

User Manual

F27T70*

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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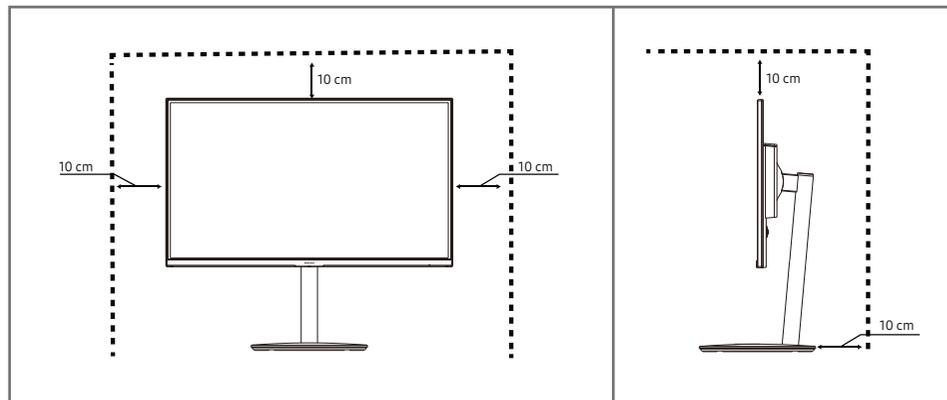
Chapter 01

Before Using the Product

Securing the Installation Space

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.



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.

	<p>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.</p>		<p>AC voltage: Rated voltage marked with this symbol is AC voltage.</p>
	<p>This symbol indicates that this product has included important literature concerning operation and maintenance.</p>		<p>DC voltage: Rated voltage marked with this symbol is DC voltage.</p>
	<p>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).</p>		<p>Caution. Consult instructions for use: This symbol instructs the user to consult the user manual for further safety related information.</p>

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.
 - 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 Wet a soft cloth in water, wring it out well, and then use the cloth to wipe the exterior of the product clean.
- 5 Connect the power cord to the product when cleaning is finished.
- 6 Power on the product and PC.

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.

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 put AC/DC adapters together.
 - Remove the plastic bag from the AC/DC adapter before you use it.
 - Do not let water enter the AC/DC adapter device or get the device wet.
 - An electric shock or fire may result.
 - Avoid using the product outdoors where it can be exposed to rain or snow.
 - Be careful not to get the AC/DC adapter wet when you wash the floor.
 - Do not put the AC/DC adapter near to any heating apparatus.
 - Otherwise, a fire may result.
 - Keep the AC/DC adapter in a well-ventilated area.
 - If you place the AC/DC power adapter hanging with the cord input facing upwards, water or other foreign substances could enter the Adapter and cause the Adapter to malfunction.
Make sure to rest the AC/DC power adapter flat on a table or the floor.
- Do not hold the product upside-down or move it by holding the stand.
 - The product may fall and become damaged or cause an injury.
 - Looking at the screen too close for an extended period of time can deteriorate your eyesight.
 - Do not use humidifiers or stoves around the product.
 - 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.
 - 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.

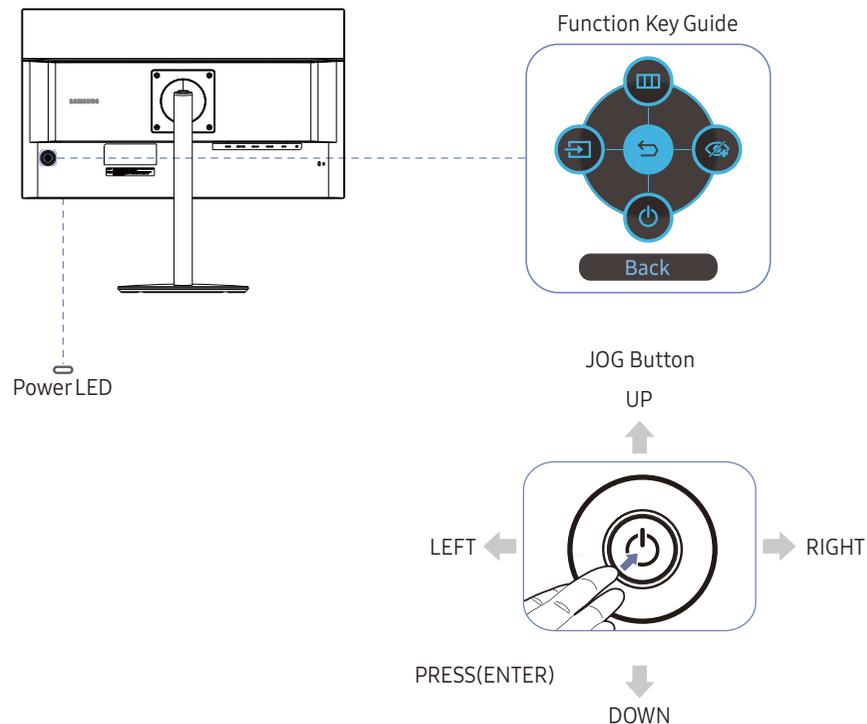
Chapter 02

Preparations

Parts

Control Panel

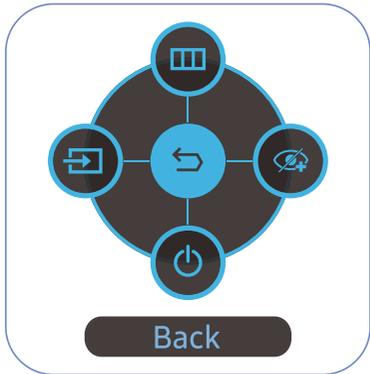
The colour and shape of parts may differ from what is shown. Specifications are subject to change without notice to improve quality.



Parts	Description
JOG Button	Multi directional button that helps navigate. The JOG button is located in the bottom of the screen center, and has 5 directions as UP/DOWN/LEFT/RIGHT/PRESS(ENTER).
Power LED	This LED is power status indicator and works as <ul style="list-style-type: none">Power On (Power button): Power LED OnPower Off (Power button): Power LED Off
Function Key Guide	After entering the menu, there is a function guide below. Press the corresponding direction key according to the guide. The Function Key Guide may vary depending on the function or product model. Please refer to the actual product.

Function Key Guide

To use the Function Key Guide, press the JOG button when the screen is turned on. Then the following window appears.



UP/DOWN/LEFT/RIGHT: Move to the item you want. The description for each item will appear when the focus changes.

When the product not displays the OSD menu, the JOG Button could be used as below.

Up : Change the settings for **Brightness**.

Down : Change the **Volume** setting.

Left or Right : Change the **Source** setting.

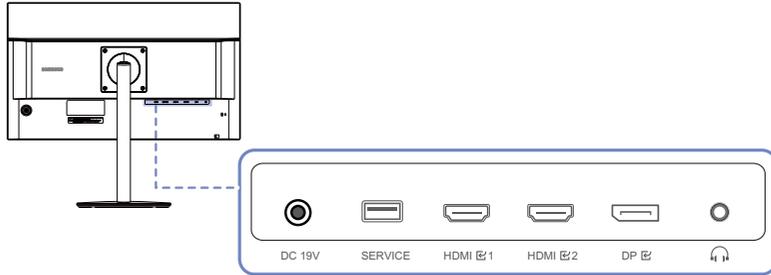
PRESS(ENTER): The selected item will be applied.

Parts	Description
Source	Selects  to change the input source by moving the JOG button in the Function Key Guide screen. A message will appear on the top right corner of the screen if the input source has been changed.
Menu	Selects  by moving the JOG button in the Function Key Guide screen. This product shows the menu as an on-screen display.
Eye Saver Mode	Selects  by moving the JOG button in the Function Key Guide screen. Press the enable or disable Eye Saver mode. ( : On,  : Off)
Power Off	Selects  to turn the product off by moving the JOG button in the Function Key Guide screen.
Back	Exit the Function Key guide menu by using the JOG button to select the  icon when the Function Key Guide screen is displayed.

Actual models because of functional variation, Function Key Guide options will be different.

Types of 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.

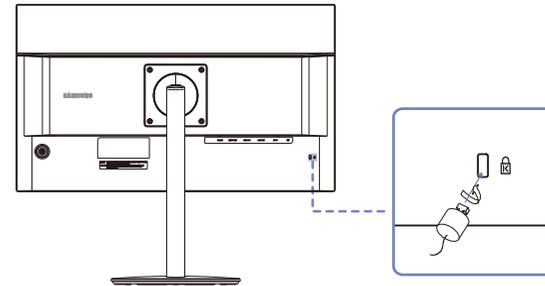


Port	Description
 DC 19V	Connect the power cord of the monitor to the DC 19V port on the back of the product.
 SERVICE	Connect to a USB device. (Only for software upgrade)
 HDMI	Connects to a source device using an HDMI cable or HDMI-DVI cable.
 DP	Connects to a PC using a DP cable.
 	Receives sound from a PC via an audio cable.

Anti-theft Lock

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

To lock an anti-theft locking device:

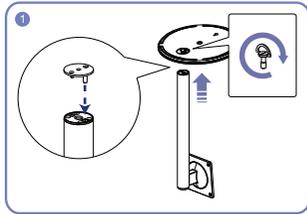
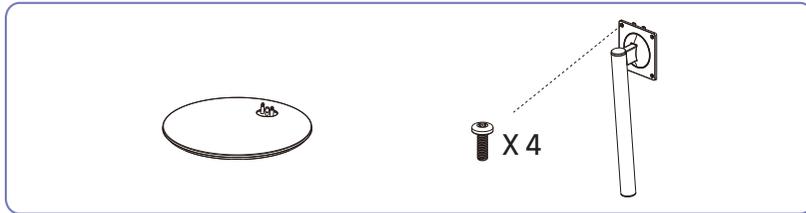


- 1 Fix the cable of your anti-theft locking device to a heavy object such as a desk.
- 2 Put one end of the cable through the loop on the other end.
- 3 Insert the locking device into the anti-theft lock slot at the back of the product.
- 4 Lock the locking device.
 - An anti-theft locking device can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

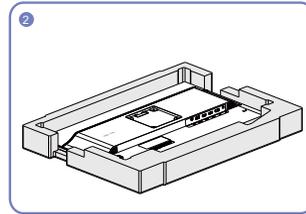
Installation

Attaching the Stand

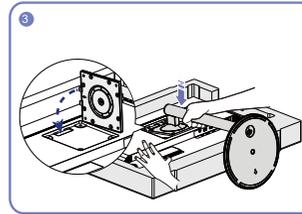
— Before assembling the product, place the product down on a flat and stable surface so that the screen is facing downwards.



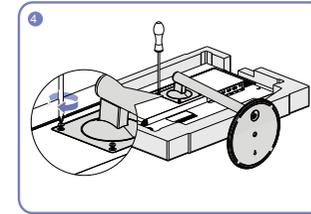
1 Insert the support rod into the bottom bracket in the direction shown in the figure. Tighten the connecting screw at the bottom of the bracket to fix the support rod firmly.



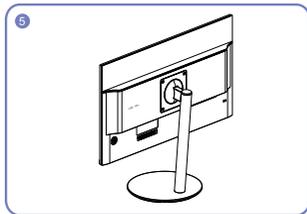
2 Place the protective Styrofoam (cushion) included in the package on the floor and place the product facing down on the Styrofoam, as shown in the image. If Styrofoam is unavailable, use a thick sitting mat.



3 Put the bracket into the groove of the rear case as shown in the figure. Pay attention to inserting the protrusions on the back shell into the corresponding grooves on the bracket when putting it in.



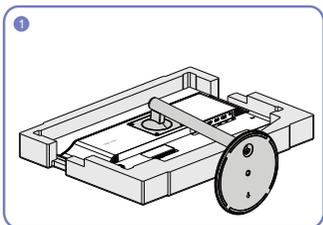
4 Follow the arrow instructions, tighten the screws, to install the bracket and the display in place.



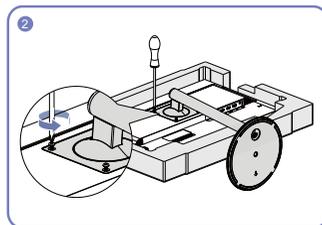
5 The base is assembled.

Removing the Stand

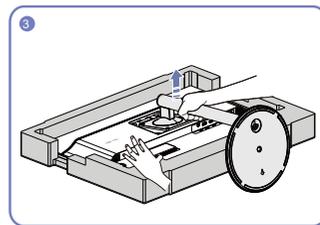
Before removing the stand from the product, place the product on a flat and stable surface with the screen facing down.



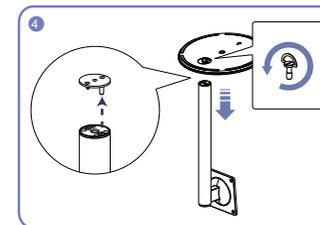
Place the machine on a clean and flat surface as shown in the figure. Push the button up and hold.



Follow the arrow to loosen the screws.

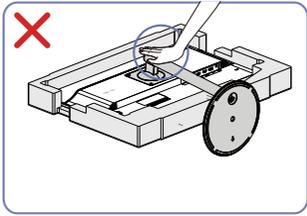


Follow the arrow to separate the stand from the display.

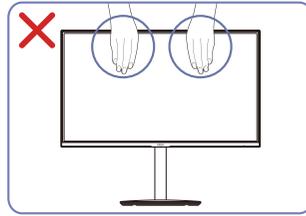


Unscrew the screws and separate the stand rod from the bracket as indicated by the arrow.

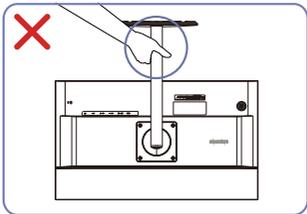
Precautions for moving the product



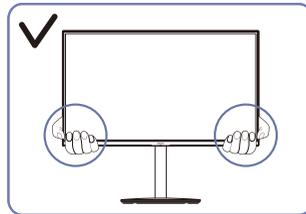
- Do not press down on the product. There is a risk of damaging the product.



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



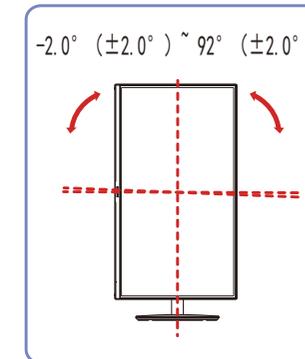
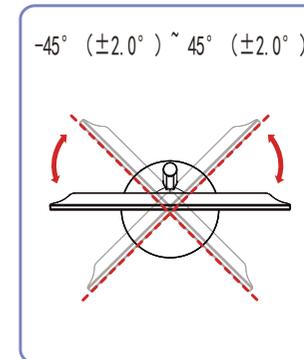
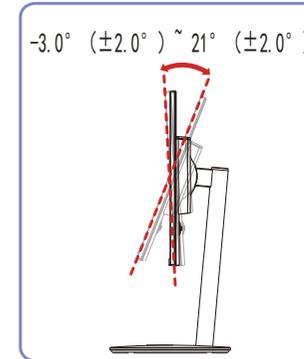
- Do not hold the product upside down only by the stand.



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

Adjusting the Product Tilt and rotation angle

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



- The product tilt and rotation angle can be adjusted.
- Hold the lower part of the product and adjust the tilt and rotation angle carefully.

Chapter 03

Connecting and Using a Source Device

Read below before connecting the product.

- 1 Before connecting the product, check the shapes of both ports of the supplied signal cables and the shapes and locations of the ports on the product and external device.
- 2 Before connecting the product, make sure you remove the power cables from both the product and the external device to prevent damage to the product due to a short circuit or over current.
- 3 After all signal cables have been properly connected, connect the power cables back to the product and the external device.
- 4 After connecting is completed, make sure you read the user guide to acquaint yourself with the product functions, precautions and other information required to use the product properly.

Connecting and Using a PC

Select a connection method suitable for your PC.

- Connecting parts may differ in different products.
- Provided ports may vary depending on the product.
- First make sure that the power cables for product and other devices (e.g. PC, settop box, etc.) are removed.

Connection Using the HDMI Cable



- When connecting an HDMI cable, use the cable that came with the components of the product. If you use an HDMI cable other than provided by Samsung, the image quality may be degraded.

Connection Using an HDMI-DVI Cable



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

Connection Using an DP Cable



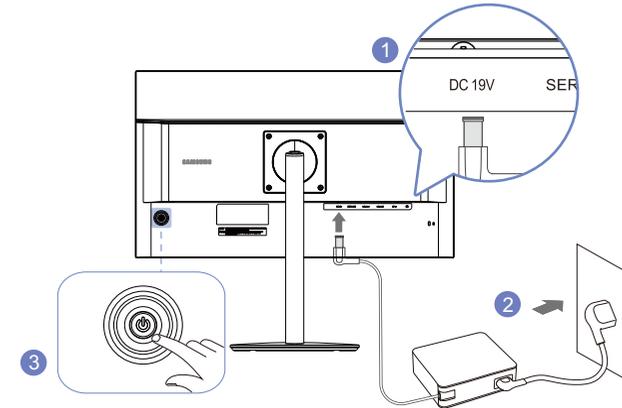
- A DP cable shorter under 1.5 m in length is recommended. Using a cable longer than 1.5 m can affect the picture quality.

Connecting to headphones or earphones



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

Connecting the Power



- 1 Connect the power cable to the AC/DC adapter. Then, connect the AC/DC adapter to the DC 19V port on the back of the product.
 - 2 Next, connect the power cable to the power outlet.
 - 3 Press the JOG button at the bottom of the product to turn it on.
- The input voltage is switched automatically.

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.

Driver Installation

- You can set the optimum resolution and frequency for this product by installing the corresponding drivers.
- To install the latest version of the product driver, download it from the Samsung Electronics website at <http://www.samsung.com>.

Setting Optimum Resolution

- If you want to set the optimum resolution for your computer. Please refer to (Q&A) → [“How can I change the resolution?”](#)

Chapter 04

Picture Setup

Function Key Guide →  → Picture

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

— 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.

Brightness

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

A high value will make the picture appear brighter.

- This menu is not available when **Game Mode** is set to **DRC**.
- This menu is not available when **Picture Mode** is set to **Non-custom**.

Contrast

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

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

- This menu is not available when **Game Mode** is set to **DRC**.
- This menu is not available when **Picture Mode** is set to **Non-custom**.

Black Equalizer

Adjust the brightness of dim areas.

The closer the value is to 100, the brighter the darker areas of the screen will make it easier to spot enemies when playing games. To find enemies more easily during the game, use a higher value.

The closer the value is to 0, the darker areas of the screen will be darker, increasing the contrast.

- When the **Eye Saver Mode** is enabled, this menu cannot be used.
- **Picture Mode** when set to a mode other than **User**, this menu cannot be used.

Picture Mode

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

- **Custom:** Customise the contrast and brightness as required.
- **Standard:** Obtain a picture quality suitable for editing documents or using Internet.
- **Cinema:** Obtain the brightness and sharpness of monitors suitable for enjoying video and DVD content.
- **Custom:** Customise the contrast and brightness as required.
- **Picture mode:** Obtain image quality suitable for viewing pictures.
- **RTS:** Get brightness and image quality suitable for role-playing games.
- **FPS:** Get the brightness and contrast suitable for first-person shooters.

Screen Ratio

Change the picture size.

- **Wide:** Display the picture in widescreen regardless of the aspect ratio of the input source.
- **4:3:** Display the picture in 4:3 regardless of the aspect ratio of the input source.
 - This option is available when **FreeSync** is disabled.

Chapter 05

Color Settings

Function Key Guide →  → Color

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

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Color Tone

Adjust the tint of the screen.

- **Red**: Adjust the red saturation level. Values closer to 100 mean greater intensity for the colour.
- **Green**: Adjust the green saturation level. Values closer to 100 mean greater intensity for the colour.
- **Blue**: Adjust the blue saturation level. Values closer to 100 mean greater intensity for the colour.
- **Color Tone** : Select a colour tone that best suits your viewing needs.
 - **Normal**: Display the standard colour tone.
 - **Cool**: Set the colour temperature to be cooler than **Normal** mode.
 - **Warm**: Set the colour temperature to be warmer than **Normal** mode.
 - **sRGB**: Display the sRGB mode colour tone.
 - **User**: Customise the colour tone.

Gamma

Turn on or off "Eye Saver Mode" .

Off / 1.8 / 2.0 / 2.2 / 2.4

Eye Saver Mode

Adjust the middle level of luminance.

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

Chapter 06

Game settings

Function Key Guide →  → Game

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

— 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.

AMD FreeSync

FreeSync technology is a 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?

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

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** 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** 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.

FreeSync Max Resolution

- HDMI1.4 : 2560 x 1440 @ 60 Hz
- HDMI2.0 : 2560 x 1440 @ 75 Hz
- DisplayPort : 2560 x 1440 @ 75 Hz

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 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)
- 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)

Response Time

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

- Use **Standard** mode when not playing a video or game.

DCR (Dynamic contrast)

The brightness is automatically adjusted to provide the best screen contrast for the current conditions.

Off Timer

The **Off Timer** is set to automatically activate 4 hours after the product powers on. This is done in accordance with power supply regulations.

- If you do not want the timer to activate, go to  → **Game** → **Off Timer** to **Off**.

Chapter 07

Source settings

Function Key Guide →  → Source

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

— 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.

DP

Select the DisplayPort to be used.

- If the connection is not correct, a black screen may be displayed.
- In this case, please check the equipment specifications.

HDMI (1.4)

Select the HD multimedia interface to be used 1(version 1.4).

- If the connection is not correct, a black screen may be displayed.
- In this case, please check the equipment specifications.

HDMI (2.0)

Select the HD multimedia interface to be used 1(version 2.0).

- If the connection is not correct, a black screen may be displayed.
- In this case, please check the equipment specifications.

Chapter 08

System settings

Function Key Guide →  → System

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

— 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.

Language

Set the menu language.

English/汉语/한국어/日本語/Français/German/Italian/
Русский/Español/Magyarul/Polski/Português/Svenska/Türkçe/

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

OnScreen Display

- **Transparency:** Set the transparency of the menu window.
- **Position:** Adjust the green saturation level. The closer the value is to 100, the greater the color intensity.
 - **H Position:** Move the menu position to the left or right.
 - **V Position:** Move the menu position up or down.
- **Display Time:** The OSD menu will automatically disappear when not in use during the specified period. **Display Time** is a function to specify how long you want the OSD menu to disappear.

Sound

Operate the Jog key up/down to activate/deactivate the muffler function and adjust the volume.

Reset All

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

USB Update

Update software using an update file on a USB device.

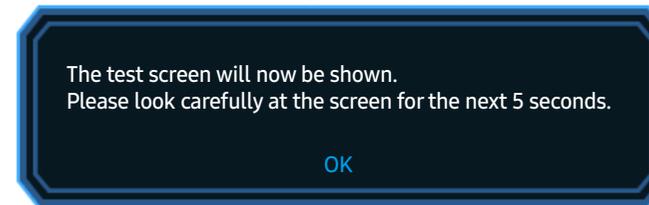
- 1 Save the update file (in .bin format) that you downloaded from the Samsung Electronics website (<http://www.samsung.com/sec>) to a USB device.
- 2 Connect the USB device to the SERVICE port (🔌 (SERVICE)) on the monitor.
Select **III** → **Support** → **Software Update**.
- 3 Follow the instructions on the screen to proceed with update.
- 4 Your product will turn itself off and on again automatically after completing update, and then turn off your product.
- 5 Remove the power cord from the power outlet and then reconnect the cord after turning off.
 - To perform software update by using a USB device, first format the USB device to FAT32.
 - When updating by a USB device, be sure to use the device whose version of USB 3.0 or lower.
 - When performing update, make sure that only one BIN file (.bin) is saved in the root directory.
 - If the **No USB devices detected. Please check and try again.** message is displayed, this is probably due to the following reasons.
 - A USB device is not connected to the SERVICE port (🔌 (SERVICE)).
 - The files in the connected USB device are not compatible formats.
 - There are no valid update files found in the connected USB device. (There are no update files saved in the memory or the file names are incorrect.)

Self Diagnosis

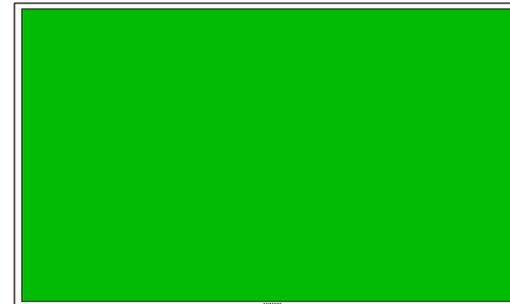
- 1 Use the Function Key Guide and go to **III** → **System** → **Self Diagnosis**.



- 2 Select **OK** when the following screen is prompted.

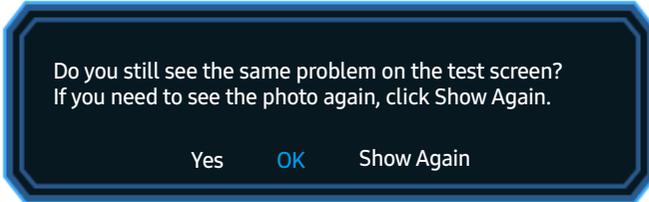


- Review the test screen.

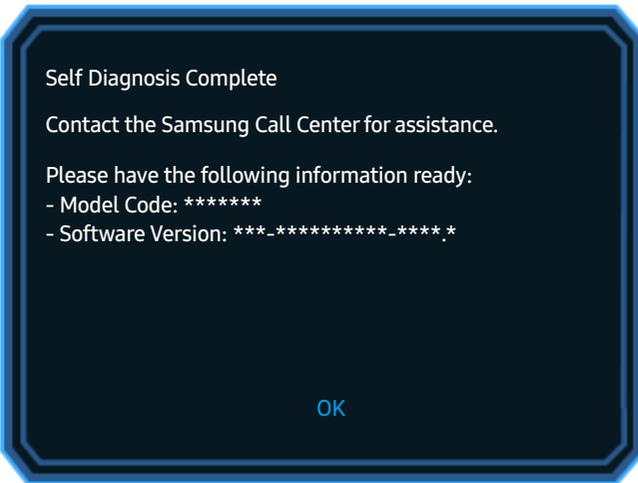


- Never turn off the power nor change the input source during self diagnosis. If possible, try not to interrupt testing.

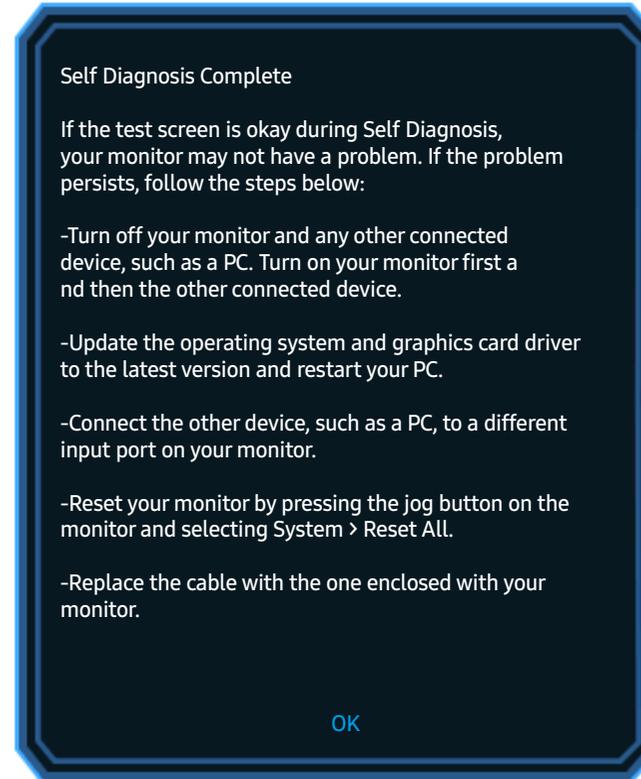
- 3 Base on the test result, select **Yes** / **No** / **Show Again**.



- You will see the following screen when you select **Yes**.



- You will see the following screen when you select **No**.



Chapter 09

Installing the Software

Easy Setting Box



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

To install the latest version of Easy Setting Box, download it from the Samsung Electronics website at <http://www.samsung.com>.

- The software may not work properly if you do not restart the PC after the installation.
- The Easy Setting Box icon may not appear depending on the PC system and the product specifications.
- If the shortcut icon does not appear, press the F5 key.

Restrictions and Problems with the Installation

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

System Requirements

OS	Hardware
• Windows 7 32Bit/64Bit	• At least 32MB of memory
• Windows 8 32Bit/64Bit	• At least 60MB of free space on the hard disk drive
• Windows 8.1 32Bit/64Bit	
• Windows10 32Bit/64Bit	

Chapter 10

Troubleshooting Guide

Requirements Before Contacting Samsung Customer Service Centre

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

Product diagnosis (Screen issue)

If a problem occurs with the product screen, run [Self Diagnosis](#) to check that the product is working properly.

Checking the Resolution and Frequency

If a resolution that is not supported (see the [Standard Signal Mode Table](#)) is selected, then the screen may not be displayed properly.

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

Check the following.

Installation issue

The screen keeps switching on and off.

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

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

The blank spaces found on the screen have nothing to do with the product.

Blank spaces on the screen are caused by the PC or graphics card. To resolve the problem, adjust the screen size in the HDMI or DVI settings for the graphics card.

If the graphics card settings menu does not have an option to adjust the screen size, update the graphics card driver to the latest version.

(Please contact the graphics card or PC manufacturer for further details about how to adjust the screen settings.)

Screen issue

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

Check that the power cable is connected properly.

If a problem occurs with the product screen, run [Self Diagnosis](#) to check that the product is working properly.

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

Check that the cable is properly connected to the product.

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

OVER RANGE is displayed.

This message appears when the signal from the graphics card exceeds the maximum resolution or frequency for the product.

Change the maximum resolution and frequency to suit the product performance, referring to Standard Signal Mode Table ([P32](#)).

The images on the screen look distorted.

Check the cable connection to the product.

The screen is not clear. The screen is blurry.

Remove any accessories (video extension cable, etc.) and try again.

Set the resolution and frequency to the recommended level.

The screen appears unstable and shaky. There are shadows or ghost images left on the screen.

Check that the resolution and frequency for the PC are within the range of resolution and frequency compatible with the product. Next, if required, change the settings, referring to Standard Signal Mode Table ([P32](#)) in this manual and the **Information** menu on the product.

The screen is too bright. The screen is too dark.

Adjust **Brightness** and **Contrast**.

Screen colour is inconsistent.

Change the **Color** settings.

The colours on the screen have a shadow and are distorted.

Change the **Color** settings.

White does not really look white.

Change the **Color** settings.

There is no image on the screen and the power LED blinks every 0.5 to 1 second.

The product is operating in power-saving mode.

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

Text is blurry.

If using a Windows OS (e.g. Windows 7, Windows 8, Windows 8.1 or Windows 10): Go to Control Panel → Fonts → Adjust ClearType text and change Turn on ClearType .

Video playback is choppy.

Playback of high-definition large video files can be choppy. This may be because the video player is not optimised for the PC resource.

Try playing the file on another video player.

Sound issue

There is no sound.

Re-check the condition of the connected audio cable and/or adjust the volume.

Check the volume.

Check whether audio is set to mute.

The volume is too low.

Adjust the volume.

If the volume is still low after turning it up to the maximum level, adjust the volume on your PC sound card or software programme.

Video is available but there is no sound.

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

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

Source device issue

A beeping sound is heard when my PC is booting.

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

Q & A

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

How can I change the frequency?

Set the frequency on your graphics card.

- Windows 7: Go to Control Panel → Appearance and Personalization → Display → Screen Resolution → Advanced settings → Monitor, and adjust Screen Refresh Rate under Monitor settings.
- Windows 8(Windows 8.1): Go to Settings → Control Panel → Appearance and Personalization → Display → Screen Resolution → Advanced settings → Monitor, and adjust Refresh rate under Monitor **settings**.
- Windows 10: Go to Settings → System → Display → Advanced display settings → Display adapter properties → Monitor, and adjust Screen refresh rate under Monitor settings.

How can I change the resolution?

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

How do I set power-saving mode?

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

Chapter 11

Specifications

General

Model Name	F27T70*
Size	27 Class (26.9 Inches / 68.4 cm)
Display area	596.73 mm (H) x 335.66 mm (V)
Pixel Pitch	0.233 mm (H) x 0.233 mm (V)
Maximum Pixel Clock	75.53 MHz (4pixel/clock)
Power Supply	AC100-240V~ 50/60Hz Based on the AC voltage of the adapter. For the DC voltage of the product, refer to the product label.
	HDMI, DisplayPort
Signal connectors	Operating
Environmental conditions	Temperature: 0 °C – 40 °C (32 °F – 104 °F) Humidity: 10 % – 80 %, non-condensing
	Storage Temperature: -20 °C – 45 °C (-4 °F – 113 °F) 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 above specifications are subject to change without notice to improve quality.

— For detailed device specifications, visit the Samsung Electronics website.

Standard Signal Mode Table

Model Name	F27T70*	
Synchronization	Horizontal Frequency	71.3 ~ 117 kHz
	Vertical Frequency	48 ~ 76 Hz
Resolution	Optimum Resolution	2560 x 1440 @ 60 Hz
	Maximum Resolution	2560 x 1440 @ 60 Hz (HDMI1)
		2560 x 1440 @ 75 Hz (HDMI2/DisplayPort)

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

Resolution	Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Pixel Clock (MHz)	Sync Polarity (H/V)	Port		
					HDMI1 IN	HDMI2 IN	DP IN
IBM, 720 x 400	31.469	70.087	28.322	-/ +	0	0	0
VESA, 640 x 480	31.469	59.940	25.175	-/ -	0	0	0
MAC, 640 x 480	35.000	66.667	30.240	-/ -	0	0	0
VESA, 640 x 480	37.861	72.809	31.500	-/ -	0	0	0
VESA, 640 x 480	37.500	75.000	31.500	-/ -	0	0	0
VESA, 800 x 600	35.156	56.250	36.000	+/ +	0	0	0
VESA, 800 x 600	37.879	60.317	40.000	+/ +	0	0	0
VESA, 800 x 600	48.077	72.188	50.000	+/ +	0	0	0
VESA, 800 x 600	46.875	75.000	49.500	+/ +	0	0	0
MAC, 832 x 624	49.726	74.551	57.284	-/ -	0	0	0
VESA, 1024 x 768	48.363	60.004	65.000	-/ -	0	0	0
VESA, 1024 x 768	56.476	70.069	75.000	-/ -	0	0	0
VESA, 1024 x 768	60.023	75.029	78.750	+/ +	0	0	0
VESA, 1152 x 864	67.500	75.000	108.000	+/ +	0	0	0
MAC, 1152 x 870	68.681	75.062	100.000	-/ -	0	0	0
VESA, 1280 x 720	45.000	60.000	74.250	/ +	0	0	0
VESA, 1280 x 800	49.702	59.810	83.500	-/ +	0	0	0
VESA, 1280 x 1024	63.981	60.020	108.000	+/ +	0	0	0

Resolution	Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Pixel Clock (MHz)	Sync Polarity (H/V)	Port		
					HDMI1 IN	HDMI2 IN	DP IN
VESA, 1280 x 1024	79.976	75.025	135.000	+/+	0	0	0
VESA, 1440 x 900	55.935	59.887	106.500	-/+	0	0	0
VESA, 1600 x 900	60.000	60.000	108.000	+/+	0	0	0
VESA, 1680 x 1050	65.290	59.954	146.250	-/+	0	0	0
VESA, 1920 x 1080	67.500	60.000	148.500	+/+	0	0	0
VESA, 2560 x 1440	88.787	59.951	241.500	+/-	0	0	0
VESA, 2560 x 1440	93.850	74.999	302.120	+/-	-	0	0

– Horizontal Frequency

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

– Vertical Frequency

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

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

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

Chapter 12

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 homeshopping or online.

A Product damage caused by customer's fault

Product damage caused by customer's mishandling or wrong repair

If a product damage is caused by;

- External impact or drop.
- Use of supplies or 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.