User's Guide

U.S.A.

U.S.FEDERAL COMMUNICATIONS COMMISSION
RADIO FREQUENCY INTERFERENCE STATEMENT
INFORMATION TO THE USER

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 of a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for assistance.

Changes or modification not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
Connecting of peripherals requires the use of grounded shielded signal cables.

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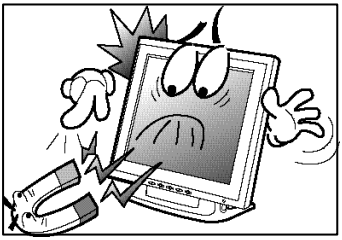
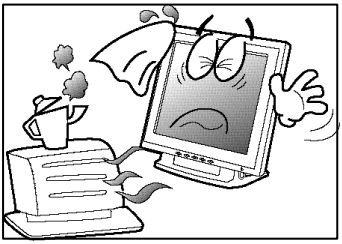
General safety precautions

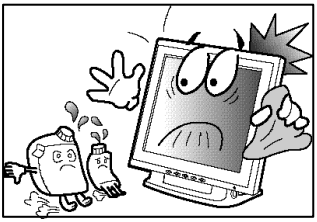
This Monitor has been engineered and manufactured to assure your safety. Please read this manual and comply with the warnings and the procedures to avoid any serious electrical shock and other serious damage.



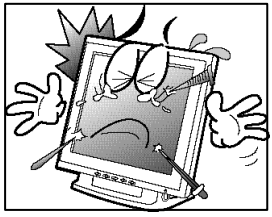
1. Do not place anything heavy, wet or magnetic on the monitor or power cord. Do not cover the ventilation openings nor touch them with metallic or flammable material.



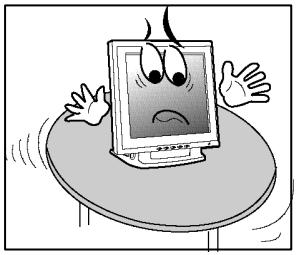
2. High temperature can cause troubles. Avoid operating the monitor in extreme heat, humidity or dusty areas. Extreme temperature may cause discoloration or damages.
Ambient Temperature : 0 ℃ ~ 40 ℃



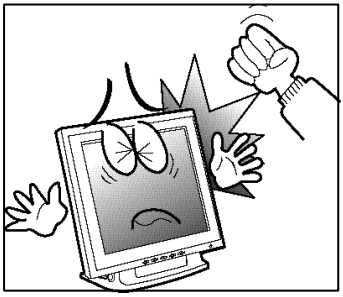
3. Do not use a solvent, such as benzene, to clean the monitor to prevent any damages to the LCD surface.



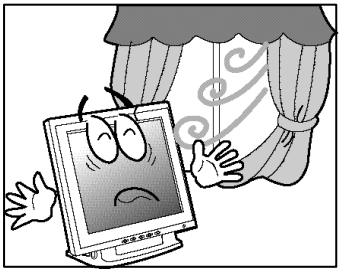
4. Do not use fine tools such as a pin or a pencil near the monitor to prevent any scratch to the LCD surface.



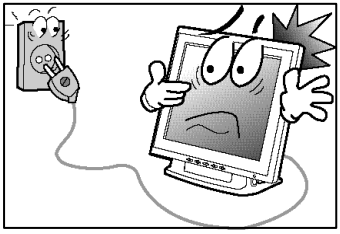
5. Place the monitor on a flat surface to prevent it from falling.



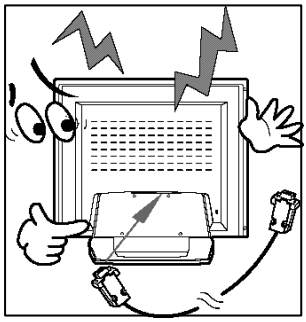
6. Do not apply any mechanical shocks to the machine.



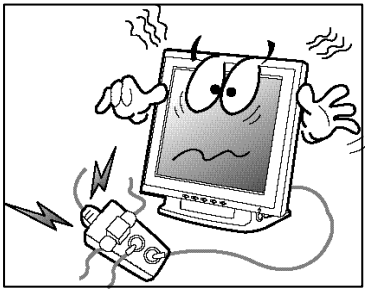
7. Install it in a well-ventilated area or secure enough space for ventilation.



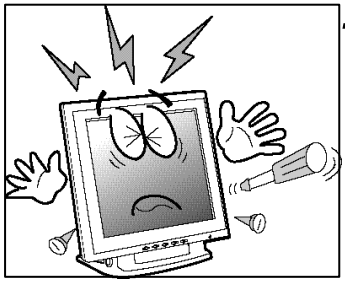
8. Turn the monitor off before connecting it to the power outlet.



9. Make sure that the power cord and the other cords are properly connected.



10. Overloaded AC outlets and extension cords are dangerous. Also, the frayed power cords and the broken plugs may cause electric shock or fire.

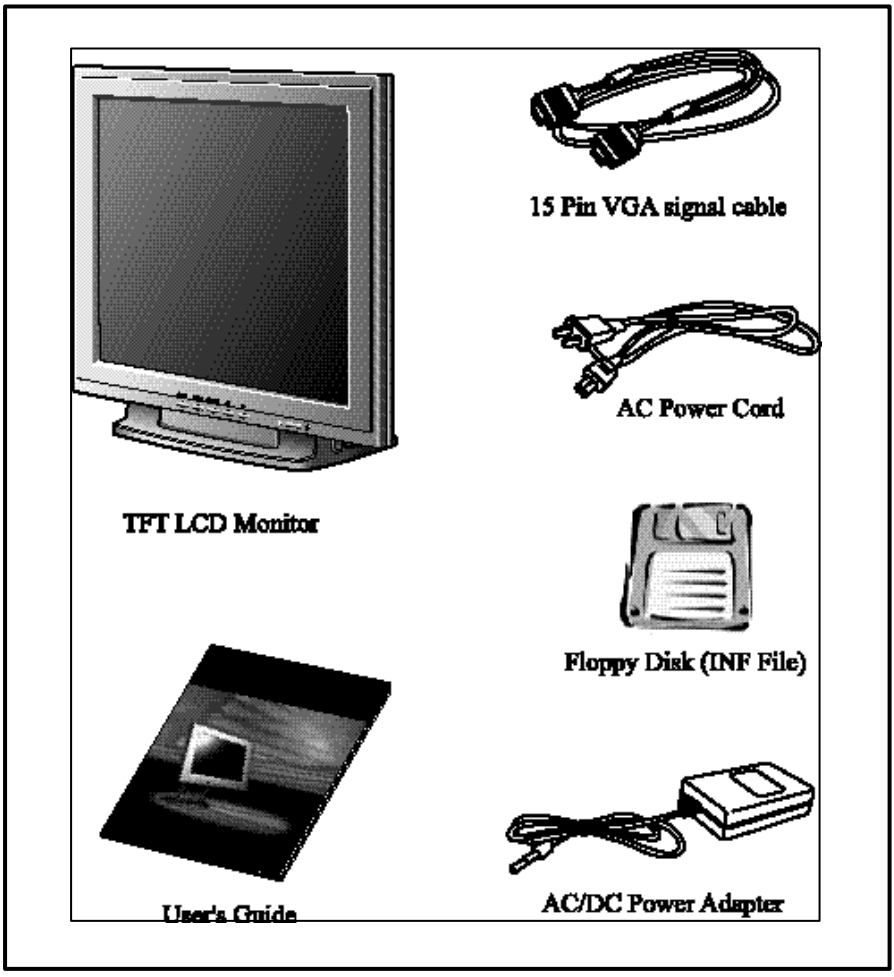


11. Do not open the monitor. There are no user-serviceable components inside. There is a risk of exposure to high-voltage electricity inside, even when power is turned off. If the display monitor does not operate properly, unplug the power cord and contact your dealer. Handling the electrical equipment carelessly will cause a serious electrical shock and other hazards**.**

CAUTION : RISK OF ELECTRIC SHOCK, DO NOT OPEN

Unpacking your monitor

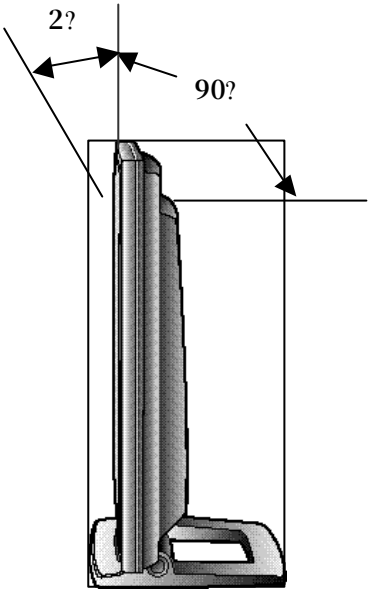
Please make sure the following items are included with your monitor.
If you find that any of these items are missing or appear damaged, contact your dealer immediately.



The power cord can be different depending upon different voltage areas.

Viewing angle

Your monitor was designed to allow you to adjust it to a comfortable viewing angle. The viewing angle can be adjusted 2? to 90? forward and backward respectively as indicated by the arrow marks below.

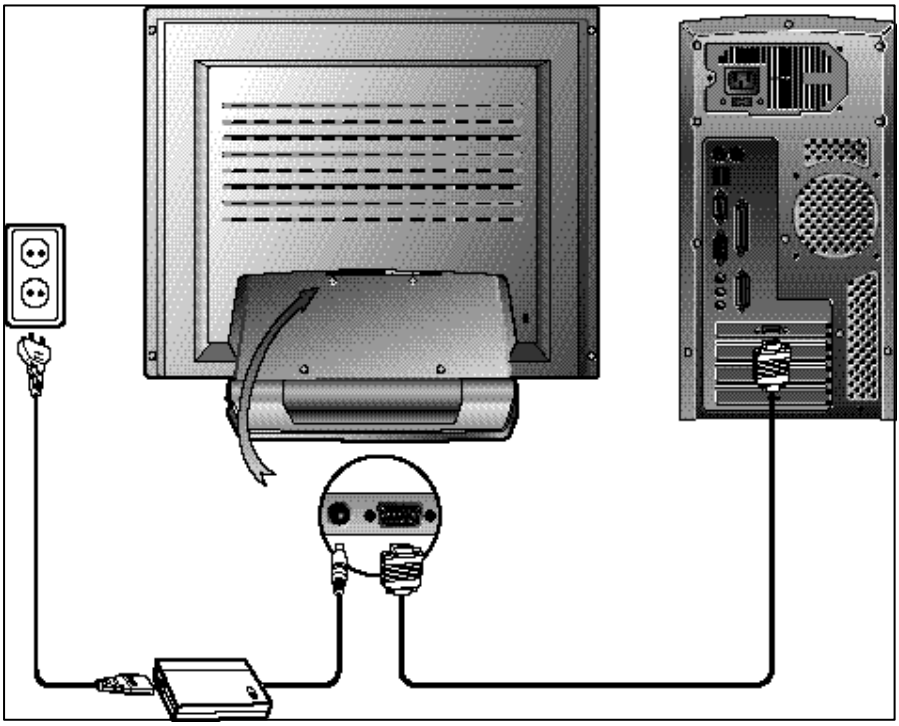


Caution

Basically when the monitor is in used, please make sure that the monitor is at the safe angle less then 45 degrees.

Connecting your monitor

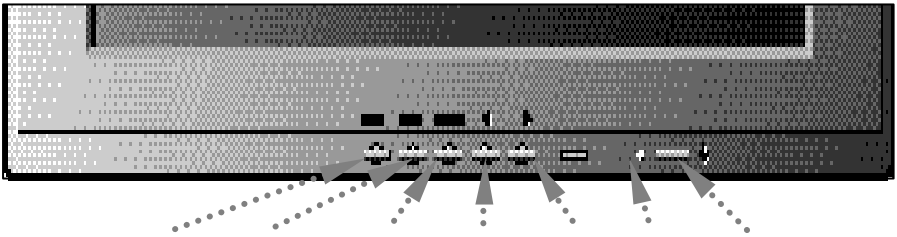
Be sure to turn the computer off before connecting the monitor



- Connect the power adaptor cord to the monitor and then to the power supply.
- After powering on the computer, adjust the display using the various controls provided. For further information on the installation procedure, please refer to the operating guide of the computer being used.

User controls

Front control buttons



No.	Key name	Description
1	AUTO	Activates the auto adjustment function.
2	MENU	Opens the OSD menu.
3	SELECT	Selects the main menu items and sub-menu items.
4	◀	Moves to the lower menu item or sub-menu item. Decreases the value of the parameter.
5	▶	Moves to the upper menu item or sub-menu item. Increases the value of the parameter.
6	LED	Indicates the status of the monitor. • Green : Normal operation. • Blinking : Power saving mode or disconnected signal cable.
7	POWER	Turns on/off the monitor.

OSD Functions and adjustments

Main menu and control selection

Press the MENU key to access the main menu.
Place the color box on the control icon you wish to adjust by pressing using the ◀ or ▶ key.
Press the SELECT key to access the control.

Exit menu

Press the MENU key to exit the OSD screen.

Auto exit

The OSD menu will disappear automatically after a few second of inactivity.

Auto save

The monitor automatically saves the new values when OSD closes.

Normal mode

When the video signal is working in normal display mode, power LED is lit green.

DPMS mode

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

Out of Range

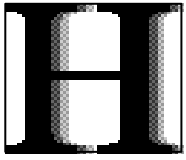
When an unsuitable signal is detected, the OSD displays an Out of Range message.

Menu adjustments

Icon	Settings and sub-menus	Description
	BRIGHTNESS	• IMAGE BRIGHTNESS CONTROL
	CONTRAST	• IMAGE CONTRAST CONTROL
	AUTO-ADJUST	• AUTOMATICALLY IMAGE SHARPNESS CONTROL AND NOISE ELIMINATION.
	POSITION	• H&V POSITION, CLOCK & PHASE CONTROL.
	H-Position	• IMAGE H-POSITION CONTROL
	V-Position	• IMAGE V-POSITION CONTROL
CLOCK	**Phase**	• IMAGE WIDTH CONTROL
PHASE	**Clock**	• IMAGE SHARPNESS CONTROL AND NOISE ELIMINATION

Icon	Settings and sub-menus	Description
	**COLOR**	• WHITE BALANCE CONTROL
	Preset Color 1	• ONE OF FACTORY SET OF WHITE BALANCE
	Preset Color 2	• ONE OF FACTORY SET OF WHITE BALANCE
	User Color	• USER CAN CHANGE THE WHITE LEVEL
	**LANGUAGE**	• LANGUAGE SELECTION
	**OSD ADJUST**	• OSD WINDOW & OSD TIME CONTROL
	**Horizontal Position**	
	**Vertical Position**	
	**OSD TIME**	
	**INFORMATION**	• Information of input timing.
		• This message is displayed after a few seconds of no input signal. In this mode, the DPMS mode is operated so that the monitor power is off.
		• This message is displayed when the input signal refresh rate is out of the supported frequency rate.
		• This message is displayed when the input signal refresh rate is not compatible with the frequency rate of TFT LCD monitor

Refining the picture

Step 1	At first display, a full screen, such as window background or "H" character should be achieved by using editor.
Step 2	Adjust the screen to the center of the display (LCD), by using the top and bottom display controls (i.e. using Vertical position menu).  
Step 3	Adjust the screen to the center of the display (LCD) by using the right and left display controls (i.e. using Horizontal position menu).  
Step 4	Adjust the phase until the "H" character displays clear. 
Step 5	Using the Contrast, Brightness, set the color to your preference.
Step 6	When you finish the adjustment, you can save your settings by pressing on the menu until the OSD screen has disappeared.

Power management function

This monitor is equipped with a DPMS(Display Power Management Signaling) function that automatically cuts the power dissipation down to less than 5W when the computer is left unattended.
Although the monitor can be left in power-saving mode for longer periods, we recommend that you turn it off after your daily work.

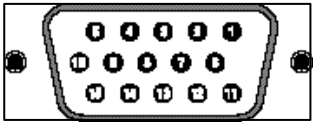
Status	Description
Green	Power on.
Blink (Amber/Green)	Power saving.
Red	Non operating / Abnormal operating.

Video input terminal

A 15Pin D-Sub connector is used as the input signal connector.
Each pin and assignment is shown in the table below.

Pin No.	Signal Name	Pin No.	Signal Name
1	RED	**9**	N.C.
2	GREEN	**10**	GROUND
3	BLUE	**11**	GROUND
4	GROUND	**12**	DDC SDA
5	GROUND	**13**	H-Sync
6	RED Ground	**14**	V-Sync
7	GREEN Ground	**15**	DDC SCL
8	BLUE Ground		

15Pin D-Sub connector



Display modes

For the display modes listed below, the screen image has been optimized during production.

Preset timing modes.

Mode	Display Mode	Horizontal Frequency (KHz)	Vertical Frequency (Hz)	Standard Type
VGA	640 x 350	31.5KHz	70Hz	IBM？
	720 x 400	31.5KHz	70Hz	IBM？
	640 x 480	31.5KHz	60Hz	Industry Standard
	640 x 480	37.9KHz	72Hz	VESA Standard
	640 x 480	37.5KHz	75Hz	VESA Standard
	640 x 480	43.3KHz	85Hz	VESA Standard
SVGA	800 x 600	35.2KHz	56Hz	VESA Guidelines
	800 x 600	37.9KHz	60Hz	VESA Guidelines
	800 x 600	48.1KHz	72Hz	VESA Standard
	800 x 600	46.9KHz	75Hz	VESA Standard
	800 x 600	53.7KHz	85Hz	VESA Standard
XGA	1024 x 768	48.4KHz	60Hz	VESA Guidelines
	1024 x 768	56.5KHz	70Hz	VESA Standard
	1024 x 768	60.0KHz	75Hz	VESA Standard
SXGA	1280 x 1024	64.0KHz	60Hz	VESA Standard
	1280 x 1024	80.0KHz	75Hz	VESA Standard

Troubleshooting

Warning : This section will try to anticipate potential problems that you may encounter in the day-to-day use of your monitor.
If after trying the suggested solutions, your monitor' s symptom remains the same, contact your authorized service center.

Troubleshooting problems

Problems		Corrective Actions
No Picture	LED ON	• Using OSD, adjust Brightness and Contrast to maximum or reset to their default settings.
	LED OFF	• Check the power switch. • Check if the AC power cord is properly connected to the AC adapter.
	LED Amber	• Check if video signal cable is properly connected at the back of monitor. • Check if the power to computer system is ON.
Display is not clear		• Adjust the Frequency and Phase settings.
Too light or too dark		• Adjust the Brightness and Contrast settings.
Image is not centered		• Adjust the Horizontal and Vertical position settings using the OSD.

Problems	Corrective Actions
Out of Range	• Check the maximum resolution and the frequency on the video port of your computer.
Picture is scrambled	• Check the signal cable connection between the computer and monitor.
Picture is fuzzy	• Perform Auto adjustment.
Picture bounces or has wavy oscillations	• Check the signal cable connection between computer and monitor.
Picture appears to be ghosting	• Check the signal cable connection between computer and monitor.
Color is not uniform	• Adjust the color settings using the color menu.
The colors are distorted with dark or shadowed areas	• Adjust the color settings using the color menu.
The power indicator is Amber	• The monitor is using its power management system. Check the power management utility on your computer.

Specifications

LCD viewable size	**Type**	17” viewable diagonal TFT type
	Pixel pitch	0.088 mm (H) x RGB x 0.264 mm (V)
	Viewable angle	L/R : 65°, U/D : 40°/65°
	Glass surface	Anti-glare, Hard coating.
Contrast ratio		400:1 (Typical)
Response time		25ms(Rising + Falling)
Display mode		Normally white
Brightness		250 cd/ m^2
INPUT	**VGA**	RGB Analog, Fh : 31.5 to 80 KHz Fv : 56 to 75 Hz
Input resolution		From VGA up to 1280 x 1024 at 75Hz
I/O Connectors		VGA 15-pin D-sub, DC Power in
Power		AC 100~240V, 50/60Hz Input 12V, 5A Max DC Output
User controls		Auto-Adjust, Brightness, Contrast, Position, Color, Language, OSD Adjust
Displayable color		16.7 M (Full Color)
Displayable area		337.92mm(H) x 270.336mm(V)
Temperature	Operation	0 ℃ ~ 50 ℃ (32 ℉ ~ 122 ℉)
	Storage	-20 ℃ ~ 60 ℃ (-4 ℉ ~ 140 ℉)
Dimensions	Physical	414.6mm(W) x 369.0mm(H) x 170.5mm(D)
Weight	Net	4.9Kg
	Gross	6.7Kg
Regulations		UL/cUL, CE, CB, TUV/GS, MPR II, FCC-B, TCO95, VCCI
Plug & play		VESA DDC 1/2B
Power management		VESA DPMS Compatible