

User manual

SyncMaster S27A850T

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.

Copyright

The contents of this manual are subject to change without notice to improve quality.

© 2011 Samsung Electronics

Samsung Electronics owns the copyright for this manual.

Use or reproduction of this manual in parts or entirety without the authorization of Samsung Electronics is prohibited.

The SAMSUNG and SyncMaster logos are registered trademarks of Samsung Electronics.

Microsoft, Windows and Windows NT are registered trademarks of Microsoft Corporation.

VESA, DPM and DDC are registered trademarks of the Video Electronics Standards Association.

- An administration fee may be charged if either
 - (a) an engineer is called out at your request and there is no defect in the product (i.e. where you have failed to read this user manual).
 - (b) you bring the unit to a repair center and there is no defect in the product (i.e. where you have failed to read this user manual).
- The amount of such administration charge will be advised to you before any work or home visit is carried out.

Before Using the Product

Icons used in this manual

	The following images are for reference only. Real-life situations may differ from what is shown in the images.
---	--

Symbols for safety precautions

 Warning	A serious or fatal injury may result if instructions are not followed.
 Caution	Personal injury or damage to properties may result if instructions are not followed.
	Activities marked by this symbol are prohibited.
	Instructions marked by this symbol must be followed.

Before Using the Product

Cleaning

Cleaning

Exercise care when cleaning as the panel and exterior of advanced LCDs are easily scratched.

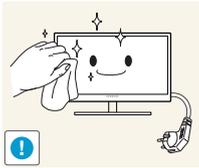
Take the following steps when cleaning.



1. Power off the monitor and computer.
2. Disconnect the power cord from the monitor.



Hold the power cable by the plug and do not touch the cable with wet hands. Otherwise, an electric shock may result.



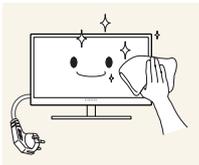
3. Wipe the monitor screen using a clean, soft and dry cloth.



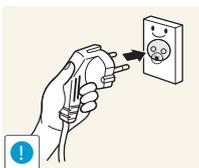
- Do not apply a cleaning agent that contains alcohol, solvent, or surfactant to the monitor.



- Do not spray water or detergent directly on the product.



4. Wet a soft and dry cloth in water and wring thoroughly to clean the exterior of the monitor.



5. Connect the power cord to the product after cleaning the product.
6. Power on the monitor and computer.

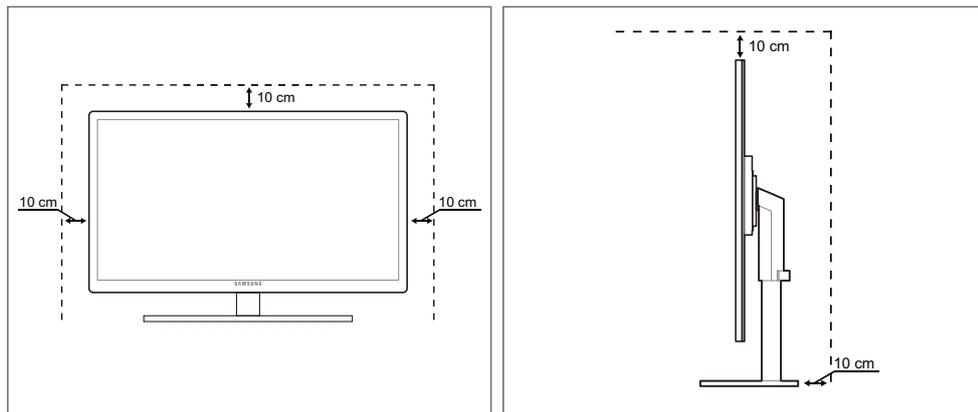
Before Using the Product

Securing the Installation Space

- Ensure some space around the product for ventilation. An internal temperature rise may cause fire and damage the product. Be sure to allow the amount of space as shown below or greater when installing the product.



The exterior may differ depending on the product.



Precautions for storage

High-glossy models can develop white stains on the surface if an ultrasonic wave humidifier is used nearby.



Be sure to contact Samsung Customer Service Center (page 83) if the inside of the monitor needs cleaning. (Service fee will be charged.)

Before Using the Product

Safety Precautions

Electricity and Safety



The following images are for reference only. Real-life situations may differ from what is shown in the images.

Warning



Do not use a damaged power cord or plug, or a loose power socket.

- An electric shock or fire may result.



Do not plug many products into the same power socket.

- Otherwise, the socket may overheat and cause a fire.



Do not touch the power plug with wet hands.

- Otherwise, an electric shock may result.



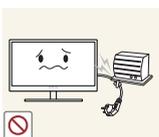
Insert the power plug all the way in so it is not loose.

- An unstable connection may cause a fire.



Ensure you connect the power plug to a grounded power socket. (type 1 insulated devices only).

- An electric shock or injury may result.



Do not bend or pull the power cord with force. Do not weigh the power cord down with a heavy object.

- A damaged power cord may cause an electric shock or fire.



Do not place the power cord or product near heat sources.

- An electric shock or fire may result.



Remove foreign substances such as dust around the plug pins and power socket with a dry cloth.

- Otherwise, a fire may result.

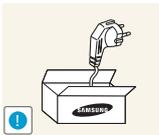
Before Using the Product

Caution



Do not unplug the power cord when the product is in use.

- The product may become damaged by an electric shock.



Do not use the power cord for products other than authorized products supplied by Samsung.

- An electric shock or fire may result.



Keep the power socket where the power cord is connected unobstructed.

- If any problem occurs in the product, unplug the power cable to completely cut the power to the product.

Power to the product cannot be completely cut off with the power button.



Hold the plug when disconnecting the power cord from the power socket.

- An electric shock or fire may result.

Installation and Safety

Warning



DO NOT PLACE CANDLES, INSECT REPELLANTS OR CIGARETTES ON TOP OF THE PRODUCT. DO NOT INSTALL THE PRODUCT NEAR HEAT SOURCES.

- Otherwise, a fire may result.



Avoid installing the product in a narrow space with bad ventilation, such as a bookshelf or wall closet.

- Otherwise, a fire may result due to an increased internal temperature.



Keep the plastic packaging bag for the product in a place that cannot be reached by children.

- Children may suffocate.

Before Using the Product



Do not install the product on an unstable or vibrating surface (insecure shelf, sloped surface, etc.).

- The product may fall and break or cause a personal injury.
- Using the product in an area with excess vibration may damage the product or cause a fire.



Do not install the product in a vehicle or a place exposed to dust, moisture (water drips, etc.), oil, or smoke.

- An electric shock or fire may result.



Do not expose the product to direct sunlight, heat, or a hot object such as a stove.

- Otherwise, the product lifespan may be reduced, or a fire may result.



Do not install the product within the reach of young children.

- The product may fall and injure children.



Edible oil, such as soybean oil, can damage or deform the product.
Do not install the product in a kitchen or near a kitchen counter.

Caution



Take care not to drop the product when moving it.

- Otherwise, product failure or personal injury may result.



Do not set down the product on its front.

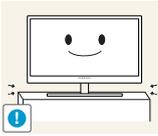
- The screen may become damaged.



When installing the product on a cabinet or shelf, make sure that the bottom edge of the front of the product is not protruding.

- The product may fall and break or cause a personal injury.
- Install the product only on cabinets or shelves of the right size.

Before Using the Product



Put down the product carefully.

- The product may fall and break or cause a personal injury.



Installing the product in an unusual place (a place exposed to a lot of fine particles, chemical substances or extreme temperatures, or an airport or train station where the product should operate continuously for an extended period of time) may seriously affect its performance.

- Be sure to consult Samsung Customer Service Center (page 83) before installation if you want to install the product at such a place.

Operation and Safety

Warning



High voltage runs through the product. Do not attempt to disassemble, repair, or modify the product on your own.

- An electric shock or fire may result.
- Contact Samsung Customer Service Center (page 83) for repair.



Before you move the product, be sure to turn off the power switch and remove all the cables connected to the product, including the power cord and the antenna cable.

- Otherwise, the power cord may be damaged and a fire or electric shock may result.



If the product generates a strange noise, a burning smell, or smoke, remove the power cord immediately and contact Samsung Customer Service Center (page 83).

- An electric shock or fire may result.



Do not let children hang from the product or climb on top of it.

- The product may fall, and your child may become injured or seriously harmed.



If the product falls or the exterior is damaged, power off the product, remove the power cord, and contact Samsung Customer Service Center (page 83).

- Otherwise, an electric shock or fire may result.

Before Using the Product



Do not put a heavy object, toy, or sweets on top of the product.

- The product or heavy objects may fall as children try to reach for the toy or sweets resulting in a serious injury.



During a lightning or thunderstorm, remove the power cord and do not touch the antenna cable.

- An electric shock or fire may result.



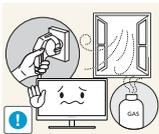
Do not drop objects on the product or apply impact.

- An electric shock or fire may result.



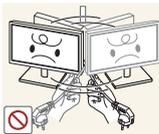
Do not move the product by pulling the power cord or any cable.

- Otherwise, the cable may be damaged and product failure, an electric shock or fire may result.



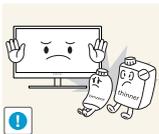
If a gas leakage is found, do not touch the product or power plug. Also, ventilate the area immediately.

- Sparks can cause an explosion or fire.
- During a lightning or thunderstorm, do not touch the power cord or antenna cable.



Do not lift or move the product by pulling the power cord or any cable.

- Otherwise, the cable may be damaged and product failure, an electric shock or fire may result.



Do not use or keep combustible spray or an inflammable substance near the product.

- An explosion or fire may result.



Ensure the vents are not blocked by tablecloths or curtains.

- Otherwise, a fire may result from an increased internal temperature.

Before Using the Product



Do not insert a metallic object (a chopstick, coin, hair pin, etc.) or inflammable object (paper, match, etc.) into the vent or ports of the product.

- If water or any foreign substance enters the product, be sure to power off the product, remove the power cord, and contact Samsung Customer Service Center (page 83).
- Product failure, an electric shock or fire may result.



Do not place objects containing liquid (vases, pots, bottles, etc) or metallic objects on top of the product.

- If water or any foreign substance enters the product, be sure to power off the product, remove the power cord, and contact Samsung Customer Service Center (page 83).
- Product failure, an electric shock or fire may result.

Caution



Leaving the screen fixed on a stationary image for an extended period of time may cause afterimage burn-in or defective pixels.

- If you are not going to use the product for an extended period of time, activate power-saving mode or a moving-picture screen saver.



Disconnect the power cord from the power socket if you do not plan on using the product for an extended period of time (vacation, etc.).

- Otherwise, a fire may result from accumulated dust, overheating, an electric shock, or electric leakage.



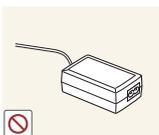
Use the product at the recommended resolution and frequency.

- Your eyesight may deteriorate.



Do not put DC power adapters together.

- Otherwise, a fire may result.



Remove the plastic bag from the DC power adapter before you use it.

- Otherwise, a fire may result.

Before Using the Product



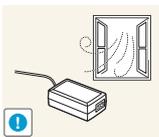
Do not let water enter the DC power adapter or get the adapter wet.

- An electric shock or fire may result.
- Avoid using the product outdoors where it can be exposed to rain or snow.
- Be careful not to get the DC power adapter wet when you wash the floor.

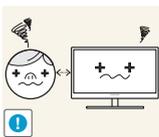


Do not put the DC power adapter near to any heating apparatus.

- Otherwise, a fire may result.



Keep the DC power adapter in a well-ventilated area.



Looking at the screen too close for an extended period of time can deteriorate your eyesight.



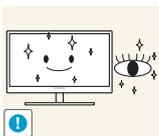
Do not hold the monitor upside-down or move it by holding the stand.

- The product may fall and break or cause a personal injury.



Do not use humidifiers or stoves around the product.

- An electric shock or fire may result.



Rest your eyes for more than 5 minutes for every 1 hour of product use.

- Eye fatigue will be relieved.



Do not touch the screen when the product has been turned on for an extended period of time as it will become hot.



Store the small accessories used with the product out of reach of children.

Before Using the Product



Exercise caution when adjusting the product angle or stand height.

- Otherwise, children's fingers or hands may become stuck and injured.
- Tilting the product excessively may cause it to fall and result in personal injury.



Do not place heavy objects on the product.

- Product failure or personal injury may result.

Correct posture to use the product



Use the product in the correct posture as follows:

- Straighten your back.
- Allow a distance of 45 to 50cm between your eye and the screen, and look slightly downward at the screen.
Keep your eyes directly in front of the screen.
- Adjust the angle so light does not reflect on the screen.
- Keep your forearms perpendicular to your upper arms and level with the back of your hands.
- Keep your elbows at about a right angle.
- Adjust the height of the product so you can keep your knees bent at 90 degrees or more, your heels attached to the floor, and your arms lower than your heart.

Table Of Contents

BEFORE USING THE PRODUCT	2	Copyright
	3	Icons used in this manual
	3	Symbols for safety precautions
	4	Cleaning
	4	Cleaning
	5	Securing the Installation Space
	5	Precautions for storage
	6	Safety Precautions
	6	Electricity and Safety
	7	Installation and Safety
	9	Operation and Safety
	13	Correct posture to use the product
PREPARATIONS	19	Checking the Contents
	19	Removing the Packaging
	20	Checking the Components
	21	Parts
	21	Frontal Buttons
	23	Reverse Side
	24	Installation
	24	Attaching the Stand
	25	Adjusting the Product Tilt and Height
	25	Rotating the Monitor Screen
	26	Installing a Wall-mount Kit or Desktop Stand
	27	Anti-theft Lock
	28	"MagicRotation Auto"
CONNECTING AND USING A SOURCE DEVICE	29	Before Connecting
	29	Pre-connection Checkpoints

Table Of Contents

	30	Connecting and Using a PC
	30	Connecting to a PC
	32	Driver Installation
	33	Setting Optimum Resolution
	34	Changing the Resolution Using a PC
	37	Connecting Headphones
	38	Connecting the Product to a PC as a USB HUB
	38	Connecting a PC to the Product
	38	Utilizing the Product as a USB HUB
	39	Connecting the Power
SCREEN SETUP	40	MAGIC
	40	SAMSUNG MAGIC Bright
	41	SAMSUNG MAGIC Color
	42	Brightness
	42	Configuring Brightness
	43	Contrast
	43	Configuring Contrast
	44	Sharpness
	44	Configuring Sharpness
	45	Response Time
	45	Configuring Response Time
	46	HDMI Black Level
	46	Configuring the HDMI Black Level Settings
CONFIGURING TINT	47	Red
	47	Configuring Red
	48	Green
	48	Configuring Green
	49	Blue
	49	Configuring Blue

Table Of Contents

	50	Color Tone
	50	Configuring the Color Tone Settings
	51	Gamma
	51	Configuring Gamma
RESIZING OR RELOCATING THE SCREEN	52	Size
	52	Changing the Image Size
	53	H-Position & V-Position
	53	Configuring H-Position & V-Position
	54	Menu H-Position & Menu V-Position
	54	Configuring Menu H-Position & Menu V-Position
SETUP AND RESET	55	ECO
	55	Eco Motion Sensor
	57	Eco Light Sensor
	60	Eco Saving
	61	Eco Icon Display
	63	Menu Transparency
	63	Changing Menu Transparency
	64	Language
	64	Changing the Language
	65	PC/AV Mode
	65	Configuring PC/AV Mode
	66	Auto Source
	66	Configuring Auto Source
	67	Display Time
	67	Configuring Display Time
	68	Key Repeat Time
	68	Configuring Key Repeat Time

Table Of Contents

	69	Customized Key
	69	Configuring Customized Key
	70	Off Timer On/Off
	70	Configuring Off Timer On/Off
	71	Off Timer Setting
	71	Configuring Off Timer Setting
	72	Reset
	72	Initializing Settings (Reset)
INFORMATION MENU AND OTHERS	73	INFORMATION
	73	Displaying INFORMATION
	73	Configuring Brightness in the Initial Screen
TROUBLESHOOTING GUIDE	74	Requirements Before Contacting Samsung Customer Service Center
	74	Testing the Product
	74	Checking the Resolution and Frequency
	74	Check the following.
	77	Q&A
SPECIFICATIONS	79	General
	80	PowerSaver
	81	Standard Signal Mode Table
APPENDIX	83	Contact SAMSUNG WORLDWIDE
	88	Correct Disposal of This Product (Waste Electrical & Electronic Equipment)
	89	Terminology

Table Of Contents

INDEX

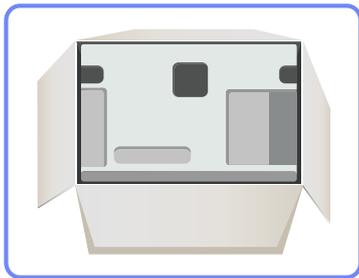
1.1 Checking the Contents

1.1.1 Removing the Packaging

- 1 Open the packaging box. Be careful not to damage the product when you open the packaging with a sharp instrument.



- 2 Remove the styrofoam from the product.



- 3 Check the components and remove the styrofoam and plastic bag.



- The appearance of actual components may differ from the image shown.
- This image is for reference only.



- 4 Store the box in a dry area so that it can be used when moving the product in the future.

1.1.2 Checking the Components



- Contact the dealer from whom you purchased the product if any item is missing.
- The appearance of the components and items sold separately may differ from the image shown.

Components



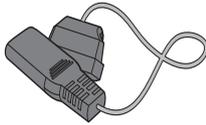
Quick setup guide



Warranty card
(Not available in all locations)



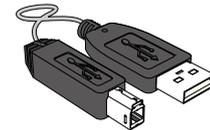
User manual



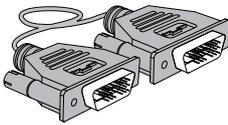
Power cable



DC power adapter



USB cable



Dual-link DVI cable



DP cable (optional)



Stand base



Components may vary depending on the country.

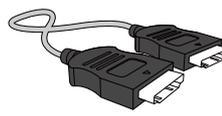
Items sold separately



The following items can be purchased at your nearest retailer.



HDMI-DVI cable



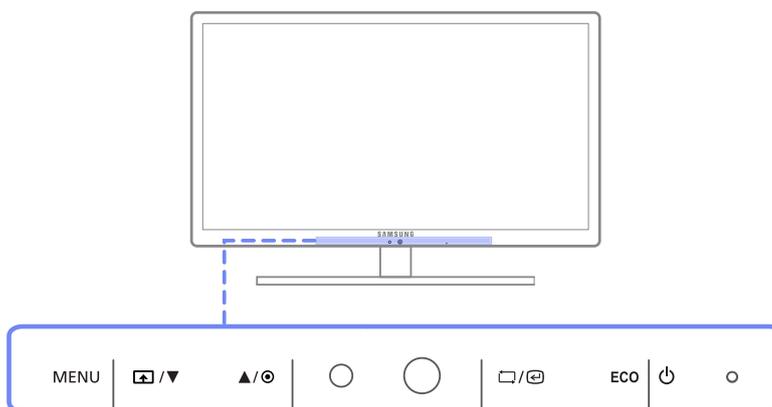
HDMI cable

1.2 Parts

1.2.1 Frontal Buttons



The color and shape of parts may differ from what is shown. Specifications are subject to change without notice to improve quality.



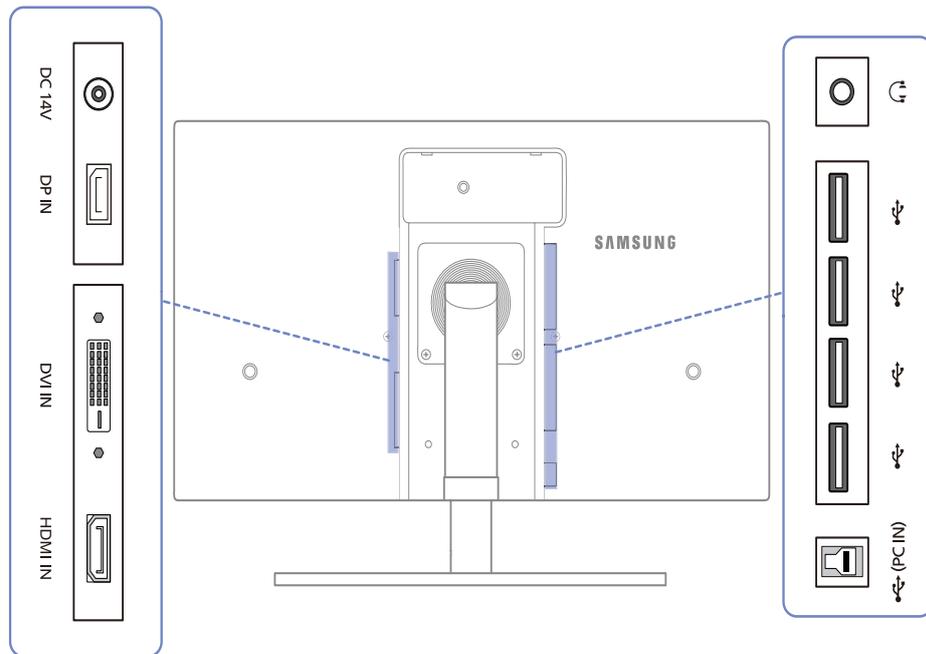
Icons	Description
MENU	<ul style="list-style-type: none"> Open or close the onscreen display (OSD) menu, or return to the parent menu. OSD control lock: Maintain the current settings, or lock the OSD control to prevent unintended changes to settings. To lock the OSD control, press the MENU button [MENU] for five seconds. To unlock the locked OSD control, press the MENU button [MENU] for more than five seconds. <p> If the OSD control is locked,</p> <ul style="list-style-type: none"> Brightness and Contrast can be adjusted, and INFORMATION can be viewed. The Customized Key function can be used by pressing the [] button. (The Customized Key function specified before the OSD control was locked is available even when the OSD control is locked.)
	<p>Configure Customized Key and press []. The following options will be enabled.</p> <ul style="list-style-type: none"> MAGIC - Image Size <p> To configure Customized Key, go to SETUP&RESET → Customized Key and select the mode you want.</p>

Icons	Description
	<p>Adjust the screen brightness.</p> <p> Volume can be adjusted if a cable is connected to the [DP IN] or [HDMI IN] port.</p>
	<p>Confirm a menu selection.</p> <p>Pressing the [] button when the OSD menu is not displayed will change the input source (Digital/DisplayPort/HDMI). If you power on the product or change the input source by pressing the [] button, a message that shows the changed input source will appear at the top left corner of the screen.</p>
	<p>Move to the upper or lower menu or adjust the value for an option on the OSD menu.</p>
<p>ECO</p>	<p>The [ECO] button opens the ECO menu directly. You do not need to go to SETUP&RESET - ECO.</p>
	<p>Turn the screen on or off.</p>
<p> Power lamp</p>	<p>The power indicator will be lit when the product is operating normally.</p> <p> <ul style="list-style-type: none"> • Refer to "9.2 PowerSaver" for details about the power-saving function. • To reduce power consumption, it is best to remove the power cable when you will not be using the product for an extended period of time. </p>

1.2.2 Reverse Side



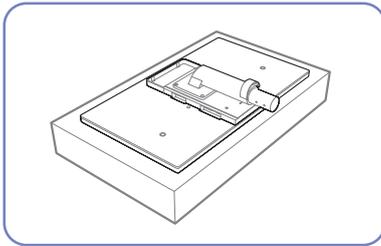
The color and shape of parts may differ from what is shown. Specifications are subject to change without notice to improve quality.



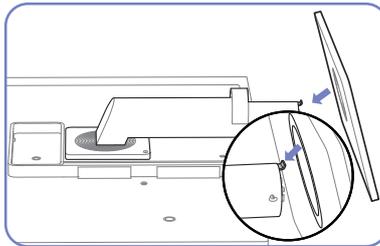
Port	Ports
	Connect to the DC power adapter.
	Connects to a PC using a DP cable
	Connects to a PC via a DVI cable.
	Connect to a source device using an HDMI cable.
	Connect to a USB device.
	Connect to an audio output device such as headphones.
	Connect to a PC using a USB cable.  This port can connect to a PC only.

1.3 Installation

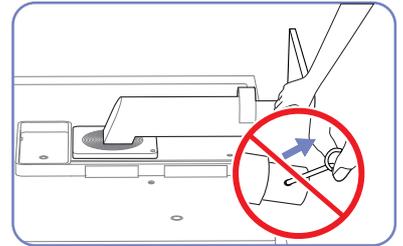
1.3.1 Attaching the Stand



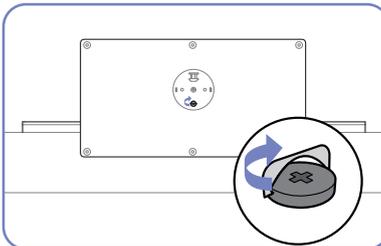
Place a protective cloth or cushion on a flat surface. Next, place the product with the face down on top of the cloth or cushion.



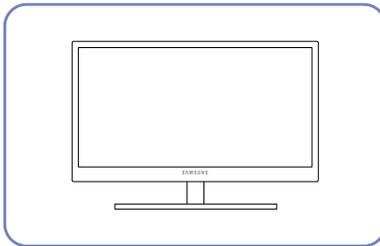
Insert the stand base into the stand in the direction of the arrow.



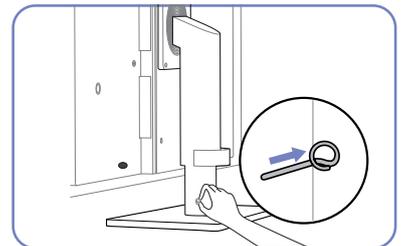
Do not remove the fixing pin until you are finished attaching the stand.



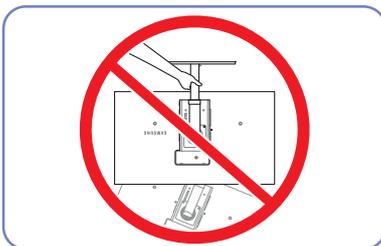
Tightly fasten the screw to the bottom of the base.



After installing the stand, place the product upright.



You can remove the fixing pin and adjust the stand now.



- Caution

Do not hold the product upside down only by the stand.

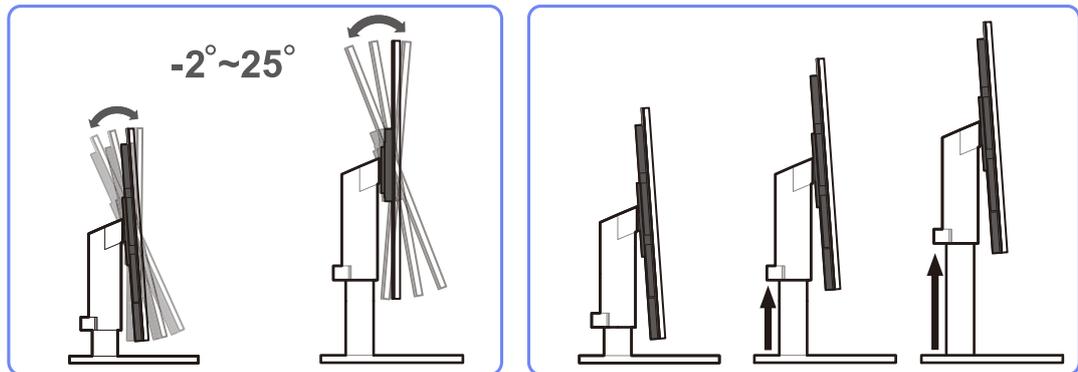


The color and shape of parts may differ from what is shown. Specifications are subject to change without notice to improve quality.

1.3.2 Adjusting the Product Tilt and Height



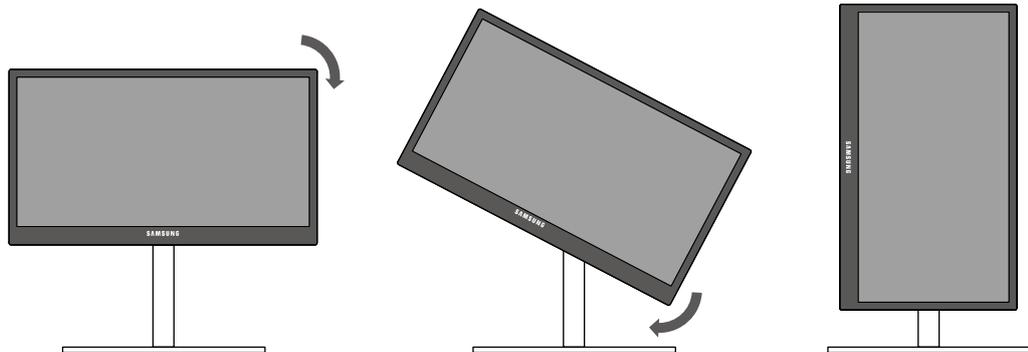
The color and shape of parts may differ from what is shown. Specifications are subject to change without notice to improve quality.



- To adjust the height, remove the fixing pin.
- The monitor tilt and height can be adjusted.
- Hold the top center of the product and adjust the height carefully.

1.3.3 Rotating the Monitor Screen

You can rotate your monitor as shown below.



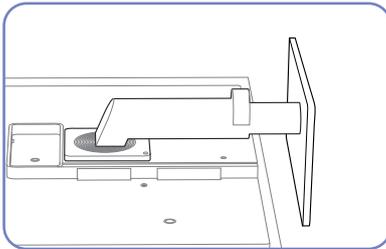
- Be sure to fully extend the stand before rotating the monitor.
- If you rotate the monitor without fully extending the stand, the corner of the monitor may hit the floor and get damaged.
- Do not rotate the monitor counterclockwise. The monitor may get damaged.

1.3.4 Installing a Wall-mount Kit or Desktop Stand

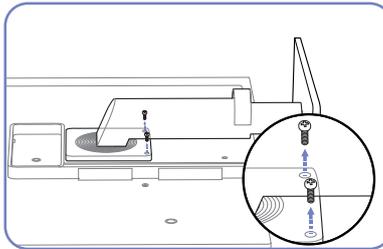
Before Installation



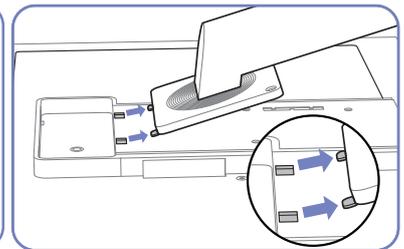
Power the product off and remove the power cable from the power socket.



Place a protective cloth or cushion on a flat surface. Next, place the product with the face down on top of the cloth or cushion.

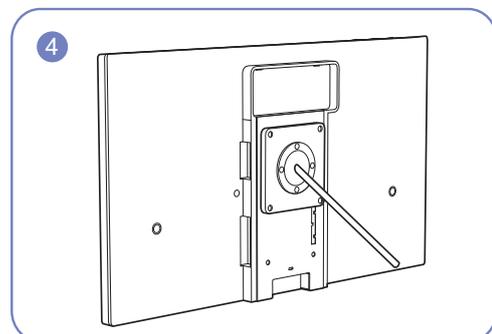
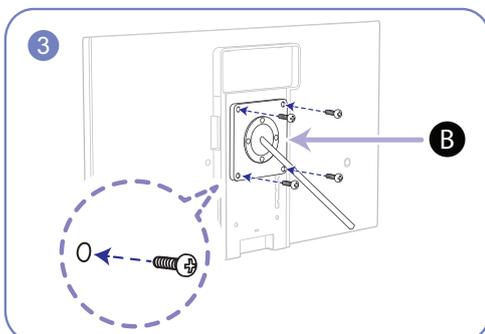
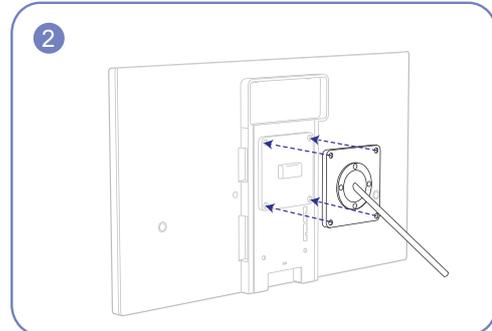
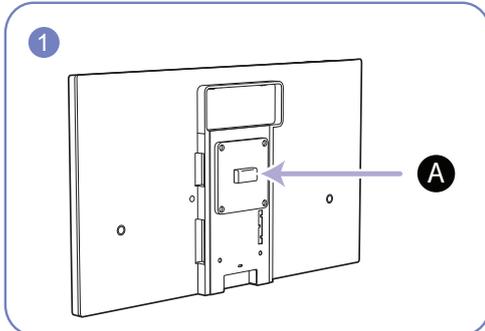


Unfasten the screw from the back of the product.



Lift and detach the stand.

Installing a Wall-mount Kit or Desktop Stand



A Attach the wall-mount kit or desktop stand here

B Bracket (sold separately)

Align the grooves and tightly fasten the screws on the bracket on the product with the corresponding parts on the wall-mount kit or desktop stand you want to attach.



Notes

- Using a screw longer than the standard length can damage the internal components of the product.
- The length of screws required for a wall mount that does not comply with the VESA standards may vary depending on the specifications.
- Do not use screws that do not comply with the VESA standards. Do not attach the wall-mount kit or desktop stand using excessive force. The product may get damaged or fall and cause personal injury. Samsung shall not be held liable for any damage or injury caused by using improper screws or attaching the wall-mount kit or desktop stand using excessive force.
- Samsung shall not be held liable for any product damage or personal injury caused by using a wall-mount kit other than the one specified or from an attempt to install the wall-mount kit on your own.
- To mount the product on a wall, ensure you purchase a wall-mount kit that can be installed 10cm or farther away from the wall.
- Be sure to use a wall-mount kit that complies with the standards.

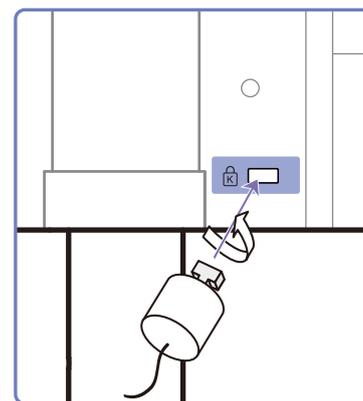
1.3.5 Anti-theft Lock

An anti-theft lock allows you to use the product securely even in public places. The locking device shape and locking method depend on the manufacturer. Refer to the user guide provided with your anti-theft locking device for details.

The lock device is sold separately.

To lock an anti-theft locking device:

- 1 Fix the cable of your anti-theft locking device to a heavy object such as a desk.
- 2 Put one end of the cable through the loop on the other end.
- 3 Insert the locking device into the anti-theft lock slot at the back of the product.
- 4 Lock the locking device.



- An anti-theft locking device can be purchased separately.
- Refer to the user guide provided with your anti-theft locking device for details.
- Anti-theft locking devices can be purchased at electronics retailers or online.

1.4 "MagicRotation Auto"

The "MagicRotation Auto" function detects the rotation of monitors that are fitted with a rotation sensor and rotates the Windows screen accordingly.

[Software Installation]

- 1 Insert the user manual CD provided with the product into the CD-ROM drive.
- 2 Follow the instructions given on the screen to proceed with installation.



After installation, the on-screen display (OSD) menu will be displayed in the language of the operating system.

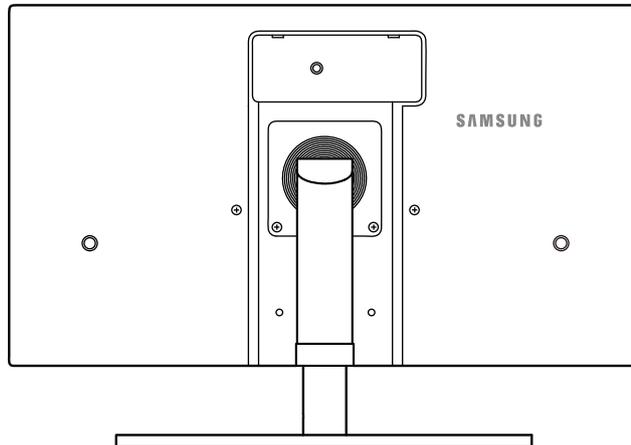
(This complies with the basic policies of Windows.)

[Caution]

- 1 Compatible only with Windows 7 (32 bits or 64 bits)
- 2 Compatible with a graphics card that complies with the DDC/CI and MS API standards
With a graphics card that does not comply with the aforementioned standards, the "MagicRotation Auto" function may not be available.
- 3 To maximize the performance of the function, update the graphics card driver to the latest version.
- 4 Fourteen languages are available as installation languages.

English, Français, Deutsch, Magyar, Italiano, Polski, Português
Русский, Español, Svenska, Türkçe, 日本語, 汉语, 한국어
- 5 If the orientation is set to a mode other than "Landscape" in the screen resolution menu on Windows 7, the "MagicRotation Auto" function may not work properly.
- 6 The OSD menu will be displayed if the monitor is rotated. When the monitor is rotated, the screen reconfiguration process may be displayed or screen burn-in may appear, depending on the graphics card. This is performed by the Windows operating system and has nothing to do with the product.
- 7 If you do not want the screen to rotate automatically when the monitor is rotated, press the Windows and L keys at the same time to lock the Windows operating system. If the operating system cannot be locked, it is due to the constraints of Windows API and has nothing to do with the product.

2.1 Before Connecting



2.1.1 Pre-connection Checkpoints

- Before connecting a source device, read the user manual provided with it. The number and locations of ports on source devices may differ from device to device.
- Do not connect the power cable until all connections are completed. Connecting the power cable during connection may damage the product.
- Check the types of ports at the back of the product you want to connect.

2.2 Connecting and Using a PC

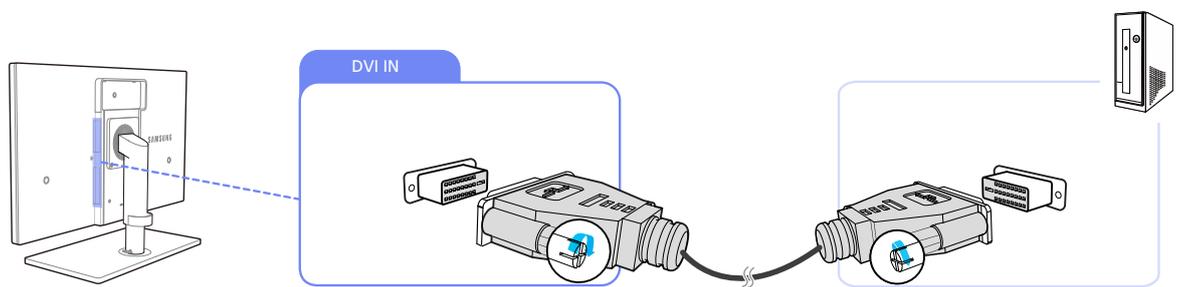
2.2.1 Connecting to a PC

- Select a connection method suitable for your PC.



Connecting parts may differ in different products.

Connection using a Dual-link DVI cable (digital type)

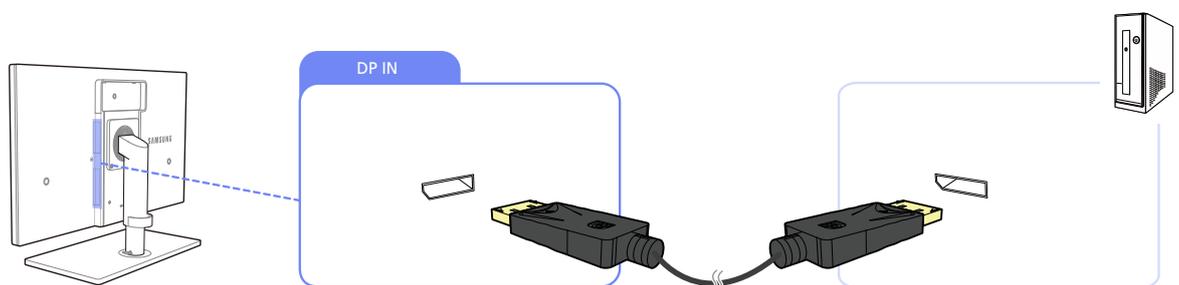


- 1 Connect the DVI cable to the [DVI IN] port on the back of the product and the DVI port on the PC.
- 2 Connect the DC power adapter to the product and a power socket. Next, turn on the power switch on the PC.
(For details, refer to "2.5 Connecting the Power".)
- 3 Press [□/⊞] on the product to change the input source to **Digital1** or **Digital2**.



- Audio is not available if the PC and product are connected via the [DVI] port.
- Refer to "2.3 Connecting Headphones" for details on how to enable sound.

Connection Using the DP Cable

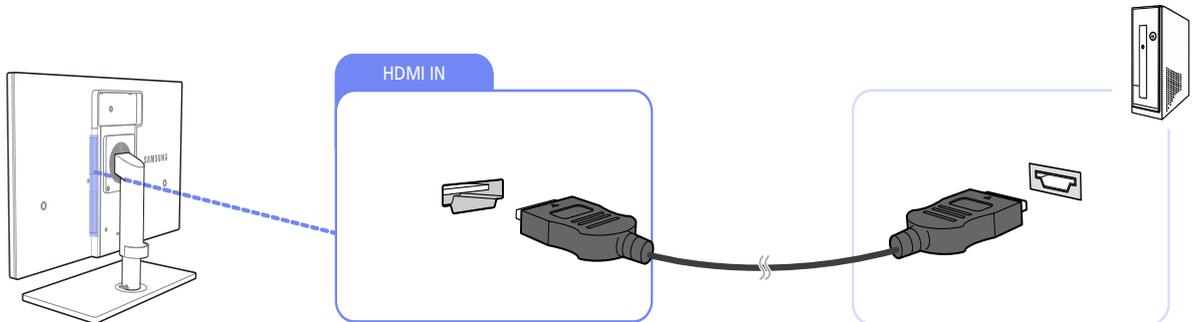


- 1 Connect the DP cable to the [DP IN] port on the back of the product and the DP port on the PC.
- 2 Connect the DC power adapter to the product and a power socket. Next, turn on the power switch on the PC.
(For details, refer to "2.5 Connecting the Power".)
- 3 Press [□/⊞] to change the input source to **DisplayPort**.



If audio is supported, the **Volume** can be adjusted using the [▼/▲] buttons on the front of the product.

Connection Using the HDMI Cable



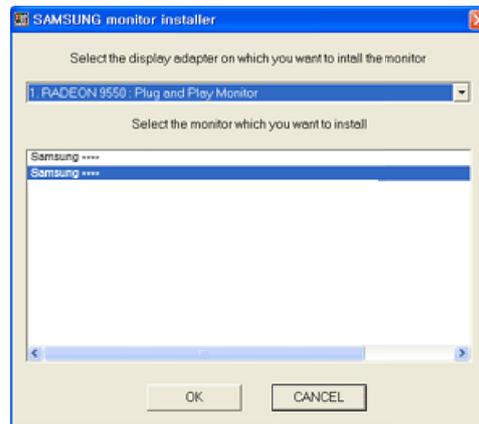
- 1 Connect the HDMI cable to the [HDMI IN] port on the back of the product and the HDMI port on the PC.
- 2 Connect the DC power adapter to the product and a power socket. Next, turn on the power switch on the PC.
(For details, refer to "2.5 Connecting the Power".)
- 3 Press [/] on the product to change the input source to **HDMI**.

2.2.2 Driver Installation



- You can set the optimum resolution and frequency for this product by installing the corresponding drivers.
- An installation driver is contained on the CD supplied with the product.
- If the file provided is faulty, visit the Samsung homepage (<http://www.samsung.com>) and download the file.

- 1 Insert the user manual CD provided with the product into the CD-ROM drive.
- 2 Click "Windows Driver".
- 3 Follow the instructions given on the screen to proceed with installation.
- 4 Select your product model from the list of models.

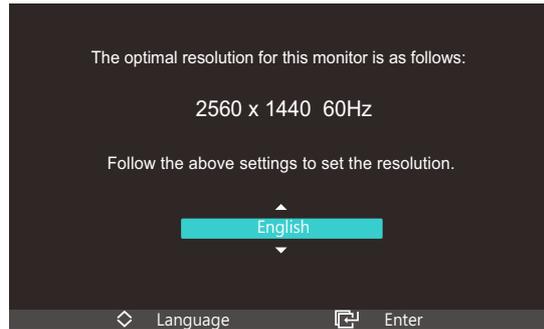


- 5 Go to Display Properties and check that the resolution and refresh rate are appropriate. Refer to your Windows OS manual for further details.

2.2.3 Setting Optimum Resolution

An information message about setting optimum resolution will appear if you power on the product for the first time after purchase.

Select a language and change the resolution to the optimum value.



- 1 Press [▼/▲] to move to the language you want and press the [□/Ⓜ].
- 2 To hide the information message, press [MENU].



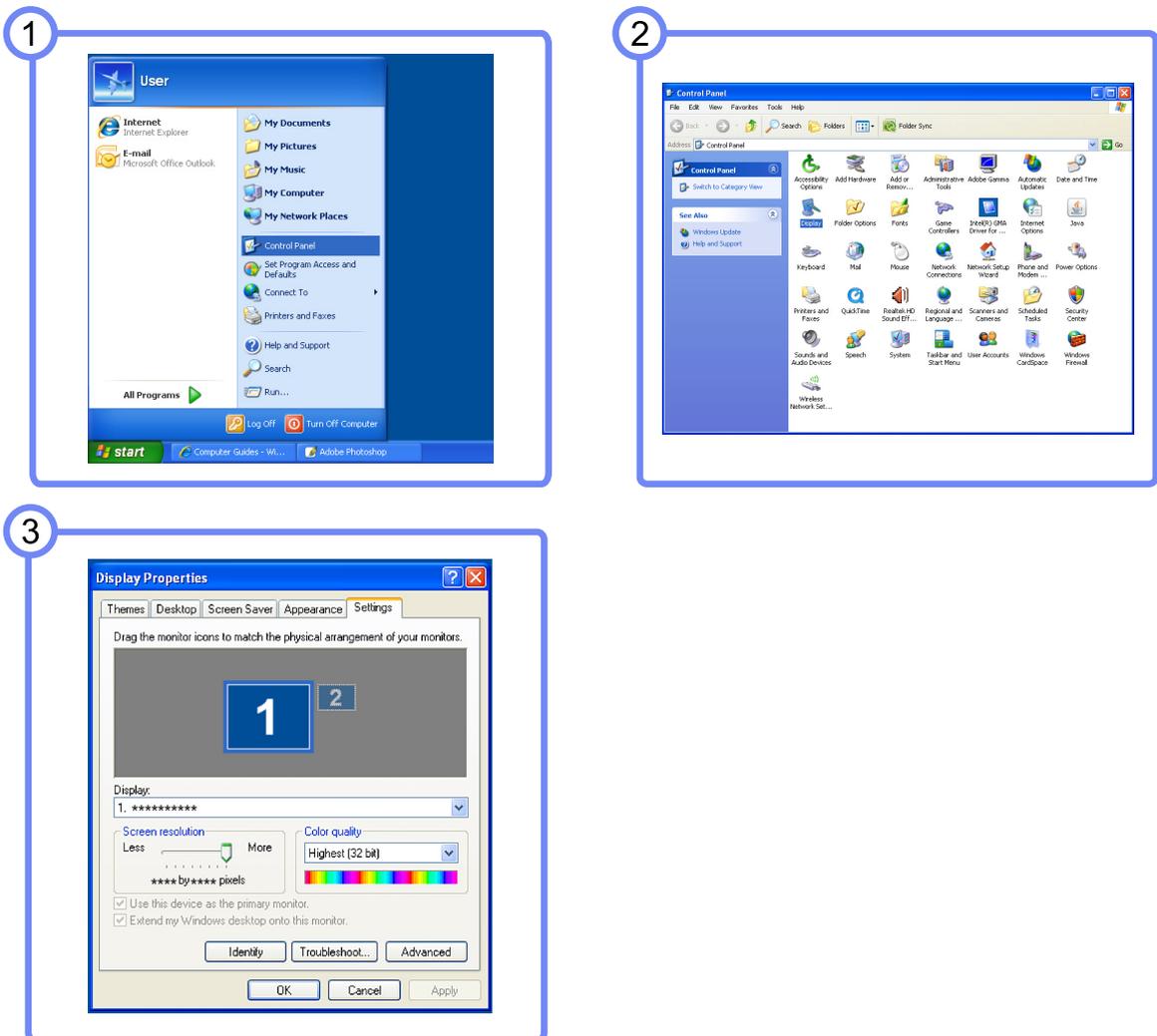
- If the optimum resolution is not selected, the message will appear up to three times for a specified time even when the product is turned off and on again.
- The optimum resolution (2560 x 1440) can also be selected in **Control Panel** on your PC.
- The optimum resolution of (2560 x 1440) is supported through the dual-link DVI and DP cables only.
- In **HDMI** mode, the maximum resolution is (1920 x 1080).

2.2.4 Changing the Resolution Using a PC

- Adjust the resolution and refresh rate in Control Panel on your PC to obtain optimum picture quality.
- The picture quality of TFT-LCDs may degrade if the optimum resolution is not selected.

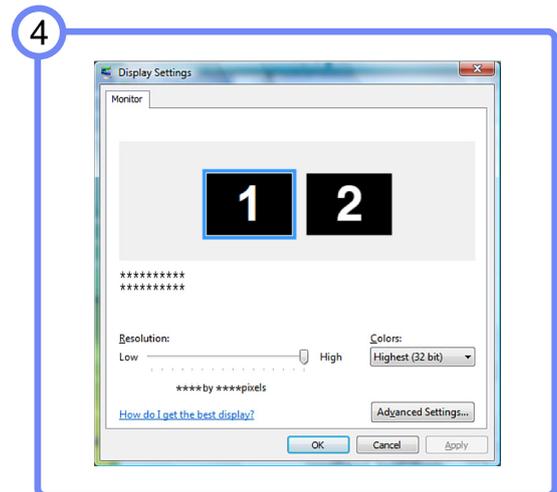
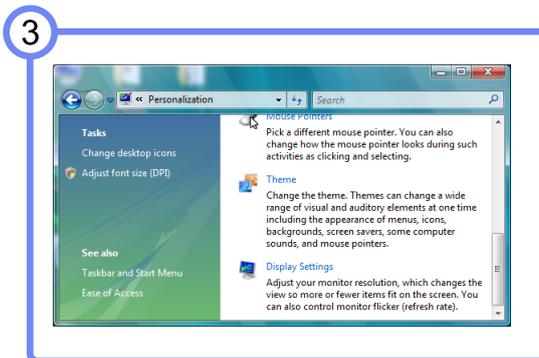
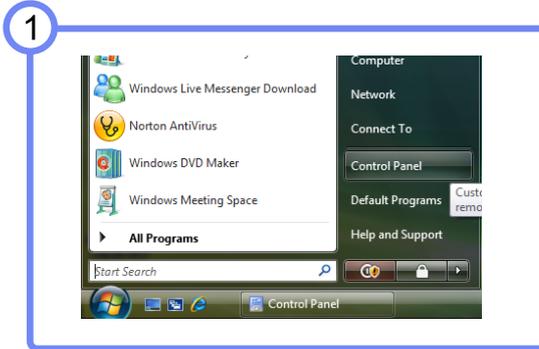
Changing the Resolution on Windows XP

Go to **Control Panel** → **Display** → **Settings** and change the resolution.



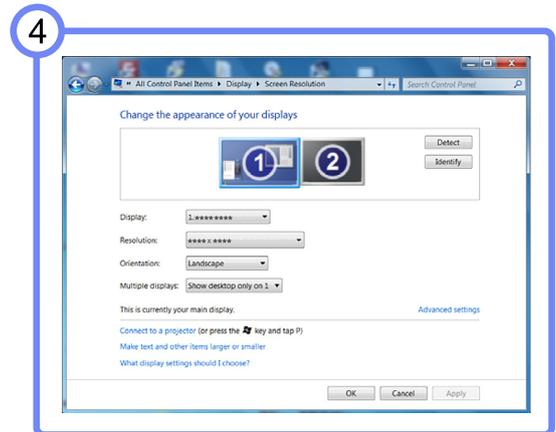
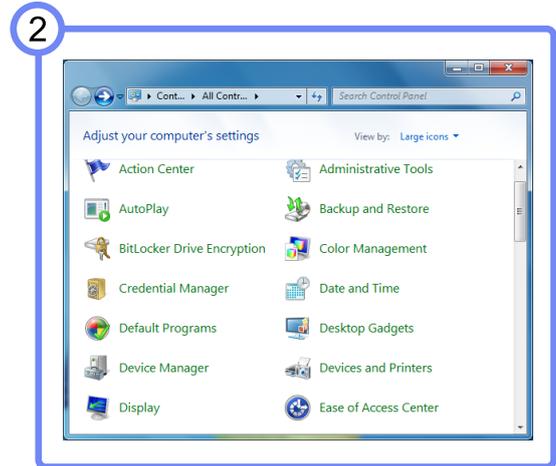
Changing the Resolution on Windows Vista

Go to **Control Panel** → **Personalization** → **Display Settings** and change the resolution.

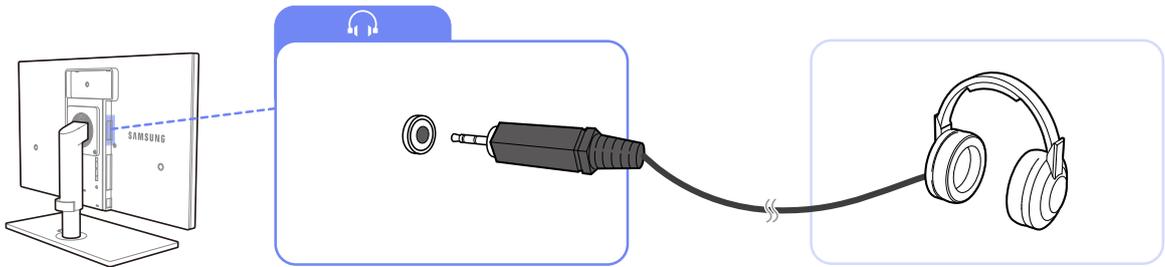


Changing the Resolution on Windows 7

Go to **Control Panel** → **Display** → **Screen Resolution** and change the resolution.



2.3 Connecting Headphones



1 Connect an audio output device such as headphones or speakers to [🎧] on the product.

 Headphones will function properly only when the product is connected to a PC via HDMI, or DP.

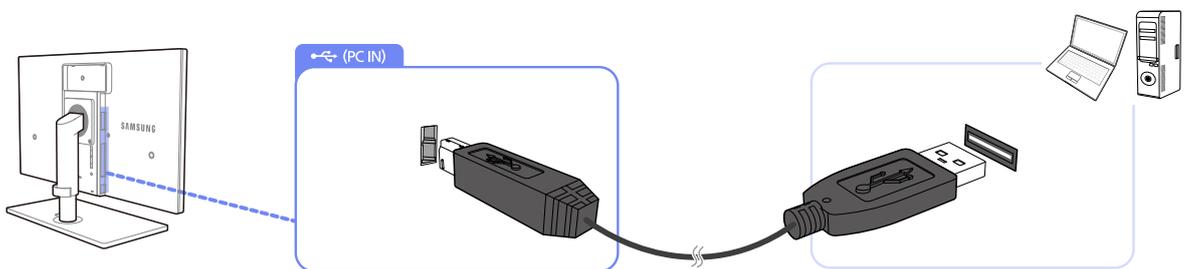
2.4 Connecting the Product to a PC as a USB HUB

2.4.1 Connecting a PC to the Product



The product can function as a HUB by connecting to a PC via a USB cable. You can connect a source device directly to the product and control the device from the product, without having to connect the device to the PC.

To use the product as a USB HUB, connect the product to a PC using a USB cable.



Connect the USB cable to [] on the back of the product and [] (USB) on the PC.

2.4.2 Utilizing the Product as a USB HUB

Using the product as a hub, connect and use various source devices with the product at the same time.

A PC cannot connect to multiple source devices at the same time as it has a limited number of input/output ports available. The HUB feature on the product will improve your work efficiency by allowing you to connect multiple source devices to the USB ports on the product at the same time without connecting them to a PC.

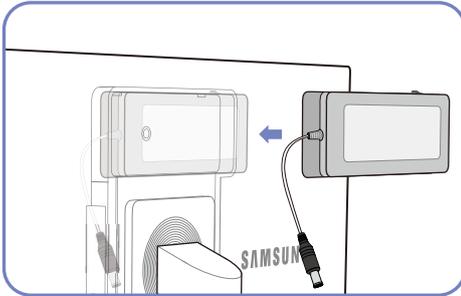


If multiple source devices are connected to the PC, the many cables around the PC may look messy. Connecting the devices directly to the product will resolve such inconvenience.



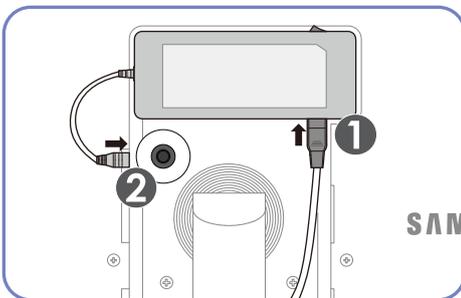
An external mass-storage HDD requires external power supply. Be sure to connect it to a power source.

2.5 Connecting the Power

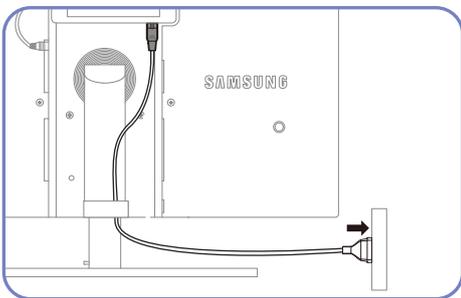


Put the DC power adapter in the groove, with the switch facing upward.

- Push the adapter until you hear a “click.”

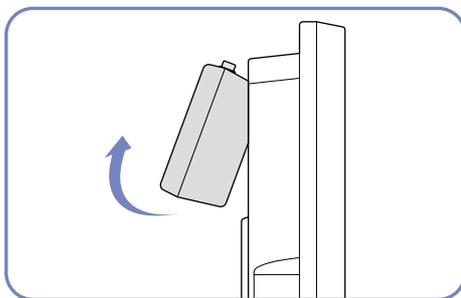


Connect the power cable to the DC power adapter. Next, connect the DC power adapter to the product.



Plug in the power cable to the power socket.

- Removing the DC power adapter



To remove the DC power adapter, lift it outwards from the bottom as shown in the image.



When using the adapter without fixing it to the back of the monitor, the adapter jack can easily get disconnected or the cable may break. Be sure to securely fix the adapter in the groove.

Screen Setup

Configure the screen settings such as brightness and color tone.

3.1 MAGIC

This feature optimizes the brightness and colors according to how the product will be used.

3.1.1 SAMSUNG MAGIC Bright

This menu provides an optimum picture quality suitable for the environment where the product will be used.

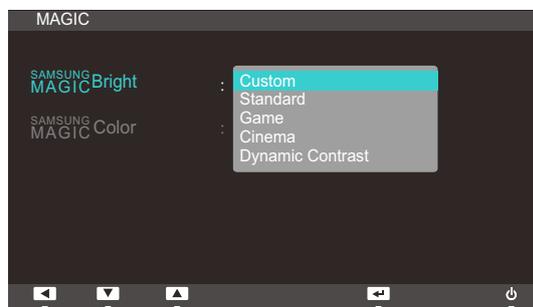


- This menu is not available when **SAMSUNG MAGIC Color** is in **Full** or **Intelligent** mode.
- This menu is not available when **Eco Light Sensor** or **Eco Saving** is set to **On**.

Configuring **SAMSUNG MAGIC Bright**

- 1 Press [MENU] on the product.
- 2 Press [▼/▲] to move to **PICTURE** and press [□/⊞] on the product.
- 3 Press [▼/▲] to move to **MAGIC** and press [□/⊞] on the product.
- 4 Press [▼/▲] to move to **SAMSUNG MAGIC Bright** and press [□/⊞] on the product.

The following screen will appear.



- **Custom:** Customize the contrast and brightness as required.
 - **Standard:** Obtain a picture quality suitable for editing documents or using Internet.
 - **Game:** Obtain a picture quality suitable for playing games that involve many graphic effects and dynamic movements.
 - **Cinema:** Obtain the brightness and sharpness of TVs suitable for enjoying video and DVD content.
 - **Dynamic Contrast:** Obtain balanced brightness through automatic contrast adjustment.
- 5 Press [▼/▲] to move to the option you want and press [□/⊞].
 - 6 The selected option will be applied.

3.1.2 SAMSUNG MAGIC Color

SAMSUNG MAGIC Color is a new picture-quality improvement technology developed independently by Samsung, which delivers vivid natural colors without picture quality degradation.

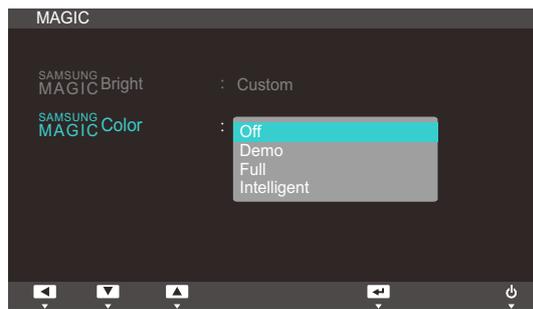


This menu is not available when **SAMSUNG MAGIC Bright** is in **Cinema** or **Dynamic Contrast** mode.

Configuring **SAMSUNG MAGIC Color**

- 1 Press [MENU] on the product.
- 2 Press [▼/▲] to move to **PICTURE** and press [□/Ⓜ] on the product.
- 3 Press [▼/▲] to move to **MAGIC** and press [□/Ⓜ] on the product.
- 4 Press [▼/▲] to move to **SAMSUNG MAGIC Color** and press [□/Ⓜ] on the product.

The following screen will appear.



- **Off:** Disable **SAMSUNG MAGIC Color**.
 - **Demo:** Compare normal screen mode with **SAMSUNG MAGIC Color** mode.
 - **Full:** Obtain a vivid picture quality for all areas including the flesh colors in the picture.
 - **Intelligent:** Improve the chroma for all areas except the flesh colors in the picture.
- 5 Press [▼/▲] to move to the option you want and press [□/Ⓜ].
 - 6 The selected option will be applied.

3.2 Brightness

You can adjust the general brightness of the picture. (Range: 0~100)

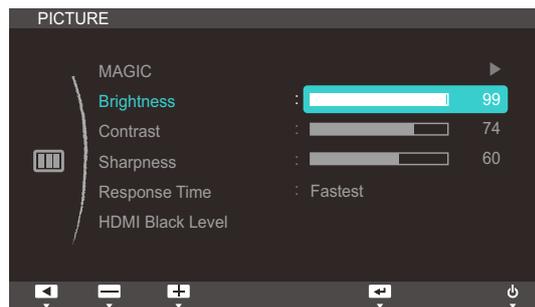
A higher value will make the picture appear brighter.



- This menu is not available when **SAMSUNG MAGICBright** is set to **Dynamic Contrast** mode.
- This menu is not available when **Eco Light Sensor** or **Eco Saving** is set to **On**.

3.2.1 Configuring Brightness

- 1 Press [MENU] on the product.
- 2 Press [▼/▲] to move to **PICTURE** and press [□/⊞] on the product.
- 3 Press [▼/▲] to move to **Brightness** and press [□/⊞] on the product.
The following screen will appear.



- 4 Adjust the **Brightness** using the [▼/▲] buttons.

3.3 Contrast

Adjust the contrast between the objects and background. (Range: 0~100)

A higher value will increase the contrast to make the object appear clearer.



- This menu is not available when **SAMSUNG MAGICBright** is in **Cinema** or **Dynamic Contrast** mode.
- This menu is not available when **SAMSUNG MAGICColor** is in **Full** or **Intelligent** mode.

3.3.1 Configuring Contrast

- 1 Press [MENU] on the product.
- 2 Press [▼/▲] to move to **PICTURE** and press [□/Ⓞ] on the product.
- 3 Press [▼/▲] to move to **Contrast** and press [□/Ⓞ] on the product.

The following screen will appear.



- 4 Adjust the **Contrast** using the [▼/▲] buttons.

3.4 Sharpness

Make the outline of objects more clear or blurry. (Range: 0~100)

A higher value will make the outline of objects clearer.

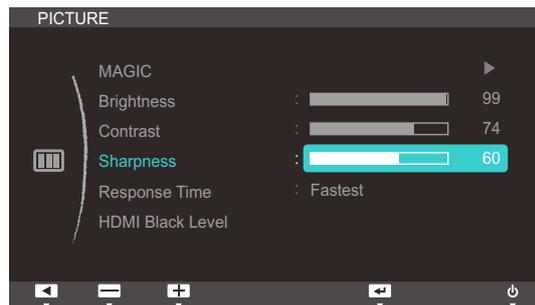


- This menu is not available when **SAMSUNG MAGICBright** is in **Cinema** or **Dynamic Contrast** mode.
- This menu is not available when **SAMSUNG MAGICColor** is in **Full** or **Intelligent** mode.

3.4.1 Configuring Sharpness

- 1 Press [MENU] on the product.
- 2 Press [▼/▲] to move to **PICTURE** and press [□/Ⓞ] on the product.
- 3 Press [▼/▲] to move to **Sharpness** and press [□/Ⓞ] on the product.

The following screen will appear.



- 4 Adjust the **Sharpness** using the [▼/▲] buttons.

3.5 Response Time

Accelerate the panel response rate to make video appear more vivid and natural.

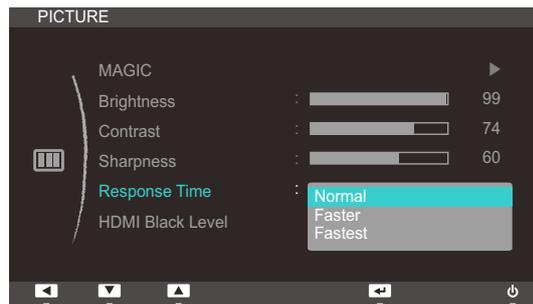


- It is best to set **Response Time** to **Normal** or **Faster** when you are not viewing a movie.
- The functions available on the monitor may vary depending on the model. Refer to the actual product.

3.5.1 Configuring Response Time

- 1 Press [MENU] on the product.
- 2 Press [▼/▲] to move to **PICTURE** and press [□/Ⓜ] on the product.
- 3 Press [▼/▲] to move to **Response Time** and press [□/Ⓜ] on the product.

The following screen will appear.



- 4 Press [▼/▲] to move to the option you want and press [□/Ⓜ].
- 5 The selected option will be applied.

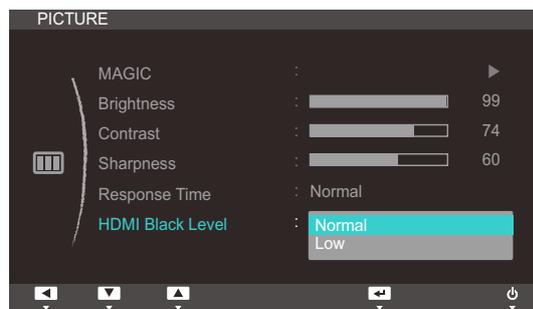
3.6 HDMI Black Level

Configure the **HDMI Black Level** to adjust the picture quality.

 Available in **HDMI** mode only.

3.6.1 Configuring the HDMI Black Level Settings

- 1 Press [MENU] on the product.
- 2 Press [▼/▲] to move to **PICTURE** and press [□/⊞] on the product.
- 3 Press [▼/▲] to move to **HDMI Black Level** and press [□/⊞] on the product.
The following screen will appear.



- 4 Press [▼/▲] to move to the option you want and press [□/⊞].
- 5 The selected option will be applied.

4

Configuring Tint

Adjust the tint of the screen. This menu is not available when **SAMSUNG MAGICBright** is set to **Cinema** or **Dynamic Contrast** mode.

4.1 Red

Adjust the value of the color red in the picture. (Range: 0~100)

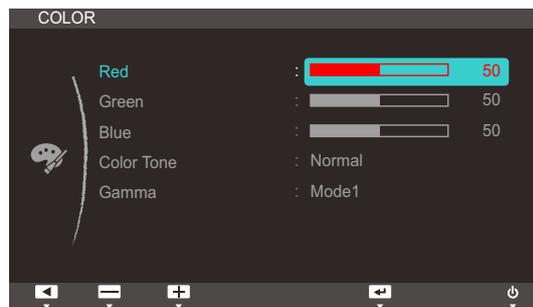
A higher value will increase the intensity of the color.



This menu is not available when **SAMSUNG MAGICColor** is in **Full** or **Intelligent** mode.

4.1.1 Configuring Red

- 1 Press [MENU] on the product.
- 2 Press [▼/▲] to move to **COLOR** and press [□/Ⓞ] on the product.
- 3 Press [▼/▲] to move to **Red** and press [□/Ⓞ] on the product. The following screen will appear.



- 4 Adjust the **Red** using the [▼/▲] buttons.

4.2 Green

Adjust the value of the color green in the picture. (Range: 0~100)

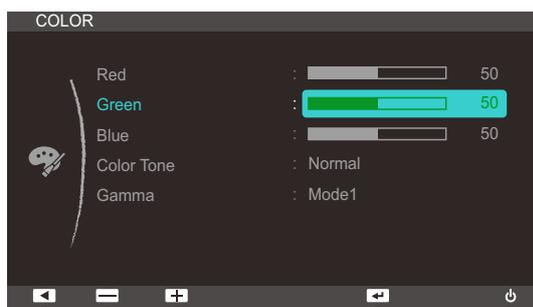
A higher value will increase the intensity of the color.



This menu is not available when **SAMSUNG MAGIC Color** is in **Full** or **Intelligent** mode.

4.2.1 Configuring Green

- 1 Press [MENU] on the product.
- 2 Press [▼/▲] to move to **COLOR** and press [□/Ⓞ] on the product.
- 3 Press [▼/▲] to move to **Green** and press [□/Ⓞ] on the product. The following screen will appear.



- 4 Adjust the **Green** using the [▼/▲] buttons.

4.3 Blue

Adjust the value of the color blue in the picture. (Range: 0~100)

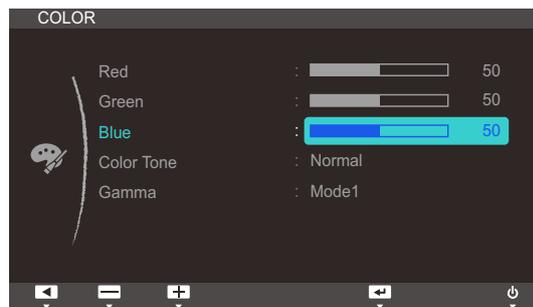
A higher value will increase the intensity of the color.



This menu is not available when **SAMSUNG Color** is in **Full** or **Intelligent** mode.

4.3.1 Configuring Blue

- 1 Press [MENU] on the product.
- 2 Press [▼/▲] to move to **COLOR** and press [□/⊞] on the product.
- 3 Press [▼/▲] to move to **Blue** and press [□/⊞] on the product. The following screen will appear.



- 4 Adjust the **Blue** using the [▼/▲] buttons.

4.4 Color Tone

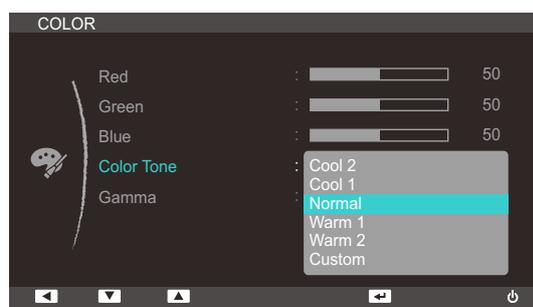
Adjust the general color tone of the picture.



This menu is not available when **SAMSUNG MAGIC Color** is in **Full** or **Intelligent** mode.

4.4.1 Configuring the Color Tone Settings

- 1 Press [MENU] on the product.
- 2 Press [▼/▲] to move to **COLOR** and press [□/⊞] on the product.
- 3 Press [▼/▲] to move to **Color Tone** and press [□/⊞] on the product.
The following screen will appear.



- **Cool 2**: Set the color temperature to be cooler than **Cool 1**.
 - **Cool 1**: Set the color temperature to be cooler than **Normal** mode.
 - **Normal**: Display the standard color tone.
 - **Warm 1**: Set the color temperature to be warmer than **Normal** mode.
 - **Warm 2**: Set the color temperature to be warmer than **Warm 1**.
 - **Custom**: Customize the color tone.
- 4 Press [▼/▲] to move to the option you want and press [□/⊞].
 - 5 The selected option will be applied.

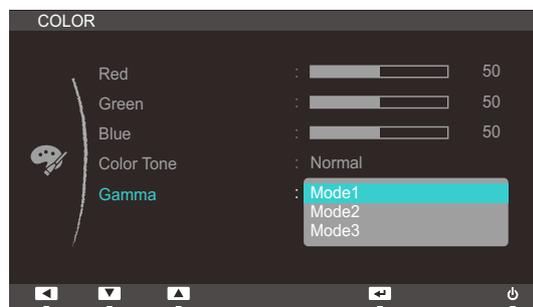
4.5 Gamma

Adjust the mid-range brightness (Gamma) of the picture.

4.5.1 Configuring Gamma

- 1 Press [MENU] on the product.
- 2 Press [▼/▲] to move to **COLOR** and press [□/Ⓜ] on the product.
- 3 Press [▼/▲] to move to **Gamma** and press [□/Ⓜ] on the product.

The following screen will appear.



- 4 Press [▼/▲] to move to the option you want and press [□/Ⓜ].
- 5 The selected option will be applied.

5.1 Size

Change the picture size.

5.1.1 Changing the Image Size

- 1 Press [MENU] on the product.
- 2 Press [▼/▲] to move to **SIZE&POSITION** and press [□/⊞] on the product.
- 3 Press [▼/▲] to move to **Image Size** and press [□/⊞] on the product.

The following screen will appear.



- **Auto**: Display the picture according to the aspect ratio of the input source.
- **Wide**: Display the picture in full screen regardless of the aspect ratio of the input source.



- **4:3**: Display the picture with an aspect ratio of 4:3. Suitable for videos and standard broadcasts.
- **16:9**: Display the picture with an aspect ratio of 16:9. Suitable for videos and standard broadcasts.
- **Screen Fit**: Display the picture with the original aspect ratio without cutting off.



Changing the screen size is available when the following conditions are satisfied.

- When connecting to digital output device via DVI/DP/HDMI cable (Select **AV** from **PC/AV Mode**)
- The input signal is 480p, 576p, 720p, 1080i, or 1080p.

- 4 Press [▼/▲] to move to the option you want and press [□/⊞].
- 5 The selected option will be applied.

5.2 H-Position & V-Position

H-Position: Move the screen to the left or right.

V-Position: Move the screen up or down.



The options above are enabled only when **Image Size** is set to **Screen Fit**.

5.2.1 Configuring H-Position & V-Position

- 1 Press [MENU] on the product.
- 2 Press [▼/▲] to move to **SIZE&POSITION** and press [□/Ⓜ] on the product.
- 3 Press [▼/▲] to move to **H-Position** or **V-Position**, and press [□/Ⓜ] on the product.

The following screen will appear.



- 4 Press [▼/▲] to configure **H-Position** or **V-Position**.

5.3 Menu H-Position & Menu V-Position

Menu H-Position: Move the menu screen to the left or right.

Menu V-Position: Move the menu screen up or down.

5.3.1 Configuring Menu H-Position & Menu V-Position

- 1 Press [MENU] on the product.
- 2 Press [▼/▲] to move to **SIZE&POSITION** and press [□/⊞] on the product.
- 3 Press [▼/▲] to move to **Menu H-Position** or **Menu V-Position**, and press [□/⊞] on the product.
The following screen will appear.



- 4 Press [▼/▲] to configure **Menu H-Position** or **Menu V-Position**.

6.1 ECO

The **Eco Motion Sensor**, **Eco Light Sensor**, and **Eco Saving** options are displayed on the same menu page so that you can conveniently configure the power saving settings.

6.1.1 Eco Motion Sensor

The **Eco Motion Sensor** activates to save power when it does not detect any movement within a specified area for a specified period of time.

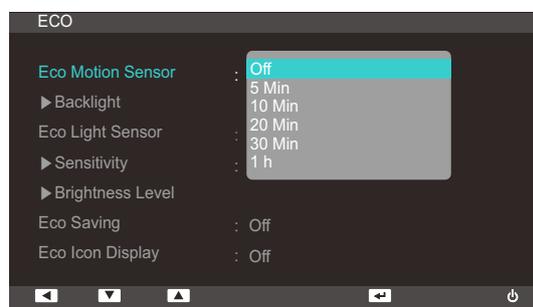


Eco Motion Sensor is not available when the monitor is used in portrait mode.

Configuring Eco Motion Sensor

- 1 Press [MENU] on the product.
- 2 Press [▼/▲] to move to **SETUP&RESET** and press [□/Ⓜ] on the product.
- 3 Press [▼/▲] to move to **ECO** and press [□/Ⓜ] on the product.
- 4 Press [▼/▲] to move to **Eco Motion Sensor** and press [□/Ⓜ] on the product.

The following screen will appear.



This option is disabled if the product is connected to a PC that is in power-saving mode.

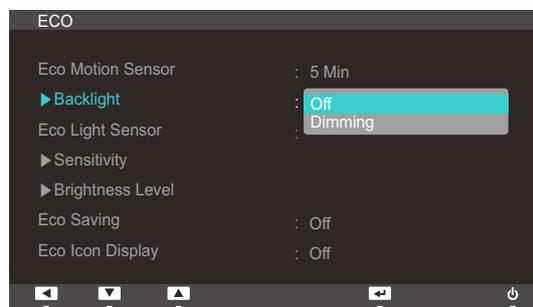
- **Off**: Deactivate the **Eco Motion Sensor** function.
 - **5 Min**: Automatically turn off the power if the sensor has not detected any movement of an object or person for 5 minutes within the specified range of detection.
 - **10 Min**: Automatically turn off the power if the sensor has not detected any movement of an object or person for 10 minutes within the specified range of detection.
 - **20 Min**: Automatically turn off the power if the sensor has not detected any movement of an object or person for 20 minutes within the specified range of detection.
 - **30 Min**: Automatically turn off the power if the sensor has not detected any movement of an object or person for 30 minutes within the specified range of detection.
 - **1 h**: Automatically turn off the power if the sensor has not detected any movement of an object or person for 1 hour within the specified range of detection.
- 5 Press [▼/▲] to move to the option you want and press [□/Ⓜ].

- 6 The selected option will be applied.

Configuring Backlight

- 1 Press [MENU] on the product.
- 2 Press [▼/▲] to move to **SETUP&RESET** and press [□/⊞] on the product.
- 3 Press [▼/▲] to move to **ECO** and press [□/⊞] on the product.
- 4 Press [▼/▲] to move to **Backlight** and press [□/⊞] on the product.

The following screen will appear.



- **Off:** Turn off the screen and activate DPMS mode. If **Off** is selected, it takes several seconds for the monitor to detect movement and turn on after it turned off.
 - **Dimming:** Reduce the brightness of the screen (still turned on).
- 5 Press [▼/▲] to move to the option you want and press [□/⊞].
 - 6 The selected option will be applied.



- The performance of **Eco Motion Sensor** is maximized to a specific user distance (1m) and angle (40 degrees).
- The sensor may not detect you if you are motionless.
- If you think that the mode entry message appears too frequently, increase the time setting of the **Eco Motion Sensor** or turn the **Eco Icon Display Off**.
- Avoid using radio equipment such as a walkie-talkie near the product as this may cause a product malfunction.

6.1.2 Eco Light Sensor

The **Eco Saving** feature optimizes the view condition and contributes to power saving by adjusting the screen brightness depending on the ambient light intensity.

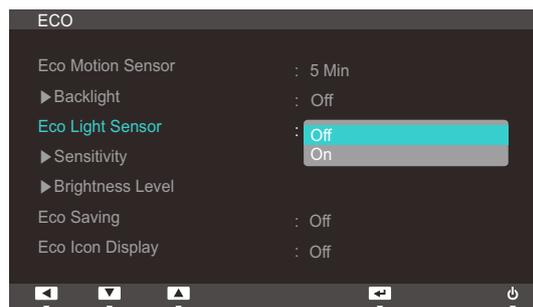


- This menu is not available when **SAMSUNG MAGIC Bright** is set to **Dynamic Contrast** mode.
- This menu is not available when **Eco Saving** is set .

Configuring Eco Light Sensor

- 1 Press [MENU] on the product.
- 2 Press [▼/▲] to move to **SETUP&RESET** and press [□/⊞] on the product.
- 3 Press [▼/▲] to move to **ECO** and press [□/⊞] on the product.
- 4 Press [▼/▲] to move to **Eco Light Sensor** and press [□/⊞].

The following screen will appear.

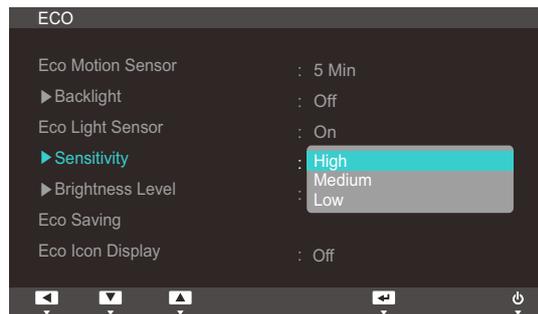


- **Off**: Deactivate the **Eco Light Sensor** function.
 - **On**: Automatically adjust the brightness according to the ambient light intensity.
- 5 Press [▼/▲] to move to the option you want and press [□/⊞].
 - 6 The selected option will be applied.

Configuring Sensitivity

- 1 Press [MENU] on the product.
- 2 Press [▼/▲] to move to **SETUP&RESET** and press [□/⊞] on the product.
- 3 Press [▼/▲] to move to **ECO** and press [□/⊞] on the product.
- 4 Press [▼/▲] to move to **Sensitivity** and press [□/⊞] on the product.

The following screen will appear.

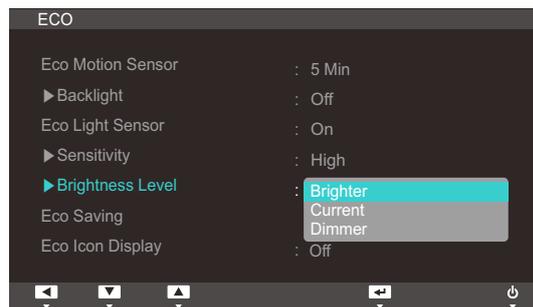


- **High:** High sensitivity that maximizes the varying level of screen brightness depending on the ambient light intensity.
 - **Medium:** Intermediate sensitivity that sets a varying level of screen brightness between **High** and **Low** depending on the ambient light intensity.
 - **Low:** Low sensitivity that minimizes the varying level of screen brightness depending on the ambient light intensity.
- 5 Press [▼/▲] to move to the option you want and press [□/⊞].
 - 6 The selected option will be applied.

Configuring Brightness Level

- 1 Press [MENU] on the product.
- 2 Press [▼/▲] to move to **SETUP&RESET** and press [□/⊞] on the product.
- 3 Press [▼/▲] to move to **ECO** and press [□/⊞] on the product.
- 4 Press [▼/▲] to move to **Brightness Level** and press [□/⊞] on the product.

The following screen will appear.



- **Brighter:** Increase the current brightness of the screen.
 - **Current:** Maintain the current brightness of the screen.
 - **Dimmer:** Decrease the current brightness of the screen.
- 5 Press [▼/▲] to move to the option you want and press [□/⊞].
 - 6 The selected option will be applied.

6.1.3 Eco Saving

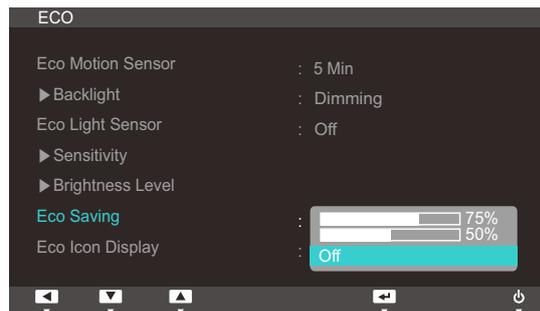
The **Eco Saving** function reduces power consumption by controlling the electric current used by the monitor panel.



- This menu is not available when **SAMSUNG MAGIC Bright** is set to **Dynamic Contrast** mode.
- This menu is not available when **Eco Light Sensor** is set.

Configuring Eco Saving

- 1 Press [MENU] on the product.
- 2 Press [▼/▲] to move to **SETUP&RESET** and press [□/Ⓜ] on the product.
- 3 Press [▼/▲] to move to **ECO** and press [□/Ⓜ] on the product.
- 4 Press [▼/▲] to move to **Eco Saving** and press [□/Ⓜ] on the product.
The following screen will appear.



- **75%:** Change the monitor power consumption to 75% of the default level.
 - **50%:** Change the monitor power consumption to 50% of the default level.
 - **Off:** Deactivate the **Eco Saving** function.
- 5 Press [▼/▲] to move to the option you want and press [□/Ⓜ].
 - 6 The selected option will be applied.

6.1.4 Eco Icon Display

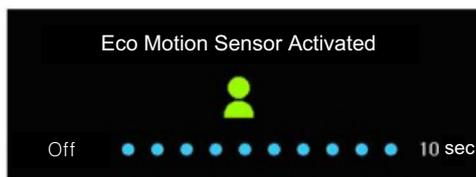
Configuring Eco Icon Display

- 1 Press [MENU] on the product.
- 2 Press [▼/▲] to move to **SETUP&RESET** and press [□/Ⓜ] on the product.
- 3 Press [▼/▲] to move to **ECO** and press [□/Ⓜ] on the product.
- 4 Press [▼/▲] to move to **Eco Icon Display** and press [□/Ⓜ].

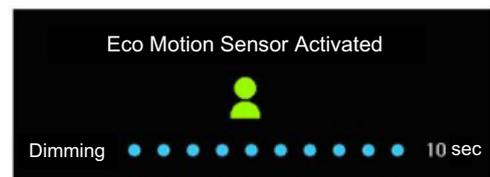
The following screen will appear.



- **Off**: Disable the Eco Icon Display function.
 - **On**: Display the operation status of the Eco sensor as a pop-up guide.
- 5 Press [▼/▲] to move to the option you want and press [□/Ⓜ].
 - 6 The selected option will be applied.

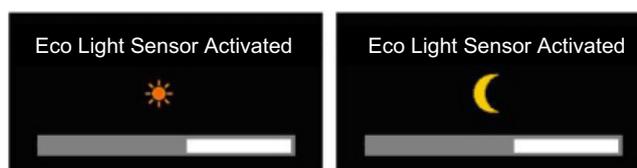


When **Backlight** is set to **Off**



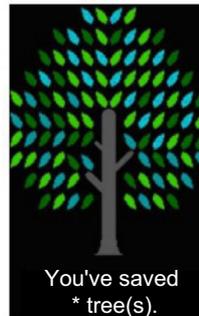
When **Backlight** is set to **Dimming**

- If the monitor is left idle for the period of time to which the off timer is configured when **Eco Motion Sensor** is enabled, **Eco Motion Sensor** will activate and switch the monitor to power-saving mode.
- A 10-second countdown timer will start along with the above picture before the power-saving mode activates showing the operation status of the **Eco Motion Sensor**.



- If the screen brightness is adjusted according to the ambient light intensity when the **Eco Light Sensor** is on, a pop-up as shown above will appear showing the adjusting screen brightness.

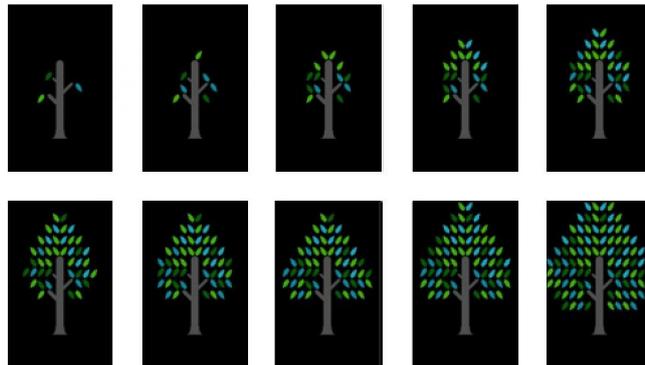
- If the screen becomes brighter as the ambient light becomes brighter, the brightness slide bar level will increase with a sun image displayed. If the screen becomes darker, the brightness slide bar level will decrease with a moon image displayed. The brightness slide bar will be displayed for 3 seconds after the sensor activates.



- A pop-up as shown above will appear when an energy tree completes while **Eco Icon Display** is **On**.



If the above picture is displayed, it means the **Eco Icon Display** option is **On**. Change this setting to **Off** if you do not want to display the pop-up.



- The amount of energy saved by the **Eco Motion Sensor**, **Eco Light Sensor**, and **Eco Saving** functions will accumulate and the progress can be viewed as a growing energy tree.
 - The energy tree grows as the energy savings of the monitor accumulate. Accordingly, the tree's growth will also be affected by other functions that involve power consumption such as the brightness control function.
- The amount of energy savings accumulated by using the power-saving functions, such as **Eco Motion Sensor**, **Eco Light Sensor** and **Eco Saving**, will be calculated and represented as an amount of carbon dioxide.
- A complete energy tree will be displayed when the amount of energy savings accumulates to as much as the amount of carbon dioxide a tree absorbs in a year. This shows that your energy saving is as effective as planting a tree so that you can easily understand the accumulation of energy savings over time and its effect by viewing the progress of a tree growing.
- The progress of a tree growing will be represented as 10 different images (stages). After one full-grown tree is complete, the initial image will be restored and the number of trees will continue to accumulate. The number for energy trees will be rounded to one decimal place.

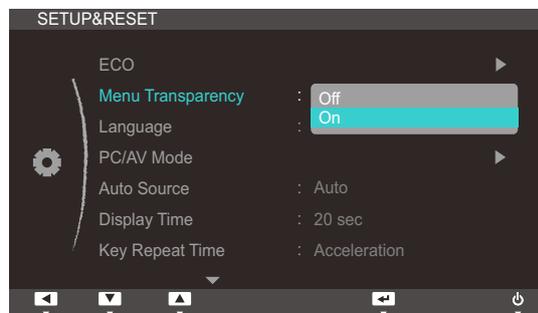
6.2 Menu Transparency

Set the transparency for the menu windows:

6.2.1 Changing Menu Transparency

- 1 Press [MENU] on the product.
- 2 Press [▼/▲] to move to **SETUP&RESET** and press [□/⊞] on the product.
- 3 Press [▼/▲] to move to **Menu Transparency** and press [□/⊞] on the product.

The following screen will appear.



- 4 Press [▼/▲] to move to the option you want and press [□/⊞].
- 5 The selected option will be applied.

6.3 Language

Set the menu language.



- A change to the language setting will only be applied to the onscreen menu display.
- It will not be applied to other functions on your PC.

6.3.1 Changing the Language

- 1 Press [MENU] on the product.
- 2 Press [▼/▲] to move to **SETUP&RESET** and press [□/⊞] on the product.
- 3 Press [▼/▲] to move to **Language** and press [□/⊞] on the product.

The following screen will appear.



- 4 Press [▼/▲] to move to the option you want and press [□/⊞].
- 5 The selected option will be applied.

6.4 PC/AV Mode

Set **PC/AV Mode** to **AV**. The picture size will be enlarged. This option is useful when you view a movie.

6.4.1 Configuring PC/AV Mode

- 1 Press [MENU] on the product.
- 2 Press [▼/▲] to move to **SETUP&RESET** and press [□/⊞] on the product.
- 3 Press [▼/▲] to move to **PC/AV Mode** and press [□/⊞] on the product.

The following screen will appear.



- 4 Press [▼/▲] to move to the option you want and press [□/⊞].
- 5 The selected option will be applied.

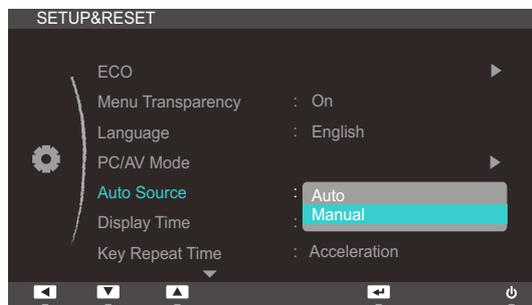
6.5 Auto Source

You can activate **Auto Source**.

6.5.1 Configuring Auto Source

- 1 Press [MENU] on the product.
- 2 Press [▼/▲] to move to **SETUP&RESET** and press [□/Ⓜ] on the product.
- 3 Press [▼/▲] to move to **Auto Source** and press [□/Ⓜ] on the product.

The following screen will appear.



- **Auto**: The input source is automatically recognized.
 - **Manual**: Manually select an input source.
- 4 Press [▼/▲] to move to the option you want and press [□/Ⓜ].
 - 5 The selected option will be applied.

6.6 Display Time

Set the on-screen display (OSD) menu to automatically disappear if the menu is not used for a specified period of time.

Display Time can be used to specify the time after which you want the OSD menu to disappear.

6.6.1 Configuring Display Time

- 1 Press [MENU] on the product.
- 2 Press [▼/▲] to move to **SETUP&RESET** and press [□/Ⓜ] on the product.
- 3 Press [▼/▲] to move to **Display Time** and press [□/Ⓜ] on the product.

The following screen will appear.



- 4 Press [▼/▲] to move to the option you want and press [□/Ⓜ].
- 5 The selected option will be applied.

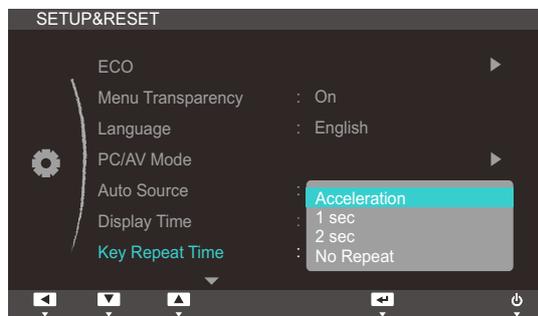
6.7 Key Repeat Time

Control the response rate of a button when the button is pressed.

6.7.1 Configuring Key Repeat Time

- 1 Press [MENU] on the product.
- 2 Press [▼/▲] to move to **SETUP&RESET** and press [□/⊞] on the product.
- 3 Press [▼/▲] to move to **Key Repeat Time** and press [□/⊞] on the product.

The following screen will appear.



- **Acceleration, 1 sec, or 2 sec** can be selected. If **No Repeat** is selected, a command responds only once when a button is pressed.
- 4 Press [▼/▲] to move to the option you want and press [□/⊞].
 - 5 The selected option will be applied.

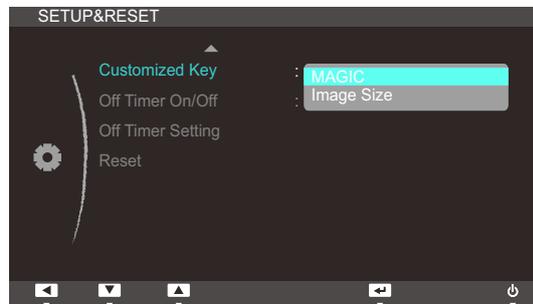
6.8 Customized Key

You can set Customized Key to the mode you want as follows.

6.8.1 Configuring Customized Key

- 1 Press [MENU] on the product.
- 2 Press [▼/▲] to move to **SETUP&RESET** and press [□/⊞] on the product.
- 3 Press [▼/▲] to move to **Customized Key** and press [□/⊞] on the product.

The following screen will appear.



- **MAGIC - Image Size.**
- 4 Press [▼/▲] to move to the option you want and press [□/⊞].
 - 5 The selected option will be applied.

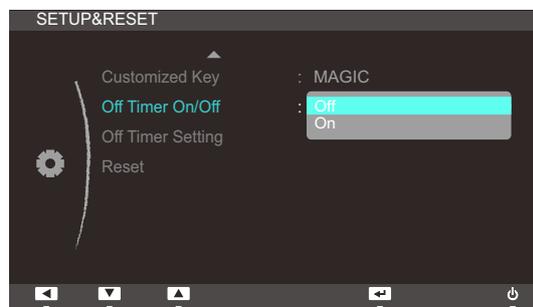
6.9 Off Timer On/Off

You can set the product to automatically turn off.

6.9.1 Configuring Off Timer On/Off

- 1 Press [MENU] on the product.
- 2 Press [▼/▲] to move to **SETUP&RESET** and press [□/Ⓜ] on the product.
- 3 Press [▼/▲] to move to **Off Timer On/Off** and press [□/Ⓜ] on the product.

The following screen will appear.



- **Off:** Deactivate the off timer so that the product does not power off automatically.
 - **On:** Activate the off timer so that the product powers off automatically.
- 4 Press [▼/▲] to move to the option you want and press [□/Ⓜ].
 - 5 The selected option will be applied.

6.10 Off Timer Setting

The off timer can be set within a range of 1 to 23 hours. The product will automatically power off after the specified number of hours.

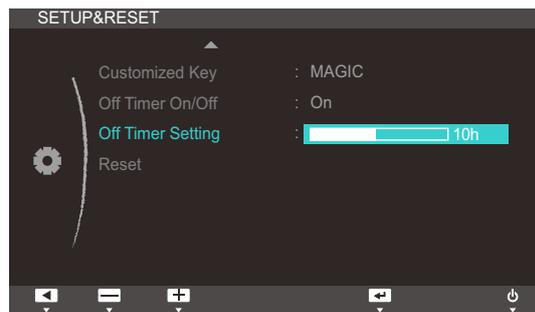


This menu is available only when **Off Timer On/Off** is set to **On**.

6.10.1 Configuring Off Timer Setting

- 1 Press [MENU] on the product.
- 2 Press [▼/▲] to move to **SETUP&RESET** and press [□/Ⓜ] on the product.
- 3 Press [▼/▲] to move to **Off Timer Setting** and press [□/Ⓜ] on the product.

The following screen will appear.



- 4 Press [▼/▲] to configure **Off Timer Setting**.

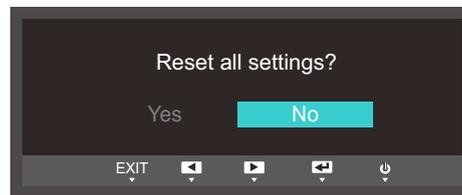
6.11 Reset

Return all the settings for the product to the default factory settings.

6.11.1 Initializing Settings (Reset)

- 1 Press [MENU] on the product.
- 2 Press [▼/▲] to move to **SETUP&RESET** and press [□/⊞] on the product.
- 3 Press [▼/▲] to move to **Reset** and press [□/⊞] on the product.

The following screen will appear.



- 4 Press [▼/▲] to move to the option you want and press [□/⊞].
- 5 The selected option will be applied.

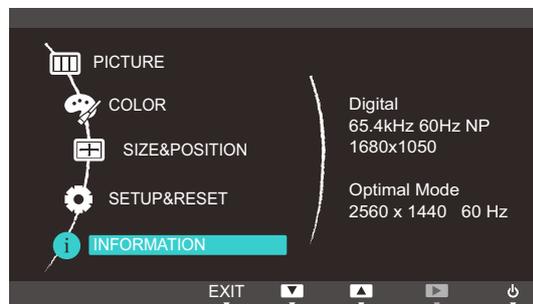
7.1 INFORMATION

View the current input source, frequency and resolution.

7.1.1 Displaying INFORMATION

- 1 Press [MENU] on the product.
- 2 Press [▼/▲] to move to **INFORMATION**.

The current input source, frequency and resolution will appear.



7.2 Configuring Brightness in the Initial Screen

Adjust the **Brightness** using the [⊙] buttons when the initial screen (that displays no menu screen) is displayed.

- 1 Press [⊙] when the initial screen is displayed. The following screen will appear.



- 2 Adjust the **Brightness** using the [▼/▲] buttons.

 **Volume** can be adjusted if a cable is connected to the [DP IN] or [HDMI IN] port.

8.1 Requirements Before Contacting Samsung Customer Service Center

8.1.1 Testing the Product



Before calling Samsung Customer Service Center, test your product as follows. If the problem persists, contact Samsung Customer Service Center.

Check if your product is operating normally by using the product test function.

If the screen is turned off and the power indicator blinks even though the product is properly connected to a PC, perform a self-diagnosis test.

- 1 Power off both the PC and product.
- 2 Disconnect the cables from the product.
- 3 Power on the product.
- 4 If the message "**Check Signal Cable**" appears, the product is working normally.



If the screen remains blank, check the PC system, video controller and cable.

8.1.2 Checking the Resolution and Frequency

For a mode that exceeds the supported resolution (refer to "9.3 Standard Signal Mode Table"), the message "**Not Optimum Mode**" will appear for a short time.

8.1.3 Check the following.

Installation issue (PC mode)	
The screen keeps switching on and off.	Check the cable connection between the product and PC, and ensure the connectors are locked. (Refer to "2.2 Connecting and Using a PC")
Screen issue	
The power LED is off. The screen will not switch on.	Check that the power cable is connected properly. (Refer to "2.2 Connecting and Using a PC")
The message Check Signal Cable appears.	Check that the cable is properly connected to the product. (Refer to "2.2 Connecting and Using a PC")
	Check that the device connected to the product is powered on.

Screen issue	
<p>Not Optimum Mode is displayed.</p>	<p>This message appears if the signal from the graphics card exceeds the maximum resolution or frequency for the product.</p>
	<p>Change the maximum resolution and frequency to suit the product performance, referring to Standard Signal Mode Table (page 81).</p>
<p>The images on the screen look distorted.</p>	<p>Check the cable connection to the product (Refer to "2.2 Connecting and Using a PC")</p>
<p>The screen is not clear. The screen is blurry.</p>	<p>Remove any accessories (video extension cable, etc.) and try again.</p>
	<p>Set the resolution and frequency to the recommended level. (Refer to "9.1 General")</p>
<p>The screen appears unstable and shaky.</p>	<p>Check that the resolution and frequency for the PC are within the range of resolution and frequency compatible with the product. Next, if required, change the settings, referring to Standard Signal Mode Table (page 81) in this manual and the INFORMATION menu on the product.</p>
<p>There are shadows or ghost images left on the screen.</p>	
<p>The screen is too bright. The screen is too dark.</p>	<p>Adjust Brightness(page 42) and Contrast(page 43).</p>
<p>Screen color is inconsistent.</p>	<p>Change the COLOR settings. (Refer to "Configuring Tint")</p>
<p>The colors on the screen have a shadow and are distorted.</p>	<p>Change the COLOR settings. (Refer to "Configuring Tint")</p>
<p>White does not really look white.</p>	<p>Change the COLOR settings. (Refer to "Configuring Tint")</p>
<p>There is no image on the screen and the power LED blinks every 0.5 to 1 second.</p>	<p>The product is operating in power-saving mode.</p>
	<p>Press any key on the keyboard or move the mouse to return to normal operating mode.</p>
Sound issue	
<p>There is no sound.</p>	<p>Check the connection of the audio cable or adjust the volume.</p>
	<p>Check the volume.</p>

Sound issue	
The volume is too low.	Adjust the volume.
	If the volume is still low after turning it up to the maximum level, adjust the volume on your PC sound card or software program.
Source device issue	
A beeping sound is heard when my PC is booting.	If a beeping sound is heard when your PC is booting, have your PC serviced.

8.2 Q&A

Question	Answer
How can I change the frequency?	<p data-bbox="694 528 1166 562">Set the frequency on your graphics card.</p> <ul data-bbox="694 589 1461 1167" style="list-style-type: none"><li data-bbox="694 589 1461 696">• Windows XP: Go to Control Panel → Appearance and Themes → Display → Settings → Advanced → Monitor, and adjust Refresh rate under Monitor settings.<li data-bbox="694 719 1461 826">• Windows ME/2000: Go to Control Panel → Display → Settings → Advanced → Monitor, and adjust Refresh rate under Monitor settings.<li data-bbox="694 848 1461 1001">• Windows Vista: Go to Control Panel → Appearance and Personalization → Personalization → Display Settings → Advanced Settings → Monitor, and adjust Refresh rate under Monitor settings.<li data-bbox="694 1023 1461 1167">• Windows 7: Go to Control Panel → Appearance and Personalization → Display → Screen Resolution → Advanced settings → Monitor, and adjust Refresh rate under Monitor settings.

Question	Answer
How can I change the resolution?	<ul style="list-style-type: none"> • Windows XP: Go to Control Panel → Appearance and Themes → Display → Settings, and adjust the resolution. • Windows ME/2000: Go to Control Panel → Display → Settings, and adjust the resolution. • Windows Vista: Go to Control Panel → Appearance and Personalization → Personalize → Display Settings, and adjust the resolution. • Windows 7: Go to Control Panel → Appearance and Personalization → Display → Adjust Resolution, and adjust the resolution.
How do I set power-saving mode?	<ul style="list-style-type: none"> • Windows XP: Set power-saving mode in Control Panel → Appearance and Themes → Display → Screen Saver Settings or BIOS SETUP on the PC. • Windows ME/2000: Set power-saving mode in Control Panel → Display → Screen Saver Settings or BIOS SETUP on the PC. • Windows Vista: Set power-saving mode in Control Panel → Appearance and Personalization → Personalize → Screen Saver Settings or BIOS SETUP on the PC. • Windows 7: Set power-saving mode in Control Panel → Appearance and Personalization → Personalize → Screen Saver Settings or BIOS SETUP on the PC.



Refer to the user manual for your PC or graphics card for further instructions on adjustment.

9.1 General

Model Name		S27A850T
Panel	Size	27 inches (68 cm)
	Display area	596.74 mm(H) x 335.66 mm(V)
Synchronization	Horizontal Frequency	31~90 kHz
	Vertical Frequency	56~76 Hz
Display Color		16.7M (True 8 bit)
Resolution	Optimum Resolution	2560 x 1440 @ 60 Hz
	Maximum Resolution	2560 x 1440 @ 60 Hz
Maximum Pixel Clock		330MHz (DVI-D, DP)
Power Supply		This product uses 100 to 240V. Refer to the label at the back of the product as the standard voltage can vary in different countries.
Signal connectors		DP, DVI-DUAL, HDMI
USB		1UP/4DOWN(USB2.0)
Dimensions (W x H x D) / Weight		642.5 X 442.5 X 224.5 mm / 25.3 X 17.4 X 8.8 inches / 6.9 kg / 15.2 lbs
Environmental considerations	Operating	Temperature : 32°F ~ 122°F (0°C ~ 50°C) Humidity : 10 % – 80 %, non-condensing
	Storage	Temperature : -4°F ~ 140°F (-20°C ~ 60°C) Humidity : 5 % – 90 %, non-condensing
Plug-and-Play		This monitor can be installed and used with any Plug-and-Play compatible systems. Two-way data exchange between the monitor and PC system optimizes the monitor settings. Monitor installation takes place automatically. However, you can customize the installation settings if desired.
Panel Dots (Pixels)		Due to the nature of the manufacturing of this product, approximately 1 pixel per million (1ppm) may appear brighter or darker on the panel. This does not affect product performance.



The above specifications are subject to change without notice to improve quality.



Class B device (broadcast communications device for home use)

This Class B device designed for home use is registered for EMC requirements and can be used in all regions.

(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

9.2 PowerSaver

The power-saving function of this product reduces power consumption by switching off the screen and changing the color of the power LED if the product is not used for a specified period of time. The power is not turned off in power-saving mode. To switch the screen back on, press any key on the keyboard or move the mouse. Power-saving mode functions only when the product is connected to a PC that has a power-saving function.

PowerSaver	Normal operation mode	Power saving mode	Power off (Power button)
Power Indicator	On	Blinking	Off
Power Consumption	53 W (when there is no USB device connected: 43 W)	0.5 W	0.5 W



- The power consumption level can vary in different operating conditions or when settings are changed.
- To reduce the power consumption to 0 watts, turn off the power switch on the back of the product or disconnect the power cable. Be sure to disconnect the power cable when you will not be using the product for an extended period of time. To reduce the power consumption to 0 watts when the power switch is not available, disconnect the power cable.

9.3 Standard Signal Mode Table



This product can be set to only one resolution for each screen size to obtain the optimum picture quality due to the nature of the panel. Therefore, a resolution other than the specified resolution may degrade the picture quality. To avoid this, it is recommended that you select the optimum resolution specified for the screen size of your product.

If a signal that belongs to the following standard signal modes is transmitted from your PC, the screen will automatically be adjusted. If the signal transmitted from the PC does not belong to the standard signal modes, the screen may be blank even though the power LED turns on. In such a case, change the settings according to the following table by referring to the graphics card user manual.

Resolution	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	-/-
MAC, 1152 x 870	68.681	75.062	100.000	-/-
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, 1152 x 864	67.500	75.000	108.000	+/+
VESA, 1280 x 800	49.702	59.810	83.500	-/+
VESA, 1280 x 960	60.000	60.000	108.000	+/+
VESA, 1280 x 1024	63.981	60.020	108.000	+/+
VESA, 1280 x 1024	79.976	75.025	135.000	+/+
VESA, 1440 x 900	55.935	59.887	106.500	-/+

Resolution	Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Pixel Clock (MHz)	Sync Polarity (H/V)
VESA, 1600 x 1200	75.000	60.000	162.000	+/+
VESA, 1680 x 1050	65.290	59.954	146.250	-/+
VESA, 1920 x 1200	74.556	59.885	193.250	-/+
VESA, 2560 x 1440(RB)	88.787	59.951	241.500	+/-



- Horizontal Frequency

The time required to scan a single line from the left to the right side of the screen is called a horizontal cycle. The reciprocal number of a horizontal cycle is called horizontal frequency. Horizontal frequency is measured in kHz.

- Vertical Frequency

Repeating the same picture dozens of times per second allows you to view natural pictures. The repeat frequency is called "vertical frequency" or "refresh rate" and is indicated in Hz.

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 http://www.samsung.com/ch_fr (French)
MEXICO	01-800-SAMSUNG (726-7864)	http://www.samsung.com

LATIN AMERICA		
ARGENTINA	0800-333-3733	http://www.samsung.com
BRAZIL	0800-124-421 4004-0000	http://www.samsung.com
BOLIVIA	800-10-7260	http://www.samsung.com
CHILE	800-SAMSUNG (726-7864) From mobile 02-482 82 00	http://www.samsung.com
COLOMBIA	01-8000112112	http://www.samsung.com
COSTA RICA	0-800-507-7267	http://www.samsung.com
DOMINICA	1-800-751-2676	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

Appendix

EUROPE		
ALBANIA	42 27 5755	http://www.samsung.com
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	http://www.samsung.com
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 Electronics Czech and Slovak, s.r.o., Oasis Florenc, Sokolovská 394/17, 180 00, Praha 8	
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
CYPRUS	From landline : 8009 4000	http://www.samsung.com
GREECE	From landline : 80111-SAMSUNG (7267864) From landline & mobile : (+30) 210 6897691	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	http://www.samsung.com
LUXEMBURG	261 03 710	http://www.samsung.com
MACEDONIA	023 207 777	http://www.samsung.com
MONTENEGRO	020 405 888	http://www.samsung.com
NETHERLANDS	0900 - SAMSUNG (0900-7267864) (€ 0,10/Min)	http://www.samsung.com
NORWAY	815-56 480	http://www.samsung.com
POLAND	0 801-1SAMSUNG (172-678) +48 22 607-93-33	http://www.samsung.com

Appendix

EUROPE		
PORTUGAL	808 20 - SAMSUNG (808 20 7267)	http://www.samsung.com
RUMANIA	From landline : 08010-SAMSUNG (7267864) From landline & mobile : (+40) 21 206 01 10	http://www.samsung.com
SERBIA	0700 Samsung (0700 726 7864)	http://www.samsung.com
SLOVAKIA	0800 - SAMSUNG (0800-726 786)	http://www.samsung.com
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	http://www.samsung.com
ARMENIA	0-800-05-555	http://www.samsung.com
AZERBAIJAN	088-55-55-555	http://www.samsung.com
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
MONGOLIA	-	http://www.samsung.com

Appendix

CIS		
UKRAINE	0-800-502-000	http://www.samsung.com/ua http://www.samsung.com/ua_ru
BELARUS	810-800-500-55-500	http://www.samsung.com
MOLDOVA	00-800-500-55-500	http://www.samsung.com

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	1800 1100 11 3030 8282 1800 3000 8282 1800 266 8282	http://www.samsung.com
INDONESIA	0800-112-8888 021-5699-7777	http://www.samsung.com
JAPAN	0120-327-527	http://www.samsung.com
MALAYSIA	1800-88-9999	http://www.samsung.com
PHILIPPINES	1-800-10-SAMSUNG (726-7864) for PLDT 1-800-3-SAMSUNG (726-7864) for Digitel 1-800-8-SAMSUNG (726-7864) for Globe 02-5805777	http://www.samsung.com
SINGAPORE	1800-SAMSUNG (726-7864)	http://www.samsung.com
THAILAND	1800-29-3232 02-689-3232	http://www.samsung.com
TAIWAN	0800-329-999 0266-026-066	http://www.samsung.com
VIETNAM	1 800 588 889	http://www.samsung.com

MIDDLE EAST		
IRAN	021-8255	http://www.samsung.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

AFRICA		
CAMEROON	7095- 0077	http://www.samsung.com
COTE D'IVOIRE	8000 0077	http://www.samsung.com
GHANA	0800-10077 0302-200077	http://www.samsung.com
KENYA	0800 724 000	http://www.samsung.com
NIGERIA	0800-726-7864	http://www.samsung.com
SENEGAL	800-00-0077	http://www.samsung.com
SOUTH AFRICA	0860-SAMSUNG (726-7864)	http://www.samsung.com
TANZANIA	0685 88 99 00	http://www.samsung.com
UGANDA	0800 300 300	http://www.samsung.com

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



(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.

Terminology

OSD(On Screen Display)

On screen display (OSD) allows you to configure on-screen settings to optimize the picture quality as required. It allows you to change the screen brightness, tint, size and many other settings using menus displayed on the screen.

HUB

HUB refers to a device that is a common connection point for multiple devices connected over a network. It is used to connect multiple PCs, video devices, office devices and/or LANs over a single network.

Gamma

The Gamma menu adjusts the grey scale that represents middle tones on the screen. Adjusting the brightness brightens the whole screen, but adjusting Gamma only brightens the medium brightness.

Grey scale

Scale refers to levels of color intensity that show variations of color change from darker areas to brighter areas on the screen. Changes to the screen brightness are expressed with black and white variation, and grey scale refers to the medium area between black and white. Changing the grey scale through Gamma adjustment will change the medium brightness on the screen.

Scanning rate

Scanning rate, or refresh rate, refers to the frequency of screen refreshes. Screen data is transmitted as it refreshes to display an image, although the refreshing is invisible to the naked eye. The number of screen refreshes is called scanning rate and is measured in Hz. A scanning rate of 60Hz means that the screen refreshes 60 times per second. The screen scanning rate depends on the performance of the graphics cards in your PC and monitor.

Horizontal Frequency

Characters or images displayed on the monitor screen consist of numerous dots (pixels). Pixels are transmitted in horizontal lines, which are then arranged vertically to create an image. The horizontal frequency is measured in kHz and represents how many times horizontal lines per second are transmitted and displayed on the monitor screen. A horizontal frequency of 85 means that the horizontal lines that make up an image are transmitted 85 000 times per second, and the horizontal frequency is indicated in 85kHz.

Vertical Frequency

One image is made of numerous horizontal lines. The vertical frequency is measured in Hz and represents how many images can be created per second by those horizontal lines. A vertical frequency of 60 means that an image is transmitted 60 times per second. The vertical frequency is also called "refresh rate" and affects screen flicker.

Resolution

Resolution is the number of horizontal pixels and vertical pixels that form a screen. It represents the level of display detail.

A higher resolution displays a greater amount of information on the screen and is suitable for performing multiple tasks at the same time.

E.g. A resolution of 2560 x 1440 consists of 2,560 horizontal pixels (horizontal frequency) and 1,440 vertical lines (vertical resolution).

Plug & Play

The Plug & Play feature allows the automatic exchange of information between a monitor and PC to produce an optimum display environment.

The monitor uses VESA DDC (international standard) to execute Plug & Play.

Index

A

Auto Source 66

B

Before Connecting 29

Blue 49

Brightness 42

C

Checking the Contents 19

Cleaning 4

Color Tone 50

Configuring Brightness in the Initial Screen 73

Connecting and Using a PC 30

Connecting Headphones 37

Contrast 43

Copyright 2

Correct Disposal of This Product 88

Correct posture to use the product 13

D

Display Time 67

G

Gamma 51

General 79

Green 48

H

HDMI Black Level 46

I

INFORMATION 73

Installation 24

K

Key Repeat Time 68

L

Language 64

M

MAGIC 40

Menu H-Position & Menu V-Position 54

Menu Transparency 63

O

Off Timer On/Off 70

Off Timer Setting 71

P

Parts 21

PC/AV Mode 65

PowerSaver 80

Q

Q&A 77

R

Red 47

Requirements Before Contacting Samsung
Customer Service Center 74

Reset 72

Response Time 45

S

Safety Precautions 6

Sharpness 44

Size 52

Index

Standard Signal Mode Table 81

T

Terminology 89

U

Utilizing the Product as a USB HUB 38