15.0″ TFT COLOR LCD MONITOR

User's Guide

Contents

How to get the most enjoyment with monitor

This is a 15.1″color LCD monitor to display signals from PC or Video equipment.

This manual has been prepared to assist you in becoming familiar with your new display monitor.

▶ Features

- 15.0″ viewable XGA (1024×768) resolution LCD module
- 16M Color Display
- Brightness(200cd/㎡)
- Viewing angle (U/D : 90°, R/L : 120°) ·
- DPMS(Display Power Management Signaling)
- OSD(On screen Display) controls, Multi Language OSD Menu
- Implement the DDC 1/2B features.
  DDC 1/2B uses a formerly signal pins in the 15-pin VGA connector.
  The system will perform "Plug&Play" feature if both monitor and host systems support DDC 1/2B protocol.

Note

If your monitor has poor display quality, please check your computer system to includes a DDC compatible video card.

▶ General Safety precautions

This Monitor has been engineered and manufactured to assure your safety, and you can prevent your safety from serious electrical shock and other hazards by keeping in the following attentions.

1 Do not place heavy, wet or magnetic on the monitor or the power cord. Never cover the ventilation openings with any material and never touch them with metallic of inflammable materials.

2 Avoid operating the monitor in the place extremely heated, humid or affected by dust.
Temperature : 0~40℃ ·
Humidity : 30~80RH

3 Be sure to turn the monitor off before plugging the power cord into the socket of power source.
Make sure that the power cord and the other cords are securely and right connected.

4 Overloaded AC outlets and extension cords are dangerous. So are frayed power cords and broken plugs. They may result in a shock or fire hazard. Call your servicetechnician for replacement.

5 Do not use the sharp tool such as pin or pencil to avoid the scratch on the LCD surface.

6 Do not use the solvent such as benzene to clean the monitor. It will damage to LCD surface.

▶ Maintenance

Do not open the monitor. There are no user serviceable components inside. There is dangerous high voltage inside, even when power is off. If the display monitor does not operate properly, remove the power cord from the wall outlet and contact your dealer. Careless use and unprofessional maintenance are able to cause serious electrical shock and other hazards.

Installation

▶ Packing List
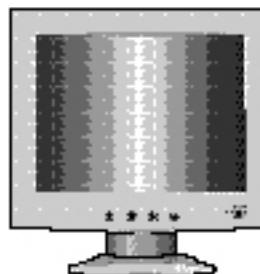
▶ LCD 15.1" MONITOR

▶ VGA CABLE   ▶ POWER CORD

▶ USERS GUIDE   ▶ AC/DC ADAPTOR

▷ *Description*

■ *Front View*

▷ *OSD KEY*

```
M
S
◁
▷
```

▷ *POWER KEY*

▷ *LED INDICATOR*

■ *Rear View*

▷ *12V DC POWER JACK*
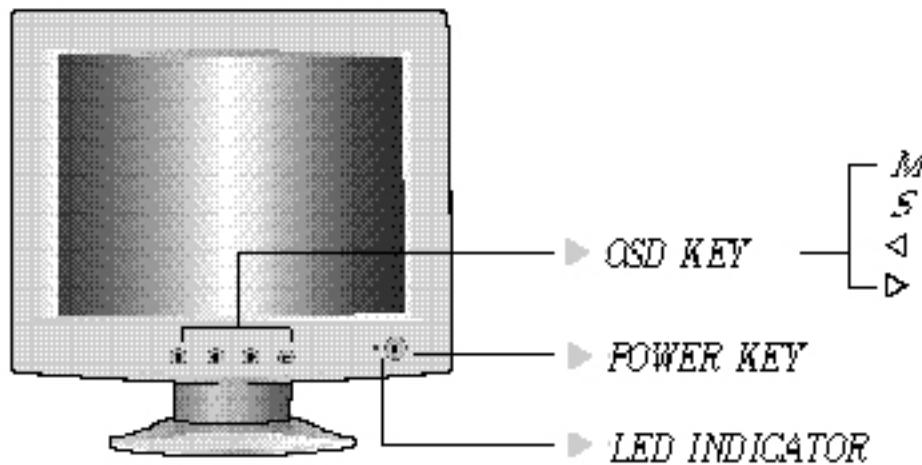
▷ *VGA (15PIN D-SUB) CONNECTOR*
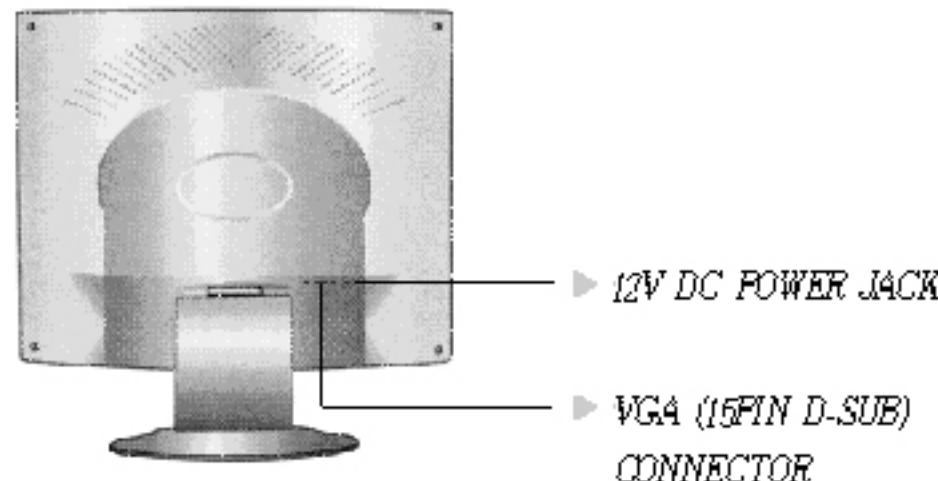
▷ *Connecting with external equipment*

■ *Cautions*

Be sure to turn off the power of your computer before connecting the monitor.
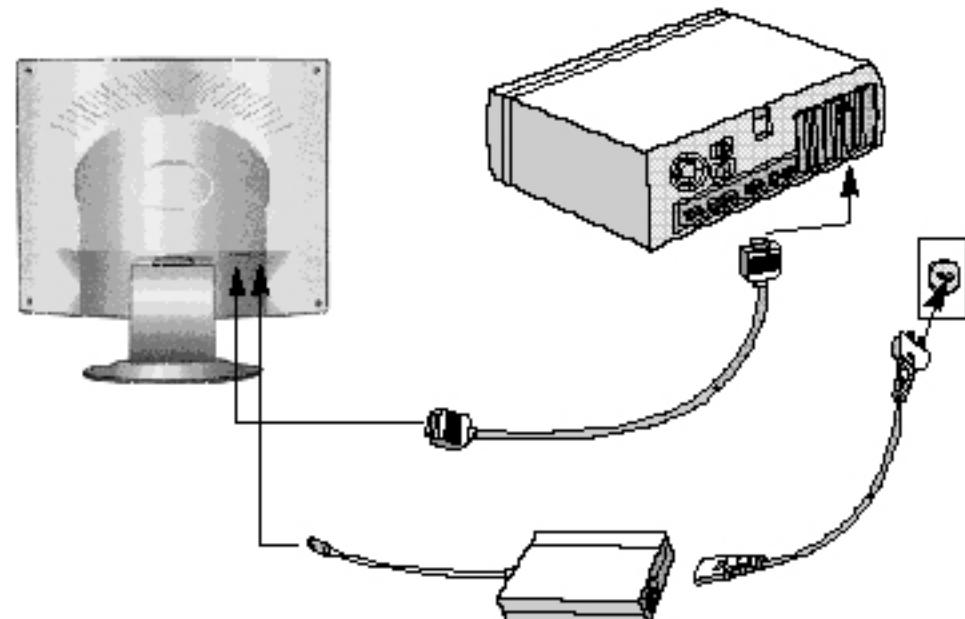
▷ *Video input terminal*

A 15 pin D-sub connector is used as the input signal connector.
Pin and input signs are shown in the table below

Pin number	Signal name	Pin number	Signal name	Pin number	Signal name
1	Red	2	Green	3	Blue
4	N.C	5	GND	6	RED-GND
7	GREEN – GND	8	BLUE – GND	9	+5V
10	Logic – GND	11	N.C	12	SDA (DDC)
13	H – sync	14	V – sync	15	SCL (DDC)

On Screen Display (OSD) Control Button
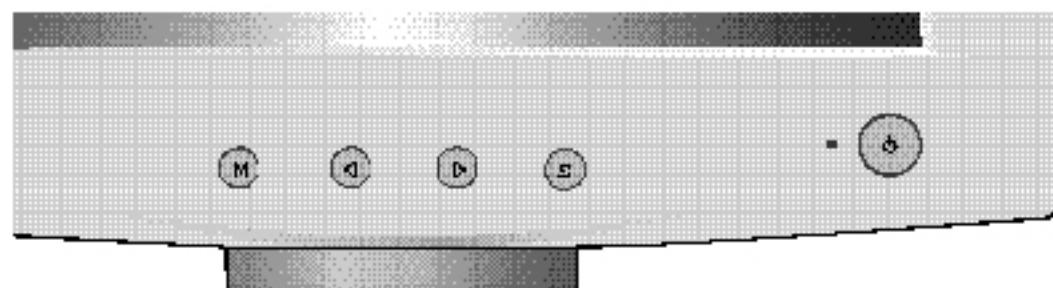
(ⓞ) POWER ON/ OFF   ▸ POWER LED INDICATOR

(ⓜ) ENABLE THE OSD MENU/EXIT   (ⓢ) SELECT

(◖◗) SELECT THE FUNCTION   ADJUST THE VALUE
(◖◗)

OSD Control Procedure

ⓜ ❶ ⟶ ◖/◗ ❷ ⟶ ⓢ ❸ ⟶ ◖/◗ ❷

Press the MENU key   Move the   Select the MENU   Move the Bar
to enable the OSD   MEMU Icon
MENU

ⓜ ❶ ⟵ ⓜ ❶ ⟵ ⓜ ❶ ⟵ ◖/◗ ❷ ⟵ ⓢ ❸

End of   Exit   End of adjust   Adjust   Select the
adjustment   the value   the value   Function
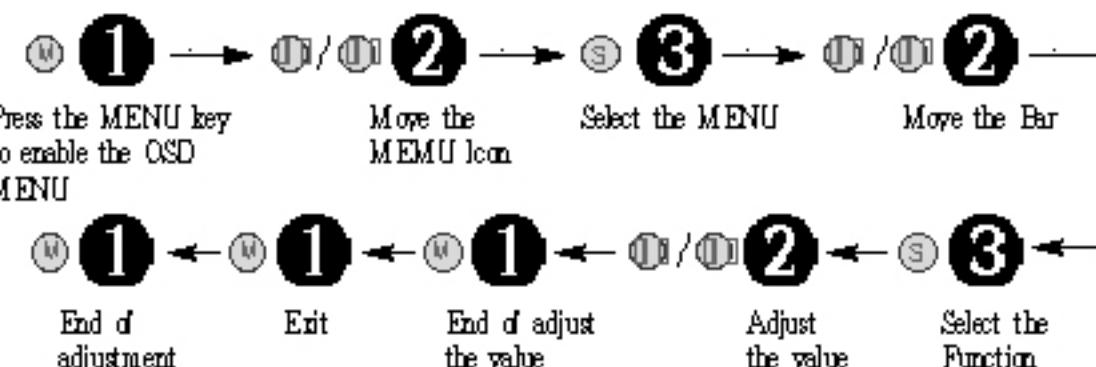
▪ Main menu & control selection

Press the MENU key to access the main menu.
The power LED is blinking.
Please the select MENU Icon to control function you wish to adjust by the
◁ or ▷ key.

▪ Exit Menu

Press the MENU key to exit. The power LED is lit green

▪ Auto exit

The OSD images are disappeared automatically after few seconds inactivity.

▪ Auto save

The monitor automatically saves the new setting while OSD is exit.

▪ Normal mode

When video signal is working with normal display condition, power LED is lit
Green.

▪ DPMS mode

The LED indicates different status when this unit operates in different power
saving modes.

▪ Not Supported Video

When unsuitable signal is detected, the OSD displays "Not Supported Video"
message.

Using Hotkey

Frequent adjustments such as AUTOMATIC ADJUSTMENT, BRIGHTNESS
and CONTRAST can be done in easy without using MENU key which display
all of the control menu.
Following table describes the allocation of the HotKey.

OSD Button	Funcation
◖◗	Automatic Adjustment
◖◗	contrast
ⓢ	Brightness

On Screen Display Setting

Menu		Description
Auto Adjustment		
	Geometry	Automatically adjust the vertical position, Horizontal position, Horizontal size and Phase
	Color Balance	Automatically adjustment the contrast of the screen
Horizontal Position		Adjust the horizontal position
Vertical Position		Adjust the vertical position
Horizontal Size		Adjust the level of the screen's image
Phase		Adjust the noise of the screen's image
Brightness		Adjust the intensity of the screen
Contrast		Adjust the contrast of the screen
Color		
	Temperature	Adjust the color temperature of the screen's image
	Red	Control the intensity of the Red colour of the screen's image
	Green	Control the intensity of the Green colour of the screen's image
	Blue	Control the intensity of the Blue colour of the screen's image
OSD	Language	Language
	English	English
	French	French
	German	German
	Itailan	Itailan
	Spanish	Spanish
Advanced		
	Factory Preset	Load the factory poeset mode
	Sharpness	Adjust the sharpness of the screen's image
	DOS/GFX	Select resolution 720×400 or 640×400 mode
	OSD H. Position	Adjust the horizontal position of the OSD
	OSD V. Position	Adjust the vertical position of the OSD
Cancel		Cancel

※ For use of Factory Preset mode, contrast needs to be re-adjusted by u:

Preset Mode chart

Spec.1 Mode	Pixel Freq MHz	Horizontal Timing				Vertical Timing			
		Sync Polar	Freq. KHz	Total Pixel	Active Pixel	Sync Polar	Freq. Hz	Total Line	Active Line
640x350 @70 Hz	25,144 VESA	P	31,430	800	640	N	70,000	449	350
720x400 @70 Hz	28,287 VESA	N	31,430	900	720	P	70,000	449	400
640x480 @60 Hz	25,175 MAC	N	31,469	800	640	N	59,940	525	480
640x480 @60 Hz	25,175 VESA	N	31,469	800	640	N	59,940	525	480
640x480 @67 Hz	30,240 MAC	N	35,000	864	640	N	66,667	525	480
640x480 @72 Hz	31,500 VESA	N	37,861	832	640	N	72,809	520	480
640x480 @75 Hz	31,500 VESA	N	37,500	840	640	N	75,000	500	480
832x624 @75 Hz	57,284 MAC	N	49,726	1152	832	N	74,551	667	624
800x600 @56 Hz	36,000 VESA	P	35,156	1024	800	P	56,250	625	600
800x600 @60 Hz	40,000 VESA	P	37,879	1056	800	P	60,317	628	600
800x600 @72 Hz	50,000 VESA	P	48,077	1040	800	P	72,188	666	600
800x600 @75 Hz	49,500 VESA	P	46,875	1056	800	P	75,000	625	600
1024x768 @60 Hz	65,000 VESA	N	48,363	1344	1024	N	60,005	806	768
1024x768 @60 Hz	64,000 MAC	N	48,780	1312	1024	N	60,001	813	768
1024x768 @70 Hz	75,000 VESA	N	45,476	1328	1024	N	70,070	806	768
1024x768 @75 Hz	80,000 VESA	N	60,241	1328	1024	N	74,927	804	768
1024x768 @75 Hz	78,750 VESA	P	60,023	1312	1024	P	75,030	800	768

Microcontroller features

The microcontroller automatically detects the video board installed in your system. When you turn on the monitor, the Micro controller first checks the display mode memory stored in the user setting area and the factory presetting area.

▶ *Display modes memory*

The microcontroller has memory capacity to store 21 differentdisplay modes including timing formats and display settings. This memory capacity is divided into two parts, one is the user setting area, the other is the factory presetting area.

▶ *User setting area*

The user can add nonstandard modes. If you adjust display image,the image is saved automatically. Then the microcontroller always detects and display thelast mode stored in the user setting area When the monitor is turned on. The user setting are maintains the last 6 display modes set by the user in its memory. When the user setting area is full (6 modes are registered), if new nonstandard timing is registered, the oldest timing settings will be deleted.

▶ *Factory presetting area*

There are 15 display modes stored in this area. These display modes are preset at the factory and include most of te display modes currently available (see Timing Chart of this manual). You can also retrieve the factory preset mode by selecting the RECALL menu

▶ *Automatic save*

The monitor automatically saves the setting value after certain times (20 sec) of adjusting OSD menu.

Power Management

This monitor equipped with DPMS(Display Power Management Signaling) Function which automatically leads the monitor to the srate of power saving that consumes just a little power less than 5Watt, when the computer is left unattended. Although the monitor can be left in power-saving mode for longer periode, we recommend the you turn it off after your daily work.

▶ *Operation*

The DPMS function requires support from the computer system of any software DPMS function applied, currently being used. If the keyboard (or mouse) is left unattended for a certain period, the program or system will set the sync signals to DPMS modes. The DPMS function has three status. The recommended signals, power consumption and recovery times are shown in the table below.

Status	Signal			Power Consumption	Recovery Time	LED Indicator
	Hsync	Vsync	Video			
On	Pulse	Pulse	Active	25Watt(Max.)		Green
Standby	No Pulse	Pulse	Blank	Less than 5Watt	Within 2sec	Alternating Green/Orange(0.5sec)
Suspend	Pulse	No Pulse	Blank			
Off	No Pulse	No Pulse	Blank			Off

Specifications

LCD	Type	TFT Color
	Size	15.0"
	Viewing Size	304.1mm X 228.1mm
	Dot Pitch	0.297 X 0.297mm
	Brightness	200cd/m²(Typ)
	Contrast	300:1
	Response Time	25ms
	Viewing Angle	U/D : 60°/60°, R/L : 45°/45°
Input	Signal	RGB Analog
	Type	15pin D-sub
Sync	H-Freq	31~60KHz
	V-Freq	50~75Hz (60Hz Optimum)
Resolution(max)		1024 X 768 @75Hz (60Hz Optimum)
User Controls & OSD Controls		Contrast, Brightness, H/V Position etc.
Plug & Play		VESA DDC1/2B
Power		DC 12V 2.5A
DPMS		VESA DPMS
Power Consumption		25Watt(Max)
Tilt	U/D	5° /30°
Temperature	Operating	0° ~ 40°C
	Storage	-10° ~ 50°C
Humidity	Operating	30% ~ 80%
	Storage	5% ~ 90%
Weight	Unit	5.5Kg
	Packed	7Kg
Carton Dimension (W X H X D)		393 X 190 X 393mm

FCC

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Caution : Any changes or modifications in construction of this device which are not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment

Note : This equipment has been tested and found to comply with the limits for a Class B 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 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/TV technician for help.