SyncMaster 173VT / 710VT

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Regulatory

PDF Document

Adobe Acrobat
Reader Installation

MagicBright

Natural Color

English > Main > Index

Safety Instructions

▶ Notational
▶ Power
▶ Installation
▶ Cleaning
▶ Others

Please read the following safety instructions as they are designed to prevent damage to property and harm to the user.

Warning / Caution

⚠ Failure to follow directions noted by this symbol could result in bodily harm or damage to equipment.

Notational Conventions

🚫 Prohibited

❗ Important to read and understand at all times

🚫 Do not disassemble

Disconnect the plug from the outlet

🚫 Do not touch

⏚ Grounding to prevent an electric shock

Safety Instructions

► Notational
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► Cleaning
► Others

When not used for an extended period of time, set your computer to DPMS.
If using a screen saver, set it to the active screen mode.

Shortcut to Anti-Afterimage Instructions ▶

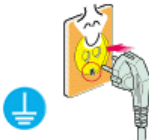🔴 **Do not use a damaged or loose plug.**

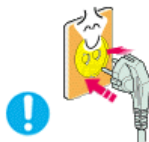- This may cause an electric shock or fire.

🔴 **Do not pull the plug out by the wire nor touch the plug with wet hands.**

- This may cause an electric shock or fire.

🔴 **Use only a properly grounded plug and receptacle.**

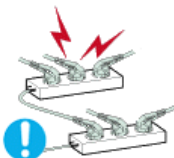- An improper ground may cause electric shock or equipment damage.

🔴 **Insert the power plug firmly so that it does not come loose.**

- A bad connection may cause fire.

🔴 **Do not excessively bend the plug and wire nor place heavy objects upon them, which could cause damage.**

- This may cause an electric shock or fire.

🔴 **Do not connect too many extension cords or plugs to an outlet.**

- This may cause fire.

Safety Instructions

▶ Notational
▶ Power
▶ Installation
▶ Cleaning
▶ Others

Be sure to contact an authorized Service Center, when installing your monitor in a location with the heavy dust, high or low temperatures, high humidity, chemical substance and where it operates for 24 hours such as the airport, the train station or etc.

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

Put your monitor in a location with low humidity and a minimum of dust.

- Failure to do so may cause an electric shock or fire inside the monitor.

Do not drop the monitor when moving it.

- This may cause damage to the product or human body.

Install the monitor base in a showcase or shelf so that the end of the base does not protrude from the showcase or shelf.

- Dropping the product may cause damage to the product or personal injury.

Do not place the product on an unstable or small surface area.

- Place the product on an even, stable surface, as the product may fall and cause harm to someone walking by, specifically children.

Do not place the product on the floor.

- Someone, specifically children could trip over it.

Keep any flammable objects such as candles, insecticides or cigarettes away from the product.

- Otherwise, this may cause a fire.

Keep any heating devices away from the power cable.

- A melted coating may lead to electric shock or fire.

Do not install the product in places with poor ventilation, for instance, a bookshelf, closet, etc.

- Any increase in internal temperature may cause fire.

Set down the monitor carefully.

- The monitor could be damaged or broken.

Do not place the monitor face down.

- The TFT-LCD surface may be damaged.

Installing a wall bracket must be done by a qualified professional.

- Installation by unqualified personnel may result in injury.
- Always use the mounting device specified in the owner's manual.

When installing the product, make sure to keep it away from the wall (more than 10cm/4inch) for ventilation purposes.

- Poor ventilation may cause an increase in the internal temperature of the product, resulting in a shortened component life and degraded performance.

Safety Instructions

▶ Notational
▶ Power
▶ Installation
▶ Cleaning
▶ Others

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

🔴 **Do not spray water or detergent directly on the monitor.**

- This may cause damage, electric shock or fire.

🔴 **Use the recommended detergent with a smooth cloth.**

🔴 **If the connector between the plug and the pin is dusty or dirty, clean it properly with a dry cloth.**

- A dirty connector may cause an electric shock or fire.

🔴 **Make sure to unplug the power cord before cleaning the product.**

- Otherwise, this may cause electric shock or fire.

🔴 **Unplug the power cord from the power outlet and wipe the product using a soft, dry cloth.**

- Do not use any chemicals such as wax, benzene, alcohol, thinners, insecticide, air freshener, lubricant or detergent.

🔴 **Contact the Service Center or Customer Center for interior cleaning once a year.**

- Keep the product's interior clean. Dust which has accumulated in the interior over an extended period of time may cause malfunction or fire.

🔴 **Do not remove cover (or back).**

- This may cause an electric shock or fire.
- Refer servicing to qualified service personnel.

🔴 **If your monitor does not operate normally - in particular, if there are any unusual sounds or smells coming from it - unplug it immediately and contact an authorized dealer or service.**

- This may cause an electric shock or fire.

🔴 **Keep the product away from places exposed to oil, smoke or moisture; do not install inside a vehicle.**

- This may cause malfunction, an electric shock or fire.
- Especially avoid operating the monitor near water or outdoors where it could be exposed to snow or rain.

🔴 **If the monitor is dropped or the casing is damaged, turn the monitor off and unplug the power cord. Then contact the Service Center .**

- The monitor may malfunction, causing an electric shock or fire.

🔴 **Disconnect the plug from the outlet during storms or lightening or if it is not used for a long period of time.**

- Failure to do so may cause an electric shock or fire.

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

- This may cause a breakdown, electric shock or fire due to damage to the cable.
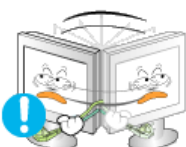
🔴 **Do not move the monitor right or left by pulling only the wire or the signal cable.**

- This may cause a breakdown, electric shock or fire due to damage to the cable.

🔴 **Do not cover the vents on the monitor cabinet.**

- Bad ventilation may cause a breakdown or fire.

🔴 **Do not place water containers, chemical products or small metal objects on the monitor.**

- This may cause malfunction, an electric shock or fire.
- If a foreign substance enters the monitor, unplug the power cord and contact the Service Center.

🔴 **Keep the product away from combustible chemical sprays or inflammable substances.**

- This may cause an explosion or fire.

🔴 **Never insert anything metallic into the monitor openings.**

- This may cause an electric shock, fire or injury.

🔴 **Do not insert metal objects such as chopsticks, wire and gimlet or inflammable objects such as paper and match into the vent, headphone port or AV ports.**

- It may cause a fire or an electric shock. If an alien substances or water flows into the product, turn the product off, unplug the power connector from the wall outlet and contact Service Center.

🔴 **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 moving picture when you need to be away from the monitor for an extended period of time.

🔴 **Adjust the resolution and frequency to the levels appropriate for the model.**

- Inappropriate resolution may cause undesirable picture quality.

  17 inch (43 cm) - 1280 X 1024

🔴 **Watching the monitor continuously at a too close angle may result in eyesight damage.**

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

Do not install the product on an unstable, uneven surface or a location prone to vibrations.

- Dropping the product may cause damage to the product or personal injury. Using the product in a location prone to vibrations may shorten the lifetime of the product or may catch fire.

When moving the monitor, turn off and unplug the power cord. Make sure that all cables, including the antenna cable and cables connecting to other devices, are disconnected before moving the monitor.

- Failure to disconnect cables may damage it and lead to fire or an electric shock.

Place the product out of children's reach, as they could damage it by hanging onto it.

- A falling product could cause physical damage even death.

When not using the product for an extended time period, keep the product unplugged.

- Otherwise, this may cause heat emission from the accumulated dirt or degraded insulation, leading to electric shock or fire.

Do not place children's favorite objects (or anything else that may be tempting) on the product.

- Children may try to climb on the product to retrieve an object. The product could fall, causing physical damage or even death.

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.

English > Main > Introduction > Unpacking

Introduction

▶ Unpacking
▶ Front
▶ Rear

Please make sure the following items are included with your monitor. If any items are missing, contact your dealer.

Signal Cable(15 pin D-Sub)

Power Cord
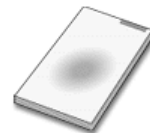
Monitor

User's Guide and Natural Color/
Driver Installation CD

Warranty Card
(Not available in all locations)

Quick Setup Guide

Introduction

▶ Unpacking
▶ Front
▶ Rear

1. Power button	Use this button for turn the monitor on and off.	
2. Power indicator	This light glows green during normal operation, and blinks green once as the monitor saves your adjustments.	
3. Auto/Exit button	Use this button for auto adjustment direct access./Use this button for Exit the active menu or the OSD.	
4. Menu button	Use this button for open the OSD and activate a highlighted menu item.	
5. MagicBright button	MagicBright™ is a new feature providing optimum viewing environment depending on the contents of the image you are watching. Currently four different modes are available: User Adjusted, Text, Internet, and Entertain. Each mode has its own pre-configured brightness value. You can easily select one of four settings by simply pressing MagicBright™ control button.	

    1) User Adjusted
      Although the values are carefully chosen by our engineers, the pre-configured values may not be comfortable to your eyes depending on your taste.
      If this is the case, adjust the brightness and contrast by using the OSD menu.

    2) Text : Normal brightness
      For documentations or works involving heavy text.

    3) Internet : Medium brightness
      For working with a mixture of images such as text and graphics.

    4) Entertain : High brightness
      For watching motion pictures such as a DVD or VCD.

6. Adjust buttons	These buttons allow you to highlight and adjust items in the menu.

Note: 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.

Maximum

Introduction

▶ Unpacking
▶ Front
▶ Rear

(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. Signal port	Connect the signal cable to the 15-pin, D-sub connector on the back of your monitor.
3. Touchscreen cable	Connect the touchscreen cable to an available serial communication (COM) port on the back of your computer.

Note: See Connecting the Monitor for further information regarding cable connections.

English > Main > Setup > Connecting the Monitor > Connecting to a Computer
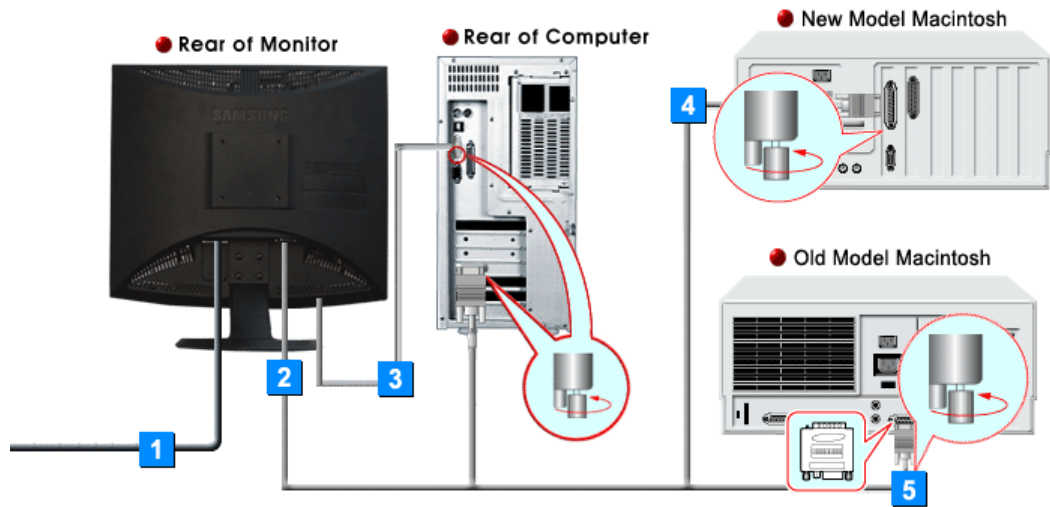
1. Connect the power cord for your monitor to the power port on the back of the monitor.
   Plug the power cord for the monitor into a nearby outlet.
2. Connect the signal cable to the 15-pin, D-sub connector on the back of your monitor.
3. Connect the touchscreen cable to an available serial communication (COM) port on the back of your computer.
   - If the COM port has a 9-pin connector, attach the touchscreen cable directly to the port.
   - If the COM port has a 25-pin connector, first attach a 9-pin to 25-pin adapter (not included) to the end of the touchscreen cable, and then attach the cable to the port.
4. Connect the monitor to the Macintosh computer using the D-SUB connection cable.
5. In the case of an old model Macintosh, you need to connect the monitor using a special Mac adaptor.
6. Turn on your computer and monitor. If your monitor displays an image, installation is complete.

Setup

- ▶ Connecting the Monitor
- ▶ Installing the Monitor Driver
- ▶ Installing a VESA base

▶▶ Automatic

▶▶ Manual

📝 **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 as 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/monitor/ (Worldwide)
  http://www.samsung.com/monitor/ (U.S.A)
  http://www.sec.co.kr/monitor/ (Korea)
  http://www.samsungmonitor.com.cn/ (China)

Windows ME | Windows XP/2000

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1. Windows ME

📝 Refer to "**Installing the Monitor Driver and User Manual**" CD-ROM supplied with the monitor. When inserted into the computer CD drive, the CD-ROM boots up automatically. If it fails to boot up automatically, click **monsetup.exe** twice in the CD-ROM drive folder of Windows Explorer.

1. Insert CD into the CD-ROM driver.

2. Click "**Windows ME Driver**"

3. Choose your monitor model in the model list, then click the "**OK**" button.

4. Click the "**Install**" button in the "**Warning**" window.

5. Monitor driver installation is completed.
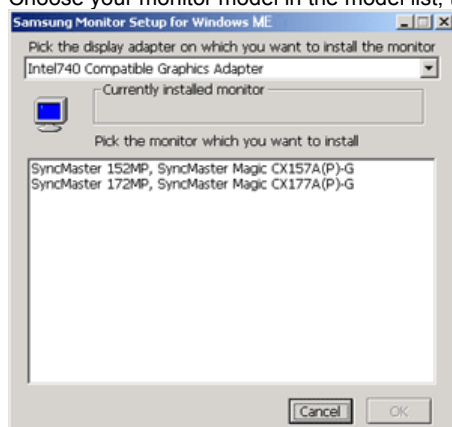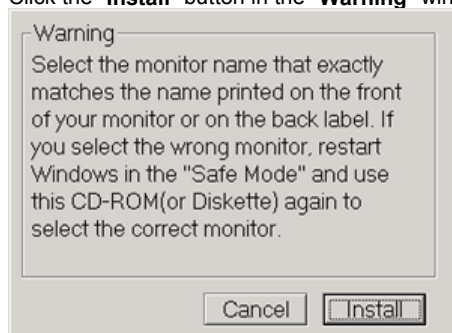
2. Windows XP/2000

Refer to "**Installing the Monitor Driver and User Manual**" CD-ROM supplied with the monitor. When inserted into the computer CD drive, the CD-ROM boots up automatically. If it fails to boot up automatically, click **monsetup.exe** twice in the CD-ROM drive folder of Windows Explorer.

1. Insert CD into the CD-ROM driver.

2. Click "**Windows XP/2000 Driver**".

3. Choose your monitor model in the model list, then click the "**OK**" button.

4. Click the "**Install**" button in the "**Warning**" window.

5. If you can see following Message window, then click the "**Continue Anyway**" button. Then click "**OK**" button.
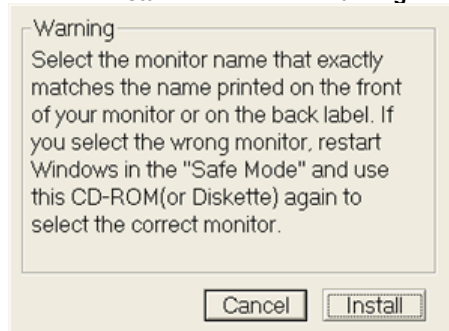
This monitor driver is under a certified MS logo. This installation will not damage your system. The certified driver will be posted on Samsung Monitor Homepage
http://www.samsung.com/monitor/
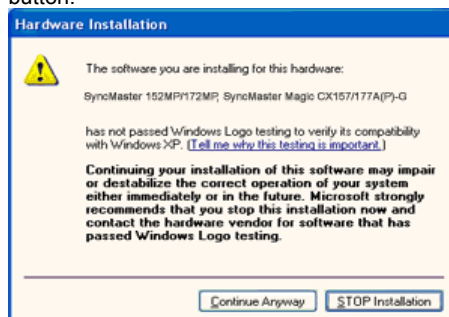
6. Monitor driver installation is completed.

Setup

- Connecting the Monitor
- Installing the Monitor Driver
- Installing a VESA base

▶▶ Automatic
▶▶ Manual

📝 **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 as 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/monitor/ (Worldwide)
  http://www.samsung.com/monitor/ (U.S.A)
  http://www.sec.co.kr/monitor/ (Korea)
  http://www.samsungmonitor.com.cn/ (China)

📝 To install the monitor driver manually, follow the procedures explained below after checking your operating system.

Windows XP | Windows 2000 | Windows Me | Windows NT | Linux

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1. 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.
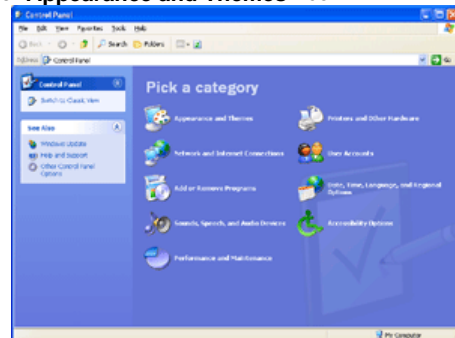
3. Click "**Display**" icon and choose the "**Settings**" tab then click "**Advanced..**".
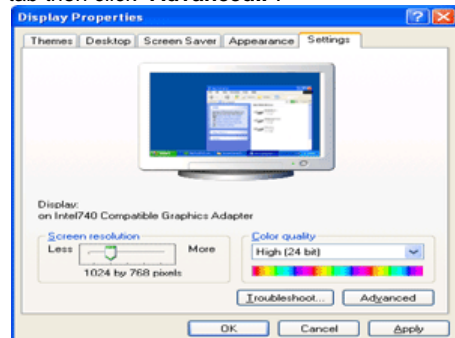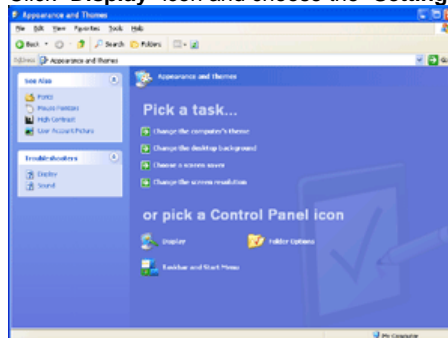
4. Click the "**Properties**" button on the "**Monitor**" tab and select "**Driver**" tab.
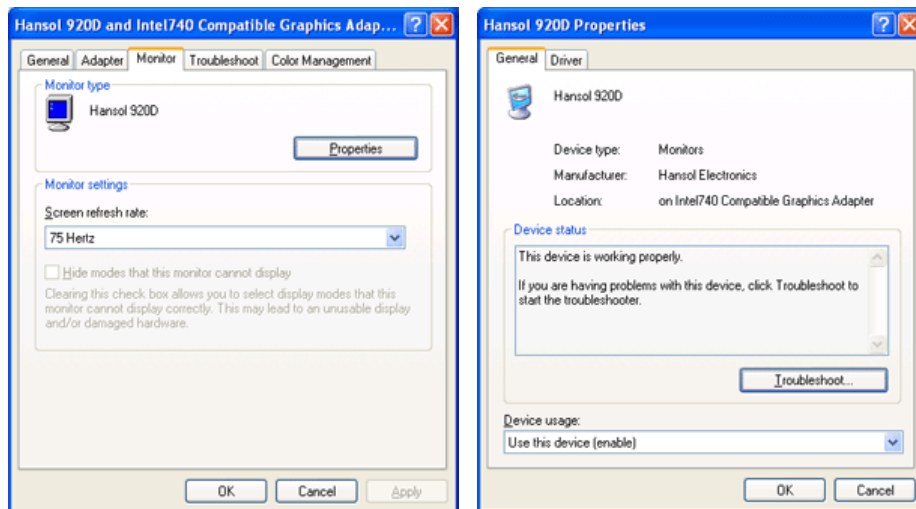
5. Click "**Update Driver..**" and select "**Install from a list or..**" then click "**Next**" button.

6. Select "**Don't search ,I will..**" then click "**Next**" and then click "**Have disk**".
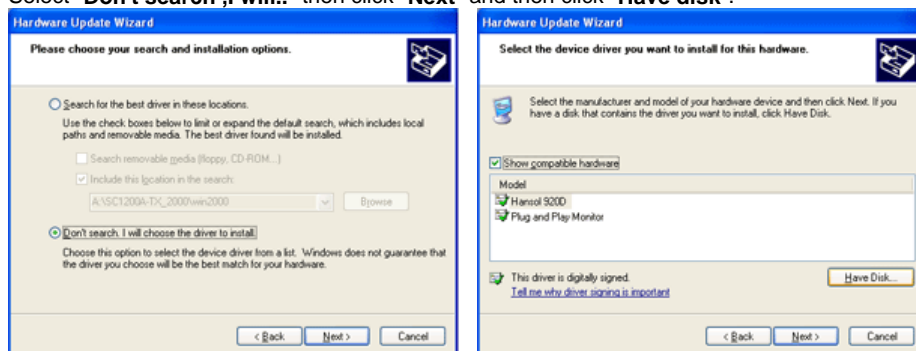
7. Click the "**Browse**" button then choose A:(D:\Driver)and choose your monitor model in the model list and click the "**Next**" button.
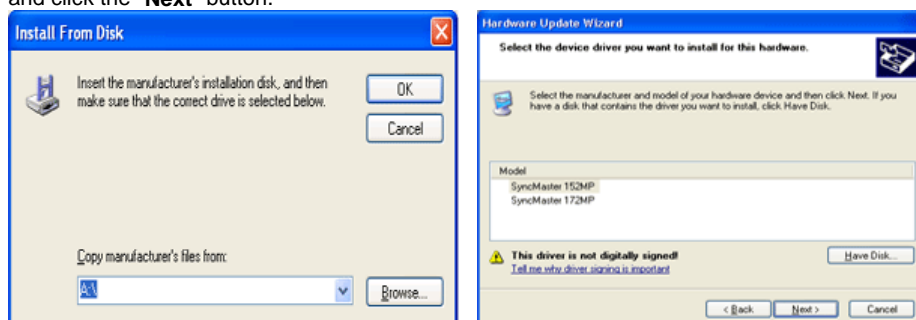
8. If you can see following "**Message**" window, then click the "**Continue Anyway**" button. Then click "**OK**" button.

This monitor driver is under a certified MS logo. This installation will not damage your system.
The certified driver will be posted on Samsung Monitor Homepage
http://www.samsung.com/monitor/

9. Click the "**Close**" button then click "**OK**" button continually.
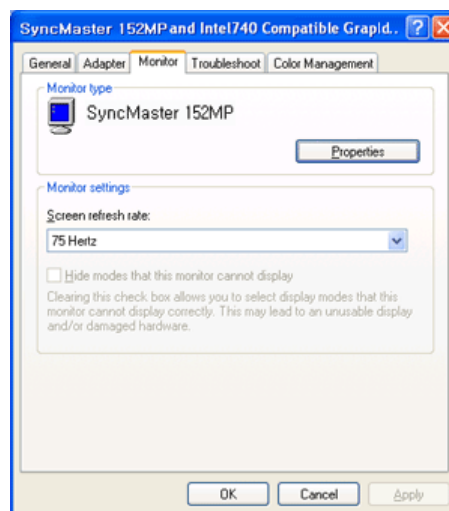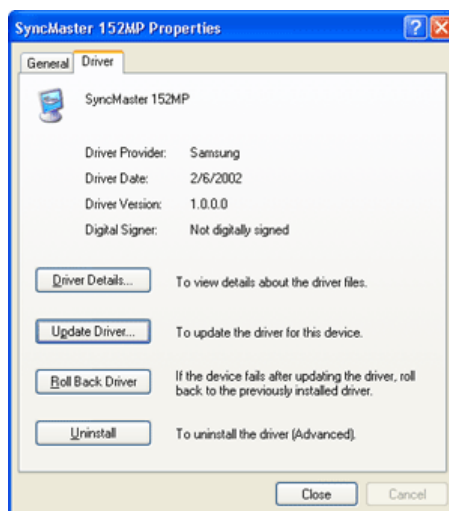
10. Monitor driver installation is completed.

2. 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**".
   Case 1:   If the "Properties" button is inactive, it means your monitor is properly configured.
             Please stop installation.
   Case 2:   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.

3. 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 **"NEXT"**. Click **"NEXT"** again and **"FINISH"** to complete installation.
11. Continue choosing **"CLOSE"** button and **"OK"** button until you close the Display Properties dialogue box.
    (You may get a screen with a warning or other message, just click the appropriate option for your monitor.)

4. Microsoft® Windows® NT 4.0 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.

5. 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.

English > Main > Setup > Installing a VESA base > Installing VESA base

Setup

- Connecting the Monitor
- Installing the Monitor Driver
- Installing a VESA base

Removing the base | Attaching a base

Removing the base

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.

Attaching a base

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

1. Rear cover mounting pad
2. Mounting interface pad

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.
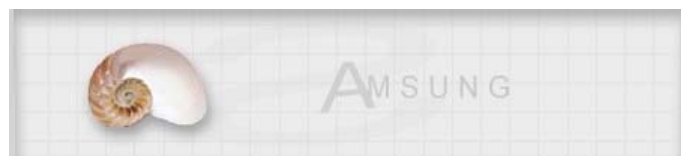
Adjusting Your LCD Monitor

Simply move your mouse over each topic to view information about the on-screen menu.

Adjustment Menu

• Brightness	• Color Temperature
• Contrast	• Color Control
• Image Lock	• Language
- Fine	• Halftone
- Coarse	• Menu Position
• Position	- H-Position
- H-Position	- V-Position
- V-Position	• Menu Display Time
• Reset	• Display Mode
- Geometry Reset	• Auto
- Color Reset	• MagicBright
• OSD Lock/Unlock	

1. **Auto/Exit Button**

2. **Menu Button**

3. **Adjust Button**

a. **MagicBright Button**

Troubleshooting

▶ Check List
▶ Q & A
▶ Self-Test Feature Check

Note Before calling for service, 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 "**No Connection, Check Signal Cable**" on the screen?	Check the signal cable connection.
	If the power is on, reboot the computer to see the initial screen (the login screen), which can be seen.	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 Preset Timing Modes) Note: If the initial screen (the login screen) does not appear, contact a service center or your dealer.
	Can you see "**Video mode not supported**" on the screen?	You can see this message when the signal from the video card exceeds the maximum resolution and frequency that the monitor can properly handle. Adjust the maximum resolution and frequency that the monitor can properly handle.
	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 or move the mouse to activate the monitor and restore the image on the screen.
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 it's 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?	For Windows ME/XP/2000: Set the colors properly at the **Control Panel**, **Display**, **Settings**.
	Has the video card been set properly?	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?	Install the monitor driver according to the Driver Installation Instructions.
	See the video card manual to see if the Plug & Play (VESA DDC) function can be supported.	Install the monitor driver according to the Driver Installation Instructions.

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 after-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 56Hz or 75Hz.
   (Do not exceed 75Hz 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.

Note: If problems repeatedly occur, contact an authorized service center.

Troubleshooting

► Check List
► Q & A
► Self-Test Feature Check

Question	Answer
How can I change the frequency?	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 remains of the detergent nor scratch the case. Do not allow any water to go inside the monitor.

English > Main > Troubleshooting > Self-Test Feature Check

Self-Test Feature Check | Warning Messages | Environment | Useful Tips

Troubleshooting

▶ Check List
▶ Q & A
▶ 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 with a border and text inside as shown in the following illustration:
   The three boxes inside the border are red, green and blue.

   No Connection
   Check Signal Cable
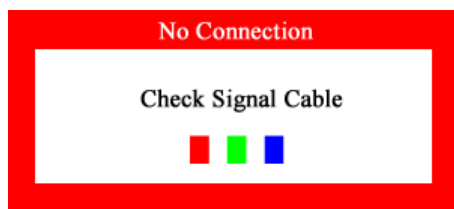
   Failure of any of the boxes to appear indicates a problem with your monitor. This box also appears during normal operation if the video cable becomes disconnected or damaged.

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.

Video mode
not supported
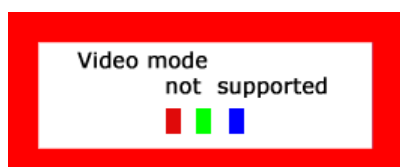
Environment

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.

- 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 a service center or your dealer.

- **Judging the monitor's working condition**
  If there is no image on the screen or a "Video mode not supported" message comes up, disconnect the cable from the computer while the monitor is still powered on.
    o If there is a message coming up on the screen or if the screen goes white, this means the monitor is in working condition.
    o In this case, check the computer for trouble.

Specifications

▶ General
▶ PowerSaver
▶ Preset Timing Modes

General

Model Name   SyncMaster 173VT / 710VT

LCD Panel

Size   17 " Diagonal (43 cm)

Display area   337.92 mm (H) x 270.336 mm (V)

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

Type   a-si TFT active matrix

Synchronization

Horizontal   30 ~ 81 kHz

Vertical   56 ~ 75 Hz

Display Color

16,194,277

Resolution

Optimum resolution   1280 x 1024 @ 60 Hz

Maximum resolution   1280 x 1024 @ 75 Hz

Input Signal, Terminated

RGB Analog 0.7 Vpp positive at 75 Ω
Separate H/V sync, Composite, TTL level positive or negative

Maximum Pixel Clock

135 MHz

Power Supply

AC 100 to 240 VAC(+/- 10 %), 60/50 Hz ± 3 Hz

Signal Cable

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

Power Consumption

Less than 45 W

Dimensions (WxDxH) / Weight

384.6 X 66.7 X 338.0 mm / 15.1 x 2.6 x 13.3 inch (Without stand)
384.6 X 201.0 X 392.8 mm / 15.1 x 7.9 x 15.4 inch / 6.2 kg (With basic stand)

VESA Mounting Interface

75 mm x 75 mm (for use with Specialty(Arm) Mounting hardware.)

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. Interaction of the monitor and computer systems will provide the best operating conditions and monitor settings. In most cases, monitor installation will proceed automatically, unless the user wishes to select alternate settings.

Dot Acceptable

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.

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

Specifications

▶ General
▶ PowerSaver
▶ Preset Timing Modes

This monitor has a built-in power management system called PowerSaver. This system saves energy by switching your monitor into a 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 a software utility installed on your computer to set up this feature.

State	Normal Operation	Power saving mode EPA	Power off
Power Indicator	Green	Green Blinking	Black
Power Consumption	Less than 45W	Less than 3W	Less than 1W (110 Vac)

Specifications

▶ General
▶ PowerSaver
▶ 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.

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	70.086	28.322	-/+
MAC, 640 x 480	35.000	66.667	30.240	-/-
MAC, 832 x 624	49.726	74.551	57.284	-/-
VESA, 640 x 480	37.500	75.000	31.500	-/-
VESA, 640 x 480	37.861	72.809	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	46.875	75.000	49.500	+/+
VESA, 800 x 600	48.077	72.188	50.000	+/+
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, 1280 x 1024	63.981	60.020	108.00	+/+
VESA, 1280 x 1024	79.976	75.025	135.00	+/+
SUN, 1280 x 1024	81.129	76.106	135.00	-/-

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

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- ▶ Terms
- ▶ Natural Color
- ▶ For Better Display
- ▶ Image Retention Free
- ▶ Authority

※ The address and phone number of the company can be changed without previous notice.

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● **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).

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● **Natural Color Software Program**

One of the recent problems in using a computer is that the color of the images printed out by a printer or other images scanned by a scanner or a digital camera are not the same as those shown on the monitor.

The Natural Color S/W is the very solution for this problem. It is a color administration system developed by Samsung Electronics in association with Korea Electronics & Telecommunications Research Institute (ETRI). This system is available only for Samsung monitors and makes the color of the images on the monitor the same as the printed or scanned images.
For more information, refer to Help (F1) in the software program.

How to install the Natural Color software
Insert the CD included with the Samsung monitor into the CD-ROM Drive. Then, the initial screen of the program installation will be executed. Click Natural Color on the initial screen to install the Natural Color software. To install the program manually, insert the CD included with the Samsung monitor into the CD-ROM Drive, click the [Start] button of Windows and then select [Execute].
Enter D:\color\eng\setup.exe and then press the <Enter> key.
(If the drive where the CD is inserted is not D:\, enter the applicable drive.)

How to delete the Natural Color software program
Select [Setting]/[Control Panel] on the [Start] menu and then double-click [Add/Delete a program].
Select Natural Color from the list and then click the [Add/Delete] button.

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● **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.

    o Resolution: 1280 x 1024
    o 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.

    o 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 picture, you can get better quality of 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 moving picture when you need to be away from the monitor for an extended period of time.

6. Do not display a still image(such as on a video game or when hooking up a DVD to this LCD_TV) on the Color TFT-LCD (Thin Film Transister Liquid Crystal Display) panel for a long time as it can cause screen image retention. This image retention is also known as " screen burn". To avoid such image retention, reduce the degree of brightness and contrast of this screen when displaying a still image.

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● **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.

○ **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 24 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.
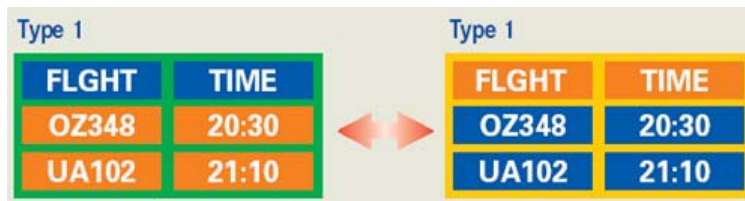
Avoid using a combination of characters and background color with large difference in luminance.
Avoid using Grey colors, which can cause Image retention easily.

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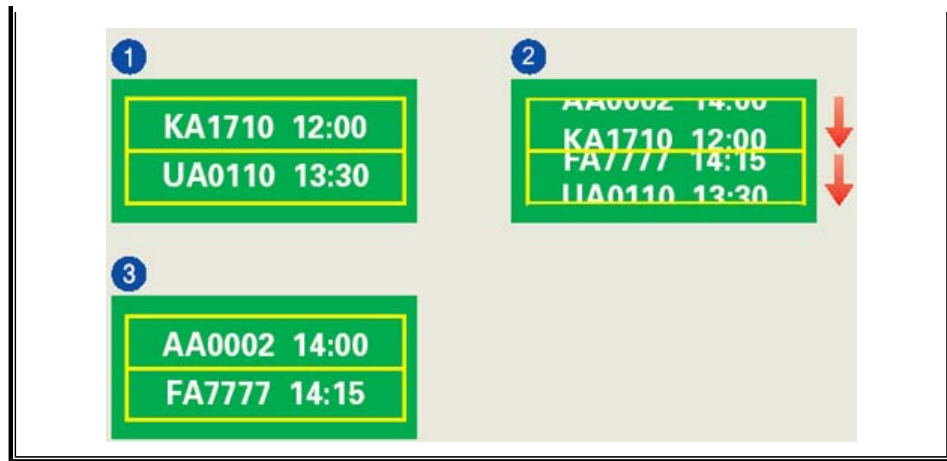Ex)

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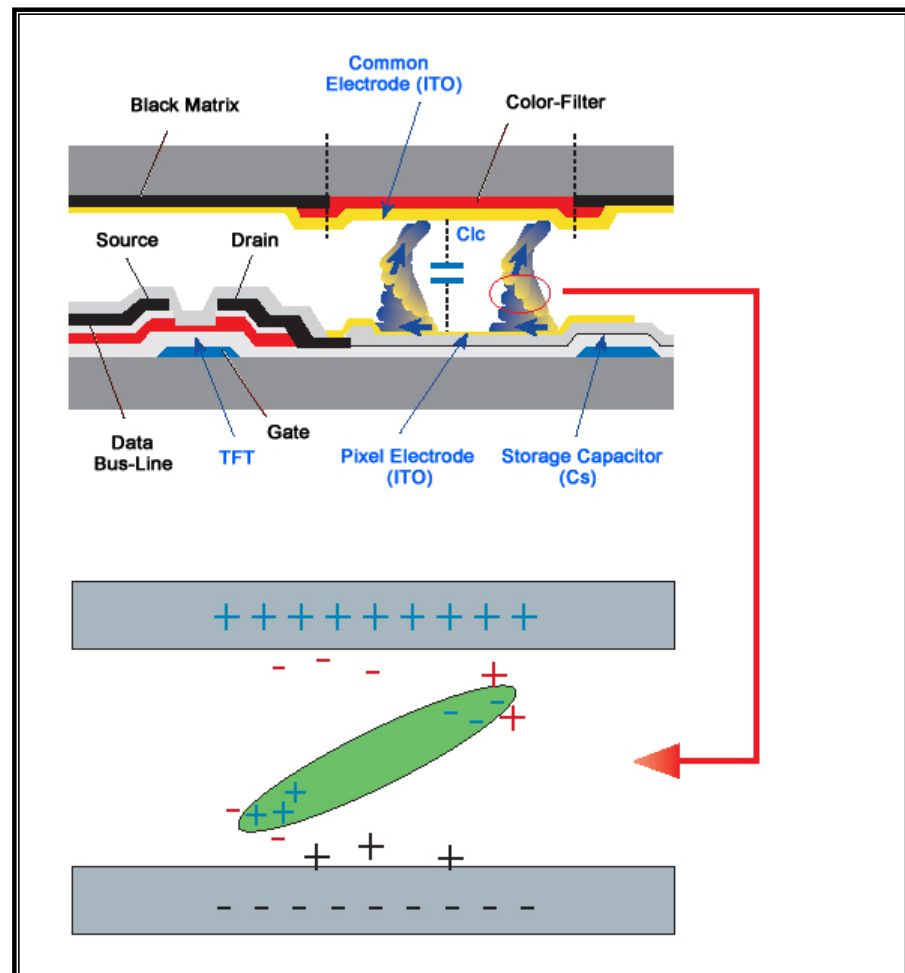
● Our LCD Monitor satisfies ISO13406-2 Pixel fault Class II

Information

▶ Service Center
▶ Terms
▶ Natural Color
▶ For Better Display
▶ Image Retention Free
▶ Authority

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Class B
This device is a Class B digital apparatus. For Safety and EMC compliance guide, you may refer to "Regulatory" Guide.