

Product Guide

S32DM1E* S43DM1E* S27DM50* S32DM50* S32DM70*
S43DM70* S32DM80* S27FM50* S32FM50* S32FM70*
S43FM70* S32FM80* S32FM90*

The color and the appearance may differ depending on the product, and the content in the manual is subject to change without prior notice to improve the performance.

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

© Samsung

Samsung owns the copyright for this manual.

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

Trademarks other than that of Samsung are owned by their respective owners.

Contents

Before Using the Product

Safety Precautions

- 3 Electricity and Safety
- 4 Installation
- 4 Operation

Cleaning

Correct posture to use the product

Preparations

Installation

- 7 Attaching the Stand
 - S32DM1E* S27DM50* S32DM50* S32DM70* S32FM70*
 - S27FM50* S32FM50*
 - S43DM1E* S43DM70* S43FM70*
 - S32DM80* S32FM80*
 - S32FM90*
- 12 Tidying Up the Connected Cables
- 14 Connecting the camera to the product
- 15 Precautions for moving the product
- 15 Checking the space around the product
- 16 Adjusting the Product Tilt and Height
- 18 Rotating the Product
- 19 Anti-theft Lock
- 20 Wall Mount Kit Specifications (VESA)

Control Panel

Connections

Ports

- 23 S32DM1E* S27DM50* S32DM50* S27FM50* S32FM50*
S32DM70* S32FM70*
- 25 S32DM80* S32FM80* S32FM90*
- 26 S43DM1E* S43DM70* S43FM70*

Connecting the Product to a PC as a USB HUB

Precautions and Notes

Read After Installing the product

- 28 Picture sizes and input signals

Supported Resolutions for UHD Input Signals

- 29 If Input Signal Plus is set to Off
- 29 If Input Signal Plus is set to On

Read Before Connecting a Computer (Supported Resolutions)

- 30 VESA DMT
- 31 VESA CVT

Supported Resolutions for Video Signals

- 32 CTA-861
- 32 List of graphic cards supporting HDR10

FreeSync (for AMD graphics card)

Adaptive-Sync (for NVIDIA graphics card)

Supported Resolutions for FreeSync/Adaptive-Sync (VRR)

- 37 VRR VESA DMT
- 37 VRR VESA CVT
- 37 VRR CTA-861

Specifications

General

Appendix

Responsibility for the Pay Service (Cost to Customers)

- 41 Not a product defect
- 41 A Product damage caused by customer's fault
- 41 Others

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 cord 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.

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 put heavy objects, toys or snacks on top of the product.
 - Hanging on to the product to get a toy or snack may cause heavy objects to fall or the product to tip over, resulting in injury or death.
- 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 (via the vent or input/output ports, etc).
 - Be sure to power off the product and disconnect the power cord when water or other foreign substances have entered the product. Then contact Samsung Customer Service Center.
- 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.

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 product screen. 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.
-  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, 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.

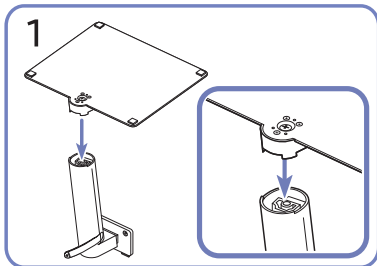
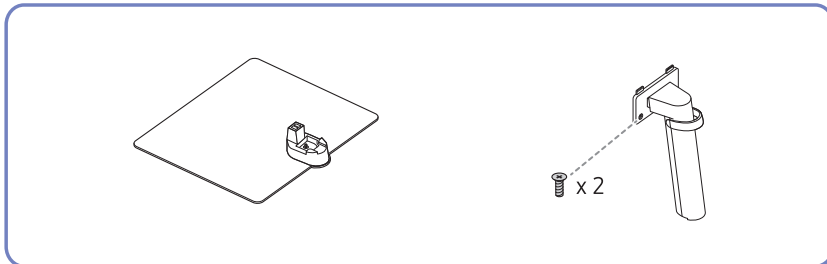
Preparations

Installation

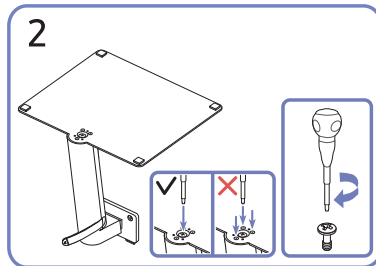
Attaching the Stand

-  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.

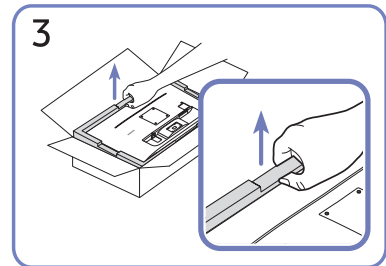
S32DM1E* S27DM50* S32DM50* S32DM70* S32FM70*



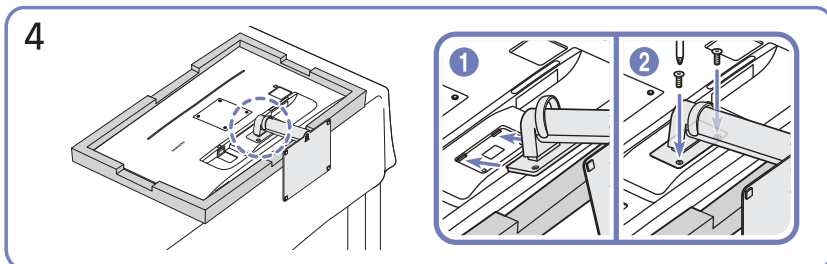
Put the stand base onto the stand neck as the direction shown in the figure. Check that the stand neck is firmly connected.



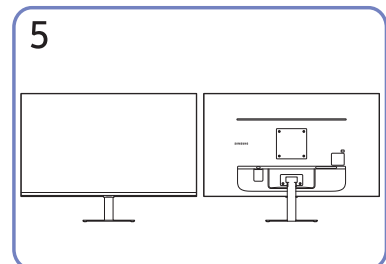
Tightly fasten the connecting screw at the bottom of the stand base. Fasten the large screw in the middle for assembly.



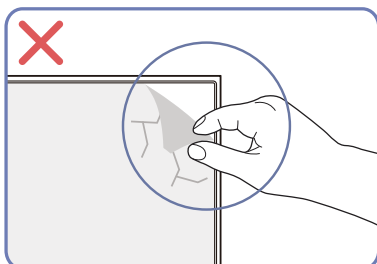
As shown in the figure, remove the product and foam cushion, and then place the product on the table with its front side facing the floor.



Push the assembled stand into the main body in the direction of the arrow as shown in the figure. Tightly fasten the stand to the main body using the screw.

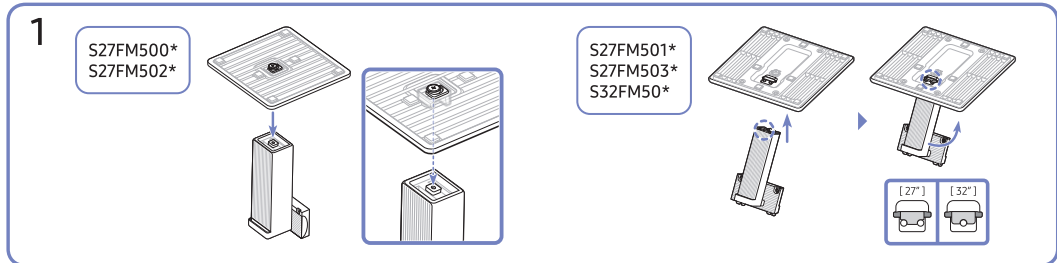


Stand assembly is complete.




Caution

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





2


S27FM500*
S27FM502*




S27FM501*
S27FM503*
S32FM50*





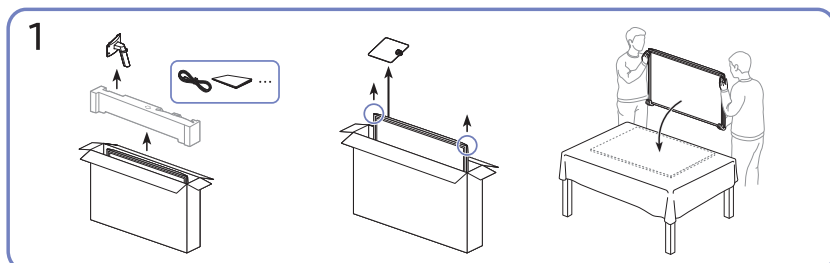
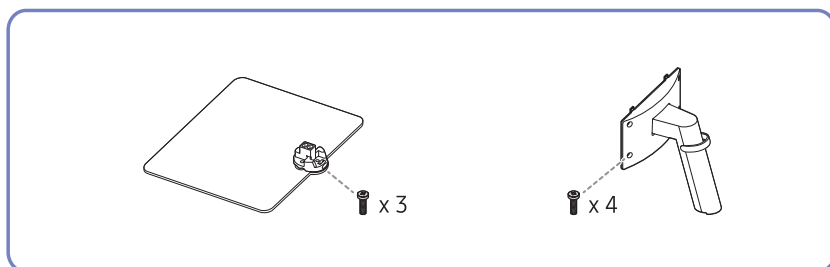


4

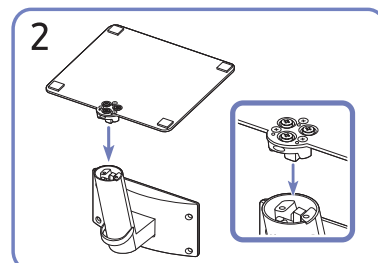


- 8 -

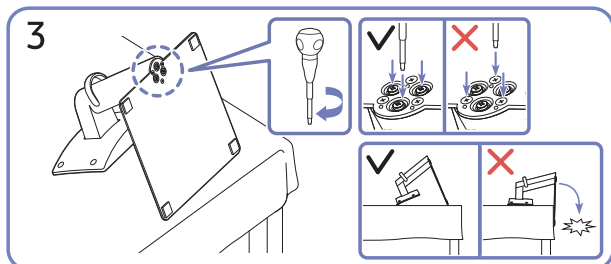
S43DM1E* S43DM70* S43FM70*



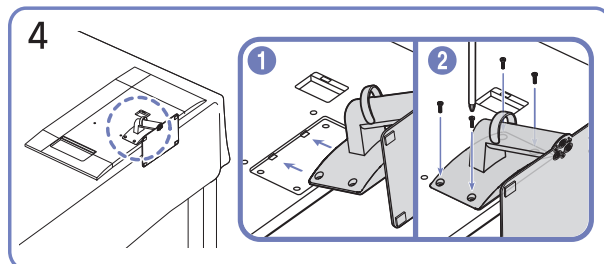
As shown in the figure, remove the product and foam cushion, and then place the product on the table with its front side facing the floor.



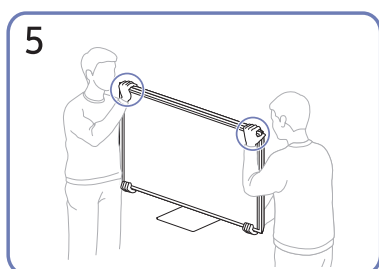
Put the stand base onto the stand neck as the direction shown in the figure. Check that the stand neck is firmly connected.



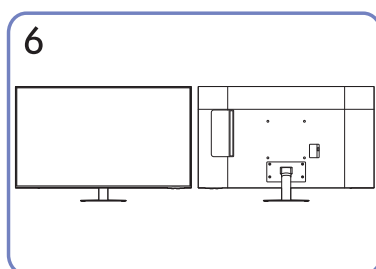
Place the stand on a table as shown in the figure. With the stand neck fastened vertically to the stand base, tightly fasten the connecting screws at the bottom of the stand base.



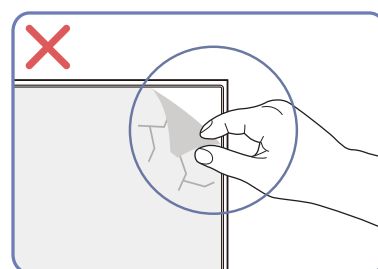
Push the assembled stand into the main body in the direction of the arrow as shown in the figure. Tightly fasten the stand to the main body using the screw.



Stand up the monitor as shown in the figure.



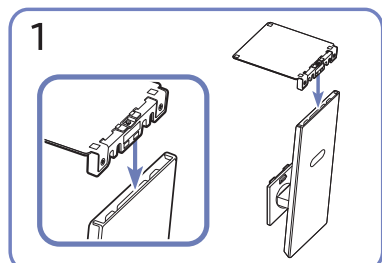
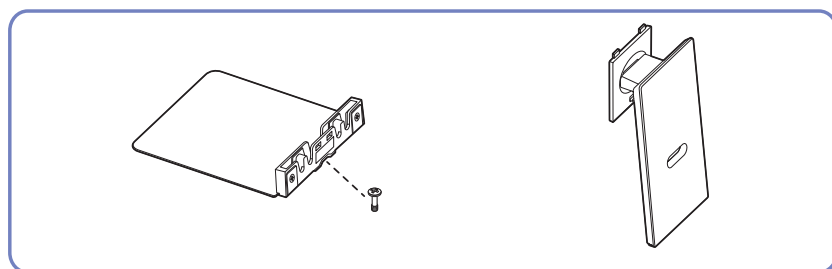
Stand assembly is complete.



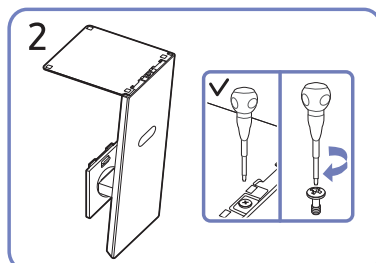
Caution

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

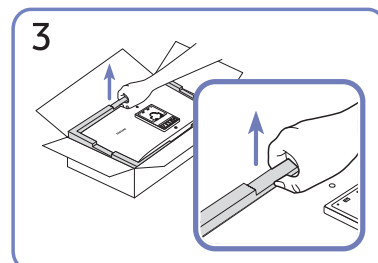
S32DM80* S32FM80*



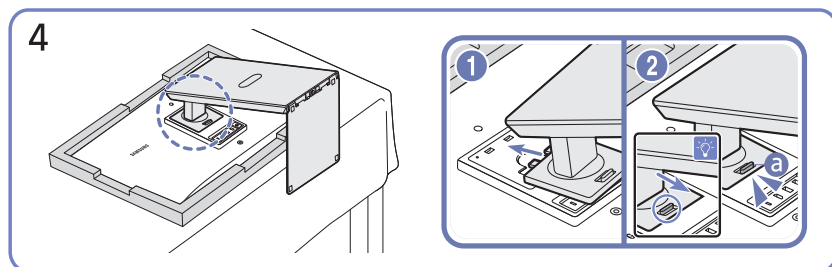
Put the stand base onto the stand neck as the direction shown in the figure. Check that the stand neck is firmly connected.



Tightly fasten the connecting screw at the bottom of the stand base.

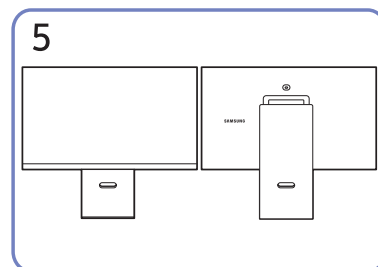


As shown in the figure, remove the product and foam cushion, and then place the product on the table with its front side facing the floor.

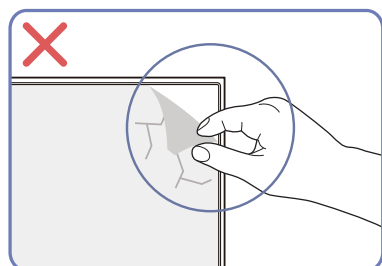


Push the assembled stand into the main body in the direction of the arrow as shown in the figure.

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



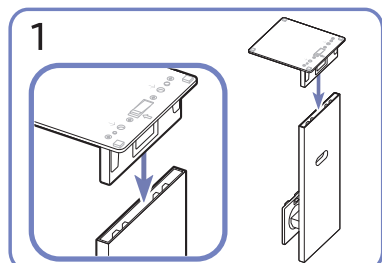
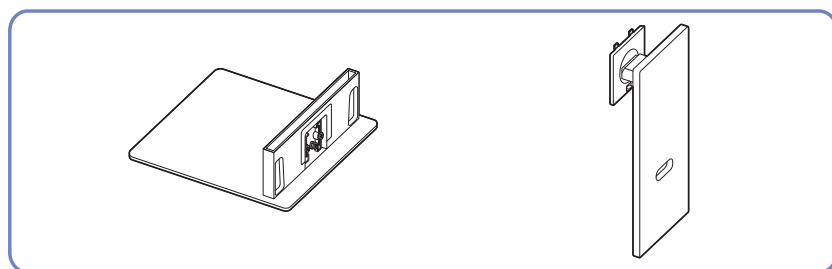
Stand assembly is complete.



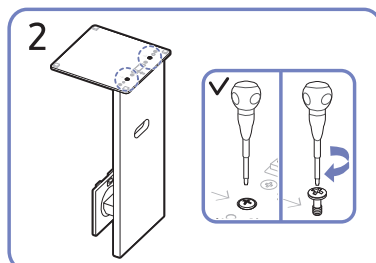
Caution

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

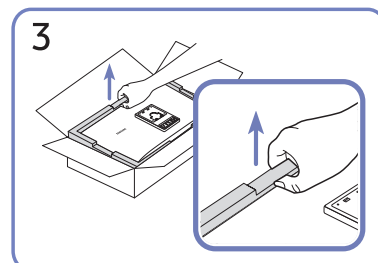
S32FM90*



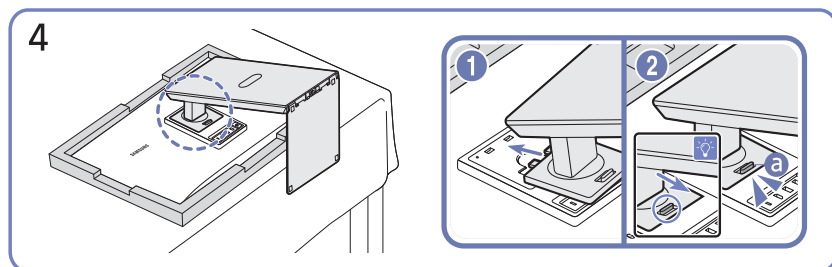
Put the stand base onto the stand neck as the direction shown in the figure. Check that the stand neck is firmly connected.



Tightly fasten the connecting screw at the bottom of the stand base.

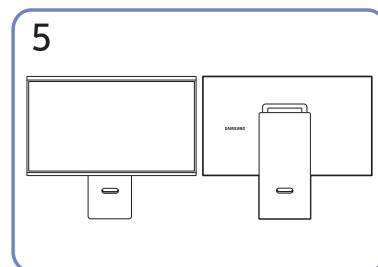


As shown in the figure, remove the product and foam cushion, and then place the product on the table with its front side facing the floor.

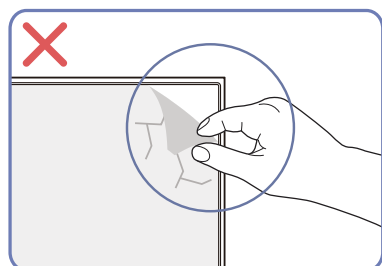


Push the assembled stand into the main body in the direction of the arrow as shown in the figure.

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



Stand assembly is complete.

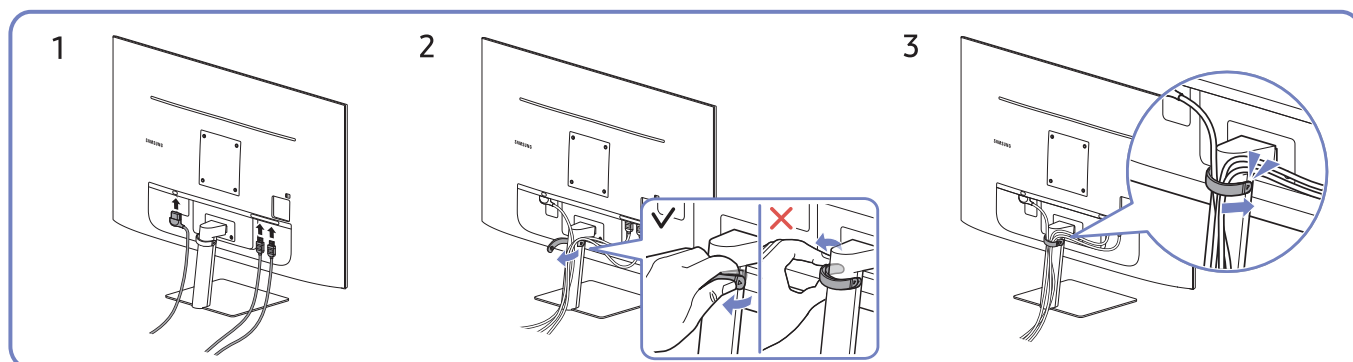


Caution

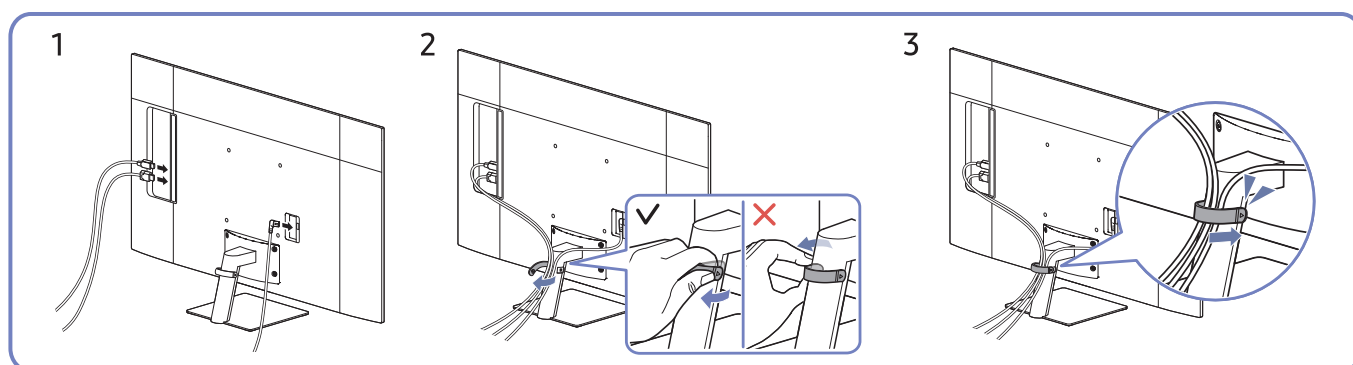
Do not arbitrarily remove the panel film. If not observed, the warranty service may be restricted.

Tidying Up the Connected Cables

S32DM1E* S27DM50* S32DM50* S32DM70* S32FM70*

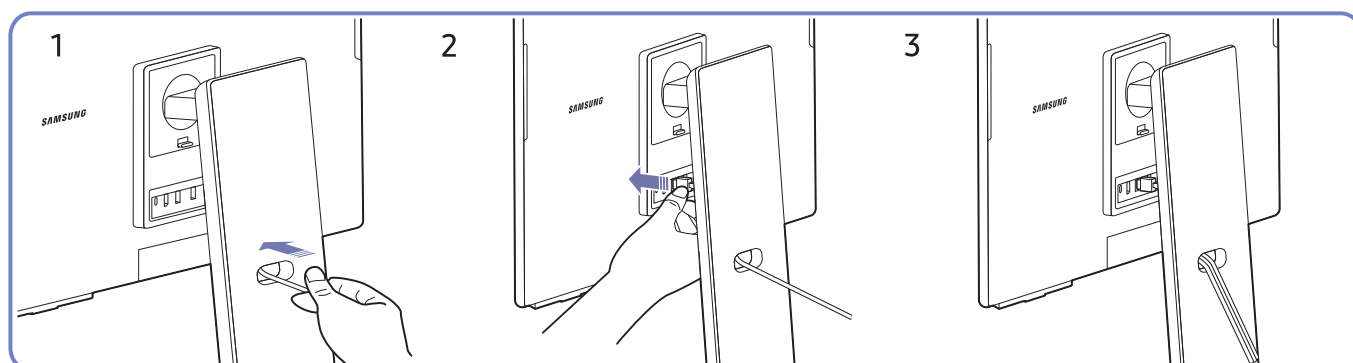


S43DM1E* S43DM70* S43FM70*

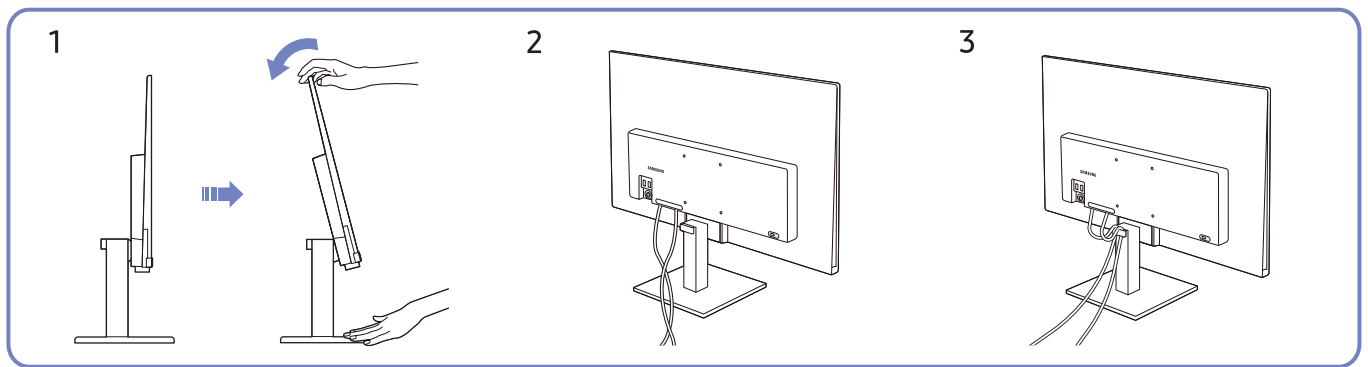


1. Connect the corresponding cables.
2. Pull the right side of the HOLDER-STAND CABLE to remove from the stand.
The left side of the cable can be damaged when pulled forcibly.
3. Put both cables in the cable holder on the stand (HOLDER-STAND CABLE) to organize the cables, as shown in the figure.
Assembly is complete.

S32DM80* S32FM80* S32FM90*



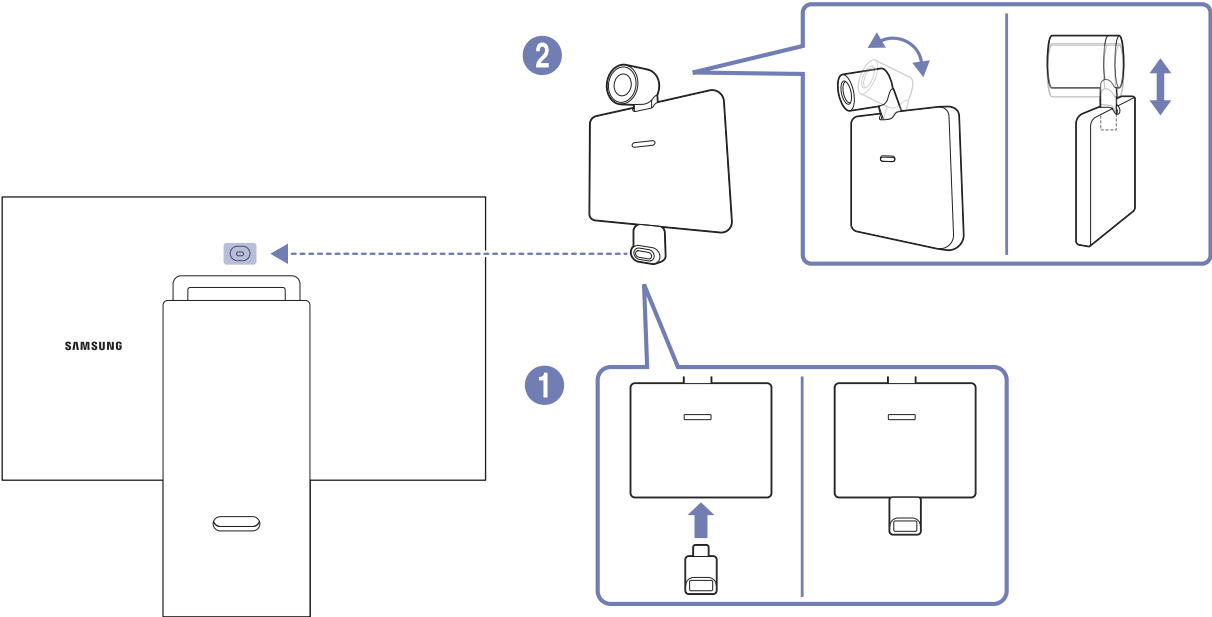
1. Pass cables through the hole on the stand.
2. Connect the cables to the corresponding ports.
3. Organize cables by passing them through the hole on the stand, as shown in the figures.



1. Tilt the display, as shown in the figure.
2. Connect the corresponding cables.
3. Organize the cables by hanging them on the cable hanger, as shown in the figures.



Connecting the camera to the product

 S32DM80* / S32FM80* models only.



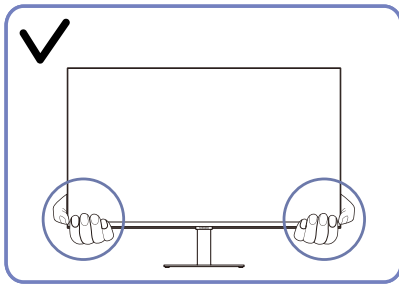
Camera Specifications

Resolution	1920 x 1080, 30 fps (FHD)
Automatic light compensation	0
Viewing angle	85°
Connection	USB Type-C (USB 2.0)

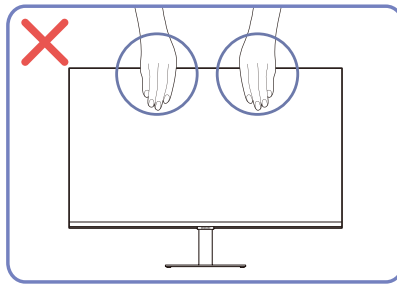
-  Before using the product, use a soft dry cloth to wipe the camera connector, to prevent malfunction due to foreign matter.
-  A camera may not be provided, depending on the model.

Precautions for moving the product

 The color and shape of parts may differ from what is shown.

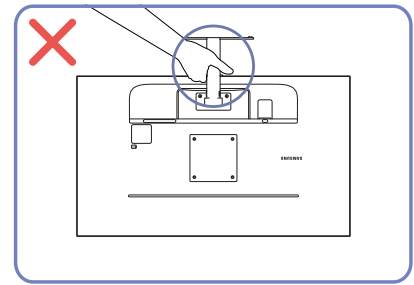


Hold the lower corners or edges of the product when moving it.

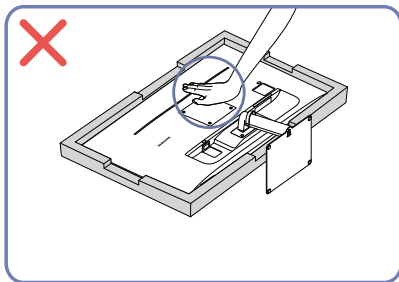


Do not directly apply pressure on the screen.

Do not hold the screen when moving the product.



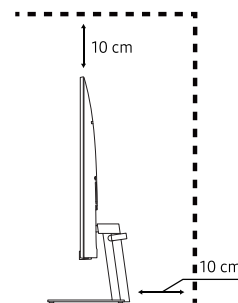
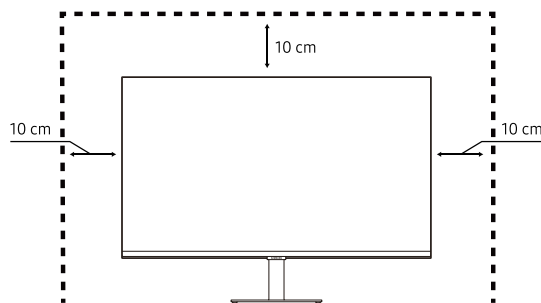
Do not hold the product upside down only by the stand.




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

Checking the space around the product

Make sure there is at least 10 cm of space between the product and other objects, to ensure good ventilation. An internal temperature rise may cause fire and damage the product.

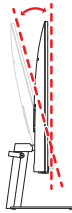


Adjusting the Product Tilt and Height

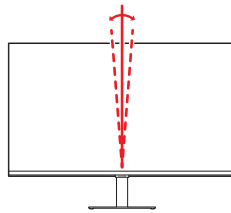
 The color and shape of parts may differ from what is shown. Specifications are subject to change without notice to improve quality.

- 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.

S32DM1E* S27DM50* S32DM50* S32DM70* S32FM70*
S43DM1E* S43DM70* S43FM70*



[27" / 32"] -2.0° (±2.0°) ~ 22.0° (±2.0°)
[43"] -2.0° (±2.0°) ~ 20.0° (±2.0°)

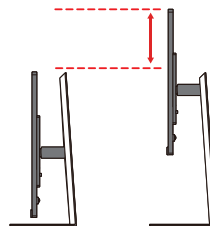


-2.0° (±1.0°) ~ 2.0° (±1.0°)

S32DM80* S32FM80* S32FM90*

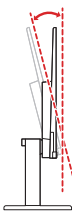


[S32*M80*] -2.0° (±2.0°) ~ 15.0° (±2.0°)
[S32*M90*] -2.0° (±2.0°) ~ 25.0° (±2.0°)

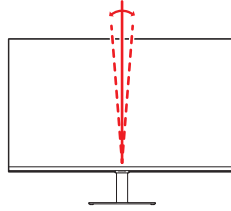


120.0 mm (±5.0 mm)

S27FM50* S32FM50*





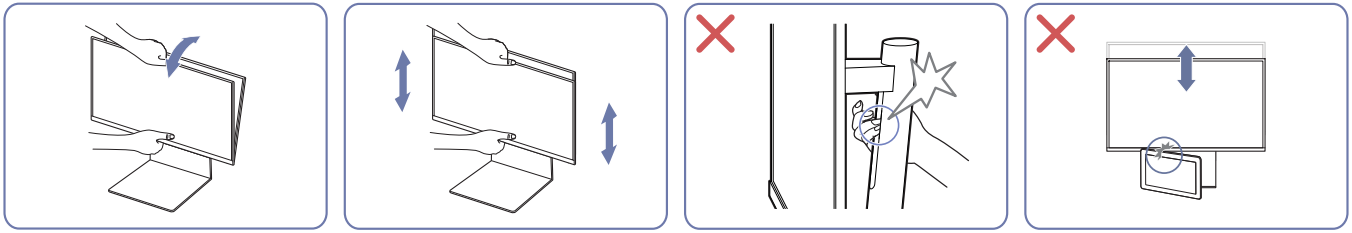
-2.0° (±2.0°) ~ 15.0° (±2.0°)



-3.0° (±2.0°) ~ 3.0° (±2.0°)

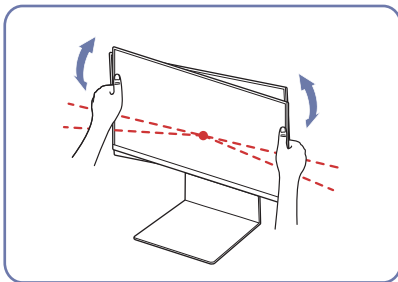
Caution

-  The Product shape may differ depending on the model.
-  S32DM80* / S32FM80* / S32FM90* model only.




- Grasp the center of the top, bottom or sides of the product and adjust the height and incline.
- Do NOT hold the moving part of the stand when adjusting the product's tilt or height. There is a risk of 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.



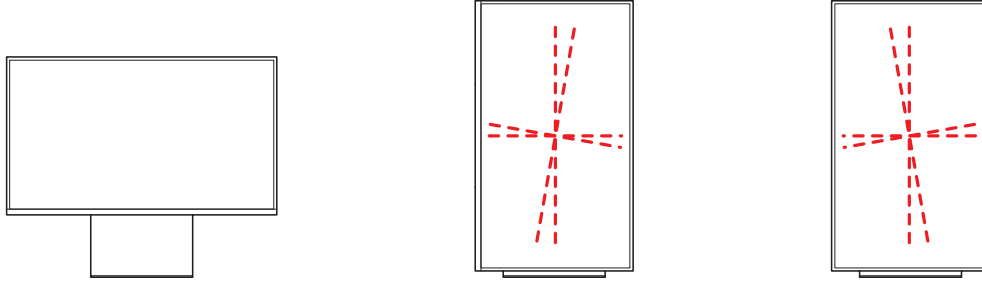
- Hold the bezel at both side edges and adjust the monitor angle until the screen becomes level. (Be careful not to directly hold the LCD display.)

Rotating the Product

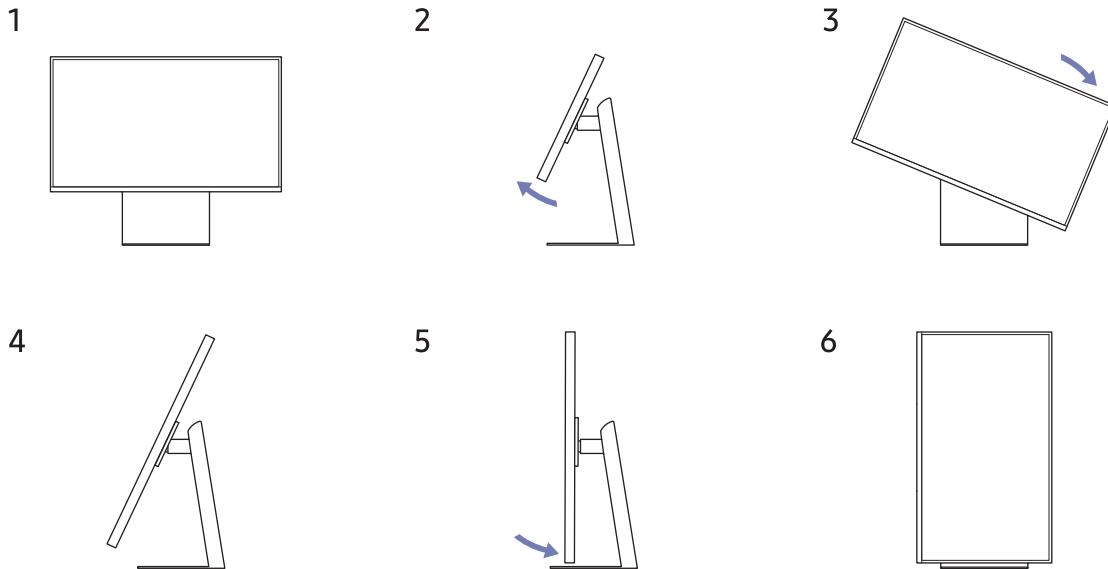
 The color and shape of parts may differ from what is shown. Specifications are subject to change without notice to improve quality.

 S32DM80* / S32FM80* / S32FM90* models only.

$-92.0^{\circ} (\pm 2.0^{\circ}) \sim +92.0^{\circ} (\pm 2.0^{\circ})$






You can rotate your product as shown below.

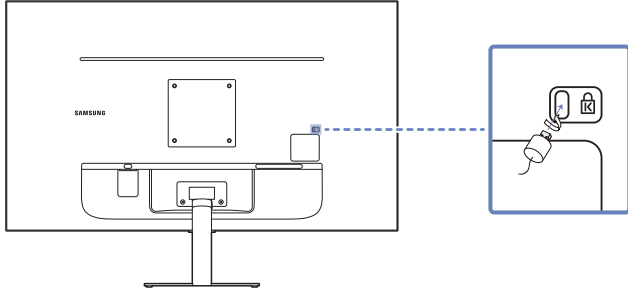


- Be sure to fully extend the stand before rotating the product.
- If you rotate the product without fully extending the stand, the corner of the product may hit the floor and get damaged.
- When rotating the product, be careful not to damage the product by hitting the object or stand.

Anti-theft Lock


-  An anti-theft lock allows you to use the product securely even in public places.
-  The locking device shape and locking method depend on the manufacturer. Refer to the manuals provided with your anti-theft locking device for details.
-  This function may not be supported depending on the model.

To lock an anti-theft locking device:



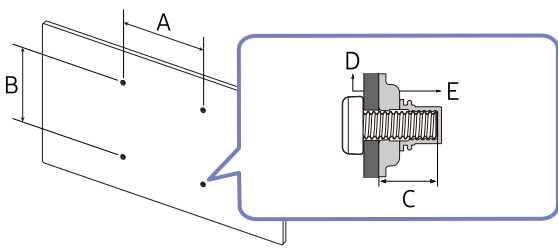
1. Fix the cable of your anti-theft locking device to a heavy object such as a desk.
2. Put one end of the cable through the loop on the other end.
3. Insert the locking device into the anti-theft lock slot at the back of the product.
4. Lock the locking device.
 - An anti-theft locking device can be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

Wall Mount Kit Specifications (VESA)

 Install your wall mount on a solid wall perpendicular to the floor. Before attaching the wall mount to surfaces other than plaster board, please contact your nearest dealer for additional information. If you install the product on a slanted wall, it may fall and result in severe personal injury. Samsung wall mount kits contain a detailed installation manual and all parts necessary for assembly are provided.

- Do not use screws that are longer than the standard length or do not comply with the VESA standard screw specifications. Screws that are too long may cause damage to the inside of the product.
- For wall mounts that do not comply with the VESA standard screw specifications, the length of the screws may differ depending on the wall mount specifications.
- Do not fasten the screws too firmly. This may damage the product or cause the product to fall, leading to personal injury. Samsung is not liable for these kinds of accidents.
- Samsung is not liable for product damage or personal injury when a non-VESA or non-specified wall mount is used or the consumer fails to follow the product installation instructions.
- Do not mount the product at more than a 15 degree tilt.
- Standard dimensions for wall mount kits are shown in the table below.


Model name	VESA screw hole specs (A * B) in millimeters	C	Standard Screw	Quantity
S27FM50* S32FM50*	100.0 x 100.0	6.0 ~ 8.0 mm	M4	4
S32DM1E* S27DM50* S32DM50* S32DM70* S32FM70*		6.7 ~ 8.7 mm		
S32DM80* S32FM80* S32FM90*		5.8 ~ 7.8 mm		
S43DM1E* S43DM70* S43FM70*		200.0 x 200.0		

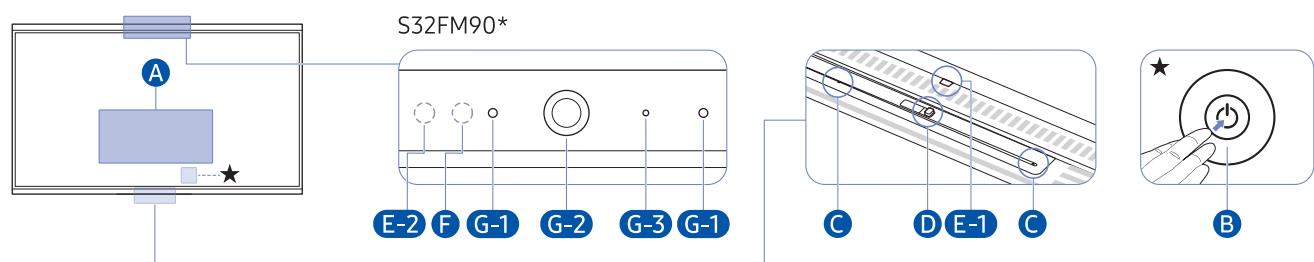
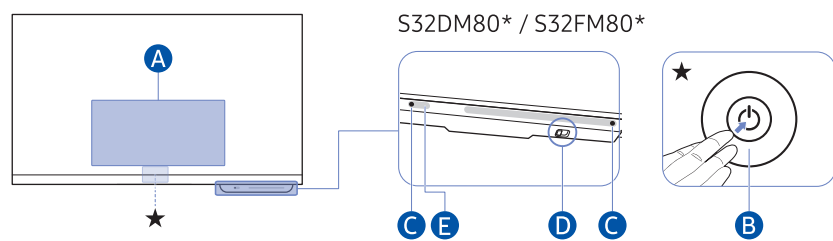
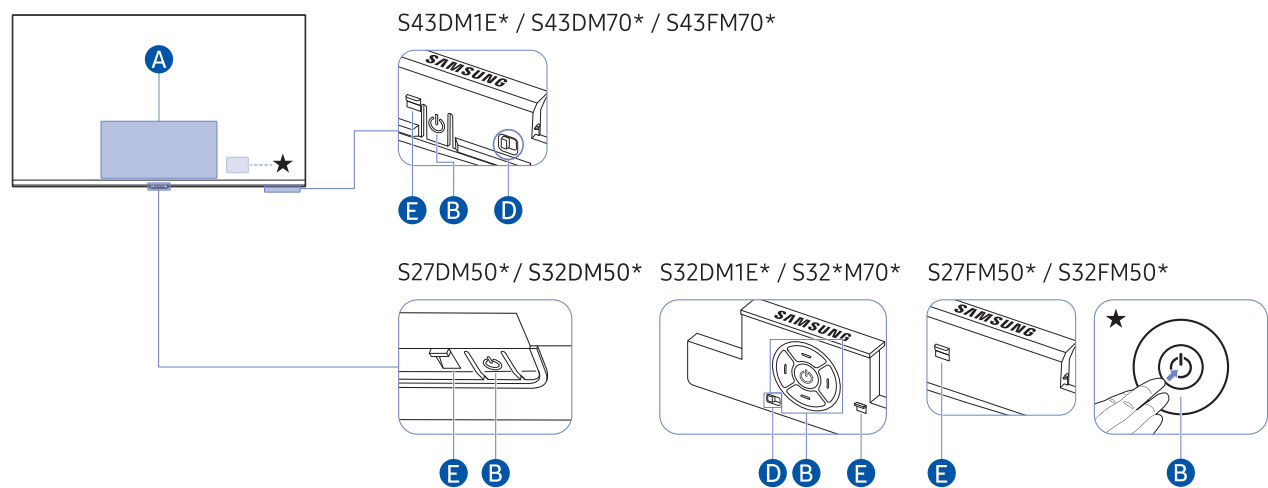








D : Wall mount bracket
E : Product

 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

 You can turn on the product with the Power button, and then use the Control menu. The Control menu appears when the Power button is pressed while the product is On.




Location	Description
A	Control menu
B	<p>Power button / Controller button</p> <ul style="list-style-type: none"> Press  button: Display the Control menu. Select or run a focused item on the menu. 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.  ★ : This button is located on the rear of the product.
C	Microphone
D	<p>Microphone switch (On ↔ Off)</p> <p>You can turn on or off the microphone.</p> <p>If microphone is turned off, All voice and sound features using microphone are not available.</p> <ul style="list-style-type: none"> 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.
E	<p>Power indicator / Remote control sensor</p> <p>E-1 Power indicator</p> <p>E-2 Remote control sensor</p> <ul style="list-style-type: none"> 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 color 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 buttons (excluding the Power button) on the Bluetooth-type Samsung Smart Remote, the receiver LED does not blink.
F	Light sensor
G-1	Camera microphone
G-2	Camera (Resolution : 3840 x 2160 @ 30 Hz)
G-3	<p>Camera status indicator</p> <ul style="list-style-type: none"> The LED lights up when the camera is operating.

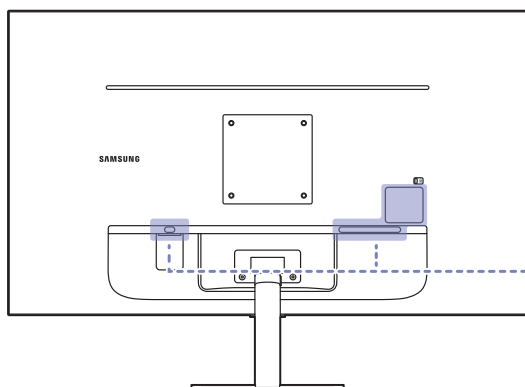
Connections

Using various connectors, you can also connect external devices.

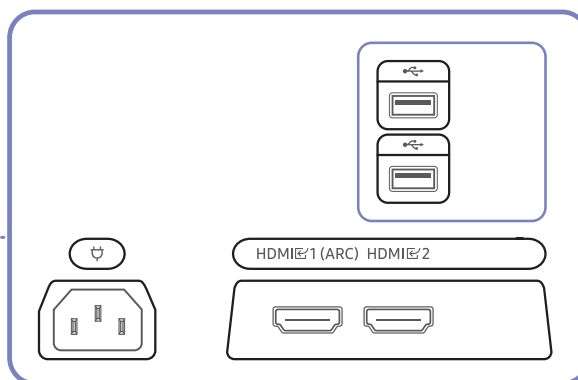
Ports

 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.

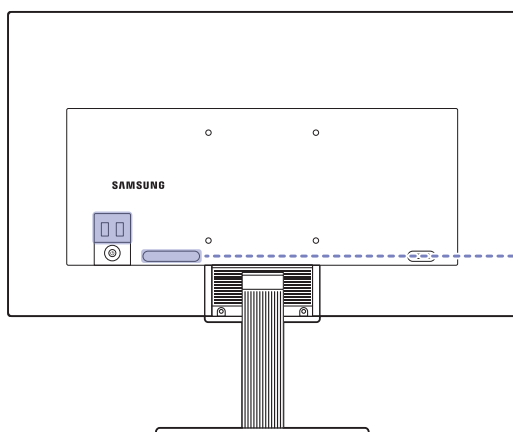
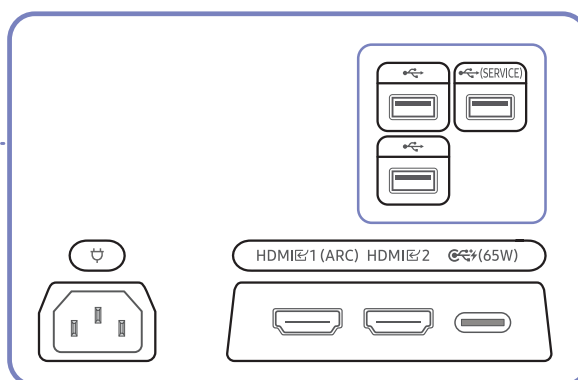
S32DM1E* S27DM50* S32DM50* S27FM50* S32FM50* S32DM70* S32FM70*



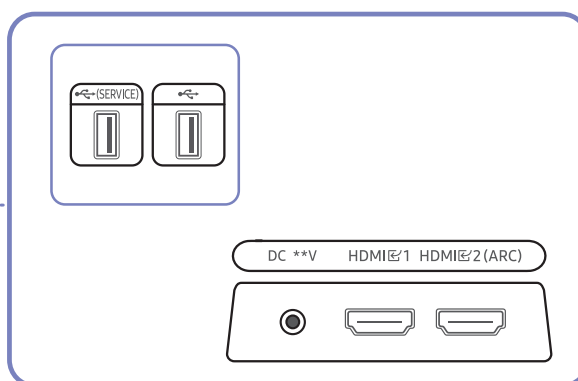
S27DM50* / S32DM50*
















S32DM1E* / S32DM70* / S32FM70*



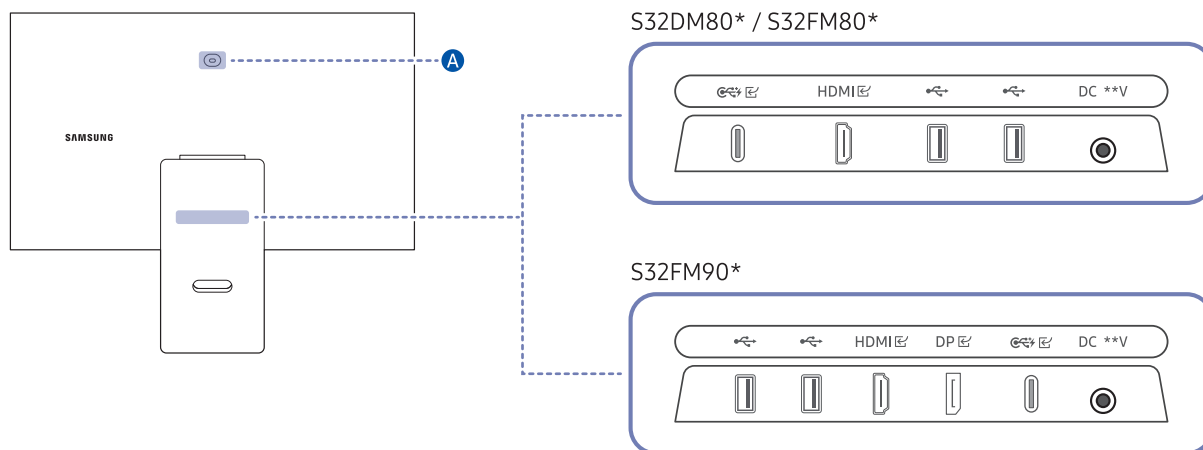
S27FM50* / S32FM50*



Port	Description
HDMI 1 (ARC) HDMI 2	Connects to a source device using an HDMI cable.
HDMI 1 HDMI 2 (ARC)	
 (SERVICE)	<ul style="list-style-type: none"> Connects to a USB device, such as a keyboard or mouse.  This port does not support the USB hub function, and connects to the monitor. Used to update the software.
	<ul style="list-style-type: none"> Connects to a USB device, such as a keyboard or mouse. This port supports the USB hub function. It allows you to connect a variety of devices to your computer by using the product as a hub. (This function is supported on the S32DM1E* / S32DM70* / S32FM70* models only.)  For more information, see Connecting the Product to a PC as a USB HUB page.
 (65W)	<ul style="list-style-type: none"> Connects to a source device using a USB Type-C cable. When connecting a USB Type-C source device, make sure to use the USB Type-C 3.1 Gen2 10G cable so that the screen is displayed properly.  Lower version cables do not support the video input function (Displayport ALT). The USB Type-C port can be connected to a notebook or mobile device for charging.  A maximum of 65 W charging power is supported. Charging speed and whether or not charging is supported may differ, depending on the device connected to the product.  We cannot guarantee that this product can charge all types of devices that have a USB Type-C port, because there are a wide variety of devices that come with USB Type-C ports on the market.  Make sure your USB Type-C cable complies with the USB Power Delivery specification. A cable that does not comply with the specification may damage the device.
	Connect the power cord for product.
DC **V	Connects to the AC/DC adapter.

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

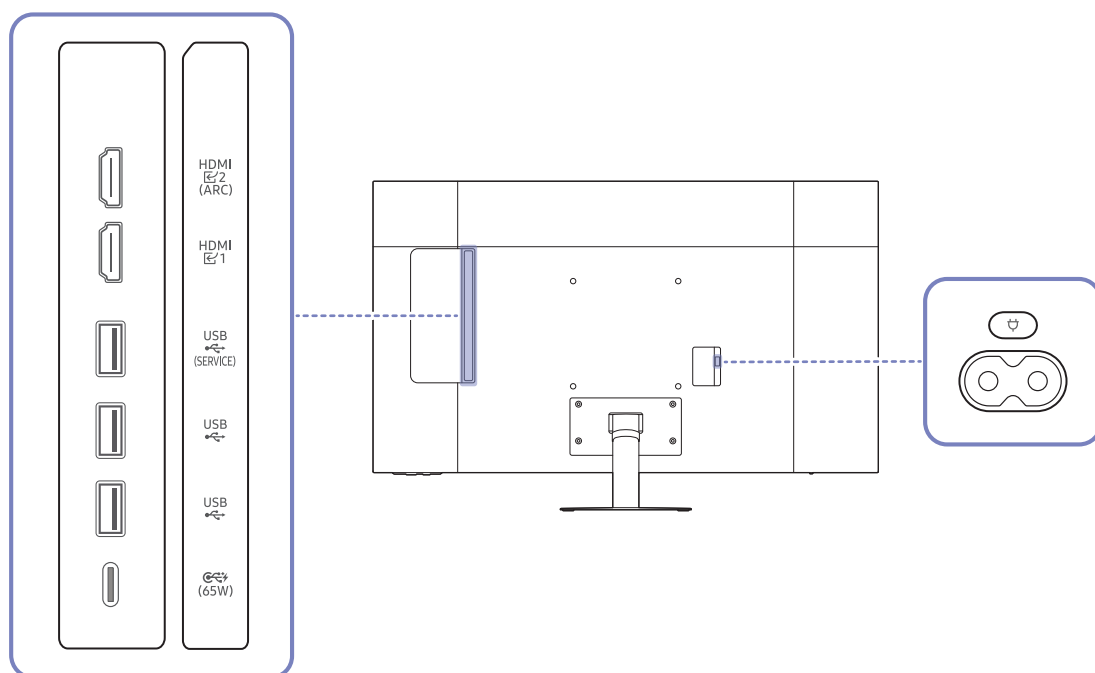
S32DM80* S32FM80* S32FM90*



Port	Description
A	Camera Port (S32DM80* / S32FM80* models only)
	<ul style="list-style-type: none"> Connects to a source device using a USB Type-C cable. When connecting a USB Type-C source device, make sure to use the USB Type-C 3.1 Gen2 10G cable so that the screen is displayed properly. <ul style="list-style-type: none"> Lower version cables do not support the video input function (Displayport ALT). The USB Type-C port can be connected to a notebook or mobile device for charging. <ul style="list-style-type: none"> The M8 series supports charging power of up to 65 W, and the M9 series supports charging power of up to 90 W. Charging speed and whether or not charging is supported may differ, depending on the device connected to the product. We cannot guarantee that this product can charge all types of devices that have a USB Type-C port, because there are a wide variety of devices that come with USB Type-C ports on the market. Make sure your USB Type-C cable complies with the USB Power Delivery specification. A cable that does not comply with the specification may damage the device.
HDMI	Connects to a source device using an HDMI cable.
DP	Connects to a PC using a DP cable.
	<ul style="list-style-type: none"> Connects to a USB device, such as a keyboard or mouse. This port supports the USB hub function. It allows you to connect a variety of devices to your computer by using the product as a hub. <ul style="list-style-type: none"> For more information, see Connecting the Product to a PC as a USB HUB page.
DC **V	Connects to the AC/DC adapter.

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


S43DM1E* S43DM70* S43FM70*

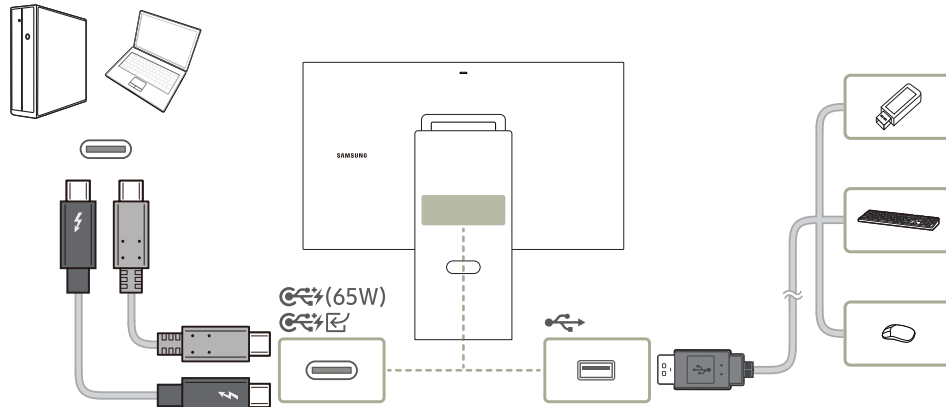


Port	Description
HDMI 1 HDMI 2 (ARC)	Connects to a source device using an HDMI cable.
USB (SERVICE)	<ul style="list-style-type: none"> Connects to a USB device, such as a keyboard or mouse. This port does not support the USB hub function, and connects to the monitor. Used to update the software.
USB	<ul style="list-style-type: none"> Connects to a USB device, such as a keyboard or mouse. This port supports the USB hub function. It allows you to connect a variety of devices to your computer by using the product as a hub. For more information, see Connecting the Product to a PC as a USB HUB page.
USB Type-C (65W)	<ul style="list-style-type: none"> Connects to a source device using a USB Type-C cable. When connecting a USB Type-C source device, make sure to use the USB Type-C 3.1 Gen2 10G cable so that the screen is displayed properly. Lower version cables do not support the video input function (Displayport ALT). The USB Type-C port can be connected to a notebook or mobile device for charging. A maximum of 65 W charging power is supported. Charging speed and whether or not charging is supported may differ, depending on the device connected to the product. We cannot guarantee that this product can charge all types of devices that have a USB Type-C port, because there are a wide variety of devices that come with USB Type-C ports on the market. Make sure your USB Type-C cable complies with the USB Power Delivery specification. A cable that does not comply with the specification may damage the device.
Power Button	Connect the power cord for product.










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

Connecting the Product to a PC as a USB HUB

 The M5 series does not support this function.



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

-  The Product shape may differ depending on the model.
-  To detect and start a USB device (USB memory, Keyboard, Mouse, etc.) 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 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.
-  To use the product's camera from your computer, connect the USB type-C cable.
 - If the camera does not work, check that **USB Port Changing Setup** is set to **Auto** or **USB-C**. If **USB Port Changing Setup** is set to **Smart Monitor**, the camera will not be recognized by the computer.
 - This feature is supported only when the product is equipped with a built-in camera or is connected to a camera.

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	Series		
		M5	M1/M7/M8	M9
HDMI (720p)	16:9, 4:3	0	0	-
HDMI (1080p)	16:9, 4:3	0	0	-
¹⁾ HDMI (1920 x 800p @ 60Hz)	21:9	0	-	-
HDMI (3840 x 2160p)	16:9	-	0	-
HDMI (3840 x 1600p @ 60Hz)	21:9	-	0	-
HDMI (3840 x 1080p @ 60Hz)	32:9	-	0	-
HDMI, DisplayPort (720p)	16:9	-	-	0
HDMI, DisplayPort (1080p)	16:9, 21:9	-	-	0
HDMI, DisplayPort (3840 x 2160p)	16:9	-	-	0
HDMI, DisplayPort (3840 x 1600p)	21:9	-	-	0
USB (720p)	16:9, 4:3	0	0	0
USB (3840 x 2160p @ 24/30 Hz)	16:9	-	0	0
USB (3840 x 2160p @ 60 Hz)	16:9	-	0	0
USB Type-C (720p)	16:9, 4:3	-	0	0
USB Type-C (1080p @ 60Hz)	16:9, 4:3	-	0	0
USB Type-C (3840 x 2160p @ 60Hz)	16:9	-	0	0
USB Type-C (3840 x 1600p @ 60Hz)	21:9	-	0	0
USB Type-C (3840 x 1080p @ 60Hz)	32:9	-	0	-

 The input ports for external devices may differ depending on the model and geographical area.

 Available **Picture Size** may differ depending on the external device.

 ¹⁾: M50F models are not supported.

Supported Resolutions for UHD Input Signals

Check the supported resolution for UHD input signals.


- Resolution: 3840 x 2160p (M1/M7/M8/M9 series)

If Input Signal Plus is set to Off

Frame rate (fps)	Color Depth / Chroma Sampling	RGB 4:4:4	YCbCr 4:4:4	YCbCr 4:2:2	YCbCr 4:2:0
50 / 60	8 bit	-	-	-	0

If Input Signal Plus is set to On

Frame rate (fps)	Color Depth / Chroma Sampling	RGB 4:4:4	YCbCr 4:4:4	YCbCr 4:2:2	YCbCr 4:2:0
50 / 60	8 bit	0	0	0	0
	10 bit	-	-	0	0
¹⁾ 60	8 bit	0	0	0	0
	10 bit	0	0	0	0




 For USB-C, YCbCr 4:2:0 is not supported.

 ¹⁾ : This input signal is supported only by M9 series.

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 and recommended resolutions are 1920 x 1080 at 60 Hz (M5 series), 3840 x 2160 at 60 Hz (M1/M7/M8 series), 3840 x 2160 at 120 Hz (M9 series). 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.

-  M1/M7/M8 series : With **Input Signal Plus** enabled, the optimal resolutions are 3840 x 2160 at 60 Hz. With **Input Signal Plus** disabled, the optimal resolution is 3840 x 2160 at 30 Hz.
-  M9 series : With **Input Signal Plus** enabled, the optimal resolutions are 3840 x 2160 at 120 Hz. With **Input Signal Plus** disabled, the optimal resolution is 3840 x 2160 at 30 Hz. The optimal recommended resolution is 3840 x 2160 at 165 Hz when **Game Mode** is on.
-  If the resolution is set to an unsupported one, the "**Mode Not Supported**" message may appear or noise may occur on the screen. Make sure to set the resolution to a supported one.

VESA DMT

Resolution (Dots x lines)	Display format	Horizontal frequency (kHz)	Vertical frequency (Hz)	Clock frequency (MHz)	Polarity (horizontal / vertical)	Port		
						HDMI	USB Type-C	DP
640 x 480	60 Hz	31.469	59.940	25.175	- / -	O	O	O
640 x 480	75 Hz	57.500	75.000	31.500	- / -	O	O	O
800 x 600	60 Hz	37.879	60.317	40.000	+ / +	O	O	O
800 x 600	72 Hz	48.077	72.188	50.000	+ / +	O	O	O
800 x 600	75 Hz	46.875	75.000	49.500	+ / +	O	O	O
1024 x 768	60 Hz	48.363	60.004	65.000	- / -	O	O	O
1024 x 768	70 Hz	56.476	70.069	75.000	- / -	O	O	O
1024 x 768	75 Hz	60.023	75.029	78.750	+ / +	O	O	O
1152 x 864	75 Hz	67.500	75.000	108.000	+ / +	O	O	O
1280 x 720	60 Hz	45.000	60.000	74.250	+ / +	O	O	O
1280 x 800	60 Hz	49.702	59.810	83.500	- / +	O	O	O
1280 x 1024	60 Hz	63.981	60.020	108.000	+ / +	O	O	O
1280 x 1024	75 Hz	79.976	75.025	135.000	+ / +	O	O	O
1440 x 900	60 Hz	55.935	59.887	106.500	- / +	O	O	O
1600 x 900	60 Hz	60.000	60.000	108.000	+ / +	O	O	O
1680 x 1050	60 Hz	65.290	59.954	146.250	- / +	O	O	O
1920 x 1080	60 Hz	67.500	60.000	148.500	+ / +	O	O	O

-  The input ports for external devices may differ depending on the model and geographical area.


VESA CVT

Resolution (Dots x lines)	Display format	Horizontal frequency (kHz)	Vertical frequency (Hz)	Clock frequency (MHz)	Polarity (horizontal / vertical)	Port		
						HDMI	USB Type-C	DP
1920 x 800	60 Hz	49.279	59.877	102.500	+ / -	0	0	0
²⁾ 1920 x 800	50 Hz	27.885	49.883	58.000	+ / -	0	0	0
⁴⁾ 1920 x 540	60 Hz	33.534	59.989	69.750	+ / -	0	0	-
¹⁾ 2560 x 1440	60 Hz	88.787	59.951	241.500	+ / -	0	0	0
³⁾ 1920 x 1080RB	165 Hz	192.788	164.917	401.000	+ / -	0	0	0
³⁾ 2560 x 1080RB	165 Hz	192.831	164.954	524.500	+ / -	0	0	0
³⁾ 2560 x 1440RB	120 Hz	182.996	119.998	497.750	+ / -	0	0	0
³⁾ 2560 x 1440RB	165 Hz	257.169	164.958	699.500	+ / -	0	0	0
³⁾ 3840 x 1600RB	60 Hz	98.750	59.994	395.000	+ / -	0	0	0
³⁾ 3840 x 1600	120 Hz	205.924	119.932	1103.750	- / +	0	0	0
³⁾ 3840 x 1600RB	165 Hz	285.75	164.983	1143.000	+ / -	0	0	0
³⁾ 3840 x 2160RB	165 Hz	385.75	164.991	1543.000	+ / -	0	0	0


 ¹⁾ : This input signal is supported only by M1/M7/M8 series.

 ²⁾ : This input signal is supported only by M5 series.

 ³⁾ : This input signal is supported only by M9 series.

 ⁴⁾ : This input signal is not supported on the M9 series.

 The input ports for external devices may differ depending on the model and geographical area.

 VESA CVT resolution is not supported on the M50F models.

Supported Resolutions for Video Signals

Check the resolutions supported for video signals.

CTA-861

Resolution (Dots x lines)	Display format	Horizontal frequency (kHz)	Vertical frequency (Hz)	Clock frequency (MHz)	Polarity (horizontal / vertical)	Port		
						HDMI	USB Type-C	DP
¹⁾ 720 x 576	50 Hz	31.250	50.000	27.000	- / -	0	0	-
720 x 480	60 Hz	31.469	59.940	27.000	- / -	0	0	0
¹⁾ 1280 x 720	50 Hz	37.500	50.000	74.250	+ / +	0	0	-
1280 x 720	60 Hz	45.000	60.000	74.250	+ / +	0	0	0
¹⁾ 1920 x 1080	24 Hz	27.000	24.000	74.250	+ / +	0	0	-
¹⁾ 1920 x 1080	25 Hz	28.125	25.000	74.250	+ / +	0	0	-
¹⁾ 1920 x 1080	30 Hz	33.750	30.000	74.250	+ / +	0	0	-
¹⁾ 1920 x 1080	50 Hz	56.250	50.000	148.500	+ / +	0	0	-
1920 x 1080	60 Hz	67.500	60.000	148.500	+ / +	0	0	0
⁴⁾ 1920 x 1080	120 Hz	135.000	120.000	297.000	+ / +	0	0	0
⁴⁾ 3840 x 2160	120 Hz	270.000	120.000	1188.000	+ / +	0	0	0
²⁾ 3840 x 2160	24 Hz	54.000	24.000	297.000	+ / +	0	0	-
²⁾ 3840 x 2160	25 Hz	56.250	25.000	297.000	+ / +	0	0	-
³⁾ 3840 x 2160	30 Hz	67.500	30.000	297.000	+ / +	0	0	0
²⁾ 3840 x 2160	50 Hz	112.500	50.000	594.000	+ / +	0	0	-
³⁾ 3840 x 2160	60 Hz	135.000	60.000	594.000	+ / +	0	0	0



¹⁾ : This input signal is supported only by M1/M5/M7/M8 series.



²⁾ : This input signal is supported only by M1/M7/M8 series.



³⁾ : This input signal is supported only by M1/M7/M8/M9 series.



⁴⁾ : This input signal is supported only by M9 series.



DP port is only supported for M9 series.



The input ports for external devices may differ depending on the model and geographical area.

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.

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.

 This function is supported on the M9 series only.

- [Game Mode > Off](#): Disable FreeSync.
- [Game Mode > 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.

 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 Center.




 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

Adaptive-Sync (for NVIDIA graphics card)

 This function may not be supported depending on the model.

Adaptive-Sync 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 **Adaptive-Sync** menu items on the monitor may vary, depending on the monitor model and compatibility with the NVIDIA graphics card.


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

Apply the optimum resolution when using **Adaptive-Sync**.

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 **Adaptive-Sync** function is only enabled in **HDMI** or **DisplayPort** mode.
Use the HDMI/DP cable provided by the manufacturer when using **Adaptive-Sync**.

 If the **Adaptive-Sync** 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 **Adaptive-Sync** mode is disabled.

If you use the [Adaptive-Sync](#) 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 [Adaptive-Sync](#) mode to [Off](#), or visit the NVIDIA website to check your graphics driver's version and update it with the latest one.
- While you are using the [Adaptive-Sync](#) 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 Center.



If you change the screen resolution while the function is [On](#), the screen may intermittently blank out due to the graphic card. Set [Adaptive-Sync](#) to [Off](#) and change the resolution.



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

The models in the Graphics Cards list supports Adaptive-Sync

[Adaptive-Sync](#) can only be used with specific NVIDIA graphics card models. Refer to the following list for supported graphics cards:

Make sure to install the latest official graphics drivers from NVIDIA that support [Adaptive-Sync](#).



For additional NVIDIA graphics card models that support the [Adaptive-Sync](#) feature, visit the official NVIDIA website.



Select [Adaptive-Sync Off](#) if you are using a graphics card from a different manufacturer.



When applying the [Adaptive-Sync](#) function via the DisplayPort cable, it may fail to work due to the bandwidth limitation of certain NVIDIA graphics card.

- | | |
|-------------------------|-------------------------|
| • GeForce GTX 10 series | • GeForce RTX 20 series |
| • GeForce RTX 30 series | • GeForce RTX 40 series |

Supported Resolutions for FreeSync/Adaptive-Sync (VRR)

Check the supported resolutions for the FreeSync/Adaptive-Sync (VRR) signal.

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

 This function is supported on the M9 series only.

VRR VESA DMT

Resolution (Dots x lines)	Display format	Horizontal frequency (kHz)	Vertical frequency (Hz)	Clock frequency (MHz)	Polarity (horizontal / vertical)	Port	
						HDMI	DP
1600 x 900	60 Hz	60.000	60.000	108.000	+ / +	0	0

VRR VESA CVT

Resolution (Dots x lines)	Display format	Horizontal frequency (kHz)	Vertical frequency (Hz)	Clock frequency (MHz)	Polarity (horizontal / vertical)	Port	
						HDMI	DP
1920 x 1080RB	165 Hz	192.788	164.917	401.000	+ / -	0	0
2560 x 1440RB	60 Hz	88.787	59.951	241.500	+ / -	0	0
2560 x 1440RB	120 Hz	182.996	119.998	497.750	+ / -	0	0
2560 x 1080RB	165 Hz	192.831	164.954	524.500	+ / -	0	0
2560 x 1440RB	120 Hz	182.996	119.998	497.750	+ / -	0	0
2560 x 1440RB	165 Hz	257.169	164.958	699.500	+ / -	0	0
3840 x 1600RB	60 Hz	98.750	59.994	395.000	+ / -	0	0
3840 x 1600	120 Hz	205.924	119.932	1103.750	- / +	0	0
3840 x 1600RB	165 Hz	285.75	164.983	1143.000	+ / -	0	0
3840 x 2160RB	165 Hz	385.75	164.991	1543.000	+ / -	0	0

VRR CTA-861

Resolution (Dots x lines)	Display format	Horizontal frequency (kHz)	Vertical frequency (Hz)	Clock frequency (MHz)	Polarity (horizontal / vertical)	Port	
						HDMI	DP
1280 x 720	60 Hz	45.000	60.000	74.250	+ / +	0	0
1920 x 1080	60 Hz	67.500	60.000	148.500	+ / +	0	0
1920 x 1080	120 Hz	135.000	120.000	297.000	+ / +	0	0
2560 x 1080	60 Hz	66.000	60.000	198.000	+ / +	0	0
2560 x 1080	120 Hz	150.000	120.000	495.000	+ / +	0	0
3840 x 2160	60 Hz	135.000	60.000	594.000	+ / +	0	0
3840 x 2160	120 Hz	270.000	120.000	1188.000	+ / +	0	0

Specifications

General

Model Name		S27DM50* / S27FM50*	S32DM50* / S32FM50*
Size		27 Class (27.0 Inches / 68.6 cm)	32 Class (31.5 Inches / 80.1 cm)
Display area		597.888 mm (H) x 336.312 mm (V)	698.4 mm (H) x 392.85 mm (V)
Pixel Pitch		0.3114 mm (H) x 0.3114 mm (V)	0.36375 mm (H) x 0.36375 mm (V)
Maximum Pixel Frequency		148.5 MHz	148.5 MHz
Synchronization (PANEL Spec)	Horizontal Frequency	67.5 kHz	67.5 kHz
	Vertical Frequency	60 Hz	60 Hz
Resolution	Optimum Resolution	1920 x 1080 @ 60 Hz	1920 x 1080 @ 60 Hz
	Maximum Resolution		
Model Name		S32DM1E* / S32DM70* / S32FM70*	S32DM80* / S32FM80*
Size		32 Class (31.5 Inches / 80.0 cm)	32 Class (31.5 Inches / 80.0 cm)
Display area		697.306 mm (H) x 392.234 mm (V)	697.306 mm (H) x 392.234 mm (V)
Pixel Pitch		0.18159 mm (H) x 0.18159 mm (V)	0.18159 mm (H) x 0.18159 mm (V)
Maximum Pixel Frequency		594.0 MHz	594.0 MHz
Synchronization (PANEL Spec)	Horizontal Frequency	135 kHz	147.78 kHz ~ 148.38 kHz
	Vertical Frequency	60 Hz	60 Hz
Resolution	Optimum Resolution	3840 x 2160 @ 60 Hz	3840 x 2160 @ 60 Hz (HDMI 2.0)
	Maximum Resolution		3840 x 2160 @ 30 Hz (HDMI 1.4)

Model Name		S43DM1E* / S43DM70* / S43FM70*	S32FM90*
Size		43 Class (42.5 Inches / 107.9 cm)	32 Class (31.6 Inches / 80.3 cm)
Display area		941.184 mm (H) x 529.416 mm (V)	699.48 mm (H) x 394.73 mm (V)
Pixel Pitch		0.2451 mm (H) x 0.2451 mm (V)	0.1814 mm (H) x 0.1814 mm (V)
Maximum Pixel Frequency		594.0 MHz	1543 MHz
Synchronization (PANEL Spec)	Horizontal Frequency	135 kHz	140.4 ~ 388.74 kHz
	Vertical Frequency	60 Hz	48 ~ 165 Hz
Resolution	Optimum Resolution	3840 x 2160 @ 60 Hz	3840 x 2160 @ 120 Hz (Game Mode off) 3840 x 2160 @ 165 Hz (Game Mode on)
	Maximum Resolution		3840 x 2160 @ 165 Hz (Game Mode on)
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. (Supported models: S32DM1E* / S43DM1E* / S27DM50* / S32DM50* / S32DM70* / S43DM70* / S32FM70* / S43FM70*) Based on the AC voltage of the adapter. For the DC voltage of the product, refer to the product label. (Supported models: S32DM80* / S27FM50* / S32FM50* / S32FM80* / S32FM90*)	
Signal connectors		M5 series : HDMI M1/M7/M8 series : HDMI, USB-C M9 series : HDMI, DP, USB-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.

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 programs.
- 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 Product Guide.

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 Product Guide first.