SyncMaster 2343NW/2343NWX

LCD Monitor

User Manual

Safety Instructions

Notational

🖉 Note

These safety instructions must be followed to ensure your safety and prevent property damage.

Make sure to read the instructions carefully and use the product in the correct manner. **Warning / Caution**



Otherwise, it may result in death or personal injury.

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

Notational Conventions



Power

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

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

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

Shortcut to Anti-Afterimage Instructions



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



Otherwise, this may result in electric shock or fire.

Do not touch the power plug with wet hands when removing or plugging the plug into the outlet.
 Otherwise, this may result in electric shock.

٠



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

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



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

• Otherwise, this may result in fire.

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

• Otherwise, this may result in fire.



Do not connect multiple appliances to the same power outlet.

• Otherwise, this may cause fire due to overheating.



Do not disconnect the power cord while using the monitor.

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



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

This may cause electric shock or fire.



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

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

Installation



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

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



Do not drop the monitor when moving it.

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



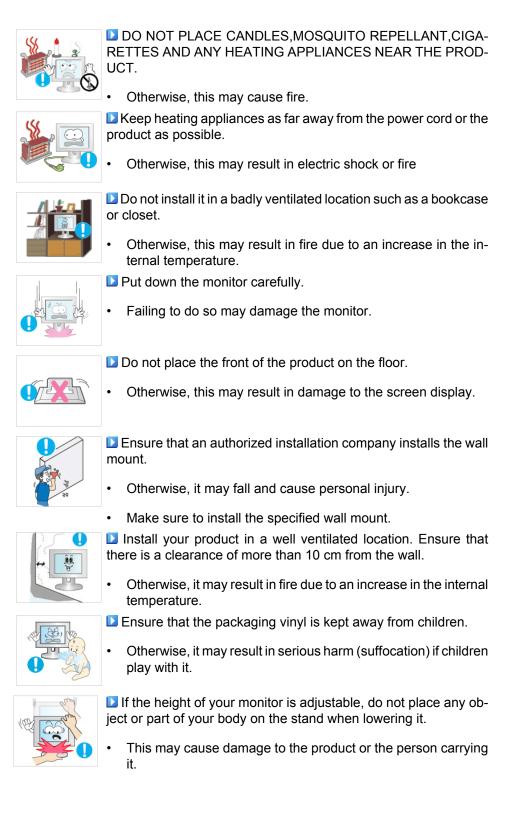
Ensure that at least two persons lift and move the product.

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



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

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



Clean



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



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

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



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

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

Otherwise, it may result in fire.



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

Otherwise, it may result in electric shock or fire.



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

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



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

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



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

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

Others



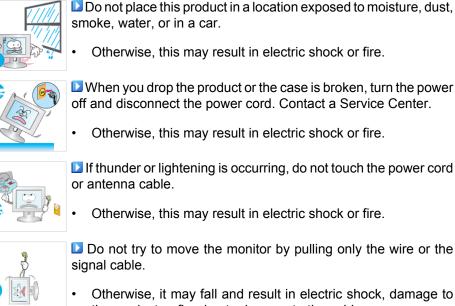
The product is a high voltage product. Ensure that users do not disassemble, repair or modify the product themselves.

• Otherwise, this may result in electric shock or fire. If the product needs to be repaired, contact a Service Center



▶ If there is a strange smell or a strange sound or smoke is coming from the product, disconnect the power plug immediately and contact a Service Center.

Otherwise, this may result in electric shock or fire.



When you drop the product or the case is broken, turn the power

- If thunder or lightening is occurring, do not touch the power cord
 - Otherwise, this may result in electric shock or fire.



Do not try to move the monitor by pulling only the wire or the

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



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

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



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

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



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

- If water or a foreign material enters the product, disconnect the power cord and contact a Service Center.
- This may result in a product malfunction, electric shock, or fire.



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

Otherwise, this may result in an explosion or fire.



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

If water or foreign material enters the product, disconnect the power cord and contact a Service Center.



- Otherwise, this may result in electric shock or fire.
- When using a fixed screen for a long time, an afterimage or stain may occur.
 - If you are not using your product for a long period of time, put it into sleep mode or use a moving screen saver.

- Set a resolution and frequency appropriate to the product.
- Otherwise, your eyesight may be damaged.



0.0

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



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



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

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



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



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

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

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



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

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



Do not place any heavy items or toys or confectionery, such as cookies etc. that may attract the attention of children and to the product.

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



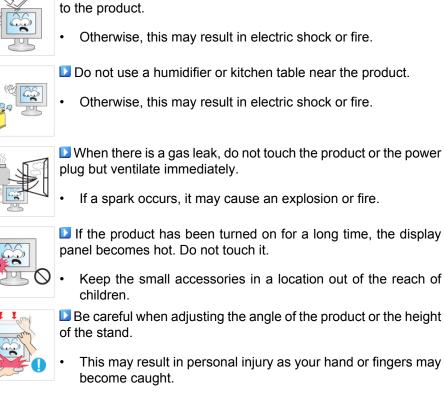
Do not turn the product upside down or move it while holding only the stand.

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



- Do not place the product in a location exposed to direct sunlight or near any heat such as a fire or heater.
- This may reduce the lifetime of the product, and may result in fire.

Do not drop any objects onto the product or cause any impact



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

|--|

•

- Do not install the product in a location low enough for children to reach.
- Otherwise, it may fall and result in personal injury.

Do not put any heavy objects on the product.

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



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



Good Postures When Using the Monitor

► When using the product, use it in the correct position.

- Keep your back straight while looking at the product.
- The distance between your eyes and the screen should be between 45 to 50 cm. Look at the screen from a slightly higher location than the height of the screen.
- When using the product, use it in the correct position.





- Adjust the angle so that light is not reflected on the screen.
- Place your arms perpendicular to your sides and allow your arms to be level with the back of the hand.
- Keep your elbow at 90 degrees.
- Keep your knees at greater than 90 degrees, and keep your heels firmly on the floor. Keep your arms lower than your heart.

Introduction

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

Type 1





Monitor & Simple stand

Type 2





Monitor & USB Simple stand

🖉 Note

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

Туре3





Monitor & HAS stand

Type4



Monitor & USB HAS stand

Manuals



Quick Setup Guide



Warranty Card

(Not available in all locations)





User's Guide





D-Sub Cable



Power Cord

Others





Cleaning Cloth

Cable holding ring (Simple stand)

Sold separately



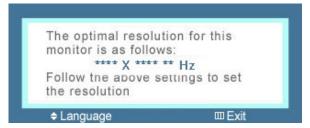
USB Cable



Cleaning Cloth is only provided for highly polished black products as a product feature.

Your Monitor

Initial Settings



Select the language using the up or down key.

The displayed content will disappear after 40 seconds.

Turn the Power button off and on. It will be displayed again.

It can be displayed up to three (3) times. Make sure to adjust the resolution of your PC before reaching the maximum count.

🖉 Note

The resolution displayed on the screen is the optimal resolution for this product.

Adjust your PC resolution so that it is the same as the optimal resolution for this product.

Front



▲ MENU button [MENU/Ⅲ]

Opens the on-screen menu and exits from the menu. Also use to exit the OSD menu or return to the previous menu.

2 Customized Key[

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

🖉 Note

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

Brightness button [⁰]

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

>> Click here to see an animation clip

Adjust buttons [▼!▲]

These buttons allow you to adjust items in the menu.

👩 Enter button (@)

Activates a highlighted menu item.

👩 AUTO button

Use this button for auto adjustment.

- >> Click here to see an animation clip
- 6 Power button [^b]

Use this button for turning the product on and off.

n Power Indicator

This light is lit when operating normally, and blinks once when your adjustments are saved.

🖉 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.

Rear

🖉 Note

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



Simple Stand

HAS Stand

POWER port

Connect the power cord for your monitor to the POWER port on the back of the product.

🔈 RGB IN port

Connect the D-sub cable to the 15-pin, RGB IN port on the back of your monitor.

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.

🖉 Note

The location of the Kensington Lock may be different depending on its model.

Using the Anti-Theft Kensington Lock

- Insert the locking device into the Kensington slot on the Monitor ¹/₁ and turn it in the locking direction ¹/₂.
- 2. Connect the Kensington Lock cable.
- 3. Fix the Kensington Lock to a desk or a heavy stationary object.
- DOWN(USB downstream port)

Connect the COWN port of the USB monitor and a USB device with the USB cable.

UP(USB upstrem port)

Connect the ++++ UP port of the monitor and the USB port of the computer with the USB cable.

🖉 Note

See Connecting Cables for further information regarding cable connections.

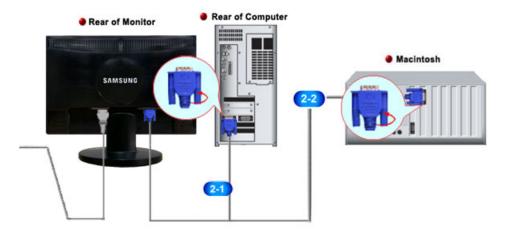


Cable holding ring

• Fix the cables using the holding ring, as shown in the figure.

Connections

Connecting Cables



Connect the power cord for your monitor to the power port on the back of the monitor.

Plug the power cord for the monitor into a nearby outlet.

2 Use a connection appropriate for your computer.

Using the RGB IN(Analog) connector on the video card.

• Connect the signal cable to the 15-pin, D-sub port on the back of your monitor.



Connected to a Macintosh.

• Connect the monitor to the Macintosh computer using the D-sub connection cable.

Ø Note

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

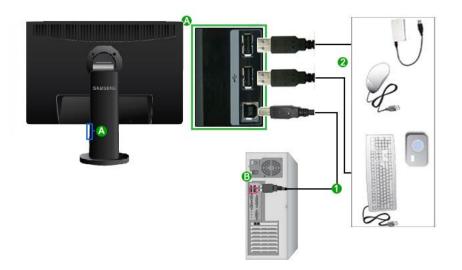
Connecting USB (Option)

Note

You can use a USB device such as a mouse, keyboard, Memory Stick, or external hard disk drive by connecting them to the C.

The 😽 USB port of the monitor supports High-Speed Certified USB 2.0.

	High speed	Full speed	Low speed
Data Rate	480 Mbps	12 Mbps	1.5 Mbps
Power Consump- tion	2.5 W	2.5 W	2.5 W
	(Max., each port)	(Max., each port)	(Max., each port)

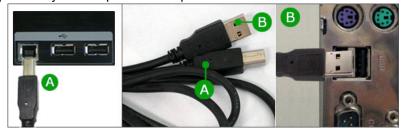


Connect the Grant UP port of the monitor and the USB port of the computer with the USB cable.

🖉 Note

To use + DOWN port, you have to connect the UP (Upstream Cable) to the PC.

Make sure to use the USB cable supplied with this monitor to connect the monitor's *UP* port and your computer's USB port.



- 2. Connect the COWN port of the USB monitor and a USB device with the USB cable.
- 3. The use procedures are as the same as those for using an external device connecting to the PC.
 - You can connect and use a keyboard and mouse.
 - You can play a file from a media device.

(Examples of media devices: MP3, digital camera, etc.)

• You can run, move, copy or delete the files on the storage device.

(Examples of storage devices: external memory, memory card, memory reader, HDD-type MP3 player, etc.)

• You can use other USB devices that can be connected to a computer.

🖉 Note

When connecting a device to the 4 *DOWN* port of the monitor, connect the device using a cable appropriate to the device.

(For the purchase of the cable and external devices, ask the service center of the corresponding product.)

The company is not liable for problems or damages to an external device caused by using an unauthorized cable for the connection.

Some products do not follow the USB standard, and it may cause a malfunction of the device.

If the device malfunctions even if it is connected to the computer, contact the service center of the device/computer.

Using the Stand

Monitor Assembly



Simple Stand

Monitor and Bottom

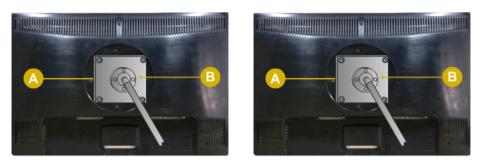
HAS Stand



A. Stand Stopper

Attaching a Base

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



Simple Stand

HAS Stand

A. Monitor

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



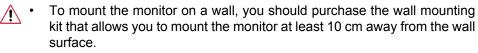
Do not use screws longer than the standard dimension, as they may damage the inside of the Monitor.

- For wall mounts that do not comply with VESA standard screw specifications, the length of the screws may differ depending on their specifications.
- Do not use screws that do not comply with the VESA standard screw specifications.

Do not fasten the screws too tightly, as this may damage the product or cause the product to fall, leading to personal injury.

Samsung is not liable for these kinds of accidents.

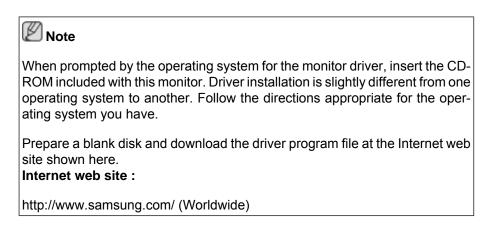
 Samsung is not liable for product damage or personal injury when a non-VESA or non-specified wall mount is used or the consumer fails to follow the product installation instructions.



- Contact the nearest Samsung Service Center for more information. Samsung Electronics will not be responsible for damages caused by using a base other than those specified.
- Please use Wall Mount according to the International standards.

Using the Software

Monitor Driver



Installing the Monitor Driver (Automatic)

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

SAMSUNG monitor installer	×
Select the display adapter on which you want to intall the monitor	
1. RADEON 9550 : Plug and Play Monitor	-
Select the monitor which you want to install	
Samsung ****	
()	
OK CANCEL	

4. If you can see following message window, then click the "Continue Anyway" button. Then click "OK" button (Microsoft[®] Windows[®] XP/2000 Operating System).

Hardwa	re Installation
♪	The software you are installing for this hardware: Samsung **** has not passed Windows Logo testing to verify its compatibility with Windows XP. (Tell me why this testing is important.) Continuing your installation of this software may impair or destabilize the correct operation of your system either immediately or in the future. Microsoft strongly recommends that you stop this installation now and contact the hardware vendor for software that has passed Windows Logo testing.
	Continue Anyway

🖉 Note

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/

Installing the Monitor Driver (Manual)

Microsoft[®] Windows Vista[™], Operating System

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



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



4. Click "Advanced Settings...".

Display Settings		
fonitor		
Drag the icons to match your monitors.	-	Jdentify Monitor
1		
1. (Multiple Menitori) on NVIDIA Geforer	- 6600 LE (N	Icrosoft Corporation
1. (Multiple Monitors) on NVIDIA GeForce	- 6600 LE (N	Icrosoft Corporation -
	- 6600 LE (N	icrosoft Corporation
[7] [his is my main monitor	6600 LE (M	Scrosoft Corporation -
Dis is my main monitor Distant the solutop ands this monitor Bisolution Low	6600 LE (M	
It is a my main monitor It is a my main monitor Exclusion Low	High	<u>Colore</u>
This is my main monitor To be a set of the solution set of the monitor Besolution Low	High	<u>Colore</u>

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".

dapter Monitor Troubleshoot. Color Management	Windows needs your permission to contionu
Ceneric PrP Monitor	
(Properties	If you started this action, continue.
Monitor Settings	During Presenting
Screen refresh rate:	Device Properties Microsoft Windows
60 Hertz •	
Bide modes that this monitor cannot display	
Clearing this check box allows you to select display modes that this monitor cannot display correctly. This may lead to an unusable	Oetails Continue Cance
display and/or damaged hardware.	User Account Control helps stop unauthorized changes to your comput
	L.

🖉 Note

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.

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

Seneral Driver Details		General Driver Details	
Genetic Ph/P Monitor		Generic PriP Monitor	
Device type: Monitors Manufacturer (Standard monitor types) Location: on NV/DIA GeForce 660 Device status		Driver Provider: Morsent Driver Date: 6/21/2006 Driver Venson: 6.0.6000 16388 Digital Signer: microsoft windows	
This device is working property.		Driver Details To vew details about the driver files.	
		Update Driver To update the driver software for this den	
	(m)	Disable Dashies the selected device.	
		Uninstal To uninstal the driver (Advanced).	

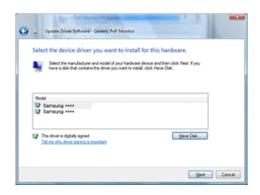
7. Check the "Browse my computer for driver software" checkbox and click "Let me pick from a list of device drivers on my computer".

low do you want to search for driver software?	Browse for driver software on your computer
 Search automatically for updated driver software Windows will search your computer and the between for the latest driver software for your device. 	Search for driver software in this location:
 Egonese may computer for driver software Locate and initial three software manufly. 	Let me pick from a list of device drivers on my computer The far will show insafeld driver whears compatible with the doics, and all driver software is the same category as the doics.

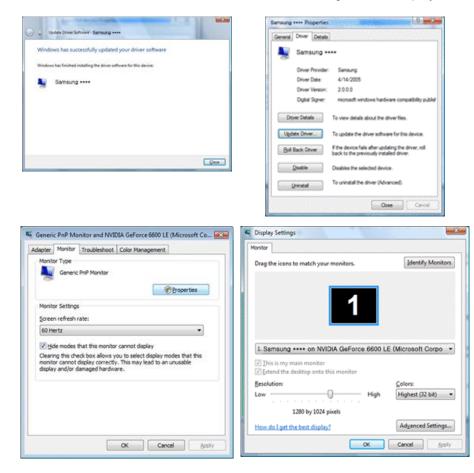
8. Click "Have Disk..." and select the folder (for example, D:\Drive) where the driver setup file is located, and click "OK".

Select the device driver you want to install for this hardware.	heet the manufacture's installation dak, and then make sure that the correct drive is selected below. Cancel
IV/Rex garpatile hardwari Mode 12 Genera Hof Hanter	Copy manufacturer's files from:
Net Generals That Header	Browse.
The down a detaily signed Telement and a montest	

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



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



Microsoft[®] Windows[®] XP Operating System

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

	🕼 fiel 🔕 - 🤧 🔎 Sauch 🐑 Nation 💷 -	
My Documents My Pictures My Pictures My Pictures My Computer My Computer My Computer Discourd Panel Disco	e stalaas tude e hiya ad legad	A second and the seco

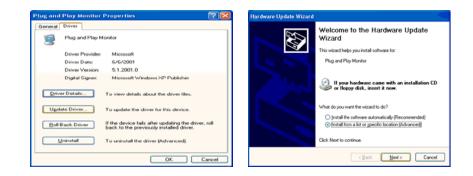
3. Click "Display" icon and choose the "Settings" tab then click "Advanced...".

P Appearance and Tremes		Display Properties
BR ER Ser Revers Del 1 G Ball - O - B PSea Address Paperster and Trenet		Themes Desktop Screen Saver Appearance Sottings
See allon	Approximate of these Pick as task (hourse it as task (hourse it as task it is formed (hourse it as task it is task it is formed	
	or pick a Control Panel icon	Display: Pkg and Play Monitor on 3D Prophet III Screen resolution Leve July Annual More 1024 by 760 pixels Troublestroot Adgenced

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

Plug and Play Monitor and 3D Prophet III Properties 👘 😰 🔀	Plug and Play Monitor Properties	2 🔀
GeForce3 Device Selection Correction General Adapter Monitor Troubleshoot Color Management Monitor type Plug and Play Monitor Properties	Cerneral Driver Plug and Play Monitor Device type: Monitors	
Monitor settings Screen refresh rate:	Manufacturer: (Standard monitor types) Location: on 3D Prophet III	
60 Hetz Lide modes that this monitor cannot display Clearing this check box allows you to select display modes that this monitor cannot display correctly. This may lead to an unusable display and/or damaged hardware.	Device status This device is twoking properly. If you are having problems with this device, click Troubleshoot to start the troubleshooter.	2
OK Cancel Arely	Involdeshoot Revice unage: Use this device (enable) OK OK	Cancel

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".

Hardware Update Wizard	Hardware Update Wizard
Please choose your search and installation options.	Select the device driver you want to install for this hardware.
Qearch for the best driver in these locations. Use the check boxes below to limit or expand the default search, which includes local paths and removable media. The best driver found will be installed.	Select the manufacturer and model of your hardware device and then click Next. If you have a disk that contains the driver you want to install, click Have Disk.
Search removable media (floppy, CD-ROM)	Show compatible hardware
Include this location in the search:	Model
An Opon't search. I will choose the driver to install.	Plug and Play Monitor
Choose this option to select the device driver from a list. Windows does not guarantee that	
Choose has option to select the dence after hints a lot. Whole we have been not guarantee that the driver you choose will be the best match for your hardware.	E This driver is diptally signed. Isl me who driver isoning is insortant
< <u>Back</u> Mext> Cancel	< Back News Cancel

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

Install From Disk	X	Hardware Update Wizard
Insert the manufacturer's installation disk, and then make sure that the correct drive is selected below.	OK Cancel	Select the device driver you want to install for this hardware.
Copy manufacturer's files from:	Browse	This driver is not digitally signed! Isl me who driver signing is important
		< Back Next> Cancel

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

Hardwa	re Installation
⚠	The software you are installing for this hardware: Samsung **** has not passed Windows Logo testing to verify its compatibility with Windows P.P. (Tell me why this testing is important.) Continuing your installation of this software may impair or destabilize the correct operation of your system either immediately or in the future. Microsoft strongly recommends that you stop this installation now and contact the hardware vendor for software that has passed Windows Logo testing.
	Continue Anyway STOP Installation

Ø Note

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 "OK" button continually.

Samsung *****	22
Operating Driver Samsung **** Driver Powider: Samsung Driver Powider: Samsung Driver Powider: Samsung Driver Powider: Samsung Driver Powider: Samsung Driver Powider: Samsung Driver Powider: Samsung Driver Powider: Not digitally signed Driver Powider: Not digitally signed Driver Details To view details about the driver files. Update Driver To update the driver for this device. Update Driver To update the driver for this device. Update docum To update the driver for this device.	rol
Uninstall To uninstall the driver (Advanced).	ancel
	Cenneral Driver Samsung **** Driver Provider: Samsung **** Driver Deate: To update the driver for this device. Bolt Back Driver If the device fails after updating the diver, loads, bit the pervision of streamed diver. Universalt To universalt the diver.

10. Monitor driver installation is completed.

Microsoft® Windows® 2000 Operating System

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

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

How to install

- 1. Click "Start", "Setting", "Control Panel".
- 2. Double click the "Display" icon.
- 3. Select the "Settings" tab and click "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 on "Update Driver..." then click on the "Next" button.
- 6. Choose "Display a list of the known drivers for this device so that I can choose a specific driver" then click "Next" and then click "Have disk".
- 7. Click the "Browse" button then choose A:(D:\Driver).
- 8. Click the "Open" button, then click "OK" button.
- 9. Choose your monitor model and click the "Next" button then click "Next" button.
- 10. Click the "Finish" button then the "Close" button.

If you can see the "Digital Signature Not Found" window then click the "Yes" button. And click the "Finish" button then the "Close" button.

Microsoft[®] Windows[®] Millennium Operating System

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

Microsoft[®] Windows[®] NT Operating System

- 1. Click "Start", "Settings", "Control Panel", and then double-click "Display" icon.
- 2. In Display Registration Information window, click Settings Tab and then click "All Display Modes".
- 3. Select a mode that you wish to use (Resolution, Number of colors and Vertical frequency) and then click "OK".
- 4. Click "Apply" button if you see the screen working normally after clicking "Test". If the screen is not normal, change to a different mode (lower mode of resolution, colors or frequency).

🖉 Note

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 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 Natural Color 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 [Run...]. Enter D:\color \NCProSetup.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.

MagicTune™



Installation

- 1. Insert the installation CD into the CD-ROM drive.
- Click the MagicTune[™] installation file.
 Note

If the popup window to install the software for the main screen is not displayed, proceed with the installation using the MagicTune executable file on the CD.

- 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

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

- 32 MB Memory above
- 60 MB 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.

🖉 Note

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

The MagicTune™ program is an additional program for monitor products. Some computing systems that install either an older or the latest video driver are not compatible with MagicTune™. Please visit the MagicTune™ Website for technical support for MagicTune™.



MagicRotation



Installation

- 1. Insert the installation CD into the CD-ROM drive.
- Click the MagicRotation installation file.
 Note

If the popup window to install the software for the main screen is not displayed, proceed with the installation using the MagicRotation executable file on the CD.

- 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 MagicRotation program.
- 7. Click "Install".
- 8. The "Setup Status" window appears.
- 9. Click "Finish".

Have to reboot the system in order for the MagicRotation to work properly.

10. When the installation is complete, the MagicRotation executable icon appears on your desktop.



Installation Problems

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

Limitation

1. The "Display Driver" should be properly loaded for the MagicRotation to work properly.

The installed "Display Driver" should be the latest driver supplied by the vendor.

- 2. If some applications like Windows Media Player, Real Player, etc. are not displaying movie files properly in 90, 180 and 270 orientations then do the following :
 - Close the application.
 - Select the Orientation (90, 180, 270) you want to view the application.
 - Relaunch the application.

In most cases this should fix the problem.

3. User Applications using OpenGL and DirectDraw (3D drawing) will not function as per the orientation mode selected (90, 180, 270).

e.g. 3D games

- 4. DOS based applications in Full Screen Mode will not function as per the orientation mode selected (90, 180, 270).
- 5. Dual is not supported in Windows[®], 98, ME, NT 4.0.
- 6. MagicRotation does not provide support for 24 bits per pixel (Bit depth/Color Quality).
- 7. If you are changing your Graphic Card it is recommended that you uninstall the MagicRotation Software before doing so.

System Requirements

OS

- Windows 98 SE
- · Windows ME
- Windows NT 4.0
- Windows 2000
- Windows XP Home Edition
- Windows XP Professional
- Windows Vista™

Hardware

- 128 MB Memory above (recommended)
- 25 MB Hard disk space above

Service Packs

- It is recommended that your System has the latest Service Pack installed.
- For Windows[®], NT 4.0, it is recommended to install Internet Explorer 5.0 and above with Active Desktop component.

For more information, visit the MagicRotation website. Windows[®], is registered trademark of Microsoft Corporation,Inc.

Uninstall

The MagicRotation program can be removed only by using the "Add or Remove Programs" option of the Windows[®] Control Panel.

Perform the following steps remove MagicRotation.

- 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 "MagicRotation." 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.
- 7. After uninstall restart the system to complete the uninstallation.

🖉 Note

Visit the MagicRotation website for technical support for MagicRotation, FAQs (questions and answers) and software upgrades.

Windows®, is registered trademark of Microsoft Corporation,Inc

The specifications are subject to change without notice.
MagicRotation is a tradmark of SAMSUNG ELECTRONICS CO., LTD.
All other product tradmarks mentioned in this document may be registered
tradmarks of their respective companies.

MultiScreen



Installation

- 1. Insert the installation CD into the CD-ROM drive.
- 2. Click the MultiScreen installation file.

🖉 Note

If the popup window to install the software for the main screen is not displayed, proceed with the installation using the MultiScreen executable file on the CD.

- 3. When the Installation Shield Wizard window appears, click "Next".
- 4. Select "I agree to the terms of the license agreement" to accept the terms of use.
- 5. Choose a folder to install the MultiScreen, program.
- 6. Click "Install".
- 7. The "Installation Status" window appears.
- 8. Click "Finish".
- 9. When the installation is complete, the Multiscreen executable icon appears on your desktop. Double-click the icon to start the program.

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

Installation Problems

The installation of MultiScreen 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 MultiScreen in Windows® 2000 or later.

Hardware

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

Uninstall

The Multiscreen program can be removed only by using the "Add or Remove Programs" option of the Windows $^{\mbox{$^{\circ}$}}$ Control Panel.

Perform the following steps remove Multiscreen.

Select "Setting/Control Panel" on the "Start" menu and then double-click "Add/Delete a program".

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

Adjusting the Monitor

Direct Functions

AUTO



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 Analog signal. The values of **Fine**, **Coarse** and **Position** are adjusted automatically.

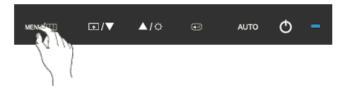
▶ If auto adjustment does not work properly, press 'AUTO' button again to adjust picture with more accuracy.

▶ If you change resolution in the control panel, auto function will be executed automatically.

OSD Lock & Unlock

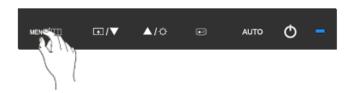
When pressing the AUTO button after locking the OSD





When pressing the MENU button after locking the OSD





This is the function that locks the OSD in order to keep the current states of settings or prevent others from adjusting the current settings.

Lock : Hold down the MENU button for more than five (5) seconds to activate the OSD adjustment lock function.

Unlock : Hold down the MENU button for more than five (5) seconds to deactivate the OSD adjustment lock function.

🖉 Note

Though the OSD adjustment lock function is activated, you can still adjust the brightness and contrast, and adjust **Customized Key** () using the Direct button.

Customized key



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

To view the operating screen displayed when pressing the [1] button after configuring the customized key for a function, click the name of each function.

(Image Size - MagicBright - MagicColor - Color Effect)

You can configure the customized key for a required function via $\ensuremath{\textit{Setup}}\xspace > \ensuremath{\textit{Customized}}\xspace$ Key.

Brightness



MENU/IIII	⊡/▼	▲ /≎	•	AUTO	Φ	-

When OSD is not on the screen, push the **Brightness** () button to adjust brightness.

OSD Function

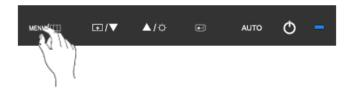
Picture	Brightness	Contrast	Magic- Bright		
Color	MagicColor	Color Tone	Color Con- trol	Color Effect	Gamma
Image	Coarse	Fine	Sharpness	H-Position	V-Position
CSD	Language	H-Position	V-Position	Transpar- ency	Display Time
Setup	Reset	Custom- ized Key	Image Size		
Information					



Brightness

(Not available in MagicBright mode of Dynamic Contrast.)





You can use the on-screen menus to change the brightness according to personal preference.

 $\mathsf{MENU} \to \textcircled{\bullet} \to \textcircled{\bullet} \to \blacktriangle, \blacktriangledown \to \mathsf{MENU}$

Contrast

(Not available in MagicBright mode of Dynamic Contrast.)



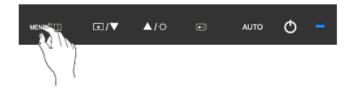
You can use the on-screen menus to change the contrast according to personal preference.

(Not available in MagicColor mode of Full and Intelligent.)

$$\mathsf{MENU} \to \textcircled{\bullet} \to \blacktriangle, \blacktriangledown \to \textcircled{\bullet} \to \bigstar, \blacktriangledown \to \mathsf{MENU}$$

MagicBright





Push the **1** button to circle through available preconfigured modes.

MagicBright is a new feature providing optimum viewing environment depending on the contents of the image you are watching. Currently seven different modes are available: **Custom**, **Text**, **Internet**, **Game**, **Sport**, **Movie** and **Dynamic Contrast**. Each mode has its own pre-configured brightness value. You can easily select one of seven settings by simply pressing **Customized Key** control button.

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.

Text

For documents or works involving heavy text.

• Internet

For working with a mixture of images such as texts and graphics.

• Game

For watching motion pictures such as a game.

Sport

For watching motion pictures such as a sport.

Movie

For watching motion pictures such as a DVD or Video CD.

Dynamic Contrast

Dynamic Contrast automatically detects the distribution of the visual signal and adjusts to create an optimum contrast.

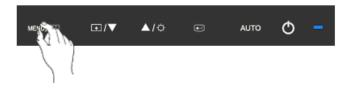
 $\mathsf{MENU} \to \textcircled{\bullet} \to \blacktriangle, \blacktriangledown \to \textcircled{\bullet} \to \bigstar, \blacktriangledown \to \mathsf{MENU}$



(Not available in MagicBright mode of Dynamic Contrast.)

MagicColor





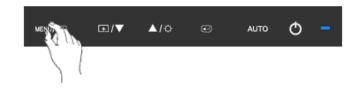
MagicColor is a new technology that Samsung has exclusively developed to improve digital image and to display natural color more clearly without disturbing image quality.

- Off Returns to the original mode.
- **Demo** The screen before applying **MagicColor** appears on the right and the screen after applying **MagicColor** appears on the left.
- **Full** Displays not only vivid natural color but also more realistic natural skin color with clearness.
- Intelligent Displays vivid natural color with clearness.

 $\mathsf{MENU} \to \blacktriangle, \blacktriangledown \to \textcircled{\bullet} \to \textcircled{\bullet} \to \bigstar, \blacktriangledown \to \mathsf{MENU}$

Color Tone





The tone of the color can be changed and one of four modes can be selected.

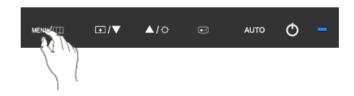
- **Cool** Makes whites bluish.
- Normal Keeps whites white.
- Warm Makes whites reddish.
- **Custom** Select this mode when you want to adjust the image according to your preferences.

(Not available in MagicColor mode of Full and Intelligent.)

 $\mathsf{MENU} \to \blacktriangle, \blacktriangledown \to \textcircled{\bullet} \to \bigstar, \blacktriangledown \to \textcircled{\bullet} \to \bigstar, \blacktriangledown \to \mathsf{MENU}$

Color Control



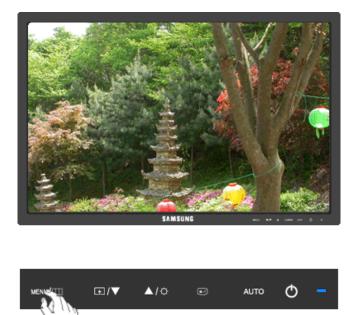


Adjusts individual Red, Green, Blue color balance.

(Not available in MagicColor mode of Full and Intelligent.)

 $\mathsf{MENU} \to \blacktriangle, \blacktriangledown \to \textcircled{e} \to \bigstar, \blacktriangledown \to \textcircled{e} \to \bigstar, \blacktriangledown \to \textcircled{e} \to \bigstar, \blacktriangledown \to \mathsf{MENU}$

Color Effect



You can change the overall mood by changing the screen colors.

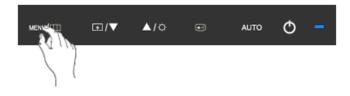
(Not available in MagicColor mode of Full and Intelligent.)

- Off
 Grayscale · Green · Aqua · Sepia
- Off This applies an achromatic color to the screen to adjust the screen effects.
- Grayscale The default colors of black and white are displayed.
- Green This applies the green color effect to a black and white screen.
- Aqua This applies the aqua color effect to a black and white screen.
- Sepia This applies the Sepia color effect to a black and white screen.

 $\mathsf{MENU} \to \blacktriangle, \blacktriangledown \to \textcircled{el} \to \bigstar, \blacktriangledown \to \textcircled{el} \to \bigstar, \blacktriangledown \to \mathsf{MENU}$

Gamma





Gamma correction changes the luminance of the colors with intermediate luminance.

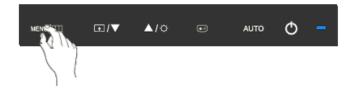
• Mode 1 • Mode 2 • Mode 3

 $\mathsf{MENU} \to \blacktriangle, \blacktriangledown \to \textcircled{el} \to \bigstar, \blacktriangledown \to \textcircled{el} \to \bigstar, \blacktriangledown \to \mathsf{MENU}$

🛑 Image

Coarse





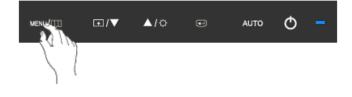
Removes noise such as vertical stripes.

Coarse adjustment may move the screen image area. You may relocate it to the center using the horizontal control menu.

$$\mathsf{MENU} \to \blacktriangle, \blacktriangledown \to \textcircled{\bullet} \to \textcircled{\bullet} \to \bigstar, \blacktriangledown \to \mathsf{MENU}$$

Fine





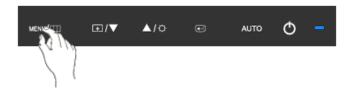
Removes noise such as horizontal stripes.

If the noise persists even after **Fine** tuning, repeat it after adjusting the frequency (clock speed).

 $\mathsf{MENU} \to \blacktriangle, \blacktriangledown \to \textcircled{el} \to \bigstar, \blacktriangledown \to \textcircled{el} \to \bigstar, \blacktriangledown \to \mathsf{MENU}$

Sharpness





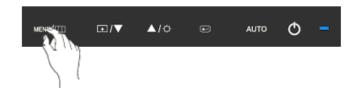
Changes the clearance of image.

(Not available in MagicColor mode of Full and Intelligent.)

 $\mathsf{MENU} \to \blacktriangle, \blacktriangledown \to \textcircled{\bullet} \to \bigstar, \blacktriangledown \to \textcircled{\bullet} \to \bigstar, \blacktriangledown \to \mathsf{MENU}$

H-Position



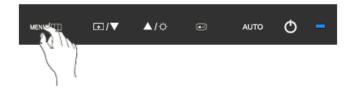


Changes the horizontal position of the monitor's entire display.

 $\mathsf{MENU} \to \blacktriangle, \blacktriangledown \to \textcircled{el} \to \bigstar, \blacktriangledown \to \textcircled{el} \to \bigstar, \blacktriangledown \to \mathsf{MENU}$

V-Position





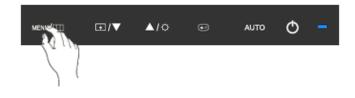
Changes the vertical position of the monitor's entire display.

 $\mathsf{MENU} \to \blacktriangle, \blacktriangledown \to \textcircled{\bullet} \to \bigstar, \blacktriangledown \to \textcircled{\bullet} \to \bigstar, \blacktriangledown \to \mathsf{MENU}$

🔲 OSD

Language





You can choose one of nine languages.

 English, Deutsch, Español, Français, Italiano, Svenska, Русский, Português, Türkçe

🖉 Note

The language chosen affects only the language of the OSD. It has no effect on any software running on the computer.

 $\mathsf{MENU} \to \blacktriangle\,,\, \blacktriangledown \to \textcircled{\bullet} \to \textcircled{\bullet} \to \bigstar\,,\, \blacktriangledown \to \mathsf{MENU}$

H-Position



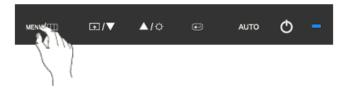


You can change the horizontal position where the OSD menu appears on your monitor.

 $\mathsf{MENU} \to \blacktriangle, \blacktriangledown \to \textcircled{el} \to \bigstar, \blacktriangledown \to \textcircled{el} \to \bigstar, \blacktriangledown \to \mathsf{MENU}$

V-Position



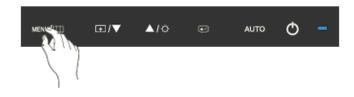


You can change the vertical position where the OSD menu appears on your monitor.

 $\mathsf{MENU} \to \blacktriangle, \blacktriangledown \to \textcircled{\bullet} \to \bigstar, \blacktriangledown \to \textcircled{\bullet} \to \bigstar, \blacktriangledown \to \mathsf{MENU}$

Transparency





Change the transparency of the background of the OSD.

• Off • On

 $\mathsf{MENU} \to \blacktriangle, \blacktriangledown \to \textcircled{\bullet} \to \bigstar, \blacktriangledown \to \textcircled{\bullet} \to \bigstar, \blacktriangledown \to \mathsf{MENU}$

Display Time





The menu will be automatically turned off if no adjustments are made for a certain time period.

You can set the amount of time the menu will wait before it is turned off.

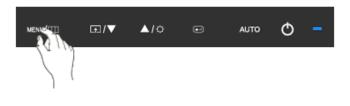
• 5 sec • 10 sec • 20 sec • 200 sec

 $\mathsf{MENU} \to \blacktriangle, \forall \to \textcircled{\bullet} \to \bigstar, \forall \to \textcircled{\bullet} \to \bigstar, \forall \to \mathsf{MENU}$

Setup

Reset





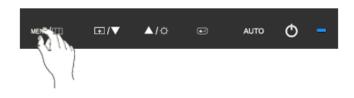
Reverts the product settings to factory defaults.

• No • Yes

 $\mathsf{MENU} \to \blacktriangle, \blacktriangledown \to \textcircled{el} \to \textcircled{el} \to \bigstar, \blacktriangledown \to \mathsf{MENU}$

Customized Key

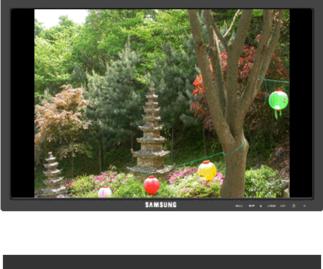




You can specify a function which will be activated when the **Customized Key** (

 $\mathsf{MENU} \to \blacktriangle, \blacktriangledown \to \textcircled{\bullet} \to \bigstar, \blacktriangledown \to \textcircled{\bullet} \to \bigstar, \blacktriangledown \to \mathsf{MENU}$

Image Size





You can change the size of the screen displayed on your monitor.

Auto · Wide

- **Auto** The screen is displayed in accordance with the screen aspect ratio of the input signals.
- Wide A full screen is displayed regardless of the screen aspect ratio of the input signals.

Note

- Signals not available in the standard mode table are not supported.
- If the wide screen which is the optimal resolution for the monitor is set on your PC, this function is not performed.

 $\mathsf{MENU} \to \blacktriangle, \blacktriangledown \to \textcircled{\textcircled{}} \to \bigstar, \blacktriangledown \to \textcircled{\textcircled{}} \to \bigstar, \blacktriangledown \to \mathsf{MENU}$

Information



MENICOTO	⊡ /▼	▲ /ở	۲	AUTO	Φ	-
2.1						

Shows a video source, display mode on the OSD screen.

 $\mathsf{MENU} \to \blacktriangle$, $\blacktriangledown \to \mathsf{MENU}$

Troubleshooting

Self-Test Feature Check

Ø Note

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

Self-Test Feature Check

- 1. Turn off both your computer and the monitor.
- 2. Unplug the video cable from the back of the computer.
- 3. Turn on the monitor.

If the monitor is functioning properly, you will see a box in the illustration below.



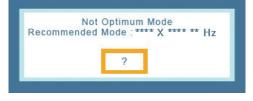
This box appears during normal operation if the video cable becomes disconnected or damaged.

4. Turn off your monitor and reconnect the video cable; then turn on both your computer and the monitor.

If your monitor screen remains blank after using the previous procedure, check your video controller and computer system; *your monitor is functioning properly.*

Warning Messages

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



Environment

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

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 a problem with the computer or the video card, this can cause the monitor to become blank, have poor coloring, become noisy, and 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** 2048 x 1152 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.

Check List

Note

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

No images on the screen. I cannot turn on the monitor.

- Q: Is the power cord connected properly?
- A: Check the power cord connection and supply.
- Q: Can you see "Check Signal Cable" on the screen?
- A: (Connected using the D-sub cable)

Check the signal cable connection.

- Q: If the power is on, reboot the computer to see the initial screen (the login screen), which can be seen.
- A: 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.

- Q: Can you see "Not Optimum Mode", "Recommended Mode 2048 x 1152 60 Hz" on the screen?
- A: You can see this message when the signal from the video card exceeds the maximum resolution and frequency that the monitor can handle properly.
- A: Adjust the maximum resolution and frequency that the monitor can handle properly.
- A: If the display exceeds SXGA or 75 Hz, a "Not Optimum Mode", "Recommended Mode 2048 x 1152 60 Hz" message is displayed. If the display exceeds 85 Hz, the

display will work properly but the "**Not Optimum Mode**", "**Recommended Mode** 2048 x 1152 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.)

- Q: There is no image on the screen. Is the power indicator on the monitor blinking at 1 second intervals?
- A: The monitor is in PowerSaver mode.
- A: Press a key on the keyboard to activate the monitor and restore the image on the screen.
- A: If there is still no image, press the 'e' button. Then press any key on the keyboard again to activate the monitor and restore the image on the screen.

I cannot see the On Screen Display.

- Q: Have you locked the On Screen Display (OSD) Menu to prevent changes?
- A: Unlock the OSD by pressing the [MENU/ III] button for at least 5 seconds.

The screen shows strange colors or just black and white.

- Q: Is the screen displaying only one color as if looking at the screen through a cellophane paper?
- A: Check the signal cable connection.
- A: Make sure the video card is fully inserted in its slot.
- Q: Have the screen colors become strange after running a program or due to a crash between applications?
- A: Reboot the computer.
- Q: Has the video card been set properly?
- A: Set the video card by referring to the video card manual.

The screen suddenly has become unbalanced.

- Q: Have you changed the video card or the driver?
- A: Adjust screen image position and size using the OSD.
- Q: Have you adjusted the resolution or frequency to the monitor?
- A: Adjust the resolution and frequency at the video card.

(Refer to the Preset Timing Modes).

Q: 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.

- Q: Have you adjusted the resolution or frequency on the monitor?
- A: Adjust the resolution and frequency of the video card.

(Refer to the Preset Timing Modes).

LED is blinking but no images on the screen.

- Q: Is the frequency properly adjusted when checking the Display Timing on the menu?
- A: 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.

- Q: Have the Windows colors been set properly?
- A: Windows XP :

Set the resolution at the Control Panel \rightarrow Appearance and Themes \rightarrow Display \rightarrow Settings.

A: Windows ME/2000 :

Set the resolution at the Control Panel \rightarrow Display \rightarrow Settings.

- Q: Has the video card been set properly?
- A: 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".

- Q: Have you installed the monitor driver?
- A: Install the monitor driver according to the Monitor Driver.
- Q: See the video card manual to see if the Plug & Play (VESA DDC) function can be supported.
- A: Install the monitor driver according to the Monitor Driver.

Check when MagicTune[™] does not function properly.

- Q: MagicTune[™] feature is found only on PC (VGA) with Window OS that supports Plug and Play.
- A: To check whether your PC is available for MagicTune[™] feature, follow the steps below (When Windows is XP);

Control Panel \rightarrow Performance and Maintenance \rightarrow System \rightarrow Hardware \rightarrow Device Manager \rightarrow Monitors \rightarrow After deleting Plug and Play monitor, find 'Plug and Play monitor' by searching new Hardware.

A: 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

MagicTune[™] doesn't work properly.

- Q: Have you changed your PC or video graphic card?
- A: Download the latest program. The program can be downloaded http://www.samsung.com/monitor/magictune
- Q: Did you install the program?
- A: 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.

Ø Note

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 a service for the main board of the computer.)

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.

Check if the scanning ratio of the video screen is set to between 56 Hz \sim 61 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 in the "Control Panel \rightarrow System \rightarrow Device Administrator" and then reboot the computer to reinstall the adapter (video) driver.

Note 🖉

If problems repeatedly occur, contact an authorized service center.

Q & A

- Q: How can I change the frequency?
- A: The frequency can be changed by reconfiguring the video card.
- A: 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.)
- Q: How can I adjusts the resolution?
- A: Windows XP:

Set the resolution in the Control Panel \rightarrow Appearance and Themes \rightarrow Display \rightarrow Settings.

A: Windows ME/2000:

Set the resolution in the Control Panel \rightarrow Display \rightarrow Settings.

- * Contact the video card manufacturer for details.
- Q: How can I set the Power Saving function?
- A: Windows XP:

Set the resolution in the Control Panel \rightarrow Appearance and Themes \rightarrow Display \rightarrow Screen Saver.

Set the function in the BIOS-SETUP of the computer. (Refer to the Windows / Computer Manual).

A: Windows ME/2000:

Set the resolution at the Control Panel \rightarrow Display \rightarrow Screen Saver.

Set the function in the BIOS-SETUP of the computer. (Refer to the Windows / Computer Manual).

- Q: How can I clean the outer case/LCD Panel?
- A: Disconnect the power cord and then clean the monitor with a soft cloth, using either a cleaning solution or plain water.

Do not leave any detergent or scratches on the case. Do not let any water enter the monitor.



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

Specifications

General

General	
Model Name	SyncMaster 2343NW
LCD Panel	
Size	23 inch (58cm)
Display area	509.952mm(H) X 286.848mm(V)
Pixel Pitch	0.249mm(H) X 0.249mm(V)
Synchronization	
Horizontal	30 ~ 75 kHz
Vertical	56 ~ 61 Hz
Display Color	
16.7M	
Resolution	
Optimum resolution	2048 X 1152@60Hz
Maximum resolution	2048 X 1152@60Hz
Input Signal, Termir	nated
RGB Analog	
0.7 Vp-p ± 5 %	
Separate H/V sync, 0	Composite
TTL level (V high ≥ 2	.0 V, V low ≤ 0.8 V)
Maximum Pixel Clo	ck
157MHz	
Power Supply	
AC 100 - 240 V~ (+/-	10 %), 50/60 Hz ± 3 Hz
Signal Cable	
15pin-to-15pin D-sub	cable,Detachable
Dimensions (W x H	x D) / Weight (Simple Stand)
544.6 x 323.1 x 72.9	mm / 21.4 x12.7 x 2.9 inch (Without Stand)
544.6 x 408.8 x 227.5	5 mm / 21.4 x 16.1 x 9.0 inch (With Stand), 5.4 kg / 11.9 lbs
Dimensions (W x H	x D) / Weight (HAS Stand)
·	mm / 21 4 x 12 7 x 2 6 inch (Without Stand)

544.6 x 323.1 x 67.0 mm / 21.4 x 12.7 x 2.6 inch (Without Stand)

544.6 x 408.8 x 250.0 mm / 21.4 x 16.1 x 9.8 inch (With Stand), 7.3 kg / 16.1 lbs

VESA Mounting Interface

100.0 mm x 100.0 mm

Environmental considerations

Operating	Temperature : 50°F ~ 104°F (10°C ~ 40°C)
	Humidity : 10 % ~ 80 %, non-condensing
Storage	Temperature : -4°F ~ 113°F (-20°C ~ 45°C)
	Humidity : 5 % ~ 95 %, non-condensing

Plug and Play Capability

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

Dot Acceptable

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

For example, the number of TFT-LCD sub pixels contained in this product are 7,077,888.

🖉 Note

Design and specifications are subject to change without prior notice.

Class B Equipment (Information Communication equipment for residential use)

This product complies with the Electromagnetic Compatibility Directives for residential use and can be used in all areas including common residential areas. (Class B equipment emits less electromagnetic waves than Class A equipment.)

PowerSaver

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

State	Normal Opera- tion	Power saving mode	Power off (Power but- ton) EPA/ENERGY 2000
Power Indicator	ON	blinking	Off
Power Con- sumption	44 watts	Less than 1watts	0.3 watts



This monitor is EPA ENERGY STAR[®] compliant and ENERGY2000 compliant when used with a computer equipped with VESA DPM functionality.

As an ENERGY STAR[®] Partner, SAMSUNG has determined that this product meets the ENERGY STAR[®] guidelines for energy efficiency.

Preset Timing Modes

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

Horizontal Frequency (kHz)	Vertical Fre- quency (Hz)	Pixel Clock (MHz)	Sync Polarity (H/V)
31.469	59.940	25.175	-/-
35.156	56.250	36.000	+/+
37.879	60.317	40.000	+/+
48.363	60.004	65.000	-/-
49.702	59.810	83.500	-/+
60.000	60.000	108.000	+/+
63.981	60.020	108.000	+/+
55.935	59.887	106.500	_/+
65.290	59.954	146.250	_/+
70.992	59.909	156.750	+/-
	Frequency (kHz) 31.469 35.156 37.879 48.363 49.702 60.000 63.981 55.935 65.290	Frequency (kHz)quency (Hz)31.46959.94035.15656.25037.87960.31748.36360.00449.70259.81060.00060.00063.98160.02055.93559.88765.29059.954	Frequency (kHz)quency (Hz)(MHz)31.46959.94025.17535.15656.25036.00037.87960.31740.00048.36360.00465.00049.70259.81083.50060.00060.000108.00063.98160.020108.00055.93559.887106.50065.29059.954146.250



Horizontal Frequency

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

Vertical Frequency

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

General

General	
Model Name	SyncMaster 2343NWX
LCD Panel	
Size	23 inch (58cm)
Display area	509.952mm(H) X 286.848mm(V)
Pixel Pitch	0.249mm(H) X 0.249mm(V)
Synchronization	
Horizontal	30 ~ 75 kHz
Vertical	56 ~ 61 Hz
Display Color	
16.7M	
Resolution	
Optimum resolution	2048 X 1152@60Hz
Maximum resolution	2048 X 1152@60Hz
Input Signal, Termir	nated
RGB Analog	
0.7 Vp-p ± 5 %	
Separate H/V sync, C	Composite
TTL level (V high ≥ 2	.0 V, V low \leq 0.8 V)
Maximum Pixel Cloo	ck
157MHz	
Power Supply	
AC 100 - 240 V~ (+/-	10 %), 50/60 Hz ± 3 Hz
Signal Cable	
15pin-to-15pin D-sub	cable,Detachable
Dimensions (W x H	x D) / Weight (Simple Stand)
	mm / 21.4 x12.7 x 2.9 inch (Without Stand)
	5 mm / 21.4 x 16.1 x 9.0 inch (With Stand), 5.4 kg / 11.9 lbs

Dimensions (W x H x D) / Weight (HAS Stand)

544.6 x 323.1 x 67.0 mm / 21.4 x 12.7 x 2.6 inch (Without Stand)

544.6 x 408.8 x 250.0 mm / 21.4 x 16.1 x 9.8 inch (With Stand), 7.3 kg / 16.1 lbs

VESA Mounting Interface

100.0 mm x 100.0 mm

Environmental considerations

Operating	Temperature : 50°F ~ 104°F (10°C ~ 40°C)
	Humidity : 10 % ~ 80 %, non-condensing
Storage	Temperature : -4°F ~ 113°F (-20°C ~ 45°C)
	Humidity : 5 % ~ 95 %, non-condensing

Plug and Play Capability

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

Dot Acceptable

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

For example, the number of TFT-LCD sub pixels contained in this product are 7,077,888.

🖉 Note

Design and specifications are subject to change without prior notice.

Class B Equipment (Information Communication equipment for residential use)

This product complies with the Electromagnetic Compatibility Directives for residential use and can be used in all areas including common residential areas. (Class B equipment emits less electromagnetic waves than Class A equipment.)

PowerSaver

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

State	Normal Opera- tion	Power saving mode	Power off (Power but- ton) EPA/ENERGY 2000
Power Indicator	ON	blinking	Off
Power Con- sumption	44 watts	Less than 1watts	0.3 watts



This monitor is EPA ENERGY STAR[®] compliant and ENERGY2000 compliant when used with a computer equipped with VESA DPM functionality.

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 adjusts the screen as follows.

Display Mode	Horizontal Frequency (kHz)	Vertical Fre- quency (Hz)	Pixel Clock (MHz)	Sync Polarity (H/V)
IBM, 640 x 480	31.469	59.940	25.175	-/-
VESA, 800 x 600	35.156	56.250	36.000	+/+
VESA, 800 x 600	37.879	60.317	40.000	+/+
VESA, 1024 x 768	48.363	60.004	65.000	-/-
VESA, 1280 x 800	49.702	59.810	83.500	-/+
VESA, 1280 x 960	60.000	60.000	108.000	+/+
VESA, 1280 x 1024	63.981	60.020	108.000	+/+
VESA, 1440 x 900	55.935	59.887	106.500	-/+
VESA, 1680 x 1050	65.290	59.954	146.250	-/+
VESA, 2048 x 1152	70.992	59.909	156.750	+/-

Horizontal Frequency



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

Vertical Frequency

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

Information

For Better Display

Adjust the computer resolution and screen injection rate (refresh rate) on the computer as described below to enjoy the best picture quality. You can have an uneven picture quality on screen if the best picture quality is not provided for TFT-LCD.

- Resolution: 2048 x 1152
- Vertical frequency (refresh rate):60 Hz

• TFT-LCD panels manufactured by using advanced semiconductor technology with a precision of 1ppm (one millionth) and 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 any problems.

 For example, the number of TFT-LCD sub pixels contained in this product are 7,077,888.

When cleaning the monitor and the panel outside, please apply the recommended small amount of cleaner by using a soft cloth to polish. Do not force the LCD area but rub softly.

If excessive force is applied, you may stain it.

If you are not satisfied with the picture quality, you can get better quality of picture by performing the "Auto Adjustment function" in display screen that is appeared as window termination button is pressed.

If there's still noise after the automatic adjustment, use the **Fine/Coarse** adjustment function.

When viewing a fixed screen for an extended period of time, a 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.

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.

오 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

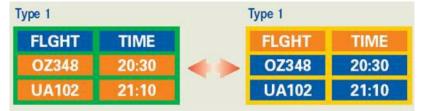
Ex) Airports, Transit Stations, Stock Markets, Banks, and Controlling Systems We recommend that you follow set up of your display system program as below:

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)		
	SYSTEM : 245 STATUS : OK	the second s

• Every 30 minutes, change the characters with movement.



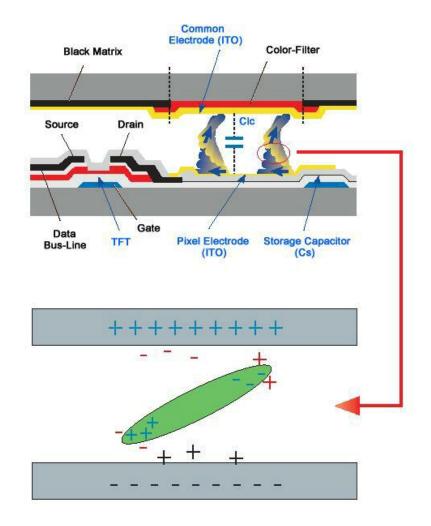
The best way to protect your monitor from Image retention is to set your PC or System to operate a Screen Saver program when you are not using it.

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.

Information



Our LCD Monitor satisfies ISO13406-2 Pixel fault Class II

Appendix

Contact SAMSUNG WORLDWIDE

🖉 Note

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

North America

U.S.A	1-800-SAMSUNG(726-7864)	http://www.samsung.com/us
CANADA	1-800-SAMSUNG(726-7864)	http://www.samsung.com/ca
MEXICO	01-800-SAMSUNG (726-7864)	http://www.samsung.com/mx

Latin America

ARGENTINE	0800-333-3733	http://www.samsung.com/ar
BRAZIL	0800-124-421	http://www.samsung.com/br
	4004-0000	
CHILE	800-SAMSUNG(726-7864)	http://www.samsung.com/cl
COLOMBIA	01-8000112112	http://www.samsung.com/co
COSTA RICA	0-800-507-7267	http://www.samsung.com/lat- in
ECUADOR	1-800-10-7267	http://www.samsung.com/lat- in
EL SALVADOR	800-6225	http://www.samsung.com/lat- in
GUATEMALA	1-800-299-0013	http://www.samsung.com/lat- in
Honduras	800-7919267	http://www.samsung.com/lat- in
JAMAICA	1-800-234-7267	http://www.samsung.com/lat- in
Nicaragua	00-1800-5077267	http://www.samsung.com/lat- in
PANAMA	800-7267	http://www.samsung.com/lat- in
PUERTO RICO	1-800-682-3180	http://www.samsung.com/lat- in
REP. DOMINICA	1-800-751-2676	http://www.samsung.com/lat- in
TRINIDAD & TO- BAGO	1-800-SAMSUNG(726-7864)	http://www.samsung.com/lat- in
VENEZUELA	0-800-100-5303	http://www.samsung.com/lat- in

Europe

AUSTRIA	0800-SAMSUNG(726-7864)	http://www.samsung.com/at
BELGIUM	02 201 2418	http://www.samsung.com/be

Europe		
CZECH REPUBLIC	800-726-786(800-SAM- SUNG)	http://www.samsung.com/cz
Distributor pro Česko Samsung Zrt., česká	u republiku: organizační složka, Oasis Florenc, S	okolov ská394/17, 180 00, Praha 8
DENMARK	70 70 19 70	http://www.samsung.com/dk
EIRE	0818 717 100	http://www.samsung.com/ie
FINLAND	030-6227 515	http://www.samsung.com/fi
FRANCE	3260 SAMSUNG(€ 0.15/Min)	http://www.samsung.com/fr
	08 25 08 65 65 (€ 0.15/Min)	
GERMANY	01805 - SAMSUNG (726-7864) (€ 0.14/Min)	http://www.samsung.de
HUNGARY	06-80-SAMSUNG(726-7864)	http://www.samsung.com/hu
ITALIA	800-SAMSUNG(726-7864)	http://www.samsung.com/it
LUXEMBURG	02 261 03 710	http://www.samsung.com/lu
NETHERLANDS	0900-SAMSUNG(726-7864 € 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
	022-607-93-33	
PORTUGAL	80820-SAMSUNG(726-7864)	http://www.samsung.com/pt
SLOVAKIA	0800-SAMSUNG(726-7864)	http://www.samsung.com/sk
SPAIN	902-1-SAMSU(72678)	http://www.samsung.com/es
SWEDEN	0771-400 200	http://www.samsung.com/se
Switzerland	0800-SAMSUNG(726-7864)	http://www.samsung.com/ch
U.K	0845 SAMSUNG(7267864)	http://www.samsung.com/uk
	CIS	
ESTONIA	800-7267	http://www.samsung.ee
LATVIA	8000-7267	http://www.samsung.com/lv
LITHUANIA	8-800-77777	http://www.samsung.lt
KAZAKHSTAN	8-10-800-500-55-500	http://www.samsung.com/ kz_ru
KYRGYZSTAN	00-800-500-55-500	
RUSSIA	8-800-555-55-55	http://www.samsung.ru
TADJIKISTAN	8-10-800-500-55-500	
UKRAINE	8-800-502-0000	http://www.samsung.ua
UZBEKISTAN	8-10-800-500-55-500	http://www.samsung.com/ kz_ru
Asia Pacific		
AUSTRALIA	1300 362 603	http://www.samsung.com/au
CHINA	800-810-5858	http://www.samsung.com/cn

400-810-5858

Asia Pacific	
--------------	--

	010-6475 1880	
	HONG KONG: 3698 - 4698	http://www.samsung.com/hk
INDIA	3030 8282	http://www.samsung.com/in
	1800 110011 1-800-3000-8282	
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
New zealand	0800 SAMSUNG(0800 726 786)	http://www.samsung.com/nz
PHILIPPINES	1800-10-SAMSUNG (726-7864)	http://www.samsung.com/ph
SINGAPORE	1800-SAMSUNG(726-7864)	http://www.samsung.com/sg
THAILAND	1800-29-3232	http://www.samsung.com/th
	02-689-3232	
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-SAMSUNG(726-7864)	http://www.samsung.com/za
TURKEY	444 77 11	http://www.samsung.com/tr
U.A.E	800-SAMSUNG(726-7864)	http://www.samsung.com/ae
	8000-4726	

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 fre- quency of this repetition per second is called the Vertical Frequency or Refresh Rate. Unit: Hz
	Example: If the same light repeats itself 60 times per sec- ond, 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 the 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 sequentially 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 Inter- lace 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 ex- change information automatically. This monitor follows the international standard VESA DDC for the Plug & Play func- tion.
Resolution	The number of horizontal and vertical dots used to compose the screen image is called the 'resolution'. This number shows the accuracy of the display. A high resolution is good for performing multiple tasks as more image information can be shown on the screen.
	Example: If the resolution is 2048 x1152, this means the screen is composed of 2048 horizontal dots (horizontal resolution) and 1152 vertical lines (vertical resolution).

Correct Disposal

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.

Authority

Information in this document is subject to change without notice.

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

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

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

Samsung is the registered trademark of Samsung Electronics Co., Ltd.; Microsoft, Windows and Windows NT are registered trademarks of Microsoft Corporation; VESA, DPM and DDC are registered trademarks of Video Electronics Standard Association; the ENERGY STAR[®] name and logo are registered trademarks of the U.S. Environmental Protection Agency

(EPA). As an ENERGY STAR[®] Partner, Samsung Electronics Co., Ltd. has determined that this product meets the ENERGY STAR[®] guidelines for energy efficiency. All other product names mentioned herein may be the trademarks or registered trademarks of their respective owners.