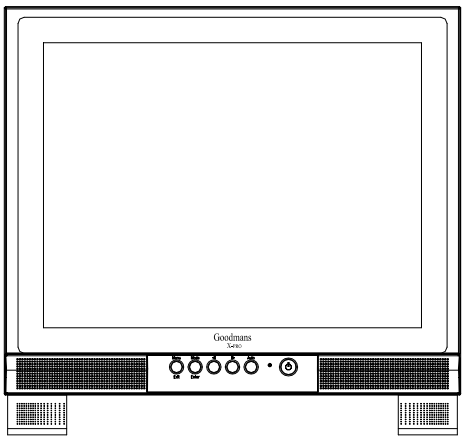
Goodmans
X-PRO

GLCD15M2/GLCD17M

15” / 17” MONITOR



INSTRUCTION MANUAL

Contents

Introduction

This latest LCD monitor has a 15-inch/17-inch active matrix TFT (thin film transistor) liquid crystal display module. It can be used with set top boxes. DVD players, VCR's and also windows based PC's.

Features

Important features include:

- Automatic configuration to the PC video settings with maximum XGA (15" 1024*768) / SXGA (17" 1280*1024) resolution.
- Five control buttons plus OSD (on-screen display) for monitor settings adjustment and configuration with ease and instant feedback.
- Supports analogue video input for direct and immediate replacement of CRT displays.
- Supports composite video input for TV signal.
- Built-in speakers.
- Anti-glare coating on the panel to reduce the reflection of ambient light.
- Flicker-free performance across all recommended video modes.
- Support for high refresh rates up to 75 Hz for PC use.
- VESA DDC2B Plug-and-Display compliant.
- Power-saving feature that is compatible with Microsoft® Windows.
- Compliance with Swedish MPR II guidelines for reduced electromagnetic emissions.

For Safe use of this product

For safe use and the protection of the monitor, please follow these precautions:

Warning

To completely disconnect power from the display, you must remove the power cord from the wall outlet and then remove the power cable from the display.

- Use only the factory-supplied power adaptor shipped with the monitor.
- To prevent electrical shock, do not disassemble the display. The cover should be removed only by qualified service personnel.
- Do not cover the air vents.
- To avoid the risk of damage to the display and electrical shock, do not expose the display to rain or moisture.

If any of the following conditions occur, unplug the display and contact qualified service personnel:

- The power cord or plug is frayed or damaged.
- Liquid has been spilled into the display.
- The display has been exposed to rain or water.
- The display does not operate correctly when the operating instructions are followed.
- The display has been dropped or the cabinet has been damaged.

Installation

Please follow the instructions in this chapter to install the LCD Monitor.

Note: ***Before connecting the display, first read through the instructions in this chapter and the safety precautions on the previous page.***

Unpacking the Display

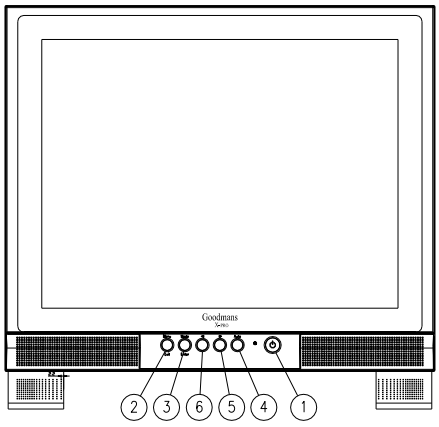
When unpacking the display, make sure that the following items are present:

- The LCD monitor
- AC power adapter with attached DC power cable.
- Power cord with 3 pin mains plug
- Scart video signal cable

Note: ***Place the display on a flat, sturdy surface. Choose an area free from excessive heat, moisture, and sunlight.***

Locations and Functions of Controls

There are five control buttons and one power button on the front panel of the display, as well as an LED indicator for power status indication.



① **Power button**
② **Menu/Exit button**
③ **Mode/Enter button**
④ **Auto button**
⑤ **Right navigation button**
⑥ **Left navigation button**

The power button is located on the lower right of the panel.
The functions of the five control buttons, which are located on the front panel of the display, are described as below:

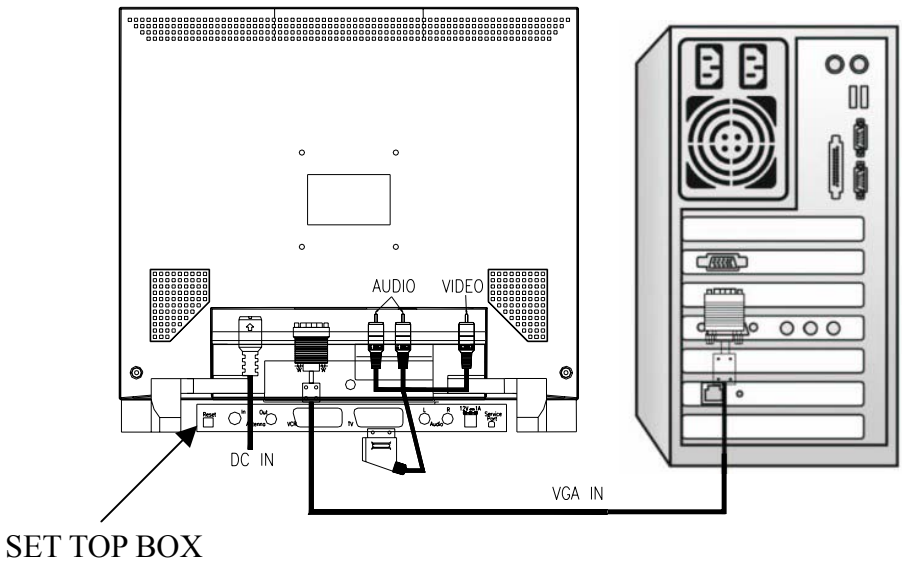
Button	Function Description
Menu/Exit	(1) PC or PC+AV: Launches the OSD menu. (2) OSD exit. (3) Volume display cancel
Mode/Enter	(1) Scrolls the OSD menu. (2) Selects an option (3) mode change (PC mode, AV mode, S-video mode)
Auto	Automatically adjusts the clock, phase, H-position and V-position values to the most optimal setting. Use full screen when enabling this function.
Right (▶)	(1) Item selection move upward or user-adjustable value increasing. (In OSD menu) (2) Adjusts the volume up. (Direct-key function)
Left (◀)	(1) Item selection move downward, user-adjustable value decreasing (in OSD menu) (2) Adjusts the volume down. (Direct-key function)

Making the Connections

Before connecting any cables, make sure that the device being connected and the display are turned off.

To connect the power and video signal cables:

1. Locate the AC power adapter with attached DC power cable.
2. Connect the power cable to the DC input socket on the rear of the display ("DC IN" as shown below).
3. Plug the three-pin power cord into a power outlet, and plug the other end into the socket on the AC power adapter.



When using with a PC:

4. Plug the analogue video signal cable into the Analogue Video Input port on the back of the display ("VGA IN" as shown above).
5. Connect the other end of the video cable into the computer's video port.
   (Please check the computer's documentation if you're not sure where the port is located.)

Note: ***For best display performance, it is strongly recommended that Auto Setup be used to automatically configure the display's settings (only for Analogue input).***

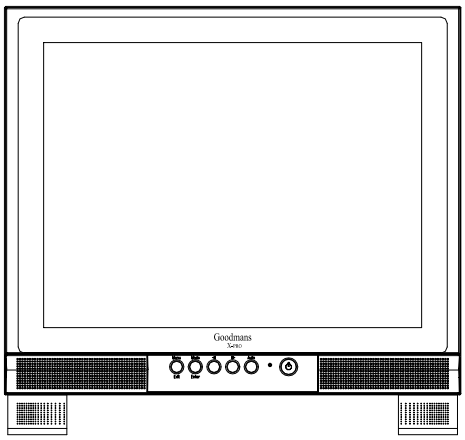
Connecting a set top box / DVD players:

6. Locate the scart to composite video/audio cable.
7. Insert the scart plug into the scart socket of the set top box / DVD player.
8. Connect the RCA plug (Yellow) to the composite video in socket on the rear of the panel.
9. Connect the RCA plugs (Red, White) for the audio to the sockets on the rear of the panel.

Using The Display

Turning the Display On and Off

Use the power button located at the lower right side of the front panel to turn the display on and off. When the display is on, the LED near the Power button is illuminated. The indicator will illuminate green when the display is active and amber when the display is in reduced power mode. (PC only)



Warning

To completely disconnect power from the display, you must remove the power cord from the wall outlet and then remove the power cable from the display.

Note: For PC use only.

If the PC supplies power saving signals to the display, the display's power management features reduce power consumption to low levels when the PC goes into its power-saving mode. See " Minimizing Power Consumption " on page 9 for more information.

If the PC doesn't use industry standard power-save signaling techniques, power consumption can be reduced by turning off the display when not in use.

Note: ***Because of the technology used in LCD panels, screen savers will not prolong the life of the display. So if the display will not be used for an extended period, ensure it is switched off.***

Setting the Video Mode (PC only)

Since the inherent format of this display is 1024 pixels by 768 lines for 15” monitor and 1280 pixels by 1024 lines for 17” monitor, the display will perform best when a PC is set to a screen resolution of 1024 x 768 for 15” monitor and 1280 x 1024 for 17” monitor. If using a lower resolution (such as 640 x 480), the image is expanded to fill the screen.

The display supports many common video modes, as shown in “ Video Modes “ on page 21 Check the documentation supplied with the PC and video adapter card to find out which modes they support.

To check the video mode of the PC, please check the Windows’ settings feature.

Setting the Refresh Rate (PC only)

The image *refresh rate* is the number of times per second that the image is refreshed; it is also known as the *vertical frequency*.

On standard CRT displays, the highest possible refresh rate supported by your PC at the current screen resolution should be used. This is necessary to avoid screen flickering and to minimize eyestrain. However, with an LCD Monitor, flicker is not an issue. It is flicker-free at all supported refresh rates.

The table in “ Video Mode “ on page 21 shows the image refresh rates supported by the display at different screen resolution. Although this LCD monitor supports up to 75 Hz for analogue video input, we recommend that is used at 75 **Hz** refresh rate for best performance.

To set the refresh rate with standard Windows installation, follow the steps mentioned in the Windows’ or graphic card’s user’s manual.

Minimizing Power Consumption (PC only)

Many PCs support industry standard power-save signaling techniques. Power management features reduce the display’s power consumption after a period of keyboard inactivity.

When the display is in a power-saving mode, the screen is blank and the power indicator is amber. Pressing a key on the keyboard or moving the mouse restores the image in several seconds. Consult the PC documentation for information about setting the power-saving modes.

The display accepts the signals for the three standard power-saving modes—Standby, Suspend, and Sleep. For any of these conditions, the display will go into Sleep mode.

Caring for and Cleaning the Display

To maximize screen life and prevent damage to the LCD panel, we recommend to:

- Use the display power management system (if available on the PC).
- If a power management system is not used, turn off the display when it won't be used for an extended period.
- Don't press, rub, or poke the display with fingers or other objects.
- Handle the display with care.

The LCD module is a high-quality optical device that requires special care when cleaning.

Warning

Don't use liquid, aerosol, or abrasive cleaning solutions to clean the screen.

To clean the screen:

1. Turn off and unplug the display.
2. Gently dust the screen with a dry, soft, line-free cloth.

Note: ***If the screen is still dirty, a dampened cloth with several drops of distilled water can be used. Make sure the LCD panel is completely dry before turning back on.***

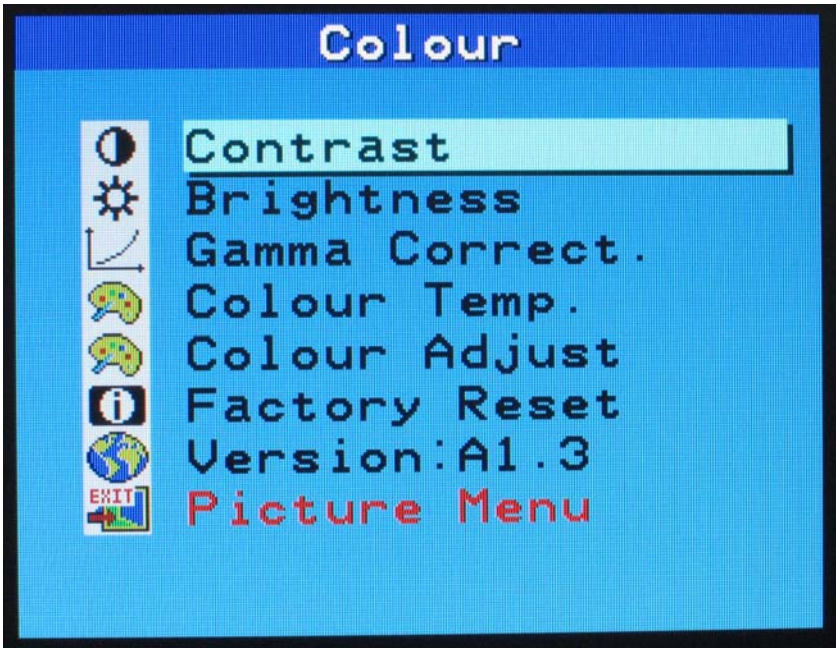
Adjusting The Display

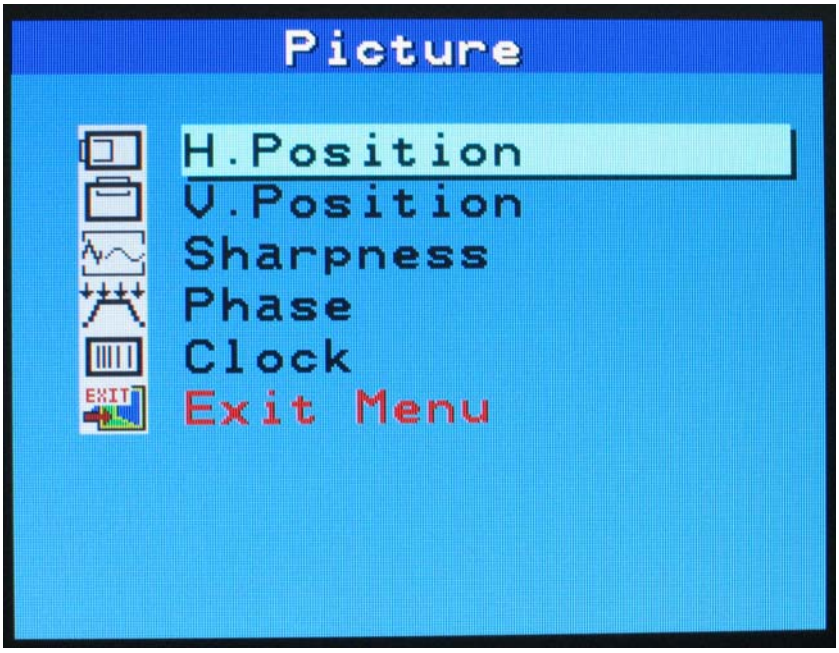
Functions of Control Buttons

See “ Locations and Functions of Controls “ on page 5.

Displaying the OSD “Main Menu” (Only for PC mode)

To display the OSD “ Main Menu “, press the Menu/Exit button.





The following table briefly describes each of the items on the OSD " Main Menu ".
(Colour Menu, Picture Menu)

Colour Menu:

Item	Description
Contrast	Adjust the level of difference between light and dark areas of the image.
Brightness	Controls the brightness of the display.
Gamma Correct	Select 0 ~ 3 to meet the correct Gamma on different LCD panel
Colour Temp.	Select the Colour Temp. between Soft, Natural or Rich. Rich is the default setting.
Colour Adjust	Adjust the colour item between Red, Green or Blue, the default setting of R, G, B is 50.
Factory Reset	Select this option resets all adjusted values back to their default positions as set at the time of first manufacture.
Picture Menu	Press Mode/Enter button into Picture Menu.

Picture Menu:

Item	Description
H . Position	Shift the image on the screen horizontally
V . Position	Shift the image on the screen vertically.
Sharpness	Select –2 ~ +2 to get the picture of the best sharpness
Phase	To adjust the phase value of the image.
Clock	To adjust the clock value of the image.
Exit Menu	Press Mode/Enter button exit OSD Menu

Selecting Items in the OSD Menu

To select items in the OSD " **Main Menu** ", use the Mode/Enter button on the front panel of the display.

To select items in the OSD submenus, use three (Mode/Enter,▶,◀) control buttons. To select a specific submenu, use Mode/Enter button to locate the required option. Then choose or adjust any item in the selected submenu by using "**Right**" or "**Left**" buttons.

Making Adjustments Via the OSD Menu

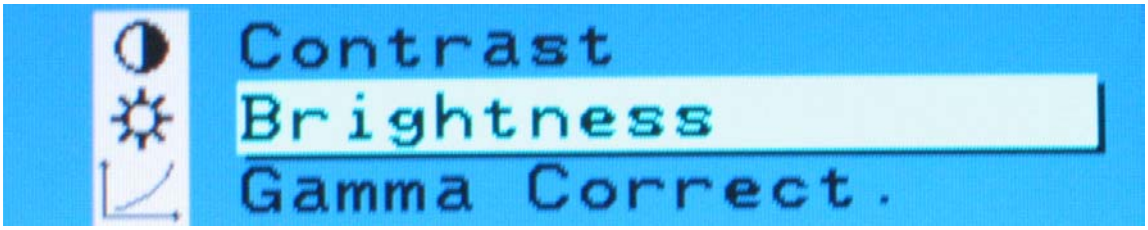
Enter Colour Menu:

Adjusting Contrast

- Press the Menu/Exit button to show the OSD Colour menu.
- The contrast icon will be highlighted (White)
- Press the Mode/Enter button to select this option
- Using the **Left** and **Right** control buttons increase or decrease the Contrast level as required between the limits of " 0 " and " 100 ".
- Press the Mode/Enter button to return to the previous option.

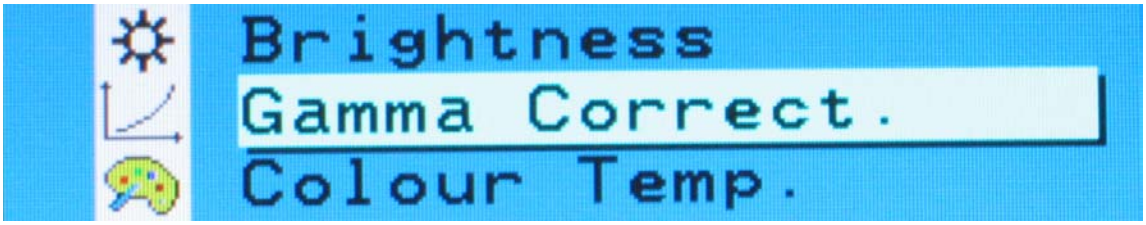
Adjusting Brightness

- Press the Menu/Exit button to show the OSD Colour menu.
- The Contrast icon will be highlighted (white).
- Press the Right control button, the brightness icon will now change to white to indicate it is the active function.
- Press the Mode/Enter button to locate this option.
- Use the **Left** and **Right** control buttons increase or decrease the brightness level as required between the limits of " 0 " and " 100 ".
- Press the Mode/Enter button again back to the previous option.



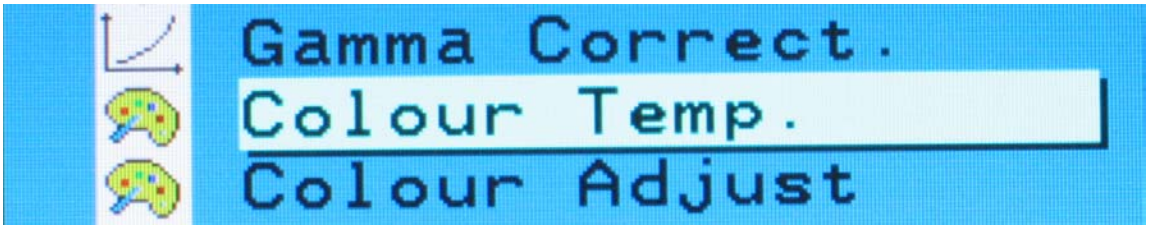
Adjusting Gamma Correct

- Press the Menu/Exit button to show the OSD Colour menu.
- The Contrast icon will be highlighted (white).
- Press the Right control button, until the Gamma Correct icon changes to white to indicate it is the active function.
- Press the Mode/Enter button to select this option.
- Use the **Left** and **Right** control buttons to select 0 ~ 3 to adjust the Gamma correction.
- Press the Mode/Enter button again to return to the previous option.



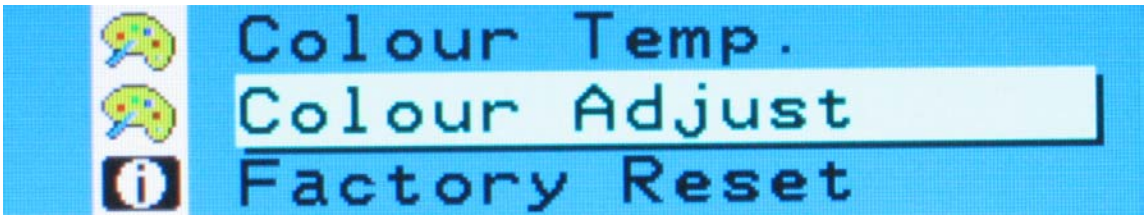
Adjusting Colour Temp.

- Press the Menu/Exit button to show the OSD Colour menu.
- The Contrast icon will be highlighted (white).
- Press the Right control button, until the Colour Temp. icon changes to white to indicate it is the active function.
- Press the Mode/Enter button to select this option.
- Use the **Left** and **Right** control buttons to select the Colour Temp of either Soft, Natural or Rich.
- Press the Mode/Enter button again to return to the previous option.



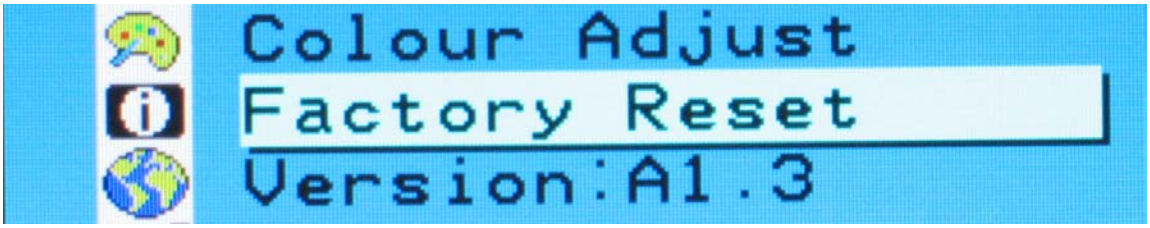
Colour Adjustment

- Press the Menu/Exit button to show the OSD Colour menu.
- The Contrast icon will be highlighted (white).
- Press the Right control button, until the Colour Adjust icon changes to white to indicate it is the active function.
- Press the Mode/Enter button to select this option.
- Use the **Left** and **Right** control buttons to adjust the Red, Green, Blue level then press Mode/Enter button again.
- Press the Mode/Enter button to return to the previous option.



Factory Reset Setting

- Press the Menu/Exit button to show the OSD Colour menu.
- The Contrast icon will be highlighted (white).
- Press the Right control button, until the Factory Reset icon changes to white to indicate it is the active function.
- Press the Mode/Enter button, this option resets all adjusted values back to their default settings at the time of first manufacture.



Enter Picture Menu:

- In Colour Menu, use the Right control button to highlight " Picture Menu".
- Press the Mode/Enter button to show the Picture Menu.

- The H. Position icon will be highlighted (white).
- Use the **Left** and **Right** control buttons select the required feature from the menu.
- To adjust the image position, In H. Position mode the Left button shifts the image left and the Right button shifts the image right; In V. Position mode the Left button shifts the image down and the Right button shifts the image up.
- For Phase and Clock options use the Left and Right control buttons to adjust the Phase and Clock values, before this is attempted it is strongly recommended that Auto mode is used.
- To Exit Menu press Mode/Enter button again.

Monitor connected to a Set top box, DVD player or VCR

With the monitor connected to a set top box, DVD player or VCR ONLY, adjustments can be made via the set up menu as below.

- Press Mode / Enter button to select AV or S-Video mode.
- To display the “Set up Menu”, press the Menu/Exit button.

Displaying the OSD “Set up Menu“ (For AV mode, S-Video mode)

The following table briefly describes each of the items in the OSD “ Set up Menu “

Item	Description
Contrast	Adjust the level of difference between light and dark areas of the picture.
Brightness	Controls the brightness of the picture.
Colour Temp	Select the Colour Temp between Soft, Natural or Rich. Rich is the default setting.
Colour	Adjust the colour saturation of the picture.
Sharpness	Select –2 ~ +2 to get the picture of the best sharpness.
Factory Rest	Select this option resets all adjusted values back to their default positions as set at the time of manufacture.
Press Menu to Exit	Press Menu/Exit button or Mode/Enter button exit OSD Menu.

Selecting Items in the OSD " Set up Menu "

To select items in the " Set up Menu ", use the Mode/Enter button on the front panel of the monitor.
To select items in the submenus, use three (Mode/Enter,▶,◀) control buttons.
To select a specific submenu, use the Mode/Enter button to locate the required option. Then choose or adjust any item in the selected submenu by using " Right " or " Left " buttons.

Making Adjustments Via the OSD Menu

To use the three (Mode/Enter,▶,◀) control buttons, the method is the same as the PC mode Menu.
Please note: only one set up menu page is available in AV S-video modes.

Direct-key Function Access using the Left or Right Buttons

Adjust the volume up or down using the ▶ or ◀ buttons , default setting is 90.

Troubleshooting

This chapter contains information about how to troubleshoot problems. If you have tried all of the items listed below, please contact a qualified service personnel.

A. My display doesn't work, even though the computer appears to work.
   1. Make sure the power cable is securely plugged into the display.
   2. Make sure the display is turned on.
   3. Try turning the display off and then turning it on again.
   4. Make sure the display's power cord is plugged into a power outlet and into the AC power adapter. Check to see whether the outlet works by plugging another device (such as a lamp) into the outlet. (If the LED on the front of the display is illuminated, it is getting power. Try the Next item in the list.)
   5. Check the cable connection between the display and the computer. The cable connectors must be pushed in all the way.

B. The message " No Sync " appears on my display.
   This message appears when there is no video signal from the computer with cable already connected.
   1. Make sure that the computer's power is turned on.
   2. Make sure that your graphic card has its output already.

C. The message " Signal out of Range " appears on my display.
   This message appears when the input signal is beyond the display's capability.
   Set your PC to a supported video mode, preferably 1024 x 768 at 75Hz. See "Setting the Video Mode" on page 21

D. The image is very unstable.
   1. Set your PC to a supported video mode, preferably 1024 x 768 at 60 Hz. See " Setting the Video Mode " on page 9
   2. Restore the original factory settings by choosing **Factory Reset** in the OSD "Colour" submenu.

   Note: ***Even if your PC's setting is out of the range of video modes that are supported by your LCD monitor, it may still be displayed with reduced quality. This provides you with an opportunity to change your PC's setting to a more suitable one.***

Technical Information

This chapter contains technical information about the LCD Monitor.

Display Information

	GLCD15M2	GLCD17M
LCD Module	15-in (38.0 cm), active matrix TFT, anti-glare coating, 0.297 mm pixel pitch	17-in (43 cm), active matrix TFT, anti-glare coating, 0.264 mm pixel pitch
Display Size	304.1 mm x 228.1mm	337.9 mm x 270.3 mm
Viewing Angle Left/Right Up/Down	+60° ~ -60° +40° ~ -60°	+70° ~ -70° +60° ~ -60°
Luminance	250 cd/m^2 (Typical)	
Contrast Ratio	400:1 (Typical)	450:1 (Typical)
Display Colors	16.2 Million	
Power Input	90 ~ 264 V_{AC} Full Range, 50/60 Hz, < 1.2A @ 110V; < 0.6A @ 230V	
Maximum power Consumption	28W (2CCFL) 38W (4CCFL)	40W
Signal Input Video Signal Sync signals	Analog: RGB positive 0.7 Vpp, 75Ω Separate, TTL Level. Video: NTSC/PAL Composite	
Line (horizontal) frequency	Analog: 31.5 kHz ~ 60 kHz Video: 15.625 kHz/16.734 kHz	Analog: 31.5 kHz ~ 80 kHz Video: 15.625 kHz/16.734 kHz
Raster (vertical) frequency	Analog: 56 Hz ~ 75 Hz Video: 50 Hz/60 Hz	
Pixel dot clock	79 MHz (maximum)	135 MHz (maximum)
Recommended mode	1024 x 768 @ 75 Hz	1280 x 1024 @ 75 Hz
Dimensions (W x H x D)	370mm x 345mm x 125mm	405mm x 418mm x 175mm
Net weight **Grass weight**	3KG 4.5KG	4.9KG 6.8KG
Operating Conditions Temperature, Humidity, Altitude	5° ~ 40°C at altitude 0 ~ 2000m: 5° ~ 30°C at altitude 2000 ~ 3000m, 20% ~ 85% RH, non-condensing, 3000m Max.	
Storage Conditions Temperature, Humidity, Altitude	-20° ~ 60°C, 10% ~ 90% RH, 10000m Max	

Video Modes

Your LCD monitor supports the following industry-standard combinations of screen resolution and refresh rates. Other combinations are possible, but may require adjustments to the image.
For optimum performance, set your PC to a screen resolution of 1024 x 768 at a 75Hz refresh rate for 15” monitor and 1280 x 1024 at a 75Hz for 17” monitor.

Analog:

Supported Resolution (Dots x lines)		Vertical Frequency (Refresh Rate)
VGA	640 x 350	70 Hz
	640 x 480	60 Hz
	640 x 480	72 Hz
	640 x 480	75 Hz
SVGA	800 x 600	56 Hz
	800 x 600	60 Hz
	800 x 600	72 Hz
	800 x 600	75 Hz
XGA	1024 x 768	60 Hz
	1024 x 768	70 Hz
	1024 x 768	75 Hz
SXGA	1280 x 1024	60 Hz
	1280 x 1024	75 Hz
US TEXT	720 x 400	70 Hz
Power MAC	832 x 624	75 Hz
	640 x 480	67 Hz

Video:

Supported Resolution (Lines x horizontal frequency)		Vertical Frequency (Refresh Rate)
NTSC M	525 x 15.734 kHz	60 Hz
PAL B/G/H/I/D/K	628 x 15.625 kHz	50 Hz

Note: ***The display is capable of going beyond these recommended modes.***

Unknown Video Modes

Like all other monitors, this LCD monitor is designed to work with standard video modes. However, not all video/graphic cards use only standard display modes.

This LCD monitor uses state-of-the-art technology, which is designed to synchronize to any display mode. We recommend choosing one of the supported modes listed above. If you choose an unknown mode, you will need to manually adjust the clock, phase, and image position.

If you must use an unknown mode, you can run Auto Setup at first. If Auto Setup doesn't provide adequate image adjustment, then you must manually adjust the clock, phase, horizontal position, and vertical position.