SAMSUNG

User guide

S49C95*U S49F95*U

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Before Using the Product

Safety Precautions

Warning

A serious or fatal injury may result if instructions are not followed.

Caution

Personal injury or damage to properties may result if instructions are not followed.

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.		AC voltage: Rated voltage marked with this symbol is AC voltage.
	This symbol indicates that this product has included important literature concerning operation and maintenance.		DC voltage: Rated voltage marked with this symbol is DC voltage.
	Class II product: This symbol indicates that a safety connection to electrical earth (ground) is not required. If this symbol is not present on a product with a mains lead, the product MUST have a reliable connection to protective earth (ground).		Caution. Consult instructions for use: This symbol instructs the user to consult the user manual for further safety related information.

Electricity and Safety

Warning

- Do not use a damaged power cord or plug, or a loose power socket.
- Do not use multiple products with a single power socket.
- Do not handle the power plug with a wet body part.
- Insert the power plug all the way in so it is not loose.
- Connect the power plug to a grounded power socket (type 1 insulated devices only).
- Do not bend or pull the power cord with force. Be careful not to leave the power cord under a heavy object.
- Do not place the power cord or product near heat sources.
- Clean any dust around the pins of the power plug or the power socket with a dry cloth.

Caution

- Do not disconnect the power cord while the product is being used.
- Only use the power cord provided with your product by Samsung. Do not use the power cord with other products.
- 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.
- Hold the plug when disconnecting the power cord from the power socket.

Installation

Warning

- DO NOT PLACE CANDLES, INSECT REPELLANTS OR CIGARETTES ON TOP OF THE PRODUCT. DO NOT INSTALL THE PRODUCT NEAR HEAT SOURCES.
- Discard the plastic packaging that the product is packaged in, immediately after unpacking.
  - Plastic packaging material can cause suffocation if it is handled improperly.
- Do not install the product on an unstable or vibrating surface (insecure shelf, sloped surface, etc.)
  - The product may fall and become damaged 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.
- 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.
- Edible oil (such as soybean oil) may damage or distort the product. Keep the product away from oil pollution. And do not install or use the product in the kitchen or near the kitchen stove.

Caution

- Do not drop the product while moving.
- Do not set down the product on its front.
- 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 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.
- Before assembling the product, place the product down on a flat and stable surface so that the screen is facing downwards.
  - The product is curved. Placing pressure on the product when on a flat surface may damage the product. When the product is on the ground facing up or down, do not put pressure on it.
- In the same series, the color can vary depending on the size.

Operation

Warning

- There is a high voltage inside the product. Never disassemble, repair or modify the product yourself.
  - Contact Samsung Customer Service Center for repairs.
- To move the product, first disconnect all the cables from it, including the power cord.
- If the product generates abnormal sounds, a burning smell or smoke, disconnect the power cord immediately and contact Samsung Customer Service Center.
- Do not hang on to or climb on the product.
  - The product may tip over or fall, causing injury or death.
- 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.
- Do not leave heavy objects or items that children like (toys, sweets, etc.) on top of the product.
  - The product or heavy objects may fall as children try to reach for the toys or sweets resulting in a serious injury.
- During a lightning or thunderstorm, power off the product and remove the power cord.
- Do not drop objects on the product or apply impact.
- Do not move the product by pulling the power cord or any cable.
- If a gas leakage is found, do not touch the product or power plug. Also, ventilate the area immediately.
- Do not lift or move the product by pulling the power cord or any cable.
- Do not use or keep combustible spray or an inflammable substance near the product.
- 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 (through 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.
- 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.
- Do not use liquid fumigators containing chemicals, such as mosquito repellent or air freshener, around the product.
  - If steam comes in contact with the product surface or enters the product, it may cause stains or malfunction.

Caution

- Leaving the screen fixed on a stationary image for an extended period of time may cause afterimage burn-in or defective pixels.
  - Set the screen to power-saving mode or moving-picture screen saver when not 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 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.
- Take a break for at least 5 minutes after using the product for 1 hour.
- Do not touch the screen when the product has been turned on for an extended period of time as it will become hot.
- Exercise caution when storing the remote control batteries and small accessories, so they are not swallowed.
  - If swallowed, consult a physician immediately.
- Exercise caution when adjusting the product angle or stand height.
  - Parts of the human body may become caught and could be 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.

Cleaning

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.)

Do not press the monitor screen. There is a risk of damaging it.

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

Take the following steps when cleaning.

1. Power off the product and PC.
2. Disconnect the power cord from the product.

   — When removing the power cord, hold the plug. Never hold the plug with a wet body part. Otherwise, an electric shock may result.
3. Wipe the product with a clean, soft and dry cloth.

   Wet a soft cloth in water, wing it out well, and then use the cloth to wipe the exterior of the product clean.
   - Do not apply a cleaning agent that contains alcohol, solvent, or surfactant to the product.
   - Do not spray water or detergent directly on the product.
4. Connect the power cord to the product when cleaning is finished.
5. Power on the product and PC.

Correct posture to use the product



Use the product in the correct posture as follows:

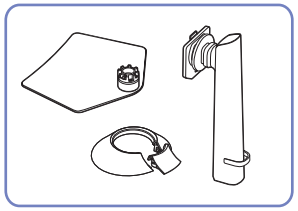
- Straighten your back.
- Allow a distance of 45 to 50cm between your eye and the screen, and look slightly downward at the screen.
- Keep your eyes directly in front of the screen.
- Adjust the angle so light does not reflect on the screen.
- Keep your forearms perpendicular to your upper arms and level 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.
- Do the Eye excercises or blink frequently, then eye fatigue will be relieved.

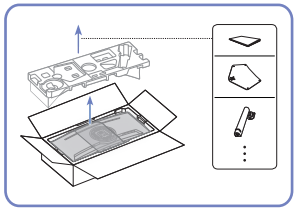
Preparations

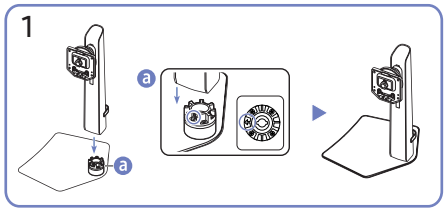
Installation

Attaching the Stand

- Before assembling the product, place the product down on a flat and stable surface so that the screen is facing downwards.
- Disassembly is the reverse order of assembly.
- The color and shape of parts may differ from what is shown. Specifications are subject to change without notice to improve quality.

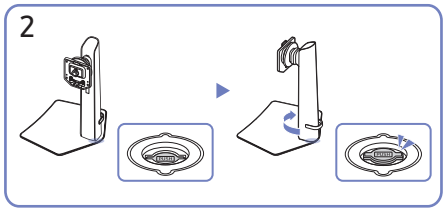






Check the direction of the arrow on the stand base.

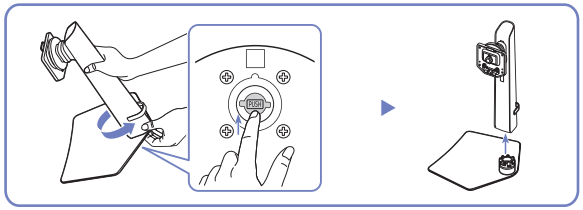
Align the direction of the arrow on the stand base with the front direction of the stand neck, and then insert the stand neck from top to bottom.



Turn the stand neck clockwise to fasten it to the base.

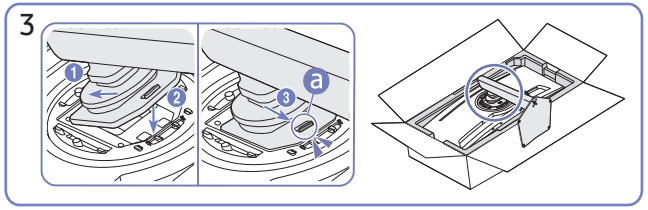
Lift the stand slightly and check that the PUSH button on the bottom of the base protrudes.

Separating the stand neck from the stand base



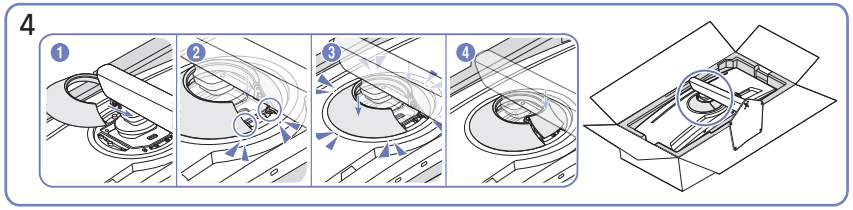
Lift the assembled stand slightly and press the PUSH button on the bottom of the base.

While holding down the PUSH button, turn the stand neck anticlockwise to remove it.

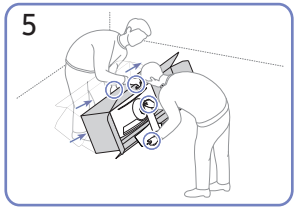


Push the assembled stand into the main body in the direction of the arrow as shown in the figure.

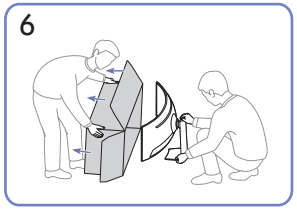
Confirm that the stand is tightly fastened. If ⓐ has not been fully lowered, lower it while holding it with your hand.



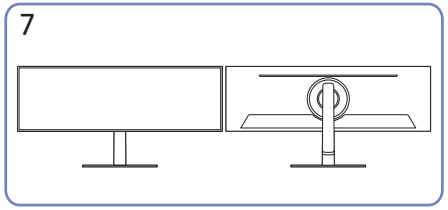
Attach the COVER-REAR TOP to the rear of the monitor, as shown in the figure.



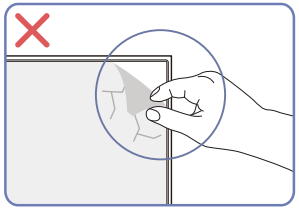
Stand up the monitor as shown in the figure.



Separate the box from the product.



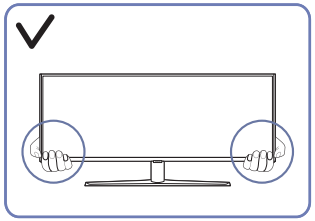
Stand assembly is complete.



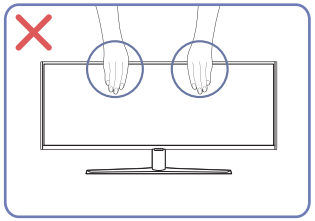
Caution

Do not arbitrarily remove the panel film. If not observed, the warranty service may be restricted.

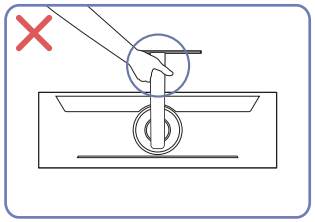
Precautions for moving the product



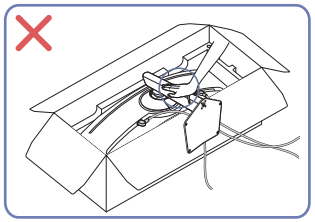
- Hold the lower corners or edges of the product when moving it.



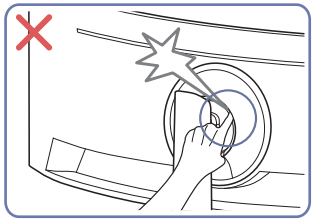
- Do not directly apply pressure on the screen.
- Do not hold the screen when moving the product.



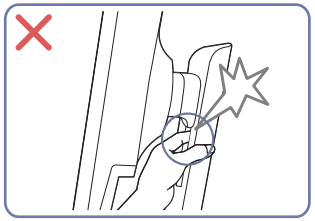
- Do not hold the product upside down only by the stand.



- Do not press down on the product. There is a risk of damaging the product.



- Be careful and ensure that your fingers are not caught.

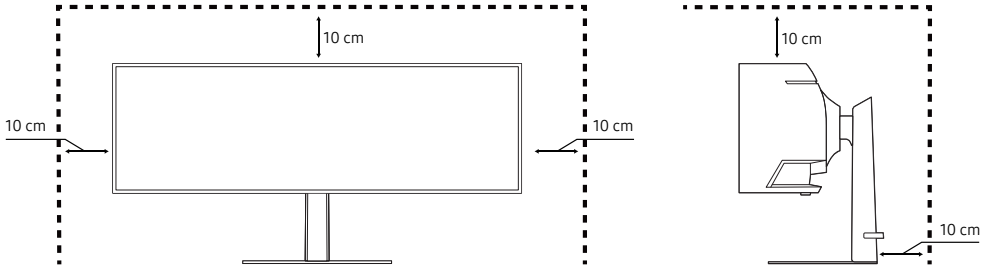


- Be careful and ensure that your fingers are not caught.

Checking the space around the product

Make sure to have enough space for ventilation when placing the product. An internal temperature rise may cause fire and damage the product. Maintain enough space around the product as shown in the diagram when installing the product.

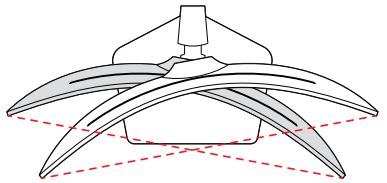
― The exterior may differ depending on the product.



Adjusting the Product Tilt and Height

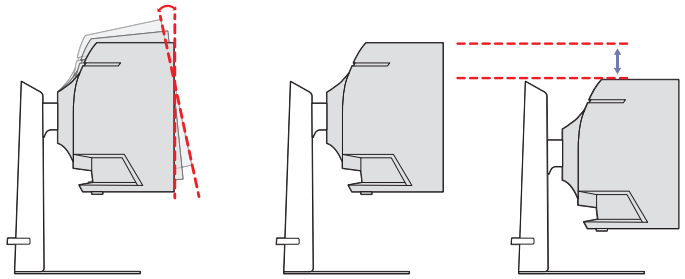
― The color and shape of parts may differ from what is shown. Specifications are subject to change without notice to improve quality.

-15.0° (±3.0°) ~ 15.0° (±3.0°)



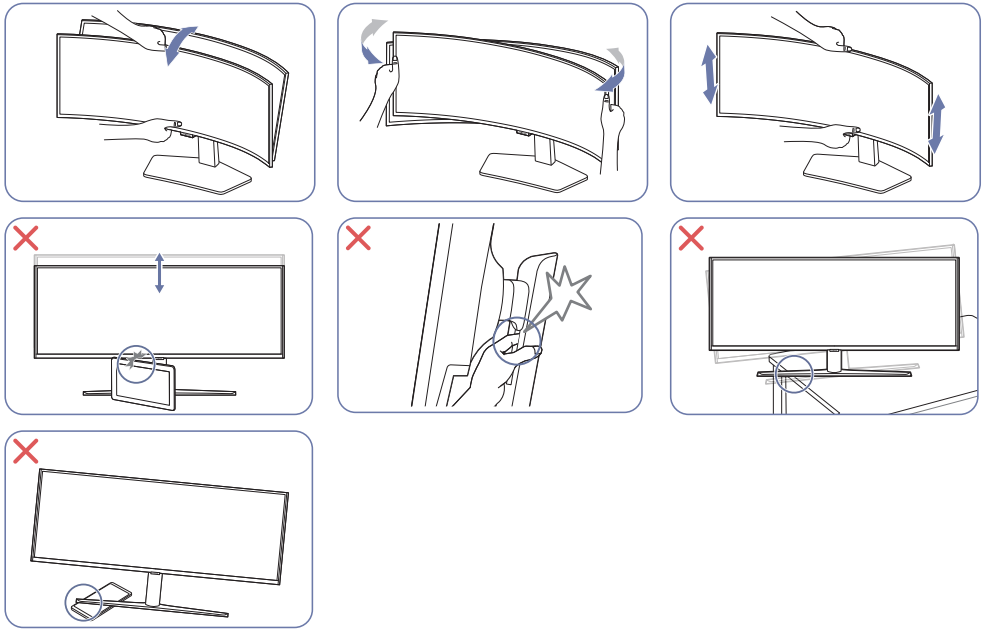
-2.0° (±2.0°) ~ 11.0° (±2.0°)

120.0 mm (±5.0 mm)



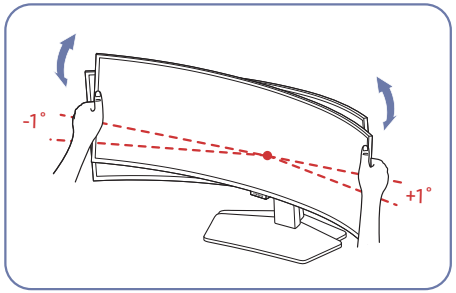
- The product tilt and height can be adjusted.
- Hold the top center of the product and adjust the height carefully.
- When adjusting the stand height, you may hear a noise. This noise is generated because the ball inside the stand slides when the stand height is adjusted. It is a normal noise and not a product malfunction.
- When adjusting the left/right angles of the product, there may be a slight gap in the connection area of the stand base. This is normal and does not indicate a malfunction of the product.

Caution



- Grasp the left and right sides of the monitor and adjust the swivel.
- Grasp the center of the monitor and adjust the height.
- Do not hold the moving area of the stand when adjusting the tilt or height of the product. It may cause injury.
- Do not put an object around the lower part of the product. The product or object may get damaged when adjusting the product height.

After adjusting the product tilt and height, if the screen is not level, take the following actions.



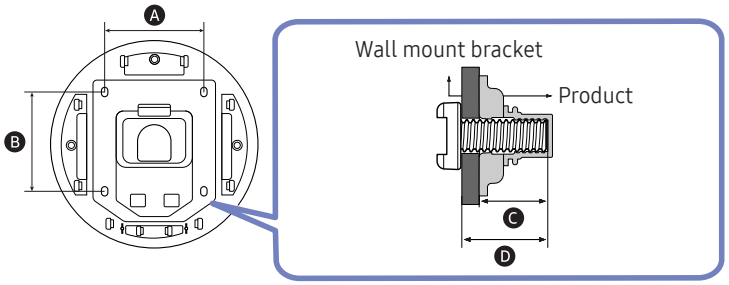
- Hold the bezel at both side edges and adjust the monitor angle until the screen becomes level. (Be careful not to directly hold the LCD display.)
- The monitor angle can be adjusted from -1° to +1°.

Wall Mount Kit Specifications (VESA)

- Using a screw longer than the standard length can damage the internal components of the product.
- The length of screws required for a wall mount that does not comply with the VESA standards may vary depending on the specifications.
- Do not use screws that do not comply with the VESA standards. Do not attach the wall-mount kit or desktop stand using excessive force. The product may get damaged or fall and cause personal injury. Samsung shall not be held liable for any damage or injury caused by using improper screws or attaching the wall-mount kit or desktop stand using excessive force.
- Samsung shall not be held liable for any product damage or personal injury caused by using a wall-mount kit other than the one specified or from an attempt to install the wall-mount kit on your own.
- To mount the product on a wall, ensure you purchase a wall-mount kit that can be installed 10 cm or farther away from the wall.
- Be sure to use a wall-mount kit that complies with the standards.
- To install the monitor using a wall mount, disconnect the stand base from the monitor.
- Do not mount the product at more than a 15 degree tilt.
- Use the power cable provided with the monitor. (The power input connector on the monitor is 'L' shaped.)
- To install the monitor on a stand, use the supplied stand.

  To use on a personally purchased mounting device (e.g. a monitor arm, stand, or wall mount), install the cables with sufficient slack to allow the monitor to tilt or rotate.

  If a cable is pulled or squeezed, the input connector may be damaged, and any damage resulting from this is not covered under warranty.

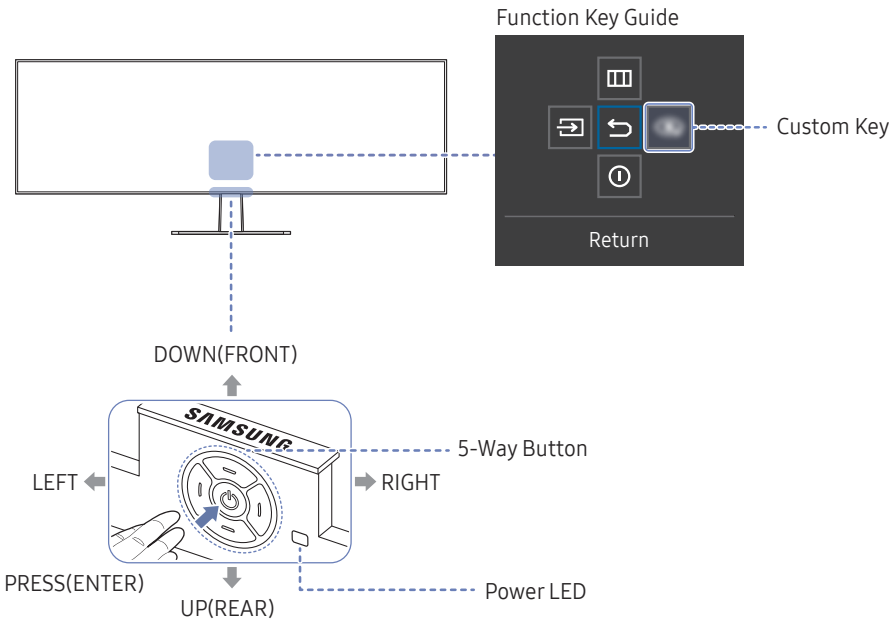


Model name	VESA screw hole specs (A * B) in millimeters	C	D	Standard Screw	Quantity
S49C95*U S49F95*U	100.0 x 100.0	4.0 ~ 9.5 mm	C + Wall mount bracket	M4	4

— Do not install your Wall Mount Kit while your product is turned on. It may result in personal injury due to electric shock.

Control Panel

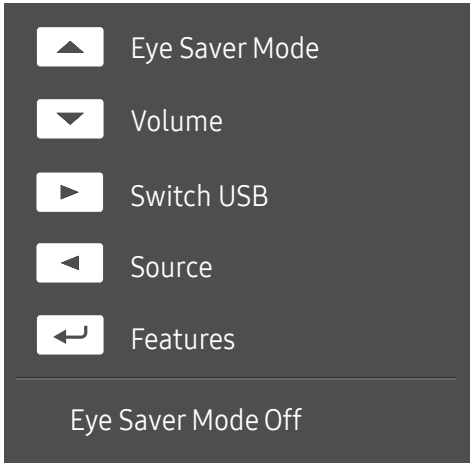
— The color and shape of parts may differ from what is shown. Specifications are subject to change without notice to improve quality.



Parts	Description
5-Way Button	Multi directional button that helps navigate.
Power LED	This LED is power status indicator. — You can select the power LED operation to be enabled or disabled on the menu screen. (☰ → System → Power LED On)
Function Key Guide	To use the Function Key Guide, press the 5-Way Button when the screen is turned on.
Custom Key	• Custom Key is used to directly access the function set in Setup Custom Key. • Setup Custom Key — Go to ☰ → System → Setup Custom Key and change the custom key.
Source	Changes the input source. A message will appear on the top left corner of the screen if the input source has been changed.
Menu	Displays the main on-screen menu. To enable or disable the menu lock, move to the next step (move the 5-Way Button to the right) with the "Menu" displayed, and then push the 5-Way Button to the left for10 seconds until the menu screen disappears. If the menu lock is enabled, Brightness, Contrast, Eye Saver Mode, Volume and Information are available.
Power Off	Turns off the product.
Return	Exits from the menu page.

Direct Key Guide

— On the Direct Key Guide screen, the following menu options appear when the product screen is switched on or the input source is changed.



— The Direct Key Guide screen shows if Eye Saver Mode is enabled. (Off, Low, High)

— When the product not displays the OSD menu, the 5-Way Button could be used as below.

- UP: Adjust Brightness, Contrast, Eye Saver Mode.
- DOWN: Adjust Volume, Mute.
- RIGHT: Switch the USB source.
- LEFT: Adjust Source.
- PRESS(ENTER): Display Function Key Guide.

Connecting and Using a Source Device

Read below before connecting the product.

1 Before connecting the product, check the shapes of both ports of the supplied signal cables and the shapes and locations of the ports on the product and external device.

2 Before connecting the product, make sure you remove the power cords from both the product and the external device to prevent damage to the product due to a short circuit or over current.

3 After all signal cables have been properly connected, connect the power cords back to the product and the external device.

4 After connecting is completed, make sure you read the manuals to acquaint yourself with the product functions, precautions and other information required to use the product properly.

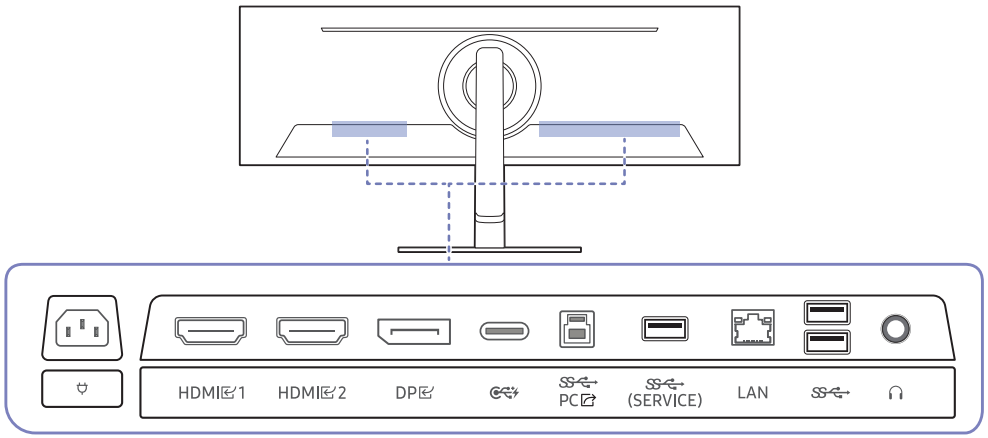
5 To use Max specifications of our products, check the support specifications of the cable version you use.

— Connecting parts may differ in different products.

— Provided ports may vary depending on the product.

Ports

— The functions available may vary depending on the product model. The color and shape of parts may differ from what is shown. Specifications are subject to change without notice to improve quality. Refer to the actual product.



Port	Description
HDMI 1 HDMI 2	Connects to a source device using an HDMI cable or HDMI-DVI cable.
DP	Connects to a PC using a DP cable.
	• Connects to a source device using a USB Type-C cable. • The USB Type-C port can be connected to a notebook or mobile device for charging.
PC	Connects to a PC using a USB cable. — This port can only connect to a PC.
(SERVICE)	• Connect to a USB device. • Used to update the software.
LAN	If a PC is connected to the monitor using a USB Type-C cable, connect a LAN cable to this port to connect the PC to the network. — Use Cat7(*STP Type) cable for the connection. (10/100 Mbps) *Shielded Twisted Pair — The PC, not the product, can have a network connection with this port.
	Connect to a USB device.
	Connect to an audio output device such as headphones.
	Connect the power cord for product.

Connecting and Using a PC

Select a connection method suitable for your PC.

Connection Using the HDMI Cable



- It is recommended to use the HDMI cable provided as components. If not provided, be sure to use authorized cable for HDMI cable connections. If you use a unauthorized HDMI cable, the image quality may be degrade.

Connection Using an HDMI-DVI Cable



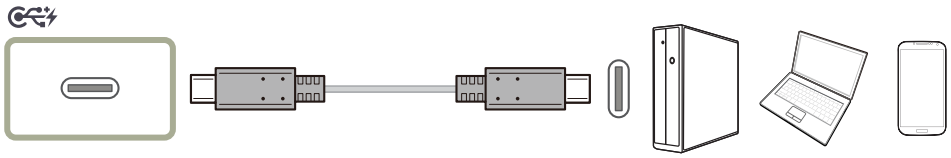
- The audio function is not supported if the source device is connected using the HDMI-DVI cable.
- The optimum resolution may not be available with an HDMI-DVI cable.
- S49C95*U models only.

Connection Using an DP Cable



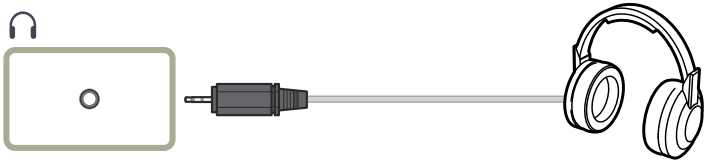
- It is recommended to use the DP cable provided as an accessory. If not provided, be sure to use a DP cable of 1.5 m or below.
- Use a VESA certified DP1.2 cable or higher and its gender.

Connection Using the USB Type-C Cable



- Check the bandwidth of your USB Type-C cable whether it is available. The output may not be adequate depending on the cable specification and condition.
- Do not quickly connect or disconnect the connector and power cord, because it requires some time.
- Due to the compatibility issue, the function may not be available when any Thunderbolt device is connected using a cable.
- When charging with a USB Type-C cable, malfunction may occur depending on the device type. In this case, use the provided charger or consult the manufacturer of the device.

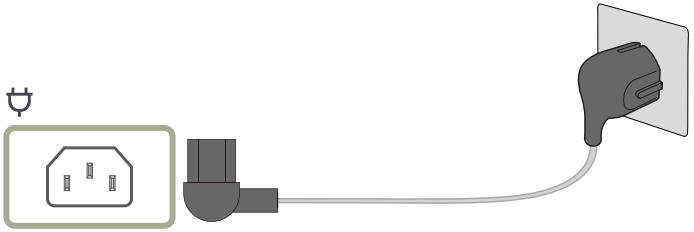
Connecting to headphones or earphones



— Use headphones or earphones when activating sound with an HDMI-HDMI or DP cable.

— The headphones or earphones jack supports only the 3 conductor tip-ring-sleeve (TRS) type.

Connecting the Power



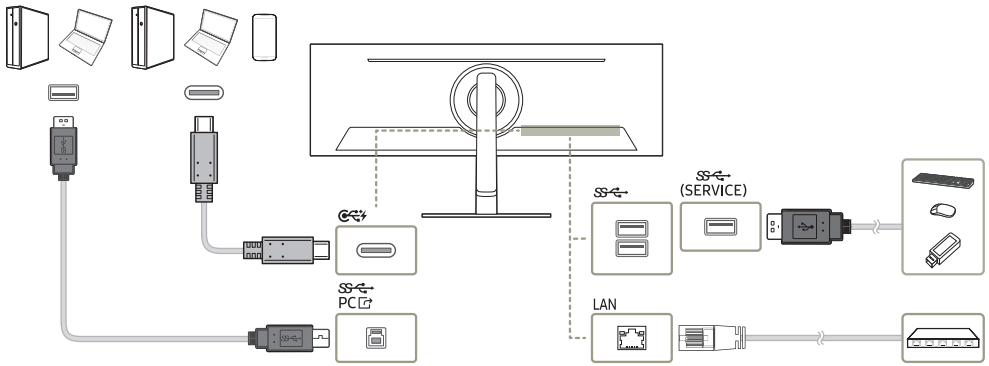
To use the product, connect the power cord to a power outlet and the ⏚ port on the product.

— The input voltage is switched automatically.

Connecting the Product to a PC as a USB HUB

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

— Port names and the number of ports may differ, depending on the model.



Use the product as a hub to connect the PC to a variety of devices or networks.

— With some PCs, network connection through LAN may not be supported.

— To detect and start a USB device faster, connect the USB device to the SS (SERVICE), SS port on the product. The read/write rate will be affected by the USB device and your PC.

— For USB-related problems caused by OS, drive programs or software, please contact relevant suppliers.

— With the launch of various USB devices on the market, we cannot guarantee that our products are matched with all USB devices.

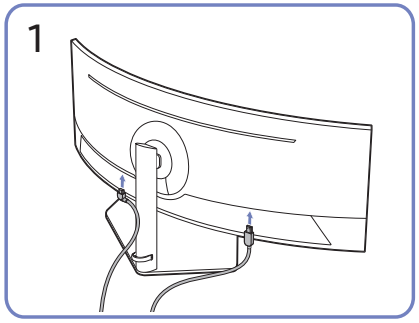
— For an external mass-storage HDD requiring external power supply, be sure to connect it to a power source.

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

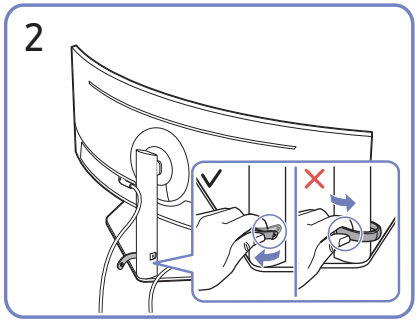
— Some products do not follow the USB standard, and it may cause a malfunction of the device.

— It is recommended that users use USB devices of 5V/0.5A or lower.

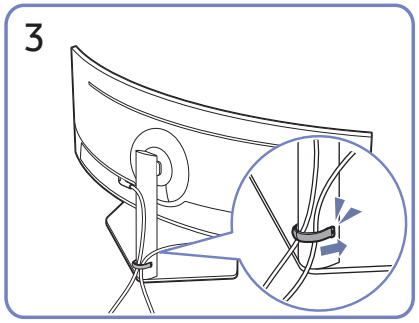
Tidying Up the Cables



Connect the corresponding cables.



Pull the right side of the HOLDER-STAND CABLE to remove from the stand. The left side of the HOLDER-STAND CABLE can be damaged when pulled forcibly.



Put both cables in the cable holder on the stand (HOLDER-STAND CABLE) to organize the cables, as shown in the figure.

Assembly is complete.

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 information message and change the resolution on your PC to the optimum setting.

— 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.

— If you want to set the optimum resolution for your computer. Please refer to (Q&A) → "How can I change the resolution?"

List of graphic cards supporting HDR 400

HDR 400 is accessible only on Windows 10 systems equipped with graphic cards that support Play Ready 3.0 Digital Rights Management (for protected HDR content). Use graphic cards listed below for HDR 400.

- NVIDIA GeForce 1000 series or higher
- AMD Radeon™ RX 400 series or higher
- Intel UHD Graphics 600 series or higher

— Graphic cards that support hardware-accelerated 10-bit video decoding for HDR video codecs are recommended.

Menu

Function Key Guide → 

— The functions available may vary depending on the product model. The color and shape of parts may differ from what is shown. Specifications are subject to change without notice to improve quality.

Picture

2nd	Description
Picture Mode	This menu provides an optimum picture quality suitable for the environment where the product will be used. — This menu is not available when Eye Saver Mode is enabled. — This menu is not available when PIP/PBP Mode is enabled. (S49C95*U models only.) In PC mode • Entertain: Obtain the clear and vivid picture quality with color enhancement. • Graphic: Obtain the quality of Image contents without color enhancement. • Eco: This screen is provided to save energy. • Game Standard: Obtain a picture quality suitable for playing games.

2nd	Description
Picture Mode	• RPG: This mode is optimized for 3D graphics and instant messaging on the RPG (Role Playing Game) game screen. • RTS: Increase the color temperature and contrast ratio to improve visibility of the RTS (Real-Time Strategy) screen and minimap. • FPS: Increase the brightness of darker areas of the FPS (First-Person Shooter) game screen. This mode increases visibility of your enemies during a FPS (First-Person Shooter) game. • Sports: Obtain the brightness and sharpness of monitors suitable for enjoying sports contents. • Original: Obtain the pure picture quality of contents without color enhancement. • Custom: Customize the contrast and brightness as required.

2nd	Description
Picture Mode	In AV mode When the external input is connected through HDMI/DP/USB Type-C and PC/AV Mode is set to AV, Picture Mode has eleven automatic picture settings (Dynamic, Standard, Eco, Movie, Game Standard, FPS, RTS, RPG, Sports, Original and Custom) that are preset at the factory. You can activate either Dynamic, Standard, Eco, Movie, Game Standard, FPS, RTS, RPG, Sports, Original 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. • Eco: This screen is provided to save energy. • Movie: Select this mode when the surroundings are dark. This will save power and reduce eye fatigue. • Game Standard: Obtain a picture quality suitable for playing games. • RPG: This mode is optimized for 3D graphics and instant messaging on the RPG (Role Playing Game) game screen.

2nd	Description
Picture Mode	• RTS: Increase the color temperature and contrast ratio to improve visibility of the RTS (Real-Time Strategy) screen and minimap. • FPS: Increase the brightness of darker areas of the FPS (First-Person Shooter) game screen. This mode increases visibility of your enemies during a FPS (First-Person Shooter) game. • Sports: Obtain the brightness and sharpness of monitors suitable for enjoying sports contents. • Original: Obtain the pure picture quality of contents without color enhancement. • Custom: Select this mode when you want to adjust the image according to your preferences. — This function may not be supported depending on the model. — The input source is 480p, 576p, 720p or 1080p and product can display normally (Not every model can support all of these signals.).

2nd	Description
Brightness	You can adjust the general brightness of the picture. (Range: 0~50) A higher value will make the picture appear brighter. — This menu is not available when Eye Saver Mode is enabled.
Contrast	Adjust the contrast between the objects and background. (Range: 0~50) A higher value will increase the contrast to make the object appear clearer. — This menu is not available when PIP/PBP Mode is enabled. (S49C95*U models only.)
Sharpness	Make the outline of objects more clear or blurry. (Range: 0~20) A higher value will make the outline of objects clearer. — This menu is not available when PIP/PBP Mode is enabled. (S49C95*U models only.)
Color	Adjust the color saturation levels. Color saturation intensifies as the value nears 50. — This menu is not available when Eye Saver Mode is enabled. — This menu is not available when PIP/PBP Mode is enabled. (S49C95*U models only.)
Tint (G/R)	Adjust the ratio of green to red tint levels. Increasing values intensifies the saturation of red and green colors. — This menu is not available when PIP/PBP Mode is enabled.

2nd	Description
Local Dimming	Control the brightness of individual areas on the screen to maximize contrast automatically. — This menu is not available when PIP/PBP Mode is enabled. (S49C95*U models only.)
Contrast Enhancer	Automatically balance the contrast to prevent excessive differences between bright and dark areas. • Off / Low / High — This menu is not available when Eye Saver Mode is enabled. — This menu is not available when PIP/PBP Mode is enabled. (S49C95*U models only.)
HDR Tone Mapping	Automatically adjusts the brightness with tone mapping processing according to HDR content information. — This menu is not available when Eye Saver Mode is enabled. — This menu is not available when PIP/PBP Mode is enabled.
Color Tone	Select a color tone that best suits your viewing needs. — This menu is not available when Eye Saver Mode is enabled. — This menu is not available when PIP/PBP Mode is enabled. (S49C95*U models only.)

2nd	Description
White Balance	Adjust the color temperature of the picture so that white objects appear brighter. — This menu is not available when Eye Saver Mode is enabled. — This menu is not available when PIP/PBP Mode is enabled. (S49C95*U models only.)
	Red Adjust the red saturation level. Values closer to 50 mean greater intensity for the color.
	Green Adjust the green saturation level. Values closer to 50 mean greater intensity for the color.
	Blue Adjust the blue saturation level. Values closer to 50 mean greater intensity for the color.
	Reset Restore the white balance settings to the default values.
Gamma	Adjust the middle level of luminance. — This menu is not available when Eye Saver Mode is enabled. — This menu is not available when PIP/PBP Mode is enabled. (S49C95*U models only.)
Shadow Detail	Adjust the brightness of dark images. Black detail increases as the value nears 5. — This menu is not available when Eye Saver Mode is enabled. — This menu is not available when PIP/PBP Mode is enabled. (S49C95*U models only.)

2nd	Description
Color Space	Configure color space settings to refine the spectrum of colors on your screen. — This menu is not available when Eye Saver Mode is enabled. — This menu is not available when PIP/PBP Mode is enabled. (S49C95*U models only.)
Dynamic Brightness	Automatically adjust the Brightness to provide the best possible screen contrast under the current conditions. — This menu is not available when Eye Saver Mode is enabled. — This menu is not available when PIP/PBP Mode is enabled. — This menu is disabled when the Local Dimming feature is set to Low / Standard / High.
Black Level	Optimize HDMI picture brightness and contrast by adjusting the black level of the video signal. In such case, Black Level can be used to adjust the image quality. • Auto / Normal / Low — This function is only available in HDMI mode. — This menu is not available when PIP/PBP Mode is enabled. — Black Level may not be compatible with some source devices. — The Black Level feature is only activated at a certain AV resolution, such as 480p @ 60 Hz, 576p @ 50 Hz, 720p @ 60 Hz and 1080p @ 60 Hz. — This menu is not available when Eye Saver Mode is enabled.
Response Time	Accelerate the panel response rate to make video appear more vivid and natural. — Use Standard mode when not playing a video or game. — This menu is not available when PIP/PBP Mode is enabled.

2nd	Description
Screen Ratio	Choose the size and aspect ratio of the picture displayed on screen. — This menu is not available when PIP/PBP Mode is enabled. In PC mode • Auto / Wide In AV mode • 4:3 / 16:9 / 21:9 / 32:9 / Screen Fit — The function may not be supported depending on the ports provided with the product. — Changing the Screen Ratio is available when the following conditions are satisfied. — The input source is 480p, 576p, 720p or 1080p and product 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/USB Type-C and PC/AV Mode is set to AV.
Screen Adjustment	Adjust the position of the screen or increase the picture quality. • H-Position: Move the screen to the left or right. • V-Position: Move the screen up or down. — Connection Using the HDMI, DP, USB Type-C Cable — This menu is only available when Screen Ratio is set to Screen Fit in AV Mode. When a 480p, 576p, 720p or 1080p signal is input in AV mode and the product can display normally, select Screen Fit to adjust horizontal position and vertical position in 0-6 levels. — This menu is not available when Eye Saver Mode is enabled. — This menu is not available when PIP/PBP Mode is enabled.
Picture Reset	Restore all picture settings to the factory default.

Eye Care

2nd	Description
Adaptive Picture	Optimizes brightness and provides the best picture quality in real time, based on the lighting condition and the content you're viewing.
Minimum Brightness	Set the minimum brightness for the monitor screen. This function only works if its value is lower than the value set in the Picture menu's Backlight setting.
Eye Saver Mode	Set to an optimum picture quality suitable for eye relaxation. 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.

PIP/PBP

2nd	Description
PIP/PBP Mode	Turn PIP/PBP Mode on or off.
Mode Type	Select the size and aspect ratio of the sub-screen. •  — This option is available when Mode Type is set to PIP.
Screen Size	Select sub-screen size. •  — This option is available when Mode Type is set to PIP.
Screen Position	Select the position of the sub-screen from the available options. •  — This option is available when Mode Type is set to PIP.
Source	Select the source for each screen.
Sound Source	Set which screen you want to hear the sound for. In PIP mode •  In PBP mode • 
Switch USB	Switch the USB source while in the PIP/PBP mode.

2nd	Description
Screen Ratio	Choose the size and aspect ratio of the picture displayed on screen. In PC mode • Auto / Wide In AV mode • 4:3 / 16:9 / 21:9 / Screen Fit — The function may not be supported depending on the ports provided with the product. — Changing the Screen Ratio is available when the following conditions are satisfied. — The input source is 480p, 576p, 720p or 1080p and product 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/USB Type-C and PC/AV Mode is set to AV.
Contrast	Adjust the contrast level. Values closer to 50 mean a bigger light/dark contrast. — S49C95*U models only.

OnScreen Display

2nd	Description
Transparency	Set the transparency for the menu windows.
Position	• H-Position: Move the menu position to the left or right. • V-Position: Move the menu position up or down.
Language	Set the menu language. — A change to the language setting will only be applied to the onscreen menu display.
Display Time	Set how long the menu window will remain on screen for when it is not in use.
Display Time Info	Show the time left until the menu window disappears. Menu display time can be set in the Menu settings.
Enlarge	Enlarge the size of the Menu area.

System

2nd	Description
Save Energy	Reduce power consumption by adjusting brightness settings.
Volume	Change the Volume setting.
USB Source Setup	Set up a USB port assigned to the video source.
Off Timer Plus	Off Timer • Off Timer: Turn on Off Timer mode. • Turn Off After: The off timer can be set within a range of 1 to 23 hours. The product will automatically power off after the specified number of hours. – This option is only available when Off Timer is set to On. — 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 → System → Off Timer Plus and set Off Timer to Off. Eco Timer • Eco Timer: Turn on Eco Timer mode. • Eco Off After: The Eco Timer can be set between 10 and 180 minutes. The product will automatically power off after the specified time has elapsed. – This option is only available when Eco Timer is set to On.

2nd	Description
PC/AV Mode	Set PC/AV Mode to AV. The picture size will be enlarged. This option is useful when you view a movie. — Products with a display area of 16:9 or 16:10 are only supported.
DisplayPort Ver.	Select the DisplayPort version to use. — Incorrect settings may cause the screen to go blank. If this occurs, check the device specifications.
Input Port Ver.	Select an HDMI version. — The supportable device and resolution may differ depending on its version. — When the version is changed, the screen may blink. — If you set the HDMI Mode to 1.4, some high resolutions may not be supported because of bandwidth limitation of the HDMI 1.4 protocol. — When the setting is not appropriate, a blank screen may appear. In this case, check the specifications of the device.
Auto Source Switch+	Auto Source Switch+ By activating, a new connected source is displayed automatically. — This function may not be supported depending on the model or geographical area. USB-C Switch When there is no signal, the display automatically switches to the new device connected to the USB-C port.

2nd	Description
Key Repeat Time	Control the response rate of a button when the button is pressed. Acceleration, 1 sec or 2 sec can be selected. If No Repeat is selected, a command responds only once when a button is pressed.
Power LED On	Configure the settings to enable or disable the power LED located at the lower part of the product. • 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.
Accessibility	Configures the accessibility options. • SeeColors Mode: Allows users with color blindness to experience rich colors. Enable this feature to customize colors to suit your viewing conditions, to experience richer colors on the screen. — Some menus are not available when SeeColors Mode is in use. — This function may not be supported depending on the model. • High Contrast: Increase the contrast between the text and background for the Settings menu. • Grayscale: Change the color sense of the screen to black-and white tone. • Color Inversion: Invert the colors of the Settings menu. White becomes black, black becomes white, and other colors are inverted according to RGB color values.

2nd	Description
USB-C Preference	Choose between high resolution and data transfer speed. If you change the settings during data transfer, the transfer may be canceled or data corruption may occur. • High Resolution: If High Resolution is selected, 5120 x 1440 @ 60 Hz is available for input of USB-C. The performance for LAN and SS ports may be limited. The SS port operates as USB 2.0. • High-Speed Data: If High-Speed Data is selected, 5120 x 1440 @ 60 Hz is not available for input of USB-C. The SS port operates as USB 3.0.
Setup Custom Key	Set the custom key so that your chosen function can be set up directly.
Best Brightness	Optimizes brightness in real time, based on your lighting environment.
Minimum Brightness	Set the minimum brightness for the monitor screen. This function only works if its value is lower than the value set in the Picture menu's Backlight setting.
Max. Power Saving	Set to on, Ethernet is turned off to save power. Set to off, the USB-C connected PC or laptop can be woken by LAN.

Support

2nd	Description
Self Diagnosis	Perform this test when you experience a problem with your monitor's picture. — Never turn off the power nor change the input source during self diagnosis. If possible, try not to interrupt testing.
Software Update	Update software using an update file on a USB device. 1 Save the update file (in .bin or .img format) that you downloaded from the Samsung website (http://www.samsung.com) to a USB storage device. 2 Connect the USB device to the SS (SERVICE) port on the monitor. Select ☰ → Support → Software Update. 3 Follow the instructions on the screen to proceed with update. 4 Your product will turn itself off and on again automatically after completing update, and then turn off your product. 5 Remove the power cord from the power outlet and then reconnect the cord after turning off. — To perform software update by using a USB device, first format the USB device to FAT32. — When updating by a USB device, be sure to use the device whose version of USB 3.0 or lower. — When performing update, make sure that only one BIN or IMG file (.bin or .img) is saved in the root directory.

2nd	Description
Software Update	— Upon updates, save only either the .bin or .image file, downloaded from the Samsung website, to the root directory. — If the No USB devices detected. Please check and try again. message is displayed, this is probably due to the following reasons. — A USB device is not connected to the (SERVICE) port. — The files in the connected USB device are not compatible formats. — There are no valid update files found in the connected USB device. (There are no update files saved in the memory or the file names are incorrect.) — The update will not start if the downloaded software does not match the software installed on the monitor. To check the software for consistency, select → Support → Information. — Do not turn off the product until the update is complete. And prevent the updating from any interruption as far as possible. In general, the product returns to the previous version if an update is interrupted. — It may change the screen color or blink during USB update, but it is not a monitor problem. Since S/W update is performed normally, please wait until the update is finished.
Information	View the current software information. Refer to the actual monitor screen.
Reset All	Return all the settings for the product to the default factory settings.

Installing the Software

Easy Setting Box



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

To install the latest version of **Easy Setting Box**, download it from the Samsung website.

(http://www.samsung.com)

— The software may not work properly if you do not restart the PC after the installation.

— The **Easy Setting Box** icon may not appear depending on the PC system and the product specifications.

— If the shortcut icon does not appear, press the F5 key.

Restrictions and Problems with the Installation

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

System Requirements

OS	Hardware
• Windows 7 32Bit/64Bit • Windows 8 32Bit/64Bit • Windows 8.1 32Bit/64Bit • Windows 10 32Bit/64Bit • Windows 11 32Bit/64Bit	• At least 32MB of memory • At least 60MB of free space on the hard disk drive

Driver Installation

To install the latest version of the product driver, download it from the Samsung website.

(http://www.samsung.com)

— You can set the optimum resolution and frequency for this product by installing the corresponding drivers.

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.

Product diagnosis (Screen issue)

If a problem occurs with the product screen, run Self Diagnosis to check that the product is working properly.

Checking the Resolution and Frequency

If a resolution that is not supported (see the Standard Signal Mode Table) is selected, the Not Optimum Mode message may appear for a short time or the screen may not be displayed properly.

— The displayed resolution may vary, depending on the PC system settings and cables.

Check the following.

Caution

When the product makes popping (cracking) sound.

The sound may be caused by contraction or expansion from temperature change of external components or internal circuit of the product.

This is NOT a product failure and does not affect the life of the product.

Installation issue

Blank spaces are found on all four sides of the screen when an HDMI or HDMI-DVI cable is connected to the product and PC.

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 PC manufacturer for further details about how to adjust the screen settings.)

Screen issue

The power LED is off. The screen will not turn on.

Check that the power cord is connected properly.

If a problem occurs with the product screen, run Self Diagnosis to check that the product is working properly.

The message Check the cable connection and the settings of the source device. appears.

Check that the cable is properly connected to the product.

Check that the device connected to the product is powered on.

Check the PC/AV Mode status. (☰ → System → PC/AV Mode → DisplayPort, HDMI, USB Type-C → PC or AV.)

Set the connected HDMI or DisplayPort version. (HDMI: ☰ → System → Input Port Ver. → 1.4 or 2.0, DisplayPort: ☰ → System → DisplayPort Ver. → 1.1 or 1.2↑)

Not Optimum Mode is displayed.

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.38).

The images on the screen look distorted.

Check the cable connection to the product.

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. There are shadows or ghost images left on the screen.

Check that the resolution and frequency for the PC are within the range of resolution and frequency compatible with the product. Next, if required, change the settings, referring to Standard Signal Mode Table (P.38) in this manual and the Information menu on the product.

Change the Response Time in the Display OSD to Faster or Standard depending on your application and usage.

— Available functions may differ depending on the model.

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 every 0.5 to 1 second.

Check the cable connection between the product and PC, and ensure the connectors are locked.

Press any key on the keyboard or move the mouse to return to normal operating mode.

The product is operating in power-saving mode.

Text is blurry.

If using a Windows OS (e.g. Windows 7, Windows 8, Windows 8.1 or Windows 10): 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 PC resource.

Try playing the file on another video player.

When setting the PIP Screen Size, the screen does not fit the PIP size.

Depending on the graphic card or graphic card driver, it may not be automatically set to the Optimum resolution. If you set it properly for the first time, there will be no problems thereafter.

Sound issue

There is no sound.

Re-check the condition of the connected headphone or earphone or adjust the volume.

Check the volume.

Check whether the volume of the product or the source device is set to mute.

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.

Video is available but there is no sound.

Sound cannot be heard if an HDMI-DVI cable or DVI cable is used to connect the input device.

Connect the device using an HDMI cable or a DP cable.

Source device issue

A beeping sound is heard when my PC is booting.

If a beeping sound is heard when your PC is booting, have your PC serviced.

Q & A

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

How can I change the frequency?

Set the frequency on your graphics card.

- Windows 7: Go to **Control Panel** → **Appearance and Personalization** → **Display** → **Screen Resolution** → **Advanced settings** → **Monitor**, and adjust **Screen 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**.
- Windows 10: Go to **Settings** → **System** → **Display** → **Advanced display settings** → **Display adapter properties** → **Monitor**, and adjust **Screen refresh rate** under **Monitor settings**.

How can I change the resolution?

- Windows 7: Go to **Control Panel** → **Appearance and Personalization** → **Display** → **Screen Resolution** → **Adjust Resolution**.
- Windows 8(Windows 8.1): Go to **Settings** → **Control Panel** → **Appearance and Personalization** → **Display** → **Adjust Resolution**, and adjust the resolution.
- Windows 10: Go to **Settings** → **System** → **Display** → **Advanced display settings**, and adjust the resolution.

How do I set power-saving mode?

- Windows 7: Go to **Control Panel** → **Appearance and Personalization** → **Personalization** → **Screen Saver Settings** → **Power options** or BIOS SETUP on the PC.
- Windows 8(Windows 8.1): Go to **Settings** → **Control Panel** → **Appearance and Personalization** → **Personalize** → **Screen Saver Settings** → **Power options** or BIOS SETUP on the PC.
- Windows 10: Go to **Settings** → **Personalization** → **Lock screen** → **Screen timeout settings** → **Power & sleep** or BIOS SETUP on the PC.

Specifications

General

Model Name	S49C95*U / S49F95*U
Size	49 Class (48.7 Inches / 123.8 cm)
Display area	1191.936 mm (H) x 335.232 mm (V)
Pixel Pitch	0.2328 mm (H) x 0.2328 mm (V)
Maximum Pixel Clock	972.67 MHz
Power Supply	AC100-240V~ 50/60Hz Refer to the label at the back of the product as the standard voltage can vary in different countries.
Signal connectors	HDMI, DisplayPort, USB Type-C
Environmental conditions	**Operating** Temperature: 50 °F to 104 °F (10 °C to 40 °C) Humidity: 10 % to 80 %, non-condensing
	Storage Temperature: -4 °F to 113 °F (-20 °C to 45 °C) Humidity: 5 % to 95 %, non-condensing

- Plug-and-Play

  This product can be installed and used with any Plug-and-Play compatible systems. Two-way data exchange between the product and PC system optimizes the product settings. Product installation takes place automatically. However, you can customize the installation settings if desired.
- Panel Dots (Pixels)

  Due to the nature of the manufacturing of this product, approximately 1 pixel per million (1ppm) may be brighter or darker on the LCD panel. This does not affect product performance.
- The specifications are subject to change without notice to improve quality.
- For detailed device specifications, visit the Samsung website.
- Open Source Licence Notice

  Open Source used in this product can be found on the following webpage (https://opensource.samsung.com).

The terms HDMI, HDMI High-Definition Multimedia Interface, HDMI trade dress and the HDMI Logos are trademarks or registered trademarks of HDMI Licensing Administrator, Inc.

(USA only)

Dispose unwanted electronics through an approved recycler. To find the nearest recycling location, go to our website: www.samsung.com/recycling or call, 1-800-Samsung

For battery recycling go to batterynetwork.org or call 1-800-822-8837

Standard Signal Mode Table

Model Name		S49C95*U / S49F95*U
Synchronization	Horizontal Frequency	30 ~ 184 kHz
	Vertical Frequency	30 ~ 120 Hz
Resolution	Optimum Resolution	3840 x 1080 @ 60 Hz (HDMI 1.4, DP 1.1)
	Maximum Resolution	5120 x 1440 @ 60 Hz (HDMI 2.0, USB Type-C, DP1.2) 5120 x 1440 @ 120 Hz (DP1.4)

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)	Port		
					HDMI IN	DP IN	USB Type-C IN
IBM, 720 x 400	31.469	70.087	28.322	-/+	O	O	O
MAC, 1152 x 870	68.681	75.062	100.000	-/-	O	O	O
VESA, 640 x 480	31.469	59.940	25.175	-/-	O	O	O
VESA, 640 x 480	37.500	75.000	31.500	-/-	O	O	O
VESA, 800 x 600	37.879	60.317	40.000	+/+	O	O	O
VESA, 800 x 600	46.875	75.000	49.500	+/+	O	O	O
VESA, 1024 x 768	48.363	60.004	65.000	-/-	O	O	O

Resolution	Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Pixel Clock (MHz)	Sync Polarity (H/V)	Port		
					HDMI IN	DP IN	USB Type-C IN
VESA, 1024 x 768	56.476	70.069	75.000	-/-	O	O	O
VESA, 1024 x 768	60.023	75.029	78.750	+/+	O	O	O
VESA, 1280 x 720	45.000	60.000	74.250	+/+	O	O	O
VESA, 1280 x 800	49.702	59.810	83.500	-/+	O	O	O
VESA, 1280 x 1024	63.981	60.020	108.000	+/+	O	O	O
VESA, 1280 x 1024	79.976	75.025	135.000	+/+	O	O	O
VESA, 1440 x 900	55.935	59.887	106.500	-/+	O	O	O
VESA, 1600 x 900	60.000	60.000	108.000	+/+	O	O	O
VESA, 1680 x 1050	65.290	59.954	146.250	-/+	O	O	O
VESA, 1920 x 1080	67.500	60.000	148.500	+/+	O	O	O
VESA, 2560 x 1440	88.787	59.951	241.500	+/-	O	O	O
VESA, 2560 x 1440	182.996	119.998	497.750	+/-	O	O	O

Resolution	Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Pixel Clock (MHz)	Sync Polarity (H/V)	Port		
					HDMI IN	DP IN	USB Type-C IN
VESA, 3440 x 1440	88.819	59.973	319.750	+/-	O	O	O
VESA, 3440 x 1440	150.972	99.982	543.500	+/-	-	O	-
VESA, 3440 x 1440	182.986	120.000	658.750	+/-	-	O	-
VESA, 3840 x 1080	66.625	59.968	266.500	+/-	O	O	O
VESA, 3840 x 1080	137.279	119.999	565.590	+/-	O	O	O
VESA, 5120 x 1440	89.399	60.000	486.330	+/-	O	O	O
VESA, 5120 x 1440	178.800	120.000	972.670	+/-	-	O	-
CEA, 3840 x 2160	67.500	30.000	297.000	+/+	O	-	-
CEA, 3840 x 2160	112.500	50.000	594.000	+/+	O	-	-
CEA, 3840 x 2160	135.000	60.000	594.000	+/+	O	O	O

¯ 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.

¯ 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.

¯ Some resolutions listed in the table above may not be available depending on graphics card specifications.

Appendix

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 is requested to give 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 the customer requests instructions on how to use 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 home-shopping 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 separately 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-authorized 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.)

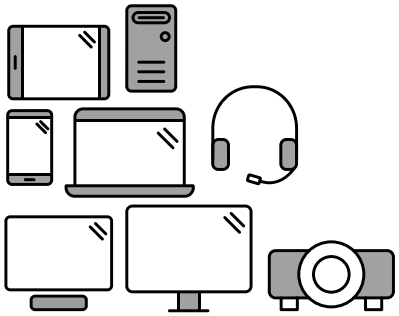
If customer requests a service in case the product has no defect, service fee may be charged. So please read User Manual first.

TCO CERTIFIED

— A third-party certification according to ISO 14024

— Applies to TCO-certified models only.

Toward sustainable IT products



Say hello to a more sustainable product

IT products are associated with a wide range of sustainability risks throughout their life cycle. Human rights violations are common in the factories. Harmful substances are used both in products and their manufacture. Products can often have a short lifespan because of poor ergonomics, low quality and when they are not able to be repaired or upgraded.

This product is a better choice. It meets all the criteria in TCO Certified, the world's most comprehensive sustainability certification for IT products. Thank you for making a responsible product choice, that help drive progress towards a more sustainable future!

Criteria in TCO Certified have a life-cycle perspective and balance environmental and social responsibility. Conformity is verified by independent and approved verifiers that specialize in IT products, social responsibility or other sustainability issues. Verification is done both before and after the certificate is issued, covering the entire validity period. The process also includes ensuring that corrective actions are implemented in all cases of factory non-conformities. And last but not least, to make sure that the certification and independent verification is accurate, both TCO Certified and the verifiers are reviewed regularly.

Want to know more?

Read information about TCO Certified, full criteria documents, news and updates at **tcocertified.com**. On the website you'll also find our Product Finder, which presents a complete, searchable listing of certified products.

Product warranty information

- Minimum included product warranty : 1~3 years
- Minimum purchasable extended warranty : 2~4 years
- Total available warranty (free + extended) : 5 years
- The maximum cost per year for the extended warranty : under 15% of product cost

— The warranty period may vary by region and model.

Software updates

Samsung guarantees the availability of free-of-charge security updates, corrective updates and functionality updates to the operating system for at least 5 years after the end of placement on the market. You can download the latest version of software from the Samsung.com support page.