or video sources.
- Ensure that the PC or video sources are turned on.

“Out of Range” message.

- Check the maximum resolution and the frequency of the video adaptor.
- Compare these values with the data in the input resolution in the Specifications.

The image is too light or too dark.

- Adjust the Brightness and Contrast.

Horizontal bars appear to flicker, jitter or shimmer on the image.

- Adjust the Phase function.

Vertical bars appear to flicker, jitter or shimmer on the image.

- Adjust the Clock function and then adjust the Phase function.

Image is not stable and may appear to vibrate.

- Check that the display resolution and frequency from your PC or video board is a supported mode for your monitor.

Image is not centered on the screen.

- Adjust the horizontal and vertical position.

No sound.

- Ensure that the audio cables are firmly connected to both the audio-in ports on your monitor.
- Check the volume level.

Picture is light or the tint is bad.

- Check color adjustment.

Specifications

Items		Model	HTM170B25S	
LCD	LCD Panel	17.0 inches TFT LCD Panel		
	Active display area (Diagonal)	17.0 inches		
	Pixel format	1280 (H) x 1024 (V) , RGB vertical stripe		
	Pixel pitch	0.264mm x 0.264mm		
	Color depths	8 Bit / 16.2 M Colors		
	Contrast ratio	250 : 1 (Typical)		
	Brightness	250 cd/m ² (Typical)		
	Viewing angles (L/R/U/D)	75° / 75° / 65° / 60° (Typical)		
	Light source / Lifetime	4CCFL / 40,000 Hrs (Minimum)		
	Response time	25 ms		
Video	Video Mode	NTSC/PAL		
	Scanning method	Digital progressive scan (Still/Progressive mode)		
	Video input signals	Composite	1.0Vp-p / 75Ω	
		S-video	0.7Vp-p(Luminance) , 0.3Vp-p (Chrominance) / 75Ω	
	Video connector	Composite	BNC x 2	
		S-video	4 Pin Mini-DIN x 2	
	Termination	75 Ω, Auto termination		
	Audio connector	RCA x 2 (Stereo) , Headphone jack x 1		
Audio output	2.5W x 2			
Resolution (Composite & Y/C)	More than 500 TV Lines			
PC	Input signal	Analog RGB (0.714 Vp-p,75 Ω) , H & V Sync (TTL)		
	Input connector	15-pin, D-sub		
	Input resolution	VGA 640 x 480 / 60 ~ 75Hz SVGA 800 x 600 / 56 ~ 75Hz XGA 1024 x 768 / 60 ~ 75Hz SXGA 1280 x1024 / 60Hz		
	Plug & Play	DDC 2B		
User controls	Brightness, Contrast, Tint, Color, Sharpness, etc			
OSD Languages	English, / French, / German, / Italian, / Spanish, and / Polish			
Power requirement	12VDC ±5%			
Power consumption	≤ 50 Watts (Normal Operation) , ≤ 2 Watts (Power Saving Mode)			
DC power connector	Barrel, 5.5/2.5mm (+ Center)			
AC power connector	IEC-320 Male, 100 - 240VAC			
Dimensions (W x H x D)	418 x 426 x 196 mm (Monitor body) 418 x 481.5 x 74.5 mm (When folded) 522 x 566 x 131 mm (Packaging)			
Weight	7.55 kg (Monitor Body) 9.9 kg (With packaging)			

Specifications

Operating temperature	0° to +40 °C (32° to 104°F)
Storage temperature	0° to +50 °C (32° to 122°F)
Case color	Silver & Dark Gray
Case material	Plastic
Accessories	DC Adaptor, VGA cable, Video & Audio cable, Diskette, Power Cord, Manual

Design and specifications are subject to change without notice.