

Safety Instructions

Notational



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

Warning / Caution



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

Notational Conventions



Prohibited



Important to read and understand at all times



Do not disassemble



Disconnect the plug from the outlet



Do not touch



Ground to prevent an electric

Power



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

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

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

Shortcut to Anti-Afterimage Instructions



- Do not use a damaged power cord or plug or a damaged or loose power outlet.
- Otherwise, this may result in electric shock or fire.



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



- ▶ Make sure to connect the power cord to a grounded power outlet.
- Otherwise, it may result in electric shock or personal injury.



- Ensure that the power plug is plugged into the power outlet firmly and correctly
- Otherwise, this may result in fire.



- Do not forcefully bend or pull the power plug and do not place any heavy material on it.
- · Otherwise, this may result in fire.



- Do not connect multiple appliances to the same power outlet.
- Otherwise, this may cause fire due to overheating.



- Do not disconnect the power cord while using the product.
- Otherwise, this may result in damage to the product due to electric shock.



- To disconnect the apparatus from the mains, the plug must be pulled out from the mains socket, therefore the mains plug shall be readily operable.
- This may cause electric shock or fire.



- Use only the power cord provided by our company. Do not use the provided power cord of another product.
 - Otherwise, this may result in fire or electric shock.

Installation



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

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



- Do not drop the monitor when moving it.
- This may cause damage to the product or the person carrying it.



- **■** Ensure that at least two persons lift and move the product.
- Otherwise, it may be dropped and cause personal injury, and/or damage the product.



- When installing the product in a cabinet or rack, make sure that the front end of the bottom of the product does not project out.
- Otherwise, it may fall or cause personal injury.
- Use a cabinet or rack of a size appropriate to the product.



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

· Otherwise, this may result in fire.



- Keep heating appliances as far away from the power cord or the product as possible.
- Otherwise, this may result in electric shock or fire.



- Do not install it in a badly ventilated location such as a bookcase or closet.
- Otherwise, this may result in fire due to an increase in the internal temperature.



Put down the monitor carefully.

Failing to do so may damage the monitor.



- Do not place the front of the product on the floor.
- Otherwise, this may result in damage to the screen display.



- Ensure that an authorized installation company installs the wall mount.
- Otherwise, it may fall and cause personal injury.
- Make sure to install the specified wall mount.



- ▶ Install your product in a well ventilated location. Ensure that there is a clearance of more than 10 cm from the wall.
- Otherwise, it may result in fire due to an increase in the internal temperature.



- Ensure that the packaging vinyl is kept away from children.
- Otherwise, it may result in serious harm (suffocation) if children play with it.



- If the height of your monitor is adjustable, do not place any object or part of your body on the stand when lowering it.
- This may cause damage to the product or the person carrying it.

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.

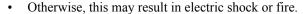
Others



- 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.





- Do not place this product in a location exposed to moisture, dust, smoke, water, or in a car.
- Otherwise, this may result in electric shock or fire.

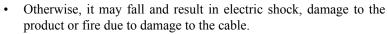


- When you drop the product or the case is broken, turn the power off and disconnect the power cord. Contact a Service Center.
- Otherwise, this may result in electric shock or fire.





Do not try to move the monitor by pulling only the wire or the signal 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 insert any metal, such as chopsticks, coins, pins and steels, or inflammable objects, such as matches or paper, inside the product (through the ventilating openings, input and output terminals, etc).
- If water or foreign material enters the product, disconnect the power cord and contact a Service Center.
- Otherwise, this may result in electric shock or fire.



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

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



Set a resolution and frequency appropriate to the product.

Otherwise, your eyesight may be damaged.



- When using headphones or earphones, do not turn the volume too high.
- Having the sound too loud may damage your hearing.



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
- If you use the product in a location exposed to vibrations, it may damage the product and result in fire.



- When moving the product, turn the power off and disconnect the power plug, antenna cable, and all the cables connected to the product.
- Otherwise, it may result in electric shock or fire.



- Ensure that children do not hang onto the product or climb up onto the product.
- The product may fall and cause personal injury or death.



- If you do not use the product for a long period of time, disconnect the power cord from the power outlet.
- Otherwise, this may result in overheating or fire due to dust, and may result in fire due to electric shock or leakage.



- Do not place any heavy items or toys or confectionery, such as cookies etc. that may attract the attentions of children onto the product.
- Your children may hang onto the product causing it to fall and this may result in personal injury or death.



- Do not turn the product upside down or move it while holding only the stand.
- Otherwise, it may fall and result in personal injury and/or damage to the product.



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



- Do not drop any objects onto the product or cause any impact to the product.
- Otherwise, this may result in electric shock or fire.



- Do not use a humidifier or kitchen table near the product.
- Otherwise, this may result in electric shock or fire.



- When there is a gas leak, do not touch the product or the power plug but ventilate immediately.
- If a spark occurs, it may cause an explosion or fire.





- ▶ If the product has been turned on for a long time, the display panel becomes hot. Do not touch it.
- Keep the small accessories in a location out of the reach of children.



- Be careful when adjusting the angle of the product or the height of the stand
- This may result in personal injury as your hand or fingers may become caught.
- Also, if you tilt the product too far, it may fall and cause personal injury.



- Do not install the product in a location low enough for children to reach.
- Otherwise, it may fall and result in personal injury.
- Since the front part of the product is heavy, install the product on a level and stable surface.



- Do not put any heavy objects on the product.
- This may result in personal injury and/or damage to the product.
- Good Postures When Using the Monitor



- When using the product, use it in the correct position.
- Keep your back straight while looking at the product.
- The distance between your eyes and the screen should be between 45 to 50 cm. Look at the screen from a slightly higher location than the height of the screen.
- Tilt the product backwards between 10 to 20 degrees. Adjust the height of the screen to a slightly lower level than the level of your eyes.
- 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

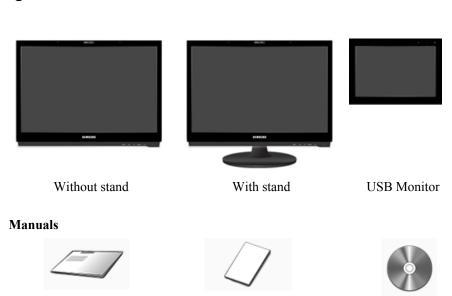


Please make sure the following items are included with your monitor.

If any items are missing, contact your dealer.

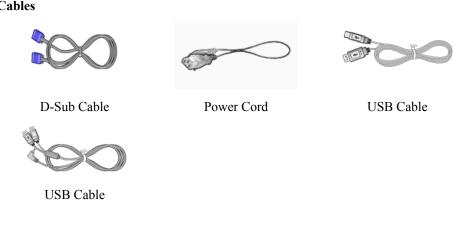
Contact a local dealer to buy optional items.

Unpacking



Cables

Quick Setup Guide



Warranty Card

(Not available in all locations)

User's Guide

Sold separately



Others



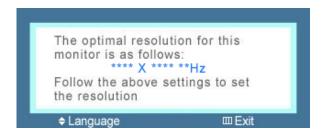
Cleaning Cloth



This 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.

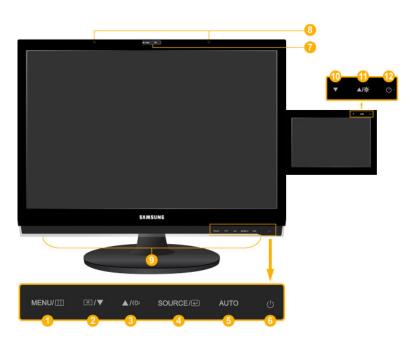
It can be displayed up to three (3) times. Make sure to adjust the resolution of your PC before reaching the maximum count.



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/□]

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

🕖 Customized Key

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



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

<u> (3)</u> V**olume** button

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

>> Click here to see an animation clip

______ Adjust buttons [▼! ▲]

Adjust items in the menu.

👍 SOURCE button / Enter button [🚭]

Push the 'SOURCE/ ', then selects the video signal while the OSD is off. (When the SOURCE button is pressed to change the input mode, a message appears in the upper left of the screen displaying the current mode -- analog or digital input signal.)

/ Activates a highlighted menu item.



If you select the digital mode, you must connect your monitor to the graphic card's DVI port using the DVI cable.

>> Click here to see an animation clip

👩 AUTO button

Use this button for auto adjustment.

(Available in **Analog** mode only)

>> Click here to see an animation clip

6 Power button [🖰] / Power indicator

Use this button for turning the monitor on and off.

/ This light glows blue during normal operation, and blinking blue once as the monitor saves your adjustments.

7 Camera

Using this camera, you can view and send video for video chatting.

Mic

Using this microphone, you can view and send audio for video chatting.

👩 Speaker

You can hear sound by connecting the soundcard of your PC to the monitor.

- You can only hear sound from this monitor model if it is connected to a PC via a USB cable.



Use this button to decrease the screen brightness for the 7" USB monitor. The LED blinks when the screen brightness is decreased to the minimum or when a screen brightness adjustment is completed.

<mark>a A</mark>/O

Use this button to increase the screen brightness for the 7" USB monitor. The LED blinks when the screen brightness is increased to the maximum or when a screen brightness adjustment is completed.

12 Power button [🖰] / Power indicator

Press the Power button to turn the 7" USB monitor on or off. The Power indicator is displayed in blue when operating normally.

- Please activate the afterimage prevention function before using the 7" USB auxiliary monitor.
- · Activating the function

Turn off the USB monitor and hold down the Power button for five (5) seconds. The monitor is turned on again and the afterimage prevention program is activated while the LED blinks twice.

· Deactivating the function

Turn off the USB monitor and hold down the Power button for five (5) seconds. The monitor is turned on again and the afterimage prevention program is deactivated while the LED blinks once.

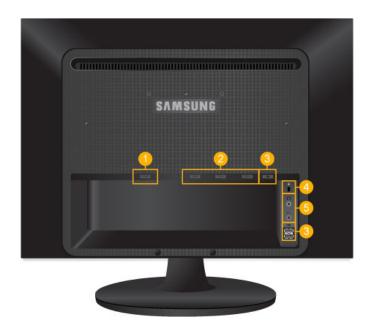
• What is the afterimage prevention function?

If you use the USB auxiliary monitor with the same image remaining on the screen for a long period of time, an afterimage may develop on the panel. The afterimage prevention function reduces afterimages on the panel by turning the USB auxiliary monitor on and off automatically for a short time (about 0.1 seconds) every thirty (30) minutes.

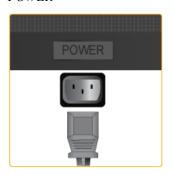
Rear



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



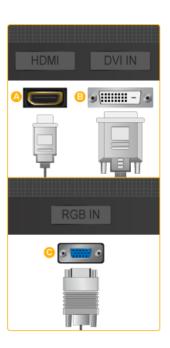
1 POWER



POWER

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

2 HDMI/DVI IN/RGB IN



A HDMI

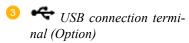
Connect the *HDMI* terminal at the back of your monitor to the *HDMI* terminal of your digital output device using a *HDMI* cable.

B DVI IN

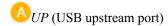
Connect the DVI cable to the *DVI IN* port on the back of your monitor.



Connect the *RGB IN* terminal at the back of your monitor to your computer.







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



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

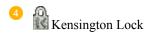


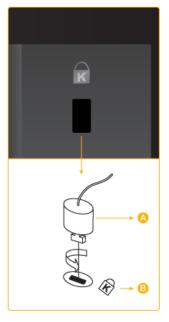
To use ** DOWN (Downstream Port), you have to connect the ** UP (Upstream Cable) to the PC.

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



For the procedures on connecting the 7" USB monitor, refer to Connecting the USB Monitor.





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. The appearance and locking method may differ from the illustration depending on the manufacturer. Refer to the manual provided with the Kensington Lock for proper use. The locking device has to be purchased separately.

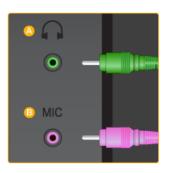


The location of the Kensington Lock may be different depending on its model.

Using the Anti-Theft Kensington Lock

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







Headphone output terminal



Connect a microphone to the MIC terminal.

6 Cable holding ring



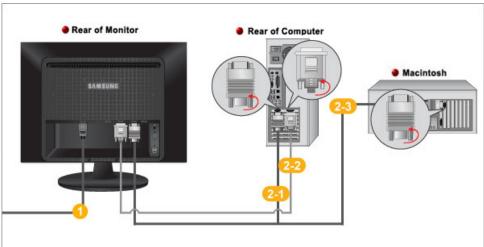
Fix the cables using the holding ring, as shown in the figure.



See Connecting Cables for further information regarding cable connections.

Connections

Connecting Cables



Onnect 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.
- 2-1 Using the D-sub (Analog) connector on the video card.
- Connect the signal cable to the 15-pin, D-sub port on the back of your monitor.

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



- 2-3 Connected to a Macintosh.
- Connect the monitor to the Macintosh computer using the D-sub connection cable.



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

Connecting HDMI



You can connect digital output devices to your monitor.

You can enjoy better screen and sound quality.

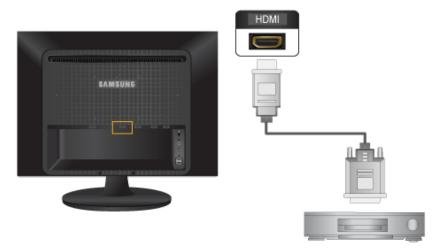
Connecting Using a HDMI Cable



1. Input devices such as digital DVD are connected to the *HDMI* terminal of the monitor using the HDMI cable. When all the connections are completed, connect the power cords for the monitor and DVD (or the device connected to the digital output terminal).

Select **HDMI** using the *SOURCE* button.

Connecting Using a DVI to HDMI Cable



- 1. Connect the DVI output terminal of a digital output device to the *HDMI* terminal of the monitor using a DVI to HDMI cable.
- 2. To listen to sound via an external device, refer to the information in its user manual on how to connect the device.
- 3. When all the connections are completed, connect the power cords for the monitor and DVD (or the device connected to the digital output terminal).
- 4. Selet *HDMI* using the *SOURCE* button.



If you just connect using the DVI to HDMI cable without connecting to the sound source, you cannot hear sound.

Connecting USB

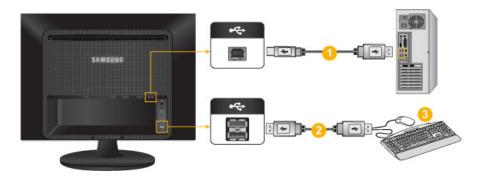


You can use a USB device such as a mouse, keyboard, Memory Stick, or external hard disk drive by connecting them to the *DOWN* port of the monitor without connecting them to the PC.

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 Consumption	2.5 W	2.5 W	2.5 W

(Max., each port) (Max., each port) (Max., each port)

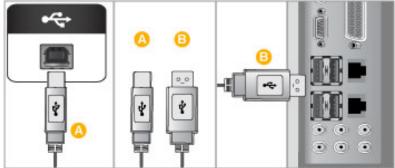


1. Connect the ** UP port of the monitor and the USB port of the computer with the USB cable.

Note



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 *DOWN 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.



When connecting a device to the *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.

Connecting the USB Monitor

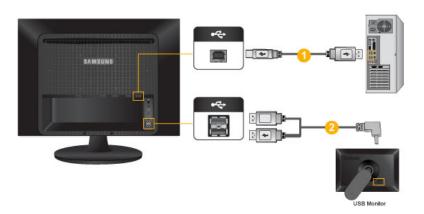
System Requirements

CPU: 1.73GHz or Later

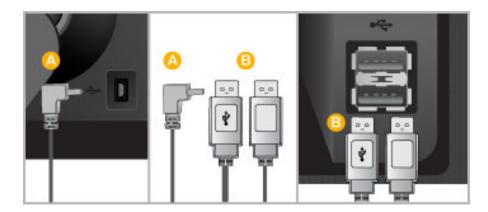
OS: Windows XP Service Pack2 or later. However, Windows Vista 64bit is not supported.

RAM: 512 MB RAM or more

USB: 1.1 or higher (USB 2.0 recommended)



- 1. Connect the ** UP port of the monitor and the USB port of the computer with the USB cable.
- 2. Connect the terminal (A) of the USB monitor and the USB terminal (B) of the primary monitor using a USB cable.





For more information on the driver installation and usage of the USB monitor, refer to Restrictions on the 7"USB Monitor .

Installing and Using the USB Monitor



- 1. Engage and fix the USB monitor into the groove of the armrest holder.
- 2. You can adjust the location of the USB monitor.



You can also adjust the length of the armrest holder after adjusting the location of the USB monitor.





- 1. Do not tilt the stand too far backwards when the USB auxiliary monitor is lifted up, as shown in the figure. This may change the center of gravity of the product resulting in the product falling causing product damage or personal injury.
- 2. When adjusting the angle of the USB auxiliary monitor stand, do not use too much force. This may cause the stand to break.





- 3. Make sure to use the 7" USB monitor after properly adjusting the angle of its stand.
 - This may cause the center of gravity of the product to change, leading causing the product to fall resulting in damage or a malfunction.
- 4. When moving a 7" USB monitor, take care not to knock the monitor against something.

The monitor may become scratched.



5. When disassembling the 7" USB monitor, remove it by holding the A part and pushing it in the direction of the arrow.

Connecting Headphone



You may connect your headphones to the monitor.



1. Connect your headphones to the Headphone connection terminal.

Connecting MIC



You may connect your microphone to the monitor.



1. Connect the microphone cable to the MIC port on the monitor.

Using the Stand

Monitor Assembly



Simple Stand

Monitor and Bottom

Swivel stand



Using (), You can swivel the monitor left and right at an angle of 350° to set the monitor lengthwise. The rubber under the stand is to avoid the monitor slide.

When you try to rotate the monitor in the state of the power cord or cable connecting to the monitor, the power cord of cable can be destroyed.

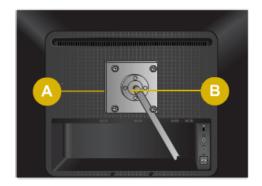
Tilt angle



Using (), You can adjust the tilt angle within a range of -5° forward to 12° backward for the most comfortable viewing angle.

Attaching a Base

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



- A Monitor
- B Mounting interface pad (Sold separately)
- 1. Turn off your monitor and unplug its power cord.
- 2. Lay the LCD monitor face-down on a flat surface with a cushion beneath it to protect the screen.
- 3. Remove four screws and then remove the stand from the LCD monitor.
- 4. Turn the armrest holder upwards or downwards. Remove the screws on the armrest holder and remove it.
- 5. 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.



- To mount the monitor on a wall, you should purchase the wall mounting kit that allows you to mount the monitor at least 10 cm away from the wall surface.
- 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

Using the WebCam Monitor

This monitor can be used as a normal monitor for video communications and for viewing multimedia files simply by connecting the power cable and the USB cable to your PC.



Minimum baseline spec

• System Requirements

CPU: 1.73GHz or Later

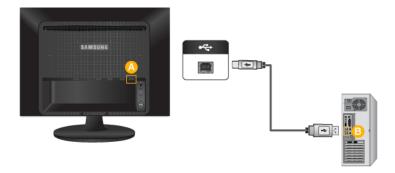
OS: Windows XP Service Pack2 or later. However, Windows Vista 64bit is not supported.

RAM: 512 MB RAM or more

USB: 1.1 or higher (USB 2.0 recommended)

Auto Setup for the web camera, microphone and speaker

1. Connect your monitor and PC using a USB cable, as shown in the figure below.



2. The web camera, microphone and speaker will be set up automatically and appear on the status bar.





- If the camera is recognized as a USB1.1 device, the screen quality may be degraded and noise may occur. Make sure to upgrade to USB 2.0.
- Because of the characteristics of USB communication, the device is recognized whenever it is turned off and on. When the recognition process is finished, you can use it normally.
- If you remove the cable while your PC is recognizing a USB device, it may cause a serious error to your PC.
- Do not turn the camera too forcefully. This may cause a product malfunction
- Make sure to remove the USB cable after clicking on the <Remove hardware safely> icon on the taskbar of your PC and unloading the USB device from Windows.

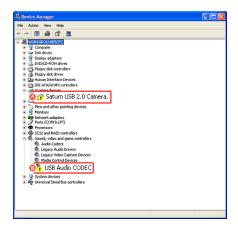
Installation Precautions

- 1. Never disconnect the USB cable from the USB port while the auto installation is in progress. (The installation takes about a minute. If you remove the USB port during the installation, a severe problem may occur with your PC.)
- 2. Do not turn off the monitor while the auto installation is in progress. (If you turn off the monitor during the installation, a severe problem may occur with your PC.)
- 3. The screen may blink when the auto installation is completed. (This occurs when your PC recognizes your monitor as a USB device. This is not a fault.)
- 4. If the auto installation is completed, configure the position and resolution for the monitors in the [Settings] tab of the [Display Properties] window. (The optimal resolution for this monitor is 1680 x 1050.)
- 5. If you change the USB Port after your PC has recognized a USB device, it may cause a USB device recognition error. (You must remove and reinstall the driver.)

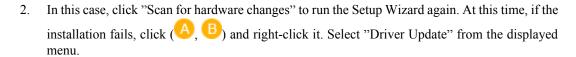
If the installation fails



If the installation is stopped because the New Hardware Wizard has failed, right-click "My computer", and click "Properties" - "System Properties" - the "Hardware" tab. Click on the "Device Manager" and reinstall the driver by following these steps below.



1. The symbol showing that the device has failed to be installed is displayed as shown in (A),



Checking the configuration



After the installation, you can check the configuration by following these steps:

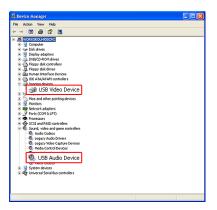
1. Right-click My computer, click Properties - System Properties - Hardware tab.



2. Click on "Device Manager".



3. A list of installed devices will be displayed, as shown in the figure below.



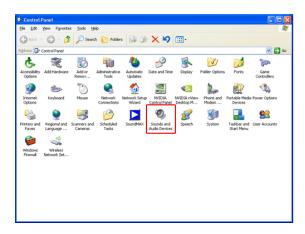
Checking the Web Camera Setup

- 1. Double-click My Computer on the Windows Desktop.
- 2. Double-click the USB Video Device #2. You should find that the web camera has been set up normally, as shown in the figure below.



Checking the Microphone and Speaker Setup

1. Double-click Sounds and Audio Devices in the Control Panel.



2. Select the Voice tab and click on Test Hardware.





If the sound from your monitor is too soft, adjust the volume after setting the volume of your PC to the maximum.

3. Follow the steps described below. You should find that the microphone and speaker have been set up.



Restrictions on Using the Monitor

1. The Camera and Audio functions of this monitor except the basic Display function are recognized as USB Devices.



This monitor must be connected with a D-Sub (Analog) or a DVI-D cable (Digital) when used as a normal monitor. USB cables are used when connecting other devices.

- 2. For some media players, when a USB device is being recognized again while a media player is running, you have to close and run it again to operate the sound and camera devices normally.
- 3. For some PCs, your PC may not boot up with the monitor recognized even if the USB cable is connected, depending on the PC BIOS version. Check whether the BIOS on your PC has been updated to the latest version.
- 4. Sometimes, if the initial volume setting is low the sound may be very low due to the characteristics of USB Audio devices. (This may differ according to the operating system.) In this case, adjust the Master Volume of the PC to an appropriate level.
- 5. This monitor supports Windows XP Service Pack 2 or later only.



Service Pack 1 or earlier is not supported.

This monitor is designed for optimal performance using Windows XP Service Pack 2 and USB 2.0.

- 6. The monitor may not operate normally with versions older than USB 2.0.
- 7. If more than one monitor of this type of model is connected, the USB device recognized for each monitor may not operate normally.
- 8. Noise may occur from the MIC and speaker if this monitor is placed too near.

Web Cam Companion 2

Digital video cameras have become common in households today. As a result, a plethora of software has been made available for users to edit and create home movies. Forgotten in the mix is the widely popular webcam, used for a variety of purposes ranging from simple video creation to online video chats. To complement webcam's small but versatile functionalities, ArcSoft Web Cam Companion 2[™] offers a broad range of functions designed and optimized for webcam use. Whether utilized to launch a video chat client or automatically record movement detected by the device, Web Cam Companion 2 can do it all!

- You can only hear sound from this monitor model if it is connected to a PC via a USB cable.
- System Requirements

Windows XP/ Vista

PIII 800 MHz or equivalent (PIV 2.0 GHz or higher recommended)

100 MB free hard drive space for program installation

256 MB RAM (512 MB DDR RAM recommended)

16-bit color display at 800x600 (32 MB video memory with DirectX 3D support recommended)

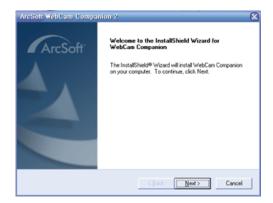
DirectX 8.1 or higher (DirectX 9.0c recommended)

Webcam

- 1. Insert the Program Setup CD into the CD-ROM drive.
- 2. Click on Web Cam Companion 2 (WCC2).
- 3. Select a language and click the "OK" button.



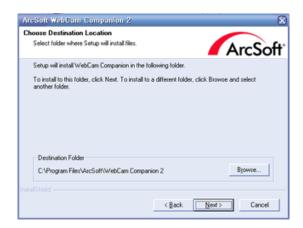
4. Click the "Next" button.



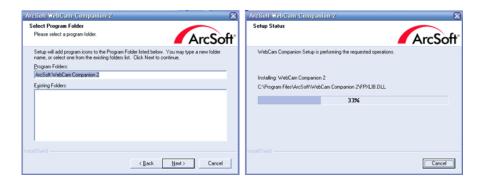
5. Click the "Yes" button.



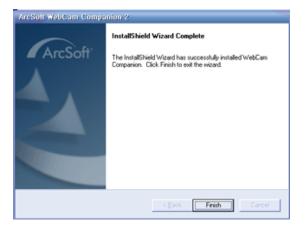
6. Click the "Next" button.



7. Click the "Next" button.



8. Click the "Finish" button. The installation of the Web Cam Companion 2 is completed.





For more information on how to use the program, refer to its "Help" section.

Opening the chat program

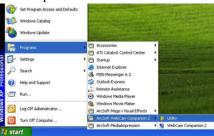
When the installation of the Web Cam Companion 2 program is completed, touch the "A" position on the monitor for the Web Cam Companion 2 chat window to appear, as shown in the figure below.



• Install or select the chat program you want to use.



- Touch the "A" position on the monitor. The chat window of the selected program appears immediately.
- To change the chat program to which a shortcut was created, select the Utility in the Start -> All Programs -> Arcsoft Web Cam Companion 2.



Magic-I Visual Effects

ArcSoft Magic-iTM! Visual Effects is a smart and simple webcam application designed to enhance users' video chat experience through frames, effects, and themes. Using "Video Plug-in" technology, Magic-i Visual Effects launches automatically when you start a video chat with any of your favorite chat clients, so you can apply fun effects simply and easily. It's also compatible with popular webcam applications like ArcSoft Web Cam Companion 2TM!.

System Requirements

Windows XP/ Vista

Pentium IV 1.6 GHz or equivalent (Pentium IV 2.4 GHz or higher recommended)

20 MB free hard drive space required for program installation

256 MB RAM (512 MB DDR RAM recommended)

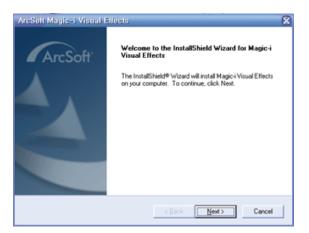
16-bit color display at 800x600 (32 MB video memory with DirectX 3D support recommended)

DirectX 9.0c or above

- 1. Insert the Program Setup CD into the CD-ROM drive.
- 2. Click on Magic-I Visual Effects.
- 3. Select a language and click the "OK" button.



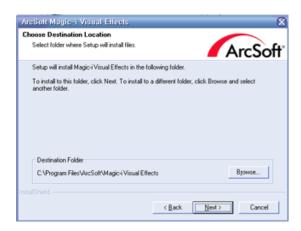
4. Click the "Next" button.



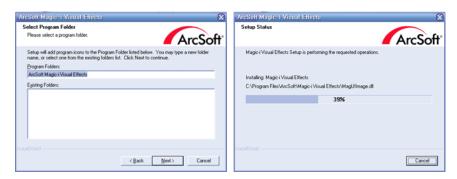
5. Click the "Yes" button.



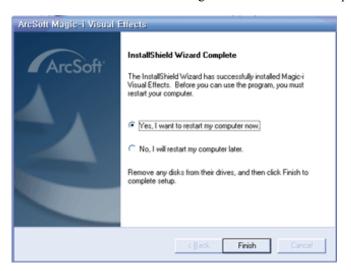
6. Click the "Next" button.



7. Click the "Next" button.



8. Click the "Finish" button. The installation of the Magic-I Visual Effects is completed.





For more information on how to use the program, refer to its "Help" section.

Media-Impression

ArcSoft Media Impression™ manages your media for you, and gives you tons of fun and exciting ways to create and share projects featuring your photo, video, and music files.

- System Requirements
 - Windows XP/ Vista

Pentium III 1 GHz or equivalent

512 MB RAM

150 MB available hard disk space

800x600 pixels, 16-bit color monitor

Microsoft Windows Media Player 9.0 or higher

Microsoft DirectX 9.0 or higher

Apple QuickTime® 7.0 or higher recommended

- Macintosh OS X 10.3, 10.4

PowerPC G4 800 MHz, or Intel processor

150 MB available hard disk space

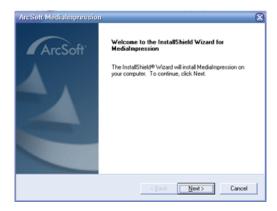
800x600 pixels, 16-bit color monitor

Apple QuickTime®6.0 or higher

- 1. Insert the Program Setup CD into the CD-ROM drive.
- 2. Click on Media-Impression.
- 3. Select a language and click the "OK" button.



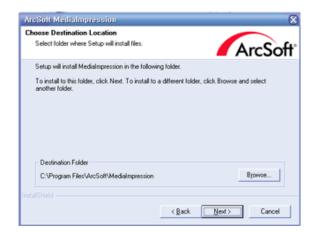
4. Click the "Next" button.



5. Click the "Yes" button.



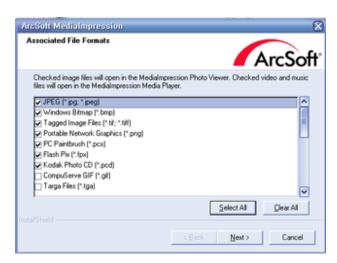
6. Click the "Next" button.



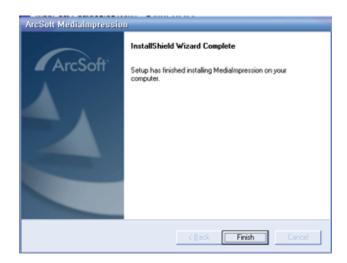
7. Click the "Next" button.



8. Select a file type and click the "Next" button.



9. Click the "Finish" button. The installation of the Media-Impression is completed.





For more information on how to use the program, refer to its "Help" section.

Installing the 7" USB Monitor Driver

System Requirements

CPU: 1.73GHz or Later

OS: Windows XP Service Pack2 or later. However, Windows Vista 64bit is not supported.

RAM: 512 MB RAM or more

USB: 1.1 or higher (USB 2.0 recommended)

Installing Your USB Monitor

- Make sure to connect the USB cable and begin the installation after your PC has booted.
- The Setup program requires about one minute for the installation. If you turn the power off or remove the USB cable while the Setup program is running, it may cause an error with the PC or the Windows operating system.

- The optimal resolution for this USB monitor is 800x480.
- 1. Insert CD into the CD-ROM drive. Click "USB Monitor Driver"
- 2. Click "I Accept".



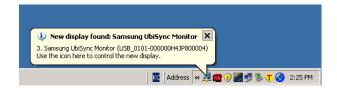
3. The progress window appears, as shown in the figure below.



4. If you connect your USB monitor to your PC, it recognizes the monitor and the "Found New Hardware" wizard is displayed, as shown in the figure below.



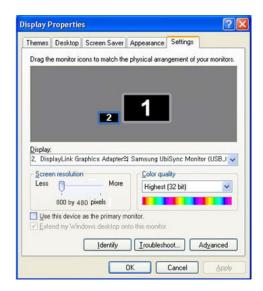
When setup is finished, a monitor icon is created in the system tray at the bottom of the monitor screen, and the information for the installed USB monitor is displayed.



- 5. When the installation is completed, configure the following settings to use multiple monitors.
- 1. Right-click on the "Windows Desktop" and select "Properties" from the displayed menu. The "Display Properties" window appears.
- 2. Select the "Settings" tab. A list of connected USB monitors is displayed.



3. Arrange the monitors displayed in the 'Display Properties' window in the order they are actually used.



4. Then click "OK" button.

Configuring the 7" USB Monitor Display Information

1. When the driver setup for the USB monitor is finished, a monitor icon is created in the system tray at the bottom of the monitor screen.



Click the monitor icon to display a list of connected USB monitors. Select the monitor for which
you want to configure the display settings. You can configure the "Screen Resolution", "Color
Quality" and "Screen Rotation" settings for your monitor.



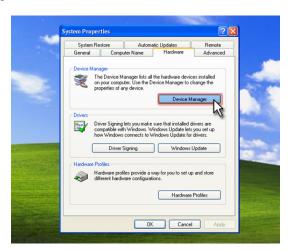
Checking the configuration

After the installation, you can check the configuration by following these steps.

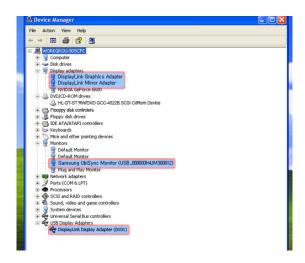
1. Right-click "My Computer", and select "Properties" - "System Properties" - the "Hardware tab".



2. Click "Device Manager".



3. A list of the installed device will be displayed, as shown in the figure below.



- The Initial Screen Settings after Installing the Program

Applicable mode: Extend mode

• Mode position: To the right of the primary screen

• Mode rotation: 0°

Restrictions on the 7" USB Monitor

Supported OS (Operating Systems)

· Windows XP

- Service Pack 1 or earlier: Unsupported

- Service Pack 2 or later: Supported

Windows 2000

- Service Pack 3 or earlier: Not Supported

- Service Pack 4 or later: Supported

Windows Server 2003: Not Supported

Windows Vista: Supported. (64bit Not Supported)

To check the information on the operating system of your PC, right-click "My Computer" on the "Windows Desktop" and select "Properties" from the displayed menu. Check the information in the "General" tab of the "Computer Properties" window.

- 1. Because this USB monitor is recognized as a USB device, the DOS screen that appears for general monitors when a PC is booting up is not displayed.
- 2. You cannot use the USB monitor for software using 3D hardware acceleration.
 - Real Player (Expansion mode is not supported.)
 - For most 3D games
 - Programs running on the base of Direct X
- 3. Supported movie programs

- Power DVD
- Win DVD(Version 5 onwards)
- Windows Media Player (Version 10 or later is supported.)
- VLC
- 4. This monitor does not support the MagicTune program.
 - The MagicRotation function may not function normally.
 - If the MagicTune program is installed on your PC, it may not be compatible with this monitor.
- 5. The USB monitor may not work normally with USB 1.0.
- 6. If the graphics card of your PC does not support WDDM, the extended mode may not be available in Windows Vista.

Example) Some versions of the Matrox Card

Monitor Driver



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

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

Internet web site:

http://www.samsung.com/ (Worldwide)

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.



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





This monitor driver is under certifying MS logo, and this installation doesn't damage your system.

The certified driver will be posted on Samsung Monitor homepage.

http://www.samsung.com/

Installing the Monitor Driver (Manual)

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

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





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



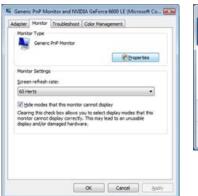


4. Click "Advanced Settings...".



5. Click "Properties" in the "Monitor" tab. If the "Properties" button is deactivated, it means the configuration for your monitor is completed. The monitor can be used as is.

If the message "Windows needs..." is displayed, as shown in the figure below, click "Continue".



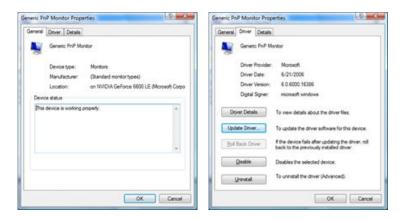




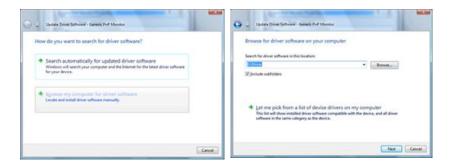
This monitor driver is under certifying MS logo, and this installation doesn't damage your system.

The certified driver will be posted on Samsung Monitor homepage.

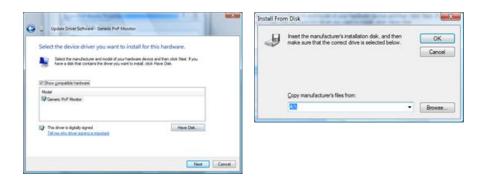
6. Click "Update Driver..." in the "Driver" tab.



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



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

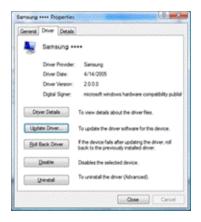


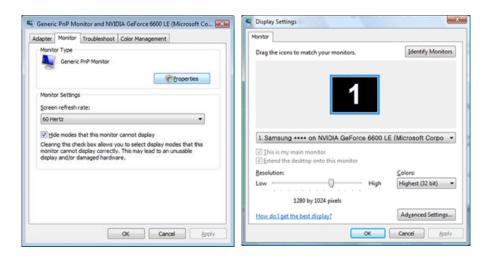
9. Select the model that matches your monitor from the list of monitor models on the screen, and click "Next".



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





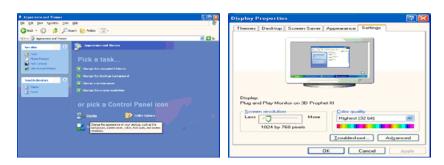


Microsoft® Windows® XP Operating System

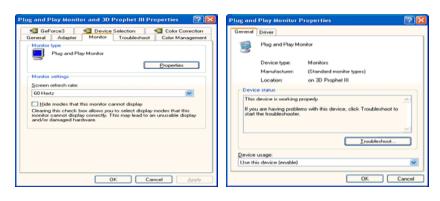
- 1. Insert CD into the CD-ROM drive.
- 2. Click "Start" → "Control Panel" then click the "Appearance and Themes" icon.



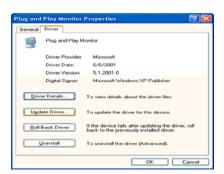
3. Click "Display" icon and choose the "Settings" tab then click "Advanced...".



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

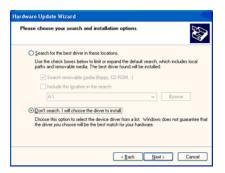


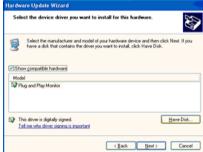
5. Click "Update Driver..." and select "Install from a list or..." then click "Next" button.





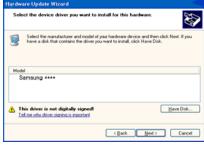
6. Select "Don't search, I will..." then click "Next" and then click "Have disk".





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





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





This monitor driver is under 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.





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).



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.
- 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.

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.

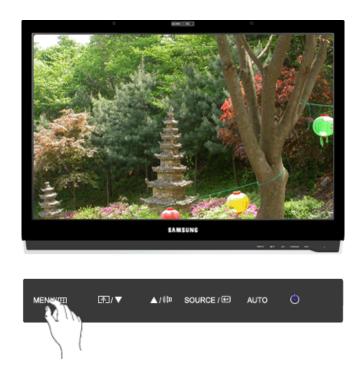
Auto adjustment allows the monitor to self-adjust to the incoming Analog signal. The values of **Fine**, **Coarse** and **Position** are adjusted automatically.

(Available in Analog mode only)

- 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.



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 [button after configuring the customized key for a function, click the name of each function.

(MagicBright - MagicColor - Color Effect - Image Size)
Note

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

Volume



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

SOURCE



Selects the video signal while the OSD is off.

OSD Function

Picture Brightness Contrast MagicBright Picture Mode

Color	MagicColor	Color Tone	Color Control	Color Effect	Gamma
Image	Coarse	Fine	Sharpness	H-Position	V-Position
OSD	Language	H-Position	V-Position	Transparen- cy	Display Time
I II Setup	Reset	Customized Key	Off Timer	Auto Source	Image Size
	AV Mode	HDMI Black Level			
Information					

Picture

Brightness

(Not available in MagicBright mode of Dynamic Contrast.)



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

$$\mathsf{MENU} \to \boxdot \to \bot \to \bot \,, \blacktriangledown \to \mathsf{MENU}$$

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.)

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

MagicBright



Push the 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 documentations 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 is to automatically detect distribution of inputted visual signal and adjust to create optimum contrast.

$$MENU \rightarrow \bullet \rightarrow \bullet$$
, $\blacktriangledown \rightarrow \bullet \rightarrow \bullet$, $\blacktriangledown \rightarrow MENU$

Picture Mode



Push the button to circle through available preconfigured modes.

The Monitor has four automatic picture settings ("Dynamic", "Standard", "Movie" and "Custom") that are preset at the factory. You can activate either Dynamic, Standard, Movie, or Custom. You can select Custom which automatically recalls your personalized picture settings.

• Dynamic

Select this mode to view a sharper image than in **Standard** mode.

Standard

Select this mode when the surroundings are bright. This also provides a sharp image.

Movie

Select this mode when the surroundings are dark. This will save power and reduce eye fatigue.

Custom

Select this mode when you want to adjust the image according to your preferences



• It can only be selected if an external input is connected to the HDMI terminal and the 'AV Mode' is set to 'On'.

$$MENU \rightarrow \bigcirc \bigcirc \rightarrow \bot$$
, $\blacktriangledown \rightarrow \bigcirc \bigcirc \rightarrow \bot$, $\blacktriangledown \rightarrow MENU$



(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.

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

Color Tone



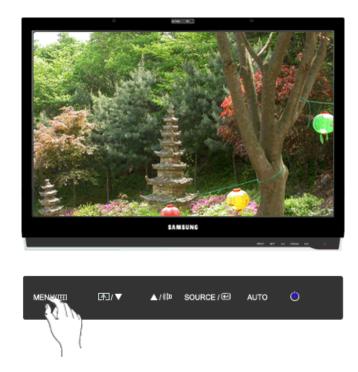
The tone of the color can be changed and one of four modes can be selected.

- 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.)

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

Color Control



Adjusts individual Red, Green, Blue color balance.

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

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

Color Effect



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

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

- Off 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.

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

Gamma



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

• Mode 1 • Mode 2 • Mode 3 $MENU \to \blacktriangle \,, \blacktriangledown \to \biguplus \to \blacktriangle \,, \blacktriangledown \to \biguplus \to \blacktriangle \,, \blacktriangledown \to MENU$



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.

(Available in Analog mode only)

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

Fine



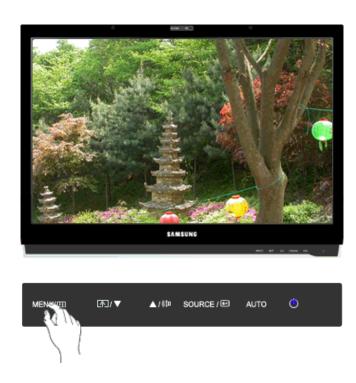
Removes noise such as horizontal stripes.

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

(Available in Analog mode only)

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

Sharpness



Changes the clearance of image.

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

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

H-Position



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

(Available in **Analog** mode only)

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

V-Position



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

(Available in Analog mode only)

$$MENU \rightarrow A$$
, $\nabla \rightarrow \Theta \rightarrow A$, $\nabla \rightarrow \Theta \rightarrow A$, $\nabla \rightarrow MENU$



Language





You can choose one of nine languages.

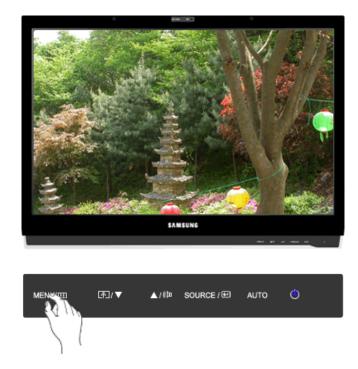
 English, Deutsch, Español, Français, Italiano, Svenska, Русский, Português, Türkçe



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

$$MENU \rightarrow A$$
, $\nabla \rightarrow \blacksquare \rightarrow \blacksquare \rightarrow A$, $\nabla \rightarrow MENU$

H-Position



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

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

V-Position



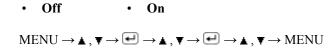
You can change the vertical position where the OSD menu appears on your monitor.

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

Transparency



Change the transparency of the background of the OSD.



Display Time



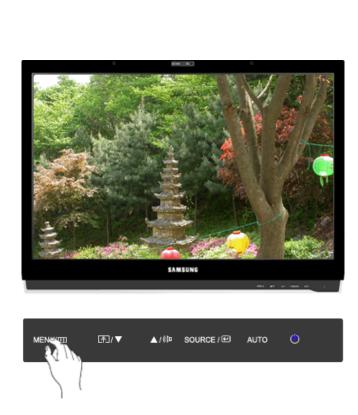
The menu will be automatically turned off if no adjustments are made for a certain time period.

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



B Setup

Reset



Reverts the product settings to factory defaults.

• No • Yes
$$MENU \to \blacktriangle \, , \blacktriangledown \to \maltese \to \blacktriangle \, , \blacktriangledown \to \maltese \to MENU$$

Customized Key



You can specify a function which will be activated when the **Customized Key** () is pressed.

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

Off Timer



The monitors will turn off automatically at the specified time.

• Off • On

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

Auto Source



Select **Auto Source** for the monitor to automatically select the signal source.

• Auto • Manual $\text{MENU} \to \blacktriangle \ , \blacktriangledown \to \clubsuit \to \clubsuit \to \blacktriangle \ , \blacktriangledown \to \text{MENU}$

Image Size

PC Mode



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

- 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.



- 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.

$$MENU \rightarrow A$$
, $\nabla \rightarrow \bullet \bullet \rightarrow A$, $\nabla \rightarrow \bullet \bullet \rightarrow A$, $\nabla \rightarrow \bullet \rightarrow A$

HDMI/DVI Mode



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

- 4:3 Sets the picture to 4:3 normal mode.
- Wide Enlarges the aspect ratio of the picture to fit the entire screen.
- **Just Scan** Use the function to see the full image without any cutoff when HDMI/DVI (720p/ 1080i/1080p) signals are input.



- It can only be selected if an external input is connected to the HDMI terminal and the 'AV Mode' is set to 'On'.
- 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.

 $MENU \rightarrow A$, $\forall \rightarrow \bullet \bullet \rightarrow A$, $\forall \rightarrow \bullet \bullet \bullet \rightarrow \bullet$, $\forall \rightarrow \bullet \rightarrow \bullet$

AV Mode



This function allows the screen to be displayed at the optimal quality in accordance with the size of the screen when a 480P, 576P, 720P, 1080i, or 1080P video signal is input in HDMI/DVI mode.

Set to Off when connected to a PC, Set to On when connected to an AV device.

If not set to On, the screen may not be displayed normally.

(Unavailable in Analog mode)



Defaults: DVI mode - Off, HDMI mode - On

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

HDMI Black Level



When a DVD or set-top box is connected to your TV via HDMI, it may cause a degradation in the screen quality, such as an increase in the black level, a low contrast, or discoloration, etc., depending on the external device connected. In this case, adjust the screen quality of your TV by configuring the HDMI black level.

(This function is active only when the external input connects to HDMI (RGB signals))

$$MENU \rightarrow A$$
, $\nabla \rightarrow \Theta$ $\rightarrow A$, $\nabla \rightarrow \Theta$ $\rightarrow A$, $\nabla \rightarrow MENU$

Information



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



Troubleshooting

Self-Test Feature Check



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

Self-Test Feature Check

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

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



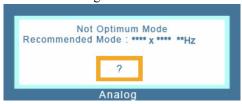
This box appears during normal operation if the video cable becomes disconnected or damaged.

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

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

Warning Messages

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



Environment

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

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** 1680 x 1050 60 Hz" message comes up, disconnect the cable from the computer while the monitor is still powered on.

If there is a message coming up on the screen or if the screen goes white, this means the monitor is in working condition.

In this case, check the computer for trouble.

Check List



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

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.

(Connected using the DVI cable)

If you still see an error message on the screen when the monitor is connected properly, check to see if the monitor status is set to analog.

If you still see an (error) message on the screen when the monitor is connected properly, check to see if the monitor status is set to analog. Press 'SOURCE/ button to have the monitor double-check the input signal source.

- 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 1680 x 1050 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 WSXGA or 75 Hz, a "Not Optimum Mode", "Recommended Mode 1680 x 1050 60 Hz" message is displayed. If the display exceeds 85 Hz, the display will work properly but the "Not Optimum Mode", "Recommended Mode 1680 x 1050 60 Hz" message appears for one minute and then disappears.

Please change to the recommended mode during this one-minute period.

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

- 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 'SOURCE/ button. Then press any key on the keyboard again to activate the monitor and restore the image on the screen.
- Q: Connected using the DVI cable?
- A: You may get a blank screen if you boot the system before you connect the DVI cable, or disconnect and then reconnect the DVI cable while the system is running as certain types of graphic cards do not send out video signals. Connect the DVI cable and then reboot the system.

I cannot see the On Screen Display.

- 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 Driver Installation Instructions.
- 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 Driver Installation Instructions.

There is no image on the screen. I cannot turn on the monitor.

- Q: Check whether the USB cable is connected correctly. Check whether the USB driver is installed.
- A: The USB monitor is recognized as a general USB device on a PC. If you turn the monitor on or off quickly and repeatedly, a USB device problem may occur. Refer to the USB device Troubleshooting section on the Microsoft customer support website.
 - 1. Right-click the "My Computer" and click on "Properties"
 - 2. The Device Manager is displayed.
 - 3. From the "Action" menu, click "Scan for hardware changes". Reboot your PC.

The screen of the USB monitor freezes.

- Q: Check the "Hardware acceleration" setting for your USB monitor in the "Display Properties" window.
- A: Set the "Hardware acceleration" value to "Full".

For more information on how to configure the settings, click here.

- 1. Right-click the "Windows Desktop" and click on "Properties".
- 2. The "Display Properties" window appears.

Select the "Settings" tab and click on "Advanced".

3. If the "Properties" window for your monitor is displayed, select the "Troubleshoot" tab. Move the "Hardware acceleration" slide to "Full".

My USB monitor is connected but the screen is blank.

- Q: Does the Auto Installation program run when your USB monitor is connected?
- A: Install the "USB Monitor Driver" from the provided CD. For more information on how to install the driver, refer to "Installing and Using the Software".

I have connected the USB monitor but it does not boot up...

- Q: For the One-Board Type computer which uses an i815 chipset motherboard, change the Legacy USB support option to [Disabled] in the BIOS Setup menu and reboot the computer.
- A: (Example) Phoenix BIOS

If you turn on the computer, the "Press F2 to enter SETUP" message is displayed on the bottom of the screen. Press [F2] to display the BIOS Setup menu.

A: - Configuring the Settings

Set the Advanced -> Peripheral Configuration (Integrated Peripherals) -> Legacy USB Support item to [Enabled]. Save the settings and reboot the computer.

A: - Entering the BIOS Setup screen may differ for each BIOS company. Refer to the user manual for your PC.

For more information, visit the Microsoft website.

My computer is on and the LED is blinking. However, only a blank screen is displayed on the monitor.

- Q: Check whether your computer is in hibernation mode (The monitor turns off).
- A: Move your mouse or press any key to display the screen again.

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 75 Hz.

(Do not exceed 75 Hz when using the maximum resolution.)

If you have problems in installing the adapter (video) driver, boot the computer in Safe Mode, remove the Display Adapter in the "Control Panel \rightarrow System \rightarrow Device Administrator" and then reboot the computer to reinstall the adapter (video) driver.



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.

- O: How I can clone or extend screen mode?
- A: Open the "Display Properties" window and select the "Settings" tab,
- Q: How can I remove the "USB Monitor Installation Program" completely?

- A: Click "Add/Remove Programs" in the "Control Panel". A list of "currently installed programs" is displayed.
 - Select "Samsung UbiSync Monitor" from the list and click "Remove".
- Q: The screen size of the USB monitor is larger than the actual monitor size.
- A: If the primary monitor has a high resolution, screens are expanded beyond the recommended resolution in Clone mode (USB monitor).
- Q: The screen size of the USB monitor is smaller than the actual monitor size. The screen is centered on the monitor.
- A: If the primary monitor has a high resolution, screens are smaller than the recommended resolution in Clone mode (USB monitor).
- Q: I disconnected or turned off my USB monitor but my PC still displays the old monitor information in the Display Properties window.
- A: The deactivated USB monitors are such that the power to them is turned off or their USB cables are disconnected. To remove this information, you have to remove the "Samsung Ubisync Monitor" program from "Add/Remove Programs" in the "Control Panel".
 - If you remove the program you cannot use all the connected USB monitors.
 - If you want to use the USB monitor again, you have to setup the installation program again.
- Q: Icons and photos are broken or jagged in Clone mode (USB monitor).
- A: This occurs because Windows does not send the screen updating information to Clone mode if Extended mode is active on a single PC.

We recommend using the monitor in Extend mode.



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

22" Monitor

General		
Model Name	SyncMaster 2263DX	
LCD Panel		
Size	22 " diagonal (55 cm)	
Display area	473.76 mm(H) x 296.1 mm(V)	
Pixel Pitch	0.282 mm(H) x 0.282 mm(V)	
Synchronization		
Horizontal	30 ~ 81 kHz	
Vertical	56 ~ 75 Hz	

Display Color

16.7M

Resolution

Optimum resolution	1680x1050@60Hz
Maximum resolution	1680x1050@60Hz

Input Signal, Terminated

RGB Analog, DVI(Digital Visual Interface) Compliant Digital RGB

 $0.7 \text{ Vp-p} \pm 5 \%$

Separate H/V sync, Composite, SOG

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

Maximum Pixel Clock

146MHz (Analog, Digital)

Power Supply

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

Signal Cable

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

DVI-D to DVI-D connector, Detachable

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

 $513.5\ x\ 428.7\ x\ 218.8\ mm\ /\ 20.2\ x\ 16.9\ x\ 8.6\ inch\ /\ 5.9\ kg\ /\ 13\ Ibs$

Dimensions (W x H x D) / Weight (Without Stand)

513.5~x~378.8~x~86.5~mm~/~20.2~x~14.9~x~3.4~inch~/~5.4~kg~/~11.9~Ibs

VESA Mounting Interface

100 mm x 100 mm (For use with Specialty(Arm) Mounting hardware.)

Environmental considerations

Operating	Temperature : $50^{\circ}F \sim 104^{\circ}F (10^{\circ}C \sim 40^{\circ}C)$	
	Humidity : $10 \% \sim 80 \%$, non-condensing	
Storage	Temperature : $-4^{\circ}F \sim 113^{\circ}F (-20^{\circ}C \sim 45^{\circ}C)$	
	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 5,292,000.



Design and specifications are subject to change without prior notice.



Class B Equipment (Information Communication equipment for residential use)

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

USB Monitor

General		
Model Name	UbiSync7	
LCD Panel		
Size	7" diagonal (17 cm)	
Display area	152.4 mm(H) x 91.4 mm(V)	
Pixel Pitch	0.1905 mm(H) x 0.1905 mm(V)	
Synchronization		
Horizontal	30 kHz	
Vertical	60 Hz	
Display Color		

16.7M

Resolution

Optimum resolution	800x480@60Hz
Maximum resolution	800x480@60Hz

Input Signal, Terminated

USB interface (Compliant Digital RGB)

USB Format

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

Maximum Pixel Clock

30 MHz (USB Mode)

Power Supply

DC 5V (USB Power) (+/- 10 %)

Signal Cable

USB Cable (1 up to 2 down), Detachable

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

184.0 x 124.0 x 43.6 mm / 7.2 x 4.9 x 1.7 inch / 0.37kg / 0.81 Ibs



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 Operation	Power saving mode	Power off (Power button)
Power Indicator	Blue	Blue blinking	Off
Power Consumption(Without 7")	45 watts	less than 2 watts (Off-mode)	less than 1 watts(120Vac) without USB(upstream)
			less than 2 watts(120Vac) with USB(upstream)
Power Consumption(With 7")	52 watts	less than 5 watts (Off-mode)	less than 2.5 watts(120Vac) without USB(upstream)
			less than 5 watts(120Vac) with USB(upstream)

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.

22" Monitor

Display Mode	Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Pixel Clock (MHz)	Sync Polarity (H/V)
IBM, 640 x 350	31.469	70.086	25.175	+/-
IBM, 640 x 480	31.469	59.940	25.175	-/-
IBM, 720 x 400	31.469	70.087	28.322	-/+
MAC, 640 x 480	35.000	66.667	30.240	-/-
MAC, 832 x 624	68.681	75.062	100.000	-/-
MAC, 1152 x 870	49.726	74.551	57.284	-/-
VESA, 640 x 480	37.861	72.809	31.500	-/-
VESA, 640 x 480	37.500	75.000	31.500	-/-
VESA, 800 x 600	35.156	56.250	36.000	+/+
VESA, 800 x 600	37.879	60.317	40.000	+/+
VESA, 800 x 600	48.077	72.188	50.000	+/+
VESA, 800 x 600	46.875	75.000	49.500	+/+
VESA, 1024 x 768	48.363	60.004	65.000	-/-
VESA, 1024 x 768	56.476	70.069	75.000	-/-
VESA, 1024 x 768	60.023	75.029	78.750	+/+
VESA, 1152 x 864	67.500	75.000	108.000	+/+
VESA, 1280 x 960	60.000	60.000	108.000	+/+
VESA, 1280 x 1024	79.976	75.025	135.000	+/+
VESA, 1680 x 1050	64.674	59.883	119.000	+/-

USB Monitor

Display Mode	Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Pixel Clock (MHz)	Sync Polarity (H/V)
IBM, 640 x 350	29.738	59.476	29.500	+/+



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.
- 22" Wide Resolution: 1680 x 1050, 7" USB Monitor Resolution: 800 x 480
- 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.
- Number of sub-pixels by the LCD panel type: 22" Wide (55 cm screen): 5,292,000 pixels

7 " USB (17 cm screen): 1,152,000 pixels

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.

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 accumu-

lates between the two electrodes which encase the liquid crystal. This may cause the liquid crystal to build up in a certain areas of the display. Thus, the previous image is retained when switching to a new video image. All display products, including LCD, are subject to image retention. This is not a product defect.

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

Power Off, Screen Saver, or Power Save Mode

Ex)

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

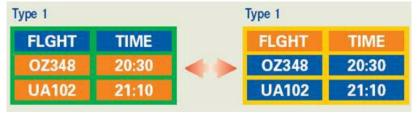
Ex) Airports, Transit Stations, Stock Markets, Banks, and Controlling Systems We recommend that you follow set up of your display system program as below:

Display Information together with Logo or Moving image cycle.

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

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

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



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

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

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

Ex)



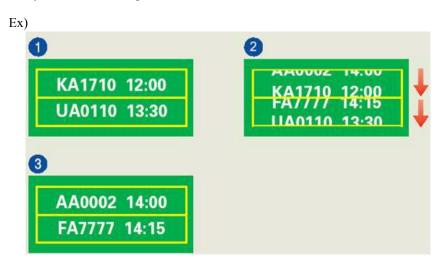
• Recommended settings: Bright colors with little difference in luminance

• Change the characters color and background color every 30 minutes

Ex)



• Every 30 minutes, change the characters with movement.

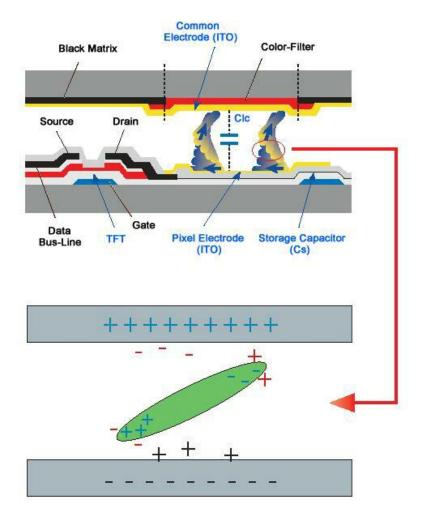


The best way to protect your monitor from Image retention is to set your PC or System to operate a Screen Saver program when you are not using it.

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

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

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



Our LCD Monitor satisfies ISO13406-2 Pixel fault Class II

Appendix

Contact SAMSUNG WORLDWIDE



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

North America				
U.S.A	1-800-SAMSUNG(726-7864)	http://www.samsung.com		
CANADA	1-800-SAMSUNG(726-7864)	http://www.samsung.com/ca		
MEXICO	01-800-SAMSUNG(726-7864)	http://www.samsung.com		
	Latin America			
ARGENTINE	0800-333-3733	http://www.samsung.com/ar		
BRAZIL	0800-124-421	http://www.samsung.com		
	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/latin		
ECUADOR	1-800-10-7267	http://www.samsung.com/latin		
EL SALVADOR	800-6225	http://www.samsung.com/latin		
GUATEMALA	1-800-299-0013	http://www.samsung.com/latin		
HONDURAS	800-7919267			
JAMAICA	1-800-234-7267	http://www.samsung.com/latin		
NICARAGUA	00-1800-5077267			
PANAMA	800-7267	http://www.samsung.com/latin		
PUERTO RICO	1-800-682-3180	http://www.samsung.com/latin		
REP. DOMINICA	1-800-751-2676	http://www.samsung.com/latin		
TRINIDAD & TO-BAGO	1-800-SAMSUNG(726-7864)	http://www.samsung.com/latin		
VENEZUELA	0-800-100-5303	http://www.samsung.com/latin		
	Europe			
AUSTRIA	0800-SAMSUNG (726-7864)	http://www.samsung.com/at		
BELGIUM	0032 (0)2 201 24 18	http://www.samsung.com/be		
CZECH REPUBLIC	844 000 844	http://www.samsung.com/cz		
	Distributor pro Českou republiku: Samsung Zrt., česka organizační slo	ožka Vyskočilova 4, 14000 Praha 4		
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		
	08 25 08 65 65 (€ 0,15/Min)			

Europe

	Europe	
GERMANY	01805 - SAMSUNG (726-7864) (€ 0,14/Min)	http://www.samsung.com
HUNGARY	06-80-SAMSUNG (726-7864)	http://www.samsung.com
ITALIA	800-SAMSUNG (726-7864)	http://www.samsung.com
LUXEMBURG	0035 (0)2 261 03 710	http://www.samsung.com/be
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 10 11 30	http://www.samsung.com
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
	CIC	
ECTONIA	CIS	1.44
ESTONIA	800-7267	http://www.samsung.ee
LATVIA	800-7267	http://www.samsung.com/lv
LITHUANIA	8-800-77777	http://www.samsung.lt
KAZAKHSTAN	8-10-800-500-55-500	http://www.samsung.kz
KYRGYZSTAN	00-800-500-55-500	1.4//
RUSSIA	8-800-555-55-55	http://www.samsung.ru
TADJIKISTAN	8-10-800-500-55-500	1 //
UKRAINE	8-800-502-0000	http://www.samsung.com
UZBEKISTAN	8-10-800-500-55-500	http://www.samsung.uz
	Asia Pacific	
AUSTRALIA	1300 362 603	http://www.samsung.com
CHINA	800-810-5858	http://www.samsung.com
	010-6475 1880	
HONG KONG	3698 - 4698	http://www.samsung.com/hk
INDIA	3030 8282	http://www.samsung.com
	1800 110011	
INDONESIA	0800-112-8888	http://www.samsung.com
JAPAN	0120-327-527	http://www.samsung.com/jp
MALAYSIA	1800-88-9999	http://www.samsung.com/my
NEW ZEALAND	0800 SAMSUNG(726-7864)	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
THAILAND	1800-29-3232, 02-689-3232	http://www.samsung.com

Asia Pacific

TAIWAN 0800-329-999 http://www.samsung.com/tw VIETNAM 1 800 588 889 http://www.samsung.com

Middle East & Africa

SOUTH AFRICA 0860-SAMSUNG(726-7864) http://www.samsung.com TURKEY 444 77 11 http://www.samsung.com U.A.E 800-SAMSUNG(726-7864) http://www.samsung.com

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 frequency 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 second, this

is regarded as 60 Hz.

Horizontal Frequency The time to scan one line connecting the right edge to the left edge

of the screen horizontally is called the Horizontal Cycle. The inverse number of the Horizontal Cycle is called Horizontal Fre-

quency. 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 show-

ing odd lines and then even lines in turn is called the Interlace method. The Non-Interlace method is used for the majority of monitors to ensure a clear image. The Interlace method is the same

as that used in TVs.

Plug & Play

This is a function that provides the best quality screen for the user

by allowing the computer and the monitor to exchange information automatically. This monitor follows the international standard

VESA DDC for the Plug & Play function.

Resolution The number of horizontal and vertical dots used to compose the

screen image is called 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 1680 x 1050, this means the screen is composed of 1680 horizontal dots (horizontal resolution) and

1050 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

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