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**FCC Class B Radio Frequency Interference Statement**  
**WARNING: (FOR FCC CERTIFIED MODELS)**

**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:

1. Reorient or relocate 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 interface cables and AC power cord, if any, must be used in order to comply with the emission limits.
3. The manufacturer is not responsible for any radio or TV interference caused by unauthorized modification to this equipment. It is the responsibilities of the user to correct such interference.

**WARNING:**

To prevent fire or shock hazard, do not expose the monitor to rain or moisture. Dangerously high voltages are present inside the monitor. Do not open the cabinet. Refer servicing to qualified personnel only.

## PRECAUTIONS

- Do not use the monitor near water, e.g. near a bathtub, washbowl, kitchen sink, laundry tub, swimming pool or in a wet basement.
- Do not place the monitor on an unstable cart, stand, or table. If the monitor falls, it can injure a person and cause serious damage to the appliance. Use only a cart or stand recommended by the manufacturer or sold with the monitor. If you mount the monitor on a wall or shelf, use a mounting kit approved by the manufacturer and follow the kit instructions.
- Slots and openings in the back and bottom of the cabinet are provided for ventilation. To ensure reliable operation of the monitor and to protect it from overheating, be sure these openings are not blocked or covered. Do not place the monitor on a bed, sofa, rug, or similar surface. Do not place the monitor near or over a radiator or heat register. Do not place the monitor in a bookcase or cabinet unless proper ventilation is provided.
- The monitor should be operated only from the type of power source indicated on the label. If you are not sure of the type of power supplied to your home, consult your dealer or local power company.
- Unplug the unit during a lightening storm or when it will not be used for long period of time. This will protect the monitor from damage due to power surges.
- Do not overload power strips and extension cords. Overloading can result in fire or electric shock.
- Never push any object into the slot on the monitor cabinet. It could short circuit parts causing a fire or electric shock. Never spill liquids on the monitor.
- Do not attempt to service the monitor by yourself; opening or removing covers can expose you to dangerous voltages and other hazards. Please refer all servicing to qualified service personnel.
- For use only with power adaptor with UL,CSA mark.(output 12V DC)

## **SPECIAL NOTES ON LCD MONITORS**

The following symptoms are normal with LCD monitor and do not indicate a problem.

### **NOTES**

- Due to the nature of the fluorescent light, the screen may flicker during initial use. Turn off the Power Switch and then turn it on again to make sure the flicker disappears.
- You may find slightly uneven brightness on the screen depending on the desktop pattern you use.
- The LCD screen has effective pixels of 99.99% or more. It may include blemishes of 0.01% or less such as a missing pixel or a pixel lit all of the time.
- Due to the nature of the LCD screen, an afterimage of the previous screen may remain after switching the image, when the same image is displayed for hours. In this case, the screen is recovered slowly by changing the image or turning off the Power Switch for hours.
- When the screen becomes black or flashing, or cannot illuminate any more, contact your dealer or service center to replace parts. Don't repair the screen by yourself!

## **BEFORE YOU OPERATE THE MONITOR**

### **FEATURES**

- 48cm(19") TFT Color LCD Monitor
- Crisp, Clear Display for Windows
- *Recommended Resolutions: 1280 X 1024 @75Hz*
- EPA ENERGY STAR®
- Ergonomic Design (TCO'99 Approved)
- Space Saving, Compact Case Design

### **PACKAGE LIST**

**The product package should include the following items:**

1. LCD Monitor
2. Owner's Manual
3. Power Cable
4. Signal Cable
5. External Adaptor

# POWER CABLE

## Power Source:

1. Make sure that the power cord is the correct type required in your area.
2. The monitor's power range is wide. You can use 100/120V or 220/240V AC area. (Dispense with user adjustment)
3. Use AC power cable connect with adaptor jack of monitor, then adaptor's other side connect with monitor. AC power cable can connect with jack of the wall or PC. You can make a decision with power cable type.

4.

## CONTROLS AND CONNECTORS

### POWER CABLE

**Connecting the power Cable:** AC power cable plug in external adaptor, then DC cable plug in DC input.

### SIGNAL CABLE

**Connecting the Signal Cable:** the LCD monitor comes with a built-in video cable. Plug the signal cable's 15-pin connector into the computer's video port and tighten the two screws on the cable connector.

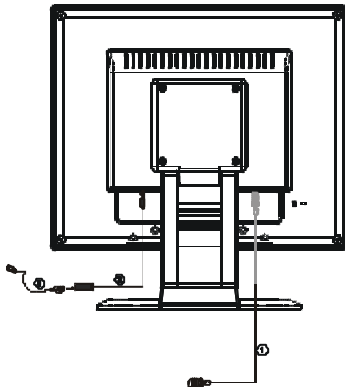


Figure 2 Connecting Cables

1.	Signal Cable
2.	DC-Jack Power Cable
3.	AC Power Cable

## ADJUSTING THE VIEWING ANGLE

- For optimal viewing it is recommended to look at the full face of the monitor, then adjust the monitor's angle to your own preference.
- Hold the stand so you do not topple the monitor when you change the monitor's angle.
- You are able to adjust the monitor's angle from  $-5^{\circ}$  to  $20^{\circ}$ .

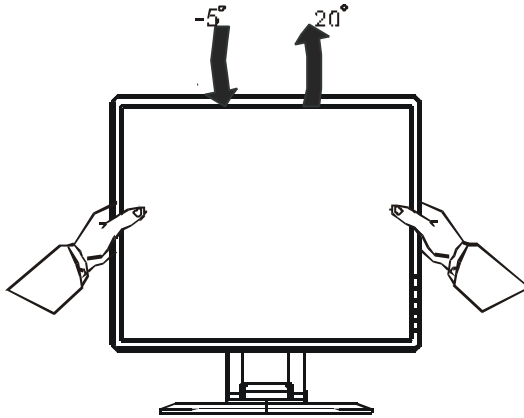


Figure 3

## NOTES

- Do not touch the LCD screen when you change the angle. It may cause damage or break the LCD screen.
- Careful attention is required not to catch your fingers or hands when you change the angle.

## OPERATING INSTRUCTIONS

### GENERAL INSTRUCTIONS

Press the power button to turn the monitor on or off. The other control buttons are located at front panel of the monitor (See Figure 4). By changing these settings, the picture can be adjusted to your personal preferences.

- Connect the video cable from the monitor to the video card.
- Press the power button to turn on the monitor position. The power indicator will light up.

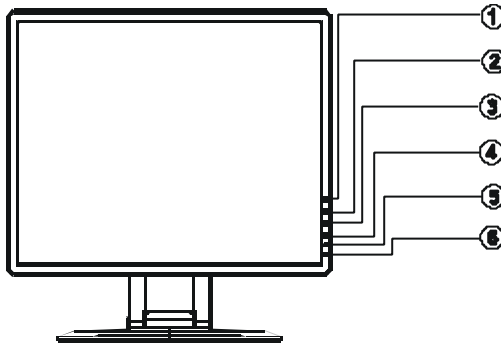










Figure 4 External Control Button

### EXTERNAL CONTROLS

1.	 Auto Config / Exit	2.	/Brightness
3.	/Contrast	4.	 MENU / ENTER
5.	Power indicator	6.	Power

## FRONT PANEL CONTROL

- **Power :**  
Press this knob to switch ON/OFF of monitor' s power.
- **MENU / ENTER/  :**  
Active OSD menu or function adjust confirm or Exit OSD menu when in Brightness/Contrast OSD status.
- **Contrast  /  :**  
Adjust contrast or function adjust.
- **Brightness  /  :**  
Adjust brightness or function adjust.
- **Auto Adjust button / Exit/  :**
  1. When OSD menu is in active status, this button will act as EXIT-KEY (EXIT OSD menu)
  2. When OSD menu is in off status, press this button over 1 seconds to activate the Auto Adjustment function.  
The Auto Adjustment function is used to set the HPos, VPos, Clock and Focus.
- **Power indicator:**  
Blue — Power On mode.  
Orange — Power Off mode.

## NOTES

- Do not install the monitor in a location near heat sources such as radiators or air ducts, or in a place subject to direct sunlight, or excessive dust or mechanical vibration or shock.
- Save the original shipping carton and packing materials, as they will come in handy if you ever have to ship your monitor.
- For maximum protection, repackage your monitor as it was originally packed at the factory.
- To maintain the cleanness of your LCD display, wipe it periodically with clean and soft cloth. The screen may be damaged by any liquid splash.
- To keep the monitor looking new, periodically clean it with a soft cloth. Stubborn stains may be removed with a cloth lightly dampened with a mild detergent solution. Never use strong solvents such as thinner, benzene, or



abrasive cleaners, since these will damage the cabinet. As a safety precaution, always unplug the monitor before cleaning it.

## HOW TO ADJUST A SETTING

The monitor controls are accessed by pressing button MENU to enable OSD (On-Screen-Display). The main menu will be displayed as follows (see figure 5) .If OSD window is in English when power on (see figure 6), press the Contrast/UP Key or Brightness/Down Key to choosethe next window. Choose the Chinese, then press MENU Key for confirming. OSD window will display in Chinese.











1. Press the MENU-Key  to show the OSD window. See figure 5.
2. Press  or  to select the adjusted item, then press the MENU-key .
3. Press  or  to change the settings of selected item. Press MENU-key  when desired setting is done.
4. If you want to adjust any other items, repeat steps 2-4.
5. To exit and save the setting, press  or  to the exit item and press MENU-key , or leave the monitor alone for a few seconds.
6. When the OSD window is active, it shows the input signal timing.



Figure 5 Chinese OSD Message



Figure 6 English OSD Message

## ADJUSTING THE PICTURE

The description for function control LEDS

### 1. BRIGHTNESS & CONTRAST

#### 1.1 BRIGHTNESS

Adjust the picture brightness.

#### 1.2 CONTRAST

Adjust the picture contrast.



## 2. ADJUST POSITION



### 2.1 HORIZONTAL POSITION

Adjust the horizontal position of the picture.

### 2.2 VERTICAL POSITION

Adjust the vertical position of the picture.

## 3. VIDEO NOISE



### 3.1 FOCUS



Adjust the picture Focus.

### 3.2 CLOCK



Adjust the picture Clock.

## 4. LANGUAGE



Multi-Language selection.

## 5. OSD TIMER



Choose OSD window display time.

## 6. COLOR TEMPERATURE



### 6.1 7800K/6500K ( COLOR TEMPERATURE)

The color temperature for 7800K is  $x=0.296$ ,  $y=0.311$  and 6500K is  $x=0.313$ ,  $y=0.329$ . It presents two different color sets on the screen. You can select 7800K or 6500K by pressing MENU Key.

### 6.2 USER MODE ( Red / Green/ Blue )

If the 7800K normal white or 6500K warmer white do not satisfy your desire, properly adjust R .G. B GAIN controls to obtain your optimum whiteness level.

## 7. OSD POSITION



### 7.1 HORIZONTAL OSD

Adjust the horizontal position of the OSD menu.

### 7.2 VERTICAL OSD

Adjust the vertical position of the OSD menu.

## 8. SUPER BRIGHTNESS



Increase the picture brightness

## 9. EXIT OSD

Close OSD window.

## 10. RESET

Press RESET to restore the monitor to factory settings.

### Active-off Mode

When both the H and V sync signals from the computer are off, the monitor enters into Active-off Mode which reduces the power consumption to less than 3W. The screen becomes dark, and the power indicator turns to orange. From Active-off Mode, the screen reappears instantaneously when the keyboard or the mouse is touched again.

- The power-saving mode can be indicated by the light-emitting diode (LED) on the front panel:

Mode	Signal		Power	
	Cable	Signal	Indicator	Consumption
On	Attached	Active	Blue	= 55 W
Off	Attached	Blank	Orange	= 3 W

## FEATURES

### Green monitor

- The monitor has a screen saver function that conforms to the VESA standard. This feature will only work if your PC is a green PC. This feature is similar to a screen saver, except that your monitor will turn it off instead of activating the screen saver.

To activate this feature in Windows® 95/98/2000/XP:

In Windows® 95/98/2000/XP, this feature can be activated and customized under the screen saver setting of the display properties.

1. Right click on the desktop and choose Properties.
2. Click on the tab that says Screen Saver. If your system supports Green PC, there will be a section entitled "Energy Saving Features of Monitor." If there isn't a section like that, then your PC does not support Green Monitor. The

monitor will behave just like a normal monitor, so you will have to turn it off manually to save energy.

3. In the "Energy Saving Features of Monitor" sections are two boxes, Power on and Shut off. To activate either one, click the box next to each one.
4. You can specify the amount of inactive time before your monitor enters shuts off mode.

## **PLUG AND PLAY**

### **Plug & Play DDC2B Feature**

This monitor is equipped with VESA DDC2B capabilities according to the VESA DDC STANDARD. It allows the monitor to inform the host system of its identity and, depending on the level of DDC used, communicate additional information about its display capabilities.

The DDC2B is a bidirectional data channel based on the I<sup>2</sup>C protocol. The host can request EDID information over the DDC2B channel.

**THIS MONITOR WILL APPEAR TO BE NON-FUNCTIONAL IF THERE IS NO VIDEO INPUT SIGNAL. IN ORDER FOR THIS MONITOR TO OPERATE PROPERLY, THERE MUST BE A VIDEO INPUT SIGNAL.**

This monitor meets the Green monitor standards as set by the Video Electronics Standards Association (VESA) and/or the United States Environmental Protection Agency (EPA) and The Swedish Confederation Employees (NUTEK). This feature is designed to conserve electrical energy by reducing power consumption when there is no video-input signal present. When there is no video input signal this monitor, following a time-out period, will automatically switch to an OFF mode. This reduces the monitor's internal power supply consumption. After the video input signal is restored, full power is restored and the display is automatically redrawn. The appearance is similar to a "Screen Saver" feature except the display is completely off. The display is restored by pressing a key on the keyboard, or clicking the mouse.

## TECHNICAL SUPPORT (FAQ)

Problem & Question	Possible Solution
Power LED is not on	*Check if the Power Switch is in the ON position
No Plug & Play	*Check if the PC system is Plug & Play compatible *Check if the Video Card is Plug & Play compatible *Check if the D-15 plug pin of Video Cable is bent
Picture is fuzzy	*Adjust the Contrast and Brightness Controls.
Picture bounces or a wave pattern is present in the picture	*Move electrical devices that may cause electrical interference.
The power LED is ON (orange) but there' s no video or no picture.	*Computer Power Switch should be in the ON position. *Computer Video Card should be snugly seated in its slot *Make sure monitor' s video cable is properly connected to the computer. *Inspect monitor' s video cable and make sure none of the pins are bent. *Make sure computer is operational by hitting the CAPS LOCK key on the keyboard while observing the CAPS LOCK LED. The LED should either turn ON or OFF after hitting the CAPS LOCK key.
Missing one of the primary colors (RED, GREEN, or BLUE)	*Inspect the monitor' s video cable and make sure that none of the pins are bent.

Screen image is not centered or sized properly.	*Adjust pixel frequency (CLOCK) and FOCUS or press hot-key (AUTO).
Picture has color defects (white does not look white)	*Adjust RGB color or select color temperature.
Poor brightness or contrast	*When the brightness of the screen lowers after being used for a certain period and the function of the display is affected, send it to our authorized service center for repair.
Horizontal or vertical disturbances on the screen	*Use win 95/98/2000/XP shut-down mode Adjust CLOCK and FOCUS or perform hot- key (AUTO-key).

CLOCK (pixel frequency) controls the number of pixels scanned by one horizontal sweep. If the frequency is not correct, the screen shows vertical stripes and the picture has not correct width.

FOCUS adjusts the phase of the pixel clock signal. With a wrong phase adjustment the picture has horizontal disturbances in light picture.

For FOCUS and CLOCK adjustment use “dot-pattern” or win 95/98/2000 shut-down mode pattern.

## ERROR MESSAGE & POSSIBLE SOLUTION

### CABLE NOT CONNECTED :

1. Check that the signal-cable is properly connected , If the connector is loose, tighten the connector' s screws.
2. Check the signal-cable' s connection pins for damage.

### INPUT NOT SUPPORT :

Your computer has been set to unsuitable display mode ,set the computer to display mode given in the following table.

### UNSUPPORTED MODE TRY DIFFERENT VIDEO CARD SETTING:

Your computer resolution is out of VESA-SPEC

#### If the monitor is stuck in Power Saving mode:

1. Make sure monitor' s signal-cable is properly connected to the computer.
2. The computer has switched the monitor into screen saver mode. Press any key in the computer keyboard to wake up the monitor.
3. Check that the computer is switched on.
4. Check the computer resolution/ rate may be too high, out of LCD-MONITOR display mode range.

## RESOLUTION

RESOLUTION	VERTICAL FREQUENCY	RESOLUTION	VERTICAL FREQUENCY
640 × 480	60Hz	800 × 600	75Hz
720 × 400	70Hz	832 × 624	75Hz
640 × 480	72Hz	1024 × 768	60Hz
640 × 480	75Hz	1024 × 768	70Hz
640 × 480	67Hz	1024 × 768	75Hz
800 × 600	56Hz	1024 × 768	72Hz
800 × 600	60Hz	1280 × 1024	60Hz
800 × 600	72Hz	1280 × 1024	75Hz

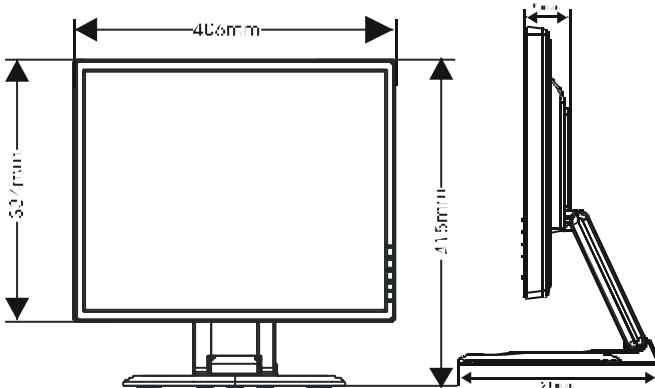
## APPENDIX

### SPECIFICATIONS

LCD Panel	Driving system	TFT Color LCD
	Size	48cm(19.0")
	Pixel pitch	0.294mm( H ) x 0.294mm( V )
	Viewable angle	130° (H) 130° (V)
Input	Video	R,G,B Analog Interface
	Separate Sync.	H/V TTL
	H-Frequency	30KHz - 80KHz
	V-Frequency	50-75Hz
Display Colors	16.7M Colors	
Dot Clock	135MHz	
Max. Resolution	1280 x 1024	
Plug & Play	VESA DDC2B™	
EPA ENERGY STAR®	ON Mode	=55W
	OFF Mode	=3W
Input Connector	D-Sub 15pin	
Input Video Signal	Analog:0.7Vp-p(standard), 75 OHM, Positive	
Maximum Screen Size	Horizontal : 376.32mm Vertical : 301.06mm	
Power Source	AC 100~240V, 50~60Hz	
Environmental Considerations	Operating Temp: 0° to 40°C Storage Temp.: -20° to 60°C Operating Humidity: 10% to 85%	
Weight (N. W.)	6.0kg	



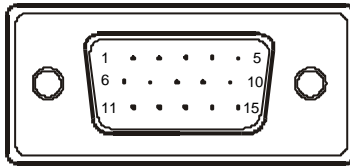
External Controls:	Switch	<ul style="list-style-type: none"> <li>• Auto Adjust Key</li> <li>• ▲ / Brightness</li> <li>• ▼ / Contrast</li> <li>• Power / Power indicator</li> <li>• MENU/ Exit</li> </ul>
	Functions	<ul style="list-style-type: none"> <li>• BRIGHTNESS &amp; CONTRAST</li> <li>• ADJUST POSITION</li> <li>• VIDEO NOISE</li> <li>• LANGUAGE</li> <li>• OSD TIMER</li> <li>• COLOR TEMPERATURE</li> <li>• OSD POSITION</li> <li>• EXIT OSD</li> <li>• RESET</li> </ul>
Power Consumption ( Maximum )		55Watts
Regulatory Compliance		CCC, TCO'99, FCC



### FACTORY PRESET TIMING TABLE

STANDARD	RESOLUTION	HORIZONTAL FREQUENCY	VERTICAL FREQUENCY
Dos-mode	640 × 400	31.47kHz	70Hz
Dos-mode	720 × 400	31.47kHz	70Hz
VGA	640 × 480	31.47kHz	60Hz
	640 × 480	37.861kHz	72Hz
	640 × 480	37.50kHz	75Hz
SVGA	800 × 600	35.156kHz	56Hz
	800 × 600	37.879kHz	60Hz
	800 × 600	48.077kHz	72Hz
	800 × 600	46.875kHz	75Hz
XGA	1024 × 768	48.363kHz	60Hz
	1024 × 768	56.476kHz	70Hz
	1024 × 768	60.02kHz	75Hz
SXGA	1280 × 1024	64.000kHz	60Hz
	1280 × 1024	80.000kHz	75Hz

## CONNECTOR PIN ASSIGNMENT



15 - Pin Color Display Signal Cable

PIN NO.	DESCRIPTION	PIN NO.	DESCRIPTION
1.	Red	9.	+5V
2.	Green	10.	Ground
3.	Blue	11.	Ground
4.	Ground	12.	DDC-Serial Data
5.	Ground	13.	H-Sync
6.	R-Ground	14.	V-Sync
7.	G-Ground	15.	DDC-Serial Clock
8.	B-Ground		