MonitorUser Manual

The color and the appearance may differ depending on the product, and the specifications are subject to change without prior notice to improve the performance.



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1 Major Safety Precautions

1-1 Before You Start

Icons used in this manual

ICON	NAME	MEANING
1	Caution	Indicates cases where the function may not work or the setting may be canceled.
	Note	Indicates a hint or tip to operate a function.

Using this Manual

- Make yourself fully aware of the safety precautions before using this product.
- If a problem occurs, refer to the 'Troubleshooting' section.

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Major Safety Precautions 1-1

1-2 Custody and Maintenance

External Surface and Screen Maintenance

Clean the product with a soft dry cloth.

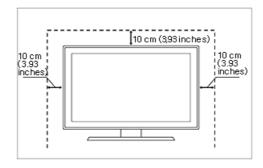
- Do not clean the product with an inflammable substance such as benzene or thinner or with a wet cloth. This may result in a problem with the product.
- Do not scratch the screen with your fingernails or a sharp object.
 - This may result in scratches or damage to the product.
- Do not clean the product directly by spraying water onto the product.
 - If water enters the product, it may result in fire, electric shock or a problem with the product.
- A white stain may be generated on the surface of the highglossy model due to the inherent characteristics of the material, if a supersonic humidifier is used.
- The appearance and the color may differ depending on the model.



Securing the Installation Space

- Keep the required distances between the product and other objects (e.g. walls) to ensure proper ventilation.
 Failing to do so may result in fire or a problem with the product due to an increase in the internal temperature.
 Install the product so the required distances shown in the figure are kept.
 - The appearance may differ depending on the product.

When installing the product with a stand



About persistent images

- Displaying a still image for a long time may create a persistent image or stain on the screen. If you do not use the product for a long time, set the power-saving mode or screen saver.
- Due to technological constraints of the panel manufacturer, the images generated by this product may appear either brighter or darker than normal for approximately 1 ppm (parts per million) pixels.
 - The number of sub-pixels by panel type: The number of Sub-Pixels = Max. Horizontal Resolution x Max. Vertical Resolution x 3

Example) If the maximum resolution is 1920 x 1080, the number of sub-pixels is 1920 x 1080 x 3 = 6,220,800.

1-2 Major Safety Precautions

1-3 Cleaning the Monitor

Cleaning the Monitor

• The panel and exterior of the cutting-edge monitor scratch easily and require careful attention. Clean the monitor according to the following steps.



- 1. Power off the monitor and PC.
- 2. Disconnect the power cable from the monitor.
- To avoid electric shock, be sure you disconnect the cable by gripping the plug and do not touch the cable with wet hands.



3. Wipe the monitor using a soft, slightly damp cloth that has been squeezed .

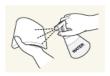


Do not use a cleaning agent that contains alcohol or solvents, or that is surface active. Otherwise, the exterior may discolor or crack or the panel coating may come off.



Do not spray water or cleaning agent directly onto the monitor.

Otherwise, the liquid may sink into the monitor and cause a fire, electric shock, or failure.



4. Clean the exterior of the monitor using a soft cloth dampened with a small amount of water.



- 5. Connect the power cable to the monitor after you have finished cleaning.
- 6. Power on the monitor and PC.

Precautions for Storage

- · Using an ultrasonic humidifier may cause white stains on a highly glossy product.
 - Be sure you contact the nearest service center (paid service) for cleaning the inside of the monitor.

Major Safety Precautions 1-3

Icons used for safety precautions

ICON	NAME	MEANING
<u>^</u>	Warning	Failing to follow the precautions marked with this sign, may result in a serious injury or even a fatality.
<u>^</u>	Caution	Failing to follow the precautions marked with this sign, may result in a personal injury or property damage.

Meaning of Signs



Do not perform.



Must be followed.



Do not disassemble.



The power plug must be unplugged from the wall outlet.



Do not touch.



Must be grounded to prevent electric shock.

Power Related

The product image used in the following pictures for your reference may look different from the actual product.



Warning



Avoid using a damaged power cord or plug or a loose power outlet.

Otherwise, it may result in electric shock or



Avoid connecting multiple electric appliances to a single wall outlet.

Otherwise, it may result in fire due to overheating of the wall outlet.



Avoid plugging in or unplugging the power supply with wet hands.

Otherwise, it may result in electric shock.



Plug the power plug in firmly.

Otherwise, it may result in fire.

Avoid bending or twisting the power cord



Make sure to connect the power cord to a grounded wall outlet (for insulation class 1 equipment only).

 Otherwise, it may result in electric shock or injury.



excessively and avoid placing heavy objects on the cord.



Keep the power cord and the product away from a heater.

Otherwise, it may result in electric shock or



Otherwise, it may result in electric shock or fire due to a damaged power cord.

If the pins of the power plug or the wall outlet are covered in dust, clean it using a dry cloth.

Otherwise, it may result in fire.

Caution



Avoid unplugging the power plug while the product is operating.

Otherwise, it may damage the product due to electric shock.



Make sure to use only the power cord supplied by our company. In addition, do not use the power cord of another electric appliance.

Otherwise, it may result in electric shock or fire.

Connect the power plug to a wall outlet that can be easily reached.

When a problem occurs with the product, you must unplug the power plug to cut the power off completely. You cannot cut the power off completely using only the power button on the product.



When unplugging the power plug from the wall outlet, make sure to hold it by the plug and not by the cord.

Otherwise, it may result in electric shock or



Installation Related



Warning



Avoid placing burning candles, mosquitorepellent or cigarettes on the product and installing the product near a heater.

Otherwise, it may result in fire.

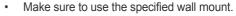
internal over-heating.



Otherwise, it may result in injury.



Ask an installation engineer or relevant company to install the product onto the wall.



Keep a distance of at least 10 cm from the wall when installing the product for ventilation.

Otherwise, it may result in fire due to internal over-heating.



Keep the plastic bags used to pack the product away from children.

Avoid installing the product in a badly-ventilated

location such as inside a bookshelf or closet.

Otherwise, it may result in fire due to

If children place the plastic bags over their heads, they may suffocate.



Avoid installing the product in a location that is unstable or exposed to excessive vibrations such as on an unstable or slanted shelf.

- The product may fall and this may result in damage to the product or injury.
- If you use the product in a location exposed to excessive vibrations, it may result in a problem with the product or fire.



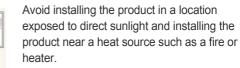
Avoid installing the product in a location exposed to dust, moisture (sauna), oil, smoke or water (rain drops) and installing it within a vehicle.

This may result in electric shock or fire.



Avoid installing the product at an easily reachable height where children may reach it.

- If a child touches the product, the product may fall and this may result in injury.
- Since the front part is heavier, install the product on a flat and stable surface.



This may shorten the product life cycle or cause fire

1-4



Major Safety Precautions

Caution



Do not let the product drop while moving it.

This may result in a problem with the product or injury.



Do not place the product face down on the floor.

This may damage the panel of the product.



When installing the product on a console or shelf, make sure that the front of the product does not protrude out of the console or shelf.

- Otherwise, this may cause the product to fall off and result in a malfunction or injury.
- Make sure to use a cabinet or shelf suitable to the size of the product.



gently.

Otherwise, it may result in a problem with the product or injury.

When putting the product down, handle it



If the product is installed in a location where the operating conditions vary considerably, a serious quality problem may occur due to the surrounding environment. In this case, install the product only after consulting one of our service engineers about the matter.

Places exposed to microscopic dust, chemicals, too high or low temperature, high humidity, such as airports or stations where the product is continuously used for a long time and so on.

Usage Related

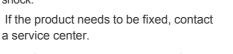


Warning

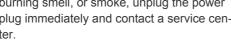


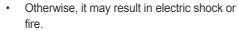
Since a high voltage runs through the product, never disassemble, repair or modify the product yourself.

- Otherwise, it may result in fire or electric shock.
- If the product needs to be fixed, contact



If the product generates a strange noise, a burning smell, or smoke, unplug the power plug immediately and contact a service center.







Avoid letting children to hang or climb onto the product.

Otherwise, it may result in fire, electric

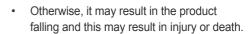
shock or a problem with the product.

When cleaning the product, do not spray water

Make sure that water does not enter the

directly over the product parts.

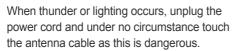
product.





If you drop the product or the case is damaged, turn the power off and unplug the power cord. Contact a service center.

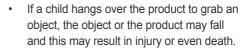
Otherwise, it may result in fire or electric shock.



Otherwise, it may result in electric shock or fire.



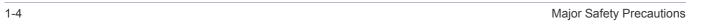
Avoid placing objects such as toys and cookies on top of the product.



Avoid dropping an object over the product or cause impact to the product.

Otherwise, it may result in electric shock or fire.







Avoid moving the product by pulling the power cord or antenna cable.

Otherwise, it may result in electric shock, fire or a problem with the product due to damage to the cable.



When a gas leak occurs, do not touch the product or the power plug and ventilate immediately.

- A spark may result in an explosion or fire.
- During a thunder or lighting storm, do not touch the power cord or antenna cable.

Avoid using or placing inflammable spray or objects near the product.

This may result in an explosion or fire.



Avoid lifting up or move the product by holding only the power cord or signal cable.

Otherwise, it may result in electric shock, fire or a problem with the product due to damage to the cable.



Avoid inserting metal objects such as a chopsticks, coins or hairpins, or inflammable objects into the product (the vents, ports, etc).

- If water or an alien substance enters the product, turn the power off, unplug the power cord and contact a service center.
- Otherwise, it may result in a problem with the product, electric shock or fire.



Take care not to block the vent by a table cloth or curtain.

Otherwise, it may result in fire due to internal overheating.



Avoid placing a liquid container such as a vase, flowerpot, beverage, cosmetics or drugs, or a metal object over the product.

- If water or an alien substance enters the product, turn the power off, unplug the power cord and contact a service
- Otherwise, it may result in a problem with the product, electric shock or fire.



Caution



Displaying a still image for a long time may create a persistent image or stain on the screen.

If you do not use the product for a long time, use the power-saving mode or set the screensaver to the moving picture mode.



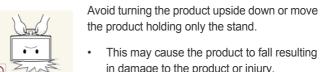
When not using the product for a long time such as leaving your home, unplug the power cord from the wall outlet.

Otherwise, it may cause dust accumulation and result in fire caused by overheating or short circuit or result in an electric shock.



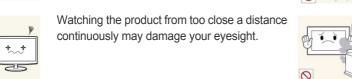
Set the appropriate resolution and frequency for the product.

Otherwise, it may result in eye strain.



product.

the product holding only the stand.



This may cause the product to fall resulting in damage to the product or injury.



Otherwise, it may result in electric shock or

Avoid using a humidifier or cooker near the



It is important to give your eyes some rest (5 minutes every hour) when viewing the product screen for long periods of time.

This will alleviate any eye strain.



Since the display panel is hot after using it for a long time, do not touch the product.

Major Safety Precautions 1-4



Keep small accessories away from the children.



Take care when adjusting the angle of the product or the height of the stand.

- If your hand or finger is caught, you may be injured.
- If the product is tilted excessively, the product may fall and this may result in injury.

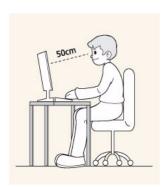




Avoid placing a heavy object over the product.

 Otherwise, it may result in a problem with the product or injury.

Maintaining the Correct Posture when Using this Product



Maintain the correct posture when using this product.

- · Straighten your back.
- Keep a distance of 45~50 cm from your eyes to the screen. Look down at the screen and face the screen forwards.
- Adjust the angle of the product so that light is not reflected onto the screen.
- Keep your elbow at a right angle and keep your arm level with the back of your hand.
- · Keep your elbow at a right angle.
- Place your heels flat on the ground while keeping your knees at an angle of 90 degrees or higher and maintain the position of your arm so that your arm is below your heart.

2 Installing the Product

2-1 Package Contents

- Unpack the product and check if all of the following contents have been included.
 - Store the packaging box in case you need to move the Product at a later stage.



Monitor

	Contents			
Quick Setup Guide	Product Warranty (Not available in all locations)	D-Sub Cable	Stand Connector	
Stand	Power Cord			

The cables provided may vary depending on the product you purchase.

Installing the Product 2-1

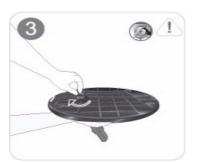
Before assembling the product, place the product down on a flat and stable surface so that the screen is facing downwards.



Insert the Stand Connector into the Stand in the direction shown by the figure.



Check if the Stand Connector is firmly connected.



Turn the connecting screw at the bottom of the stand fully so that it is completely fixed.



Place a soft cloth over the table to protect the product and place the product onto the cloth so that the front of the product is facing downwards.

2-2



Hold the main body of the product with your hand as shown by the figure.

Push the assembled stand into the main body in the direction of the arrow as shown in the figure.



- Caution

Avoid lifting the product holding only the stand.

Disassembly is in the reverse order of the assembly.

Installing the Product 2-2

- The connecting part may differ depending on the product model.
- 1. Connect the product to a PC depending on the video output supported by the PC.
 - When the graphics card provides D-Sub (<Analog>) output
 - Connect the [RGB IN] port of the product to the [D-Sub] port of the PC with the D-Sub cable.



2. To use the product, connect the power cable to a power outlet and the [POWER] port on the product. (The input voltage is switched automatically.)



- When the product is connected to a PC, you can turn the product on and use it.
- 3. Cables can be fixed as shown.



2-3 Installing the Product

2-4 Kensington Lock

A Kensington Lock is an anti-theft device that enables users to lock the product so that they can safely use it in public locations. Since the shape and usage of the locking device may differ depending on the model and the manufacturer, for more information, refer to the User Manual supplied with the locking device for more information.

You must purchase the Kensington Lock separately.



To lock the product, follow these steps:

- 1. Wrap the Kensington lock cable around a large, stationary object such as a desk or chair.
- 2. Slide the end of the cable with the lock attached through the looped end of the Kensington lock cable.
- 3. Insert the locking device into the Kensington slot on the Monitor().
- 4. Lock the lock(A).
- These are general instructions. For exact instructions, see the User Manual supplied with the locking device.
 - · You can purchase the locking device from an electronics store, an online shop, or our service center.

Installing the Product 2-4

3 Using the product

3-1 Standard Signal Mode Table

This product delivers the best picture quality when viewed under the optimal resolution setting. The optimal resolution is dependent on the screen size.

Therefore, the visual quality will be degraded if the optimal resolution is not set for the panel size. It is recommended setting the resolution to the optimal resolution of the product.

If the signal from the PC is one of the following standard signal modes, the screen is set automatically. However, if the signal from the PC is not one of the following signal modes, a blank screen may be displayed. Therefore, configure it as follows referring to the User Manual of the graphics card.

S19A10N

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, 720 x 400	31.469	70.087	28.322	-/+
MAC, 640 x 480	35.000	66.667	30.240	-/-
MAC, 832 x 624	49.726	74.551	57.284	-/-
VESA, 640 x 480	31.469	59.940	25.175	-/-
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, 1366 x 768	47.712	59.790	85.500	+/+

Horizontal Frequency

The time taken to scan one line from the left-most position to the right-most position on the screen is called the horizontal cycle and the reciprocal of the horizontal cycle is called the horizontal frequency. The horizontal frequency is represented in kHz.

Vertical Frequency

A panel must display the same picture on the screen tens of times every second so that humans can see the picture. This frequency is called the vertical frequency. The vertical frequency is represented in Hz.

Product Operating Buttons



The On/Off and AUTO Adjustment functions of this product are performed with only one button.

FUNCTION	DESCRIPTION
On/Off	Press this button to turn the product on or off
	When the product is in operation, press and hold this button for less than five seconds and then release the button. The product will power off.
	When the product is not in operation, press this button to turn it on.
	For more information on the power-saving function, refer to the power saving function in More Information. When not using the product for a long time, unplugging the power cord is recommended to minimize power consumption.
AUTO Adjustment	To adjust the screen settings automatically, press and hold this botton for more than five seconds and then release the button.
	If the resolution settings are changed in the Display Properties, the AUTO adjustment function is performed.

Using the product 3-2

What is MagicTune?



MagicTune is a software program that helps with monitor adjustments by providing comprehensive descriptions of monitor functions and easy-to-understand guidelines.

Users can adjust the product with the mouse and the keyboard without using the operating buttons of the product.

Installing the Software

- Visit Samsung's offcial website to download the lastest MagicTune vertion. HTTP://WWW.SAMSUNG.COM
- 2. Complete the remaining software installation steps according to the instructions displayed on the screen.
 - The software may not work properly if you do not restart the computer after the installation.
 - The MagicTune icon may not appear depending on the computer system and the product specifications.
 - · If the shortcut icon does not appear, press the F5 key.

Restrictions and Problems with the Installation (MagicTune™)

The installation of MagicTune™may be affected by the graphics card, motherboard and the networking environment.

System Requirements

os

- •Windows 2000
- •Windows XP Home Edition
- •Windows XP Professional
- •Windows Vista 32Bit
- •Windows 7 32Bit
- Solution Street Str

Hardware

- At least 32MB of memory
- •At least 60MB of free space on the hard disk drive
- Solution For more information, refer to the website.

Removing the Software

You can only remove MagicTune™through [Add or Remove Programs] in Windows.

To remove MagicTune™, complete the following steps.

- **1.** Click [Start] select [Settings], and select [Control Panel] from the menu. For Windows XP, click [Start], and select [Control Panel] from the menu.
- 2. Double-click the [Add or Remove Programs] icon in the Control Panel.
- 3. In the [Add/Remove] window, find and select MagicTune™so that it is highlighted.
- 4. Click [Change or Remove Programs] to remove the software.
- 5. Select [Yes] to start removing MagicTune™.

6. Wait until a message box appears informing you that the software has been removed completely.

Solution For technical support, the FAQ (frequently asked questions) or information about the software upgrade for MagicTune™, please visit our website.

Using the product 3-3

Troubleshooting 4

Monitor Self-Diagnosis 4-1

- You can check if the product is working properly using the Self-Diagnosis function.
 - · After connectting the product to PC properly, if a blank screen is displayed, use the Self-Diagnosis function with the following steps.
- 1. Turn the product and the PC off.
- 2. Separate the signal cable from the product .
- 3. Turn the product on.
- 4. If the product is working properly, the <Check Signal Cable> icon will appear on the screen.



In this case, if a blank screen is displayed again, make sure that there is no problem with the PC and the connection. The product is working properly.

4-1 Troubleshooting

4-2 Before Requesting Service

Please check the following before requesting After-Sales service. If the problem continues, please contact your nearest Samsung Electronics Service Center.

A blank screen appears / I	cannot turn the product on
Is the power cord connected properly?	Check the connection status of the power cord.
Does the screen display <check cable="" signal=""> icon?</check>	Check the cable connecting the PC and the product.
Does the screen display <optimum resolution=""> icon?</optimum>	This occurs when the signal from the graphics card exceeds the maximum resolution or the maximum frequency of the product. In this case, set up the appropriate resolution and the frequency for the product.
Does the screen display <power mode="" saving=""> icon and go black after five seconds?</power>	 This icon will appear before the product goes to power-saving mode. To restore normal operation, click the mouse or press any key on the keyboard. When the product is in power-saving mode, the screen will display <power mode="" saving=""> icon immediately if you press this button, and will go to power-saving mode again in five seconds.</power> When the screen is displaying the <power mode="" saving=""> icon, the monitor will shut down if you press this button.</power>
The color is weird / The picture	is displayed in black and white
Is the entire screen displayed in the same color as if viewing the screen through a cellophane paper?	Check the cable connection to the computer. Reinsert the graphics card into the computer completely.
Is the graphics card configured correctly?	Set up the graphics card referring to the user manual.
The display area suddenly mo	ves to an edge or to the center.
Did you change the graphics card or the driver?	Press this button to run the AUTO Adjustment function.
Did you change the resolution and frequency appropriate to the product?	Set the resolution and the frequency to the appropriate values in the graphics card refer to the (Standard Signal Mode Table)
Is the graphics card configured correctly?	Set up the graphics card referring to the user manual.
The pictures a	re out-of-focus.
Did you change the resolution and the frequency appropriate to the product?	Set the resolution and the frequency to the appropriate values in the graphics card refer to the (Standard Signal Mode Table)

Troubleshooting 4-2

The color is displayed in 16 bit (16 colors). The color has been changed after changing the graphics card.			
	Windows XP : Set the color again by selecting Control Panel → Appearance and Themes → Display → Settings.		
	Windows ME/2000 : Set the color again by selecting Control Panel \rightarrow Display \rightarrow Settings.		
Did you install the device driver for the product?	Windows Vista : Change the color settings by selecting Control Panel \rightarrow Appearance and Personalization \rightarrow Personalization \rightarrow Display settings.		
	Windows 7 : Change the color settings by selecting Control Panel → Appearance and Personalization → Display → Adjust resolution → Advanced settings → Monitor.		
	(For more information, refer to the Windows user manual for the computer.)		
Is the graphics card configured correctly?	Configure the color again in accordance with the new graphics card driver.		
A "beep, beep" sound is	heard when booting the computer.		
If the beep sound is generated 3 or more times when boot	ting up the computer, please request service for the computer.		

4-2 Troubleshooting

FAQ!	PLEASE TRY THE FOLLOWING!
How can I change the frequency (refresh rate) of the video signal?	You have to change the frequency of the graphics card. Windows XP : Change the frequency by selecting Control Panel → Appearance and Themes → Display → Settings → Advanced → Monitor, and then change the refresh rate under Monitor Settings. Windows ME/2000 : Change the frequency by selecting Control Panel → Display → Settings → Advanced → Monitor, and then change the refresh rate under Monitor Settings. Windows Vista : Change the frequency by selecting Control Panel → Appearance and Personalization → Personalization → Display settings → Advanced settings → Monitor, and then change the refresh rate under Monitor Settings. Windows 7 : Change the frequency by selecting Control Panel → Appearance and Personalization → Display → Adjust resolution → Advanced settings → Monitor, and then change the refresh rate under Monitor Settings. (For more information, refer to the User Manual of the computer or the graphics card.)
How can I change the resolution?	Windows XP : Change the resolution by selecting Control Panel → Appearance and Themes → Display → Settings. Windows ME/2000 : Change the resolution by selecting Control Panel → Display → Settings. Windows Vista : Change the resolution by selecting Control Panel → Appearance and Personalization → Personalization → Display settings. Windows 7 : Change the resolution by selecting Control Panel → Appearance and Personalization → Display → Adjust resolution. (For more information, refer to the User Manual of the computer or the graphics card.)
How can I use the power saving function?	Windows XP : Configure it by selecting Control Panel → Appearance and Themes → Display → Screen Saver Setting or configure it in the BIOS Setup of the computer. Windows ME/2000 : Configure it by selecting Control Panel → Display → Screen Saver Setting or Configure it in the BIOS Setup of the computer. Windows Vista : Change settings by selecting Control Panel → Appearance and Personalization → Personalization → Screen Saver. You can also use the BIOS SETUP menu on the PC. Windows 7 : Change settings by selecting Control Panel → Appearance and Personalization → Personalization → Screen Saver. You can also use the BIOS SETUP menu on the PC. (For more information, refer to the Windows user manual for the computer.)

Troubleshooting 4-3

5 More Information

5-1 Specifications

N	MODEL NAME	S19A10N	
Size		18.5 inches (47 cm)	
Panel	Display area	409.8 mm (H) x 230.4 mm (V)	
	Pixel Pitch	0.300 mm (H) x 0.300 mm (V)	
Synchroniza-	Horizontal	30 ~ 81 kHz	
tion	Vertical	56 ~ 75 Hz	
Display Color		16.7 M	
Decelution	Optimum resolution	1366x768 @ 60 Hz	
Resolution	Maximum resolution	1366x768 @ 60 Hz	
		RGB Analog	
Input Signal, Te	arminated	0.7 Vp-p ± 5%	
iriput Signal, Te	eminated	separate H/V sync, Composite, SOG	
		TTL level (V high ≥ 2.0V, V low ≤ 0.8V)	
Maximum Pixel Clock		89MHz (Analog)	
Power Supply		This product supports 100-240 V.Since the standard voltage may differ from country to country, please check the label on the back of the product.	
Signal Cable		15pin-to-15pin D-sub cable, Detachable	
		443.4 x 283.0 x 65.7 mm (17.5 x 11.1 x 2.6 inches) (Without Stand)	
Dimensions (WxHxD) / Weight		443.4 x 366.6 x 214.2 mm (17.5 x 14.4 x8.4 inches) (With Stand) / 2.9 kg (6.4 lbs)	
	Operating	Operating Temperature : 50°F ~ 104°F (10°C ~ 40°C)	
Environmen- tal consider-	Operating	Humidity :10 % ~ 80 %, non-condensing	
ations	Storage	Storage Temperature : -4°F ~ 113°F (-20°C ~ 45°C)	
	Clorage	Humidity: 5 % ~ 95 %, non-condensing	
Tilt		-1° ~ 21°	

- Design and specifications are subject to change without prior notice.
- Class B (Information Communication equipment for residential use)

 This device is registered for EMC requirements for home use (Class B). It can be used in all areas.

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

(USA only)

Dispose unwanted electronics through an approved recycler. To find the nearest recycling location, go to our website, www.samsung.com/recyclingdirect, or call (877) 278 - 0799

5-1 More Information

5-2 Power Saving Function

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 Consumption	24 watts	0.3 watts	0.3 watts
(Typical)			

If there is no power cut-off switch, the power consumption is "0" only when the power cord is disconnected.

More Information 5-2

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

	NORTH AMERICA			
CANADA	1-800-SAMSUNG (726-7864)	http://www.samsung.com		
MEXICO	01-800-SAMSUNG (726-7864)	http://www.samsung.com		
U.S.A	1-800-SAMSUNG (726-7864)	http://www.samsung.com		
	LATIN AMERICA			
ARGENTINA	0800-333-3733	http://www.samsung.com		
BRAZIL	0800-124-421	http://www.samsung.com		
	4004-0000			
CHILE	800-SAMSUNG (726-7864)	http://www.samsung.com		
COLOMBIA	01-8000112112	http://www.samsung.com		
COSTA RICA	0-800-507-7267	http://www.samsung.com		
DOMINICA	0-800-751-2676	http://www.samsung.com		
ECUADOR	1-800-10-7267	http://www.samsung.com		
EL SALVADOR	800-6225	http://www.samsung.com		
GUATEMALA	1-800-299-0013	http://www.samsung.com		
HONDURAS	800-27919267	http://www.samsung.com		
JAMAICA	1-800-234-7267	http://www.samsung.com		
NICARAGUA	00-1800-5077267	http://www.samsung.com		
PANAMA	800-7267	http://www.samsung.com		
PERU	0-800-777-08	http://www.samsung.com		
PUERTO RICO	1-800-682-3180	http://www.samsung.com		
TRINIDAD & TOBAGO	1-800-SAMSUNG (726-7864)	http://www.samsung.com		
VENEZUELA	0-800-100-5303	http://www.samsung.com		
	EUROPE			
ALBANIA	42 27 5755	-		
AUSTRIA	0810 - SAMSUNG (7267864,€ 0.07/ min)	http://www.samsung.com		
BELGIUM	02-201-24-18	http://www.samsung.com/be (Dutch)		
		http://www.samsung.com/be_fr (French)		
BOSNIA	05 133 1999	-		
BULGARIA	07001 33 11	http://www.samsung.com		
CROATIA	062 SAMSUNG (062 726 7864)	http://www.samsung.com		
CZECH	800 - SAMSUNG (800-726786)	http://www.samsung.com		
		Samsung Zrt., česká organizační složka, Oasis Florenc, Sokolovská394/17, 180 00, Praha 8		

5-3 More Information

	EUROPE	
DENMARK	70 70 19 70	http://www.samsung.com
FINLAND	030 - 6227 515	http://www.samsung.com
FRANCE	01 48 63 00 00	http://www.samsung.com
GERMANY	01805 - SAMSUNG (726-7864,€ 0,14/ Min)	http://www.samsung.com
GREECE	2106293100	http://www.samsung.com
HUNGARY	06-80-SAMSUNG (726-7864)	http://www.samsung.com
ITALIA	800-SAMSUNG (726-7864)	http://www.samsung.com
KOSOVO	+381 0113216899	-
LUXEMBURG	261 03 710	http://www.samsung.com
MACEDONIA	023 207 777	-
MONTENEGRO	020 405 888	-
NETHERLANDS	0900 - SAMSUNG (0900-7267864) (€ 0,10/Min)	http://www.samsung.com
NORWAY	815-56 480	http://www.samsung.com
POLAND	0 801 1SAMSUNG (172678) 022 - 607 - 93 - 33	http://www.samsung.com
PORTUGAL	80820 - SAMSUNG (726-7864)	http://www.samsung.com
RUMANIA	08010 SAMSUNG (08010 7267864) – doar din rețeaua Romtelecom, tarif local; 021.206.01.10 – din orice rețea, tarif normal	http://www.samsung.com
SERBIA	0700 Samsung (0700 726 7864)	http://www.samsung.com
SLOVAKIA	0800-SAMSUNG (0800-726 786)	http://www.samsung.com/sk
SPAIN	902 - 1 - SAMSUNG (902 172 678)	http://www.samsung.com
SWEDEN	0771 726 7864 (SAMSUNG)	http://www.samsung.com
SWITZERLAND	0848-SAMSUNG (7267864, CHF 0.08/ min)	http://www.samsung.com/ch http://www.samsung.com/ch_fr (French)
U.K	0330 SAMSUNG (7267864)	http://www.samsung.com
EIRE	0818 717100	http://www.samsung.com
LITHUANIA	8-800-77777	http://www.samsung.com
LATVIA	8000-7267	http://www.samsung.com
ESTONIA	800-7267	http://www.samsung.com
TURKEY	444 77 11	http://www.samsung.com
	CIS	
RUSSIA	8-800-555-55-55	http://www.samsung.com
GEORGIA	8-800-555-555	-
ARMENIA	0-800-05-555	-
		+

More Information 5-3

	CIS	
KAZAKHSTAN	8-10-800-500-55-500 (GSM: 7799)	http://www.samsung.com
UZBEKISTAN	8-10-800-500-55-500	http://www.samsung.com
KYRGYZSTAN	00-800-500-55-500	http://www.samsung.com
TADJIKISTAN	8-10-800-500-55-500	http://www.samsung.com
UKRAINE	0-800-502-000	http://www.samsung.com/ua
		http://www.samsung.com/ua_ru
BELARUS	810-800-500-55-500	-
MOLDOVA	00-800-500-55-500	-
	ASIA PACIFIC	
AUSTRALIA	1300 362 603	http://www.samsung.com
NEW ZEALAND	0800 SAMSUNG (0800 726 786)	http://www.samsung.com
CHINA	400-810-5858	http://www.samsung.com
HONG KONG	(852) 3698 - 4698	http://www.samsung.com/hk
		http://www.samsung.com/hk_en/
INDIA	3030 8282, 1800 3000 8282	http://www.samsung.com
INDONESIA	0800-112-8888	http://www.samsung.com
	021-5699-7777	
JAPAN	0120-327-527	http://www.samsung.com
MALAYSIA	1800-88-9999	http://www.samsung.com
PHILIPPINES	1-800-10-SAMSUNG (726-7864)	http://www.samsung.com
	1-800-3-SAMSUNG (726-7864)	
	1-800-8-SAMSUNG (726-7864)	
	02-5805777	
SINGAPORE	1800-SAMSUNG (726-7864)	http://www.samsung.com
THAILAND	1800-29-3232	http://www.samsung.com
	02-689-3232	
TAIWAN	0800-329-999	http://www.samsung.com
VIETNAM	1 800 588 889	http://www.samsung.com
	MIDDLE EAST	
IRAN	021-8255	http://www.samsung.com
		http://www.samservice.com
OMAN	800-SAMSUNG (726-7864)	http://www.samsung.com
KUWAIT	183-2255	http://www.samsung.com
BAHRAIN	8000-4726	http://www.samsung.com
EGYPT	08000-726786	http://www.samsung.com
JORDAN	800-22273	http://www.samsung.com
MOROCCO	080 100 2255	http://www.samsung.com
SAUDI ARABIA	9200-21230	http://www.samsung.com
U.A.E	800-SAMSUNG (726-7864)	http://www.samsung.com

5-3 More Information

AFRICA		
NIGERIA	0800 - SAMSUNG (726-7864)	http://www.samsung.com
SOUTH AFRICA	0860-SAMSUNG (726-7864)	http://www.samsung.com

More Information 5-3

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



5-4

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

This marking on the product, accessories or literature indicates that the product and its electronic accessories (e.g. charger, headset, USB cable) should not be disposed of with other household waste at the end of their working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate these items from other types of waste and recycle them 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 these items for environmentally safe recycling.

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

5-4 More Information