



VM-15LCD 15"
VM-17LCD 17"
VM-19LCD 19"
TFT LCD monitors

USER MANUAL



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TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK DO NOT EXPOSE THIS PRODUCT
TO RAIN OR MOISTURE.
DO NOT INSERT ANY METALLIC OBJECT THROUGH VENTILATION GRILLS.

CAUTION:



Explanation of Graphical Symbols



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

Important safeguards

Risk of electric shock – Do not open

To reduce the risk of electric shock, do not remove the back cover. There are no user-serviceable parts inside.

Removing the back cover voids the warranty.

Have your monitor repaired by qualified service personnel only.

Warnings and precautions

- Do not place your hands, face, or objects close to the ventilation openings of your monitor. The top of your monitor gets very hot from exhaust air that is released through the ventilation openings. Burns or personal injuries may occur if you are too close to the monitor. Damage may occur if you place any object near the top of your monitor.
- Disconnect all cables before moving your monitor. Moving your monitor with its cables attached may damage the cables and cause fire or electric shock danger.
- Do not expose your monitor to rain or moisture.
- Keep your monitor away from excessive dust, high temperatures, moisture, or direct sunlight.
- Use your monitor in a well-ventilated area and do not cover the ventilation openings.
- Do not modify your monitor or use an unshielded power cord or video input source cable, or you may experience excessive interference.
- Disconnect your monitor and unplug the power cord when the AV is not used for a long period of time.
- If the picture displayed is in any way abnormal, turn off your monitor, then disconnect it from the electrical outlet. Make sure that your video input source cable is connected correctly, and then reconnect your monitor to the electrical outlet.
- Disconnect your monitor from the electrical outlet before cleaning or performing maintenance. Do not use liquid or aerosol cleaners. Use only a slightly damp cloth for cleaning.
- Do not place your monitor on an unstable cart, stand, or table. Your monitor may fall, causing serious damage.

Safety Precautions

Chapter 6 Safety, Regulatory and Legal Information

US Regulatory compliance statements

Your monitor has been tested and found to comply with the limits for a Class B digital devices, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. Your monitor generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instruction, may cause harmful interference to radio communication. However, there is no guarantee that interference with not occur in a particular installation. If your monitor does cause harmful interference to radio or television reception, which can be determined by turning your monitor off and on, the user is encouraged to try to correct the interference by one or more 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/AV technician for help.

Warning: Use only shielded signal cables to connect I/O devices to your monitor. You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the monitor.

FCC STATEMENT

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

Canada Regulatory compliance statements

This LCD does not exceed the Class B limits for radio noise emissions from digital apparatus as set out in the radio interference regulations of Industry Canada.

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Components

(1) LCD Color Monitor	1
(2) Accessories	
(a) Power cord	1
(b) User Manual	1
(c) VGA Cable	1

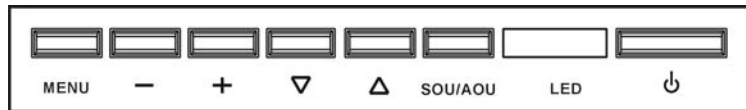
Features

- ★ Bright, flick-free image
- ★ Automatic detection and conversion of video content for correct display with minimal motion artifacts
- ★ Accurate color processing
- ★ Multi-Scan support
- ★ Built-in internal amplifier and speakers
- ★ 1280*1024 SVGA support for computer input

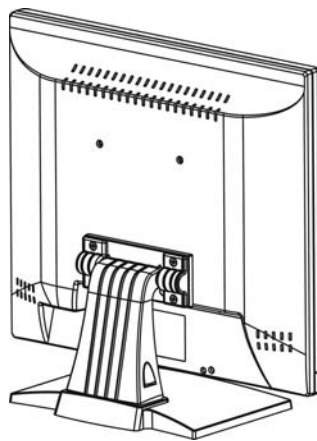
Exploring Your New Monitor

You can operate your monitor by using the buttons on the front panel.

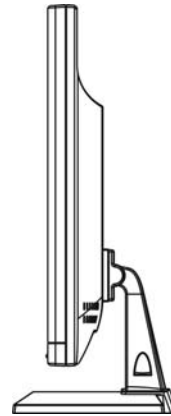
Front Panel



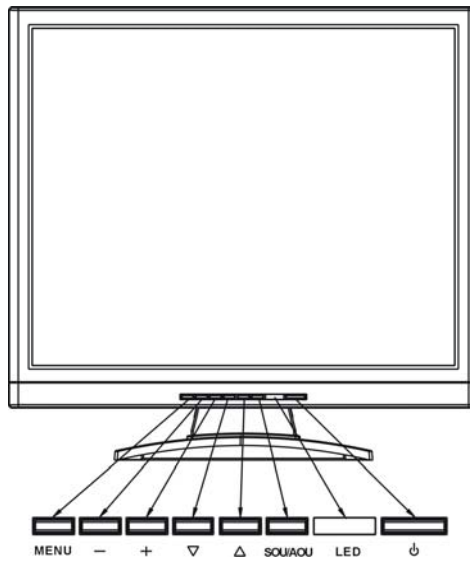
Back



Side



Function Key Instructions for AV



Up: Scroll up the menu bar

Down: Scroll down the menu bar

MENU

Menu: Activate OSD menu



Right: Increase setting the menu bar, hot key to adjust volume up



Left: Decrease setting the menu bar, hot key to adjust volume down

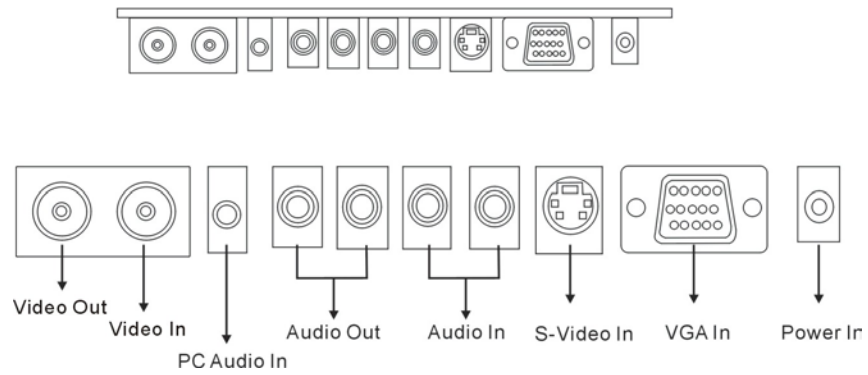
SOU/AOU

Source: Change input source



Power: Turn the main power off and on

I/O Connections:

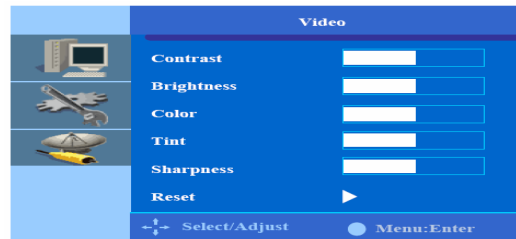


OSD (On Screen Display)

OSD (On Screen Display) menu enables user to manipulate the image and settings

OSD Menu

Video OSD Menu

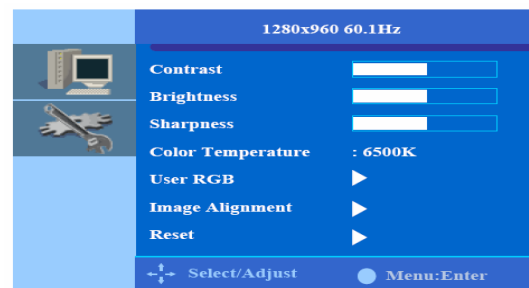


Feature Control OSD Menu



PC (VGA) OSD

Menu



Applicable Timing

VGA Timing

There are 14 timing modes that can be saved in memory by FIFO detecting architecture.

VGA Support Timing

Mode	No.	Resolution	H Freq. (kHz)	V Freq. (Hz)	Pixel clock (MHz)	15"	17"	19"
						1024*768 75Hz	1280*1024 75Hz	1280*1024 75Hz
MAC	101	832x624@74.5	49.722	74.546	57.280	-	-	-
	102	640x480@67	35.000	66.667	30.240	-	-	-
VGA	103	720x400@70	31.469	70.08	28.322	-	-	-
	104	640x480@60	31.469	59.940	25.175	-	-	-
	105	640x480@72	37.861	72.809	31.500	-	-	-
	106	640x480@75	37.500	75.000	31.500	-	-	-
SVGA	108	800x600@60	37.879	60.317	40.000	-	-	-
	109	800x600@72	48.077	72.188	50.000	-	-	-
	110	800x600@75	46.875	75.000	49.500	-	-	-
XGA	111	1024x768@60	48.363	60.004	65.000	-	-	-
	112	1024x768@70	56.576	70.069	75.000	-	-	-
	113	1024x768@75	60.023	75.029	78.750	-	-	-
SXGA	114	1280x1024@60	63.980	60.000	108.000	-	-	-
	115	1280x1024@75	79.976	75.025	135.000	-	-	-

This A/D board supports the video timing listed above.

In some cases, TFT LCD manufacturers guarantee within specific pixel frequency (dot clock) range based on the application range. As example, TFT LCD hardly displays the Image properly over 60Hz refresh rate. And also TFT LCD has the best performance at 60 Hz refresh rate. Therefore, it is highly recommended for customers to use this product at 60 Hz refresh rate.

Compatibility

There are lots of VGA cards in the market place. In general, the video signal of various VGA cards compatible with VESA recommendations, but sometimes not.

The TFT LCD controller boards are designed under the assumption that every video signal is standardized, therefore, some VGA cards has mismatch trouble.

To avoid this compatibility issue, our products are tested with popular VGA Cards.

PC RGB Input

Input Signal	Analog RGB 0.7Vp-p
Input Impedance	75 Ohm $\pm$ 2%
Polarity	Positive, Negative
Amplitude	0 ~0.7 $\pm$ 0.05Vp
Multi-mode Supported	Horizontal Frequency: 30~80KHz Vertical Frequency: 50~75Hz

Power Supply

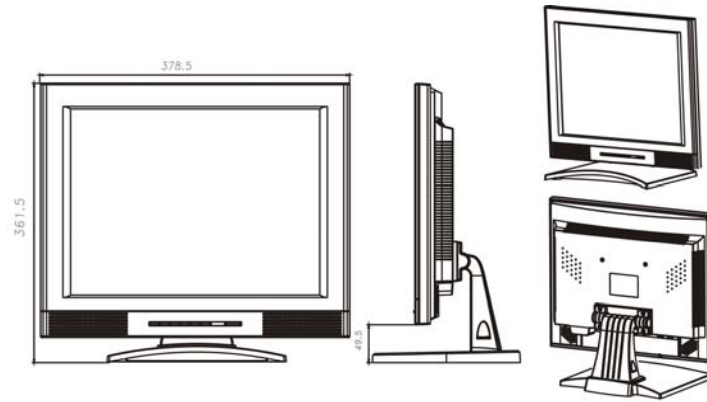
Input Voltage	100~240VAC, 50/60Hz
Output Voltage	+12V DC, 3.33A (40W) / 4.16A (50W)
Power Management	On: 50W max. (Green LED) Off: 1W max. (Red LED)

Environment

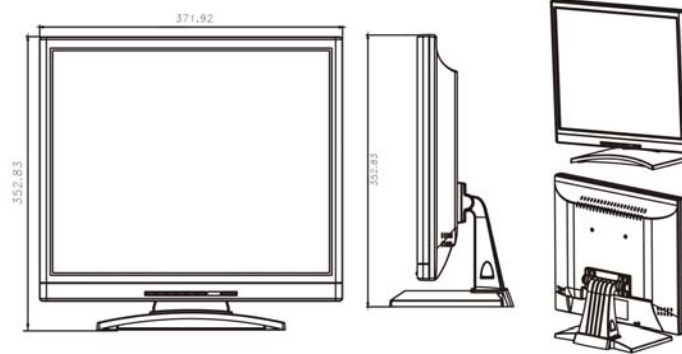
Operating Condition	Temperature	5°C to 35°C / 41°F to 95°F
	Relative Humidity	20% to 85%
Storage Condition	Temperature	-20°C to 60°C / -4°F to 140°F
	Relative Humidity	5% to 85%

Dimensions

15" LCD



17" LCD



19" LCD

