

Table of Contents

FCC Information	1
Energy Declaration	1
Important Safeguards	2
Installation	3
Monitor Connection	4
Pin Assignment	4
Operation and User Adjustment	5
On-Screen Display Guide	6
Specifications	13
Trouble-Shooting	14

FCC Information

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and if not installed and used in accordance with the instruction manual 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:

- (1). Reorient the receiving antenna.
- (2). Increase the separation between the equipment and receiver.
- (3). Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- (4). Consult the dealer or an experienced radio TV technician for help.

Notice:

- (1) The changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
- (2) Shielded interference cables must be used in order to comply with the emission limits.

Energy Declaration

This monitor is equipped with a function for saving of energy which supports the VESA Display Power Management Signaling (DPMS) standard. This means that the monitor must be connected to a computer which supports VESA DPMS to fulfill the requirement in the NUTEK specification. Time settings are adjusted from the system unit by software. From indicated inactivity to Power Saving Position A2 the total time must not be set to more than 70 minutes.

NUTEK	VESA State	LED Indicator	Power Consumption
Normal operation	ON	Green	120W (Max.)
Power Saving Position A1	SUSPEND	Orange	15W (Max.)
Power Saving Position A2	OFF	Orange-flash	5W (Max.)

We recommend you to switch off the monitor when it is not in use for quite a long time.

Important Safeguards

1. Follow all warnings and instructions marked on the video monitor.
2. Do not use attachments which is not recommended by the video monitor manufacturer as they may cause hazards.
3. Do not expose the monitor to rain, water, moisture or direct sunlight.
4. Do not place near or over a radiator or other heat-generating equipment.
5. Do not place this video monitor on an unstable cart, stand or table. The video monitor may fall and cause serious injury to child or adult.
6. Do not block or cover ventilation opening with any material. The openings & slots on the cabinet provide necessary air flow for heat dissipation. The unit should never be enclosed or built upon unless adequate ventilation is provided.
7. Do not insert any objects into the video monitor cabinet's slots as they may touch dangers voltage points or short out parts that could result in a fire or electric shock.
8. This video monitor is equipped with a 3-wire grounding type plug. 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. Do not defeat the safety purpose of the grounding type plug.
9. Do not overload wall outlets & extension cords as this can result in fire or electric shock.
10. Do not attempt to service this unit yourself as opening or removing covers may expose you to dangerous voltage or other hazards.
11. When the video monitor unused for a long time, please unplug it from the wall outlet.
12. Unplug this video monitor from the wall outlet and refer servicing under following conditions:
 - a. When the power cord or plug is damaged or frayed.
 - b. If liquid has been spilled into the video monitor.
 - c. If the video monitor does not operate normally according to operating instructions.
 - d. If the video monitor has been dropped or the cabinet has been damaged.

NOTE:

This user's manual for TE988G series contains graphics and information which is subject to

change without notice.

Installation

Tilt Swivel & Base

1. Turn the monitor upside down.
2. Turn the base upside down. Insert its four hooks into the four slots on the bottom of the monitor. (Point the hooks on the base toward the front of the monitor)

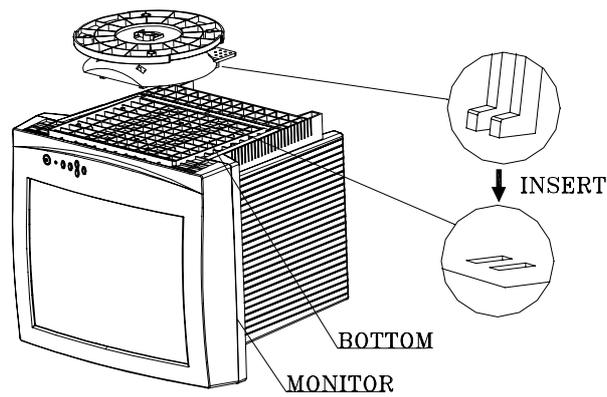


Figure 1

3. Push the tilt swivel and base in the direction of arrow (←) as indicated in Figure 2 to lock the hooks.

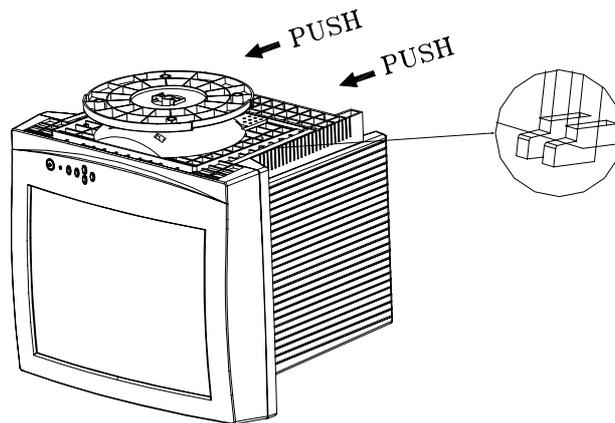


Figure 2

Monitor Connection

To attach the monitor to your system, follow the steps as described below:

1. Turn off the monitor and computer.
2. Connect one end of the power cable to your monitor and the other end to the power outlet.
3. Connect the 15-pin D-Sub signal cable to the video adapter output on your personal computer.
4. Turn on the monitor and the computer. Wait about 30 seconds to adjust the picture with the adjustment controls to obtain optimum picture.
5. If the signal cable is not connected to the PC, then the screen will display the Color Bar Pattern.

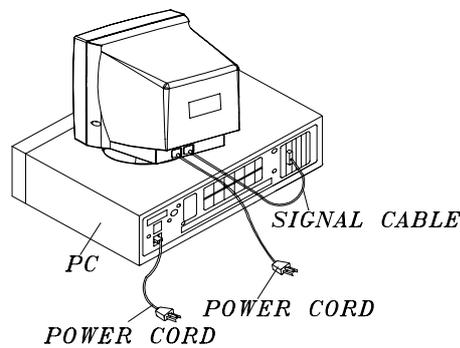
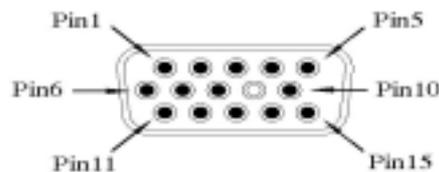


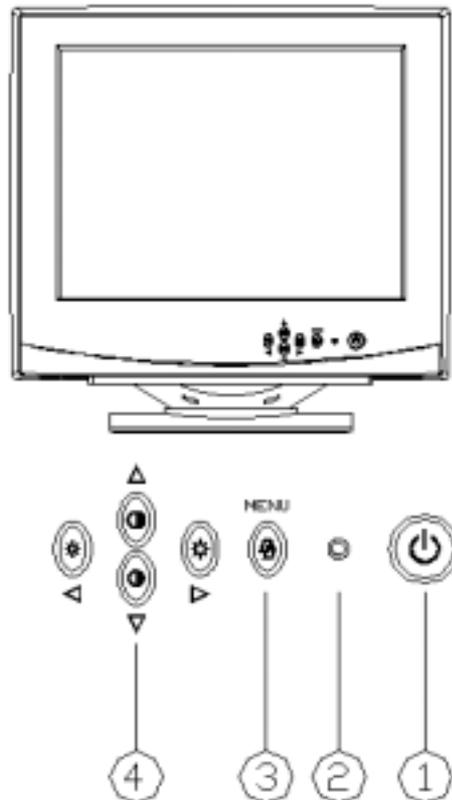
Figure 3 :Connecting the monitor

Pin Assignment



Pin	Signal	Pin	Signal
1	R	9	No Pin
2	G	10	Digital Ground
3	B	11	D-Sub Test
4	Ground	12	SDA
5	D-Sub Test	13	H-Sync
6	Video Return	14	V-Sync
7	Video Return	15	SCL
8	Video Return		

Operation and User Adjustment



Control Panel

Figure 4 shows the position of following operating units:

1. Power ON / OFF Switch
2. Power LED
3. Menu – Displays OSD menu & Scrolls through OSD menu
4. Function Control Key – Adjust level of selected items

On-Screen Display Guide

1. Contrast & Brightness

- (1). Press either ▲ or ▼ to activate and make the contrast adjustment shown by the OSD parameter. The parameter moves rightward indicating contrast increase and leftward indicating contrast decrease.



Figure5 Contrast Adjustment Parameter

- (2). Press either ◀ or ▶ to activate and make the brightness adjustment shown by the OSD parameter. The parameter moves rightward indicating brightness increase and leftward indicating brightness decrease.



Figure6 Brightness Adjustment Parameter

2. OSD Function Menu

- (1). **Press “Menu” key to enter the OSD menu containing 10 functions as shown in figure 7**
- (2). **Select adjustment function**
Please scroll the preferred function from left-right sequence by pressing Menu key. You may return to the previous item by keeping pressing the Menu key.
- (3). **Adjustment Operation**
Make the adjustment using the four function control keys. Please refer to the Figure 7 for advanced operation.

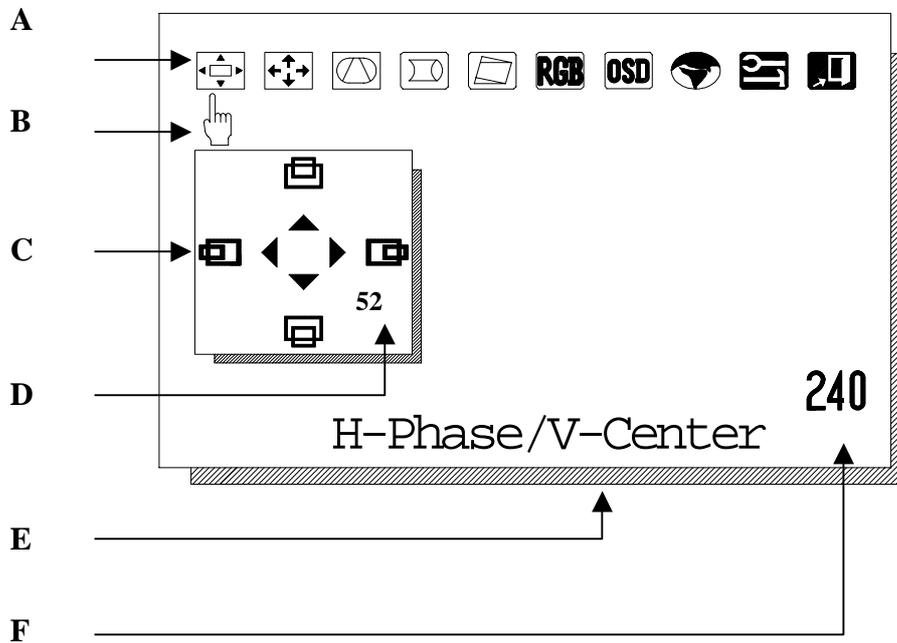


Figure 7 Function Menu

- A. OSD contains 10 icons representing the following function adjustments:
 H-Phase/V-Center, H-Size/V-Size, Pincushion/Trapezoid, Pin Balance/Corner,
 Parallel/Tilt, RGB-Gain, OSD Position, Language, Tool and Exit.
- B. Hand-shaped pointer indicates the current function selected.
- C. There are four adjustments for each function selected. The icon being selected will turn into a different color.
- D. The setting value will appear during adjustment.
- E. Displaying the message of current function selected.
- F. The number in the right corner indicates how long the OSD will last for displaying.

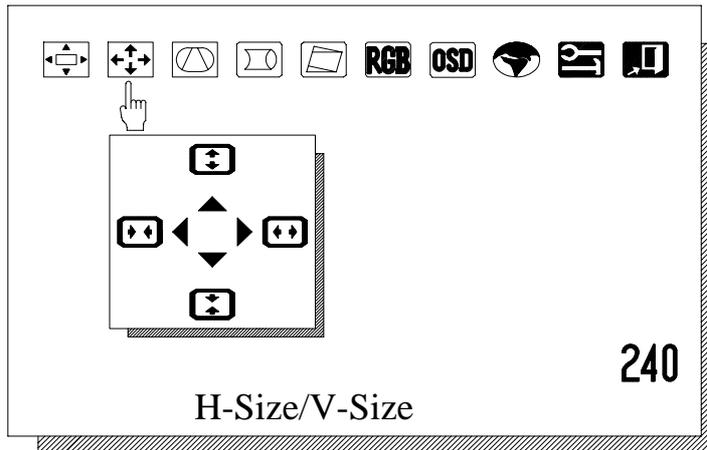
(1). H-Phase & V-Center function window

Press ◀ or ▶ key to reposition the picture leftward or rightward.

Press ▲ or ▼ key to reposition the picture upward or downward.

(Please refer to the figure 7)

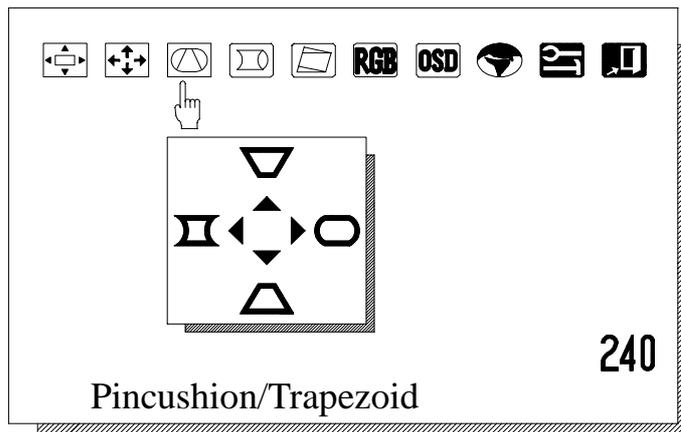
(2). H-size & V-size function window



Press ◀ key to reduce the H-size and press ▶ key to enlarge the H-size.

Press ▲ to enlarge the V-size and press ▼ key to reduce the V-size.

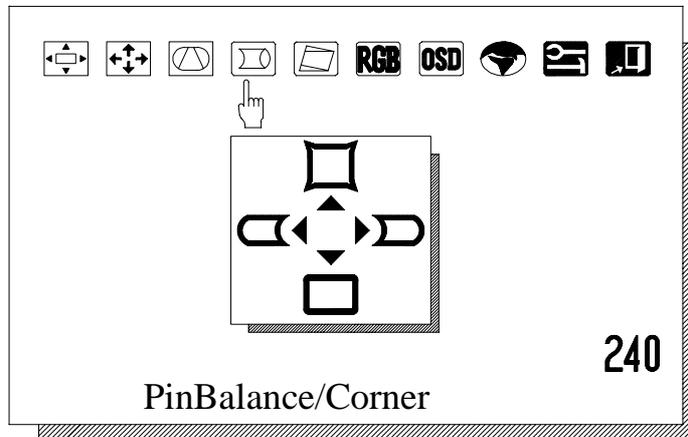
(3). Pincushion & Trapezoid function window



Press key ◀ and ▶ on the control panel to alter pincushion and barrel

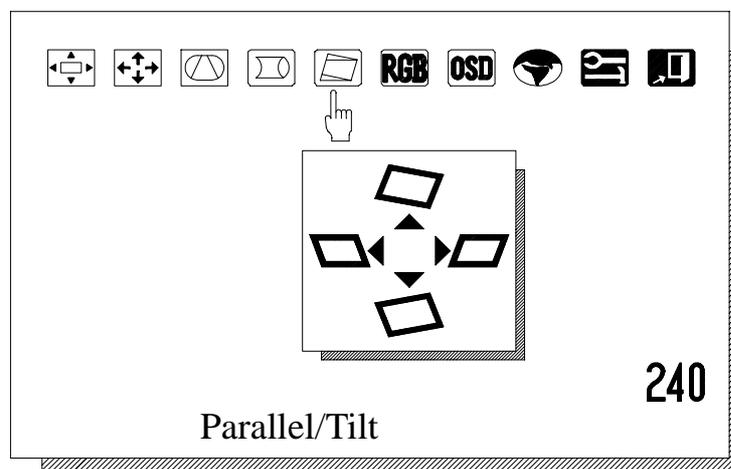
Press key ▲ and ▼ on the control panel to alter trapezoid

(4). Pin - Balance & Corner function window



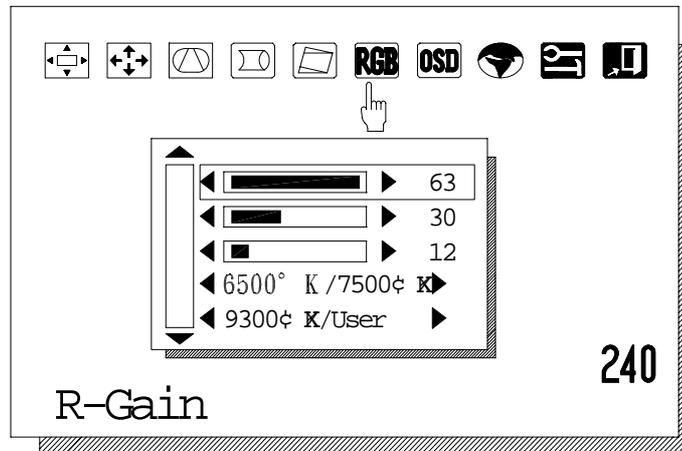
Press either ◀ or ▶ to adjust pin balance. Press either ▼ or ▲ to adjust corner distortion.

(5). Parallelogram & Tilt function window



Press either ◀ or ▶ to adjust parallelogram. Press either ▼ or ▲ to adjust tilt.

(6). RGB Color Temperature function window.



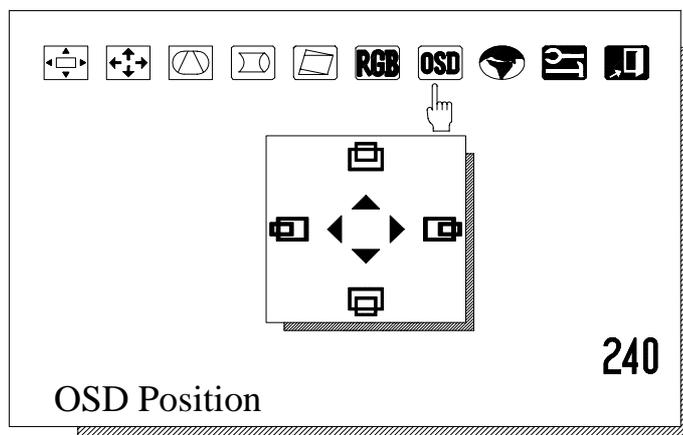
RGB Value Setting

The current setting of the color temperature is presented in purple. Press \uparrow or \downarrow key to scroll the black bar up or down to your desired item. There are three factory settings available for selection: 6500^0 K , 7500^0 K, and 9300^0 K. For personal preference, you may directly adjust the RGB values separately either in the User's mode or in 6500^0 K, 7500^0 K, and 9300^0 K mode. The values will be stored in the User's mode after leaving the user's function window.

NOTE:

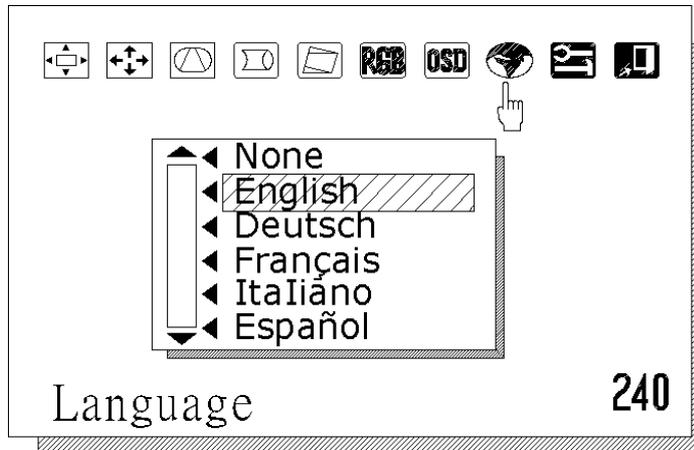
If you previously set 6500^0 K, 7500^0 K, or 9300^0 K to be stored in the User's mode, then the OSD will display these three default settings instead of the User's mode as moving the bar to select the User's mode .

(7). OSD position function window.



You may reposition OSD according to personal needs. Press \leftarrow \downarrow \uparrow or \rightarrow to move OSD.

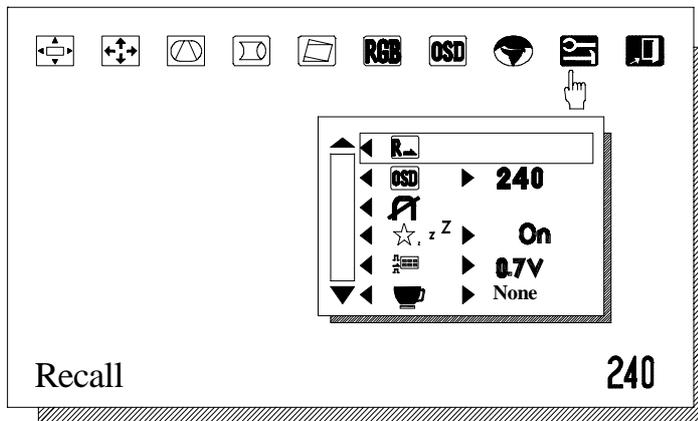
(8). Language function window



Press ▼ or ▲ to select your desired language, and then the OSD menu will be presented in the language selected.

Note : No message will be displayed if you select “None”.

(9). Tools function window.



-  1. Recall factory setting if monitor H-V frequency is in preset mode including Phase, Size, and Pincushion/Key-stone.
-  2. Adjust OSD countdown timer whose duration ranges from 5 to 240 seconds.
-  3. Activate the degauss function of CRT.
-  4. Enable or disable power saving .
-  5. Select the video input level.
-  6. Adjust tea time whose duration ranges from 0 to 255 minutes

Note

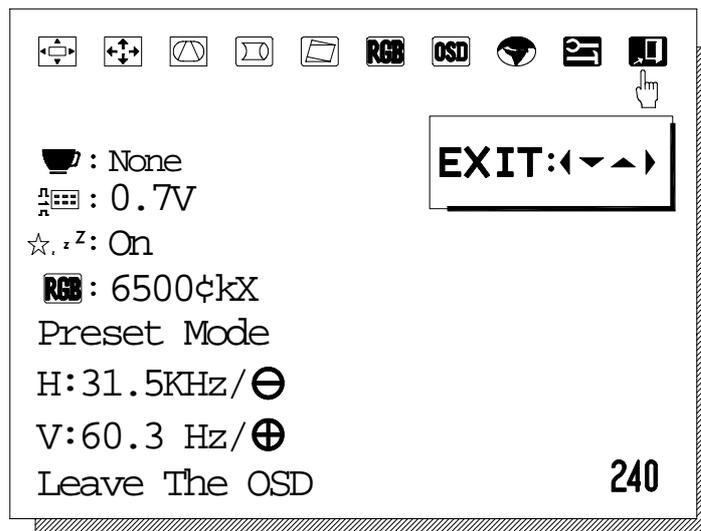
1. Degauss

- User need to perform manual degaussing , once display monitor is turned to other direction.
- It's recommended to wait 15 minutes before user to make next degaussing activity , no matter auto or manual degaussing was performed last time.

2. The icon, a cup of coffee, will appear to remind you to take a break.

3. The duration for displaying tea time is about 20 seconds. You may also set the duration For displaying tea time according to personal needs. To terminate displaying tea time, Please press any one of the keys or set the duration to None.

(10). Exit OSD menu function window.



The information of current settings such as tea time, video input level, power saving , color temperature , current horizontal / vertical frequency and polarity will be displayed.

Specifications

CRT	SIZE	19" diagonal, 90 ⁰ deflection			
	Viewable area	18"			
	Dot pitch	0.26mm			
Input Signal	Video: Analog (0.7Vp-p/1.0 Vp-p, 75 ohm positive)				
	Selected by OSD Control				
	Sync : Separate sync, positive or negative TTL				
Input Connector	15-pin D-connector				
Scanning frequency	Horizontal:30KHz-95KHz Vertical: 50Hz-150Hz				
Active Display Area	Horizontal: 350 mm (adjustable) Vertical: 262 mm (adjustable)				
Resolution	1600x1200	1280x1024	1024x768	800x600	640x480
Pixel Rate	202 MHz (maximum)				
Power Consumption	120 W (Max.)				
Power Supply	Line voltage: 100 VAC- 240 VAC Frequency: 50±3 Hz ,60±3Hz				
X-Radiation	Meets DHHS requirements				
Power Management	Meets EPA/NUTEK requirements				
Plug & Play	Satisfies DDC1 and DDC2B specifications				
Ambient Temperature	0• ~ 35• (operating) ,-10• ~ 60• (storage)				
Humidity	10• - 80•				
Regulations	UL , C-UL , TUV , GS , ERGONOMICS , MPRII , CE , AS/NZS 3548				
LED Indicators	Green (ON state), Orange (Stand-by and Suspend), Orange-flash (OFF state)				

*** Specifications subject to change without notice

Trouble Shooting

If you are experiencing difficulties with your monitor, check following table for possible solutions.

Problem	Items to check
? No picture	<ol style="list-style-type: none"> 1. The VGA card should be completely seated in the slot. 2. Power switch of the monitor and the PC should be in the ON position. 3. The signal cable should be completely connected to the video card / computer. 4. Check if the pins of the connector are twisted or shrunk.
? Image is scrolling or unstable	<ol style="list-style-type: none"> 1. The signal cable should be completely connected to the computer. 2. Check the pin assignments and signal timings of the monitor and your video card.
? LED on the monitor is not lit	<ol style="list-style-type: none"> 1. Power switch should be in the ON position and the power cord should be connected. 2. Check if the system is in the power saving mode. (Check by pressing any one of keys on the keyboard or moving the mouse.)
? Picture is fuzzy	<ol style="list-style-type: none"> 1. Adjust the Contrast and Brightness Controls.
? Picture bounces or wave pattern is present in the picture	<ol style="list-style-type: none"> 1.. Move electrical devices that may be causing electrical interference away from the monitor. 2. Refer to the FCC information of this manual.
? Edges of the display image are cured either inward or outward	<ol style="list-style-type: none"> 1. Adjust the geometry control to adjust the display image. 2. Locate the monitor facing to east.
? Display image is not centered, too small, or too large	<ol style="list-style-type: none"> 1. Adjust the image using Size and Position Controls in the OSD.