

# LCD Touch Screen Monitor



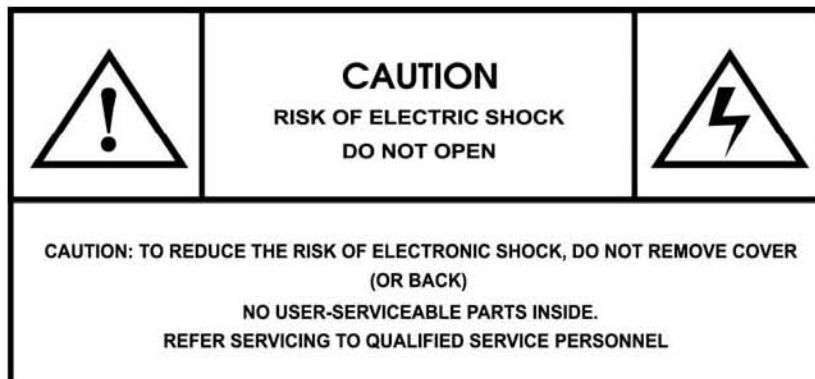
## Installation & User's Manual

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## Precautions

1. Read all of these instructions and save this manual for later use.
2. Follow all warnings and instructions on the product.
3. Do not cover or block the ventilation holes in the case.
4. Do not insert sharp objects or spill liquid into the LCD monitor through the cabinet slots; this may cause accidental fire, electric shock or failure.
5. Unplug the unit when not in use for an extended period of time.
6. Unplug the unit from power outlet before cleaning.
7. Do not attempt to service this product yourself, as opening or removing the cover may expose you to potential electric shock. Only a qualified technician should service this product.
8. Keep the monitor away from extreme heat, cold or humid places.
9. Do not place directly under sunlight, dusty surroundings or near equipment, which may generate strong magnetic fields.
10. Do not place any object on the power cord.
11. To avoid danger of the monitor falling and possibly causing injury and/or serious damage to the monitor, do not place this monitor on an unstable or uneven surface.
12. Please wait at least 2 seconds between switching the monitor ON/OFF.



## Package Contents

Touch Screen LCD Monitor			
External Univ15 pin D-sub (RGB Analog) input signal cable		Audio connector : stereo Phone Jack	
Power Cord		AC/DC power	
Driver CD		USB Cable	

## Hardware Setup

Handle the LCD monitor with care. Turn off the LCD's and PC's power before beginning setup. Follow the installation instructions step by step.

### Inputs



## **Installation**

### **Important note for Windows User's**

Before attaching your new LCD monitor to your computer, please make sure that your resolution and refresh rates are set correctly in order that your monitor works properly. The recommended resolution is 1280 x 1024 at 75Hz. You can adjust these settings by right clicking your desktop, select "Properties", then "Settings". To adjust the refresh rate, click on "Advanced" and search for this option.

Video card settings will be different based on the video capability of your computer. Please consult your video graphics card or computer manual for information in regards to this.

## **Hardware Installation**

1. Position your touch screen LCD monitor so that you can see all of the connection ports on the bottom of the monitor.
2. Plug one end of the D-Sub signal cable into the VGA connector, on the monitor and plug the other end of the cable into the 15-pin D-Sub connector at the rear of your PC. Make sure that all of the screws are hand-tightened securely.



3. Plug the Audio connector to the Audio In port on the monitor, and to the computer line out at the rear of your PC. This is optional if you wish to use a different audio source.
4. Plug the power connector to the AC In port at the rear of the monitor.



5. Plug the USB cable to the USB In port at the rear of the monitor.



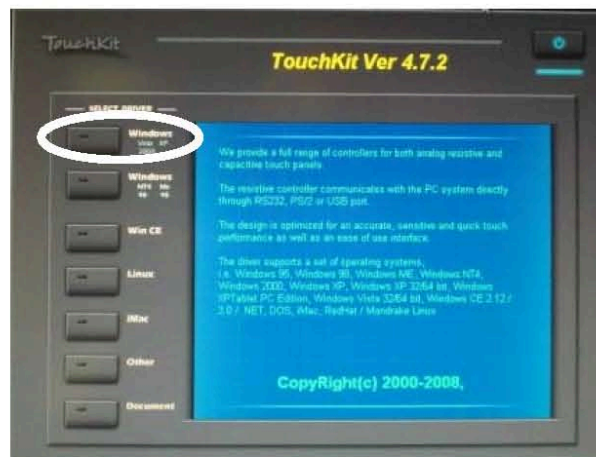
6. Power on the computer and the monitor.

## Quick Installation Guide for Touch Screen Monitor Driver

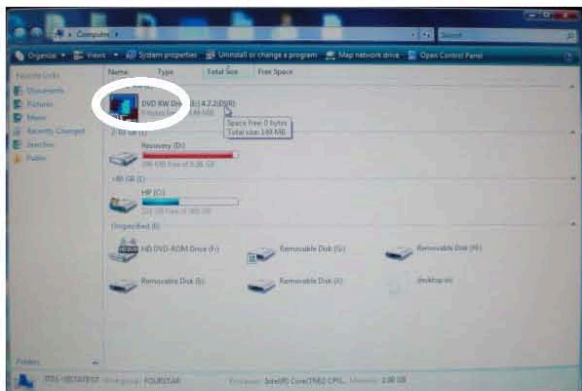
The Driver CD included with your Touch Screen monitor supports the following operating systems: Windows 98 SE, ME, 2000, XP, and iMac.

Follow these steps to install the Touch Screen Driver.

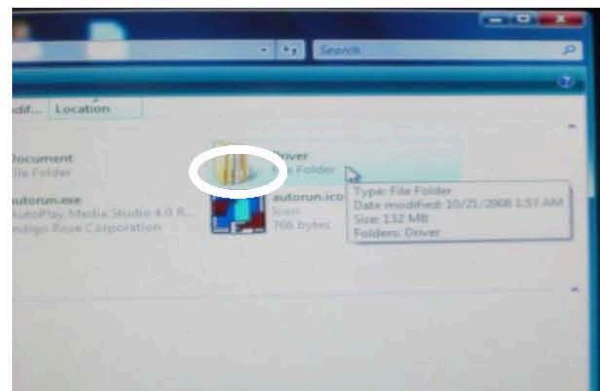
1. Place the Driver CD into the CD-ROM drive.
2. Allow the Driver CD to auto-run, if it doesn't run automatically you may browse the Driver CD manually (by clicking on Start -> Run and select your CD-ROM drive) and select the corresponding operating system on your computer. Double click on **Setup.exe**, and Windows will start to run the installation program. (**Note:** You must have the USB cable plugged into the system before the installation has been completed.)



Allow the Driver CD to auto-run.

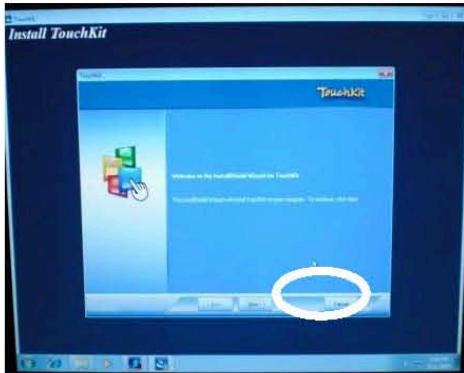


Or click on Start -> Run to browse the Driver CD.



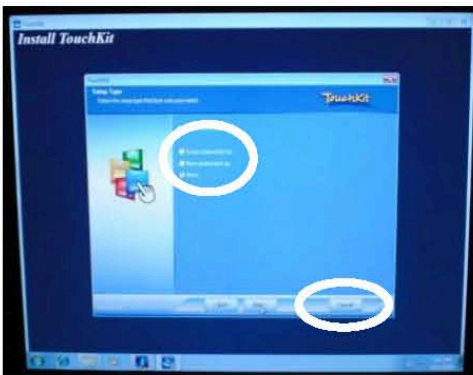
Browsing the Driver CD and selecting Setup.exe.

3. Click on the **[Next >]** button to continue installation.



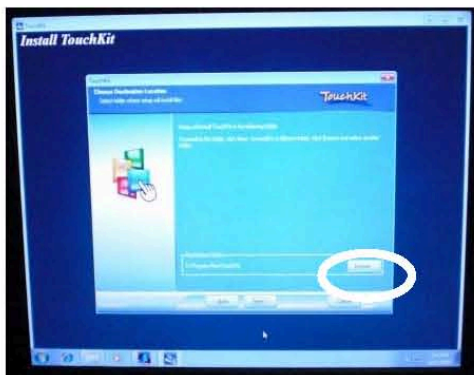
Installing the setup program.

4. You will be prompted with the check box for the PS/2 touch controller is to be installed. Leave the checkbox unchecked. Then Press **[Next >]** to continue installation.

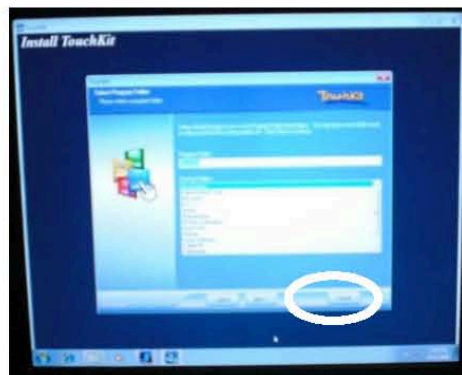


Leave the PS/2 checkbox unchecked.

5. Select the appropriate folder where set-up files will be installed. Then Press **[Next >]** to continue installation.



Choosing the destination location.



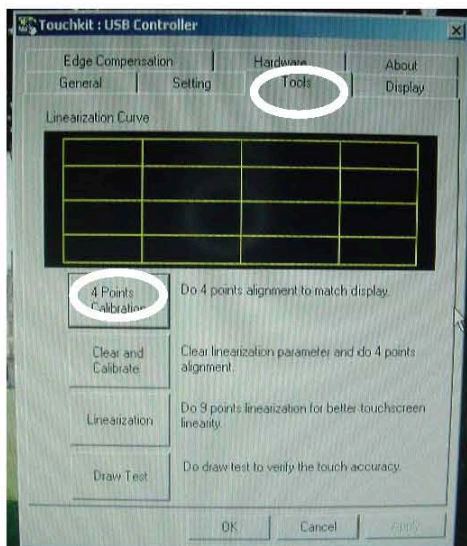
Selecting the program folder.

6. Windows will copy the driver files to your hard drive and the setup is complete. It will request for you to re-boot the computer. Press **[Yes >]** to re-boot immediately or **[No >]** to re-boot later. The installation will not be finished until you re-start the system.
7. The Driver Setup is now complete. After completion of the Touch Screen Driver installation, the USB monitor device will be found automatically as soon as it is plugged into the computer. You will then be able to see the new device on the application program window. The program will disable the USB Device automatically as soon as it is unplugged from your computer.

# Calibration Guide for Touch Screen Monitor

## **Basic 4 point Touch Screen Monitor Calibration process**

1. After the Driver has been installed correctly The Touch Screen monitor panel has to be calibrated before the touch screen panel will work correctly with your computer.
2. To do this open the Touch Kit software which can be found in the Program Files or by double clicking the icon on the desktop, click on the “**Tools**” tab and press on the “**4 Point Calibration**” button, a new window will pop-up showing you the guide in order to perform the 4 point calibration process (as shown below).



Calibrating the Touch Screen

3. Please follow the guide on your monitor screen to touch and hold the blinking **X** symbol in the calibration window until it stops blinking. This will assure that the utility can gather essential location data for computation to take place. You may notice that a time line bar is shown in the bottom of the window to indicate the time elapsed from the moment you touch the X. If you do not touch the X on the screen before the time line bar finishes going from left to right across the bottom of the screen the calibration task will be terminated and you will have to repeat this step.
4. If during regular touch screen operation you see that the location of the touch spot is lost, you can re-calibrate the monitor using this process.

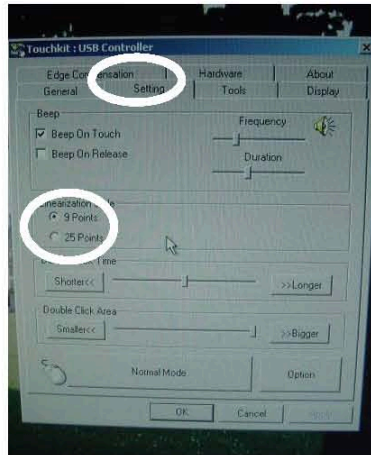


Touch the blinking symbol on the panel until it beeps or stops blinking.

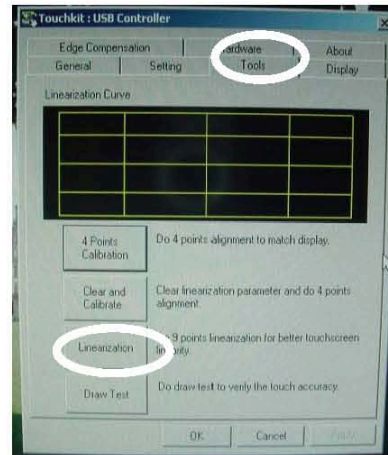


# TouchScreen Monitor Linearization process

1. We suggest that you use the 9 or 25 point Linearization Style function if you plan to use a commercial software application, to assure the most accurate performance of the monitor to the touch points on the screen.
2. The Linearization (9 or 25 points calibration) function is used to coordinate the Touch screen horizontally and vertically across the monitor screen. After the linearization process is completed, the linearity of the touch screen will be shown in the Linearity curve window.
3. To select the 9 or 25 point calibration open the Touch Kit software, click on the **“Settings”** tab select the linearization style of 9 or 25 points and then click on the **“Tools”** tab and press on the **“Linearization”** button, a new window will pop-up showing you the guide in order to perform the 9 or 25 points calibration process (as shown below).



Select the Linearization Style.

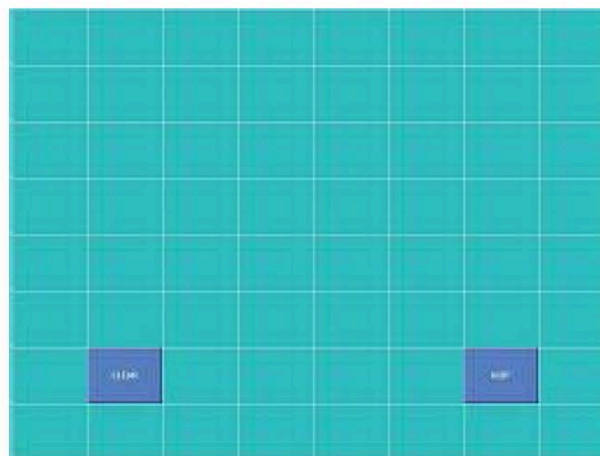


Click on the “Linearization” button.

4. Pressing this button, a new window will pop-up at the location where the touch screen was mapped to show this area in order to guide the user to perform the 25 point calibration. You should follow the guide to touch and hold the blinking X symbol in the calibration window until it does not blink to make sure that the utility can gather enough data for computation. In addition, a time line bar is shown at the bottom of the window to indicate time elapsed. If the touch screen was not touched before the time line bar finishes moving from left to right, the calibration task will be terminated automatically.

## Draw Test

This function is used for an accuracy and performance check. Draw straight lines with your finger tip to see if the touch screen is recording your touch contact points in the exact location. If the location is off, please redo the Linearization process. Press this button and a new pop up window will open in the location where the touch screen was mapped to the touch system as below:

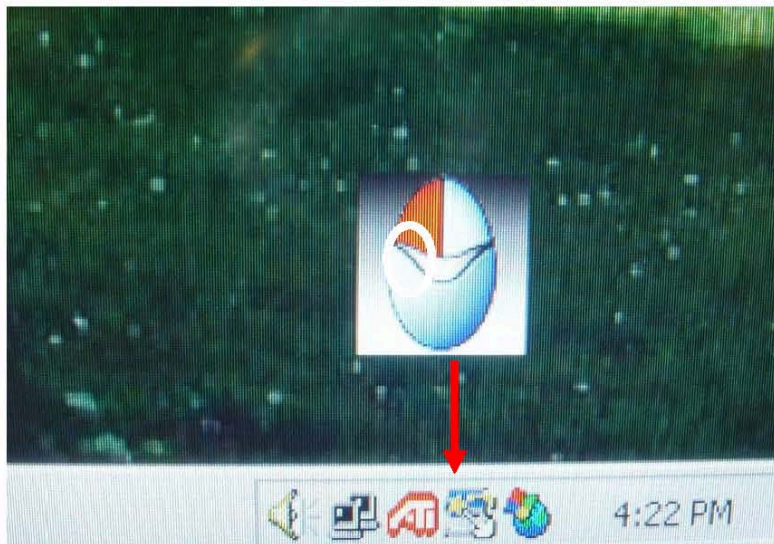


You can press the Clear Button to clear the window. Press the Quit Button to terminate the draw test. By using this test window, you can verify the panel linearity, calibration capability, and drawing line quality.

## Mouse Emulator

The Touch Screen driver emulates the function of a computer mouse left and right button click function. After installing the touch panel driver, a Mouse Icon will appear on the computer monitor desktop.

1. You can change the right / left button by clicking the upper small rectangular box of the mouse icon. The Red area will show you which button has been selected.
2. The Touch Screen driver also provides an option for advanced Mouse Emulation settings. When the user enables the "Auto Right Button", it will tell the driver to report a right click mouse event to the computer operating system when you hold your touch until time has run out. You will no longer need to touch the right button in the Touch tray to activate a right click. This feature allows you to perform a Right Click with greater ease on the Touch screen monitor
3. To remove Mouse Emulator right click on TouchKit icon in the menu bar (see arrow) a menu will open. Uncheck the flag on "Display Button" by clicking on it with your mouse. Menu will close. To return Mouse Emulator repeat process.



Selecting the mouse left and right button click function.

## Menu Control Buttons



No.	Symbol	Function
①	Adjust	1. Auto-adjust. 2. Move the selector highlight bar upward.
②	down	1. Decrease the value of the function selected.
③	up	1. Increase the value of the selected function.
④	Menu	1. Open the OSD (On Screen Display). 2. Move the selector highlight bar downward.
⑤	POWER	1. Turns the power on / off. 2. LED indicator glows green when power is ON, orange in stand by mode.

Your monitor was designed with specialized control buttons located under the bezel to virtually reduce accidental resolution resets and offsets during operation. To activate a button you must press firmly towards the back of the button where a small brim is located.

- Press the “A” button to auto adjust horizontal and vertical position to default settings.
- Press the “M” button to display the OSD menu.
- Select the desired function menu, by pressing “A” or the “M” button.
- Push the “—” or “+” button to increase or decrease the value and change the setting.
- The OSD menu will close automatically after 15 seconds of inactivity.

**NO INPUT SIGNAL**

If this warning appears,

1. Check the signal connection between the computer and LCD monitor.
2. Check the connector. If it is bent or damaged, the signal cable may be affected.
3. If the monitor is in “sleep” mode to save power, please move the mouse or press any key to “wake” it and return to working mode.
4. Please check input diagrams, and make sure the monitor has been properly configured.

**SIGNAL OUT OF RANGE**

This warning indicates that the input signal frequency does not match those supported by this monitor. For this model, horizontal frequency must be in the range of **31.47~79.98** KHz and vertical frequency in the range of **56.25~75.03**Hz.

## On Screen Display (OSD) Menu

- Press the "M" button to access the OSD menu.
- Select the desired function menu, by pressing "A" or the "M" button.
- Use the "+" and "-" buttons to adjust the selected setting's value(s).

<b>BRIGHTNESS</b>	<b>Adjusts the brightness of the display.</b>
<b>CONTRAST</b>	<b>Adjusts the difference between light and dark area.</b>
<b>PHASE</b>	<b>Adjusts the phase of Phase Lock Loop of the Monitor.</b>
<b>CLOCK</b>	<b>Adjusts the frequency of the Phase Lock Loop of the Monitor.</b>
<b>H-POSITION</b>	<b>Adjusts the horizontal position of the display.</b>
<b>V-POSITION</b>	<b>Adjusts the vertical position of display.</b>
<b>RESET</b>	<b>Recalls the default setting.</b>
<b>COLOR TEMPERATURE</b>	<b>Adjusts the color temperature.</b>
<b>RED</b>	<b>Adjusts the Red color temperature.</b>
<b>GREEN</b>	<b>Adjusts the Green color temperature.</b>
<b>BLUE</b>	<b>Adjusts the Blue color temperature.</b>
<b>LANGUAGE</b>	<b>Selects the display language of the OSD Menu.</b>
<b>MISCELLANEOUS</b>	<b>"No" will take you to the exit menu. "Yes" will bring you to the sub menus of the Miscellaneous menu.</b>
<b>EXIT OSD</b>	<b>Saves and exit.</b>

### **MISCELLANEOUS**

<b>RETURN</b>	<b>Returns to the main menu.</b>
<b>OSD H-POSITION</b>	<b>Adjusts the horizontal position of the OSD.</b>
<b>OSD V-POSITION</b>	<b>Adjusts the vertical position of the OSD.</b>
<b>OSD DURATION</b>	<b>Adjusts the duration of the OSD menu before the OSD closes</b>
<b>AUTO COLOR</b>	<b>Adjusts the color automatically.</b>
<b>VOLUME</b>	<b>Increases or decreases the sound volume.</b>
<b>VGA / DVI</b>	<b>Selects the Video source as either VGA or DVI.</b>

## Display Modes

Display Mode		
Resolution	Horizontal Frequency (KHz)	Vertical Frequency (Hz)
640x480	31.50	59.94
640x480	37.50	75.00
640x480	37.90	72.81
720x400	31.46	70.08
800x600	35.20	56.25
800x600	37.90	60.32
800x600	46.90	75.00
800x600	48.07	72.19
1024x768	48.40	60.00
1024x768	56.50	70.07
1024x768	60.00	75.03
1280x1024	64.00	60.00
1280x1024	80.00	75.03

1. Windows® supports the above 13 compatible display modes. Any other mode may not be supported.
2. Interference on your screen while you are adjusting your PC or OSD settings is normal.
3. For optimal performance, please upgrade your video card driver (if available) and choose a mode listed in the table above.

### To Adjust Your Display Properties:

1. **Set the resolution:** Right click on the Windows® desktop, choose “**Properties**”, choose “**Settings**”, and then Set the resolution
2. **Set the refresh rate:** See your video card’s user guide for instructions.

## Specifications

LCD Panel	Type	19.0" TFT Active Matrix LCD Display
	Viewing Angle	H: 160 , V:160°
	Contrast Ratio	800 : 1 (Typical)
	Brightness	300 cd/m <sup>2</sup> (Typical)
	Response Time	5 ms
	Display Colors	16.2 M colors
	Max Resolution	1280X1024 (SXGA)
	Pixel Pitch	0.294mm(H)x0.294mm(V)
Aspect Ratio	4 : 3	
Input Signals	RGB Analog	Sync TTL Frequency FH: 30~79 KHz; FV:50~75 Hz
Compatibility	PC / MAC	Up to 1280X1024@75Hz(Non-interlaced)
Connector	RGB Analog	D-sub 15-pins
	DVI	DVI-I
	Audio	Stereo Phone Jack,
	Power	External Universal AC Adaptor
	USB	USB Cable
Power	Voltage	100-240V, 50/60Hz(universal)
	Consumption	Active < 48 Watt Max
	Power saving mode	Standby < 3 Watt
Internal Speaker		x 2 (Stereo)
User Interface	LED Indicator	Active - Green
		Off - Turn off
		Standby - Orange
Operating Condition	Temperature	5°C~45°C
	Air Humidity	20% ~ 80% R.H.
Dimensions	Physical	19.09"(W) x 18.90"(H) x 9.72"(D)
Net Weight		14.09lbs
Power Management		VESA DPMS
Regulation (Certifications)		CE, FCC

# **Troubleshooting**

## **LCD Pixel Criteria**

Normally, a 19" SXGA (1280x1024) display has nearly 4 million sub-pixels. There may be up to 8 non-performing pixels on the LCD screen, which is only 0.0002% of the total sub-pixels. This percentage is acceptable for any inspection specifications.

### **1. Touch panel function will not respond**

A. Make sure the Touch screen driver is installed into your PC system, and calibrate the Touch screen monitor before you use it.

### **2. There is no picture on the screen**

A. Power saving mode may be on. Press any key or move the mouse to deactivate this mode.

B. Signal cable connector pins may be damaged. If there are bent or missing pins consult the warranty information for Tech Support information.

### **3. Missing Colors**

A. If any of the red, green, or blue colors are missing, check the signal cable to make sure it is tightened securely at both ends.

B. The pins in the cable could be loose and cause a bad connection. If there are bent or missing pins consult the warranty card for Tech Support information.

### **4. No image**

A. Make sure the power button is ON.

B. Check whether the LCD monitor and computer power cords are connected and that there is a supply of power.

### **5. Fuzzy image**

A. Adjust the Phase through the OSD menu.

### **6. Image too bright / Image too dark**

A. Adjust the Brightness and Contrast through the OSD menu.

### **7. Irregular image**

A. Check the signal connection between the computer and LCD monitor.

B. Perform an Auto Adjust by pressing the Auto Adjust button.

### **8. Distorted image**

A. Reset the LCD monitor by choosing the Recall function through the OSD menu.

### **9. Image is not centered**

A. Adjust the H. Position and V. Position through the OSD Menu.

B. Perform an Auto Adjust by pressing the Auto Adjust button.

### **10. Uneven color / Color too dark / Dark area distorted / White color is not white**

A. Adjust the Color Settings through the OSD Menu.

B. Perform an Auto Adjust by pressing the Auto Adjust button.

## **Maintaining Your Monitor**

Periodically cleaning the exterior of your monitor can reduce the chance of dust being collected, blocking the ventilation holes; hence, prolonging the life of your monitor. Please refer to the instructions below for cleaning your monitor:

### **1. Unplug the power**

Unplug the LCD monitor from the wall outlet before cleaning the monitor.

### **2. Avoiding water and liquid**

Never spray or pour any liquid directly onto the screen or case. Avoid allowing any water or liquid from entering the LCD monitor or accessories.

### **3. Cleaner**

Use water or non-ammonia/non-alcohol based glass cleaner. Do not use harsh or abrasive cleaners such as ketene (acetone), ethanol, toluene, acetic acid, methane, chloride, or other detergents to clean the monitor, these chemicals can damage the LCD monitor.

### **4. Screen**

To clean your LCD monitor screen, use water or a mild cleaner, as listed above. Moisten a soft, clean cloth. If possible, use a special screen cleaner sheet or a solution suitable for static electrical appliances. Using any cleaner other than water or a mild cleaner may damage your monitor and will not be covered under the warranty.

### **5. Storage of Unit**

If the LCD monitor is not in use for a long time, please unplug it and store it in its original box to avoid any damage.

### **6. Disclaimer**

Any damage resulting from use of any cleaner that is not mentioned above is not covered under the terms of the warranty on this product.

**Warning: To prevent electrical shock, do not open the LCD monitor casing. Leave repairing of the monitor to qualified personnel; please refer to the Warranty for tech support information.**

## **Cleaning Your Monitor**

1. Gently wipe the screen with a clean, soft, lens brush or a soft clean, lint-free cloth. This removes dust and other particles that can scratch the screen.
2. Do not pour or spray any liquid directly onto the screen or case of the LCD monitor. Chemical cleaners may damage the screen or the LCD monitor.



## **FCC and CE Radiation Norm**

### **FCC**

This equipment has been tested and complies with limits for Class B digital devices pursuant to Part 15 of Federal Communications Commission (FCC) rules.

### **CE**

This equipment has been tested and complies with the limits of the European Council Directive on the approximation of the law of the member states relating to electromagnetic compatibility (89/336/EEC) according to EN 55022 Class B.

### **FCC and CE Compliance Statement**

These limits are designed to provide reasonable protection against frequency interference in residential installations. This equipment generates, and radiates radio frequency energy, and if not installed properly or used in accordance with the instructions, may cause harmful interference to radio communication. However, there is no guarantee that interference will not occur in television reception, which can be determined by turning the equipment on and off. Interference may be corrected by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and the receiver
- Plug the equipment into an outlet on a circuit different from that to which the receiver is connected.



### **CAUTION!**

The Federal Communications Commission warns the user that changes or modifications to the unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.