



**SyncMaster**  
**SyncMaster**

Model


- ..... [Safety Instructions](#)
- ..... [Introduction](#)
- ..... [Setup](#)
- ..... [Adjusting Your Monitor](#)
- ..... [Troubleshooting](#)
- ..... [Specifications](#)
- ..... [Information](#)

Regulatory Manual Adobe Reader

### Install drivers





The color and appearance of the product may vary depending on the model, and the product specifications are subject to change without prior notice for reasons of performance enhancement.



■ Safety Instructions ■ Introduction ■ Setup ■ Adjusting Your Monitor ■ Troubleshooting ■ Specifications ■ Information

Notational | Power | Installation | Clean | Others

## ● Notational

**These safety instructions must be followed to ensure your safety and prevent property damage.  
Make sure to read the instructions carefully and use the product in the correct**

### ! Warning / Caution



Otherwise, it may result in death or personal injury.

Otherwise, it may result in personal injury or property damage.

### ! Notational Conventions



Prohibited



Important to read and understand at all times



Do not disassemble



Disconnect the plug from the outlet



Do not touch



Ground to prevent an electric shock

Notational | Power | Installation | Clean | Others

## ● Power



When not used for extended period of time, set your computer to DPM.

If using screen saver, set it to active screen mode.

The images here are for reference only, and are not applicable in all cases (or countries).

[Shortcut to Anti-Afterimage Instructions](#)



- **Do not use a damaged power cord or plug or a damaged or loose power outlet.**

- Otherwise, this may result in electric shock or fire.



- **Do not touch the power plug with wet hands when removing or plugging the plug into the outlet.**

- Otherwise, this may result in electric shock.



- **Make sure to connect the power cord to a grounded power outlet.**

- Otherwise, it may result in electric shock or personal injury.



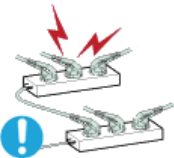
- **Ensure that the power plug is plugged into the power outlet firmly and correctly.**

- Otherwise, this may result in fire.



- **Do not forcefully bend or pull the power plug and do not place any heavy material on it.**

- Otherwise, this may result in fire.



- **Do not connect multiple appliances to the same power outlet.**

- Otherwise, this may cause fire due to overheating.



- **Do not disconnect the power cord while using the product.**

- Otherwise, this may result in damage to the product due to electric shock.



- **To disconnect the apparatus from the mains, the plug must be pulled out from the mains socket, therefore the mains plug shall be readily operable.**

- This may cause electric shock or fire.



- **Use only the power cord provided by our company. Do not use the provided power cord of another product.**

- Otherwise, this may result in fire or electric shock.

## Installation



Be sure to contact an authorized [Service Center](#) when installing your monitor in a location with heavy dust, high or low temperatures, high humidity, and exposed to chemical substances and where it operates for 24 hours such as at airports, train stations etc.

Failure to do so may cause serious damage to your monitor.



- **Do not drop the monitor when moving it.**

- This may cause damage to the product or the person carrying it.



- **Ensure that at least two persons lift and move the product.**

- Otherwise, it may be dropped and cause personal injury, and/or damage the product.



- **When installing the product in a cabinet or rack, make sure that the front end of the bottom of the product does not project out.**

- Otherwise, it may fall or cause personal injury.
- Use a cabinet or rack of a size appropriate to the product..



- **DO NOT PLACE CANDLES, MOSQUITO REPELLANT, CIGARETTES AND ANY HEATING APPLIANCES NEAR THE PRODUCT.**

- Otherwise, this may result in fire.



- **Keep heating appliances as far away from the power cord or the product as possible.**

- Otherwise, this may result in electric shock or fire.



- **Do not install it in a badly ventilated location such as a bookcase or closet.**

- Otherwise, this may result in fire due to an increase in the internal temperature.



- **Put down the monitor carefully.**

- Failing to do so may damage the monitor.

- **Do not place the front of the product on the floor.**

- Otherwise, this may result in damage to the screen display.



• **Ensure that an authorized installation company installs the wall mount.**

- Otherwise, it may fall and cause personal injury.
- Make sure to install the specified wall mount.



• **Install your product in a well ventilated location. Ensure that there is a clearance of more than 10 cm from the wall.**

- Otherwise, it may result in fire due to an increase in the internal temperature.



• **Ensure that the packaging vinyl is kept away from children.**

- Otherwise, it may result in serious harm (suffocation) if children play with it.



• **If the height of your monitor is adjustable, do not place any object or part of your body on the stand when lowering it.**

- This may cause damage to the product or the person carrying it.

Notational

Power

Installation

Clean

Others

• **Clean**



When cleaning the monitor case or the surface of the TFT-LCD screen, wipe with a slightly moistened and soft fabric.



• **Do not spray cleaner directly onto the surface of the product.**

- Otherwise, this may result in the discoloration and distortion of the structure and the screen surface may peel off.



• **Clean the product using a soft cloth with a monitor cleaner only. If you must use a cleaner other than the monitor cleaner, dilute it with water at a ratio of 1:10.**

- **When cleaning the power plug pins or dusting the power outlet, clean it with a dry cloth.**



- Otherwise, it may result in fire.



• **When cleaning the product, make sure to disconnect the power cord.**

- Otherwise, it may result in electric shock or fire.



• **When cleaning the product, disconnect the power cord and clean it softly with a dry cloth.**

- (Do not use chemicals such as wax, benzene, alcohol, thinner, mosquito repellent, lubricant, or cleaner.) These may change the appearance of the product surface and peel off the indication labels on the product.



• **Since the product housing is easily scratched, make sure to use the specified cloth only.**

- Use the specified cloth adding only a little water. As the product may be scratched if there is any foreign material on the cloth, make sure to shake it thoroughly before using it.



• **When cleaning the product, do not spray water directly onto the main body of the product.**

- Ensure that water does not enter the product and that it is not wet.
- Otherwise, this may result in electric shock, fire or a malfunction.

Notational

Power

Installation

Clean

Others

• **Others**



• **The product is a high voltage product. Ensure that users do not disassemble, repair or modify the product themselves.**

- Otherwise, this may result in electric shock or fire. If the product needs to be repaired, contact a [Service Center](#).



• **If there is a strange smell or a strange sound or smoke is coming from the product, disconnect the power plug immediately and contact a [Service Center](#).**

- Otherwise, this may result in electric shock or fire.



• **Do not place this product in a location exposed to moisture, dust, smoke, water, or in a car.**

- Otherwise, this may result in electric shock or fire.



- **When you drop the product or the case is broken, turn the power off and disconnect the power cord. Contact a [Service Center](#).**

- Otherwise, this may result in electric shock or fire.



- **If thunder or lightning is occurring, do not touch the power cord or antenna cable.**

- Otherwise, this may result in electric shock or fire.



- **Do not try to move the monitor by pulling only the wire or the signal cable.**

- Otherwise, it may fall and result in electric shock, damage to the product or fire due to damage to the cable.



- **Do not lift or move the product back and forwards or right and left while only holding the power cord or signal cables.**

- Otherwise, it may fall and result in electric shock, damage to the product or fire due to damage to the cable.



- **Make sure that the ventilating opening is not blocked by a table or curtain.**

- Otherwise, it may result in fire due to an increase in the internal temperature.



- **Do not place any containers containing water, vases, flowerpots, medicines as well as any metal on the product.**

- If water or a foreign material enters the product, disconnect the power cord and contact a [Service Center](#).

- This may result in a product malfunction, electric shock, or fire.



- **Do not use or keep combustible spray or flammable material near the product.**

- Otherwise, this may result in an explosion or fire.



- **Do not insert any metal, such as chopsticks, coins, pins and steels, or inflammable objects, such as matches or paper, inside the product (through the ventilating openings, input and output terminals, etc).**

- If water or foreign material enters the product, disconnect the power cord and contact a [Service Center](#).

- Otherwise, this may result in electric shock or fire.

- **When using a fixed screen for a long time, an afterimage or stain may occur.**

- If you are not using your product for a long period of time, put it into sleep mode or use a moving screen saver.



- **Set a resolution and frequency appropriate to the product.**



- Otherwise, your eyesight may be damaged.



- **If you continually move closer to the product screen, your eyesight may be failing.**



- **To ease eye strain, take at least a five-minute break after every hour of using the monitor.**



- **Do not install it in an unstable location such as an unstable rack or uneven surface or a location exposed to vibrations.**

- Otherwise, it may fall and cause personal injury and/or damage the product.
- If you use the product in a location exposed to vibrations, it may damage the product and result in fire.



- **When moving the product, turn the power off and disconnect the power plug, antenna cable, and all the cables connected to the product.**

- Otherwise, it may result in electric shock or fire.



- **Ensure that children do not hang onto the product or climb up onto the product.**

- The product may fall and cause personal injury or death.



- **If you do not use the product for a long period of time, disconnect the power cord from the power outlet.**

- Otherwise, this may result in overheating or fire due to dust, and may result in fire due to electric shock or leakage.



- **Do not place any heavy items or toys or confectionery, such as cookies etc. that may attract the attentions of children onto the product.**

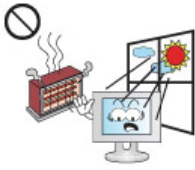
- Your children may hang onto the product causing it to fall and this may result in personal injury or death.

- **Do not turn the product upside down or move it while holding only the stand.**





- Otherwise, it may fall and result in personal injury and/or damage to the product.



- **Do not place the product in a location exposed to direct sunlight or near any heat such as a fire or heater.**

- This may reduce the lifetime of the product, and may result in fire.



- **Do not drop any objects onto the product or cause any impact to the product.**

- Otherwise, this may result in electric shock or fire.



- **Do not use a humidifier or kitchen table near the product.**

- Otherwise, this may result in electric shock or fire.



- **When there is a gas leak, do not touch the product or the power plug but ventilate immediately.**

- If a spark occurs, it may cause an explosion or fire.



- **If the product has been turned on for a long time, the display panel becomes hot. Do not touch it.**

- Keep the small accessories in a location out of the reach of children.



- **Be careful when adjusting the angle of the product or the height of the stand.**

- This may result in personal injury as your hand or fingers may become caught.

- Also, if you tilt the product too far, it may fall and cause personal injury.



- **Do not install the product in a location low enough for children to reach.**

- Otherwise, it may fall and result in personal injury.

- Since the front part of the product is heavy, install the product on a level and stable surface.

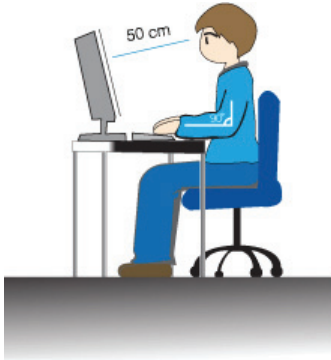


- **Do not put any heavy objects on the product.**

- This may result in personal injury and/or damage to the product.

---

## • Good Postures When Using the Monitor



### • When using the product, use it in the correct position.

- Keep your back straight while looking at the product.
  - The distance between your eyes and the screen should be between 45 to 50 cm. Look at the screen from a slightly higher location than the height of the screen.
  - When using the product, use it in the correct position.
  - Adjust the angle so that light is not reflected on the screen.
  - Place your arms perpendicular to your sides and allow your arms to be level with the back of the hand.
  - Keep your elbow at 90 degrees.
  - Keep your knees at greater than 90 degrees, and keep your heels firmly on the floor. Keep your arms lower than your heart.
-



---

**Unpacking** | Front | Rear |

---

Please make sure the following items are included with your monitor.  
If any items are missing, [contact your dealer](#).  
[Contact a local dealer](#) to buy optional items.

---







**Unpacking****Monitor & Simple stand****Bottom**

MagicRotation program can not be provided as Simple Stand does not support Pivot function.

**Manual****Quick Setup Guide****Warranty Card**  
(Not available in all locations)**User's Guide,  
Monitor Driver****Cable**

6 Front



- 1 MENU button**  Opens the OSD menu. Also use to exit the OSD menu or return to the previous menu.
- 2 Customized Key**  You can customize key assignment for the Custom button according to your preferences.
- 3 Brightness button**  When OSD is not on the screen, push the button to adjust brightness.
- 2,3 Adjust buttons**  Adjust items in the menu.
- 4 Enter button**  Activates a highlighted menu item.
- 5 AUTO button** Use this button for auto adjustment.
- 6 Power button** / **Power indicator** Use this button for turn the monitor on and off. This light glows blue during normal operation, and blinking blue once as the monitor saves your adjustments.



See [PowerSaver](#) described in the manual for further information regarding power saving functions. For energy conservation, turn your monitor OFF when it is not needed, or when leaving it unattended for long periods.

## Rear



### Simple stand

(The configuration at the back of the monitor may vary from product to product.)

- 1 **POWER port** Connect the power cord for your monitor to the power port on the back of the monitor.
- 2 **RGB IN port** Connect the signal cable to the 15-pin, D-sub port on the back of your monitor.
- 3 **POWER on/off Switch (option)** Use this button for turn the monitor on and off.
- 4 **Kensington Lock** The Kensington lock is a device used to physically fix the system to something when using it in a public place. (The locking device has to be purchased separately.) For using a locking device, contact the place of purchase.

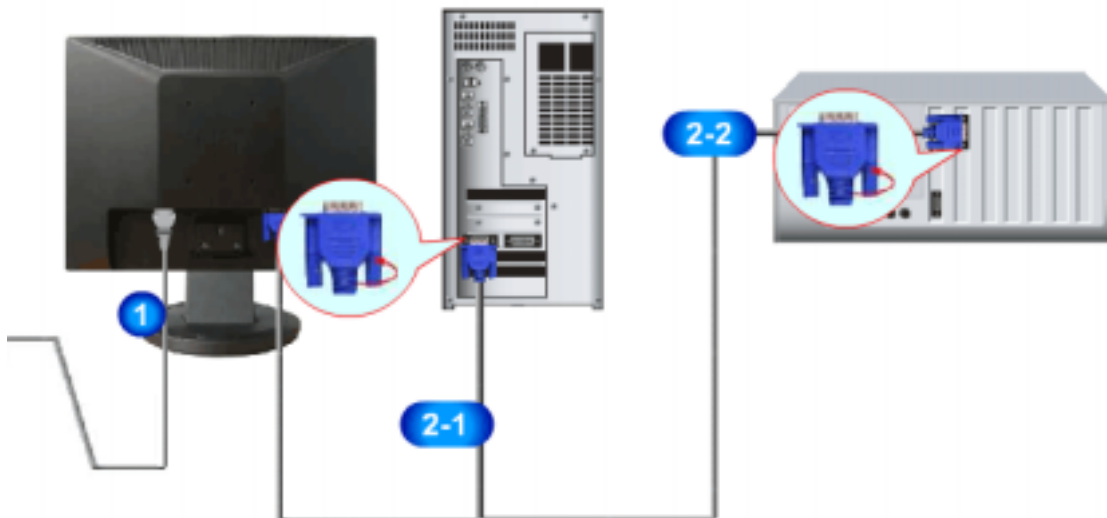



See [Connecting the Monitor](#) for further information regarding cable connections.



Connecting the Monitor | Using the Stand | Installing the Monitor Driver (Automatic) | Installing the Monitor Driver (Manual)

## Connecting the Monitor



- 1 Connect the power cord for your monitor to the power port on the back of the monitor. Plug the power cord for the monitor into a nearby outlet.
- 2 Use appropriate connection for your computer.
  - 2-1 Using the D-sub (Analog) connector on the video card. Connect the signal cable to the 15-pin, D-sub port on the back of your monitor.  
 [ RGB IN ]
  - 2-2 Connected to a Macintosh. Connect the monitor to the Macintosh computer using the D-sub connection cable.



If the monitor and the computer are connected, you can turn them on and use them.

Connecting the Monitor | **Using the Stand** | Installing the Monitor Driver (Automatic) | Installing the Monitor Driver (Manual)

## Using the Stand

## Monitor Assembly



---

### Monitor and Bottom

#### Attaching a Base

This monitor accepts a 75 mm x 75 mm VESA-compliant mounting interface pad.



**Simple stand**

**A.** Monitor

**B.** Mounting interface pad (Sold separately)

1. Turn off your monitor and unplug its power cord.
2. Lay the LCD monitor face-down on a flat surface with a cushion beneath it to protect the screen.
3. Remove four screws and then remove the stand from the LCD monitor.
4. Align the mounting interface pad with the holes in the rear cover mounting Pad and secure it with four screws that came with the arm-type base, wall mount hanger or other base.

---

Connecting the Monitor | Using the Stand | **Installing the Monitor Driver (Automatic)** | Installing the Monitor Driver (Manual)

#### Installing the Monitor Driver (Automatic)



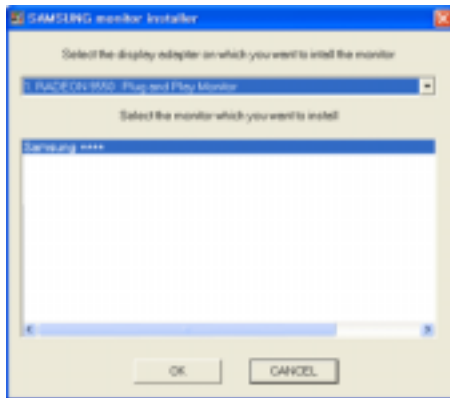
When prompted by the operating system for the monitor driver, insert the CD-ROM included with this monitor. Driver installation is slightly different from one operating

system to another. Follow the directions appropriate for the operating system you have.

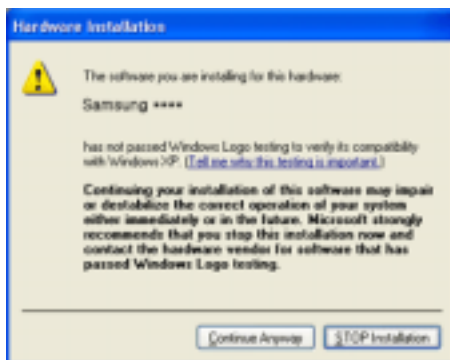
Prepare a blank disk and download the driver program file at the Internet web site shown here.

- Internet web site : <http://www.samsung.com/> (Worldwide)  
<http://www.samsung.com/monitor> (U.S.A)  
<http://www.sec.co.kr/monitor> (Korea)  
<http://www.samsungmonitor.com.cn/> (China)

1. Insert CD into the CD-ROM drive.
2. Click "**Windows**"
3. Choose your monitor model in the model list, then click the "**OK**" button.



4. If you can see following message window, then click the "**Continue Anyway**" button. Then click "**OK**" button. (Microsoft® Windows® XP Operating System)



This monitor driver is under certifying MS logo, and this installation don't damage your system. The certified driver will be posted on Samsung Monitor homepage <http://www.samsung.com/>.

5. Monitor driver installation is completed.

Connecting the Monitor | Using the Stand | Installing the Monitor Driver (Automatic) | Installing the Monitor Driver (Manual)

## Installing the Monitor Driver (Manual)

[Windows Vista](#) | [Windows XP](#) | [Windows 2000](#) | [Windows ME](#) | [Windows NT](#) | [Linux](#)



When prompted by the operating system for the monitor driver, insert the CD-ROM included with this monitor. Driver installation is slightly different from one operating system to another. Follow the directions appropriate for the operating system you have.


Prepare a blank disk and download the driver program file at the Internet web site shown



below.

- Internet web site : <http://www.samsung.com/> (Worldwide)  
<http://www.samsung.com/monitor> (U.S.A)  
<http://www.sec.co.kr/monitor> (Korea)  
<http://www.samsungmonitor.com.cn/> (China)

## Microsoft® Windows Vista™ Operating System

1. Insert your Manual CD into your CD-ROM drive.
2. Click  (Start) and "**Control Panel**". Then, double-click on "**Appearance and Personalization**".



3. Click "**Personalization**" and then "**Display Settings**".



4. Click "**Advanced Settings...**".



5. Click "**Properties**" in the "**Monitor**" tab. If the "**Properties**" button is deactivated, it means the configuration for your monitor is completed. The monitor can be used as is. If the message "**Windows needs...**" is displayed, as shown in the figure below, click "**Continue**".

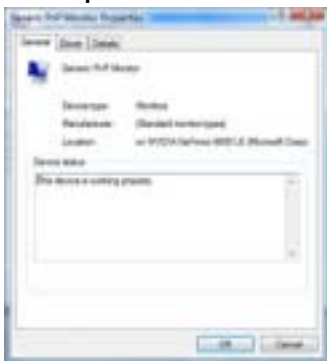




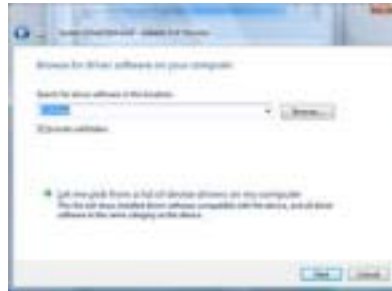
This monitor driver is under certifying MS logo, and this installation doesn't damage your system.  
The certified driver will be posted on Samsung Monitor homepage

<http://www.samsung.com/>

6. Click "**Update Driver...**" in the "**Driver**" tab.



7. Check the "**Browse my computer for driver software**" checkbox and click "**Let me pick from a list of device drivers on my computer**".

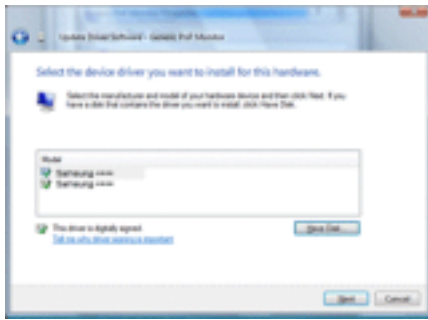


8. Click "**Have Disk...**" and select the folder (for example, D:\Drive) where the driver setup file is located, and click "**OK**".

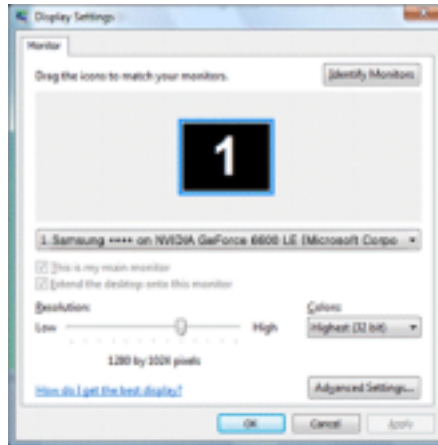
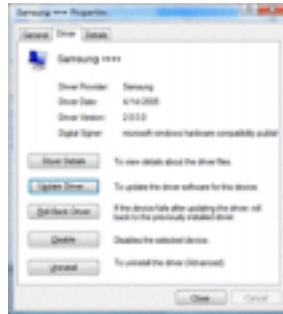


- 9.

Select the model that matches your monitor from the list of monitor models on the screen, and click "**Next**".

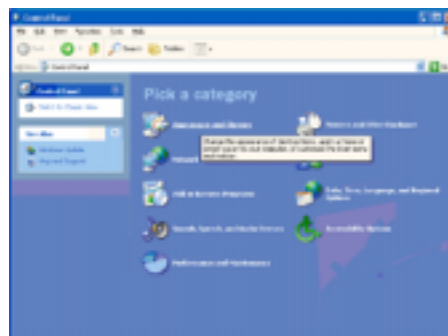


10. Click "Close"→ "Close" → "OK" → "OK" on the following screens displayed in sequence.

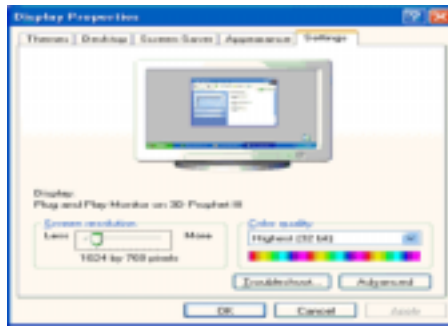
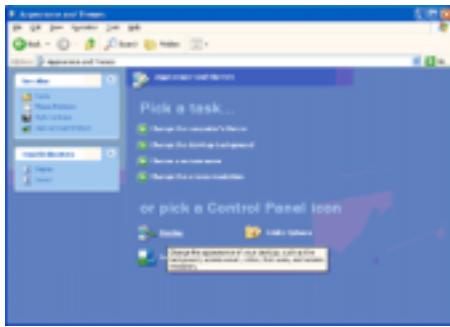


## Microsoft® Windows® XP Operating System

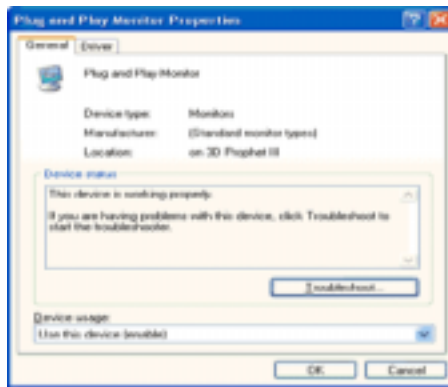
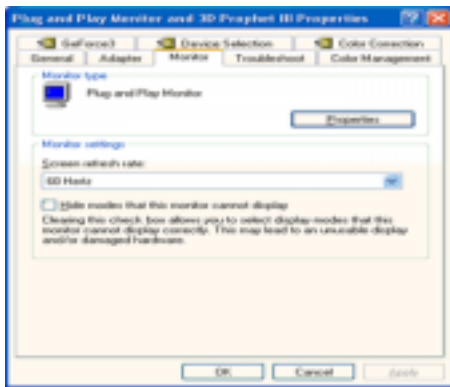
1. Insert CD into the CD-ROM driver.
2. Click "Start" → "Control Panel" then click the "Appearance and Themes" icon.



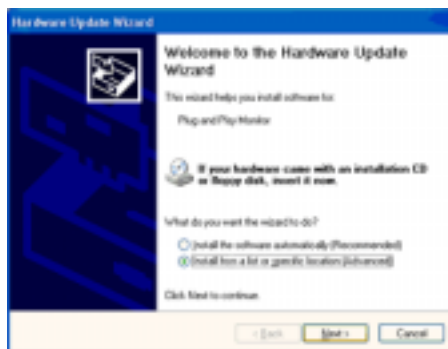
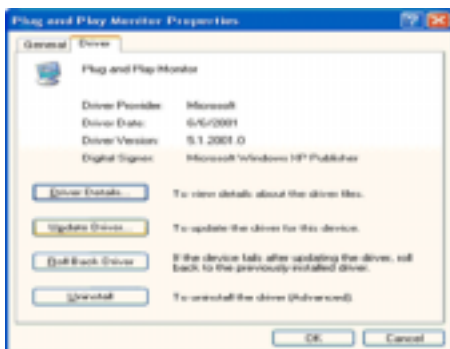
3. Click "Display" icon and choose the "Settings" tab then click "Advanced..".



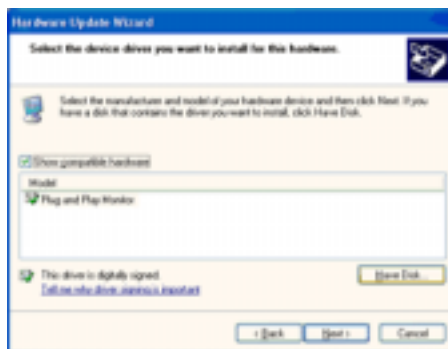
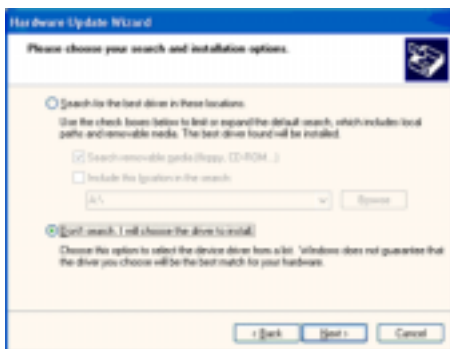
4. Click the **"Properties"** button on the **"Monitor"** tab and select **"Driver"** tab.



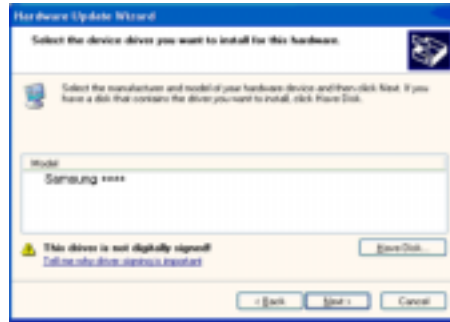
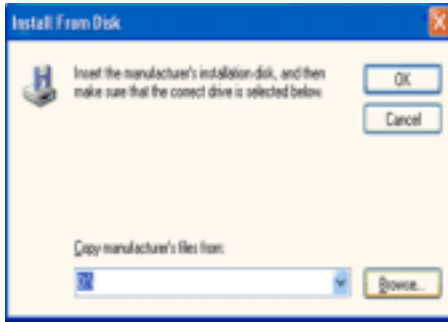
5. Click **"Update Driver.."** and select **"Install from a list or.."** then click **"Next"** button.



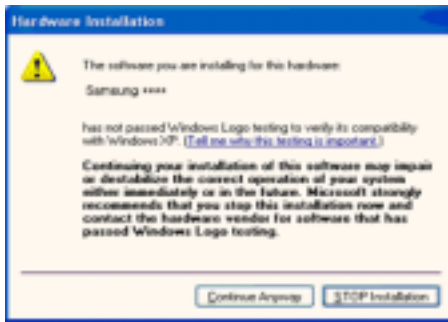
6. Select **"Don't search ,I will.."** then click **"Next"** and then click **"Have disk"**.



7. Click the **"Browse"** button then choose A:(D:\Driver) and choose your monitor model in the model list and click the **"Next"** button.

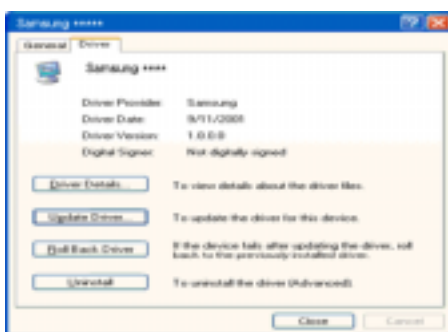
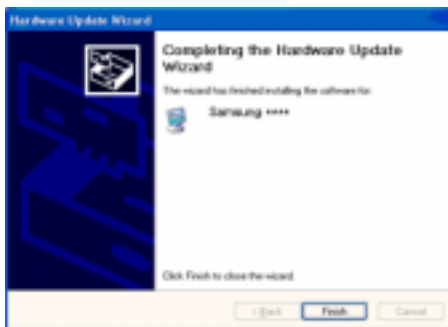


8. If you can see following "Message" window, then click the "Continue Anyway" button. Then click "OK" button.



This monitor driver is under certified MS logo, and this installation doesn't damage your system. The certified driver will be posted on Samsung Monitor homepage.  
<http://www.samsung.com/>

9. Click the "Close" button then click "OK" button continually.



10. Monitor driver installation is completed.

## Microsoft® Windows® 2000 Operating System

When you can see "Digital Signature Not Found" on your monitor, follow these steps.

1. Choose "OK" button on the "Insert disk" window.
2. Click the "Browse" button on the "File Needed" window.
3. Choose A:(D:Driver) then click the "Open" button and then click "OK" button.


How to install

1. Click **"Start"** , **"Setting"** , **"Control Panel"**.
  2. Double click the **"Display"** Icon.
  3. Choose the **"Settings"** tab and then click **"Advanced.."**.
  4. Choose **"Monitor"**.  
Case1: If the "Properties" button is inactive, it means your monitor is properly configured.  
Please stop installation  
Case2: If the "Properties" button is active, click the "Properties" button then follow next steps continually.
  5. Click **"Driver"** and then click on **"Update Driver.."** then click on the "Next" button.
  6. Choose **"Display a list of the known drivers for this device so that I can choose a specific driver"** then click **"Next"** and then click **"Have disk"**.
  7. Click the **"Browse"** button then choose A:(D:\Driver).
  8. Click the **"Open"** button, then click **"OK"** button.
  9. Choose your monitor model and click the **"Next"** button then click **"Next"** button.
  10. Click the **"Finish"** button then the **"Close"** button.
- If you can see the **"Digital Signature Not Found"** window then click the **"Yes"** button.  
And click the **"Finish"** button then the **"Close"** button.
- 

### Microsoft® Windows® Millennium Operating System

1. Click **"Start"** , **"Setting"** , **"Control Panel"**.
  2. Double click **"Display"** icon.
  3. Select the **"Settings"** tab and click **"Advanced Properties"** button.
  4. Select the **"Monitor"** tab.
  5. Click the **"Change"** button in the **"Monitor Type"** area.
  6. Choose **"Specify the location of the driver"**.
  7. Choose **"Display a list of all the driver in a specific location.."** then click **"Next"** button.
  8. Click the **"Have Disk"** button
  9. Specify A:(D:\driver) then click **"OK"** button.
  10. Select **"Show all devices"** and choose the monitor that corresponds to the one you connected to your computer and click **"OK"**.
  11. Continue choosing **"Close"** button and **"OK"** button until you close the Display Properties dialogue box.
- 

### Microsoft® Windows® NT Operating System

1. Click **Start, Settings, Control Panel**, and then double-click **Display** icon.
  2. In Display Registration Information window, click Settings Tab and then click **All Display Modes**.
  3. Select a mode that you wish to use (Resolution, Number of colors and Vertical frequency) and then click **OK**.
  4. Click **Apply** button if you see the screen working normally after clicking **Test**. If the screen is not normal, change to a different mode (lower mode of resolution, colors or frequency).
-  If there is no Mode at **All Display Modes**, select the level of resolution and vertical frequency by referring to the [Preset Timing Modes](#) in the user guide.
- 

### Linux Operating System

To execute X-Window, you need to make the X86Config file, which is a type of system setting file.

1. Press Enter at the first and the second screen after executing the X86Config file.
2. The third screen is for **setting your mouse**.
3. Set a mouse for your computer.
4. The next screen is for **selecting a keyboard**.
5. Set a Keyboard for your computer.
6. The next screen is for **setting your monitor**.
7. First of all, set a **horizontal frequency** for your monitor. (You can enter the frequency directly.)
8. Set a **vertical frequency** for your monitor. (You can enter the frequency directly.)
9. Enter the **model name of your monitor**. This information will not affect the actual execution of X-Window.
10. You have **finished** setting up your monitor.  
**Execute X-Window** after setting other requested hardware.



1. **[MENU]** Use this button to open the on-screen menu and exit from the menu screen or close screen adjustment menu.
2. **[↑/↓]** This button allows you to adjust items in the menu.
3. **[MENU]** Press this button to activate a highlighted menu item.
4. **[AUTO]** Press to self-adjust to the incoming PC signal. The values of fine, coarse and position are adjusted automatically.

**AUTO**



Menu	Description
<b>AUTO</b>	<p>When the '<b>AUTO</b>' button is pressed, the Auto Adjustment screen appears as shown in the animated screen on the center. Auto adjustment allows the monitor to self-adjust to the incoming video signal. The values of fine, coarse and position are adjusted automatically. (Available in analog mode only)</p> <ul style="list-style-type: none"> <li>- If auto adjustment does not work properly, press AUTO button again to adjust picture with more accuracy.</li> <li>- If you change resolution in the control panel, auto function will be executed automatically.</li> </ul>

🔒 Locked



Menu	Description
------	-------------



## Locked

After pushing the "MENU" button more than 5 seconds, OSD function is locked (unlocked).



You can adjust only the brightness and contrast of the monitor with the OSD adjustment locking feature.

## Customized key




### Menu

### Description

#### Customized key

You can customize key assignment for the Custom button according to your preferences.

To view the operating screen displayed when pressing the [  ] button after configuring the customized key for a function, click the name of each function.


( [MagicBright](#) - [MagicColor](#) - [Color Effect](#) )



You can configure the customized key for a required function via **Setup > Customized Key**

## Brightness


























Menu	Description
 <b>Brightness</b>	When OSD is not on the screen, push the button to adjust brightness.

[User Control Buttons](#) | 
 [Direct Functions](#) | 
 [OSD Functions](#)

 <b>Picture</b>	Brightness	Contrast	MagicBright		
 <b>Color</b>	MagicColor	Color Tone	Color Control	Color Effect	Gamma
 <b>Image</b>	Coarse	Fine	Sharpness	H-Position	V-Position
 <b>OSD</b>	Language	H-Position	V-Position	Transparency	Display Time
 <b>Setup</b>	Reset	Customized Key	Off Timer		
 <b>Information</b>					

**Picture** 






































Menu	Description	Play/Stop
<b>Brightness</b>	<p>You can use the on-screen menus to change the brightness according to personal preference.</p> <p><b>Direct Access Feature</b> : When OSD is not on the screen, push the [  ] button to adjust brightness.</p> <p>[MENU →  →  →  →  → MENU]</p>	 
<b>Contrast</b>	<p>You can use the on-screen menus to change the contrast according to personal preference.</p> <p>[MENU →  →  →  →  →  →  → MENU]</p>	 
<b>MagicBright</b>	<p>Push the  button to circle through available preconfigured modes.</p> <p>MagicBright is a new feature providing optimum viewing environment depending on the contents of the image you are watching. Currently seven different modes are available: Custom, Text, Internet, Game, Sport, Movie and Dynamic Contrast. Each mode has its own pre-configured brightness value. You can easily select one of seven settings by simply pressing Customized Key control button.</p> <p><b>1) Custom</b> - Although the values are carefully chosen by our engineers, the pre-configured values may not be comfortable to your eyes depending on your taste.</p> <p>If this is the case, adjust the brightness and contrast by using the OSD menu.</p> <p><b>2) Text</b> - For documentations or works involving heavy text.</p> <p><b>3) Internet</b> - For working with a mixture of images such as texts and graphics.</p> <p><b>4) Game</b> - For watching motion pictures such as a game.</p> <p><b>5) Sport</b> - For watching motion pictures such as a sport.</p> <p><b>6) Movie</b> - For watching motion pictures such as a DVD or Video CD.</p> <p>[MENU →  →  →  →  →  → MENU]</p>	 



## Color





















Menu	Description	Play/Stop
<b>MagicColor</b>	<p>MagicColor is a new technology that Samsung has exclusively developed to improve digital image and to display natural color more clearly without disturbing image quality.</p> <p>1) <b>Off</b> - Returns to the original mode.  2) <b>Demo</b> - The screen before applying MagicColor appears on the right and the screen after applying MagicColor appears on the left.  3) <b>Full</b> - Displays not only vivid natural color but also more realistic natural skin color with clearness.  4) <b>Intelligent</b> - Displays vivid natural color with clearness.</p> <p>[MENU →  →  →  →  →  →  → MENU]</p> <p>The tone of the color can be changed and one of four modes can be selected - Cool, Normal, Warm and Custom.</p>	
<b>Color Tone</b>	<p><b>Cool</b> - Makes whites bluish.  <b>Normal</b> - Keeps whites white.  <b>Warm</b> - Makes whites reddish.  <b>Custom</b> - Select this mode when you want to adjust the image according to your preferences.</p> <p>[MENU →  →  →  →  →  →  → MENU]</p>	
<b>Color Control</b>	<p>Adjusts individual R,G,B color balance.</p> <p>[MENU →  →  →  →  →  →  →  →  → MENU]</p> <p>You can change the overall mood by changing the screen colors.</p> <p><b>Off</b> - This applies an achromatic color to the screen to adjust the screen effects.  The default colors of black and white are</p>	





<b>Color Effect</b>	<b>Grayscale</b> - displayed.	
	<b>Green</b> - This applies the green color effect to a black and white screen.	
	<b>Aqua</b> - Select this mode when you want to adjust the image according to your preferences.	
	<b>Sepia</b> - This applies the Sepia color effect to a black and white screen.	
[MENU →  →  →  →  →  → MENU]		
<b>Gamma</b>	Gamma correction changes the luminance of the colors with intermediate luminance.	
	<ul style="list-style-type: none"> <li>• Mode 1</li> <li>• Mode 2</li> <li>• Mode 3</li> </ul>	
	[MENU →  →  →  →  →  → MENU]	



 Image 











Menu	Description	Play/Stop
<b>Coarse</b>	Removes noise such as vertical stripes. Coarse adjustment may move the screen image area. You may relocate it to the center using the horizontal control menu. (Available in analog mode only)	
	[MENU →  →  →  →  →  → MENU]	
<b>Fine</b>	Removes noise such as horizontal stripes. If the noise persists even after fine tuning, repeat it after adjusting the frequency (clock speed). (Available in analog mode only)	
	[MENU →  →  →  →  →  → MENU]	
<b>Sharpness</b>	Changes the clearance of image.	
	[MENU →  →  →  →  →  → MENU]	

<b>H-Position</b>	<p>Changes the horizontal position of the monitor's entire display. (Available in analog mode only)</p> <p>[MENU →  →  →  →  →  →  → MENU]</p>	 
<b>V-Position</b>	<p>Changes the vertical position of the monitor's entire display. (Available in analog mode only)</p> <p>[MENU →  →  →  →  →  →  → MENU]</p>	 



 OSD 



Menu	Description	Play/Stop
<b>Language</b>	<p>You can choose one of 9 languages. + English, Deutsch, Español, Français, Italiano, Svenska, Русский , Português , Türkçe</p> <p><b>Note:</b>The language chosen affects only the language of the OSD. It has no effect on any software running on the computer.</p> <p>[MENU →  →  →  →  →  → MENU]</p>	 
<b>H-Position</b>	<p>You can change the horizontal position where the OSD menu appears on your monitor.</p> <p>[MENU →  →  →  →  →  → MENU]</p>	 
<b>V-Position</b>	<p>You can change the vertical position where the OSD menu appears on your monitor.</p> <p>[MENU →  →  →  →  →  →  → MENU]</p>	 
<b>Transparency</b>	<p>Change the transparency of the background of the OSD.</p> <p>[MENU →  →  →  →  →  → MENU]</p> <p>The menu will be automatically turned off if no adjustments</p>	 

## Display Time

are made for a certain time period.  
You can set the amount of time the menu will wait before it is turned off.



[MENU → → → → → → → → MENU]



## Setup




Menu	Description	Play/Stop
<b>Reset</b>	<p>Reverts the product settings to factory defaults.</p> <p>• No • Yes</p> <p>[MENU →  →  →  →  →  → MENU]</p>	
<b>Customized Key</b>	<p>You can specify a function which will be activated when the Customized Key() is pressed.</p> <p>[MENU →  →  →  →  →  →  → MENU]</p>	
<b>Off Timer</b>	<p>The monitors will turn off automatically at the specified time.</p> <p>• Off • On</p> <p>[MENU →  →  →  →  →  →  →  →  → MENU]</p>	



## Information



Menu	Description
<b>Information</b>	Shows a video source, display mode on the OSD screen. [MENU →  → MENU]





## Check List



Before calling for assistance, check the information in this section to see if you can remedy any problems yourself. If you do need assistance, please call [the phone number on the Information section](#) or [contact your dealer](#).

Symptom	Check List	Solutions
No images on the screen. I cannot turn on the monitor.	Is the power cord connected properly?	Check the power cord connection and supply.
	Can you see " <b>Check Signal Cable</b> " on the screen?	<p><b>(Connected using the D-sub cable)</b> Check the signal cable connection.</p> <p><b>(Connected using the DVI cable)</b> If you still see an (error) message on the screen when the monitor is connected properly, check to see if the monitor status is set to analog. Press  button to have the monitor double-check the input signal source.</p>
	If the power is on, reboot the computer to see the initial screen (the login screen), which can be seen.	<p>If the initial screen (the login screen) appears, boot the computer in the applicable mode (the safe mode for Windows ME/XP/2000) and then change the frequency of the video card. (Refer to the <a href="#">Preset Timing Modes</a>)</p> <p>Note: If the initial screen (the login screen) does not appear, <a href="#">contact the Service Center or your dealer</a>.</p>
Can you see " <b>Not Optimum Mode</b> ", " <b>Recommended mode 1280 x 1024 60 Hz</b> " on the screen?		<p>You can see this message when the signal from the video card exceeds the maximum resolution and frequency that the monitor can handle properly.</p> <p>Adjust the maximum resolution and frequency that the monitor can handle properly.</p> <p>If the display exceeds SXGA or 75 Hz, a "<b>Not Optimum</b>"</p>

**Mode", "Recommended mode 1280 x 1024 60 Hz"** message is displayed. If the display exceeds 85 Hz, the display will work properly but the **"Not Optimum Mode", "Recommended Mode 1280 x 1024 60 Hz"** message appears for one minute and then disappears.  
Please change to the recommended mode during this one-minute period.

(The message is displayed again if the system is rebooted.)

There is no image on the screen. Is the power indicator on the monitor blinking at 1 second intervals?

The monitor is in PowerSaver mode. press a key on the keyboard to activate the monitor and restore the image on the screen.

If there is still no image, press the '☐' button. Then press any key on the keyboard again to activate the monitor and restore the image on the screen.

Connected using the DVI cable?

You may get a blank screen if you boot the system before you connect the DVI cable, or disconnect and then reconnect the DVI cable while the system is running as certain types of graphic cards do not send out video signals. Connect the DVI cable and then reboot the system.

I cannot see the On Screen Display.

Have you locked the On Screen Display (OSD) Menu to prevent changes?

Unlock the OSD by pressing the MENU button for at least 5 seconds.

The screen shows strange colors or just black and white.

Is the screen displaying only one color as if looking at the screen through a cellophane paper?

Check the signal cable connection. Make sure the video card is fully inserted in its slot.

Have the screen colors become strange after running a program or due to a crash between applications?

Reboot the computer.

Has the video card been set properly?

Set the video card by referring to the video card manual.

The screen suddenly has become unbalanced.

Have you changed the video card or the driver?

Adjust screen image position and size using the OSD.

Have you adjusted the resolution or frequency to the monitor?

Adjust the resolution and frequency at the video card. (Refer to the [Preset Timing Modes](#)).

The screen can be unbalanced due to the cycle of the video card signals. Readjust Position by referring to the OSD.

The screen is out of focus or OSD cannot be adjusted.

Have you adjusted the resolution or frequency on the monitor?

Adjust the resolution and frequency of the video card. (Refer to the [Preset Timing Modes](#)).

LED is blinking but no images on the screen.

Is the frequency properly adjusted when checking the Display Timing on the menu?

Adjust the frequency properly by referring to the video card manual and the [Preset Timing Modes](#).

(The maximum frequency per resolution may differ from product to product.)

There are only 16 colors shown on the screen. The screen colors have changed after changing the video card.	Have the Windows colors been set properly?  Has the video card been set properly?	Windows ME/2000/XP: Set the colors properly at the <b>Control Panel → Display → Settings</b> .  Set the video card by referring to the video card manual.
There is a message that reads "Unrecognized monitor, Plug & Play (VESA DDC) monitor found".	Have you installed the monitor driver?  See the video card manual to see if the Plug & Play (VESA DDC) function can be supported.	Install the monitor driver according to the <a href="#">Driver Installation Instructions</a> .  Install the monitor driver according to the <a href="#">Driver Installation Instructions</a> .

**Check the following items if there is trouble with the monitor.**

1. Check if the power cord and the video cables are properly connected to the computer.
2. Check if the computer beeps more than 3 times when booting.  
(If it does, request an a service for the main board of the computer.)
3. If you installed a new video card or if you assembled the PC, check if the installed the adapter (video) driver and the monitor driver.
4. Check if the scanning ratio of the video screen is set at 56 Hz ~ 75 Hz.  
(Do not exceed 75 Hz when using the maximum resolution.)
5. If you have problems in installing the adapter (video) driver, boot the computer in Safe Mode, remove the Display Adapter at the "**Control Panel→System→Device Administrator**" and then reboot the computer to reinstall the adapter (video) driver.



If problems repeatedly occur, [contact an authorized service center](#).

**Q & A**

Question	Answer
How can I change the frequency?	The frequency can be changed by reconfiguring the video card.  Note that video card support can vary, depending on the version of the driver used. (Refer to the computer or the video card manual for details.)
How can I adjust the resolution?	Windows ME/XP/2000 : Set the resolution at the Control Panel→Display→Settings.  * Contact the video card manufacturer for details.
How can I set the Power Saving function?	Windows ME/XP/2000 : Set the function at BIOS-SETUP of the computer or the screen saver. (Refer to Windows/Computer Manual).
How can I clean the outer case/LCD Panel?	Disconnect the power cord and then clean the monitor with a soft cloth, using either a cleaning solution or plain water.  Do not leave any detergent or scratches on the case. Do not let any water enter the monitor.

**Self-Test Feature Check**

Your monitor provides a self test feature that allows you to check whether your monitor is functioning properly.

---

#### Self-Test Feature Check

1. Turn off both your computer and the monitor.
2. Unplug the video cable from the back of the computer.
3. Turn on the monitor.  
If the monitor is functioning properly, you will see a box in the illustration below.



This box appears during normal operation if the video cable becomes disconnected or damaged.

4. Turn off your monitor and reconnect the video cable; then turn on both your computer and the monitor.  
If your monitor screen remains blank after using the previous procedure, check your video controller and computer system; your monitor is functioning properly.
- 

#### Warning Messages

If there is something wrong with the input signal, a message appears on the screen or the screen goes blank although the power indicator LED is still on. The message may indicate that the monitor is out of scan range or that you need to check the signal cable.



#### Environment

**The location and the position of the monitor may influence the quality and other features of the monitor.**

1. if there are any sub woofer speakers near the monitor, unplug and relocate the woofer to another room.
  2. Remove all electronic devices such as radios, fans, clocks and telephones that are within 3 feet (one meter) of the monitor.
- 

#### Useful Tips

- A monitor recreates visual signals received from the computer. Therefore, if there is trouble with the computer or the video card, this can cause the monitor to become blank, have poor coloring, noise, Video mode not supported, etc. In this case, first check the source of the problem, and then contact the Service Center or your dealer.
- **Judging the monitor's working condition**  
If there is no image on the screen or a **"Not Optimum Mode", "Recommended Mode 1280 x 1024 60 Hz"** message comes up, disconnect the cable from the computer while the monitor is still powered on.
  - If there is a message coming up on the screen or if the screen goes white, this means the monitor is in working condition.
  - In this case, check the computer for trouble.



## General

### General

Model Name SyncMaster 723N

### LCD Panel

Size 17 inch (43 cm)

Display area 337.920 mm (H) x 270.336 mm (V)

Pixel Pitch 0.264 mm (H) x 0.264 mm (V)

### Synchronization

Horizontal 30 ~ 81 k Hz

Vertical 56 ~ 75 Hz

### Display Color

16.7M

### Resolution

Optimum resolution 1280 x 1024@60 Hz

Maximum resolution 1280 x 1024@75 Hz

### Input Signal, Terminated

RGB Analog

0.7 Vp-p  $\pm$  5 %

Separate H/V sync, Composite, SOG

TTL level (V high  $\geq$  2.0 V, V low  $\leq$  0.8 V)

### Maximum Pixel Clock

135 MHz

### Power Supply

AC 100 - 240 V~ (+/- 10 %), 50/60 Hz  $\pm$  3 Hz

### Signal Cable

15pin - to - 15pin D-sub cable, Detachable

#### Dimensions (WxHxD)/ Weight (Without Stand)

371.9 x 308.7 x 64.7 mm (with Basic Stand) / 3.2 kg

#### Dimensions (WxHxD)/ Weight (With Stand)

371.9 x 385.5 x 199.9 mm (with Basic Stand) / 3.5 kg

#### VESA Mounting Interface

75 mm x 75 mm

#### Environmental considerations

Operating Temperature: 50 °F ~ 104 °F (10 °C ~ 40 °C)  
Humidity: 10% ~ 80%, non-condensing

Storage Temperature: -4 °F ~ 113 °F (-20 °C ~ 45 °C)  
Humidity: 5% ~ 95%, non-condensing

#### Plug and Play Capability

This monitor can be installed on any Plug & Play compatible system. The interaction of the monitor and the computer systems will provide the best operating conditions and monitor settings. In most cases, the monitor installation will proceed automatically, unless the user wishes to select alternate settings.

#### Dot Acceptable

TFT LCD panels manufactured by using advanced semiconductor technology with precision of 1ppm (one millionth) above are used for this product. But the pixels of RED, GREEN, BLUE and WHITE color appear to be bright sometimes or some black pixels may be seen. This is not from bad quality and you can use it without any problems.

- For example, the number of TFT LCD sub pixels contained in this product are 3,932,160.

**Note: Design and specifications are subject to change without prior notice.**

#### Class B Equipment (Information Communication equipment for residential use)

This product complies with the Electromagnetic Compatibility Directives for residential use and can be used in all areas including common residential areas.

(Class B equipment emits less electromagnetic waves than Class A equipment.)

General | **PowerSaver** | Preset Timing Modes

### PowerSaver

This monitor has a built-in power management system called PowerSaver. This system saves energy by switching your monitor to low-power mode when it has not been used for a certain amount of time. The monitor automatically returns to normal operation when you press a key on the keyboard. For energy conservation, turn your monitor OFF when it is not needed, or when leaving it unattended for long periods. The PowerSaver system operates with a VESA DPMS compliant video card installed in your computer. Use the software utility installed on your computer to set up this feature.

State	Normal Operation	Power saving mode	Power off EPA/ENERGY 2000 (Power button)
Power Indicator	Blue	Blue, Blinking	Black
Power Consumption	31 W	Less than 1 W	Less than 1 W



This monitor is EPA ENERGY STAR<sup>®</sup> compliant and ENERGY2000 compliant when used with a computer equipped with VESA DPMS functionality.

As an ENERGY STAR<sup>®</sup> Partner, SAMSUNG has determined that this product meets the ENERGY STAR<sup>®</sup> guidelines for energy efficiency.

## ■ Preset Timing Modes

If the signal transferred from the computer is the same as the following Preset Timing Modes, the screen will be adjusted automatically. However, if the signal differs, the screen may go blank while the power LED is on. Refer to the video card manual and adjust the screen as follows.

**Table 1. Preset Timing Modes**

Display Mode	Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Pixel Clock (MHz)	Sync Polarity (H/V)
IBM, 640 x 350	31,469	70,086	25,175	+/-
IBM, 640 x 480	31,469	59,940	25,175	-/-
IBM, 720 x 400	31,469	70,087	28,322	-/+
MAC, 640 x 480	35,000	66,667	30,240	-/-
MAC, 832 x 624	49,726	74,551	57,284	-/-
MAC, 1152 x 870	68,681	75,062	100,00	-/-
VESA, 640 x 480	37,861	72,809	31,500	-/-
VESA, 640 x 480	37,500	75,000	31,500	-/-
VESA, 800 x 600	35,156	56,250	36,000	+/+
VESA, 800 x 600	37,879	60,317	40,000	+/+
VESA, 800 x 600	48,077	72,188	50,000	+/+
VESA, 800 x 600	46,875	75,000	49,500	+/+
VESA, 1024 x 768	48,363	60,004	65,000	-/-
VESA, 1024 x 768	56,476	70,069	75,000	-/-
VESA, 1024 x 768	60,023	75,029	78,750	+/+
VESA, 1152 x 864	67,500	75,000	108,000	+/+
VESA, 1280 x 960	60,000	60,000	108,000	+/+
VESA, 1280 x 1024	63,981	60,020	108,000	+/+
VESA, 1280 x 1024	79,976	75,025	135,000	+/+

### Horizontal Frequency

The time to scan one line connecting the right edge to the left edge of the screen horizontally is called the Horizontal Cycle and the inverse number of the Horizontal Cycle is called the Horizontal Frequency. Unit: kHz



### Vertical Frequency

Like a fluorescent lamp, the screen has to repeat the same image many times per second to display an image to the user. The frequency of this repetition is called the Vertical Frequency or Refresh Rate. Unit: Hz

Like a fluorescent lamp, the screen has to repeat the same image many times per second to display an image to the user. The frequency of this repetition is called the Vertical Frequency or Refresh Rate. Unit: Hz





- Safety Instructions
- Introduction
- Setup
- Adjusting Your Monitor
- Troubleshooting
- Specifications
- Information



## Contact SAMSUNG WORLDWIDE



If you have any questions or comments relating to Samsung products, please contact the SAMSUNG customer care center.

### North America

U.S.A	1-800-SAMSUNG (726-7864)	<a href="http://www.samsung.com">http://www.samsung.com</a>
CANADA	1-800-SAMSUNG (726-7864)	<a href="http://www.samsung.com/ca">http://www.samsung.com/ca</a>
MEXICO	01-800-SAMSUNG (726-7864)	<a href="http://www.samsung.com">http://www.samsung.com</a>

### Latin America

ARGENTINE	0800-333-3733	<a href="http://www.samsung.com/ar">http://www.samsung.com/ar</a>
BRAZIL	0800-124-421 4004-0000	<a href="http://www.samsung.com">http://www.samsung.com</a>
CHILE	800-SAMSUNG(726-7864)	<a href="http://www.samsung.com/cl">http://www.samsung.com/cl</a>
COLOMBIA	01-8000112112	<a href="http://www.samsung.com/co">http://www.samsung.com/co</a>
COSTA RICA	0-800-507-7267	<a href="http://www.samsung.com/latin">http://www.samsung.com/latin</a>
ECUADOR	1-800-10-7267	<a href="http://www.samsung.com/latin">http://www.samsung.com/latin</a>
EL SALVADOR	800-6225	<a href="http://www.samsung.com/latin">http://www.samsung.com/latin</a>
GUATEMALA	1-800-299-0013	<a href="http://www.samsung.com/latin">http://www.samsung.com/latin</a>
HONDURAS	800-7919267	
JAMAICA	1-800-234-7267	<a href="http://www.samsung.com/latin">http://www.samsung.com/latin</a>
NICARAGUA	00-1800-5077267	
PANAMA	800-7267	<a href="http://www.samsung.com/latin">http://www.samsung.com/latin</a>
PUERTO RICO	1-800-682-3180	<a href="http://www.samsung.com/latin">http://www.samsung.com/latin</a>
REP. DOMINICA	1-800-751-2676	<a href="http://www.samsung.com/latin">http://www.samsung.com/latin</a>
TRINIDAD & TOBAGO	1-800-SAMSUNG(726-7864)	<a href="http://www.samsung.com/latin">http://www.samsung.com/latin</a>

VENEZUELA

0-800-100-5303

<http://www.samsung.com/latin>**Europe**

AUSTRIA	0800-SAMSUNG(726-7864)	<a href="http://www.samsung.com/at">http://www.samsung.com/at</a>
BELGIUM	0032 (0)2 201 24 18	<a href="http://www.samsung.com/be">http://www.samsung.com/be</a>
CZECH REPUBLIC	844 000 844	<a href="http://www.samsung.com/cz">http://www.samsung.com/cz</a>
Distributor pro Českou republiku: Samsung Zrt., česká organizační složka Vyskočilova 4, 14000 Praha 4		
DENMARK	70 70 19 70	<a href="http://www.samsung.com/dk">http://www.samsung.com/dk</a>
EIRE	0818 717 100	<a href="http://www.samsung.com/ie">http://www.samsung.com/ie</a>
FINLAND	030-6227 515	<a href="http://www.samsung.com/fi">http://www.samsung.com/fi</a>
FRANCE	3260 SAMSUNG(€ 0,15/Min) 08 25 08 65 65 (€ 0,15/Min)	<a href="http://www.samsung.com">http://www.samsung.com</a>
GERMANY	01805 - SAMSUNG(726-7864) (€ 0,14/Min)	<a href="http://www.samsung.com">http://www.samsung.com</a>
HUNGARY	06-80-SAMSUNG(726-7864)	<a href="http://www.samsung.com">http://www.samsung.com</a>
ITALIA	800-SAMSUNG(726-7864)	<a href="http://www.samsung.com">http://www.samsung.com</a>
LUXEMBURG	0035 (0)2 261 03 710	<a href="http://www.samsung.com/be">http://www.samsung.com/be</a>
NETHERLANDS	0900 SAMSUNG(726-7864) (€ 0,10/Min)	<a href="http://www.samsung.com/nl">http://www.samsung.com/nl</a>
NORWAY	815-56 480	<a href="http://www.samsung.com/no">http://www.samsung.com/no</a>
POLAND	0 801 801 881 022-607-93-33	<a href="http://www.samsung.com/pl">http://www.samsung.com/pl</a>
PORTUGAL	80820-SAMSUNG(726-7864)	<a href="http://www.samsung.com/pt">http://www.samsung.com/pt</a>
SLOVAKIA	0800-SAMSUNG (726-7864)	<a href="http://www.samsung.com/sk">http://www.samsung.com/sk</a>
SPAIN	902 10 11 30	<a href="http://www.samsung.com">http://www.samsung.com</a>
SWEDEN	0771-400 200	<a href="http://www.samsung.com/se">http://www.samsung.com/se</a>
SWITZERLAND	0800-SAMSUNG(726-7864)	<a href="http://www.samsung.com/ch">http://www.samsung.com/ch</a>
U.K	0845 SAMSUNG (7267864)	<a href="http://www.samsung.com">http://www.samsung.com</a>

**CIS**

ESTONIA	800-7267	<a href="http://www.samsung.ee">http://www.samsung.ee</a>
LATVIA	800-7267	<a href="http://www.samsung.com/lv">http://www.samsung.com/lv</a>
LITHUANIA	8-800-77777	<a href="http://www.samsung.lt">http://www.samsung.lt</a>
KAZAKHSTAN	8-10-800-500-55-500	<a href="http://www.samsung.kz">http://www.samsung.kz</a>
KYRGYZSTAN	00-800-500-55-500	
RUSSIA	8-800-555-55-55	<a href="http://www.samsung.ru">http://www.samsung.ru</a>
TADJIKISTAN	8-10-800-500-55-500	
UKRAINE	8-800-502-0000	<a href="http://www.samsung.com">http://www.samsung.com</a>
UZBEKISTAN	8-10-800-500-55-500	<a href="http://www.samsung.uz">http://www.samsung.uz</a>

### Asia Pacific

AUSTRALIA	1300 362 603	<a href="http://www.samsung.com">http://www.samsung.com</a>
CHINA	800-810-5858	<a href="http://www.samsung.com">http://www.samsung.com</a>
HONG KONG	010- 6475 1880	<a href="http://www.samsung.com/hk">http://www.samsung.com/hk</a>
INDIA	3698-4698	<a href="http://www.samsung.com">http://www.samsung.com</a>
INDONESIA	3030 8282	<a href="http://www.samsung.com">http://www.samsung.com</a>
JAPAN	1800 110011	<a href="http://www.samsung.com">http://www.samsung.com</a>
MALAYSIA	0800-112-8888	<a href="http://www.samsung.com">http://www.samsung.com</a>
NEW ZEALAND	0120-327-527	<a href="http://www.samsung.com/jp">http://www.samsung.com/jp</a>
PHILIPPINES	1800-88-9999	<a href="http://www.samsung.com/my">http://www.samsung.com/my</a>
SINGAPORE	0800 SAMSUNG(726-7864)	<a href="http://www.samsung.com/nz">http://www.samsung.com/nz</a>
THAILAND	1800-10-SAMSUNG (726-7864)	<a href="http://www.samsung.com/ph">http://www.samsung.com/ph</a>
TAIWAN	1800-SAMSUNG (726-7864)	<a href="http://www.samsung.com">http://www.samsung.com</a>
VIETNAM	1800-29-3232, 02-689-3232	<a href="http://www.samsung.com">http://www.samsung.com</a>
	0800-329-999	<a href="http://www.samsung.com/tw">http://www.samsung.com/tw</a>
	1 800 588 889	<a href="http://www.samsung.com">http://www.samsung.com</a>

### Middle East & Africa

SOUTH AFRICA	0860-SAMSUNG(726-7864)	<a href="http://www.samsung.com">http://www.samsung.com</a>
TURKEY	444 77 11	<a href="http://www.samsung.com">http://www.samsung.com</a>
U.A.E	800-SAMSUNG(726-7864) 8000-4726	<a href="http://www.samsung.com">http://www.samsung.com</a>

[Contact SAMSUNG WORLDWIDE](#) | [Terms](#) | [For Better Display](#) | [Authority](#) | [Correct Disposal](#)

## Terms

### • Dot Pitch

The image on a monitor is composed of red, green and blue dots. The closer the dots, the higher the resolution. The distance between two dots of the same color is called the 'Dot Pitch'. Unit: mm

### • Vertical Frequency

The screen must be redrawn several times per second in order to create and display an image for the user. The frequency of this repetition per second is called Vertical Frequency or Refresh Rate. Unit: Hz

Example : If the same light repeats itself 60 times per second, this is regarded as 60 Hz.

### • Horizontal Frequency

The time to scan one line connecting the right edge to the left edge of the screen horizontally is called Horizontal Cycle. The inverse number of the Horizontal Cycle is called Horizontal Frequency. Unit: kHz

### • Interlace and Non-Interlace Methods

Showing the horizontal lines of the screen from the top to the bottom in order is called the Non-Interlace method while showing odd lines and then even lines in turn is called the Interlace method. The Non-Interlace method is used for the majority of monitors to ensure a clear image. The Interlace method is the same as that used in TVs.

## Plug & Play

This is a function that provides the best quality screen for the user by allowing the computer and the monitor to exchange information automatically. This monitor follows the international standard VESA DDC for the Plug & Play function.

## Resolution

The number of horizontal and vertical dots used to compose the screen image is called 'resolution'. This number shows the accuracy of the display. High resolution is good for performing multiple tasks as more image information can be shown on the screen.

Example :If the resolution is 1280 x 1024 , this means the screen is composed of 1280 horizontal dots (horizontal resolution) and 1024 vertical lines (vertical resolution).

Contact SAMSUNG WORLDWIDE | Terms | For Better Display | Authority | Correct Disposal |

## For Better Display

1. Adjust computer resolution and screen injection rate (refresh rate) on computer as described below to enjoy the best quality of picture. You can have an uneven quality of picture in the screen if the best quality of picture is not provided in TFT-LCD.
  - Resolution: 1280 x 1024
  - Vertical frequency (refresh rate): 60 Hz
2. TFT LCD panel manufactured by using advanced semiconductor technology with precision of 1ppm (one millionth) above is used for this product. But the pixels of RED, GREEN, BLUE and WHITE color seem to be bright sometimes or some of black pixels could be seen. This is not from bad quality and you can use it without uneasiness.
  - For example, the number of TFT LCD sub pixels that is contained in this product are 3,932,160.
3. When you clean the monitor and the panel outside, please apply the recommended small amount of cleaner by using soft and dry cloth and polish it. Let LCD area not to be forced but to be scrubbed out softly.  
If excessive force is applied, you can have a stain on it.
4. If you are not satisfied with the quality of the picture, you can get better quality of the picture by executing "auto adjustment function" in display screen that is appeared as window termination button is pressed.  
If there's still noise after automatic adjustment, use FINE/COARSE adjustment function.
5. If you view a fixed screen for an extended period of time, residual image or blurriness may appear.  
Change the mode to energy save or set a screensaver to move the picture when you need to be away from the monitor for an extended period of time.

Contact SAMSUNG WORLDWIDE | Terms | For Better Display | Authority | Correct Disposal |

## Authority

**Information in this document is subject to change without notice.**

**© 2008 Samsung Electronics Co., Ltd. All rights reserved.**

Reproduction in any manner whatsoever without the written permission of Samsung Electronics Co., Ltd. is strictly forbidden.

Samsung Electronics Co., Ltd. shall not be liable for errors contained herein or for incidental or consequential damages in connection with the furnishing, performance, or use of this material.

*Samsung* is the registered trademark of Samsung Electronics Co., Ltd.; *Microsoft*, *Windows* and *Windows NT* are registered trademarks of Microsoft Corporation; *VESA*, *DPMS* and *DDC* are registered trademarks of Video Electronics Standard Association; the *ENERGY STAR*® name and logo are registered trademarks of the U.S. Environmental Protection Agency (EPA). As an ENERGY STAR® Partner, Samsung Electronics Co., Ltd. has determined that this product meets

the ENERGY STAR® guidelines for energy efficiency. All other product names mentioned herein may be the trademarks or registered trademarks of their respective owners.

**RoHS Verified:**

The RoHS directive 2002/95/EC bans using the 6 substances listed below with electric and electronic equipment.

- Lead(Pb), Cadmium(Cd), Mercury(Hg), Chromium VI(Cr VI), Polybrominated Biphenyls(PBB), Polybrominated Diphenyl Ethers(PBDE)

This certification will contribute to the protection of health and the environmentally sound recovery and disposal of electric and electronic waste equipment.

## PRODUCT INFORMATION (Image Retention Free)

LCD Monitors and TVs may have image retention when switching from one image to another especially after displaying a stationary image for a long time. This guide is to demonstrate correct usage of LCD products in order to protect them from Image retention.

### • Warranty

Warranty does not cover any damage caused by image retention. Burn-in is not covered by the warranty.

### • What is Image retention ?

During normal operation of a LCD panel, pixel image retention doesn't occur. However, if the same image is displayed for a long time, a slight difference in electric charge accumulates between the two electrodes which encase the liquid crystal. This may cause the liquid crystal to build up in a certain areas of the display. Thus, the previous image is retained when switching to a new video image. All display products, including LCD, are subject to image retention. This is not a product defect.

Please follow the suggestions below to protect your LCD from image retention

### • Power Off, Screen Saver, or Power Save Mode

Ex)

- Turn the power off when using a stationary pattern.
  - Turn the power off for 4 hours after 20 hours in use
  - Turn the power off for 2 hours after 12 hours in use
- Use a Screen saver if possible
  - Screen saver in one color or a moving image is recommended.
- Set the Monitor to power off with the PC Display Properties Power Scheme.

### • Suggestions for specific applications

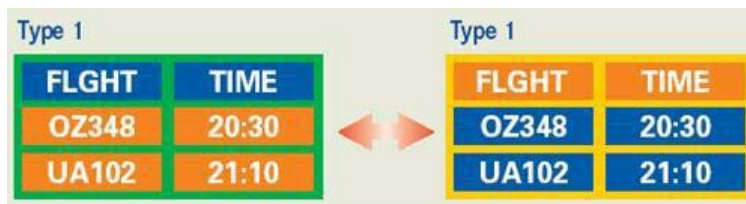
Ex) Airports, Transit Stations, Stock Markets, Banks, and Controlling Systems  
We recommend that you follow set up of your display system program as below:

### • Display Information together with Logo or Moving image cycle.

Ex) Cycle : Display Information for 1 hour followed by a Display Logo or moving image for 1 minute.

### • Change the Color Information periodically (Use 2 different colors).

Ex) Rotate the Color Information with 2 colors every 30 minutes.



Avoid using a combination of characters and background color with large difference in luminance.

Avoid using Grey colors, which can cause Image retention easily.

- Avoid: Colors with big difference in luminance (Black & White, Grey)

Ex)



- Recommended settings: Bright colors with little difference in luminance
  - Change the characters color and background color every 30 minutes

Ex)



- Every 30 minutes, change the characters with movement.

Ex)

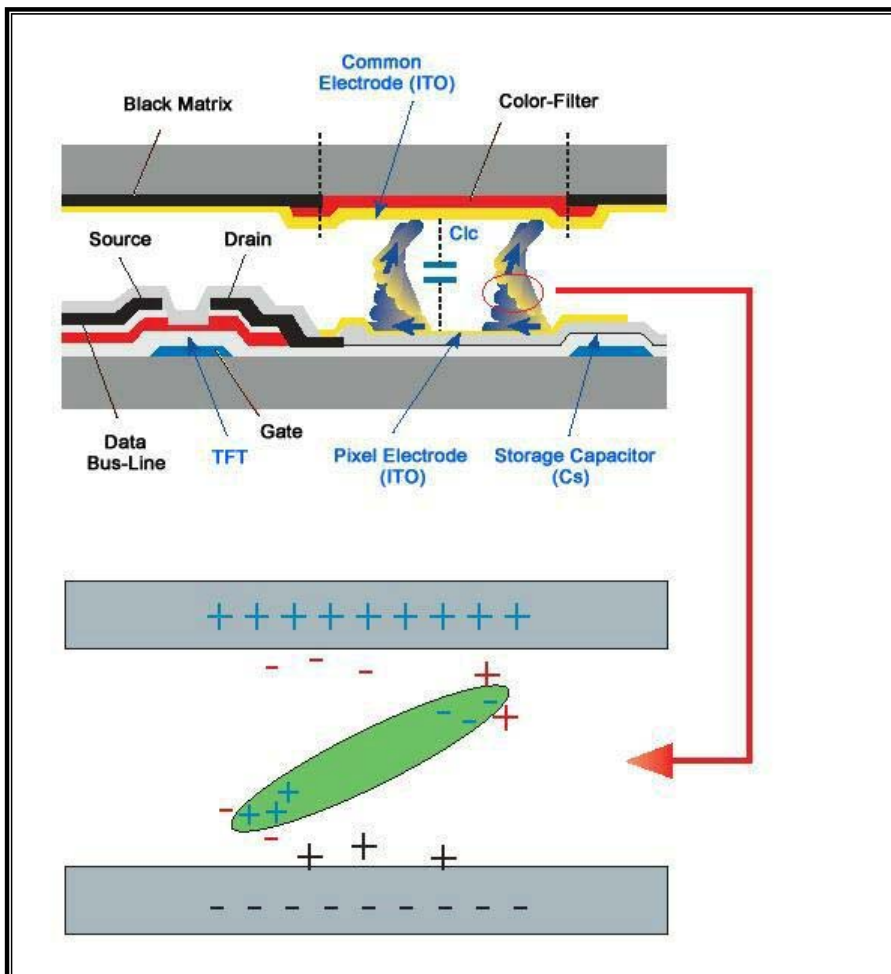


- The best way to protect your monitor from Image retention is to set your PC or System to operate a Screen Saver program when you are not using it.

Image retention may not occur when a LCD panel is operated under normal conditions.

Normal conditions are defined as continuously changing video patterns. When the LCD panel is operated for a long time with a fixed pattern (-over 12 hours-), there may be slight difference in voltage between electrodes that work the liquid crystal (LC) in a pixel. The voltage difference between electrodes increases with time, forcing the liquid crystal to lean. When this occurs, the previous image may be seen when the pattern is changed.

To prevent this, the accumulated voltage difference must be decreased.



- Our LCD Monitor satisfies ISO13406-2 Pixel fault Class II

## Correct Disposal of This Product (Waste Electrical & Electronic Equipment) - Europe only

---



**(Applicable in the European Union and other European countries with separate collection systems)**

This marking shown on the product or its literature, indicates that it should not be disposed with other household wastes at the end of its working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this item for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial wastes for disposal.