

**SAMSUNG**

# User Manual

S27BG65\* S32BG65\* S28BG70\* S32BG70\*

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

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

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An administration fee may be charged in the following situations:

- (a) An engineer is called out at your request, but it is found that the product has no defect (i.e., where the user manual has not been read).
- (b) You bring the unit to a repair centre, but it is found that the product has no defect (i.e., where the user manual has not been read).

You will be informed of the administration fee amount before a technician visits.

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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 touch the power plug with wet hands.
- 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.
- 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.
- 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) 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 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 Centre 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.

## Operation

### Warning

- There is a high voltage inside the product. Never disassemble, repair or modify the product yourself.
  - Contact Samsung Customer Service Centre for repairs.
- To move the product, first disconnect all the cables from it, including the power cable.
- If the product generates abnormal sounds, a burning smell or smoke, disconnect the power cord immediately and contact Samsung Customer Service Centre.
- 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 Centre.
  - 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 cable.
- 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 (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 Centre.
- 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 Centre.


## 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.
- Rest your eyes for more than 5 minutes or look at distance objects for every 1 hour of product use.
- 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.

## 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 Centre if you want to clean the inside of the product (Service fee will be charged.)

Do not press the product screen with hands or other objects. There is a risk of damaging the screen.

 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.
  -  Hold the power cable by the plug and do not touch the cable with wet hands. Otherwise, an electric shock may result.
3. Wipe the product with a clean, soft and dry cloth.
 

Wet a soft cloth in water, wring 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 exercises or blink frequently, then eye fatigue will be relieved.

# Preparations

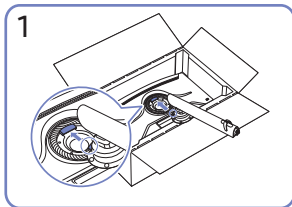
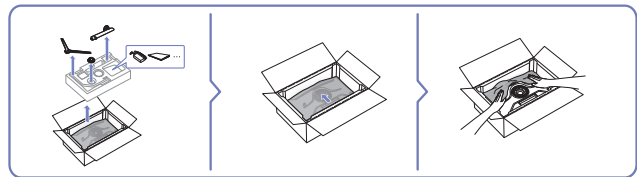
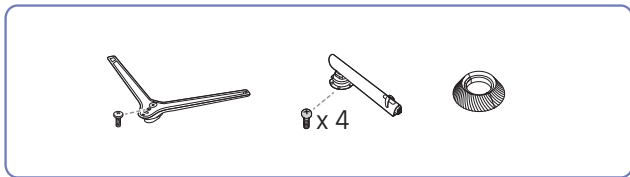
## Installation

### Attaching the Stand

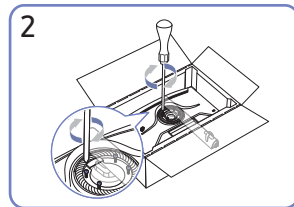
 Before assembling the product, place the product down on a flat and stable surface so that the screen is facing downwards.

 Disassembly is the reverse order of assembly.

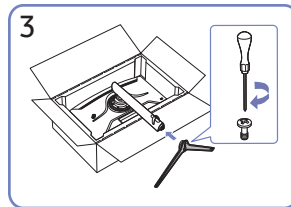
#### S27BG65\* / S32BG65\*



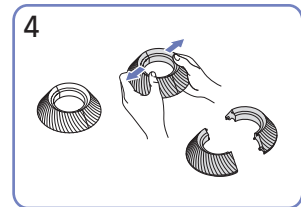
1 Place the stand neck on the monitor as shown in the figure.



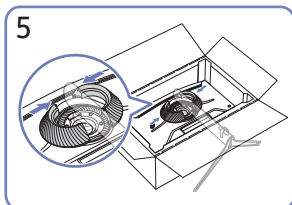
2 Fasten the screws at the top of the stand neck.



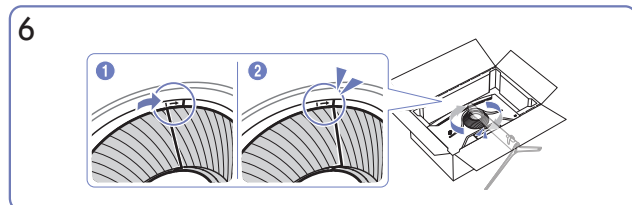
3 Insert the stand base into the stand neck in the direction as shown in the figure.



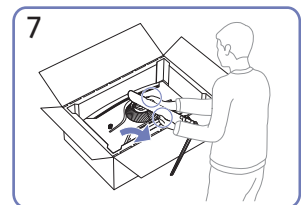
4 Disassemble the COVER-REAR TOP.



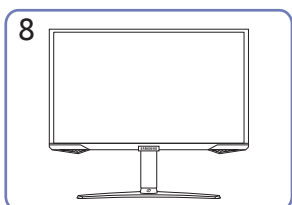
5 Assemble the COVER-REAR TOP to the stand neck as shown in the figure.



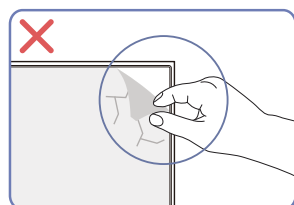
6 Rotate the COVER-REAR TOP clockwise.



7 Stand up the monitor as shown in the figure.



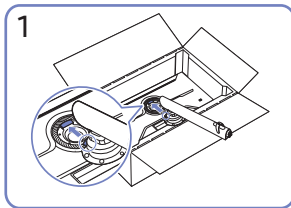
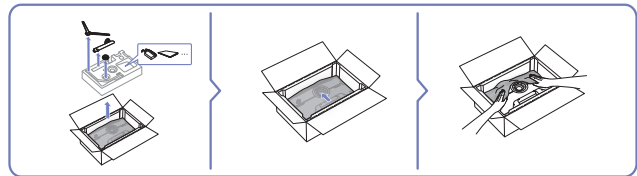
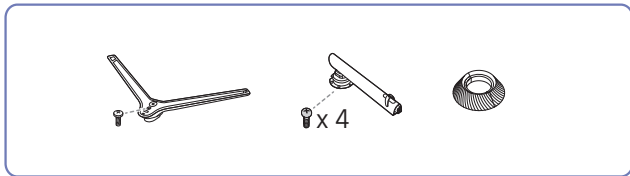
8 After installing the stand, place the product upright.



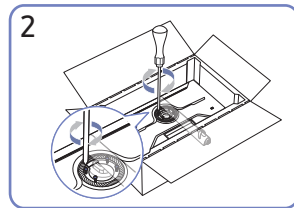
#### Caution

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

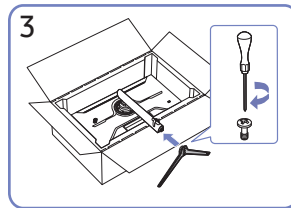
## S28BG70\* / S32BG70\*



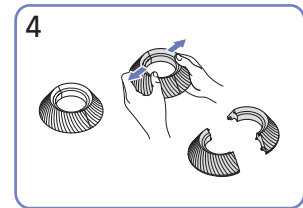
1  
Place the stand neck on the monitor as shown in the figure.



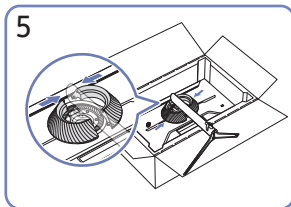
2  
Fasten the screws at the top of the stand neck.



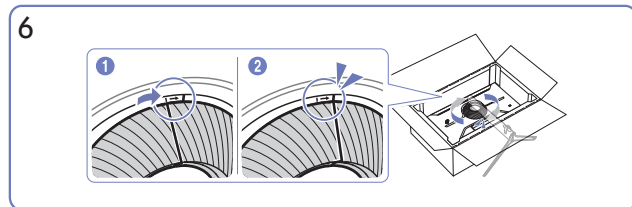
3  
Insert the stand base into the stand neck in the direction as shown in the figure.



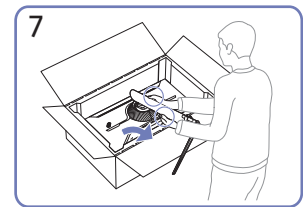
4  
Disassemble the COVER-REAR TOP.



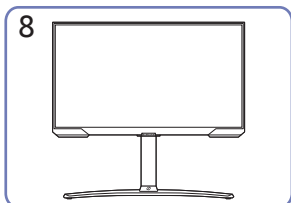
5  
Assemble the COVER-REAR TOP to the stand neck as shown in the figure.



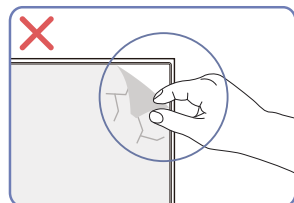
6  
Rotate the COVER-REAR TOP clockwise.



7  
Stand up the monitor as shown in the figure.

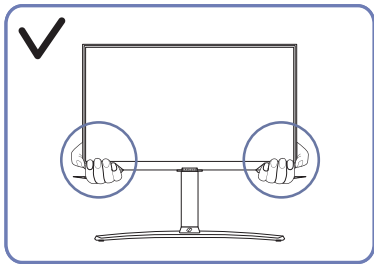


8  
After installing the stand, place the product upright.

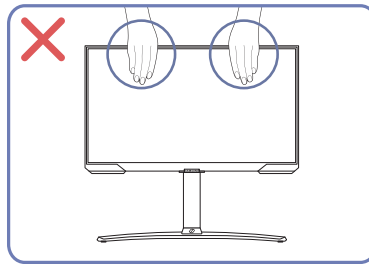


**Caution**  
Do not arbitrarily remove the panel film. If not observed, the warranty service may be restricted.

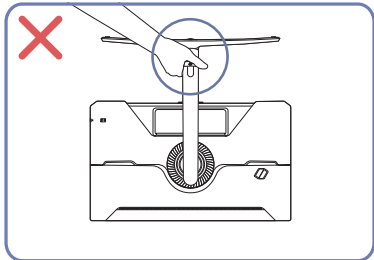
## Precautions for moving the product



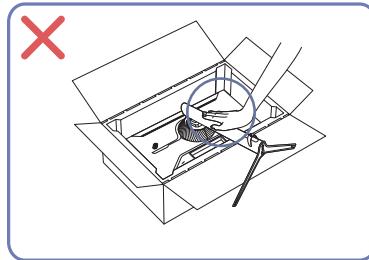
- Hold the lower corners or edges of the product when moving it.



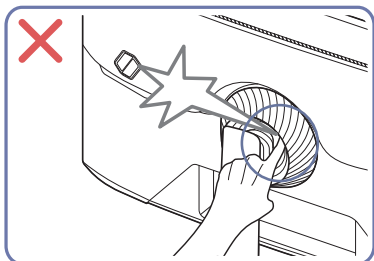
- Do not directly apply pressure on the screen.
- Do not hold the screen when moving the product.



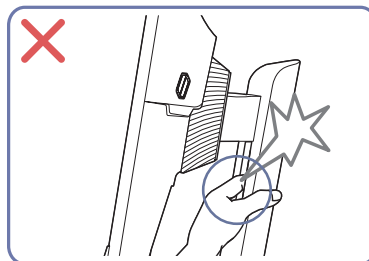
- Do not hold the product upside down only by the stand.



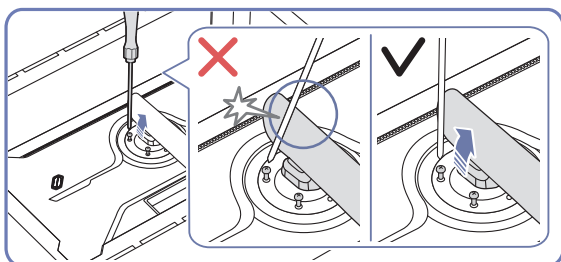
- Do not press down on the product. There is a risk of damaging the product.



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



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



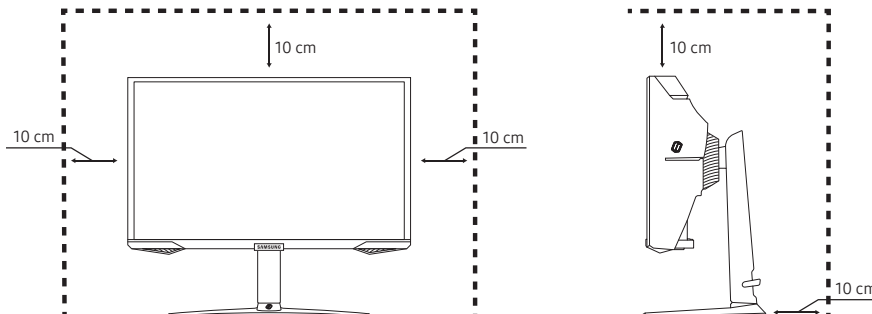
- Tilt the stand neck to sides to avoid contact with the screwdriver.

## Checking the space around the product

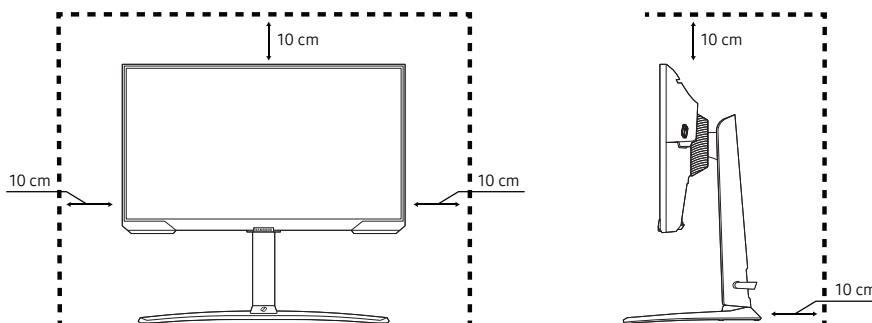
Make sure to have enough space for ventilation when placing the product. An internal temperature rise may cause fire and damage the product. Maintain enough space around the product as shown in the diagram when installing the product.

 The exterior may differ depending on the product.


### S27BG65\* / S32BG65\*



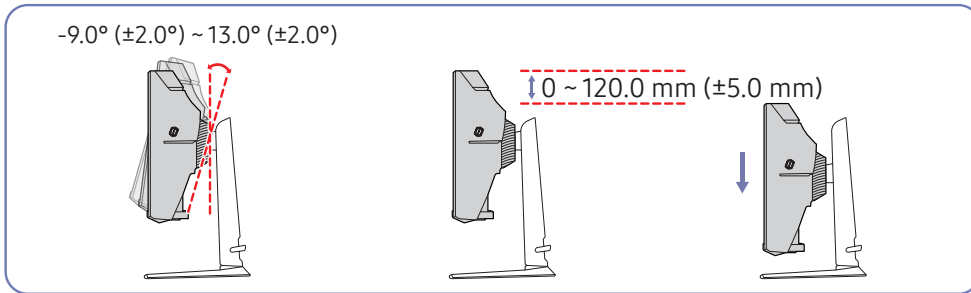
### S28BG70\* / S32BG70\*



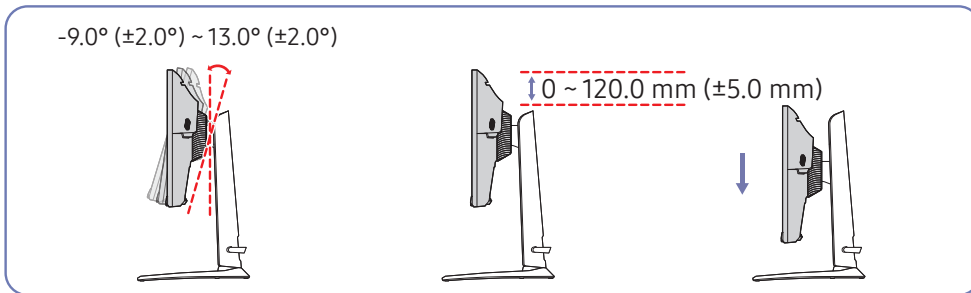
## Adjusting the Product Tilt and Height

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

S27BG65\* / S32BG65\*

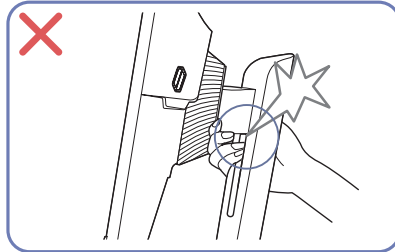
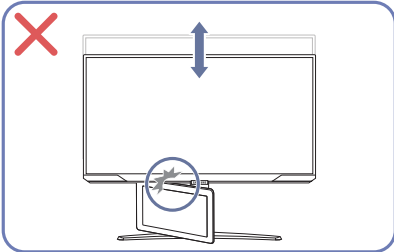
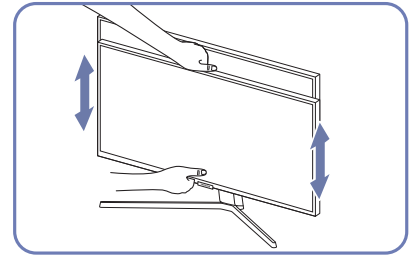
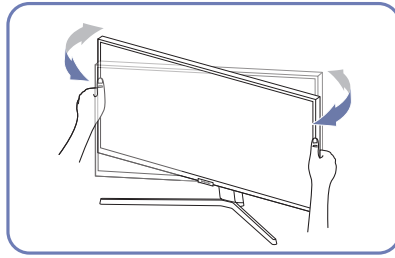
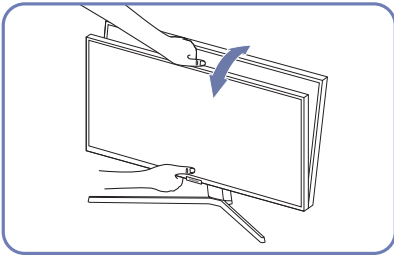


S28BG70\* / S32BG70\*



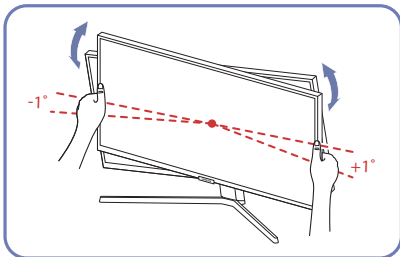
- The product tilt and height can be adjusted.
- When adjusting the tilt and height, hold both sides of the product and avoid using excessive force to prevent damage.
- When adjusting the stand height, you may hear a noise. This noise is generated because the ball inside the stand slides when the stand height is adjusted. It is a normal noise and not a product malfunction.

## Caution




- Grasp the left and right sides of the monitor and adjust the swivel.
- Grasp the centre of the monitor and adjust the height.
- Do NOT hold the stand moving part with your hand when leveling the screen. Your hand may get hurt.

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

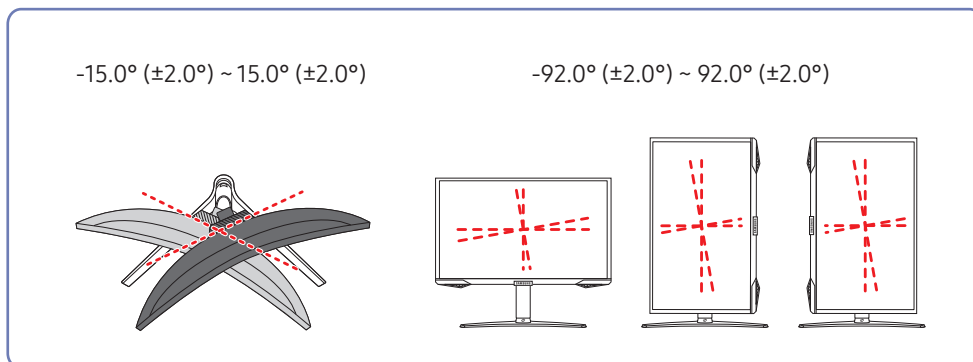


- Hold the bezel at both side edges and adjust the monitor angle until the screen becomes level. (Be careful not to directly hold the LCD display.)
- The monitor angle can be adjusted from  $-1^{\circ}$  to  $+1^{\circ}$ .

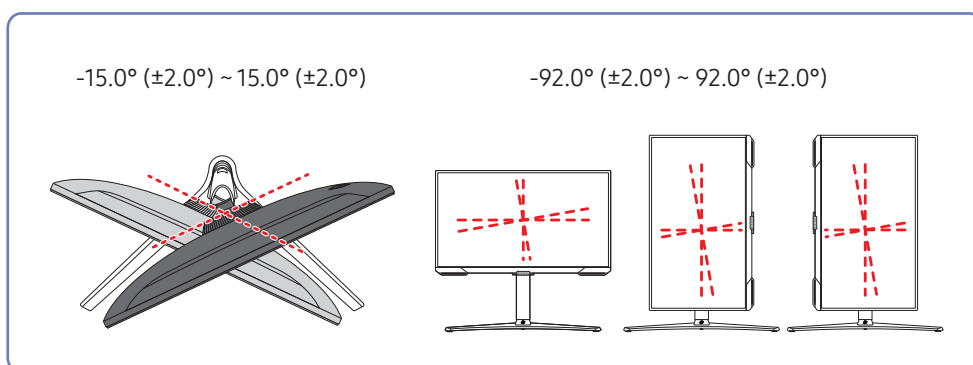
## Rotating the Product

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

S27BG65\* / S32BG65\*

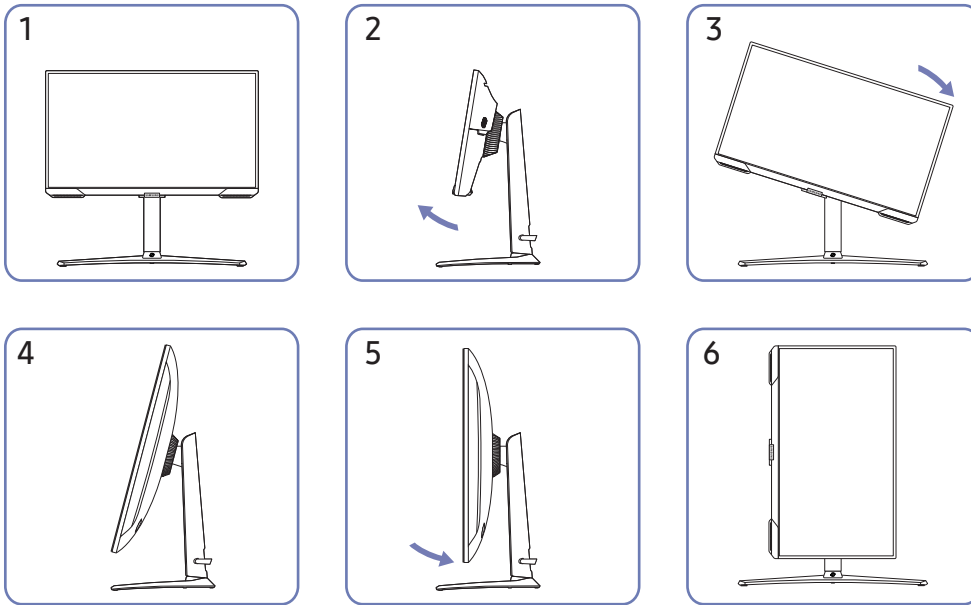


S28BG70\* / S32BG70\*



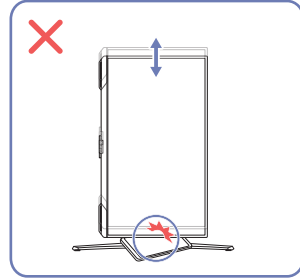
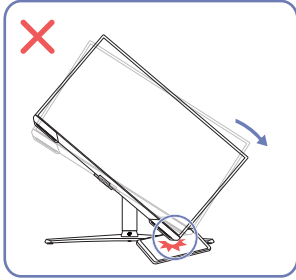
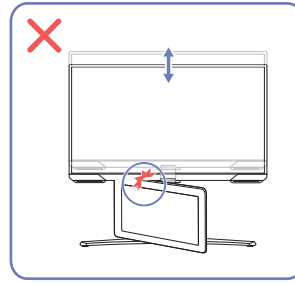
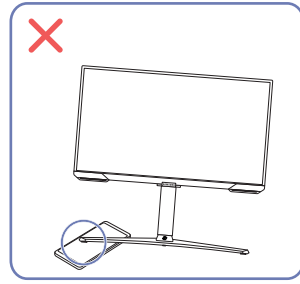
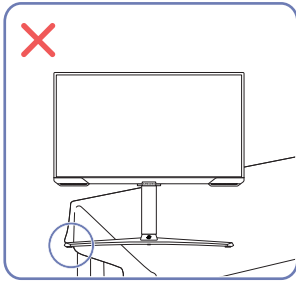


You can rotate your product as shown below.





- To rotate the monitor, raise it to the full height position.
- Adjust the monitor angle in the arrow direction shown in figure 2, and then rotate the monitor.
- If the stand or monitor is not at full height or tilt position and you rotate the monitor, the monitor corners may hit the floor and become damaged.
- When rotating the product, be careful not to damage the product by hitting the object or stand.

## Caution

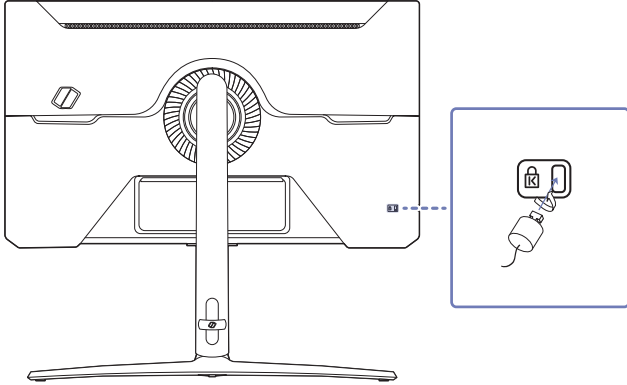


- When rotating the product, be careful not to damage the product by hitting the object or stand.
- When installing the product on a cabinet or shelf, make sure that the bottom edge of the front of the product is not protruding.

## 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 manuals provided with your anti-theft locking device for details.

### To lock an anti-theft locking device:

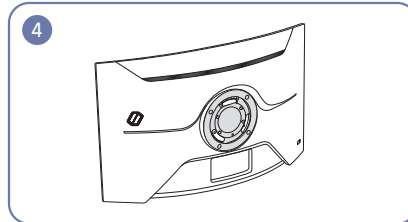
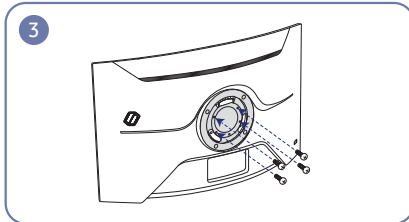
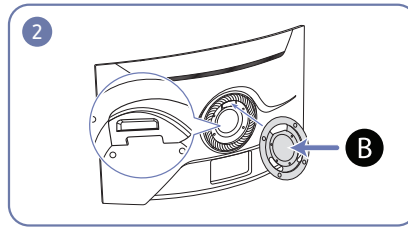
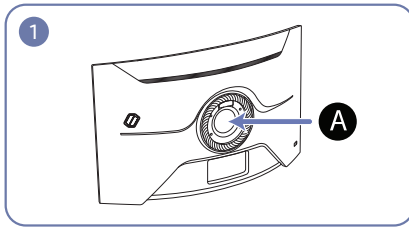


1. Fix the cable of your anti-theft locking device to a heavy object such as a desk.
2. Put one end of the cable through the loop on the other end.
3. Insert the locking device into the anti-theft lock slot at the back of the product.
4. Lock the locking device.
  - An anti-theft locking device can be purchased separately.
  - Refer to the manuals provided with your anti-theft locking device for details.
  - Anti-theft locking devices can be purchased at electronics retailers or online.

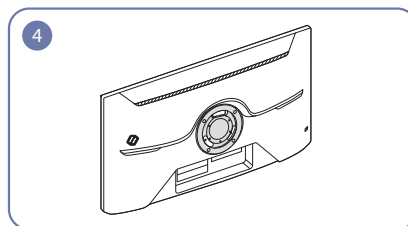
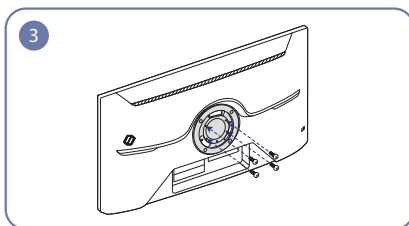
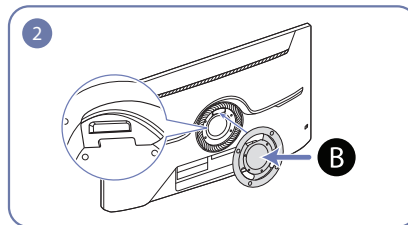
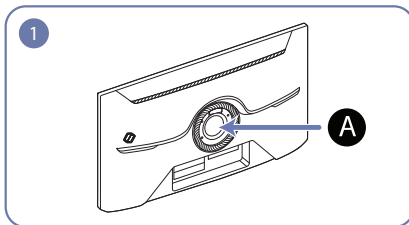
## Attaching the BRACKET WALL

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

S27BG65\* / S32BG65\*



S28BG70\* / S32BG70\*



**A** Attach the BRACKET WALL here

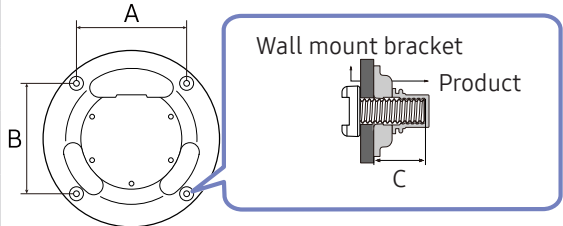
**B** BRACKET WALL

Align **B** with **A** on the monitor, then tightly fasten with the screws removed from the stand.


**Notes**

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


| Model name | VESA screw hole specs (A * B) in millimeters | C       | Standard Screw | Quantity |
|------------|--|---------|----------------|----------|
| S27BG65*   | 100.0 x 100.0                                | 10.0 mm | M4             | 4        |
| S32BG65*   |  | 12.0 mm |                |          |
| S28BG70*   |  | 10.0 mm |                |          |
| S32BG70*   |  |         |                |          |



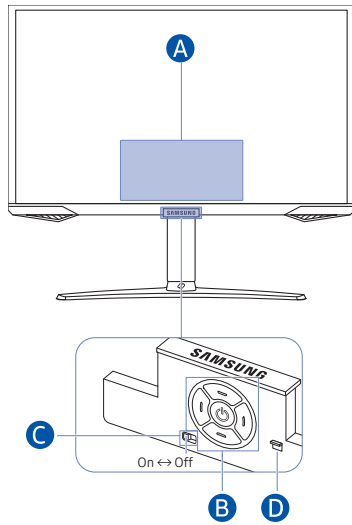
The diagram illustrates the VESA mounting standard. It shows a top-down view of a circular mounting plate with four screw holes. Dimension A is the horizontal distance between the centers of the two outer holes. Dimension B is the vertical distance between the centers of the two outer holes. Dimension C is the distance from the center of the mounting plate to the center of one of the screw holes. A callout box shows a cross-section of the wall mount bracket with a product attached, with dimension C indicating the distance from the wall to the product's center.

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

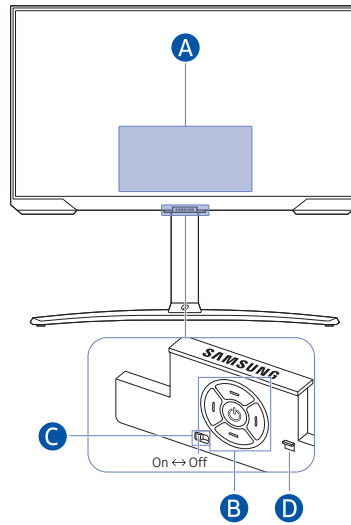
# Control Panel

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






S27BG65\* / S32BG65\*









S28BG70\* / S32BG70\*



## **A** Control menu

-  Home
-  Settings
-  Return
-  Source
-  Power off

## B Power button / Remote control sensor / Controller button

- Press  button: Display the Control menu. Select or run a focused item on the menu.
- Press and hold  button: The running function is terminated.
  -  This function may not be supported depending on the model.
- Up/Down button: Changes the channel.
  -  This function may not be supported depending on the model.
- Left/Right button: Changes the volume.
  -  This function may not be supported depending on the model.
-  The buttons may work differently depending on the situation.


## C Microphone switch

You can turn on or off the microphone by using the switch at the bottom of the Product.

If microphone is turned off, All voice and sound features using microphone are not available.

- The position and shape of the microphone switch may differ depending on the model.
- During analysis using data from the microphone, the data is not saved.


## D Power indicator

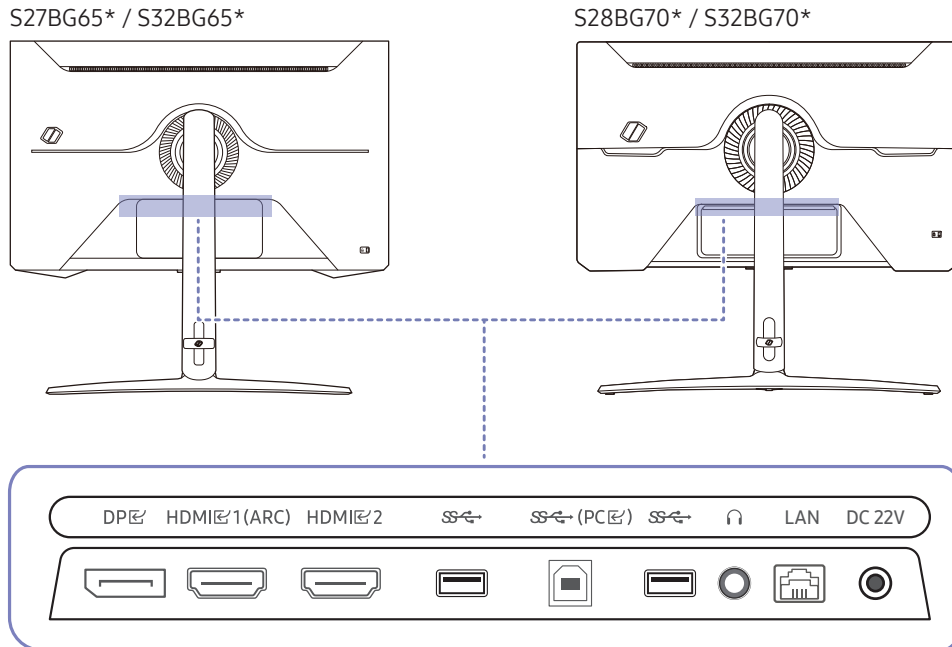
- The LED turns on when the product is turned off.
- The LED blinks when the product enters the standby mode.
  -  When 60 seconds elapses with no signal, the product enters the standby mode. In standby mode, the screen turns on again when any signal is input or any button is pressed on the remote control.
- The colour and shape of parts may differ from what is shown.
- The screen may dim if the protective film on the SAMSUNG logo or the bottom of the product is not detached. Please remove the protective film.
- When using the buttons (excluding Power) on the Samsung Smart Remote, the receiver LED does not blink.


# Connections





Using various connectors, you can also connect external devices.

## Ports

 The functions available may vary depending on the product model. The colour 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 (ARC)<br>HDMI 2 | Connects to a source device using an HDMI cable or HDMI-DVI cable.   |
| DP                     | Connects to a PC using a DP cable.   |
| USB                    | Connect to a USB device.<br>For more information, see <a href="#">Connecting the Product to a PC as a USB HUB</a> page.  |
| USB (PC)               | Connects to a PC using a USB cable. It operates as USB 3.0 only when using USB HUB. When playing content, it operates as USB 2.0.  |
| Headphone              | Connect to an audio output device such as headphones or earphones.   |
| DC 22V                 | Connects to the AC/DC adapter.   |
| LAN                    | LAN can be used in only one source at a time.<br> Use Cat7(*STP Type) cable for the connection. (10/100 Mbps)<br>*Shielded Twist Pair |

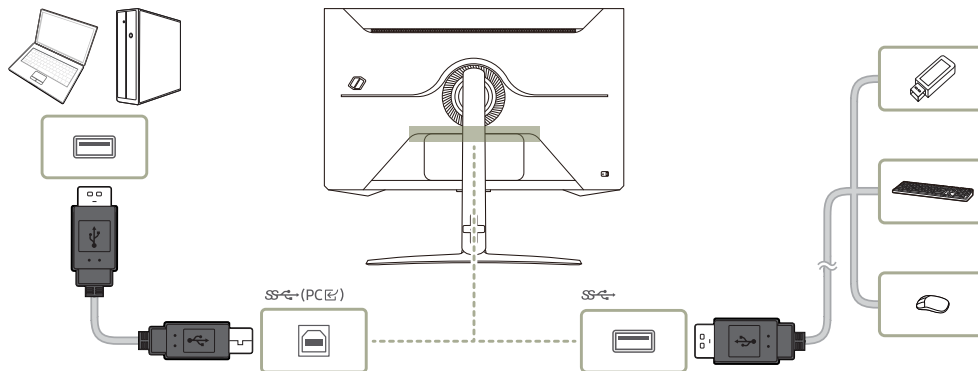
 For more information about connection to an external device, refer to  >  **Menu** >  **Connected Devices** > [Connection Guide](#).



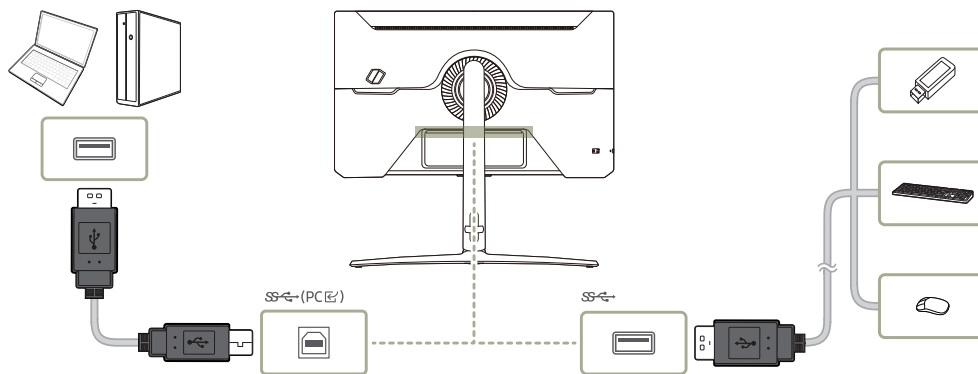
## Connecting the Product to a PC as a USB HUB



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

### S27BG65\* / S32BG65\*



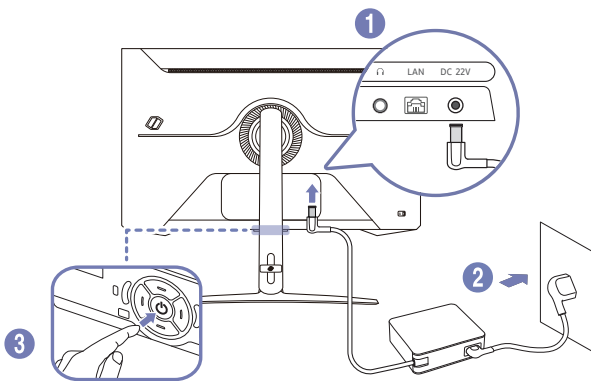
### S28BG70\* / S32BG70\*



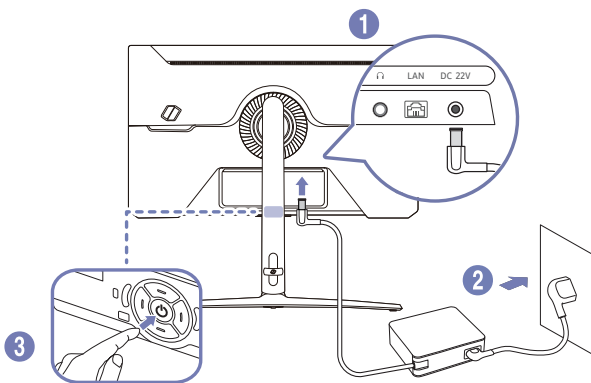
- ✎ To detect and start a USB device faster, connect the USB device to the  port on the product. The read/write rate will be affected by the USB device and your PC.
- ✎ For USB-related problems caused by OS, drive programmes or software, please contact relevant suppliers.
- ✎ With the launch of various 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 an external power source.
- ✎ USB devices requiring high current may not be supported.  can support a maximum current of 900mA.
- ✎ The battery can be charged in the power-saving mode, but it cannot be charged when the product is powered off.
- ✎ Charging your USB device is not possible if the power cable is disconnected from the power socket.
- ✎ The company is not liable for problems or damages to an external device caused by using an unauthorised cable for the connection.
- ✎ Some products do not follow the USB standard, and it may cause a malfunction of the device.


## Connecting the Power

S27BG65\* / S32BG65\*



S28BG70\* / S32BG70\*

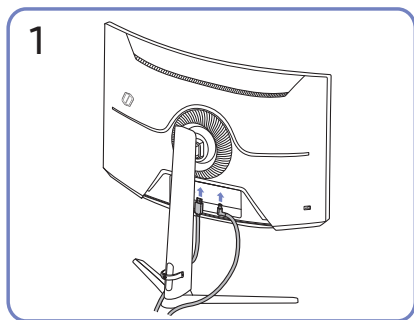


1. Connect the power cable to the AC/DC adapter. Then, connect the AC/DC adapter to the DC 22V port on the back of the product.
  - Rated power consumption for adapters differs depending on the model. Use an adapter that meets the power consumption specification of the model.
2. Next, connect the power cable to the power outlet.
3. Press the  button at the bottom of the product to turn it on.

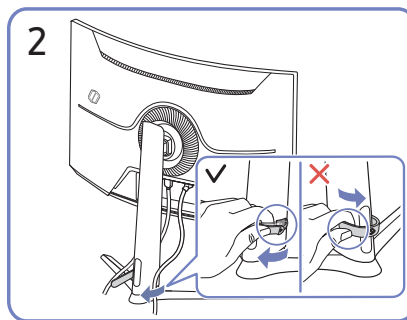
 The input voltage is switched automatically.

# Tidying Up the Connected Cables

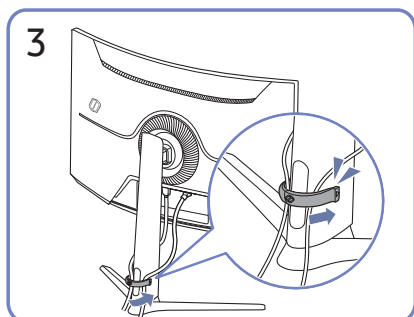
S27BG65\* / S32BG65\*



Connect the corresponding cables.



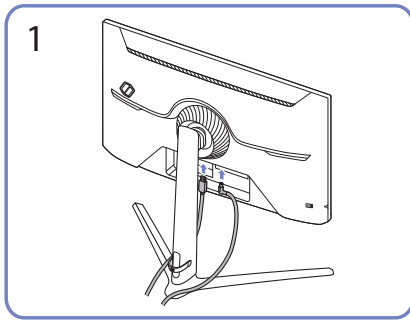
Pull the right side of the HOLDER-STAND CABLE to remove from the stand. The left side of the HOLDER-STAND CABLE can be damaged when pulled forcibly.



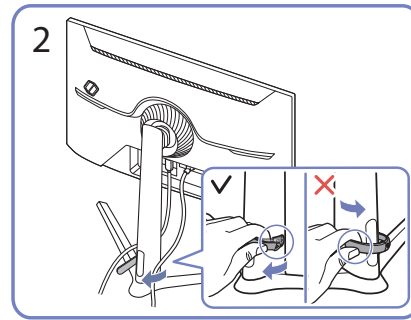
Put both cables in the cable holder on the stand (HOLDER-STAND CABLE) to organise the cables, as shown in the figure.

Assembly is complete.

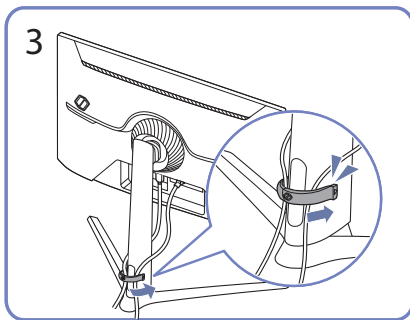
S28BG70\* / S32BG70\*



Connect the corresponding cables.



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



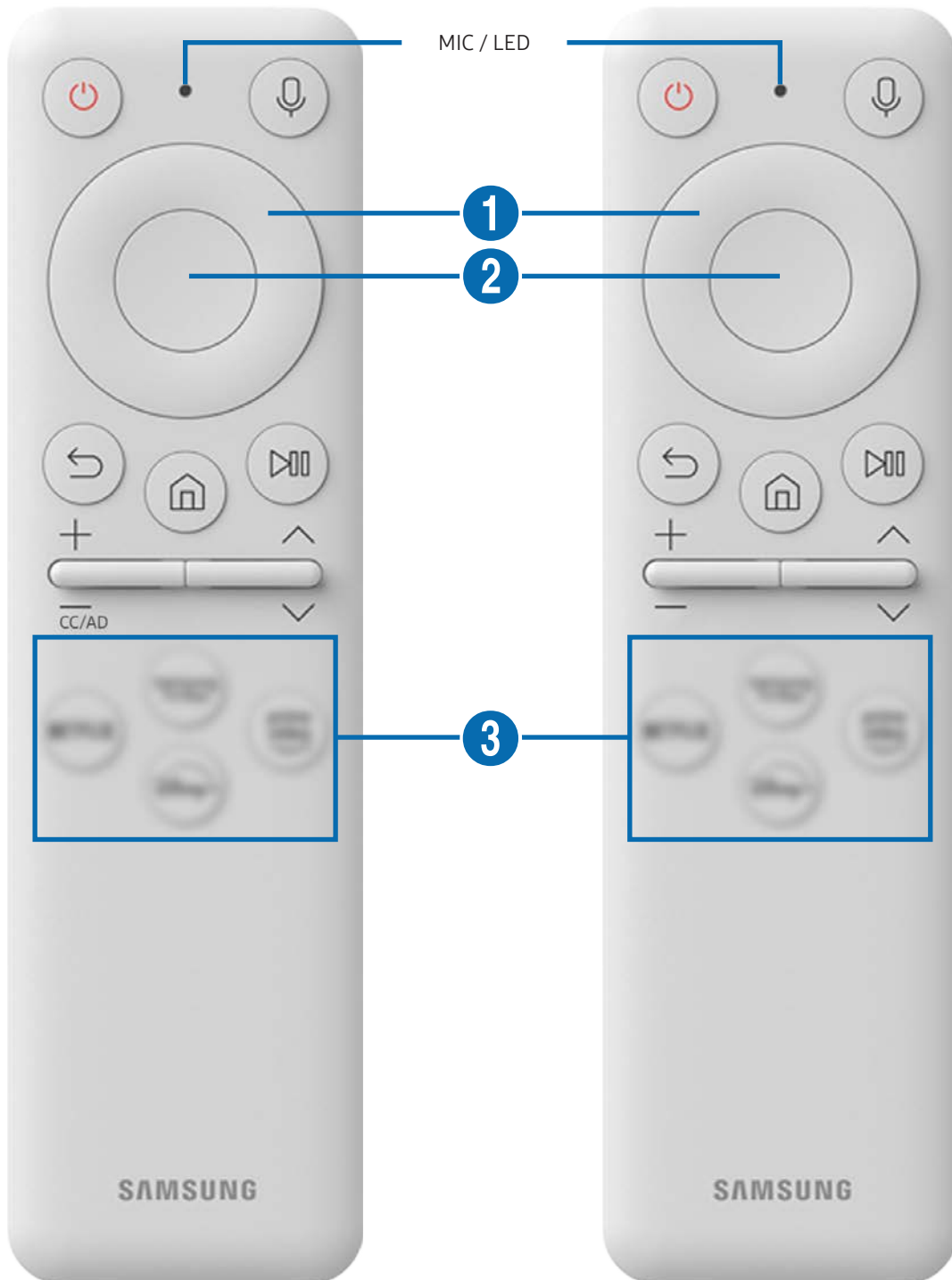
Put both cables in the cable holder on the stand (HOLDER-STAND CABLE) to organise the cables, as shown in the figure. Assembly is complete.










# Remote Control and Peripherals









You can control product operations with your Samsung Smart Remote or Remote Control. Pair external devices such as a keyboard for ease of use.





## About the Samsung Smart Remote

Learn about the buttons on the Samsung Smart Remote.





| Button  | Description  |
|---|--|
|  (Power)                                 | Press to turn the Product on or off.   |
| MIC / LED   | <p>Used as MIC when using voice recognition with the remote control.<br/>The LED on the front will light when charging. When the battery is fully charged, the LED will turn off.</p> <ul style="list-style-type: none"> <li> Do not impact the MIC hole or use a sharp object to poke into the hole.</li> <li> This function may not be supported depending on the model or geographical area.</li> </ul> |
|  (Voice Assistant)                       | <p>Runs Voice Assistant. Press and hold the button, say a command, and then release the button to run Voice Assistant.</p> <ul style="list-style-type: none"> <li> The supported Voice Assistant's languages and features may differ by geographical region.</li> <li> This function may not be supported depending on the model or geographical area.</li> </ul>  |
|  Directional button (up/down/left/right) | Moves the focus.   |
|  Select                                 | Selects or runs a focused item.  |
|  (Return)                              | Press to return to the previous menu.  |

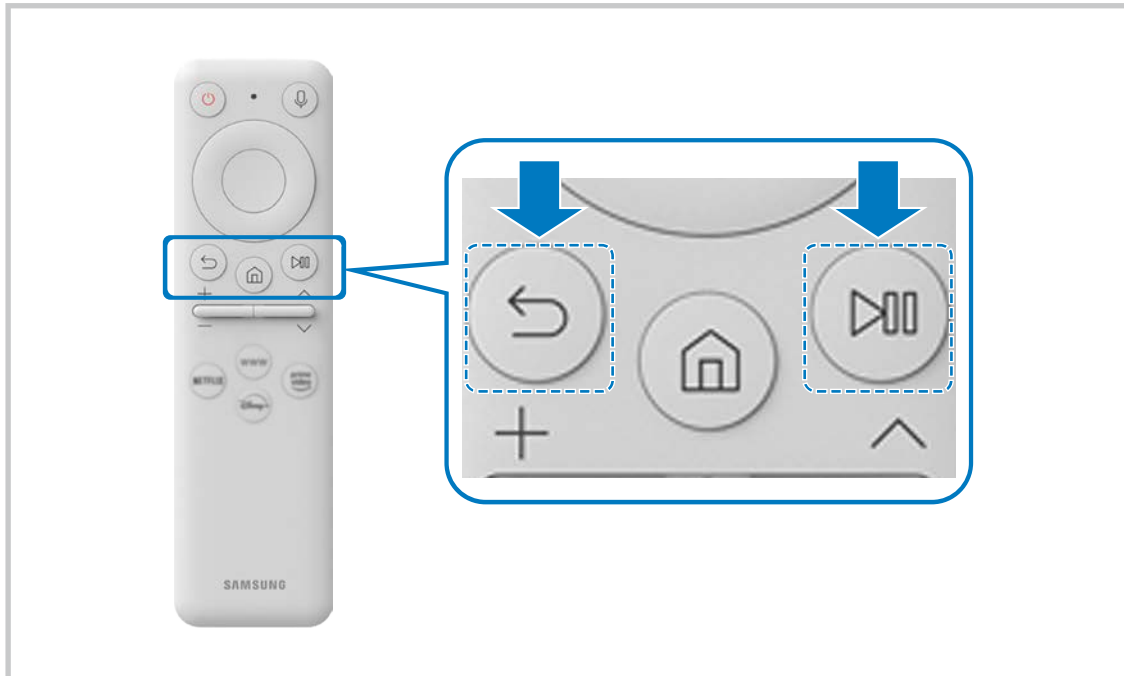
| Button  | Description  |
|---|--|
|  (Smart Hub + Control PAD) | <p>Press to return to the Home Screen.</p> <p> When pressed for 1 second or more, the Control PAD appears. You can use Settings menu / virtual numeric pad / Option pad with Colour buttons by using Control PAD.</p>   |
|  (Play/pause)              | <p>Using these controls, you can control the media content that is playing.</p>  |
|  (Volume)                  | <p>Move the button up or down to adjust the volume. To mute the sound, press the button. When pressed for 2 second or more, the <a href="#">Accessibility Shortcuts</a> appears.</p>   |
|  (Channel)                 | <p>Move the button up or down to change the channel. When pressed for 1 second or more, the <a href="#">Channel List</a> screen appears.</p>   |
|  (Launch app button)       | <p>Launch the app indicated by the button.</p> <p> App availability may vary by country.</p> <p> This function may not be supported depending on the model or geographical area.</p> |



-  In standby mode, press any button on the remote control to turn on the screen.
-  The functions related to the broadcast and channel are available only in some apps or external devices.
-  Use the Samsung Smart Remote less than 6 m from the product. The usable distance may vary with the wireless environmental conditions.
-  The images, buttons and functions of the Samsung Smart Remote may differ with the model or geographical area.

## Connecting the Samsung Smart Remote to the product

Connect the Samsung Smart Remote to your product to operate the product.

When you turn on the product for the first time, the Samsung Smart Remote pairs to the product automatically. If the Samsung Smart Remote does not pair to the product automatically, point it at the front of the product, and then press and hold the  and  buttons simultaneously for 3 seconds or more.



-  The images, buttons and functions of the Samsung Smart Remote may differ with the model or geographical area.
-  For more information about the Samsung Smart Remote, refer to [“About the Samsung Smart Remote”](#).



# Precautions and Notes


You can get instructions and information that you must read after installation.





## Read After Installing the product

Read this information after installing the product.

### Picture sizes and input signals

The **Picture Size** is applied to the current source. The applied **Picture Size** will remain in effect whenever you select that source unless you change them.



| Input signal   | Picture size  |
|--|---|
| HDMI / DisplayPort (720p)  | 16:9 Standard, Custom, 4:3 Screen Size                    |
| HDMI / DisplayPort (1080p)   | 16:9 Standard, Custom, 4:3 Screen Size                    |
| *HDMI / DisplayPort (3840 x 2160p)   | 16:9 Standard, Custom                                     |
| **HDMI / DisplayPort (2560 x 1080p)  | 21:9 Wide Screen, ultrawide game view in <b>Game Mode</b> |
| *HDMI / DisplayPort (3840 x 1600p)<br> S28BG70*, S32BG70* model only | 21:9 Wide Screen, ultrawide game view in <b>Game Mode</b> |
| USB (720p)   | 16:9 Standard, Custom, 4:3 Screen Size                    |
| USB (1080p @ 60 Hz)  | 16:9 Standard, Custom, 4:3 Screen Size                    |
| *USB (3840 x 2160p @ 24/30 Hz)   | 16:9 Standard, Custom                                     |
| *USB (3840 x 2160p @ 60 Hz)  | 16:9 Standard, Custom                                     |

-  The input ports for external devices may differ depending on the model and geographical area.
-  Available **Picture Mode** may differ depending on the external device.
-  When the screen size cannot be changed to 21:9 Wide Screen or **Ultrawide Game View**, the screen resolution on the external device needs to be changed.
-  **Ultrawide Game View** is only available on source devices which support 21:9 outputs, and may function differently depending on the game or content being viewed. To check whether **Ultrawide Game View** is available, activate this function and then check that the display resolution can be set to 3840 x 1600.

# Read Before Connecting a Computer (Supported Resolutions)

Check the resolutions supported for PC input signals.

When you connect your product to a computer, set the computer's video card to one of the standard resolutions listed in the tables below or on the next pages. The product will automatically adjust to the resolution you choose. Note that the optimal resolutions are 3840 x 2160 at 120 Hz (S28BG70\*, S32BG70\* model only) or 2560 x 1440 at 120 Hz (S27BG65\*, S32BG65\* model only). Choosing a resolution not included in the tables can result in a blank screen or just the remote control sensor turning on. Refer to the user manual of your graphics card for compatible resolutions.

-  The native resolution is 3840 x 2160 at 60 Hz with the **Input Signal Plus** set to **On**. The native resolution is 3840 x 2160 at 30 Hz with the **Input Signal Plus** set to **Off**. (S28BG70\*, S32BG70\* model only)
-  The native resolution is 2560 x 1440 at 120 Hz with the **Input Signal Plus** set to **On**. The native resolution is 2560 x 1440 at 60 Hz with the **Input Signal Plus** set to **Off**. (S27BG65\*, S32BG65\* model only)

## S27BG65\* / S32BG65\*

### VESA DMT

| Resolution<br>(Dots x lines) | Display format | Horizontal<br>frequency<br>(KHz) | Vertical<br>frequency<br>(Hz) | Clock<br>frequency<br>(MHz) | Polarity<br>(horizontal /<br>vertical) | Port |    |
|------------------------------|----------------|----------------------------------|-------------------------------|-----------------------------|--|------|----|
|                              |                |                                  |                               |                             |  | HDMI | DP |
| 640 x 480                    | 60Hz           | 31.469                           | 59.940                        | 25.175                      | -/-                                    | 0    | 0  |
| 640 x 480                    | 75Hz           | 37.500                           | 75.000                        | 31.500                      | -/-                                    | 0    | 0  |
| 800 x 600                    | 60Hz           | 37.879                           | 60.317                        | 40.000                      | +/+                                    | 0    | 0  |
| 800 x 600                    | 72Hz           | 48.077                           | 72.188                        | 50.000                      | +/+                                    | 0    | 0  |
| 800 x 600                    | 75Hz           | 46.875                           | 75.000                        | 49.500                      | +/+                                    | 0    | 0  |
| 1024 x 768                   | 60Hz           | 48.363                           | 60.004                        | 65.000                      | -/-                                    | 0    | 0  |
| 1024 x 768                   | 70Hz           | 56.476                           | 70.069                        | 75.000                      | -/-                                    | 0    | 0  |
| 1024 x 768                   | 75Hz           | 60.023                           | 75.029                        | 78.750                      | +/+                                    | 0    | 0  |
| 1152 x 864                   | 75Hz           | 67.500                           | 75.000                        | 108.000                     | +/+                                    | 0    | 0  |
| 1280 x 720                   | 60Hz           | 45.000                           | 60.000                        | 74.250                      | +/+                                    | 0    | 0  |
| 1280 x 800                   | 60Hz           | 49.702                           | 59.810                        | 83.500                      | -/+                                    | 0    | 0  |

| Resolution<br>(Dots x lines) | Display format | Horizontal<br>frequency<br>(KHz) | Vertical<br>frequency<br>(Hz) | Clock<br>frequency<br>(MHz) | Polarity<br>(horizontal /<br>vertical) | Port |    |
|------------------------------|----------------|----------------------------------|-------------------------------|-----------------------------|--|------|----|
|                              |                |                                  |                               |                             |  | HDMI | DP |
| 1280 x 1024                  | 60Hz           | 63.981                           | 60.020                        | 108.000                     | +/+                                    | 0    | 0  |
| 1280 x 1024                  | 75Hz           | 79.976                           | 75.025                        | 135.000                     | +/+                                    | 0    | 0  |
| 1440 x 900                   | 60Hz           | 55.935                           | 59.887                        | 106.500                     | -/+                                    | 0    | 0  |
| 1600 x 900RB                 | 60Hz           | 60.000                           | 60.000                        | 108.000                     | +/+                                    | 0    | 0  |
| 1680 x 1050                  | 60Hz           | 65.290                           | 59.954                        | 146.250                     | -/+                                    | 0    | 0  |
| 1920 x 1080                  | 60Hz           | 67.500                           | 60.000                        | 148.500                     | +/+                                    | 0    | 0  |

## VESA CVT

| Resolution<br>(Dots x lines) | Display format | Horizontal<br>frequency<br>(KHz) | Vertical<br>frequency<br>(Hz) | Clock<br>frequency<br>(MHz) | Polarity<br>(horizontal /<br>vertical) | Port |    |
|------------------------------|----------------|----------------------------------|-------------------------------|-----------------------------|--|------|----|
|                              |                |                                  |                               |                             |  | HDMI | DP |
| 1920 x 1080RB                | 240Hz          | 291.587                          | 239.989                       | 606.500                     | +/-                                    | 0    | 0  |
| 2560 x 1080RB                | 240Hz          | 291.544                          | 239.954                       | 793.000                     | +/-                                    | 0    | 0  |
| 2560 x 1440RB                | 120Hz          | 182.996                          | 119.998                       | 497.750                     | +/-                                    | 0    | 0  |
| 2560 x 1440RB                | 240Hz          | 388.511                          | 239.970                       | 1056.750                    | +/-                                    | 0    | 0  |
| 2560 x 1440RB                | 60Hz           | 88.787                           | 59.951                        | 241.500                     | +/-                                    | 0    | 0  |

# S28BG70\* / S32BG70\*

## VESA DMT

| Resolution<br>(Dots x lines) | Display format | Horizontal<br>frequency<br>(KHz) | Vertical<br>frequency<br>(Hz) | Clock<br>frequency<br>(MHz) | Polarity<br>(horizontal /<br>vertical) | Port |    |
|------------------------------|----------------|----------------------------------|-------------------------------|-----------------------------|--|------|----|
|                              |                |                                  |                               |                             |  | HDMI | DP |
| 640 x 480                    | 60Hz           | 31.469                           | 59.940                        | 25.175                      | -/-                                    | 0    | 0  |
| 640 x 480                    | 75Hz           | 37.500                           | 75.000                        | 31.500                      | -/-                                    | 0    | 0  |
| 800 x 600                    | 60Hz           | 37.879                           | 60.317                        | 40.000                      | +/+                                    | 0    | 0  |
| 800 x 600                    | 72Hz           | 48.077                           | 72.188                        | 50.000                      | +/+                                    | 0    | 0  |
| 800 x 600                    | 75Hz           | 46.875                           | 75.000                        | 49.500                      | +/+                                    | 0    | 0  |
| 1024 x 768                   | 60Hz           | 48.363                           | 60.004                        | 65.000                      | -/-                                    | 0    | 0  |
| 1024 x 768                   | 70Hz           | 56.476                           | 70.069                        | 75.000                      | -/-                                    | 0    | 0  |
| 1024 x 768                   | 75Hz           | 60.023                           | 75.029                        | 78.750                      | +/+                                    | 0    | 0  |
| 1152 x 864                   | 75Hz           | 67.500                           | 75.000                        | 108.000                     | +/+                                    | 0    | 0  |
| 1280 x 720                   | 60Hz           | 45.000                           | 60.000                        | 74.250                      | +/+                                    | 0    | 0  |
| 1280 x 800                   | 60Hz           | 49.702                           | 59.810                        | 83.500                      | -/+                                    | 0    | 0  |
| 1280 x 1024                  | 60Hz           | 63.981                           | 60.020                        | 108.000                     | +/+                                    | 0    | 0  |
| 1280 x 1024                  | 75Hz           | 79.976                           | 75.025                        | 135.000                     | +/+                                    | 0    | 0  |
| 1440 x 900                   | 60Hz           | 55.935                           | 59.887                        | 106.500                     | -/+                                    | 0    | 0  |
| 1600 x 900RB                 | 60Hz           | 60.000                           | 60.000                        | 108.000                     | +/+                                    | 0    | 0  |
| 1680 x 1050                  | 60Hz           | 65.290                           | 59.954                        | 146.250                     | -/+                                    | 0    | 0  |
| 1920 x 1080                  | 60Hz           | 67.500                           | 60.000                        | 148.500                     | +/+                                    | 0    | 0  |

## VESA CVT

| Resolution<br>(Dots x lines) | Display format | Horizontal<br>frequency<br>(KHz) | Vertical<br>frequency<br>(Hz) | Clock<br>frequency<br>(MHz) | Polarity<br>(horizontal /<br>vertical) | Port |    |
|------------------------------|----------------|----------------------------------|-------------------------------|-----------------------------|--|------|----|
|                              |                |                                  |                               |                             |  | HDMI | DP |
| 1920 x 1080RB                | 144Hz          | 166.587                          | 143.981                       | 346.500                     | +/-                                    | 0    | 0  |
| 2560 x 1440RB                | 60Hz           | 88.787                           | 59.951                        | 241.500                     | +/-                                    | 0    | 0  |
| 2560 x 1440RB                | 120Hz          | 182.996                          | 119.998                       | 497.750                     | +/-                                    | 0    | 0  |
| 2560 x 1440RB                | 144Hz          | 222.151                          | 143.973                       | 604.250                     | +/-                                    | 0    | 0  |
| 3840 x 1600                  | 60Hz           | 98.750                           | 59.994                        | 521.750                     | -/+                                    | 0    | 0  |
| 3840 x 1600                  | 120Hz          | 205.924                          | 119.932                       | 1103.750                    | -/+                                    | 0    | 0  |
| 3840 x 2160RB                | 60Hz           | 133.313                          | 59.997                        | 533.250                     | +/-                                    | -    | 0  |

## CVT Custom

| Resolution<br>(Dots x lines) | Display format | Horizontal<br>frequency<br>(KHz) | Vertical<br>frequency<br>(Hz) | Clock<br>frequency<br>(MHz) | Polarity<br>(horizontal /<br>vertical) | Port |    |
|------------------------------|----------------|----------------------------------|-------------------------------|-----------------------------|--|------|----|
|                              |                |                                  |                               |                             |  | HDMI | DP |
| 3840 x 1600                  | 144Hz          | 246.569                          | 143.856                       | 1035.591                    | +/-                                    | 0    | 0  |
| 2560 x 1080                  | 144Hz          | 172.339                          | 143.856                       | 170.831                     | +/-                                    | 0    | 0  |
| 3840 x 2160                  | 144Hz          | 323.977                          | 143.990                       | 1425.500                    | +/-                                    | 0    | 0  |

# Supported Resolutions for Video Signals (CTA-861)

Check the resolutions supported for video signals.

## S27BG65\* / S32BG65\*



| Resolution<br>(Dots x lines) | Display format | Horizontal<br>frequency<br>(KHz) | Vertical<br>frequency<br>(Hz) | Clock<br>frequency<br>(MHz) | Polarity<br>(horizontal /<br>vertical) | Port |    |
|------------------------------|----------------|----------------------------------|-------------------------------|-----------------------------|--|------|----|
|                              |                |                                  |                               |                             |  | HDMI | DP |
| 720 x 576                    | 50Hz           | 31.250                           | 50.000                        | 27.000                      | -/-                                    | 0    | 0  |
| 720 x 480                    | 60Hz           | 31.469                           | 59.940                        | 27.000                      | -/-                                    | 0    | 0  |
| 1280 x 720                   | 50Hz           | 37.500                           | 50.000                        | 74.250                      | +/+                                    | 0    | 0  |
| 1280 x 720                   | 60Hz           | 45.000                           | 60.000                        | 74.250                      | +/+                                    | 0    | 0  |
| 1920 x 1080                  | 50Hz           | 56.250                           | 50.000                        | 148.500                     | +/+                                    | 0    | 0  |
| 1920 x 1080                  | 60Hz           | 67.500                           | 60.000                        | 148.500                     | +/+                                    | 0    | 0  |
| 1920 x 1080                  | 120Hz          | 135.000                          | 120.003                       | 297.000                     | +/+                                    | 0    | 0  |
| 2560 x 1080                  | 60Hz           | 66.000                           | 60.000                        | 198.000                     | +/+                                    | 0    | 0  |
| 2560 x 1080                  | 120Hz          | 150.000                          | 120.000                       | 495.000                     | +/+                                    | 0    | 0  |
| 3840 x 2160                  | 30Hz           | 67.500                           | 30.000                        | 297.000                     | +/+                                    | 0    | -  |
| 3840 x 2160                  | 50Hz           | 112.500                          | 50.000                        | 594.000                     | +/+                                    | 0    | -  |
| 3840 x 2160                  | 60Hz           | 135.000                          | 60.000                        | 594.000                     | +/+                                    | 0    | -  |

## S28BG70\* / S32BG70\*

| Resolution<br>(Dots x lines) | Display format | Horizontal<br>frequency<br>(KHz) | Vertical<br>frequency<br>(Hz) | Clock<br>frequency<br>(MHz) | Polarity<br>(horizontal /<br>vertical) | Port |    |
|------------------------------|----------------|----------------------------------|-------------------------------|-----------------------------|--|------|----|
|                              |                |                                  |                               |                             |  | HDMI | DP |
| 720 x 576                    | 50Hz           | 31.250                           | 50.000                        | 27.000                      | -/-                                    | 0    | 0  |
| 720 x 480                    | 60Hz           | 31.469                           | 59.940                        | 27.000                      | -/-                                    | 0    | 0  |
| 1280 x 720                   | 50Hz           | 37.500                           | 50.000                        | 74.250                      | +/+                                    | 0    | 0  |
| 1280 x 720                   | 60Hz           | 45.000                           | 60.000                        | 74.250                      | +/+                                    | 0    | 0  |
| 1920 x 1080                  | 50Hz           | 56.250                           | 50.000                        | 148.500                     | +/+                                    | 0    | 0  |
| 1920 x 1080                  | 60Hz           | 67.500                           | 60.000                        | 148.500                     | +/+                                    | 0    | 0  |
| 1920 x 1080                  | 120Hz          | 135.000                          | 120.003                       | 297.000                     | +/+                                    | 0    | 0  |
| 2560 x 1080                  | 60Hz           | 66.000                           | 60.000                        | 198.000                     | +/+                                    | 0    | 0  |
| 2560 x 1080                  | 120Hz          | 150.000                          | 120.000                       | 495.000                     | +/+                                    | 0    | 0  |
| 3840 x 2160                  | 30Hz           | 67.500                           | 30.000                        | 297.000                     | +/+                                    | 0    | 0  |
| 3840 x 2160                  | 50Hz           | 112.500                          | 50.000                        | 594.000                     | +/+                                    | 0    | 0  |
| 3840 x 2160                  | 60Hz           | 135.000                          | 60.000                        | 594.000                     | +/+                                    | 0    | 0  |
| 3840 x 2160                  | 120Hz          | 270.000                          | 120.000                       | 1188.000                    | +/+                                    | 0    | 0  |

## List of graphic cards supporting HDR10

HDR10 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 HDR10.

- 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.
-  Graphics cards that support up to HDMI 2.0 do not support HDR10 at UHD 60Hz or UHD 120Hz.



# Specifications

## General

| Model Name                      |                      | S27BG65*                            | S32BG65*                            |
|---------------------------------|----------------------|-------------------------------------|-------------------------------------|
| Size                            |                      | 27 Class<br>(26.9 Inches / 68.4 cm) | 32 Class<br>(31.5 Inches / 80.0 cm) |
| Display area                    |                      | 596.736 mm (H) x 335.664 mm (V)     | 697.344 mm (H) x 392.256 mm (V)     |
| Pixel Pitch                     |                      | 0.2331 mm (H) x 0.2331 mm (V)       | 0.2724 mm (H) x 0.2724 mm (V)       |
| Maximum Pixel Frequency         |                      | 1056.75 MHz                         |                                     |
| Synchronization<br>(PANEL Spec) | Horizontal Frequency | 30 ~ 389 kHz                        |                                     |
|                                 | Vertical Frequency   | 240 Hz                              |                                     |
| Resolution                      | Optimum Resolution   | 2560 x 1440 @ 120 Hz                |                                     |
|                                 | Maximum Resolution   | 2560 x 1440 @ 240 Hz                |                                     |
| Model Name                      |                      | S28BG70*                            | S32BG70*                            |
| Size                            |                      | 28 Class<br>(27.9 Inches / 70.8 cm) | 32 Class<br>(31.5 Inches / 80.1 cm) |
| Display area                    |                      | 620.93 mm (H) x 341.28 mm (V)       | 698.112 mm (H) x 392.688 mm (V)     |
| Pixel Pitch                     |                      | 0.1600 mm (H) x 0.1600 mm (V)       | 0.0606 mm (H) x 0.1818 mm (V)       |
| Maximum Pixel Frequency         |                      | 1425.5 MHz                          |                                     |
| Synchronization<br>(PANEL Spec) | Horizontal Frequency | 30 ~ 324 kHz                        |                                     |
|                                 | Vertical Frequency   | 144 Hz                              |                                     |
| Resolution                      | Optimum Resolution   | 3840 x 2160 @ 120 Hz                |                                     |
|                                 | Maximum Resolution   | 3840 x 2160 @ 144 Hz                |                                     |

|                                 |   |
|---------------------------------|---|
| <b>Power Supply</b>             | AC100-240V~ 50/60Hz<br>Based on the AC voltage of the adapter. For the DC voltage of the product, refer to the product label. |
| <b>Signal connectors</b>        | HDMI<br>DisplayPort<br>USB  |
| <b>Environmental conditions</b> | Operating<br>Temperature: 10 °C – 40 °C (50 °F – 104 °F)<br>Humidity: 10 % – 80 %, non-condensing                             |
|                                 | Storage<br>Temperature: -20 °C – 45 °C (-4 °F – 113 °F)<br>Humidity: 5 % – 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 optimises the product settings. Product installation takes place automatically. However, you can customise 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.

- (Europe only)

To access energy labelling information about this product on the European Product Registry for Energy Labelling (EPREL), go to [https://eprel.ec.europa.eu/qr/\\*\\*\\*\\*\\*](https://eprel.ec.europa.eu/qr/*****)

where \*\*\*\*\* is the product's EPREL registration number. You can find the registration number on the rating label of your product.

- (Turkey only)

To access the energy labelling information of the model:

(1) Go to [https://www.samsung.com/global/ecodesign\\_energy](https://www.samsung.com/global/ecodesign_energy)

(2) Get the model identifier from the energy label of the product and type it in the search box

(3) Energy labelling information can be found

# 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 Programme.
- 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.

# FreeSync (for AMD graphics card)

FreeSync technology is solution that eliminates screen tearing without all the usual lag and latency.





This feature will eliminate screen tearing and lag during game play. Improve your gaming experience.

The displayed FreeSync menu items on the monitor may vary, depending on the monitor model and compatibility with the AMD graphics card.

- **Off:** Disable FreeSync.
- **On:** Turn on the AMD graphics cards' FreeSync function. You may experience intermittent flickers when playing some games.


Apply the optimum resolution when using FreeSync.


The refresh rate setting method please refer to Q & A → [How can I change the frequency?](#)


-  This menu is not available when **Multi View** is enabled.
-  The FreeSync function is only enabled in **HDMI** or **DisplayPort** mode.  
Use the HDMI/DP cable provided by the manufacturer when using FreeSync.
-  If the FreeSync function is in use and the text displayed on the PC screen looks blurry or corrupted, resolve the issue by changing the resolution of the PC screen to the recommended resolution.
-  If you set the **Input Signal Plus** to **OFF**, the **FreeSync Premium pro** mode is disabled.

If you use the FreeSync function while playing a game, the following symptoms may occur:

- The screen may flicker depending on the type of graphics card, the game option settings, or the video being played. Try the following actions: decrease the game setting values, change the current **FreeSync Premium pro** mode to **Off**, or visit the AMD website to check your graphics driver's version and update it with the latest one.
- While you are using the FreeSync function, the screen may flicker due to variation of the output frequency from the graphics card.
- The response rate during the game may fluctuate depending on the resolution. A higher resolution generally decreases the response rate.
- The sound quality of the monitor may be degraded.

 If you encounter any issues when using the function, contact the Samsung Service Centre.

 If you change the screen resolution while the function is **On**, the screen may intermittently blank out due to the graphic card. Set **FreeSync Premium pro** to **Off** and change the resolution.

 The function is unavailable in the devices (e.g. AV devices) that have no AMD graphic card. If the function is applied, the screen may have malfunction.


## The models in the Graphics Cards list supports FreeSync

FreeSync can only be used with specific AMD graphics card models. Refer to the following list for supported graphics cards:

Make sure to install the latest official graphics drivers from AMD that support FreeSync.

 For additional AMD graphics card models that support the FreeSync feature, visit the official AMD website.

 Select **FreeSync Premium pro Off** if you are using a graphics card from a different manufacturer.

 When applying the FreeSync function via the HDMI cable, it may fail to work due to the bandwidth limitation of certain AMD graphics card.

- Radeon™ RX Vega series
- Radeon™ RX 500 series
- Radeon™ RX 400 series
- Radeon™ R9/R7 300 series (excluding R9 370/X, R7 370/X, R7 265)
- AMD Radeon™ 5500 Series
- AMD Radeon™ 5700 Series
- Radeon™ Pro Duo (2016 edition)
- Radeon™ R9 Nano series
- Radeon™ R9 Fury series
- Radeon™ R9/R7 200 series (excluding R9 270/X, R9 280/X)
- AMD Radeon™ 5600 Series
- AMD Radeon™ RX 6000 Series

# Supported Resolutions for FreeSync (VRR)

Check the supported resolutions for the FreeSync (VRR) signal.

When **Game Mode** is set to **On** or **Auto**, the FreeSync (VRR) function is activated.

 FreeSync (VRR) is only available in select models.

## S27BG65\* / S32BG65\*

### VESA CVT

| Resolution<br>(Dots x lines) | Display format | Horizontal<br>frequency<br>(KHz) | Vertical<br>frequency<br>(Hz) | Clock<br>frequency<br>(MHz) | Polarity<br>(horizontal /<br>vertical) | Port |    |
|------------------------------|----------------|----------------------------------|-------------------------------|-----------------------------|--|------|----|
|                              |                |                                  |                               |                             |  | HDMI | DP |
| 2560 x 1440RB                | 120Hz          | 182.996                          | 119.998                       | 497.750                     | +/-                                    | 0    | 0  |
| 1920 x 1080RB                | 240Hz          | 291.587                          | 239.989                       | 606.500                     | +/-                                    | 0    | 0  |
| 2560 x 1080RB                | 240Hz          | 291.544                          | 239.954                       | 793.000                     | +/-                                    | 0    | 0  |
| 2560 x 1440RB                | 240Hz          | 388.511                          | 239.970                       | 1056.750                    | +/-                                    | 0    | 0  |
| 2560 x 1440RB                | 60Hz           | 88.787                           | 59.951                        | 241.500                     | +/-                                    | 0    | 0  |

### CTA-861

| Resolution<br>(Dots x lines) | Display format | Horizontal<br>frequency<br>(KHz) | Vertical<br>frequency<br>(Hz) | Clock<br>frequency<br>(MHz) | Polarity<br>(horizontal /<br>vertical) | Port |    |
|------------------------------|----------------|----------------------------------|-------------------------------|-----------------------------|--|------|----|
|                              |                |                                  |                               |                             |  | HDMI | DP |
| 1920 x 1080                  | 60Hz           | 67.500                           | 60.000                        | 148.500                     | +/+                                    | 0    | 0  |
| 2560 x 1080                  | 60Hz           | 66.000                           | 60.000                        | 198.000                     | +/+                                    | 0    | 0  |
| 3840 x 2160                  | 60Hz           | 135.000                          | 60.000                        | 594.000                     | +/+                                    | 0    | -  |
| 1920 x 1080                  | 120Hz          | 135.000                          | 120.003                       | 297.000                     | +/+                                    | 0    | 0  |
| 2560 x 1080                  | 120Hz          | 150.000                          | 120.000                       | 495.000                     | +/+                                    | 0    | 0  |

## S28BG70\* / S32BG70\*

### VESA CVT

| Resolution<br>(Dots x lines) | Display format | Horizontal<br>frequency<br>(KHz) | Vertical<br>frequency<br>(Hz) | Clock<br>frequency<br>(MHz) | Polarity<br>(horizontal /<br>vertical) | Port |    |
|------------------------------|----------------|----------------------------------|-------------------------------|-----------------------------|--|------|----|
|                              |                |                                  |                               |                             |  | HDMI | DP |
| 3840 x 1600                  | 60Hz           | 98.750                           | 59.994                        | 521.750                     | -/+                                    | 0    | 0  |
| 3840 x 2160RB                | 60Hz           | 133.313                          | 59.997                        | 533.250                     | +/-                                    | -    | 0  |
| 2560 x 1440RB                | 60Hz           | 88.787                           | 59.951                        | 241.500                     | +/-                                    | 0    | 0  |
| 2560 x 1440RB                | 120Hz          | 182.996                          | 119.998                       | 497.750                     | +/-                                    | 0    | 0  |
| 3840 x 1600                  | 120Hz          | 205.924                          | 119.932                       | 1103.750                    | -/+                                    | 0    | 0  |
| 1920 x 1080RB                | 144Hz          | 166.587                          | 143.981                       | 346.500                     | +/-                                    | 0    | 0  |
| 2560 x 1440RB                | 144Hz          | 222.151                          | 143.973                       | 604.250                     | +/-                                    | 0    | 0  |
| 3840 x 1600                  | 144Hz          | 246.569                          | 143.856                       | 1035.591                    | +/-                                    | 0    | 0  |
| 3840 x 2160                  | 144Hz          | 323.977                          | 143.990                       | 1425.500                    | +/-                                    | 0    | 0  |

### CVT Custom

| Resolution<br>(Dots x lines) | Display format | Horizontal<br>frequency<br>(KHz) | Vertical<br>frequency<br>(Hz) | Clock<br>frequency<br>(MHz) | Polarity<br>(horizontal /<br>vertical) | Port |    |
|------------------------------|----------------|----------------------------------|-------------------------------|-----------------------------|--|------|----|
|                              |                |                                  |                               |                             |  | HDMI | DP |
| 2560 x 1080RB2               | 144Hz          | 172.339                          | 143.856                       | 170.831                     | +/-                                    | 0    | 0  |
| 2560 x 1440RB                | 144Hz          | 222.151                          | 143.973                       | 604.250                     | +/-                                    | 0    | 0  |
| 3840 x 1600                  | 144Hz          | 246.569                          | 143.856                       | 1035.591                    | +/-                                    | 0    | 0  |
| 3840 x 2160                  | 144Hz          | 323.977                          | 143.990                       | 1425.500                    | +/-                                    | 0    | 0  |



## CTA-861

| Resolution<br>(Dots x lines) | Display format | Horizontal<br>frequency<br>(KHz) | Vertical<br>frequency<br>(Hz) | Clock<br>frequency<br>(MHz) | Polarity<br>(horizontal /<br>vertical) | Port |    |
|------------------------------|----------------|----------------------------------|-------------------------------|-----------------------------|--|------|----|
|                              |                |                                  |                               |                             |  | HDMI | DP |
| 1920 x 1080                  | 60Hz           | 67.500                           | 60.000                        | 148.500                     | +/+                                    | 0    | 0  |
| 2560 x 1080                  | 60Hz           | 66.000                           | 60.000                        | 198.000                     | +/+                                    | 0    | 0  |
| 3840 x 2160                  | 60Hz           | 135.000                          | 60.000                        | 594.000                     | +/+                                    | 0    | 0  |
| 1920 x 1080                  | 120Hz          | 135.000                          | 120.003                       | 297.000                     | +/+                                    | 0    | 0  |
| 2560 x 1080                  | 120Hz          | 150.000                          | 120.000                       | 495.000                     | +/+                                    | 0    | 0  |
| 3840 x 2160                  | 120Hz          | 270.000                          | 120.000                       | 1188.000                    | +/+                                    | 0    | 0  |