

Monitor User Manual

S29E790C

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

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Chapter 01 Before Using the Product

Copyright

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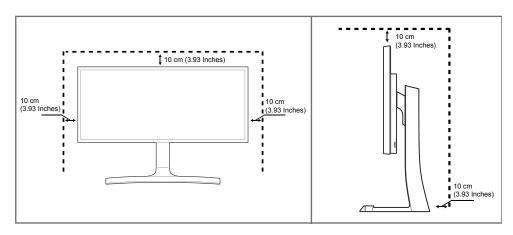
VESA, DPM and DDC are registered trademarks of the Video Electronics Standards Association.

Ownership of all other trademarks is attributed to their due owner.

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.

Contact your nearest Samsung Customer Service Center if you want to clean the inside of the product (Service fee will be charged.)

Safety Precautions

Caution

RISK OF ELECTRIC SHOCK DO NOT OPEN

Caution: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER. (OR BACK)

THERE ARE NO USER SERVICEABLE PARTS INSIDE.

REFER ALL SERVICING TO QUALIFIED PERSONNEL.



This symbol indicates that high voltage is present inside.

It is dangerous to make any kind of contact with any internal part of this product.



This symbol alerts you that important literature concerning operation and maintenance has been included with this product.

Symbols

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.

Cleaning

- Exercise care when cleaning as the panel and exterior of advanced LCDs are easily scratched.
- Take the following steps when cleaning.
- The following images are for reference only. Real-life situations may differ from what is shown in the images.



- 1 Power off the product and computer.
- 2 Disconnect the power cord from the product.
- Hold the power cable by the plug and do not touch the cable with wet hands. Otherwise, an electric shock may result.



Wipe the monitor with 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 product.



- 5 Connect the power cord to the product when cleaning is finished.
- 6 Power on the product and computer.

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 use multiple products with a single power socket.

• Overheated power sockets may 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 unsecure connection may cause a fire.



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. Be careful not to leave the power cord under a heavy object.

• Damage to the cord may result in a fire or electric shock.



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

• An electric shock or fire may result.



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

• A fire or electric shock may result.





Clean any dust around the pins of the power plug or the power socket with a dry cloth.

• A fire may result.





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

• A fire may result.



Caution

Do not disconnect the power cord while the product is being used.

• The product may become damaged by an electric shock.



closet.

Install the product at least 10cm away from the wall to allow ventilation.

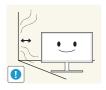
Do not install the product in poorly ventilated spaces such as a bookcase or

• An increased internal temperature may cause a fire.



Only use the power cord provided with your product by Samsung. Do not use the power cord with other products.

• A fire or electric shock may result.



• An increased internal temperature may cause a fire.



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

• The power cord must be disconnected to cut off power to the product when an issue occurs.



Keep the plastic packaging out of the reach of children.

• Children may suffocate.













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

- The product may fall and become damaged and/or cause an 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.

• A fire or electric shock may result.

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

• The product lifespan may be reduced or a fire may result.

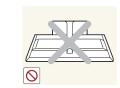
Do not install the product within the reach of young children.

• The product may fall and injure children.

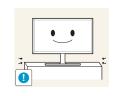
Edible oil, such as soybean oil, can damage or deform the product. Do not install the product in a kitchen or near a kitchen counter.

Caution











Do not drop the product while moving.

• 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 become damaged and/or cause an injury.
- Install the product only on cabinets or shelves of the right size.

Set down the product gently.

• Product failure or personal injury may result.

Installing the product in an unusual place (a place exposed to a lot of fine dust, chemical substances, extreme temperatures or a significant presence of moisture, or a place where the product will operate continuously for an extended period of time) may seriously affect its performance.

• Be sure to consult Samsung Customer Service Center if you want to install the product at such a place.

Operation

Warning



There is a high voltage inside the product. Never disassemble, repair or modify the product yourself.

- A fire or electric shock may result.
- Contact Samsung Customer Service Center for repairs.



To move the product, first disconnect all the cables from it, including the power cable.

• Damage to the cord may result in a fire or electric shock.



If the product generates abnormal sounds, a burning smell or smoke, disconnect the power cord immediately and contact Samsung Customer Service Center.

• An electric shock or fire may result.



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

• Children may become injured or seriously harmed.



If the product is dropped or the outer case is damaged, turn off the power and disconnect the power cord. Then contact Samsung Customer Service Center.

• Continued use can result in a fire or electric shock.









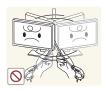
• A fire or electric shock may result.

top of the product.

power cable.







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

 Product failure, an electric shock or fire may result from a damaged cable.

Do not leave heavy objects or items that children like (toys, sweets, etc.) on

• The product or heavy objects may fall as children try to reach for the

During a lightning or thunderstorm, power off the product and remove the

toys or sweets resulting in a serious injury.

Do not drop objects on the product or apply impact.

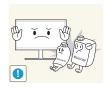
If a gas leakage is found, do not touch the product or power plug. Also, ventilate the area immediately.

• Sparks can cause an explosion or fire.

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

 Product failure, an electric shock or fire may result from a damaged cable.





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.

• An increased internal temperature may cause a fire.



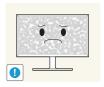
Do not insert metallic objects (chopsticks, coins, hairpins, etc) or objects that burn easily (paper, matches, etc) into the product (via the vent or input/output ports, etc).

- Be sure to power off the product and disconnect the power cord when water or other foreign substances have entered the product. Then contact Samsung Customer Service Center.
- 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.

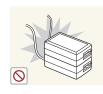
- Be sure to power off the product and disconnect the power cord when water or other foreign substances have entered the product. Then contact Samsung Customer Service Center.
- Product failure, an electric shock or fire may result.

Caution













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

 Activate power-saving mode or a moving-picture screen saver if you will not be using the product for an extended period of time.

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).

• Dust accumulation combined with heat can cause a fire, 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.

Do not let water enter the DC power device or get the device 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.



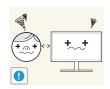
If you place the AC/DC power adapter so that it is hanging with the cord input facing upwards, water or other foreign substances could enter the Adapter and cause the Adapter to malfunction.

Make sure to rest the AC/DC power adapter flat on a table or the floor.



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

• The product may fall and become damaged or cause an injury.

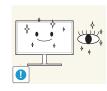


Looking at the screen too close for an extended period of time can deteriorate your eyesight.



Do not use humidifiers or stoves around the product.

• A fire or electric shock 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 small accessories out of the reach of children.



Exercise caution when adjusting the product angle or stand height.

- Your hand or finger may get stuck and injured.
- Tilting the product at an excessive angle may cause the product to fall and an injury may result.



Do not place heavy objects on the product.

• Product failure or personal injury may result.



When using headphones or earphones, do not turn the volume too high.

• Having the sound too loud may damage your hearing.

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.

Chapter 02 Preparations

Contact the vendor where you purchased the product if any

components are missing.

- The appearance of the components may differ from the images shown.
- Using the HDMI cable that came with the package is recommended.
- The optimal resolution may not be available when using a non-high speed HDMI or HDMI-DVI cable.
- The Mini DP to DP gender changer may not be provided, depending on the model.

Checking the Components

Components

— Components may vary depending on the country.



Quick Setup Guide





Power cable (P.25)



Mini DP to DP gender (Optional)



Warranty card
(Not available in some locations)



DC power adapter (Detachable) (P.25)



Cleaning cloth



Regulatory guide



HDMI cable (Optional) (P.23)



User manual

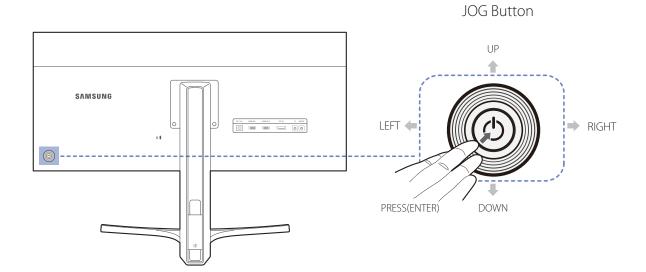


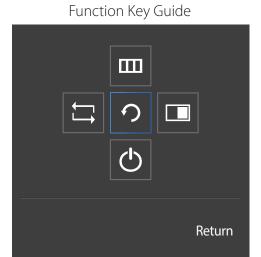
DP cable (Optional)

Parts

Control Panel

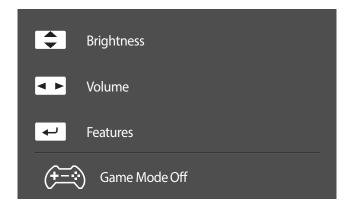
The color and shape of parts may differ from what is shown. Specifications are subject to change without notice to improve quality.





Icons	Description
JOG Button	Multi directional button that helps navigate.
	The JOG button is located on the rear left side of the product. The button can be used to move up, down, left or right, or as Enter.
Function Key Guide	Press the JOG button when the screen is turned on. The Function Key Guide will appear. To access the onscreen menu when the guide is displayed, press the corresponding direction button again.
	Function Key Guide may vary depending on the function or product model. Please refer to the actual product.

Direct Key guide



The shortcut button screen (OSD menu) shown below is displayed only when the monitor screen is turned on, the computer resolution changes, or the input source changes.

UP/DOWN: Adjust Brightness, Contrast, Sharpness.

LEFT/RIGHT: Adjust **Volume**, **Mute**.

PRESS(ENTER): Display Function Key Guide.

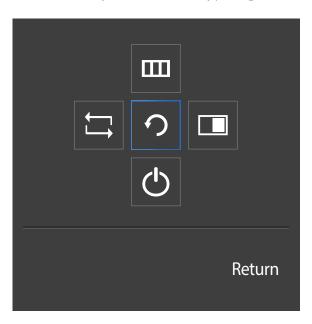
The function buttons page shows if **Game Mode** is enabled.



(†=-): On

Function Key Guide

To enter the main menu or to use other items, press the JOG button to display the Function Key Guide. You can exit by pressing the JOG button again.



UP/DOWN/LEFT/RIGHT: Move to the item you want. The description for each item will appear when the focus changes. PRESS(ENTER): The selected item will be applied.

Icons	Description
\Box	Selects to change the input signal by moving the JOG button in the Function Key Guide screen. A message will appear on the top left corner of the screen if the input signal has been changed.
	Selects IIII by moving the JOG button in the function key guide screen.
	The OSD (On Screen Display) of your Monitor's feature appears.
ш	OSD control lock: Maintain the current settings, or lock the OSD control to prevent unintended changes to settings. Enable/Disable: To lock/unlock the OSD control, press the LEFT button for 10 seconds when the main menu displayed.
	If the OSD control is locked, Brightness and Contrast can be adjusted. PIP/PBP is available. Information can be viewed.
	Selects by moving the JOG button in the function key guide screen.
	Press the button when configuring settings for the PIP/PBP function is required.
O	Selects \bigodot to turn the Monitor off by moving the JOG button in the function key guide screen.

Actual models because of functional variation, Function key guide options will be different. Please run the corresponding function based on the actual icon and description.

When the monitor displays nothing (i.e. Power saving mode or Non-signal mode), 2 direct keys for control source and power could be used as below.

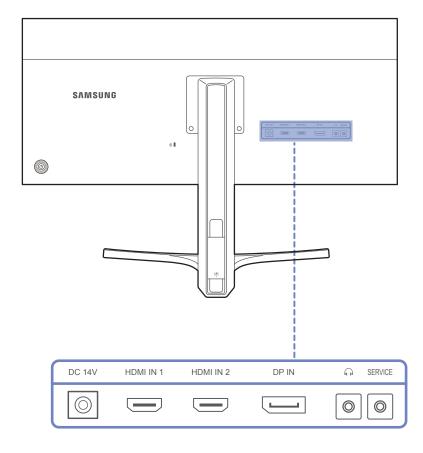
JOG Button	Power saving/Non-signal mode
UP	Source Change
Down	-
PRESS(ENTER) for 2 seconds	Power Off

[—] When the monitor displays the Main menu the JOG Button could be used as below.

JOG Button	Action
UP/DOWN	Move the option
	Exit the Main menu.
LEFT	Close Sublist without saving value.
	Value decreases in the slider.
	Move to next depth.
RIGHT	Value increases in the slider.
	Move to next depth.
PRESS(ENTER)	Save the value and close Sublist.

Reverse Side

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

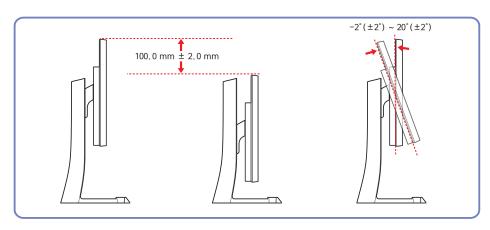


Port	Description
DC 14V	Connects to the DC power adapter.
HDMI IN 1 HDMI IN 2	Connects to a source device using an HDMI cable or HDMI-DVI cable.
DP IN	Connects to a source device using a DP cable.
\bigcap	Connect to an audio output device such as headphones.
	The sound could only be heard when using the HDMI to HDMI cable or DP cable.
SERVICE	Dedicated to service technicians.

Installation

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.



- The monitor tilt and height can be adjusted.
- To avoid damage to the product when adjusting the tilt, push or pull the top area of the product at the center while holding the top of the stand.

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

Caution





Take extra care to ensure your hand does not get stuck in the height adjustment area. This could injure your hand.



Do not put the hand below the stand body.

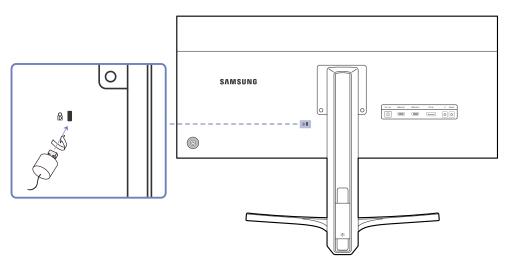


Do not hold the product upside down only by the stand.

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.

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.

Chapter 03 Connecting and Using a Source Device

Before Connecting

Check the following before you connect this product with other devices.

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.

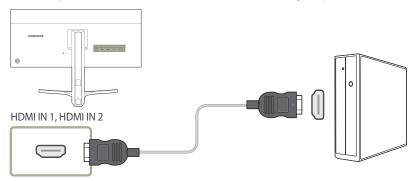
Connecting and Using a PC

Select a connection method suitable for your PC.

— Connecting parts may differ in different products.

Connection Using the HDMI Cable

Do not connect the power cable before connecting all other cables.
 Ensure you connect a source device first before connecting the power cable.

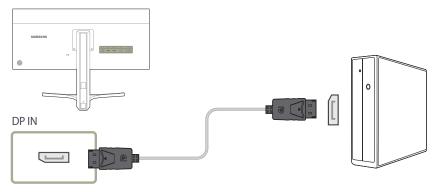


- 1 Connect the **HDMI IN 1** or **HDMI IN 2** port on the back of the product to the HDMI port on the PC using an HDMI cable.
- 2 Connect the DC power adapter to the product and a power socket. Next, turn on the power switch on the PC.
- 3 Change the input source to **HDMI 1** or **HDMI 2** controlling the JOG button UP/DOWN, when input source is not set.

[—] Provided ports may vary depending on the product.

Connection Using the DP Cable

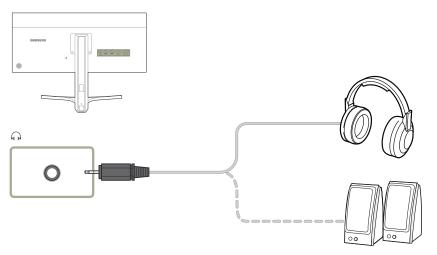
Do not connect the power cable before connecting all other cables.
 Ensure you connect a source device first before connecting the power cable.



- 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.
- 3 Change the input source to **DisplayPort** controlling the JOG button UP/DOWN, when input source is not set.

Connecting to Headphones or Speakers

Do not connect the power cable before connecting all other cables.
 Ensure you connect a source device first before connecting the power cable.



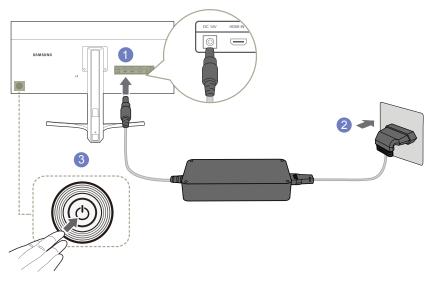
1 Connect an audio output device such as headphones or speakers to ណ on the product.

The sound could only be heard when using the HDMI to HDMI cable or DP cable.

[—] Provided ports may vary depending on the product.

Connecting the Power

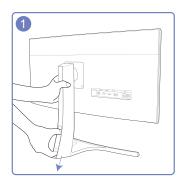
Power connection using detachable DC power adapter



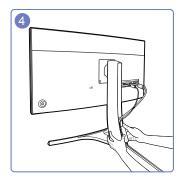
- 1 Connect the power cable to the DC power adapter. Then, connect the DC power adapter to the **DC 14V** port on the back of the product.
- 2 Next, connect the power cable to the power outlet.
- Press the JOG button on the back of the monitor to turn it on.

The input voltage is switched automatically.

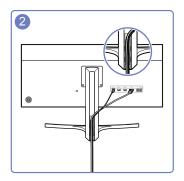
Tidying Up the Connected Cables



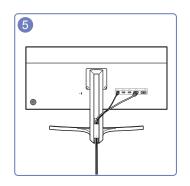
To remove the COVER-CABLE, hold and pull the COVER-CABLE with your thumb and index finger in the arrow direction while holding the stand with the other hand.



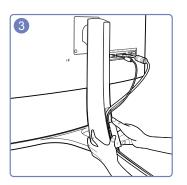
Hold the bottom of the stand neck securely with your left hand and use the thumb of your right hand to slide up the COVER-CABLE to fix it in place.



Insert and fix the cables in the slot.



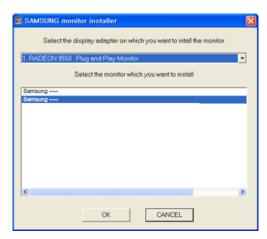
Installation is finished.



Hold the COVER-CABLE and fix the cables into the grooves on the STAND-REAR.

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".
- Follow the instructions given on the screen to proceed with installation.
- 4 Select your product model from the list of models.



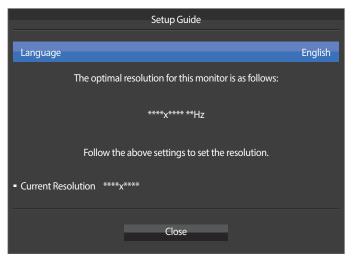
5 Go to Display Properties and check that the resolution and refresh rate are appropriate.

Refer to your Windows OS manual for further details.

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 on the product and change the resolution on your PC to the optimum setting.



- 1 Select a language by moving the JOG button LEFT/RIGHT. Next, press the JOG button.
- 2 To hide the information message, press the JOG button.
- 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 can also be selected in **Control Panel** on your PC.

Chapter 04 Screen Setup

Configure the screen settings such as brightness.

A detailed description of each function is provided. Refer to your product for details.

SAMSUNG MAGIC Bright

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

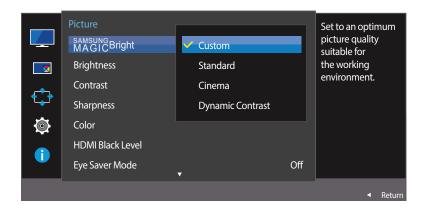
This menu is not available when **Eco Saving Plus** is enabled.

This menu is not available when **Game Mode** is enabled.

— Not available when **PIP/PBP Mode** is set to **On**.

You can customize the brightness to suit your preferences.

In PC mode

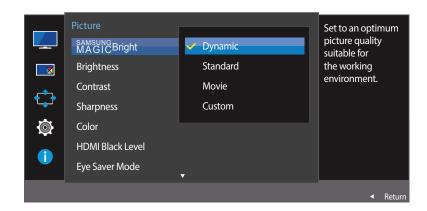


⁻ The displayed image may differ depending on the model.

Configuring SAMSUNG MAGIC Bright

- 1 When the Function Key Guide appears, select **III** by moving the JOG button UP. Next, press the JOG button.
- 2 Move to **Picture** controlling the JOG button UP/DOWN and press the JOG button.
- 3 Move to MAGGCBright controlling the JOG button UP/DOWN and press the JOG button.
- **Custom**: Customize the contrast and brightness as required.
- Standard: Obtain a picture quality suitable for editing documents or using Internet.
- Cinema: Obtain the brightness and sharpness of TVs suitable for enjoying video and DVD content.
- **Dynamic Contrast**: Obtain balanced brightness through automatic contrast adjustment.

In AV mode



- The displayed image may differ depending on the model.

When the external input is connected through HDMI/DP and **PC/AV Mode** is set to **AV**, **SAMSUNG Bright** has four automatic picture settings (**Dynamic**, **Standard**, **Movie** and **Custom**) that are preset at the factory. You can activate either **Dynamic**, **Standard**, **Movie** or **Custom**. You can select **Custom** which automatically recalls your personalized picture settings.

- **Dynamic**: Select this mode to view a sharper image than in **Standard** mode.
- **Standard**: Select this mode when the surroundings are bright. This also provides a sharp image.
- Movie: Select this mode when the surroundings are dark. This will save power and reduce eye fatigue.
- Custom: Select this mode when you want to adjust the image according to your preferences.
- 4 Move to the desired option controlling the JOG button UP/DOWN and press the JOG button.
- 5 The selected option will be applied.

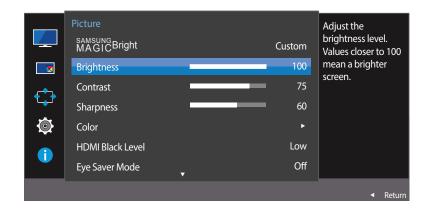
Brightness

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 MAGICBright is set to Dynamic Contrast mode.

This menu is not available when **Eco Saving Plus** is set .



⁻ The displayed image may differ depending on the model.

Configuring Brightness

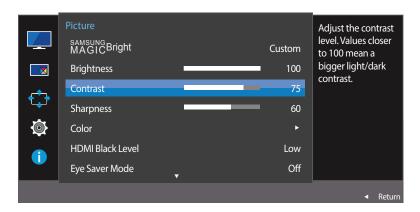
- 1 When the Function Key Guide appears, select **III** by moving the JOG button UP. Next, press the JOG button.
- 2 Move to **Picture** controlling the JOG button UP/DOWN and press the JOG button.
- 3 Move to **Brightness** controlling the JOG button UP/DOWN and press the JOG button.
- 4 Adjust the **Brightness** controlling the JOG button LEFT/RIGHT.
- 5 The selected option will be applied.

Contrast

Adjust the contrast between the objects and background. (Range: $0\sim100$)

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

- This option is not available when SAMSUNGBright is in Cinema or Dynamic Contrast mode.
- This menu is not available when **Game Mode** is enabled.
- This menu is not available when **PIP/PBP Mode** is set to **On** and the **Size** is to **On** and the **Size** is to **On** and the **On**



⁻ The displayed image may differ depending on the model.

Configuring Contrast

- 1 When the Function Key Guide appears, select **W** by moving the JOG button UP. Next, press the JOG button.
- 2 Move to **Picture** controlling the JOG button UP/DOWN and press the JOG button.
- 3 Move to **Contrast** controlling the JOG button UP/DOWN and press the JOG button.
- 4 Adjust the **Contrast** controlling the JOG button LEFT/RIGHT.
- 5 The selected option will be applied.

Sharpness

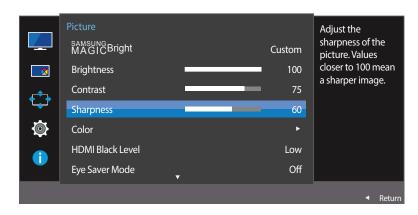
Make the outline of objects more clear or blurry. (Range: 0~100)

A higher value will make the outline of objects clearer.

This option is not available when MAGICBright is in Cinema or Dynamic Contrast mode.

This menu is not available when **Game Mode** is enabled.

— Not available when **PIP/PBP Mode** is set to **On**.



⁻ The displayed image may differ depending on the model.

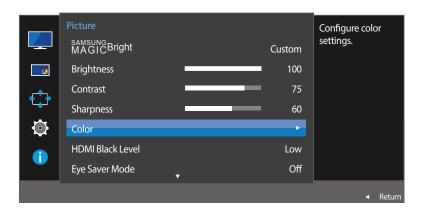
Configuring Sharpness

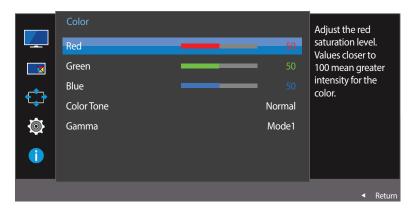
- 1 When the Function Key Guide appears, select **III** by moving the JOG button UP. Next, press the JOG button.
- 2 Move to **Picture** controlling the JOG button UP/DOWN and press the JOG button.
- 3 Move to **Sharpness** controlling the JOG button UP/DOWN and press the JOG button.
- 4 Adjust the **Sharpness** controlling the JOG button LEFT/RIGHT.
- 5 The selected option will be applied.

Color

Adjust the tint of the screen.

- This menu is not available when MAGICBright is set to Cinema or Dynamic Contrast mode.
- This menu is not available when **Game Mode** is enabled.
- Not available when PIP/PBP Mode is set to On.





⁻ The displayed image may differ depending on the model.

Configuring Color

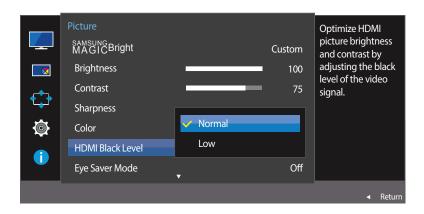
- 1 When the Function Key Guide appears, select $\overline{\mathbf{u}}$ by moving the JOG button UP. Next, press the JOG button.
- 2 Move to **Picture** controlling the JOG button UP/DOWN and press the JOG button.
- Move to Color controlling the JOG button UP/DOWN and press the JOG button.
- Red: Adjust the red saturation level. Values closer to 100 mean greater intensity for the color.
- Green: Adjust the green saturation level. Values closer to 100 mean greater intensity for the color.
- Blue: Adjust the blue saturation level. Values closer to 100 mean greater intensity for the color.
- **Color Tone**: Select a color tone that best suits your viewing needs.
 - 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.
 - When the external input is connected through HDMI/DP and **PC/AV Mode** is set to **AV**, **Color Tone** has four color temperature settings (**Cool**, **Normal**, **Warm** and **Custom**).
- Gamma: Adjust the middle level of luminance.
 - Mode1 / Mode2 / Mode3
- 4 Move to the desired option by controlling the JOG button and then press the JOG button.
- 5 The selected option will be applied.

HDMI Black Level

If a DVD player or set-top box is connected to the product via HDMI, image quality degradation (contrast/color degradation, black level, etc.) may occur, depending on the connected source device. In such case, **HDMI Black Level** can be used to adjust the image quality.

If this is the case, correct the degraded picture quality using **HDMI Black Level**.

- This function is only available in **HDMI 1** or **HDMI 2** mode.
- Not available when PIP/PBP Mode is set to On.



⁻ The displayed image may differ depending on the model.

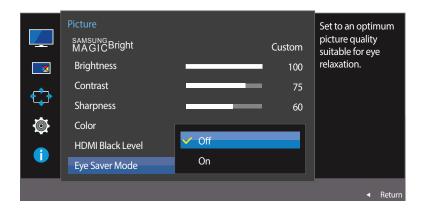
Configuring the HDMI Black Level Settings

- 1 When the Function Key Guide appears, select IIII by moving the JOG button UP. Next, press the JOG button.
- Move to **Picture** controlling the JOG button UP/DOWN and press the JOG button.
- Move to **HDMI Black Level** controlling the JOG button UP/DOWN and press the JOG button.
- Normal: Select this mode when there is no contrast ratio degradation.
- Low: Select this mode to reduce the black level and increase the white level when there is a contrast ratio degradation.
- 4 Move to the desired option controlling the JOG button UP/DOWN and press the JOG button.
- 5 The selected option will be applied.
- HDMI Black Level may not be compatible with some source devices.
- The **HDMI Black Level** feature is only activated at a certain **AV** resolution, such as 720P and 1080P.

Eye Saver Mode

Set to an optimum picture quality suitable for eye relaxation.

TÜV Rheinland "Low Blue Light Content" is a certification for products which meet requirements for lower blue light levels. When **Eye Saver Mode** is '**On**', the blue light that wavelength is around 400nm will decrease, and it will provide an optimum picture quality suitable for eye relaxation. At the same time, the blue light level is lower than in the default settings, and it was tested by TÜV Rheinland and certified as it met the requirements of TÜV Rheinland "Low Blue Light Content" standards.



⁻ The displayed image may differ depending on the model.

Configuring Eye Saver Mode

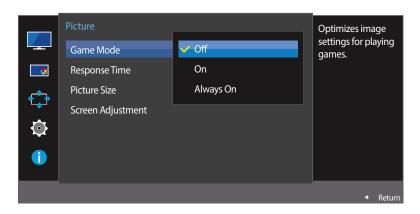
- 1 When the Function Key Guide appears, select IIII by moving the JOG button UP. Next, press the JOG button.
- 2 Move to **Picture** controlling the JOG button UP/DOWN and press the JOG button.
- 3 Move to Eye Saver Mode controlling the JOG button UP/DOWN and press the JOG button.
- 4 Move to the desired option controlling the JOG button UP/DOWN and press the JOG button.
- 5 The selected option will be applied.

Game Mode

Configure the product screen settings for game mode.

Use this feature when playing games on a PC or when a game console such as PlayStation™ or Xbox™ is connected.

— Not available when **PIP/PBP Mode** is set to **On**.



⁻ The displayed image may differ depending on the model.

Configuring Game Mode

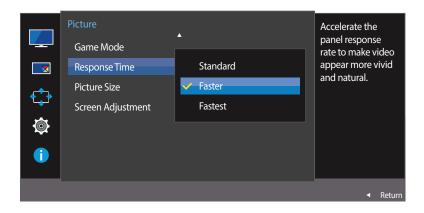
- 1 When the Function Key Guide appears, select IIII by moving the JOG button UP. Next, press the JOG button.
- 2 Move to **Picture** controlling the JOG button UP/DOWN and press the JOG button.
- Move to **Game Mode** controlling the JOG button UP/DOWN and press the JOG button.
- 4 Move to the desired option controlling the JOG button UP/DOWN and press the JOG button.
- 5 The selected option will be applied.
- When the monitor turns off, enters power-saving mode or changes input sources, **Game Mode** turns **Off** even if it is set to **On**.

If you want to keep **Game Mode** enabled all the time, select **Always On**.

Response Time

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

- It is best to set **Response Time** to **Standard** or **Faster** when you are not viewing a movie.
- This menu is not available when **PIP/PBP Mode** is set to **On** and the **Size** is to **On** and the **Size** is to **On** and the **On**



⁻ The displayed image may differ depending on the model.

Configuring the Response Time

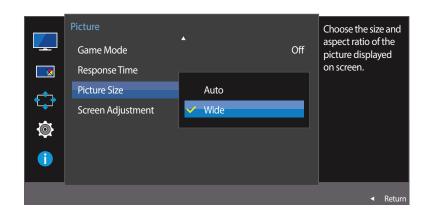
- 1 When the Function Key Guide appears, select **III** by moving the JOG button UP. Next, press the JOG button.
- 2 Move to **Picture** controlling the JOG button UP/DOWN and press the JOG button.
- Move to Response Time controlling the JOG button UP/DOWN and press the JOG button.
- Standard / Faster / Fastest
- 4 Move to the desired option controlling the JOG button UP/DOWN and press the JOG button.
- 5 The selected option will be applied.

Picture Size

Change the picture size.

This menu is not available when **PIP/PBP Mode** is set to **On** and the **Size** is to **On** and the **Size** is to **On** and the **On**

In PC mode



⁻ The displayed image may differ depending on the model.

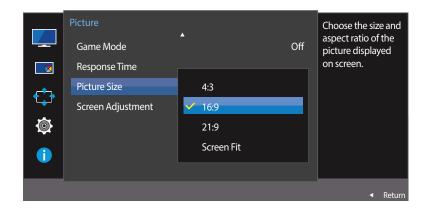
Changing the Picture Size

- 1 When the Function Key Guide appears, select **III** by moving the JOG button UP. Next, press the JOG button.
- 2 Move to **Picture** controlling the JOG button UP/DOWN and press the JOG button.
- 3 Move to Picture Size controlling the JOG button UP/DOWN and press the JOG button.

In PC mode

- 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.

In AV mode



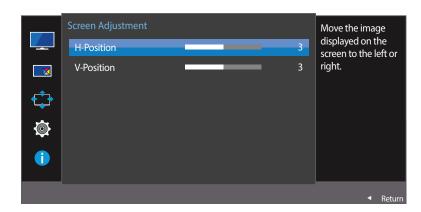
⁻ The displayed image may differ depending on the model.

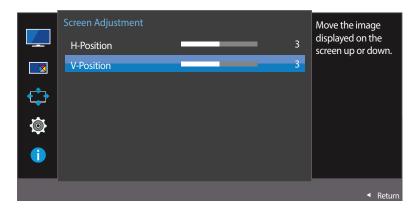
In AV mode

- 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.
- 21:9: Display the picture with an aspect ratio of 21:9.
- Screen Fit: Display the picture with the original aspect ratio without cutting off.
- The function may not be supported depending on the ports provided with the product.
- Changing the screen size is available when the following conditions are satisfied.
 - A digital output device is connected using the HDMI/DP cable.
 - The input signal is 480p, 576p, 720p, or 1080p and monitor can display normally (Not every model can support all of these signals.).
 - This can only be set when the external input is connected through HDMI/DP and PC/AV Mode is set to AV.
- 4 Move to the desired option controlling the JOG button UP/DOWN and press the JOG button.
- 5 The selected option will be applied.

Screen Adjustment

- This menu is only available when **Picture Size** is set to **Screen Fit** in **AV** Mode. When a 480P or 576P or 720P or 1080P signal is input in **AV** mode and the monitor can display normally, select **Screen Fit** to adjust horizontal position in 0-6 levels.
- Not available when PIP/PBP Mode is set to On.





⁻ The displayed image may differ depending on the model.

Configuring H-Position & V-Position

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

V-Position: Move the screen up or down.

- 1 When the Function Key Guide appears, select **W** by moving the JOG button UP. Next, press the JOG button.
- Move to Picture controlling the JOG button UP/DOWN and press the JOG button.
- 3 Move to Screen Adjustment controlling the JOG button UP/DOWN and press the JOG button.
- 4 Move to the **H-Position** or **V-Position** controlling the JOG button UP/DOWN and press the JOG button.
- Adjust the H-Position or V-Position controlling the JOG button LEFT/RIGHT and press the JOG button.
- 6 The selected option will be applied.

Chapter 05 Configuring the PIP/PBP Settings

PIP/PBP

The PIP (Picture in Picture) function separates the screen into two parts. One source device is displayed on the main screen at the same time the another source device is displayed in inset windows.

The PBP (Picture by Picture) function separates the screen in half displaying output from two different source devices simultaneously on the left and right sides of the screen.

- Compatible with Windows7 and Windows8.
- The PIP/PBP function may not be available depending on the specifications of the graphics card used. If the screen is blank in PIP/PBP mode when the optimum resolution is selected, go to Control Panel → Display → Screen Resolution and click Detect on the PC. (Instructions are based on Windows 7.) If the screen is blank when the resolution is set to the optimum resolution, change the resolution to 1280 x 1024.
- The screen may flicker briefly or appear after a delay when you enable or disable the **PIP/PBP** function or when you change the screen size with the **PIP/PBP** function activated.

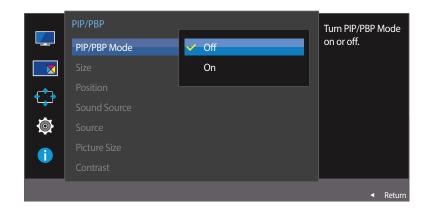
This can typically arise when a PC and a monitor are connected to two or more input sources. It has nothing to do with the performance of a monitor.

The issue is mainly caused when the video signals are delayed in transmission to the monitor depending on the graphics card performance.



- To maximize the picture quality, it is recommended to use a graphics card that supports 2560 x 1080 resolution.
- When the **PIP/PBP** function is enabled, the resolution will not be able to automatically switch to the optimum resolution due to a compatibility issue between the graphics card and the Windows system.
 - Set **PIP/PBP Mode** to **Off**. Alternatively, restart the monitor, then set the resolution to the optimum setting using the Windows interface.

Configuring PIP/PBP Mode

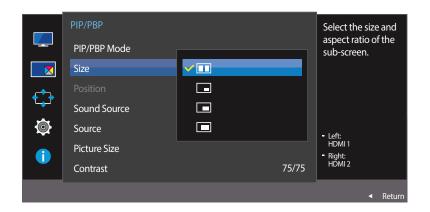


- The displayed image may differ depending on the model.

Enable or disable the **PIP/PBP Mode** function.

- 1 When the Function Key Guide appears, select **III** by moving the JOG button UP. Next, press the JOG button.
- 2 Move to the PIP/PBP controlling the JOG button UP/DOWN and press the JOG button.
- 3 Move to the PIP/PBP Mode controlling the JOG button UP/DOWN and press the JOG button.
- Off / On
- 4 Move to the desired option controlling the JOG button UP/DOWN and press the JOG button.
- 5 The selected option will be applied.

Configuring Size

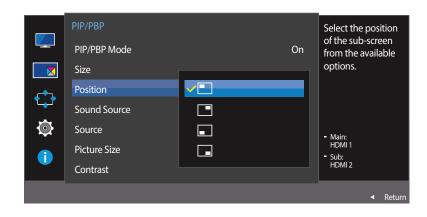


- The displayed image may differ depending on the model.

Select the size and aspect ratio of the sub-screen.

- 1 When the Function Key Guide appears, select **III** by moving the JOG button UP. Next, press the JOG button.
- Move to the PIP/PBP controlling the JOG button UP/DOWN and press the JOG button.
- **3** Move to the **Size** controlling the JOG button UP/DOWN and press the JOG button.
- Select the icon image if you want to use PBP mode where the optimum resolution for the left and right sides of the screen is 1280 x 1080 (width x height).
- Select the icon image if you want to use PIP mode where the optimum resolution for the sub-screen is 720 x 480 (width x height).
- Select the icon image if you want to use PIP mode where the optimum resolution of the sub-screen is 960 x 540 (width x height).
- Select the icon image if you want to use PIP mode where the optimum resolution of the sub-screen is 1280 x 540 (width x height).
- 4 Move to the desired option controlling the JOG button UP/DOWN and press the JOG button.
- 5 The selected option will be applied.

Configuring Position



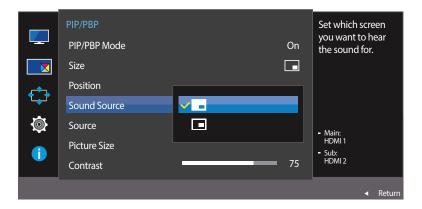
- The displayed image may differ depending on the model.

Select the position of the sub-screen from the available options.

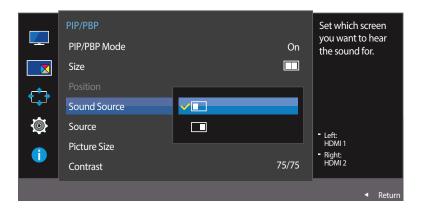
- 1 When the Function Key Guide appears, select **W** by moving the JOG button UP. Next, press the JOG button.
- Move to the PIP/PBP controlling the JOG button UP/DOWN and press the JOG button.
- Move to the **Position** controlling the JOG button UP/DOWN and press the JOG button.
- - / / / -
 - Not available when PBP is selected.
 - The screen may flicker if the input signal is unstable.
- 4 Move to the desired option controlling the JOG button UP/DOWN and press the JOG button.
- 5 The selected option will be applied.

Configuring Sound Source

PIP mode



PBP mode



- The displayed image may differ depending on the model.

Set which screen you want to hear the sound for.

- 1 When the Function Key Guide appears, select **III** by moving the JOG button UP. Next, press the JOG button.
- Move to the PIP/PBP controlling the JOG button UP/DOWN and press the JOG button.
- Move to the **Sound Source** controlling the JOG button UP/DOWN and press the JOG button.
- PIP mode: ___/
- PBP mode: /

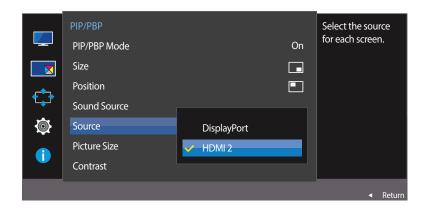
The white area of the icon means that the **Sound Source** comes from the main screen/sub-screen or the left/right screen.

- 4 Move to the desired option controlling the JOG button UP/DOWN and press the JOG button.
- 5 The selected option will be applied.

Configuring Source

PIP Mode

(available in PIP mode(Size / / / /))



⁻ The displayed image may differ depending on the model.

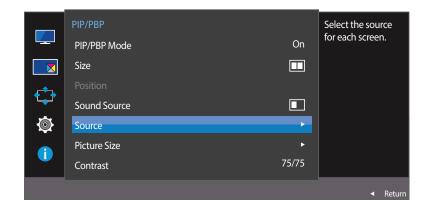
Select the source for each screen.

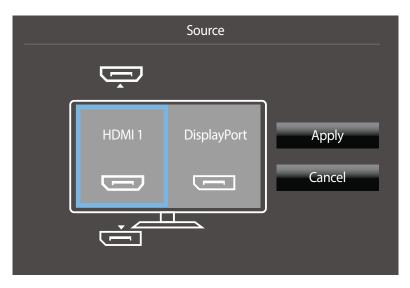
- 1 When the Function Key Guide appears, select **W** by moving the JOG button UP. Next, press the JOG button.
- Move to the PIP/PBP controlling the JOG button UP/DOWN and press the JOG button.
- 3 Move the JOG button UP/DOWN to select **Source** and then press the JOG button.
- DisplayPort / HDMI 1 / HDMI 2
- 4 Move to the desired option controlling the JOG button UP/DOWN and press the JOG button.
- 5 The selected option will be applied.
- With the exception of the current input source, the other two input sources can be selected.
- The screen may flicker if the input signal is unstable.
- You can use the JOG button to change the input source for the main screen. When the Function Key Guide is displayed, move the focus left, select the

 icon, and then press the JOG button. The main screen will switch in the order **DisplayPort**→ HDMI 1 → HDMI 2.

PBP Mode

(available in PBP mode(Size 1))





- The displayed image may differ depending on the model.

Select input sources for the devices displayed on the main and sub screens.

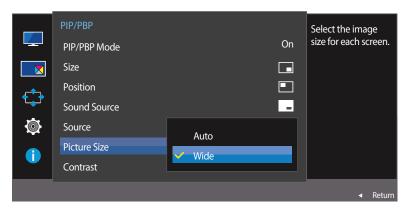
- 1 When the Function Key Guide appears, select **W** by moving the JOG button UP. Next, press the JOG button.
- Move to the PIP/PBP controlling the JOG button UP/DOWN and press the JOG button.
- Move the JOG button UP/DOWN to select **Source** and then press the JOG button.
- DisplayPort / HDMI 1 / HDMI 2
- 4 Control the JOG button UP/DOWN and choose the left/right external input source.
- Move the JOG button LEFT/RIGHT to select **Apply** and then press the JOG button. Pressing the JOG button after selecting **Cancel** will cancel **Source** configuration and revert back to the **PIP/PBP** control menu.
- The screen may flicker if the input signal is unstable.
- When the input signal of the left and right screens are the same, the operation cannot be performed.
- When the Function Key Guide appears, move the JOG button LEFT to select the \Box icon and then press the JOG button. The same PBP source setting menu appears.

Configuring Picture Size

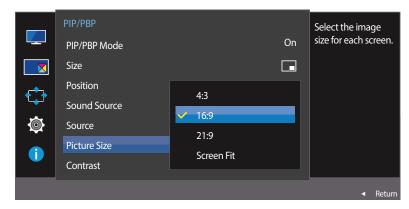
PIP Mode

(available in PIP mode(Size / / / /))

In PC mode



In AV mode



- The displayed image may differ depending on the model.

Select the image size for sub-screen.

- 1 When the Function Key Guide appears, select **W** by moving the JOG button UP. Next, press the JOG button.
- Move to the PIP/PBP controlling the JOG button UP/DOWN and press the JOG button.
- Move the JOG button UP/DOWN to select Picture Size and then press the JOG button.

(available in PIP mode(Size / / / /))

In PC mode

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

In AV mode

- 4:3: Display the picture of the sub-screen with an aspect ratio of 4:3. Suitable for videos and standard broadcasts.
- 16:9: Display the picture of the sub-screen with an aspect ratio of 16:9.
- 21:9: Display the picture of the sub-screen with an aspect ratio of 21:9.
- Screen Fit: Display the picture of the sub-screen with the original aspect ratio without cutting anything off.

The function may not be supported depending on the ports provided with the product.

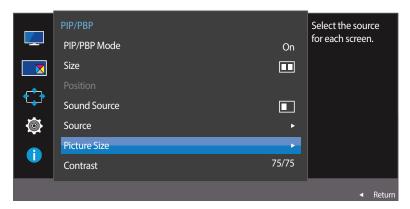
Changing the screen size is available when the following conditions are satisfied.

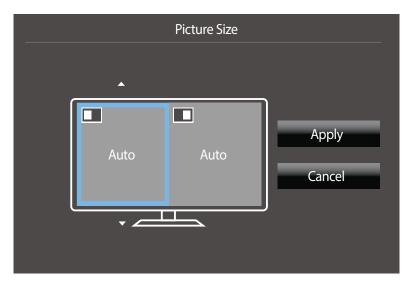
- A digital output device is connected using the HDMI/DP cable.
- The input signal is 480p, 576p, 720p, or 1080p and monitor can display normally (Not every model can support all of these signals.).
- This can only be set when the external input is connected through HDMI/DP and PC/AV Mode is set to AV.
- 4 Move to the desired option controlling the JOG button UP/DOWN and press the JOG button.
- 5 The selected option will be applied.

PBP Mode

(available in PBP mode(Size))

In PC mode





- The displayed image may differ depending on the model.

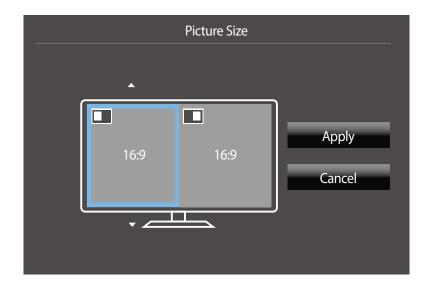
Set the **Picture Size** for each of the divided screens.

- 1 When the Function Key Guide appears, select **W** by moving the JOG button UP. Next, press the JOG button.
- Move to the PIP/PBP controlling the JOG button UP/DOWN and press the JOG button.
- 3 Move the JOG button UP/DOWN to select **Picture Size** and then press the JOG button.

In PC mode

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

In AV mode



⁻ The displayed image may differ depending on the model.

In AV mode

- 4:3: Display the picture of the sub-screen with an aspect ratio of 4:3. Suitable for videos and standard broadcasts.
- 16:9: Display the picture of the sub-screen with an aspect ratio of 16:9.
- 21:9: Display the picture of the sub-screen with an aspect ratio of 21:9.
- Screen Fit: Display the picture of the sub-screen with the original aspect ratio without cutting anything off.
- The function may not be supported depending on the ports provided with the product.
- Changing the screen size is available when the following conditions are satisfied.
 - A digital output device is connected using the HDMI/DP cable.
 - The input signal is 480p, 576p, 720p, or 1080p and monitor can display normally (Not every model can support all of these signals.).
 - This can only be set when the external input is connected through HDMI/DP and PC/AV Mode is set to AV.
- 4 Move to the desired option controlling the JOG button and press the JOG button.
- 5 The selected option will be applied.

Configuring Contrast

PIP Mode

(available in PIP mode(Size / / / /))



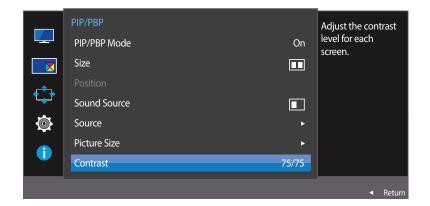
⁻ The displayed image may differ depending on the model.

Adjust the contrast level for sub-screen.

- 1 When the Function Key Guide appears, select **III** by moving the JOG button UP. Next, press the JOG button.
- Move to the PIP/PBP controlling the JOG button UP/DOWN and press the JOG button.
- 3 Move the JOG button UP/DOWN to select **Contrast** and then press the JOG button.
- 4 Adjust the **Contrast** controlling the JOG button LEFT/RIGHT.
- 5 The selected option will be applied.

PBP Mode

(available in PBP mode(Size))





- The displayed image may differ depending on the model.

Adjust the contrast level for each screen.

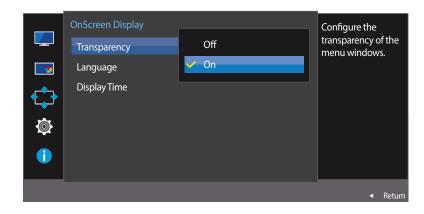
- 1 When the Function Key Guide appears, select **W** by moving the JOG button UP. Next, press the JOG button.
- 2 Move to the PIP/PBP controlling the JOG button UP/DOWN and press the JOG button.
- 3 Move the JOG button UP/DOWN to select Contrast and then press the JOG button.
- 4 Adjust the **Contrast** controlling the JOG button LEFT/RIGHT.
- 5 The selected option will be applied.

Chapter 06 Coordinating OSD

A detailed description of each function is provided. Refer to your product for details.

Transparency

Set the transparency for the menu windows.



⁻ The displayed image may differ depending on the model.

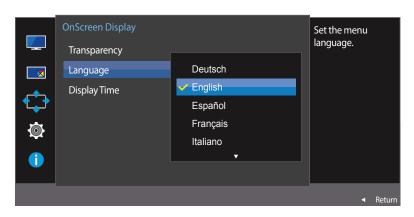
Changing Transparency

- 1 When the Function Key Guide appears, select ${\color{orange} {
 m III}}$ to display the corresponding menu screen.
- 2 Move to OnScreen Display controlling the JOG button UP/DOWN and press the JOG button.
- Move to **Transparency** controlling the JOG button UP/DOWN and press the JOG button.
- Off / On
- f 4 Move to the desired option controlling the JOG button UP/DOWN and press the JOG button.
- 5 The selected option will be applied.

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.



⁻ The displayed image may differ depending on the model.

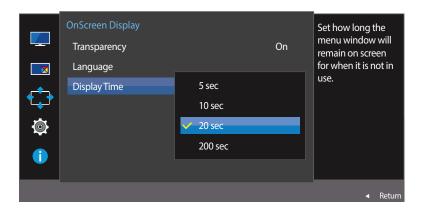
Configuring Language

- 1 When the Function Key Guide appears, select **III** by moving the JOG button UP. Next, press the JOG button.
- Move to **OnScreen Display** controlling the JOG button UP/DOWN and press the JOG button.
- **3** Move to **Language** controlling the JOG button UP/DOWN and press the JOG button.
- 4 Move to the desired option controlling the JOG button UP/DOWN and press the JOG button.
- 5 The selected option will be applied.

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.



⁻ The displayed image may differ depending on the model.

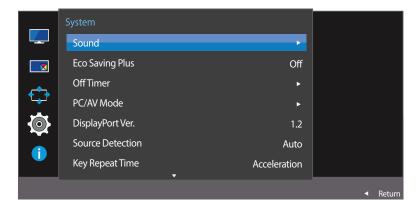
Configuring Display Time

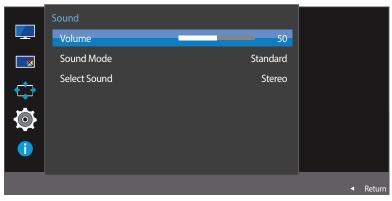
- 1 When the Function Key Guide appears, select ${f III}$ to display the corresponding menu screen.
- 2 Move to **OnScreen Display** controlling the JOG button UP/DOWN and press the JOG button.
- Move to **Display Time** controlling the JOG button UP/DOWN and press the JOG button.
- 5 sec / 10 sec / 20 sec / 200 sec
- 4 Move to the desired option controlling the JOG button UP/DOWN and press the JOG button.
- 5 The selected option will be applied.

Chapter 07 Setup and Reset

A detailed description of each function is provided. Refer to your product for details

Sound



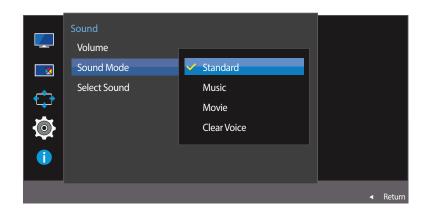


Configuring Volume

- 1 When the Function Key Guide appears, select **III** by moving the JOG button UP. Next, press the JOG button.
- 2 Move to **System** controlling the JOG button UP/DOWN and press the JOG button.
- **3** Move to **Sound** controlling the JOG button UP/DOWN and press the JOG button.
- 4 Adjust the **Volume** controlling the JOG button LEFT/RIGHT.
- 5 The selected option will be applied.

⁻ The displayed image may differ depending on the model.

Configuring Sound Mode



- The displayed image may differ depending on the model.

- 1 When the Function Key Guide appears, select **III** by moving the JOG button UP. Next, press the JOG button.
- Move to **System** controlling the JOG button UP/DOWN and press the JOG button.
- **3** Move to **Sound** controlling the JOG button UP/DOWN and press the JOG button.
- 4 Move to **Sound Mode** controlling the JOG button UP/DOWN and press the JOG button.
- **Standard**: Selects the normal sound mode.
- Music: Emphasizes music over voices.
- Movie: Provides the best sound for movies.
- **Clear Voice**: Emphasizes voices over other sounds.
- Move to the desired option controlling the JOG button UP/DOWN and press the JOG button.
- 6 The selected option will be applied.

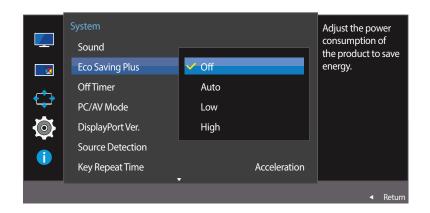
Configuring Select Sound



⁻ The displayed image may differ depending on the model.

- 1 When the Function Key Guide appears, select **IIII** by moving the JOG button UP. Next, press the JOG button.
- Move to **System** controlling the JOG button UP/DOWN and press the JOG button.
- **3** Move to **Sound** controlling the JOG button UP/DOWN and press the JOG button.
- 4 Move to **Select Sound** controlling the JOG button UP/DOWN and press the JOG button.
 - **Stereo**: Enable the sound both from the left and right speakers.
- Left Channel: Set the left and right speakers to play only the left channel of the sound source.
- Right Channel: Set the left and right speakers to play only the right channel of the sound source.
- **5** Move to the desired option controlling the JOG button UP/DOWN and press the JOG button.
- 6 The selected option will be applied.

Eco Saving Plus



⁻ The displayed image may differ depending on the model.

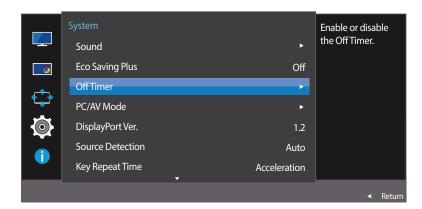
Configuring Eco Saving Plus

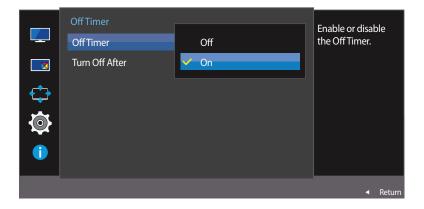
The **Eco Saving Plus** function reduces power consumption by controlling the electric current used by the monitor panel.

- This option is not available when MAGICBright is in Dynamic Contrast mode.
- This menu is not available when **Game Mode** is enabled.
- 1 When the Function Key Guide appears, select **W** by moving the JOG button UP. Next, press the JOG button.
- 2 Move to **System** controlling the JOG button UP/DOWN and press the JOG button.
- Move to **Eco Saving Plus** controlling the JOG button UP/DOWN and press the JOG button.
- Off: Deactivate the Eco Saving Plus function.
- **Auto**: The power consumption will automatically be reduced by about 10% over the current setting. (The reduction of power consumption depends on the customer screen brightness condition.)
- Low: The power consumption will be reduced by 25% over the default setting.
- **High**: The power consumption will be reduced by 50% over the default setting.
- 4 Move to the desired option controlling the JOG button UP/DOWN and press the JOG button.
- 5 The selected option will be applied.

Off Timer

You can set the product to automatically turn off.

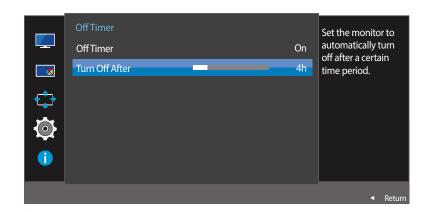




⁻ The displayed image may differ depending on the model.

Configuring Off Timer

- 1 When the Function Key Guide appears, select **III** by moving the JOG button UP. Next, press the JOG button.
- 2 Move to **System** controlling the JOG button UP/DOWN and press the JOG button.
- Move to Off Timer controlling the JOG button UP/DOWN and press the JOG button.
- 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 Move to the desired option controlling the JOG button UP/DOWN and press the JOG button.
- 5 The selected option will be applied.



⁻ The displayed image may differ depending on the model.

Configuring Turn Off After

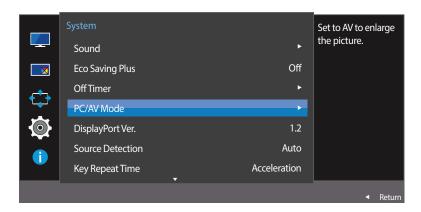
This option is only available when **Off Timer** is set to **On**.

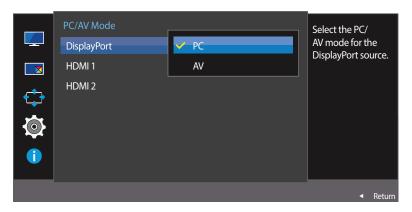
- 1 When the Function Key Guide appears, select **W** by moving the JOG button UP. Next, press the JOG button.
- Move to **System** controlling the JOG button UP/DOWN and press the JOG button.
- Move to Off Timer controlling the JOG button UP/DOWN and press the JOG button.
- 4 Move to Turn Off After controlling the JOG button UP/DOWN and press the JOG button.
- Adjust the **Turn Off After** controlling the JOG button LEFT/RIGHT.
- 6 The selected option will be applied.
- 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.
- For products for the market in some regions, the **Off Timer** is set to automatically activate 4 hours after the product powers on. This is done in accordance with power supply regulations. If you do not want the timer to activate, go to **MENU** \rightarrow **System** and set **Off Timer** to **Off**.

PC/AV Mode

Set PC/AV Mode to AV. The picture size will be enlarged.

This option is useful when you view a movie.





⁻ The displayed image may differ depending on the model.

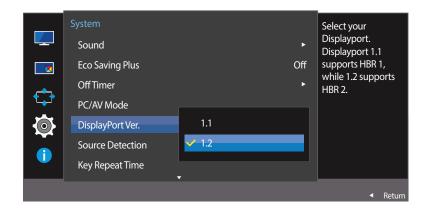
- This feature is only available on the widescreen models that include 16:9, 16:10 and 21:9.
- If the monitor is in **HDMI 1**, **HDMI 2** or **DisplayPort** mode and the screen says **Check Signal Cable** or power saving mode activates, press the JOG button to display the function-button screen and then select the **III** icon. You can select **PC** or **AV**.

Configuring PC/AV Mode

- 1 When the Function Key Guide appears, select **W** by moving the JOG button UP. Next, press the JOG button.
- Move to **System** controlling the JOG button UP/DOWN and press the JOG button.
- 3 Move to PC/AV Mode controlling the JOG button UP/DOWN and press the JOG button.
- 4 Move to the HDMI 1, HDMI 2, DisplayPort controlling the JOG button UP/DOWN and press the JOG button.
 - Set to PC when connected to a PC.
- Set to AV when connected to an AV device.
- Move to the desired option controlling the JOG button UP/DOWN and press the JOG button.
- 6 The selected option will be applied.

DisplayPort Ver.

Select your Displayport. Displayport 1.1 supports High Bit Rate 1, while 1.2 supports High Bit Rate 2.



⁻ The displayed image may differ depending on the model.

- Incorrect settings may cause the screen to go blank. If this occurs, check the device specifications.
- If the monitor is in **HDMI 1**, **HDMI 2** or **DisplayPort** mode and the screen says **Check Signal Cable** or power saving mode activates, press the JOG button to display the function-button screen and then select the III icon. You can select **1.1** or **1.2**.

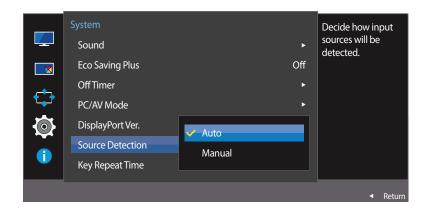
Configuring DisplayPort Ver.

- 1 When the Function Key Guide appears, select **W** by moving the JOG button UP. Next, press the JOG button.
- 2 Move to **System** controlling the JOG button UP/DOWN and press the JOG button.
- 3 Move to **DisplayPort Ver.** controlling the JOG button UP/DOWN and press the JOG button.
- 1.1 / 1.2
- 4 Move to the desired option controlling the JOG button UP/DOWN and press the JOG button.
- 5 The selected option will be applied.

Source Detection

You can activate **Source Detection**.

— Not available when **PIP/PBP Mode** is set to **On**.



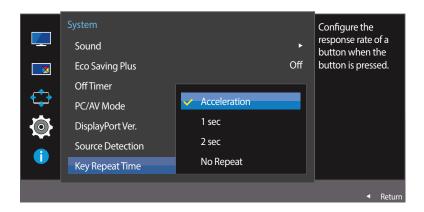
⁻ The displayed image may differ depending on the model.

Configuring Source Detection

- 1 When the Function Key Guide appears, select **III** by moving the JOG button UP. Next, press the JOG button.
- 2 Move to **System** controlling the JOG button UP/DOWN and press the JOG button.
- **3** Move to **Source Detection** controlling the JOG button UP/DOWN and press the JOG button.
- Auto: The input source is automatically recognized.
- Manual: Manually select an input source.
- 4 Move to the desired option controlling the JOG button UP/DOWN and press the JOG button.
- 5 The selected option will be applied.

Key Repeat Time

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



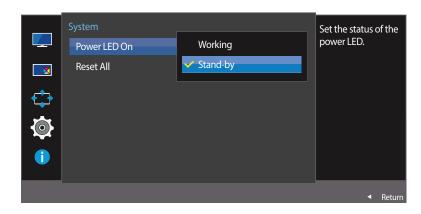
⁻ The displayed image may differ depending on the model.

Configuring Key Repeat Time

- 1 When the Function Key Guide appears, select **III** by moving the JOG button UP. Next, press the JOG button.
- 2 Move to **System** controlling the JOG button UP/DOWN and press the JOG button.
- Move to **Key Repeat Time** controlling the JOG button UP/DOWN and press the JOG button.
- 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 Move to the desired option controlling the JOG button UP/DOWN and press the JOG button.
- 5 The selected option will be applied.

Power LED On

Configure the settings to enable or disable the power LED located at the lower part of the product.



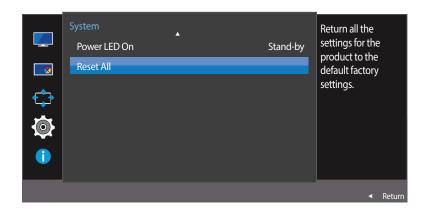
⁻ The displayed image may differ depending on the model.

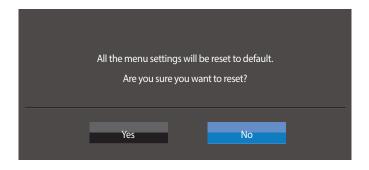
Configuring Power LED On

- 1 When the Function Key Guide appears, select **III** by moving the JOG button UP. Next, press the JOG button.
- 2 Move to **System** controlling the JOG button UP/DOWN and press the JOG button.
- Move to Power LED On controlling the JOG button UP/DOWN and press the JOG button.
- Working: The power LED is on when the product is turned on.
- Stand-by: The power LED is on when the product is turned off.
- 4 Move to the desired option controlling the JOG button UP/DOWN and press the JOG button.
- 5 The selected option will be applied.

Reset All

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





⁻ The displayed image may differ depending on the model.

Initializing Settings (Reset All)

- 1 When the Function Key Guide appears, select **III** by moving the JOG button UP. Next, press the JOG button.
- 2 Move to **System** controlling the JOG button UP/DOWN and press the JOG button.
- 3 Move to Reset All controlling the JOG button UP/DOWN and press the JOG button.
- 4 Move to the desired option controlling the JOG button LEFT/RIGHT and press the JOG button.
- 5 The selected option will be applied.

Chapter 08 Information Menu and Others

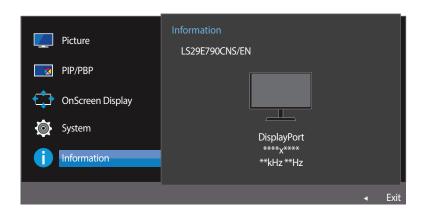
A detailed description of each function is provided. Refer to your product for details.

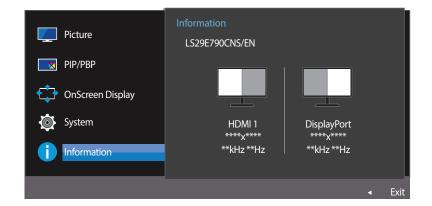
Information

View the current input source, frequency and resolution.

Displaying Information

- 1 When the Function Key Guide appears, select **III** by moving the JOG button UP. Next, press the JOG button.
- Move to **Information** controlling the JOG button UP/DOWN and press the JOG button. The current input source, frequency and resolution will appear.







⁻ The displayed image may differ depending on the model.

Configuring Brightness, Contrast and Sharpness from the Initial Screen

You can adjust **Brightness**, **Contrast** or **Sharpness** by moving the JOG button up or down, if no OSD menu is displayed.



⁻ The displayed image may differ depending on the model.

Brightness

- This menu is not available when MAGICBright is set to Dynamic Contrast mode.
- This menu is not available when **Eco Saving Plus** is enabled.

Contrast

- This menu is not available when MAGICBright is in Cinema or Dynamic Contrast mode.
- This menu is not available when **Game Mode** is enabled.
- This menu is not available when **PIP/PBP Mode** is set to **On** and the **Size** is set to **(PBP Mode)**.

Sharpness

- This menu is not available when MAGICBright is in Cinema or Dynamic Contrast mode.
- This menu is not available when **Game Mode** is enabled.
- Not available when **PIP/PBP Mode** is set to **On**.
- 1 Move the JOG button UP/DOWN to select **Brightness**, **Contrast** or **Sharpness**.
- 2 Move the JOG button LEFT/RIGHT to adjust the **Brightness**, **Contrast** or **Sharpness** setting.

Configuring Volume in the Initial Screen

You can adjust **Volume** by moving the JOG button left or right, if no OSD menu is displayed.



⁻ The displayed image may differ depending on the model.

Volume

- 1 Adjust the **Volume** controlling the JOG button LEFT/RIGHT.
- If the audio quality of a connected input device is poor, the Auto Mute function on the product may mute the sound or cause choppy audio when applying the headphones or speakers. Set the input volume for the input device to at least 20% and control the volume using the volume control (JOG button LEFT/RIGHT) on the product.
 - What is Auto Mute?
 - The function mutes the audio to improve sound effect when there is sound noise or when the input signal is weak, usually due to a problem with the volume of an input device.
- To activate the **Mute** function, access the **Volume** control screen, then use the JOG button to move the focus down.

 To deactivate the **Mute** function, access the **Volume** control screen, then increase or decrease the **Volume**.

Chapter 09 Installing the Software

Easy Setting Box



Easy Setting Box enables users to use the monitor by partitioning multiple sections.

Installing the Software

- 1 Insert the installation CD into the CD-ROM drive.
- 2 Select the **Easy Setting Box** setup program.
 - If the pop-up screen for the software installation does not appear on the main screen, find and double-click the **Easy Setting Box** setup file on the CD-ROM.
- When the Installation Wizard appears, click **Next**.
- 4 Follow the instructions given on the screen to proceed with installation.
 - The software may not work properly if you do not restart the computer after the installation.
 - The **Easy Setting Box** icon may not appear depending on the computer system and the product specifications.
 - If the shortcut icon does not appear, press the F5 key.

Restrictions and Problems with the Installation (Easy Setting Box)

The **Easy Setting Box** installation may be affected by the Graphics Card, Motherboard and the Networking Environment.

System Requirements

OS

- Windows Vista 32Bit/64Bit
- Windows 7 32Bit/64Bit
- Windows 8 32Bit/64Bit
- Windows 8.1 32Bit/64Bit

Hardware

- At least 32MB of memory
- At least 60MB of free space on the hard disk drive

Removing the Software

Click **Start**, select **Settings/Control Panel**, and then double-click **Add or Remove Programs**. Select **Easy Setting Box** from the program list and click the **Add/Delete** button.

Chapter 10 Troubleshooting Guide

Requirements Before Contacting Samsung Customer Service Center

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

Testing the Product

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.

Checking the Resolution and Frequency

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

The displayed resolution may vary depending on the product or PC system settings.

Check the following.

Installation issue (PC mode)

Solutions	
Check the cable connection between the product and PC, and ensure the connectors are locked.	
The blank spaces found on the screen have nothing to do with the product.	
Blank spaces on the screen are caused by the PC or graphics card. To resolve the problem, adjust the screen size in the HDMI or DVI settings for the graphics card.	
If the graphics card settings menu does not have an option to adjust the screen size, update the graphics card driver to the latest version.	
(Please contact the graphics card or computer manufacturer for further details about how to adjust the screen settings.)	

Screen issue

Solutions		
Check that the power cable is connected properly.		
Check that the cable is properly connected to the product.		
Check that the device connected to the product is powered on.		
This message appears when the signal from the graphics card exceeds the maximum resolution or frequency for the product.		
Change the maximum resolution and frequency to suit the product performance, referring to Standard Signal Mode Table (P.81).		
Check the cable connection to the product.		

Issues	Solutions		
The screen is not clear. The screen is blurry.	Remove any accessories (video extension cable, etc.) and try again.		
	Set the resolution and frequency to the recommended level.		
The screen appears unstable and shaky.	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		
There are shadows or ghost images left on the screen.	Table (P.81) in this manual and the Information menu on the product.		
The screen is too bright. The screen is too dark.	Adjust Brightness and Contrast .		
Screen color is inconsistent.	Change the Color settings.		
The colors on the screen have a shadow and are distorted.	Change the Color settings.		
White does not really look white.	Change the Color settings.		
There is no image on the screen and the power LED blinks	The product is operating in power-saving mode.		
every 0.5 to 1 second.	Press any key on the keyboard or move the mouse to return to normal operating mode.		
Text is blurry.	If using a Windows OS (e.g. Windows 7, Windows 8 or Windows 8.1): Go to Control Panel → Fonts → Adjust ClearType text and change Turn on ClearType .		
Video playback is choppy.	Playback of high-definition large video files can be choppy. This may be because the video player is not optimized for the computer resource.		
	Try playing the file on another video player.		

Sound issue

Issues	Solutions	
There is no sound.	Check the connection of the audio cable or adjust the volume.	
	Check the volume.	
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.	
Video is available but there is no sound.	Sound cannot be heard if a HDMI-DVI cable is used to connect the input device.	
	Connect the device using an HDMI cable or a DP cable.	

Source device issue

Issues	Solutions
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.

Q&A

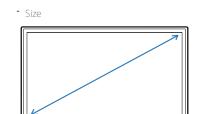
Refer to the user manual for your PC or graphics card for further instructions on adjustment.

Question Answer

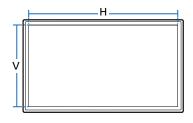
How can I change the frequency?	Set the frequency on your graphics card.		
	 Windows XP: Go to Control Panel → Appearance and Themes → Display → Settings → Advanced → Monitor, and adjust Refresh rate under Monitor settings. 		
	 Windows ME/2000: Go to Control Panel → Display → Settings → Advanced → Monitor, and adjust Refresh rate under Monitor settings. 		
	 Windows Vista: Go to Control Panel → Appearance and Personalization → Personalization → Display Settings → Advanced Settings → Monitor, and adjust Refresh rate under Monitor settings. 		
	 Windows 7: Go to Control Panel → Appearance and Personalization → Display → Screen Resolution → Advanced settings → Monitor, and adjust Refresh rate under Monitor settings. 		
	 Windows 8(Windows 8.1): Go to Settings → Control Panel → Appearance and Personalization → Display → Screen Resolution → Advanced settings → Monitor, and adjust Refresh rate under Monitor settings. 		
How can I change the resolution?	 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. 		
	 Windows 8(Windows 8.1): Go to Settings → Control Panel → Appearance and Personalization → Display → Adjust Resolution, and adjust the resolution. 		

Question	Answer		
How do I set power-saving mode?	 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. 		
	 Windows 8(Windows 8.1): Set power-saving mode in Settings → Control Panel → Appearance and Personalization → Personalize → Screen Saver Settings or BIOS SETUP on the PC. 		

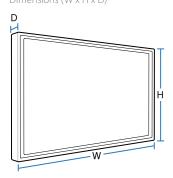
Chapter 11 **Specifications**



- Display area



- Dimensions (W x H x D)



General

Model Name		S29E790C
Panel	Size	29 Class (28.7 Inches / 73 cm)
	Display area	672.768 mm (H) x 283.824 mm (V)
		26.5 Inches (H) x 11.2 Inches (V)
	Pixel Pitch	0.2628 mm (H) x 0.2628 mm (V)
		0.010346 Inches (H) x 0.010346 Inches (V)
Dimensions (W x H x D) /	Without Stand	699.5 x 313.5 x 68.5 mm / 4.70 kg
Weight		27.5 x 12.3 x 2.7 Inches / 10.4 lbs
	With Stand	MIN: 699.5 x 423.7 x 262.6 mm / 7.20 kg
		27.5 x 16.7 x 10.3 Inches / 15.9 lbs
		MAX: 699.5 x 523.7 x 262.6 mm / 7.20 kg
		27.5 x 20.6 x 10.3 Inches / 15.9 lbs
Maximum Pixel Clock		198 MHz (HDMI, DisplayPort)
Power Supply		AC 100 - 240 V ~ (+/- 10 %), 50/60 Hz ± 3 Hz
		Refer to the label at the back of the product as the standard voltage can vary in different countries.
Signal connectors		HDMI, DP Port

Model Name		S29E790C
Environmental conditions	Operating	Temperature: 50°F – 104°F (10°C – 40°C)
		Humidity: 10 % – 80 %, non-condensing
	Storage	Temperature: -4°F – 113°F (-20°C – 45°C)
		Humidity: 5 % – 95 %, non-condensing

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.

(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

This device is a Class B digital apparatus.

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 only functions when the product is connected to a PC with a power-saving function.

PowerSaver	Power On	Power saving mode	Power off (Power button)
Power Indicator	Off	Blinking	On
Power Consumption	30.6 W (Energy Star Test Condition)	Less than 0.5 W	Less than 0.3 W

The displayed power consumption level can vary in different operating conditions or when settings are changed.

ENERGY STAR® is a US registered mark of the United States Environmental Protection Agency. Energy Star power is measured with the test method in the current Energy Star® Standard.

[—] SOG(Sync On Green) is not supported.

To reduce the power consumption to 0, disconnect the power cord. Disconnect the power cable if you will not be using the product for an extended period of time (during vacation, etc.)

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. Using 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

your product.

Standard Signal Mode Table

Model Name		S29E790C
Synchronization	Horizontal Frequency	30 – 81 kHz
	Vertical Frequency	56 – 75 Hz
Resolution	Optimum resolution	2560 x 1080
	Maximum resolution	2560 x 1080

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, 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	+/+

-	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.

Resolution	Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Pixel Clock (MHz)	Sync Polarity (H/V)
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 720	45.000	60.000	74.250	+/+
VESA, 1280 x 800	49.702	59.810	83.500	-/+
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	-/+
VESA, 1600 x 900 RB	60.000	60.000	108.000	+/+
VESA, 1680 x 1050	65.290	59.954	146.250	-/+
VESA, 1920 x 1080	67.500	60.000	148.500	+/+
CEA-861, 2560 x 1080	66.000	60.000	198.000	+/+

Chapter 12 Appendix

Contact SAMSUNG WORLD WIDE

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

NORTH AMERICA

U.S.A	1-800-SAMSUNG (726-7864)	http://www.samsung.com/us/support
CANADA	1-800-SAMSUNG (726-7864)	http://www.samsung.com/ca/support (English) http://www.samsung.com/ca_fr/support (French)

LATIN AMERICA

ARGENTINE	0800-555-SAMSUNG (0800-555-7267)	http://www.samsung.com/ar/support
BOLIVIA	800-10-7260	http://www.samsung.com/cl/support
BRAZIL	0800-124-421 (Demais cidades e regiões) 4004-0000 (Capitais e grandes centros)	http://www.samsung.com/br/support
CHILE	800-SAMSUNG (726-7864)	http://www.samsung.com/cl/support
COLOMBIA	Bogotá 600 12 72 Gratis desde cualquier parte del país 01 8000 112 112 ó desde su celular #SAM(726)	http://www.samsung.com/co/support

LATIN AMERICA

COSTA RICA	0-800-507-7267	http://www.samsung.com/latin/support (Spanish)
	00-800-1-SAMSUNG (726-7864)	http://www.samsung.com/latin_en/support (English)
DOMINICAN REPUBLIC	1-800-751-2676	http://www.samsung.com/latin/support (Spanish)
		http://www.samsung.com/latin_en/support (English)
ECUADOR	1-800-10-7267	http://www.samsung.com/latin/support (Spanish)
	1-800-SAMSUNG (72-6786)	http://www.samsung.com/latin_en/support (English)
EL SALVADOR	800-6225	http://www.samsung.com/latin/support (Spanish)
	800-0726-7864	http://www.samsung.com/latin_en/support (English)
GUATEMALA	1-800-299-0013	http://www.samsung.com/latin/support (Spanish)
	1-800-299-0033	http://www.samsung.com/latin_en/support (English)
HONDURAS	800-2791-9267	http://www.samsung.com/latin/support (Spanish)
	800-2791-9111	http://www.samsung.com/latin_en/support (English)
JAMAICA	1-800-234-7267	http://www.samsung.com/latin_en/support
	1-800-SAMSUNG (726-7864)	(English)
MEXICO	01-800-SAMSUNG (726-7864)	http://www.samsung.com/mx/support
NICARAGUA	001-800-5077267	http://www.samsung.com/latin/support (Spanish)
		http://www.samsung.com/latin_en/support (English)

LATIN AMERICA

PANAMA	800-7267	http://www.samsung.com/latin/support (Spanish)
	800-0101	http://www.samsung.com/latin_en/support (English)
PARAGUAY	009-800-542-0001	http://www.samsung.com/latin/support (Spanish)
		http://www.samsung.com/latin_en/support (English)
PERU	0800-777-08	http://www.samsung.com/pe/support
PUERTO RICO	1-800-682-3180	http://www.samsung.com/latin/support (Spanish)
		http://www.samsung.com/latin_en/support (English)
TRINIDAD & TOBAGO	1-800-SAMSUNG (726-7864)	http://www.samsung.com/latin/support (Spanish)
		http://www.samsung.com/latin_en/support (English)
URUGUAY	000-405-437-33	http://www.samsung.com/latin/support (Spanish)
		http://www.samsung.com/latin_en/support (English)
VENEZUELA	0-800-SAMSUNG (726-7864)	http://www.samsung.com/ve/support

Responsibility for the Pay Service (Cost to Customers)

When the service is requested, in spite of in warranty, we may charge you for a visit from a service technician in the following cases.

Not a product defect

Cleaning of the product, Adjustment, Explanation, Re-installation and etc.

- If a service technician gives instructions on how to use product or simply adjusts options without disassembling product.
- If a defect is caused by external environmental factors (Internet, Antenna, Wired Signal, etc.)
- If a product is reinstalled or devices are connected additionally after installing the purchased product for the first time.
- If a product is reinstalled to move to a different spot or to move to a different house.
- If customer requests instructions on how to use because of another company's product.
- If customer requests instructions on how to use the network or another company's program.
- If customer requests software installation and setup for the product.
- If a service technician removes/cleans dusts or foreign materials inside of the product.
- If customer requests an installation additionally after purchasing a product through homeshopping or online.

A Product damage caused by customer's fault

Product damage caused by customer's mishandling or wrong repair

If a product damage is caused by;

- External impact or drop.
- Use of supplies or separatly sold product unspecified by Samsung.
- Repair from a person besides an engineer of outsourcing service company or partner of Samsung Electronics Co., Ltd.
- Remodeling or repairing the product by customer.
- Using it with incorrect voltage or non-authorised electrical connections.
- Not following the "cautions" in User Manual.

Others

- If product fails by natural disaster. (lightning, fire, earthquake, flood damage, etc)
- If consumable components are all used up. (Battery, Toner, Fluorescent lights, Head, Vibrator, Lamp, Filter, Ribbon, etc.)

If customer requests a service in case the product has no defect, service fee may be charged. So please read User Manual first.

Terminology

OSD (On Screen Display) On screen display (OSD) allows you to customize on-screen settings to optimize the picture quality as required. You can 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.

Dot Pitch____ The product and screen consist of red, green and blue dots. A shorter distance between the dots produces a higher resolution. Dot pitch refers to the distance between the shortest distance between dots of the same color. Dot pitch is measured in millimeters.

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 85000 times per second. 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 1920 x 1080 consists of 1920 horizontal pixels (horizontal resolution) and 1080 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.