



SyncMaster 225MS



Install driver



Install programs





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 Precautions](#)
- [■ Introduction](#)
- [■ Connections](#)
- [■ Using the Software](#)
- [■ Adjusting the Monitor](#)
- [■ Troubleshooting](#)
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○ Safety Precautions

- [Notation](#)
- [Power](#)
- [Installation](#)
- [Cleaning and Use](#)
- [Others](#)

▶ Notation

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



Ground to prevent an electric shock

- [Notation](#)
- [Power](#)
- [Installation](#)
- [Cleaning and Use](#)
- [Others](#)

▶ Power



When not used for extended period of time, set your computer to DPMS. If using a screen saver, set it to the 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 or loose plug.**

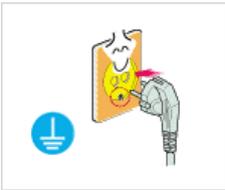


▶ This may cause an electric shock or fire.



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

▶ This may cause an electric shock or fire.



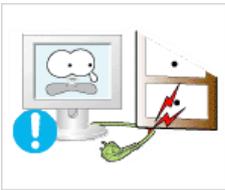
❑ Use only a properly grounded plug and receptacle.

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



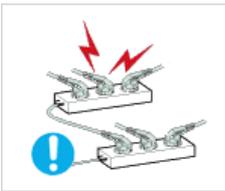
❑ Insert the power plug firmly so that it does not come loose.

▶ A bad connection may cause fire.



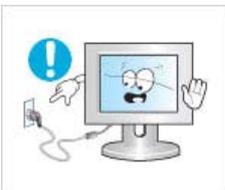
❑ Do not excessively bend the plug and wire nor place heavy objects upon them, which could cause damage.

▶ This may cause an electric shock or fire.



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

▶ This may cause fire.



❑ Do not disconnect the power cord while using the monitor.

▶ A surge may be caused by the separation and may damage the monitor.



❑ Do not use the power cord when the connector or plug is dusty.

▶ If the connector or plug of the power cord is dusty, clean it with a dry cloth.

▶ Using the power cord with a dusty plug or connector may cause an electric shock or fire.

Installation



Be sure to contact an authorized Service Center when installing your set in a location with heavy dust, high or low temperatures, high humidity, and chemical substances, or where it will be operated for 24 hours continuously such as an airport, train station or etc.

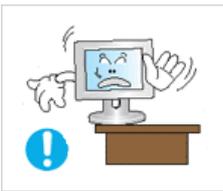
Failure to do so may cause serious damage to your set.



- ▶ 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.



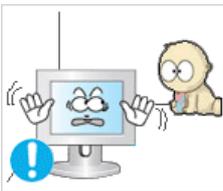
- ▶ Do not drop the monitor when moving it.
- ▶ This may cause damage to the product or human body.



- ▶ 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.



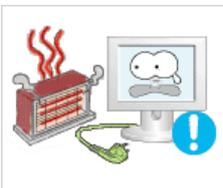
- ▶ Do not place the product on an unstable or small surface area.
- ▶ Place the product on an even and stable surface, as the product may fall and cause harm to someone walking by, specifically children.



- ▶ 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.



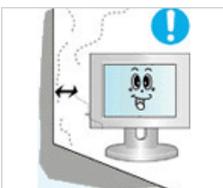
- Set down the monitor carefully.
 - The monitor could be damaged or broken.



- 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 10 cm/4 inches) 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.



- Keep the plastic packaging (bag) out of children's reach.
 - The plastic packaging (bag) may cause suffocation if children play with it.

▶ Cleaning and Use



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.



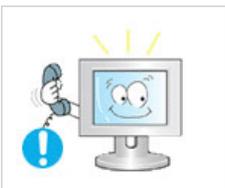
- ▶ If the connector between the plug and the pin is dusty or dirty, clean it properly with a dry cloth.
 - ▶ A dirty connector may cause an electric shock or fire.



- ▶ 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.

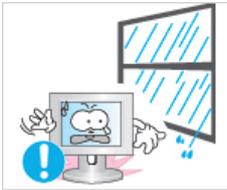
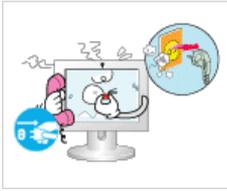
Notation Power Installation Cleaning and Use Others

▶ Others



- ▶ Do not remove cover (or back).
 - ▶ This may cause an electric shock or fire. Refer to a qualified servicing company.

- ▶ If your monitor does not operate normally - in particular, if there are any unusual sound or smell coming from it - unplug it immediately and the [Service Center](#).
 - ▶ 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 a malfunction, an electric shock or fire.
Especially avoid operating the monitor near water or outdoors where the monitor could be exposed to snow or rain.



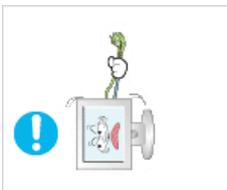
⚠ If the monitor is dropped or the casing is damaged, turn the monitor off and unplug the power cord. Then contact the [Service Center](#).

▶ The monitor may cause a malfunction, electric shock or fire.



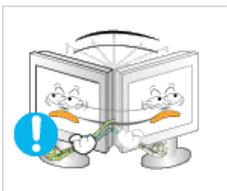
⚠ Disconnect the plug from the outlet during storms or lightening or if it is not used for a long period of time.

▶ 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 a 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 or etc.

- ▶ 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 the [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.

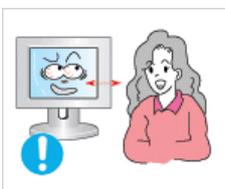
- ▶ An inappropriate resolution may cause undesirable picture quality.

22 inch (55 cm) - 1680 x 1050

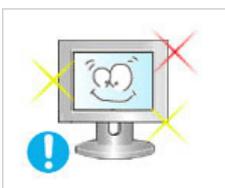


- ▶ Keep the volume at a comfortable level when using the headphones.

- ▶ Excessively loud volume levels may damage hearing.



- ▶ Watching the monitor continuously at a too close angle may result in eyesight damage.

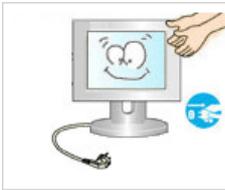


- ▶ To ease eye strain, take at least a five-minute break after every hour of using the monitor.

- ▶ 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 connected to other devices, are disconnected before moving the monitor.
- ▶ Failure to disconnect a cable may damage it and lead to fire or an electric shock.



- ▶ Place the product out of children's reach, as they could damage 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.

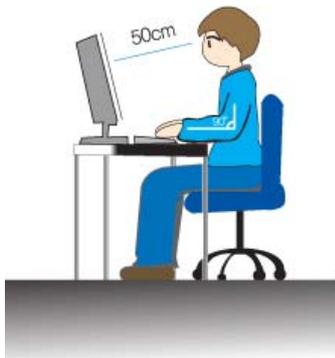


- ▶ Do not place children's favorite objects (or anything else that may be tempting) on the product.
- ▶ Children may try to climb on the product to retrieve an object. The product could fall, causing physical damage or even death.



- ▶ When lifting up or moving the monitor, do not lift the monitor upside down while holding only the stand.
- ▶ This may cause your monitor to fall, and become damaged or cause personal injury.

▶ Good Postures When Using the Monitor



- ▶ Try to maintain a good posture when using the monitor.
 - Keep your back straight.
 - Keep a distance of about 45 ~ 50 cm between your eyes and the monitor screen. Look at the screen from slightly above it, and have the monitor directly in front of you.
 - Tilt the monitor upwards by 10 ~20 degrees. Adjust the monitor height so that the top of the monitor is slightly below eye level.
 - Adjust the monitor angle so that there is no reflected light on the screen. Try to maintain your arms perpendicular to your armpits.
 - Keep your arms level with the back of your hands.
 - Keep the angle of the elbow perpendicular.
 - Keep the angle of the knees at more than 90 degree. Do not let your

feet fall up from the floor. Adjust the arm position so that it is below the heart

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.

PRODUCT INFORMATION (Image Retention Free)

LCD Monitors and TVs may have an image retention when switching from one image to another especially after displaying a stationary image for a long time. This guide is to demonstrate a 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

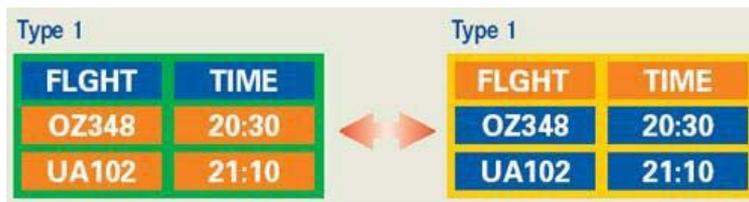
Ex) Airports, Transit Stations, Stock Markets, Banks, and Controlling Systems
We recommend that you follow set up of your display system program as below:

● 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)

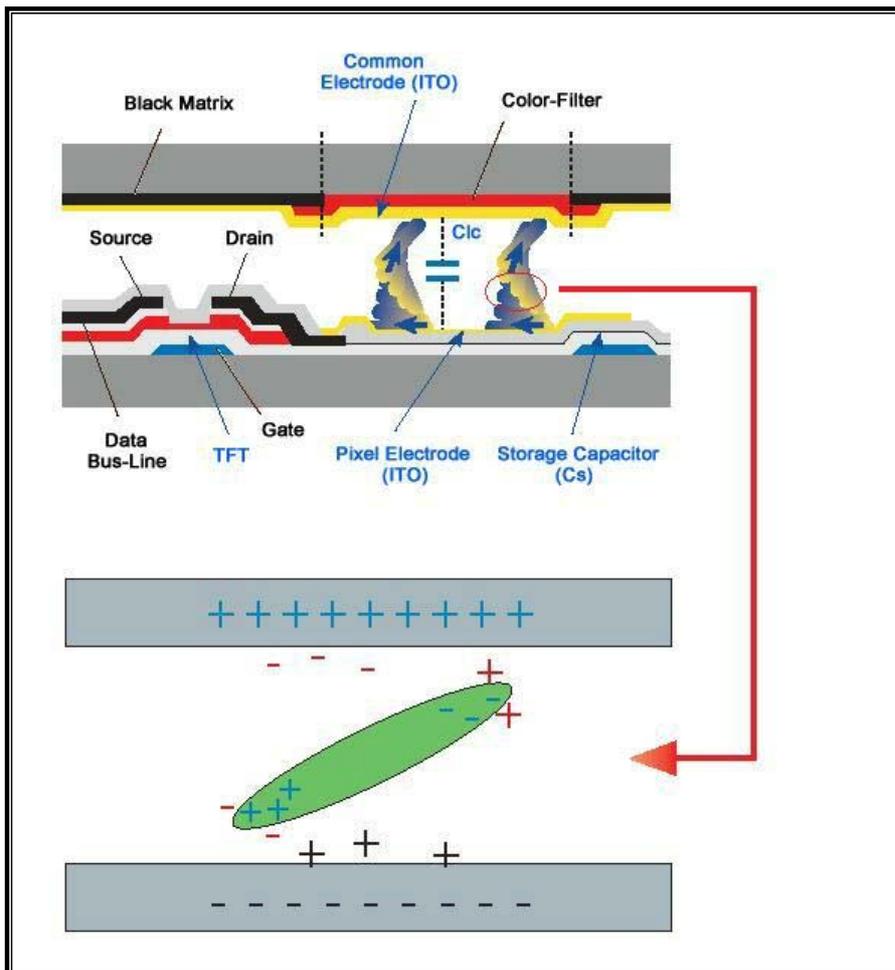


- The best way to protect your monitor from Image retention is to set your PC or System to operate a Screen Saver program when you are not using it.

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



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- Safety Precautions
- Introduction
- Connections
- Using the Software
- Adjusting the Monitor
- Troubleshooting
- Specifications
- Information

○ Introduction

Package Contents Your Monitor

▣ Package Contents

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

▶ Without Stand



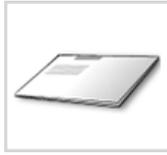
Monitor

▶ With Stand

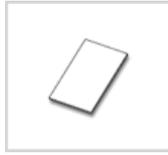


Monitor & Simple stand

▶ Manual



Quick Setup Guide

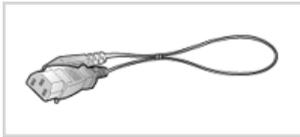


Warranty Card,
Registration Card
(Not available in all
locations)

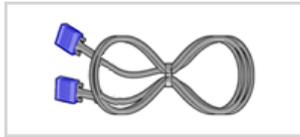


User's Guide, Monitor Driver,
Natural Color,
MagicTune™

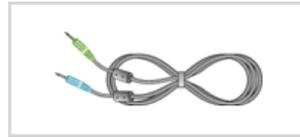
▶ Cable



Power Cord



D-sub Cable



Audio Cable

▶ Sold separately



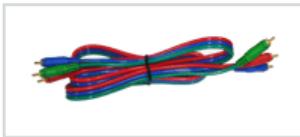
S-Video Cable



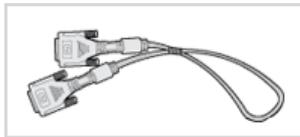
RCA Cable



Earphones/Headphones



Component Cable



DVI Cable



DVI to HDMI cable



HDMI Cable

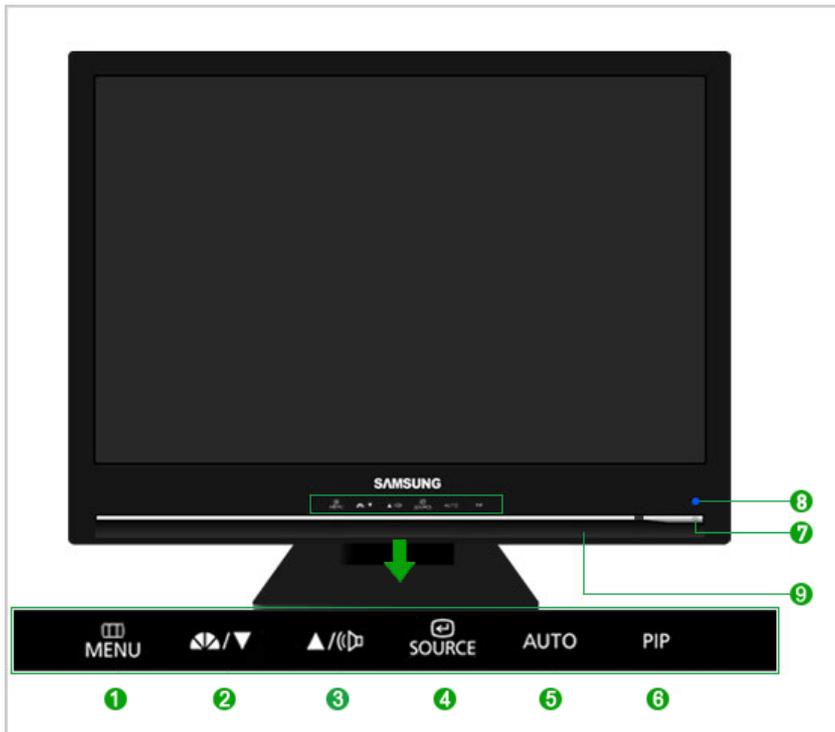


RCA to stereo (for PC) cable

※ This is an accessory that can be added depending on the model.

▶ Your Monitor

▶ Front



- 1** MENU button [≡] Opens the OSD menu.
Also use to exit the OSD menu or return to the previous menu.
- 2,3** Adjust buttons [▼/▲] These buttons allow you to adjust items in the menu.
- 2** PC/DVI :
MagicBright™ button [▶▶] MagicBright™ is a new feature providing optimum viewing environment depending on the contents of the image you are watching. Currently six different modes are available: Custom, Text, Internet, Game, Sports and Movie. Each mode has its own pre-configured brightness value. You can easily select one of six settings by simply pressing MagicBright™ control buttons.

 - 1) Custom
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
For documentations or works involving heavy text.
 - 3) Internet
For working with a mixture of images such as texts and graphics.
 - 4) Game
For watching motion pictures such as a game.
 - 5) Sports
For watching motion pictures such as a Sports.
 - 6) Movie
For watching motion pictures such as a DVD or Video CD.

>> [Click here to see an animation clip](#)

AV/S-Video/
Component :
Mode button

- The Monitor has four automatic picture settings ("Dynamic", "Standard", "Movie" and "Custom") that are preset at the factory. You can activate either Dynamic, Standard, Movie, or Custom. You can select "Custom" which automatically recalls your personalized picture settings.
- 1) Dynamic
Select this mode to view a sharper image than in "Standard" mode.
 - 2) Standard
Select this mode when the surroundings are bright. This also provides a sharp image.
 - 3) Movie
Select this mode when the surroundings are dark.
This will save power and reduce eye fatigue.
 - 4) Custom
Select this mode when you want to adjust the image according to your preferences.

>> [Click here to see an animation clip](#)

- 3 Volume button [V] When OSD is not on the screen, push the button to adjust volume.
>> [Click here to see an animation clip](#)
- 4 Enter button [E] / SOURCE button Activates a highlighted menu item. / Push the 'SOURCE', then selects the video signal while the OSD is off. (When the SOURCE button is pressed to change the input mode, a message appears in the upper left of the screen displaying the current mode -- PC, DVI, HDMI, AV, S-Video and Component input signal.)
✘ Changing the source is only allowed for external devices that are connected to the monitor at the time.
>> [Click here to see an animation clip](#)
- 5 AUTO button (Available in PC mode only)
When the 'AUTO' button is pressed, the Auto Adjustment screen appears as shown in the animated screen on the center.
Press to self-adjust to the incoming Analog signal. The values of fine, coarse and position are adjusted automatically.
>> [Click here to see an animation clip](#)
- 6 PIP button (Available in PC/DVI Mode Only)
In PC or DVI Mode, turns on Video screens in PIP Mode.
You can view a picture from HDMI (PC mode only), AV, S-Video, or Component (DVI mode only) through the PIP screen in PC and DVI mode.
- 7 Power button [P] Turns the monitor On/Off.
- 8 Power indicator This will enable you to see the overall power status of the system. For more information, see the [PowerSaver](#) section.
- 9 Speaker You can hear sound by connecting the soundcard of your PC to the monitor.

✘ 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



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

1 POWER

- POWER : Connect the power cord for your monitor to the POWER on the back of the monitor.



2 HDMI/D-SUB



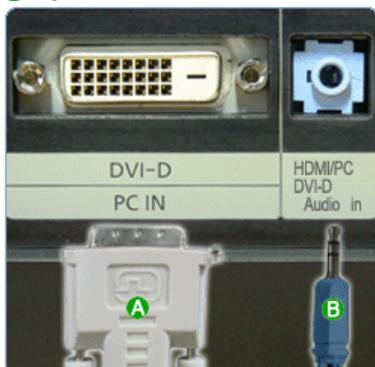
- A** HDMI
: Connect the HDMI terminal at the back of your monitor to the HDMI terminal of your digital output device using a HDMI cable.
- B** D-SUB
: Connect the RGB terminal at the back of your monitor to your computer.

3 S-VIDEO / VIDEO / R - AUDIO - L



- A** R - AUDIO - L
: External device sound input terminal
- B** VIDEO
: External device (video) input terminal
- C** S-VIDEO
: External device (S-video) input terminal

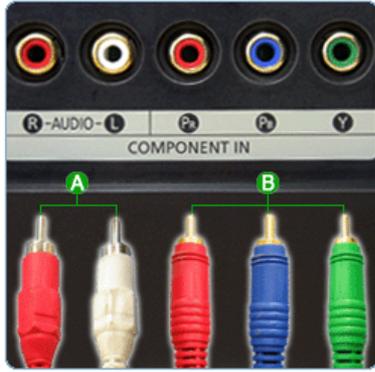
4 PC IN



- A** DVI-D
: Connect the DVI-D terminal at the back of your monitor to your computer.
- B** AUDIO
: Connect the AUDIO (PC IN/AUDIO) terminal at the back of your monitor to your computer's sound card.

5 COMPONENT IN

- A** R - AUDIO - L
: DVD, VCR (DVD / DTV Set-Top Box) sound input terminal (left/right)
- B** PR, PB, Y
: DVD / DTV Set-Top Box input terminal (PR, PB, Y)



6 



- Headphone output terminal

7  Kensington Lock



- The Kensington lock is a device used to physically fix the system when using it in a public place.
(The locking device has to be purchased separately.)
For using a locking device, contact where you purchase it.

✘ See [Connecting Cables](#) for further information regarding cable connections.

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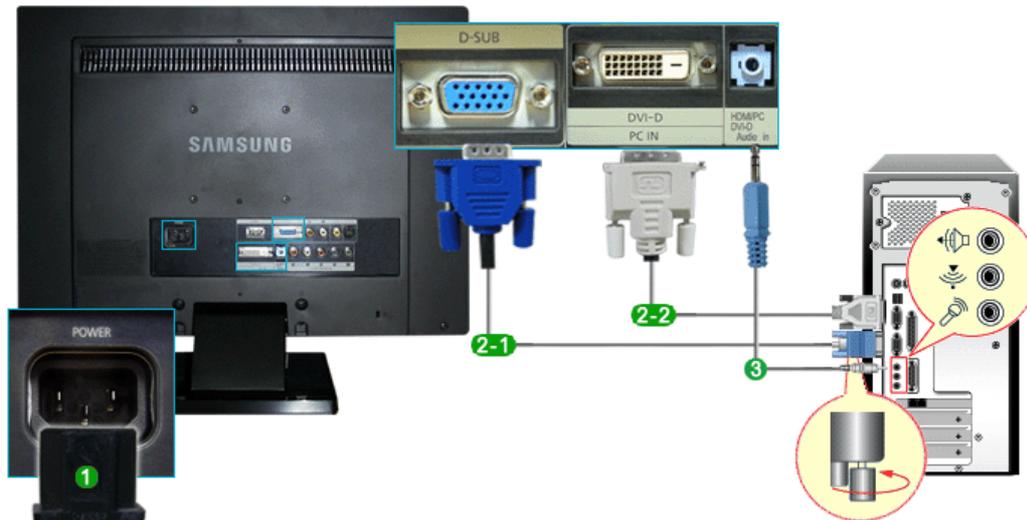
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○ Connections

Connecting Cables Using the Stand

▶ Connecting Cables

▶ 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.

✘ Use a connection appropriate 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.



[D-SUB]

2-2 Using the DVI (Digital) connector on the video card.
- Connect the DVI Cable to the DVI-D Port on the back of your Monitor.



[DVI-D]

3 Connect the AUDIO terminal at the back of the monitor to the speaker output terminal on your computer's sound card using a sound cable.

▶ Connecting to a Macintosh



- 1 Connected to a Macintosh.
Connect the monitor to the Macintosh computer using the D-sub connection cable.

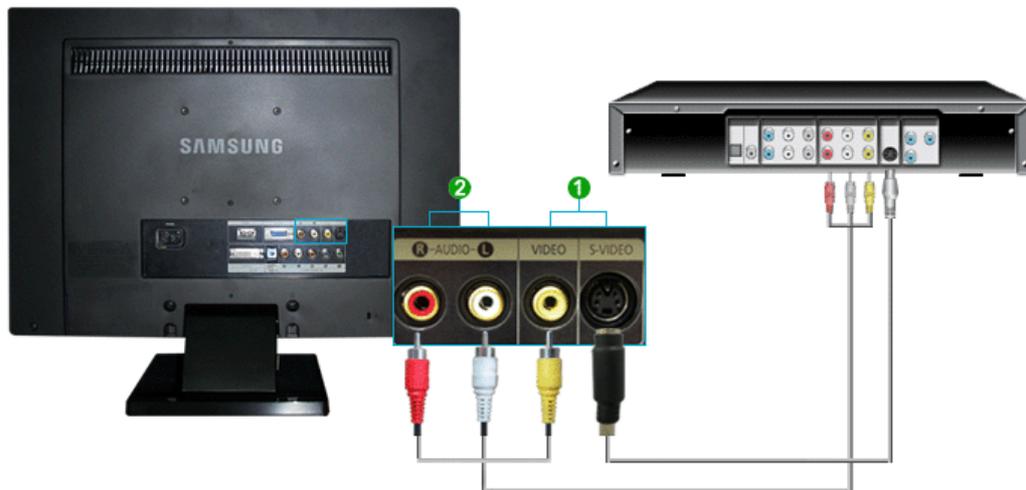


▶ Connecting to Other devices

- ✘ This monitor allows the user to connect it to such input devices as a DVD player, a VCR or a camcorder without disconnecting the PC.
- ✘ The configuration at the back of the monitor may vary from product to product.

▶ Connecting AV Devices

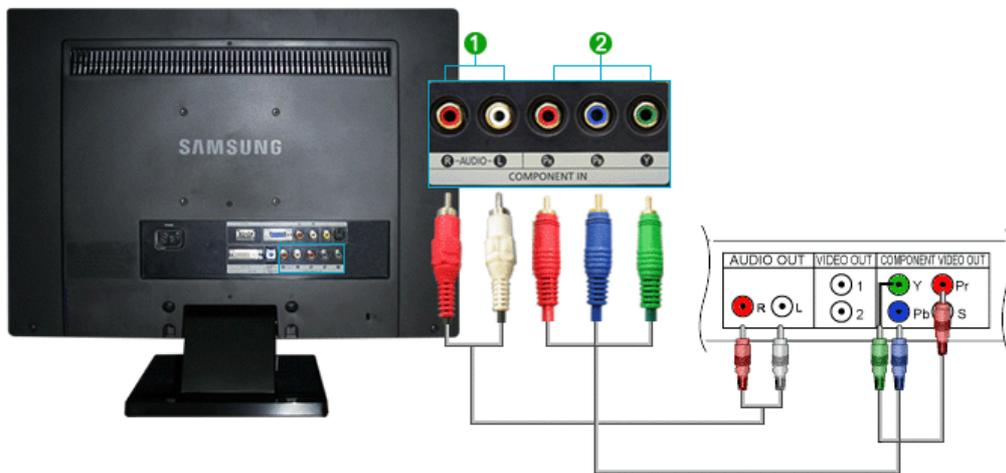
- ✘ The monitor has AV connection terminals to connect AV input devices like DVD, VCR or Camcorder. You may enjoy AV signals as long as the monitor is turned on



- 1 Input devices such as DVD, VCR or Camcorder are connected to the RCA or S-VIDEO terminal of the monitor using the RCA or S-Video cable.
 - 2 Connect the port of the DVD, VCR (DVD / DTV Set-Top Box) to the R-AUDIO-L port of the monitor.
- ✘ Then, start the DVD, VCR or Camcorder with a DVD disc or tape inserted.
 - ✘ Select AV or S-Video using the SOURCE.
 - ✘ In some areas, the image might slant to the side depending on the input broadcast signal.

▶ Connecting DVD/DTV Set Top Box

- ✘ Connect to the DVD/DTV Set Top Box input if the device has a DVD/DTV connector. You can watch Component simply by hooking up the Component with the monitor as long as the power is on.



- 1 Connect the Audio OUT port of the DVD or VCR (DVD / DTV set top box) and the R-AUDIO-L port of the monitor with the AV(RCA) cable.
 - 2 Connect the VIDEO OUT port of the DVD / DTV Set-Top Box to the Pr, Pb, Y input ports using a component video cable (Pr, Pb, Y).
- ✘ Select Component using the SOURCE button.

▶ Connecting HDMI

- ✘ You cannot connect a PC to the HDMI IN terminal.



- 1 Input devices such as digital DVD are connected to the HDMI IN terminal of the monitor using the HDMI cable.
- ✘ Then, start the DVD with a DVD disc inserted.
 - ✘ Select HDMI using the SOURCE button.

▶ Connecting Using a DVI to HDMI Cable



- ① Connect the DVI output terminal of a digital output device to the HDMI IN terminal of the monitor using a DVI to HDMI cable.
 - ② Connect the red and white jacks of an RCA to stereo (for PC) cable to the same colored audio output terminals of the digital output device, and connect the opposite jack to the HDMI/PC DVI-D AUDIO IN terminal of the monitor.
- ✘ Then, start the DVD with a DVD disc inserted.
 - ✘ Select HDMI using the SOURCE button.

▶ Connecting Headphone

- ✘ You may connect your headphones to the monitor.



- ① Connect your headphones to the Headphone connection terminal.

▶ Using the Stand

- ✘ This monitor supports various types of VESA-standard bases. You need to either fold or remove the base in use to install a VESA base.

▶ Tilt angle

- ✘ The monitor may be reclined 0 to 23 degrees



▶ Attaching a Base

- ✘ This monitor accepts a 100 mm x 100 mm VESA-compliant mounting interface pad.



- A** Monitor
- B** Mounting interface pad (Sold separately)

- ✘ Turn off your monitor and unplug its power cord.
- ✘ Lay the LCD monitor face-down on a flat surface with a cushion beneath it to protect the screen.
- ✘ Remove four screws and then remove the stand from the LCD monitor.
- ✘ 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.



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 Precautions
- Adjusting the Monitor
- Introduction
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- Using the Software
- Information

○ Using the Software

Monitor Driver Natural Color MagicTune™

▶ Monitor Driver

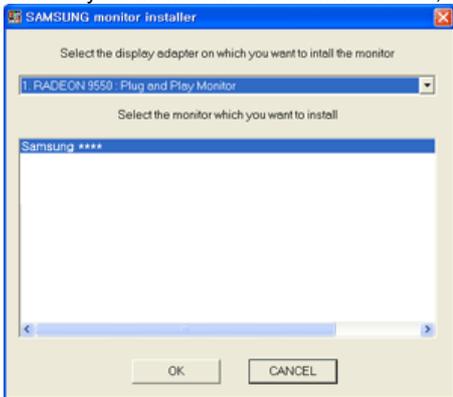
When prompted by the operating system for the monitor driver, insert the CD-ROM included with this monitor. Driver installation is slightly different from one operating system to another. Follow the directions appropriate for the operating system you have.

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)

▶ Installing the Monitor Driver (Automatic)

- 1 Insert the 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 the "OK" button (Microsoft® Windows® XP/2000 Operating System).



- ✘ 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/>

5 Monitor driver installation is completed.

▶ Installing the Monitor Driver (Manual)

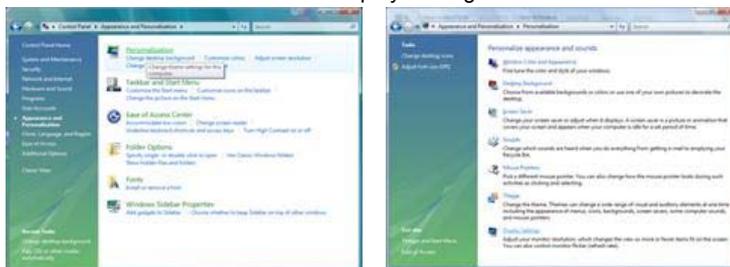
[Windows Vista](#) | [Windows XP](#) | [Windows 2000](#) | [Windows ME](#) | [Windows NT](#) | [Linux](#)

▶ 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...".



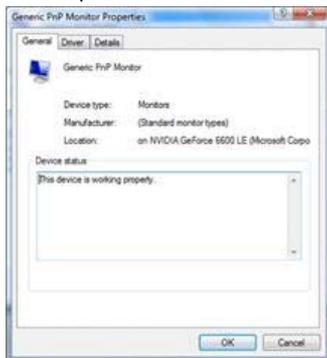
- 5 Click "Properties" in the "Monitor" tab. If the "Properties" button is deactivated, it means the configuration for your monitor is completed. The monitor can be used as is. If the message "Windows needs..." is displayed, as shown in the figure below, click "Continue".



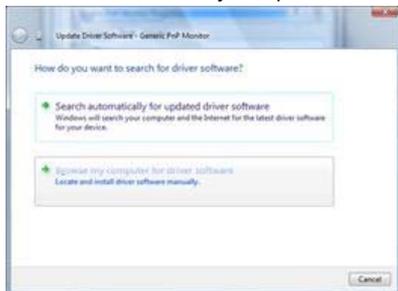
- ✘ This monitor driver is under certifying MS logo, and this installation doesn't damage your system.
The certified driver will be posted on Samsung Monitor homepage

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

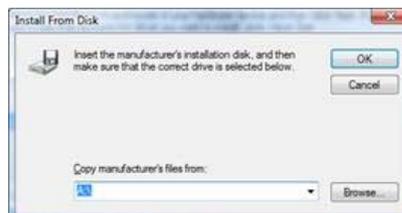
- 6 Click "Update Driver..." in the "Driver" tab.



- 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".

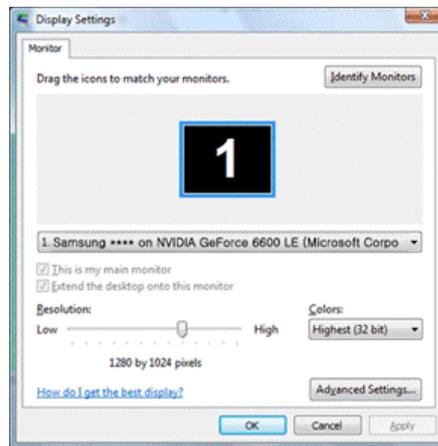


- 9

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

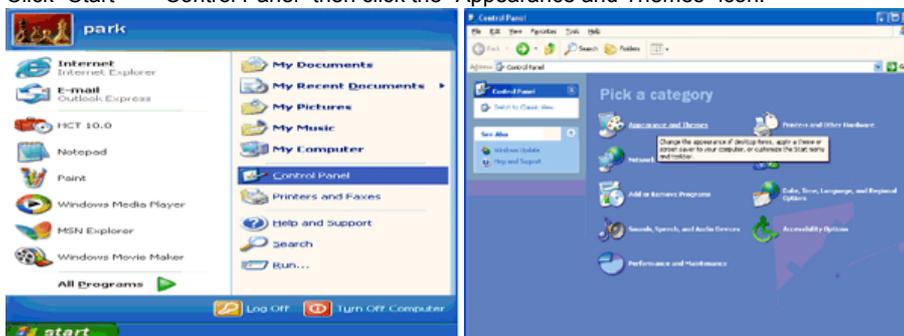


10 Click "Close" → "Close" → "OK" → "OK" on the following screens displayed in sequence.



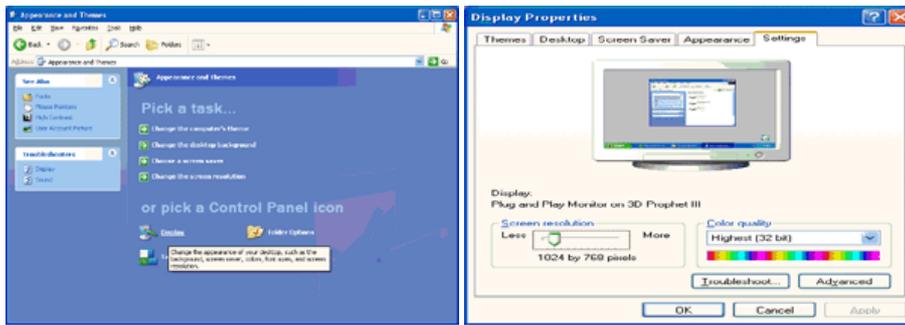
11 Microsoft® Windows® XP Operating System ▲

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



3

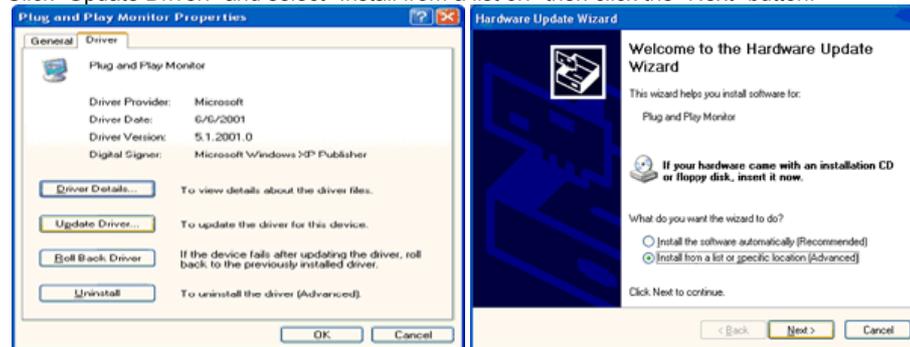
Click "Display" icon and choose the "Settings" tab then click "Advanced."



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 the "Next" button.

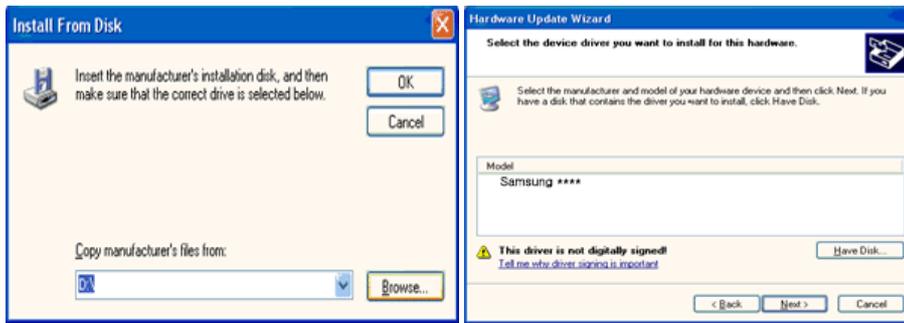


6 Select "Don't search, I will." then click "Next" and then click "Have disk".



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 the "OK" button.



- ✗ 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/>

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

How to install

- 1 Click "Start," "Setting," and then "Control Panel."
- 2 Double click the "Display" icon.
- 3 Select the "Settings" tab and click the "Advanced Properties" button.
- 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 "Update Driver." then click 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 the "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," and then "Control Panel."
- 2 Double click the "Display" icon.
- 3 Select the "Settings" tab and click the "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 the "Next" button.
- 8 Click the "Have Disk" button.
- 9 Specify A:\(D:\driver) then click the "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 the Display Registration Information window, click the 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 the "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.

▶ Natural Color

▶ Natural Color



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 is only available for Samsung monitors and ensures that the color of the images on the monitor are the same as the printed or scanned images.

For more information, refer to Help (F1) in the software program.

▶ Installing the Natural Color Software

Insert the CD included with the Samsung monitor into the CD-ROM Drive. The initial Natural Color screen will appear. Click on Natural Color in the startup window 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 Windows **[Start]** button, select **[Run...]**.

Enter D:\Color\NCPSetup.exe and then press the <Enter> key.

(If the drive where the CD is inserted is not D:\, enter the applicable drive.)

▶ Uninstalling the Natural Color Software Program

Select **"Settings" / "Control Panel"** from the **"Start"** menu and then double-click **"Add/Delete a program"**

Select Natural Color from the list and then click the "Add/Delete" button.

▶ MagicTune™

Installation

1. Insert the installation CD into the CD-ROM drive.
2. Click the MagicTune™ installation file.
3. Select installation Language, Click "Next".
4. When the Installation Shield Wizard window appears, click "Next."
5. Select "I agree to the terms of the license agreement" to accept the terms of use.
6. Choose a folder to install the MagicTune™ program.
7. Click "Install."
8. The "Installation Status" window appears.

9. Click "Finish."
10. When the installation is complete, the MagicTune™ executable icon appears on your desktop.

Double-click the icon to start the program.



MagicTune™ execution icon may not appear depending on specification of computer system or monitor.
If that happens, press F5 Key.



? Installation Problems (MagicTune™)

The installation of MagicTune™ can be affected by such factors as the video card, motherboard and the network environment.



! System Requirements

OS

- Windows 2000
- Windows XP Home Edition
- Windows XP Professional
- Windows Vista™



It is recommended using MagicTune™ in Windows™ 2000 or later.

Hardware

- 32MB Memory above
- 60MB Hard disk space above

* For more information, visit the MagicTune™ [website](#).

Uninstall

The MagicTune™ program can be removed only by using the "Add or Remove Programs" option of the Windows™ Control Panel.

Perform the following steps remove MagicTune™.

1. Go to [Task Tray] ' [Start] ' [Settings] and select [Control Panel] in the menu. If the program runs on Windows™ XP, go to [Control Panel] in the [Start] menu.
2. Click the "Add or Remove Programs" icon in Control Panel.
3. In the "Add or Remove Programs" screen, scroll down to find "MagicTune™". Click on it to highlight it.
4. Click the "Change/Remove" button to remove the program.
5. Click "Yes" to begin the uninstall process.
6. Wait until the "Uninstall Complete" dialog box appears.

Visit the MagicTune™ [website](#) for technical support for MagicTune™, FAQs (questions and answers) and software upgrades.



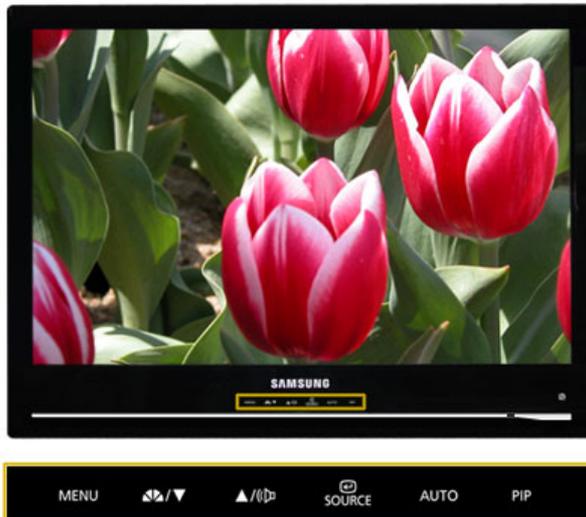
The color and appearance of the product may vary depending on the model, and the product specifications are subject to change without prior notice for reasons of performance enhancement.

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○ Adjusting the Monitor

Control Buttons Direct Functions OSD Function

▶ Control Buttons



MENU Use this button to open the on-screen menu and exit from the menu screen or close screen adjustment menu.

PC/DVI : MagicBright™
 MagicBright™ is a new feature providing the optimum viewing environment depending on the contents of the image you are watching.
 Then press the button again to circle through available preconfigured modes.
 (Custom → Text → Internet → Game → Sports → Movie)

 AV/S-Video/Component : Mode
 The Monitor has four automatic picture settings that are preset at the factory.
 Then press the button again to circle through available preconfigured modes.
 (Dynamic → Standard → Movie → Custom)

 This button allows you to adjust items in the menu.

 This button allows you to adjust items in the menu.

	When OSD is not on the screen, push the button to adjust volume.
	Press this button to activate a highlighted menu item.
SOURCE	Selects the input signal while the OSD is off.
AUTO	Press to self-adjust to the incoming Analog signal. The values of fine,coarse and position are adjusted automatically.
PIP	Push the PIP button to turn PIP On/Off.

Control Buttons Direct Functions OSD Function

Direct Functions

AUTO



Menu	Description
	When the 'AUTO' 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 PC signal. The values of fine, coarse and position are adjusted automatically. (Available in PC mode only)
AUTO	To make the automatic adjustment function sharper, execute the 'AUTO' function while the AUTO PATTERN is on. <ul style="list-style-type: none"> ▶ If auto adjustment does not work properly, press 'AUTO' button again to adjust picture with more accuracy. ▶ If you change resolution in the control panel, auto function will be executed automatically.

Locked



Menu

Description

Play/Stop

Locked

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

※ Even if you use the OSD adjustment lock function, you can still adjust MagicBright™/Mode and Brightness and Contrast of the monitor.



▶ MagicBright™



Menu

Description

Play/Stop

PC/DVI : MagicBright™
 MagicBright™ is a new feature providing the optimum viewing environment depending on the contents of the image you are

watching.
Then press the button again to circle through available preconfigured modes.
(Custom → Text → Internet → Game → Sports → Movie)

 MagicBright™

AV/S-Video/Component : Mode
The Monitor has four automatic picture settings that are preset at the factory. Then press the button again to circle through available preconfigured modes.
(Dynamic → Standard → Movie → Custom)



Volume



Menu

Description



Volume

When OSD is not on the screen, push the button to adjust volume.

SOURCE



Menu	Description
SOURCE	<p>Selects the input signal while the OSD is off. (When the source button is pressed to change the input mode, a message appears in the upper left of the screen displaying the current mode -- PC, DVI, HDMI, AV, S-Video and Component input signal.)</p> <p>※ Changing the source is only allowed for external devices that are connected to the monitor at the time.</p>

▶ PIP (Available in PC/DVI Mode Only)



Menu	Description
PIP	<p>Push the PIP button to turn PIP screen On/Off. You can view a picture from HDMI (PC mode only), AV, S-Video, or Component (DVI mode only) through the PIP screen in PC and DVI mode.</p>

OSD Function

Input



※ The default setting may differ depending on the selected Input Mode (input signal source selected in External Input List) and the selected resolution.

Menu	Description	Play/Stop
Source List	<p>Use to select PC or other external input sources connected to the Monitor. Use to select the screen of your choice.</p> <p>1) PC 2) DVI 3) HDMI 4) AV 5) S-Video 6) Component</p> <p>MENU → → → ▲, ▼ → MENU</p>	
Edit Name	<p>Name the input device connected to the input jacks to make your input source selection easier.</p> <p>1) PC 2) DVI 3) HDMI 4) AV 5) S-Video 6) Component</p> <p>MENU → → ▲, ▼ → → ▲, ▼ → MENU</p>	

Picture (PC / DVI)



※ The default setting may differ depending on the selected Input Mode (input signal source selected in External Input List) and the selected resolution.

Menu	Description	Play/Stop
MagicBright	<p>MagicBright™ is a new feature providing optimum viewing environment depending on the contents of the image you are watching. Currently six different modes are available: Custom, Text, Internet, Game, Sports and Movie. Each mode has its own pre-configured brightness value. You can easily select one of six settings by simply pressing MagicBright™ control buttons.</p> <ol style="list-style-type: none"> 1) Custom : 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 : For documentations or works involving heavy text. 3) Internet : For working with a mixture of images such as texts and graphics. 4) Game : For watching motion pictures such as a game. 5) Sports : For watching motion pictures such as a Sports. 6) Movie : For watching motion pictures such as a DVD or Video CD. 	
Custom	<p>MENU → ▲, ▼ → [] → [] → ▲, ▼ → MENU</p> <p>You can use the on-screen menus to change the contrast and brightness according to personal preference.</p> <ol style="list-style-type: none"> 1) Contrast : Adjust the Contrast. 2) Brightness : Adjust the Brightness. <p>MENU → ▲, ▼ → [] → ▲, ▼ → [] → ▲, ▼ → [] → ▲, ▼ → MENU</p>	<p>Contrast</p> <p>Brightness</p>

※ If you adjust picture using Custom function, MagicBrightT will turn to Custom mode.

Image Lock is used to fine-tune and get the best image by removing noise that creates unstable images with jitter and shimmer. If satisfactory results are not obtained using the Fine adjustment, use the Coarse adjustment and then use Fine again.

- Available in PC Mode Only

- Image Lock**
- 1) Coarse
: Adjust the screen so that all vertical lines (noise) on the screen are removed. Then, use the horizontal position adjustment menu to move the screen to the center, as the screen position may change after the noise has been removed.
 - 2) Fine
: Removes noise such as horizontal stripes. If the noise persists even after Fine tuning, repeat it after adjusting the frequency (clock speed).
 - 3) Sharpness
: Adjust the Sharpness.
 - 4) H-Position
: Adjusts the screen location horizontally.
 - 5) V-Position
: Adjusts the screen location vertically.



MENU → ▲, ▼ → [Enter] → ▲, ▼ → [Enter] → ▲, ▼ → [Enter] → ▲, ▼ → MENU

Auto Adjustment
The values of Fine, Coarse, position are adjusted automatically. By changing the resolution in the control panel, auto function is performed.
- Available in PC Mode Only



MENU → ▲, ▼ → [Enter] → ▲, ▼ → [Enter] → MENU

Size
You can switch the Size.

- 1) Wide
- 2) 4:3



MENU → ▲, ▼ → [Enter] → ▲, ▼ → [Enter] → MENU

- PIP Picture**
When the PIP is on, you can adjust the PIP screen setting.
- 1) Contrast
: Adjusts the Contrast of the PIP window on the screen.
 - 2) Brightness
: Adjusts the Brightness of the PIP window on the screen.
 - 3) Color
: Adjusts the Color of the PIP window on the screen
 - 4) Tint
: Adds a natural tone to the PIP window.



	AV S-Video		PIP Component (480i, 480p, 720p, 1080i)		HDMI (480p, 720p, 1080i)
Main	PC	O	O	X	O
	DVI	O	O	O	X

MENU → ▲, ▼ → [Enter] → ▲, ▼ → [Enter] → ▲, ▼ → [Enter] → ▲, ▼ → MENU



※ The default setting may differ depending on the selected Input Mode (input signal source selected in External Input List) and the selected resolution.

Menu	Description	Play/Stop
Mode	<p>The Monitor has four automatic picture settings ("Dynamic", "Standard", "Movie" and "Custom") that are preset at the factory. You can activate either Dynamic, Standard, Movie, or Custom. You can select "Custom" which automatically recalls your personalized picture settings.</p> <ol style="list-style-type: none"> 1) Dynamic : Select this mode to view a sharper image than in "Standard" mode. 2) Standard : Select this mode when the surroundings are bright. This also provides a sharp image. 3) Movie : Select this mode when the surroundings are dark. This will save power and reduce eye fatigue. 4) Custom : Select this mode when you want to adjust the image according to your preferences <p>MENU → ▲, ▼ → [] → [] → ▲, ▼ → MENU</p> <p>You can use the on-screen menus to change the contrast and brightness according to personal preference.</p>	
Custom	<ol style="list-style-type: none"> 1) Contrast : Adjust the Contrast. 2) Brightness : Adjust the Brightness. 3) Sharpness : Adjust the Sharpness. 4) Color : Adjust the picture Color. 5) Tint : Adds a natural tone to the display. <p>MENU → ▲, ▼ → [] → ▲, ▼ → [] → ▲, ▼ → [] → ▲, ▼ → MENU</p> <p>You can switch the Size.</p>	<p>Contrast</p> <p>Brightness</p> <p>Sharpness</p> <p>Color</p> <p>Tint</p>

Size

- 1) Wide
- 2) 16:9
- 3) Zoom1
- 4) Zoom2
- 5) 4:3



MENU → ▲, ▼ → [Left Arrow] → ▲, ▼ → [Right Arrow] → ▲, ▼ → MENU

Film Mode

You can turn Film Mode Off / On.
The Film Mode feature offers you a theater-quality viewing experience.
In Component mode, film mode is only available for 480i and 576i input.



MENU → ▲, ▼ → [Left Arrow] → ▲, ▼ → [Right Arrow] → [Left Arrow] → ▲, ▼ → MENU

 MagicColor Pro 



※ The default setting may differ depending on the selected Input Mode (input signal source selected in External Input List) and the selected resolution.

Menu	Description	Play/Stop
MagicColor	<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> <ol style="list-style-type: none"> 1) Off Returns to the original mode. 2) Intelligent Displays vivid natural color with clearness. 3) Full Displays not only vivid natural color but also more realistic natural skin color with clearness. 4) Demo The screen before applying MagicColor appears on the right and the screen after applying MagicColor appears on the left. 	

MENU → ▲, ▼ → [Left Arrow] → [Right Arrow] → ▲, ▼ → MENU

Color Tone

The tone of the color can be changed and one of four modes can be selected - Cool, Normal, Warm and Custom.

	MENU → ▲, ▼ → [Left] → ▲, ▼ → [Left] → ▲, ▼ → MENU	
Color Control	Adjusts individual R,G,B color balance. - Available in PC mode only	
	MENU → ▲, ▼ → [Left] → ▲, ▼ → [Left] → ▲, ▼ → [Left] → ▲, ▼ → MENU	
Gamma	Gamma correction changes the luminance of the colors with intermediate luminance.	
	1) Mode 1 2) Mode 2 3) Mode 3	
	MENU → ▲, ▼ → [Left] → ▲, ▼ → [Left] → ▲, ▼ → MENU	

 PIP (PC/DVI) 



※ The default setting may differ depending on the selected Input Mode (input signal source selected in External Input List) and the selected resolution.

Menu	Description	Play/Stop
PIP	Turn the PIP Screen on or off. You can view a picture from HDMI (PC mode only), AV, S-Video, or Component (DVI mode only) through the PIP screen in PC and DVI mode.	
	1) Off 2) On	
	MENU → ▲, ▼ → [Left] → [Left] → ▲, ▼ → MENU	
Source	Select the input source for the PIP. You can view a picture from HDMI (PC mode only), AV, S-Video, or Component (DVI mode only) through the PIP screen in PC and DVI mode.	
	MENU → ▲, ▼ → [Left] → ▲, ▼ → [Left] → ▲, ▼ → MENU	
	Change the Size of the PIP window.	
	 /  / 	

Size If you select in Size, Position will not be activated.



MENU → ▲, ▼ → → ▲, ▼ → → ▲, ▼ → MENU

Position Change the Position of the PIP window.



MENU → ▲, ▼ → → ▲, ▼ → → ▲, ▼ → MENU

You can select either Main or Sub when PIP is On.

Sound Select
1) Main
2) Sub



MENU → ▲, ▼ → → ▲, ▼ → → ▲, ▼ → MENU

▶ Setup



※ The default setting may differ depending on the selected Input Mode (input signal source selected in External Input List) and the selected resolution.

Menu

Description

Play/Stop

You can choose one of 11 languages.

1) English 2) Deutsch 3) Français 4) Español 5) Italiano
6) Svenska 7) Português 8) Русский 9) 한국어 10) 中国語
11) 日本語



MENU → ▲, ▼ → → → ▲, ▼ → MENU

Changes the opaqueness of the background of the OSD.

Transparency
1) High
2) Medium
3) Low
4) Opaque



MENU → ▲, ▼ → → ▲, ▼ → → ▲, ▼ → MENU

If no signal is being received or the signal is very weak, a blue screen automatically replaces the noisy picture background. If you wish to

continue viewing the poor picture, you must set the "Blue screen" mode to "Off".

Blue Screen

- Operates only for HDMI, AV, S-Video and Component mode.

MENU → ▲, ▼ →  → ▲, ▼ →  → ▲, ▼ → MENU



Picture parameters are replaced with the factory default values.

Reset

1) Image Reset

: Image parameters are replaced with the factory default values.

- Available in PC Mode Only

2) Color Reset

: Color parameters are replaced with the factory default values.

- Available in PC/DVI Mode Only

MENU → ▲, ▼ →  → ▲, ▼ →  → ▲, ▼ →  → ▲, ▼ → MENU

PC
- Image
Reset



PC
- Color
Reset



DVI
- Color
Reset



SRS TS XT

SRS TS XT is a patented SRS technology that solves the problem of playing 5.1 multichannel content over two speakers. TruSurround delivers a compelling, virtual surround sound experience through any two-speaker playback system, including internal television speakers. It is fully compatible with all multichannel formats.

MENU → ▲, ▼ →  → ▲, ▼ →  → ▲, ▼ → MENU





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○ Troubleshooting

Check List Q & A Self-Test

▶ Check List

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 "Check Signal Cable" on the screen?	(Connected using the D-sub cable) Check the signal cable connection. (Connected using the DVI cable) 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 SOURCE button to have the monitor double-check the input signal source.
	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) If the initial screen (the login screen) does not appear, contact the Service Center or your dealer .
	Can you see "Not Optimum Mode", "Recommended Mode 1680 x 1050 60 Hz" 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 handle properly. Adjust the maximum resolution and frequency that the monitor can handle properly. If the display exceeds SXGA or 75 Hz, a "Not Optimum Mode", "Recommended Mode 1680 x 1050 60 Hz" message is displayed. If the display exceeds 85 Hz, the display will work properly but the "Not Optimum Mode", "Recommended Mode 1680 x 1050 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		The monitor is in PowerSaver mode. Press a key on the keyboard to activate the monitor and

	indicator on the monitor blinking at 1 second intervals?	restore the image on the screen. If there is still no image, press the 'SOURCE' 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 / III] 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?	Windows XP : Set the resolution at the Control Panel → Appearance and Themes → Display → Settings. Windows ME/2000 : Set the resolution 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	Have you installed the monitor driver?	Install the monitor driver according to the Driver Installation Instructions .

reads "Unrecognized monitor, Plug & Play (VESA DDC) monitor found".	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 when MagicTune™ does not function properly.	MagicTune™ feature is found only on PC (VGA) with Window OS that supports Plug and Play.	<p>* To check whether your PC is available for MagicTune™ feature, follow the steps below (When Windows is XP);</p> <p>Control Panel → Performance and Maintenance → System → Hardware → Device Manager → Monitors → After deleting Plug and Play monitor, find 'Plug and Play monitor' by searching new Hardware.</p> <p>MagicTune™ is an additional software for the monitor. Some graphic cards may not support your monitor. When you have a problem with the graphic card, visit our website to check the compatible graphic card list provided. http://www.samsung.com/monitor/magictune</p>
MagicTune™ doesn't work properly.	<p>Have you changed your PC or video graphic card?</p> <p>Did you install the program?</p>	<p>Download the latest program. The program can be downloaded http://www.samsung.com/monitor/magictune</p> <p>Reboot the computer after installing the program for the first time. If a copy of the program is already installed, remove it, reboot the computer, and then install the program again. You need to reboot the computer for it to operate normally after installing or removing the program.</p>

※ Visit the MagicTune™ website and download the installation software for MagicTune™ MAC.

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

- ▶ Check if the power cord and the video cables are properly connected to the computer.
- ▶ 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.)
- ▶ If you installed a new video card or assembled the PC, please check if the adapter(video) driver and the monitor driver are properly installed.
- ▶ 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.)
- ▶ 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.

Check List Q & A Self-Test

▶ Q & A

Question	Answer
How can I change the frequency?	<p>Frequency can be changed by reconfiguring the video card.</p> <p>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.)</p>
How can I adjust the resolution?	<p>Windows XP : Set the resolution at the Control Panel → Appearance and Themes → Display → Settings.</p>

Windows ME/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 XP :
Set the resolution at the Control Panel → Appearance and Themes → Display → Screen Saver.
Set the function at BIOS-SETUP of the computer.

Windows ME/2000 :
Set the resolution at the Control Panel → Display → Screen Saver.
Set the function at BIOS-SETUP of the computer.

✘ [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.

[Check List](#) [Q & A](#) [Self-Test](#)

▶ Self-Test

[Self-Test Feature Check](#) | [Warning Messages](#) | [Environment](#) | [Useful Tips](#)

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.

Not Optimum Mode

Recommended Mode
1680 x 1050 60Hz

▶ Environment ▲

- ▶ The location and the position of the monitor may influence the quality and other features of the monitor.
 - ▶ If there are any sub woofer speakers near the monitor, unplug and relocate the woofer to another room.
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 1680 x 1050 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.



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○ Specifications

Specifications PowerSaver Preset Timing Modes

▣ Specifications

General

Model Name SyncMaster 225MS

LCD Panel

Size 22" Wide Diagonal (55 cm)

Display area 473.76 mm (H) x 296.1 mm (V)

Pixel Pitch 0.282 mm (H) x 0.282 mm (V)

Synchronization

Horizontal 30 ~ 81 kHz

Vertical 56 ~ 75 Hz

Display Color

16.7M

Resolution

Optimum resolution 1680x1050@60Hz< Analog/Digital >

Maximum resolution 1680x1050@60Hz< Analog/Digital >

Input Signal, Terminated

RGB Analog
TTL level (V high \geq 2.0V, V low \leq 0.8V)
0.7 Vp-p \pm 5%

Maximum Pixel Clock

135MHz

Power Supply

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

Signal Cable

15pin-to-15pin D-sub cable, Detachable
DVI-D to DVI-D connector, Detachable, (Option)

Signal Connectors

15pin 3-row D-sub connector, 24pin 3-row DVI-D connector
19pin Type A HDMI Connector, Composite, S-Video, Component

Dimensions (W x H x D) / Weight

520.0 X 386.0 X 65.5 mm / 20.5 x 15.2 x 2.6 inch (Without Stand)
520.0 X 439.0 X 201.9 mm / 20.5 x 17.3 x 7.9 inch (With Stand) / 7.3 kg / 16.1 lbs

VESA Mounting Interface

100 mm x 100 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 1 ppm (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 5,292,000.

※ 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.)

Specifications PowerSaver Preset Timing Modes

▶ PowerSaver

- ▶ 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

Power off
(Power button)
EPA/ENERGY 2000

Power Indicator	Blue	Blue Blinking	Black
Power Consumption	less than 58 watts	less than 2 watts	less than 2 watts

Specifications PowerSaver Preset Timing Modes

▶ 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	70.087	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	100.000	-/-
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	108.00	+/+
VESA 1280 x 960	60.000	60.000	108.00	+/+
VESA, 1280 x 1024	63.981	60.020	108.00	+/+
VESA, 1280 x 1024	79.976	75.025	135.00	+/+
VESA, 1680 x 1050	64.674	59.883	119.000	+/-

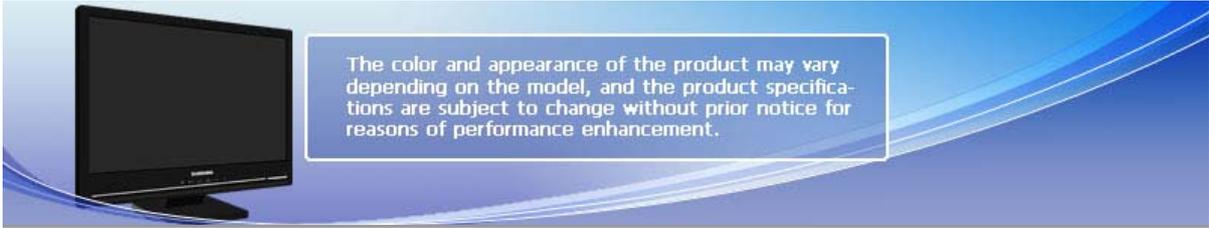
Horizontal Frequency



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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○ Information

Contact SAMSUNG WORLDWIDE Terms For Better Display Authority

▣ **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 (7267864)	http://www.samsung.com
CANADA	1-800-SAMSUNG (7267864)	http://www.samsung.com/ca
MEXICO	01-800-SAMSUNG (7267864)	http://www.samsung.com/mx

Latin America

ARGENTINE	0800-333-3733	http://www.samsung.com/ar
BRAZIL	4004-0000	http://www.samsung.com/br
CHILE	800-726-7864 (SAMSUNG)	http://www.samsung.com/cl
COLOMBIA	01-8000112112	http://www.samsung.com.co
COSTA RICA	0-800-507-7267	http://www.samsung.com/latin
ECUADOR	1-800-10-7267	http://www.samsung.com/latin
EL SALVADOR	800-6225	http://www.samsung.com/latin
GUATEMALA	1-800-299-0013	http://www.samsung.com/latin
JAMAICA	1-800-234-7267	http://www.samsung.com/latin
PANAMA	800-7267	http://www.samsung.com/latin
PUERTO RICO	1-800-682-3180	http://www.samsung.com/latin
REP. DOMINICA	1-800-751-2676	http://www.samsung.com/latin
TRINIDAD & TOBAGO	1-800-7267-864	http://www.samsung.com/latin
VENEZUELA	0-800-100-5303	http://www.samsung.com/latin

Europe

BELGIUM	03 201 2418	http://www.samsung.com/be
CZECH REPUBLIC	844 000 844	http://www.samsung.com/cz
	Distributor pro Českou republiku: Samsung Zrt., česká organizační složka Vyskočilova 4, 14000 Praha 4	
DENMARK	70 70 19 70	http://www.samsung.com/dk
FINLAND	030-6227 515	http://www.samsung.com/fi
FRANCE	3260 SAMSUNG(7267864) (€ 0,15/min)	http://www.samsung.com/fr
GERMANY	01805 - 121213 (€ 0,14/Min)	http://www.samsung.de
HUNGARY	06-80-SAMSUNG (7267864)	http://www.samsung.com/hu
ITALIA	800 SAMSUNG (7267864)	http://www.samsung.com/it
LUXEMBURG	0032 (0)2 201 24 18	http://www.samsung.lu
NETHERLANDS	0900 20 200 88 (€ 0,10/Min)	http://www.samsung.com/nl
NORWAY	815-56 480	http://www.samsung.com/no
POLAND	0 801 801 881	http://www.samsung.com/pl
PORTUGAL	80 8 200 128	http://www.samsung.com/pt
REPUBLIC OF IRELAND	0818 717 100	http://www.samsung.com/uk
SLOVAKIA	0800-SAMSUNG (7267864)	http://www.samsung.com/sk
SPAIN	903 10 11 30	http://www.samsung.com/es
SWEDEN	0771-400 200	http://www.samsung.com/se
SWITZERLAND	0800-7267864	http://www.samsung.com/ch
U.K	0870 SAMSUNG (7267864)	http://www.samsung.com/uk
CIS		
ESTONIA	800-7267	http://www.samsung.ee
LATVIA	800-7267	http://www.samsung.com/lv
LITHUANIA	8-800-77777	http://www.samsung.lt
KAZAKHSTAN	8 800 080 1188	http://www.samsung.kz
RUSSIA	8-800-200-0400	http://www.samsung.ru
UKRAINE	8-800-503-0000	http://www.samsung.com/ur
UZBEKISTAN	140-1234	http://www.samsung.uz
Asia Pacific		
AUSTRALIA	1300 362 603	http://www.samsung.com/au
CHINA	800-810-5858, 010- 6475 1880	http://www.samsung.com.cn
HONG KONG	3698-4698	http://www.samsung.com/hk

INDIA	3030 8282, 1800 1100 11	http://www.samsung.com/in
INDONESIA	0800-112-8888	http://www.samsung.com/id
JAPAN	0120-327-527	http://www.samsung.com/jp
MALAYSIA	1800-88-9999	http://www.samsung.com/my
PHILIPPINES	1800-10-SAMSUNG (7267864)	http://www.samsung.com/ph
SINGAPORE	1800-SAMSUNG (7267864)	http://www.samsung.com/sg
THAILAND	1800-29-3232, 03-689-3232	http://www.samsung.com/th
TAIWAN	0800-329-999	http://www.samsung.com/tw
VIETNAM	1 800 588 889	http://www.samsung.com/vn
Middle East & Africa		
SOUTH AFRICA	0860 7267864 (SAMSUNG)	http://www.samsung.com/za
U.A.E	800SAMSUNG (7267864) 8000-4726	http://www.samsung.com/mea

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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 1680 x 1050 , this means the screen is composed of 1680 horizontal dots (horizontal resolution) and 1050 vertical lines (vertical resolution).

▶ S-Video

- ▶ Short for "Super Video." S-Video allows up to 800 lines of horizontal resolution, enabling high-quality video.

▶ External Device Input

- ▶ External device input refers to video input from such external video devices as VCRs, camcorders and DVD players, separate from a TV broadcast.

▶ DVD

- ▶ A type of digital disk technology that takes up only the benefits of CD and LD, to implement a high resolution/quality, which enables the user to enjoy clearer images.

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▶ For Better Display

- ▶ 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 : 1680 x 1050
 - ▶ Vertical frequency (refresh rate) : 60 Hz
- ▶ 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 5,292,000.
- ▶ 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.
- ▶ 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.
- ▶ 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.

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