

# LCD TV Monitor

## User Manual

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

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# 1 Major Safety Precautions

## 1-1 Before You Start

### Icons used in this manual

ICON	NAME	MEANING
	Caution	Indicates cases where the function may not work or the setting may be canceled.
	Note	Indicates a hint or tip to operate a function.

### Using this Manual

- Make yourself fully aware of the safety precautions before using this product.
- If a problem occurs, refer to the 'Troubleshooting' section.

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## 1-2 Care and Maintenance

### External Surface and Screen Maintenance

Clean the product with a soft dry cloth.

- Avoid cleaning the product with an inflammable substance such as benzene or thinner or with a wet cloth. This may result in a problem with the product.
- Avoid scratching the screen with your fingernails or a sharp object.
- Avoid cleaning the product by spraying water onto it. If water enters the product, it may result in fire, electric shock or a problem with the product.

A white stain may be generated on the surface of the model if a supersonic humidifier is used near it.



 The appearance and the color may differ depending on models.

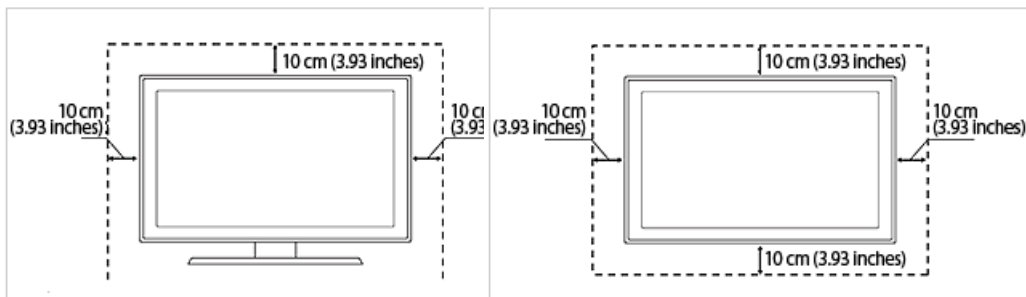
### Securing the Installation Space

- Keep the required distances between the product and other objects (e.g. walls) to ensure proper ventilation. Failing to do so may result in fire or a problem with the product due to an increase in the internal temperature. Install the product so the required distances shown in the figure are kept.

 The appearance may differ depending on the product.

When installing the product with a stand

When installing the product with a wall-mount





### About persistent images

- Displaying a still image for a long time may create a persistent image or stain on the screen. If you do not use the product for a long time, set the power-saving mode or screen saver.
- Due to technological constraints of the LCD Panel manufacturer, the images generated by this product may appear either brighter or darker than normal by appr. 1ppm (parts per million) pixel.  
The number of sub-pixels of an LCD panel by size: The number of Sub-Pixels = Max. Horizontal Resolution x Max. Vertical Resolution x 3  
Example) If the maximum resolution is 1920 x 1080, the number of sub-pixels is 1920 x 1080 x 3 = 6,220,800.

## 1-3 Safety Precautions

### Icons used for safety precautions

ICON	NAME	MEANING
	Warning	Failing to follow the precautions marked with this sign may result in a serious injury or even a fatality.
	Caution	Failing to follow the precautions marked with this sign may result in a personal injury or property damage.

### Meaning of Signs



Do not perform.



Must be followed.



Do not disassemble.



The power plug must be unplugged from the wall outlet.




Do not touch.

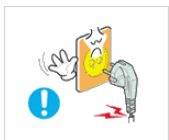


Must be grounded to prevent electric shock.

### Power Related

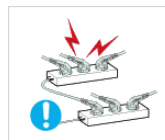
 The following images are for your reference and may differ depending on models and countries.

#### Warning



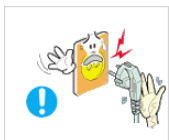
Avoid using a damaged power cord or plug or a loose power outlet.

- Otherwise, it may result in electric shock or fire.



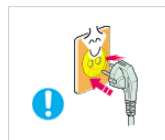
Avoid connecting multiple electric appliances to a single wall outlet.

- Otherwise, it may result in fire due to overheating of the wall outlet.



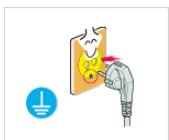
Avoid plugging in or unplugging the power supply with wet hands.

- Otherwise, it may result in electric shock.



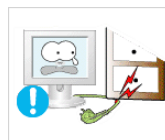
Plug the power plug in firmly.

- Otherwise, it may result in fire.



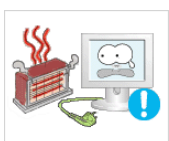
Make sure to connect the power cord to a grounded wall outlet (for insulation class 1 equipment only).

- Otherwise, it may result in electric shock or injury.



Avoid bending or twisting the power cord excessively and avoid placing heavy objects on the cord.

- Otherwise, it may result in electric shock or fire due to a damaged power cord.



Keep the power cord and the product away from a heater.

- Otherwise, it may result in electric shock or fire.



If the pins of the power plug or the wall outlet are covered in dust, clean it using a dry cloth.

- Otherwise, it may result in fire.

## Caution



Avoid unplugging the power plug while the product is operating.

- Otherwise, it may damage the product due to electric shock.



When unplugging the power plug from the wall outlet, make sure to hold it by the plug and not by the cord.

- Otherwise, it may result in electric shock or fire.



Make sure to use only the power cord supplied by our company. In addition, do not use the power cord of another electric appliance.

- Otherwise, it may result in electric shock or fire.



Connect the power plug to a wall outlet that can be easily reached.

- When a problem occurs with the product, you must unplug the power plug to cut the power off completely. You cannot cut the power off completely using only the power button on the product.

## Installation Related

### Warning



Avoid placing burning candles, mosquito-repellent or cigarettes on the product.

- Otherwise, it may result in fire.



Ask an installation engineer or relevant company to install the product onto the wall.

- Otherwise, it may result in injury.
- Make sure to use the specified wall mount.



Avoid installing the product in a badly-ventilated location such as inside a bookshelf or closet.

- Otherwise, it may result in fire due to internal over-heating.



Keep a distance of at least 10 cm (3.93 inches) from the wall when installing the product for ventilation.

- Otherwise, it may result in fire due to internal over-heating.



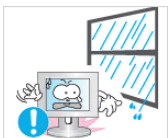
Keep the plastic bags used to pack the product away from children.

- If children place the plastic bags over their heads, they may suffocate.



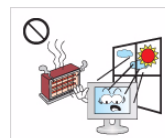
Avoid installing the product in a location that is unstable or exposed to excessive vibrations such as on an unstable or slanted shelf.

- The product may fall and this may result in damage to the product or injury.
- If you use the product in a location exposed to excessive vibration, it may result in a problem with the product or fire.



Avoid installing the product in a location exposed to dust, moisture (sauna), oil, smoke or water (rain drops) and installing it within a vehicle.

- This may result in electric shock or fire.



Avoid installing the product in a location exposed to direct sunlight or near a heat source such as a fireplace or heater.

- This may shorten the product life cycle or cause fire.



Avoid installing the product where children may reach it.

- If a child touches the product, the product may fall and this may result in injury.
- Since the front part is heavier, install the product on a flat and stable surface.



Bend the outdoor antenna cable downwards at the location where it comes in the house so that rainwater does not flow in.

- If rainwater enters the product, it may result in electric shock or fire.



Install the antenna far away from any high voltage cables.

- If the antenna touches or falls onto a high voltage cable, it may result in electric shock or fire.

## Caution



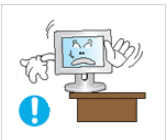
Do not let the product drop while moving it.

- This may result in a problem with the product or injury.



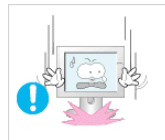
Do not place the product face down on the floor.

- This may damage the panel of the product.



When installing the product on a console or shelf, make sure that the front of the product does not protrude out of the console or shelf.

- Otherwise, this may cause the product to fall off and result in a malfunction or injury.
- Make sure to use a cabinet or shelf suitable to the size of the product.



When putting the product down, handle it gently.

- Otherwise, it may result in a problem with the product or injury.



If the product is installed in a location where the operating conditions vary considerably, a serious quality problem may occur due to the surrounding environment. In this case, install the product only after consulting one of our service engineers about the matter.

- Places exposed to microscopic dust, chemicals, too high or low temperature, high humidity, airports or stations where the product is continuously used.

## Cleaning Related

### Warning



Before cleaning the product, unplug the power cord.

- Otherwise, it may result in electric shock or fire.



When cleaning the product, do not spray water directly over the product parts.

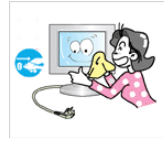
- Make sure that water does not enter the product.
- Otherwise, it may result in fire, electric shock or a problem with the product.

## Caution



Avoid spraying cleansing agent directly onto the product.

- This may result in discoloration or cracking of the exterior of the product or the panel coming off.



When cleaning the product, disconnect the power cord and clean the product with the supplied cleaning cloth.

- Avoid using chemicals such as wax, benzene, alcohol, thinner, mosquito-repellent, fragrance, lubrication or cleansing agent when cleaning the product.

This may result in the exterior being deformed or the print being removed.



If you can't get the product clean with just the supplied cloth, use a soft, damp cloth with a "monitor-exclusive cleansing agent" and wipe the product with it.

- If no monitor-exclusive cleansing agent is available, dilute a cleansing agent with water at a ratio of 1:10 before cleaning the product.



Since the exterior of the product is easily scratched, be sure to use the supplied cleansing cloth.

## Usage Related

### Warning



Since a high voltage runs through the product, never disassemble, repair or modify the product yourself.

- Otherwise, it may result in fire or electric shock.
- If the product needs to be fixed, contact a service center.



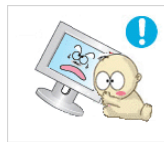
To move the product, turn the power off and unplug the power cord, the antenna cable and any other wires connected to the product.

- Otherwise, it may result in electric shock or fire due to the damaged power cord.



If the product generates a strange noise, a burning smell, or smoke, unplug the power plug immediately and contact a service center.

- Otherwise, it may result in electric shock or fire.



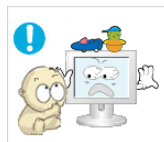
Avoid letting children hang or climb onto the product.

- Otherwise, it may result in the product falling and this may result in injury or death.



If you drop the product or the case is damaged, turn the power off and unplug the power cord.

- Otherwise, it may result in fire or electric shock.



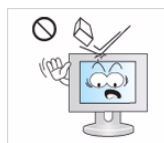
Avoid placing objects such as toys and cookies on top of the product.

- If a child hangs over the product to grab an object, the object or the product may fall and this may result in injury or even death.



When thunder or lightning occurs, unplug the power cord and under no circumstance touch the antenna cable as this is dangerous.

- Otherwise, it may result in electric shock or fire.



Avoid dropping an object over the product or cause impact to the product.

- Otherwise, it may result in electric shock or fire.





Avoid moving the product by pulling the power cord or antenna cable.

- Otherwise, it may result in electric shock, fire or a problem with the product due to damage to the cable.



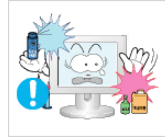
When a gas leak occurs, do not touch the product or the power plug and ventilate immediately.

- A spark may result in an explosion or fire.
- During a thunder or lightning storm, do not touch the power cord or antenna cable.



Avoid lifting up or moving the product by holding only the power cord or signal cable.

- Otherwise, it may result in electric shock, fire or a problem with the product due to damage to the cable.



Avoid using or placing inflammable spray or objects near the product.

- This may result in an explosion or fire.



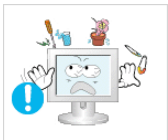
Take care not to block the vent by a table cloth or curtain.

- Otherwise, it may result in fire due to internal overheating.



Avoid inserting metal objects such as a chopsticks, coins or hairpins, or inflammable objects into the product (the vents, ports, etc).

- If water or substances enter the product, turn the power off, unplug the power cord and contact a service center.
- Otherwise, it may result in a problem with the product, electric shock or fire.



Avoid placing a liquid container such as a vase, flowerpot, beverage, cosmetics or drugs, or a metal object over the product.

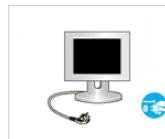
- If water or substances enter the product, turn the power off, unplug the power cord and contact a service center.
- Otherwise, it may result in a problem with the product, electric shock or fire.

### Caution



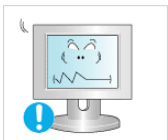
Displaying a still image for a long time may create a persistent image or stain on the screen.

- If you do not use the product for a long time, use the power-saving mode or set the screensaver to the moving picture mode.



When not using the product for a long time such as leaving your home, unplug the power cord from the wall outlet.

- Otherwise, it may cause dust accumulation and result in fire caused by overheating or short circuit or result in an electric shock.



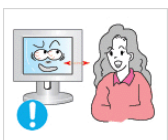
Set the appropriate resolution and frequency for the product.

- Otherwise, it may result in eye strain.



Avoid turning the product upside down or move the product holding only the stand.

- This may cause the product to fall, resulting in damage to the product or injury.

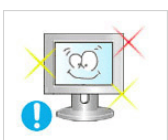


Watching the product from too close a distance continuously may damage your eyesight.



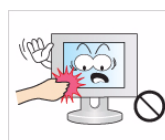
Avoid using a humidifier or cooker near the product.

- Otherwise, it may result in electric shock or fire.



It is important to give your eyes some rest (5 minutes every hour) when viewing the product screen for long periods of time.

- This will alleviate any eye strain.



Since the display panel is hot after using it for a long time, do not touch the product.



Keep the small accessories in a location out of the reach of children.



Take care when adjusting the angle of the product or the height of the stand.

- If your hand or finger is caught, you may be injured.
- If the product is tilted excessively, the product may fall and this may result in injury.



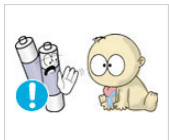
Avoid placing a heavy object over the product.

- Otherwise, it may result in a problem with the product or injury.



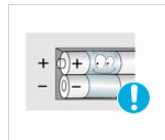
When using headphones or earphones, do not turn the volume too high.

- Having the sound too loud may damage your hearing.



Be careful that children do not place the batteries in their mouths when removed from the remote control. Place the battery in a location that children or infants cannot reach.

- If children have had the battery in their mouths, consult your doctor immediately.



When replacing the batteries, insert them with right polarity (+, -).

- Otherwise, the battery may become damaged or it may cause fire, personal injury or damage due to leakage of the internal liquid.



Use only specified standard batteries. Do not use new and used batteries together.

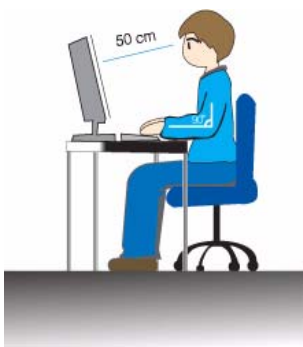
- This may cause a battery to break or leak and may cause fire, injury, or contamination (damage).



The batteries (and rechargeable batteries) are not ordinary refuse and must be returned for recycling purposes. The customer is responsible for returning the used or rechargeable batteries for recycling.

- The customer can return used or rechargeable batteries to a nearby public recycling center or to a store selling the same type of the battery or rechargeable battery.

## Maintaining the Correct Posture when Using this Product




Maintain the correct posture when using this product.

- Straighten your back.
- Keep a distance of 45~50 cm (15~19 inches) from your eyes to the screen. Look down at the screen and face the screen forwards.
- Maintain the correct posture when using this product.
- Adjust the angle of the product so that light is not reflected onto the screen.
- Keep your elbow at a right angle and keep your arm level with the back of your hand.
- Keep your elbow at a right angle.
- Place your heels flat on the ground while keeping your knees at an angle of 90 degrees or higher and maintain the position of your arm so that your arm is below your heart.

## 2 Installing the Product

### 2-1 Package Contents

-  • Unpack the product and check if all of the following contents have been included.
- Store the packaging box in case you need to move the product at a later stage.

#### CONTENTS



Installation Manual



Product Warranty  
(Not available in all locations)



User Manual



Power Cord



Cable Holder



Batteries (AAA X 2)  
(Not available in all locations)



Stand Connector



Stand Base



Remote Control



Cleaning Cloth

#### SOLD SEPARATELY




D-Sub Cable




HDMI Cable



Stereo Cable

-  The cleaning cloth is supplied with black high-glossy models only.

## 2-2 Installing the Stand

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



Insert the Stand Connector into the Stand Base in the direction shown by the figure.



Check if the Stand Connector is firmly connected.



Turn the connecting screw at the bottom of the Stand base fully so that it is completely fixed.



Place a soft cloth over the table to protect the product and place the product onto the cloth face down.



Hold the main body of the product with your hand as shown by the figure.


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



- Caution

Do not lift the product holding only the stand

## 2-3 Removing the Stand

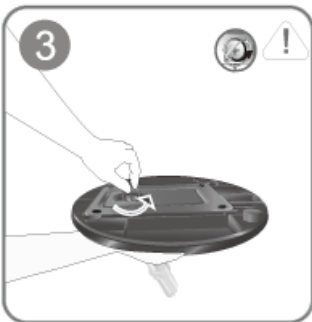
 Before removing the stand, place the product down on a flat and stable surface so that the screen faces downwards.



Place a soft cloth over the table to protect the product and place the product face down.



Hold the main body of the product with your hand as shown by the figure.  
Pull the stand in the direction of the arrow as shown in the figure to separate it.



Turn the connecting screw at the bottom of the Stand base to separate it from the Stand connector.



Take the Stand Connector out of the Stand base by pulling it in the direction of the arrow as shown in the figure.

## 2-4 Attaching a Wall Mount/Desktop Stand

### Attaching a Wall Mount/Desktop Stand(not supplied)

P2370HD : This product complies with 75 mm x 75 mm (2.95 x 2.95 inches) VESA specifications.

P2570HD : This product complies with 100 mm x 100 mm (3.94 x 3.94 inches) VESA specifications.

P2770HD : This product complies with 100 mm x 100 mm (3.94 x 3.94 inches) VESA specifications.



A. Wall/Desktop Stand Mount

B. Wall mount kit/desktop stand (not supplied)

1. Turn the product off and unplug the power cord from the wall outlet.
2. Place a soft cloth or cushion on a flat surface to protect the panel and place the product face down.
3. Align wall mount/desktop stand to the Monitor/TV and firmly fix the wall mount/desktop stand by fastening the screw.
4. Align the groove of the part of the product that is to be connected to the stand with the groove in the stand (desk-top stand, wall mount stand or another stand) and firmly fix the stand by fastening the screw.

- ! If you use screws that are longer than the standard specifications, the inside of the product may be damaged.
- For wall mounts that are not compatible with the standard VESA specifications, the length of the screw may differ depending on the corresponding specifications.
- Avoid using screws that are incompatible with the standard VESA specifications and avoid assembling them using excessive force.  
This may result in damage to the product or injury due to the product falling. Samsung shall not be held liable for any damage or injury.
- Samsung shall not be held liable for any damage to the product or injury caused by using a wall mount/desktop stand that is not compatible with the specifications or due to an installation not performed by an authorized installation engineer.
- When installing the product using a wall mount, purchase a wall mount that provides at least 10 cm (3.93 inches) of space from the wall.
- Use the wall mount according to the international specifications.

## 2-5 Connecting to a Computer

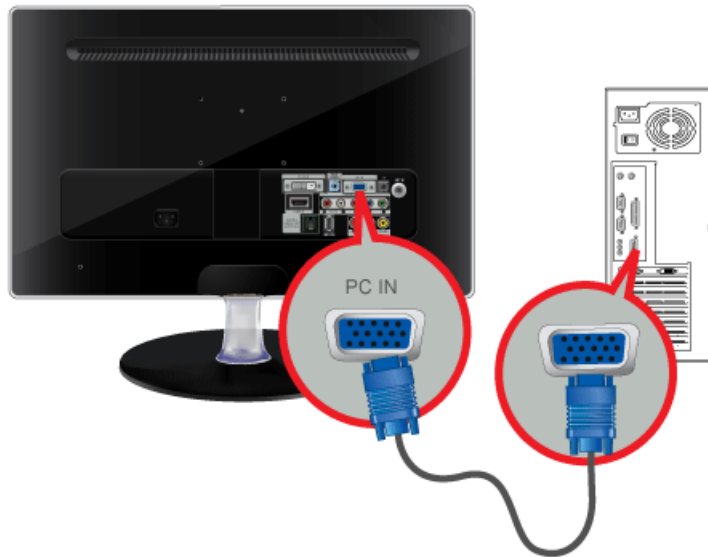
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1. Connect the product to a PC depending on the video output supported by the PC.

 The connecting part may differ depending on the product model.

When the graphics card provides a D-Sub (analog) output

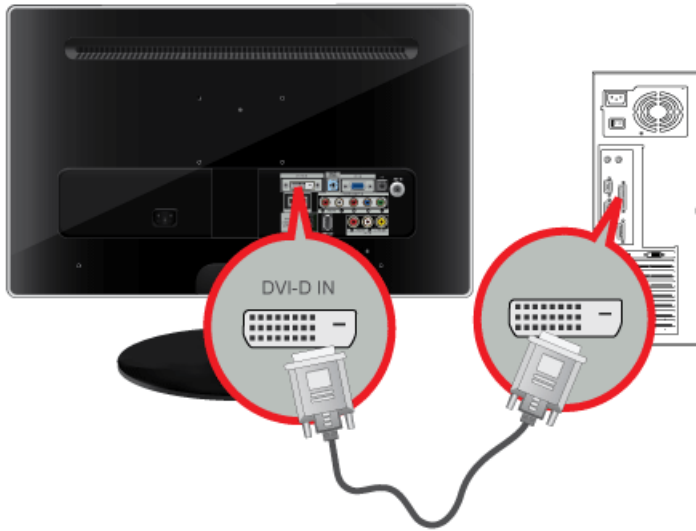
- Connect the [PC IN] port of the product to the [D-Sub] port of the PC with the D-Sub cable.



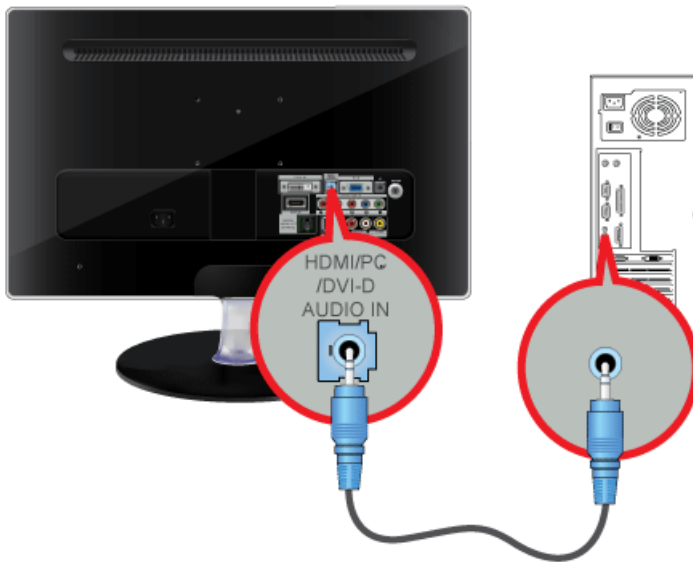
When the graphics card provides a DVI (digital) output



- Connect the [DVI-D IN] port of the product to the [DVI] port of the PC with the DVI cable.

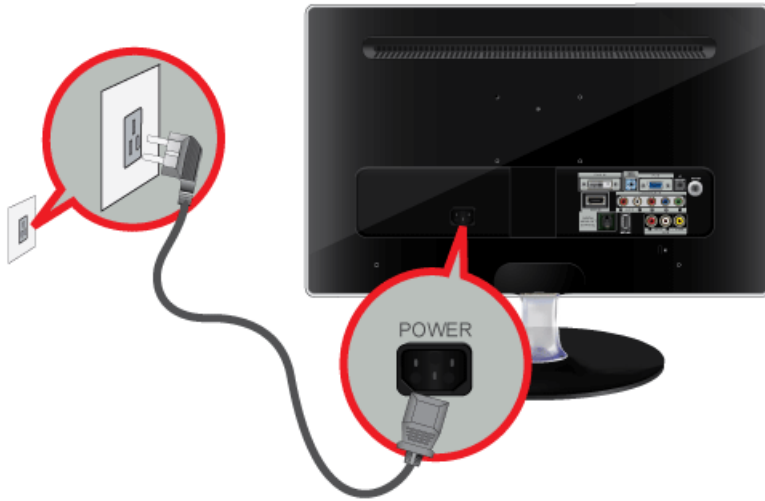



2. Connect the [HDMI/PC/DVI-D AUDIO IN] port on the rear side of the monitor to the sound card of the PC.



3. Connect one end of the power cord to the [ POWER ] port of the product and connect the other end of the power cord to the 110V or 220V wall outlet.

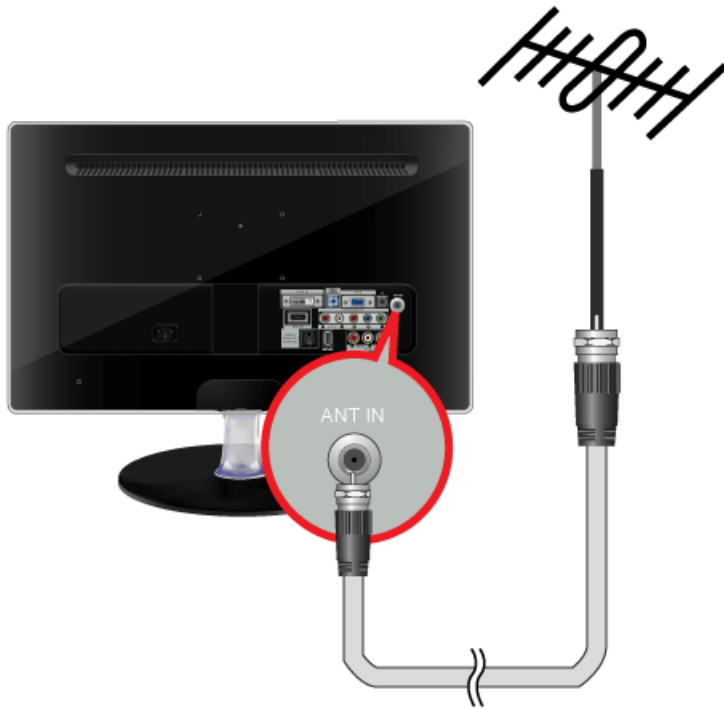
(The input voltage is switched automatically.)




- You may enjoy clear and quality sound from the computer sound card using the monitor's speakers. (You don't need to install separate speakers for your computer.)
- You may get a blank screen depending on the type of video card you are using if you connect the D-sub and DVI cables simultaneously to one computer.
- If you connect your monitor properly using the DVI connector but get a blank or fuzzy screen, check to see if the monitor status is set to analog. Press [  ] button to have the monitor double-check the input signal source.

## 2-6 Using it as a TV

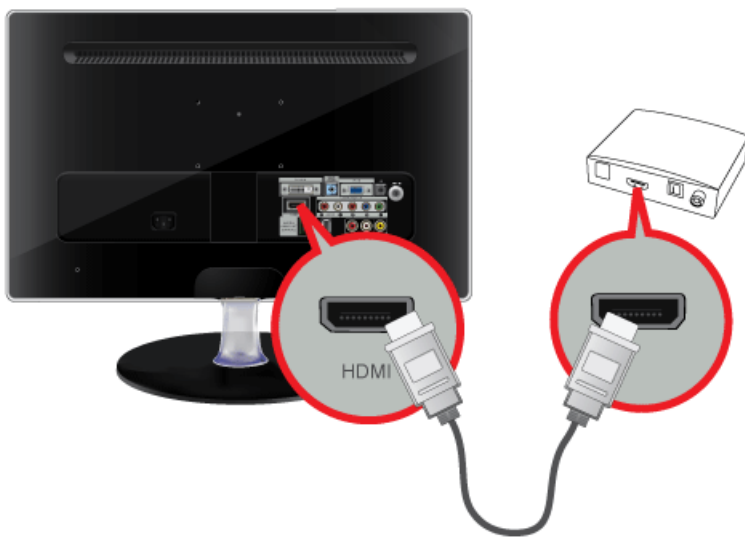
You may view television programs on the monitor if it is connected to an antenna or cable/satellite system without installing any separate TV reception hardware or software on your computer.



1. Connect the cable/satellite or TV antenna cable to the [ANT IN] port on the rear side of the monitor.
    - When using an indoor antenna/cable/satellite terminal:  
Check the antenna terminal on the wall and then connect the antenna/cable/satellite TV cable.
    - When using an outdoor antenna:  
When using an outdoor antenna, we strongly suggest using a qualified technician to install it.
  2. When the connections are completed, connect the TV power.
  3. When the product is turned on for the first time after it was purchased, the initial setup operations (<Plug & Play>) begin.
-  • Be careful that the coaxial cable is not bent when connecting it to the antenna input terminal [ANT IN].

## 2-7 Connecting an HDMI cable

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Connect the HDMI OUT port of the AV device (Blu-Ray/DVD/Cable/Satellite box) to the [HDMI IN] terminal of the monitor using the HDMI cable.

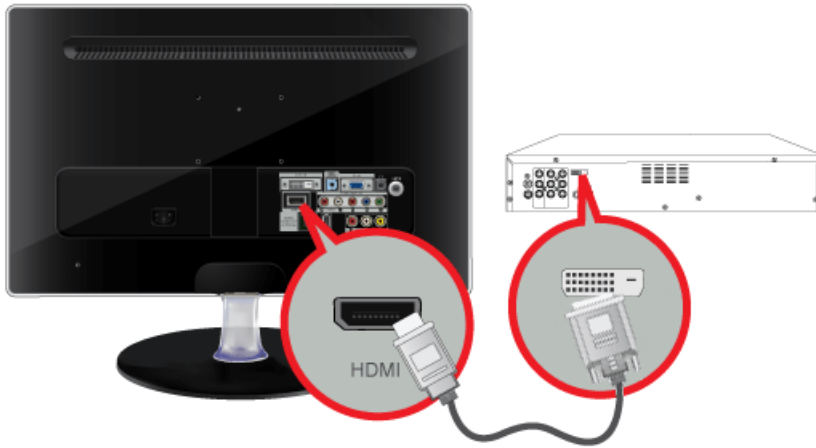
Press the [SOURCE] button at the front of the monitor or on the remote control to select <HDMI> mode.



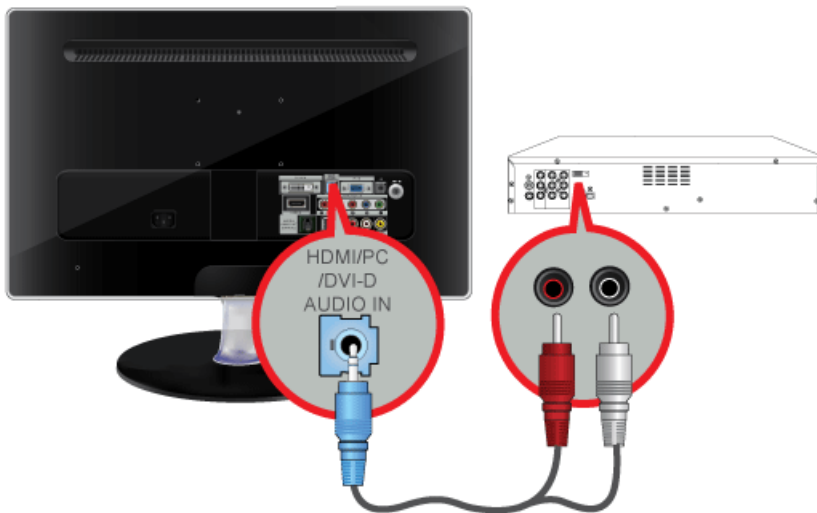
You do not need to make a separate audio connection when connecting via HDMI.

## 2-8 Connecting Using a DVI to HDMI Cable

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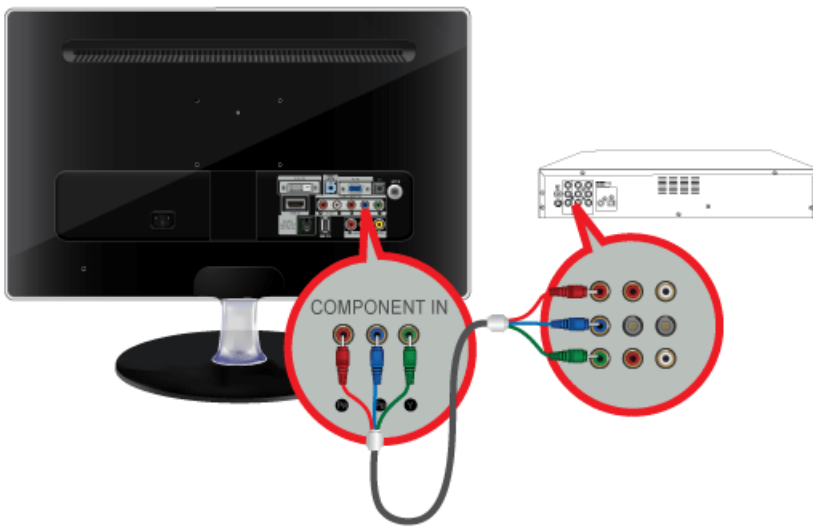


1. Connect the DVI output terminal of an external device to the [HDMI IN] terminal of the monitor using a DVI to HDMI cable.

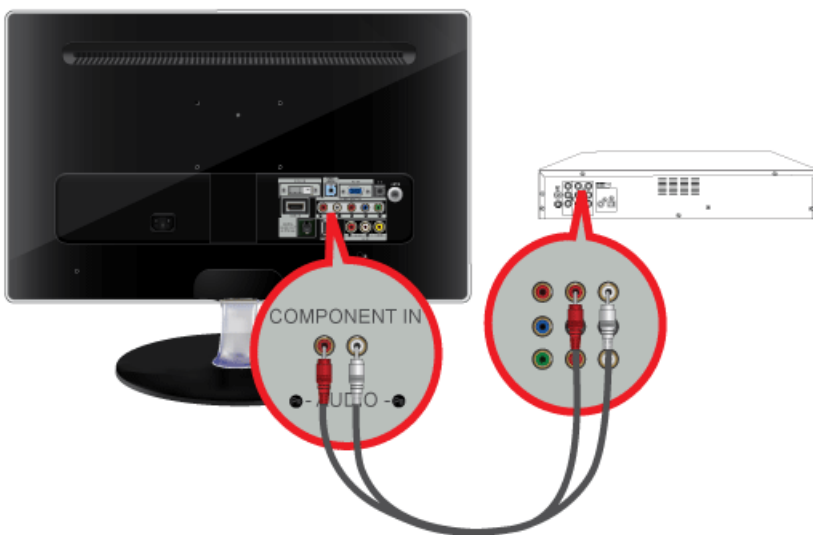


2. Connect the red and white plugs of an RCA to stereo (for PC) cable to the same colored audio output terminals of the digital output device, and connect the opposite plug to the [HDMI/PC/DVI-D AUDIO IN] terminal of the product.  
Press the [SOURCE] button at the front of the monitor or on the remote control to select <HDMI> mode.

## 2-9 Connecting a Component cable



1. Connect the VIDEO OUT port of the AV device (DVD/VCR/Cable/Satellite box) to the [COMPONENT IN [P<sub>R</sub>, P<sub>B</sub>, Y]] input ports using a component video cable [P<sub>R</sub>, P<sub>B</sub>, Y].



2. Connect the audio port of the AV device (DVD/VCR/Cable/Satellite box) to the [COMPONENT IN [[R-AUDIO-L]]] port of the monitor.

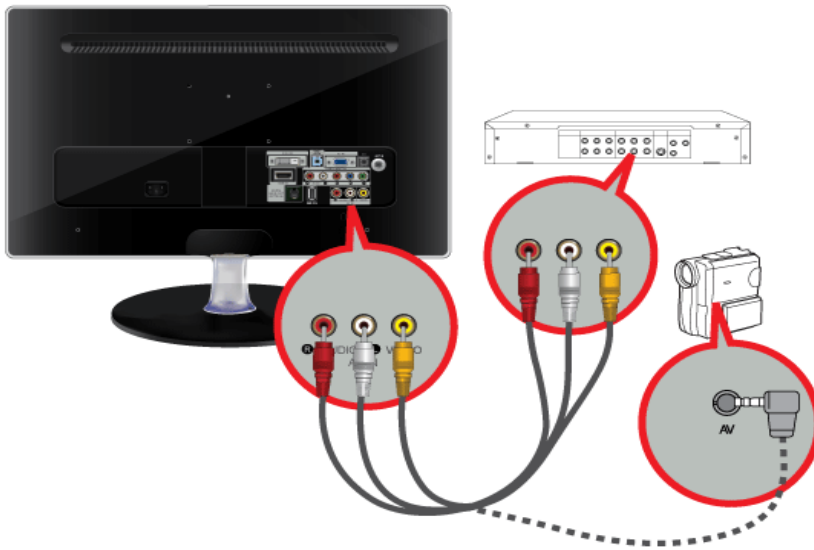
Press the [SOURCE] button at the front of the monitor or on the remote control to select the <Component> mode.




For an explanation of Component video, consult your DVD/VCR/Cable/Satellite box manual.

## 2-10 Connecting AV Devices

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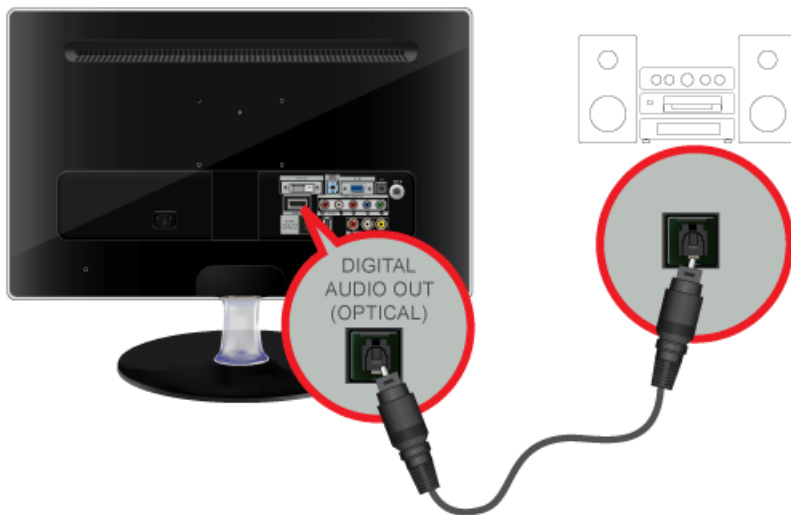


1. Connect the port of the AV device (DVD/VCR/Cable/Satellite box/Camcorder) to the [AV IN [ R-AUDIO-L ] port of the product.
2. Connect the video output terminal of the AV device and the [AV IN [VIDEO]] of the monitor using a video cable.
3. Select [AV] using the <SOURCE> button on the remote.

 • The audio-video cables shown here are usually included with a Camcorder. (If not, check your local electronics store.)

## 2-11 Connecting to an Amplifier

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Connect the [DIGITAL AUDIO OUT (OPTICAL)] terminal of your monitor to the optical input of your amplifier using an optical cable.



- If no sound is emitted from the monitor, you need to use an amplifier.
- For information on how to connect a speaker and amplifier, refer to the respective user manuals provided by their manufacturers.



## 2-12 Connecting Headphones

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Connect your headphones to the Headphone connection terminal.

## 2-13 Kensington Lock

A Kensington Lock is an anti-theft device that enables users to lock the product so that they can safely use it in public locations. Since the shape and usage of the locking device may differ depending on the model and the manufacturer, for more information, refer to the User Manual supplied with the locking device. You have to purchase the locking device separately.



### Locking the product

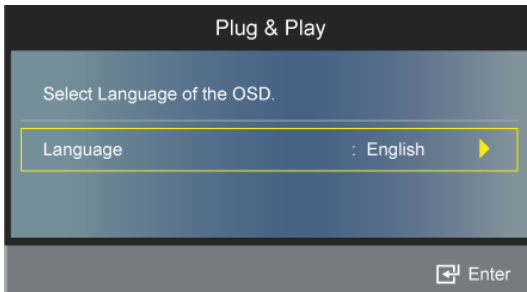
1. Insert the locking part of the locking device into the hole of the Kensington lock of the product ( **B** ) and turn it in the locking direction ( **A** ).
2. Connect the Kensington lock cable.
3. Tie the Kensington lock cable to a desk or heavy object.




You can purchase the locking device from an electronics store or an online shop.

# 3 Using the Product


## 3-1 Plug & Play Feature





When the TV is initially powered on, basic settings proceed automatically and subsequently.

1. Press the [POWER ] button on the remote control.




- You can also use the [] button on the TV.  
The message <Select Language of the OSD.> is displayed.

2. Press the [] button. Select the appropriate language by pressing the ▲ or ▼ button. Press the [] button to confirm your choice.


3. Press the ◀ or ▶ button to select <Store Demo> or <Home Use>, then the [] button.



- We recommend setting the TV to <Home Use> mode for the best picture in your home environment.
- <Store Demo> mode is only intended for use in retail environments. If the unit is accidentally set to <Store Demo> mode and you want to return to <Home Use> (Standard): Press the volume button on the TV. When the volume OSD is displayed, press and hold the [ MENU ] button on the TV for 5 seconds.



4. Press the ▲ or ▼ button to memorize the channels of the selected connection. Press the [] button to select <Start>.




- <Air>: <Air> antenna signal. / <Cable>: <Cable> antenna signal. / <Auto>: <Air> and <Cable> antenna signals.
- In Cable mode, you can select the correct signal source among <STD>, <HRC>, and <IRC> by pressing the ▲, ▼, ◀ or ▶ button, then press the [] button. If you have Digital cable, select the cable system signal source for both Analog and Digital. Contact your local cable company to identify the type of cable system that exists in your particular area.


5. Press the [] button to select <Start>. The TV will begin memorizing all of the available channels.





- To stop the search before it has finished, press the [] button with <Stop> selected.
- After all the available channels are stored. The Auto program menu then reappears. Press the [] button when channel memorization is complete. The message <Set the Clock Mode.> is displayed.

6. Press the [] button.

Press the ▲ or ▼ button to select <Auto>, then press the [] button. If you select <Manual>, <Set current date and time> is displayed.



7. Press the ▲ or ▼ button to select <Off>, <On> or <Auto>, then press the [] button.

8. Press the ▲ or ▼ button to highlight the time zone for your local area. Press the [] button. If you have received a digital signal, the time will be set automatically.

9. An HD Connection guide will appear. After reading, press the [] button.

10. The message <Enjoy your TV.> is displayed. When you have finished, press the [] button.

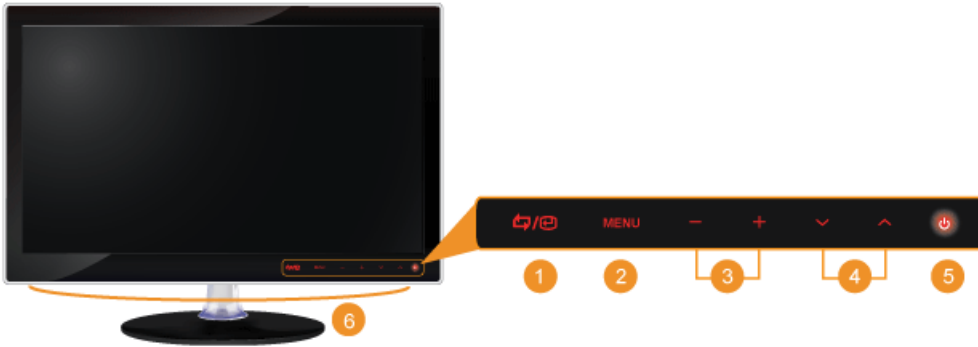
**If you want to reset this feature...**


1. Press the [MENU] button to display the menu. Press the ▲ or ▼ button to select <Setup>, then press the [] button.
2. Press the [] button again to select <Plug & Play>.







The <Plug & Play> feature is only available in the TV mode.


## 3-2 Viewing the Control panel




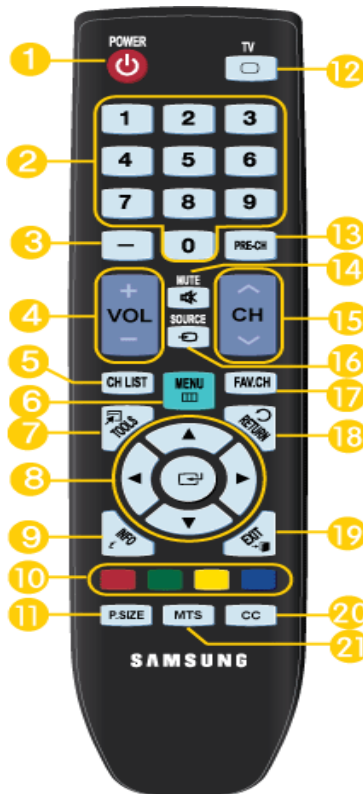
-  Touch one of the operating buttons lightly.  
The LED buttons appear.

ICON		DESCRIPTION
1	[  ]	Use this button to select a function. Signals other than the TV signal can only be selected if the corresponding device is connected. The order in which the TV/external input signal changes. <PC>→<TV>→<DVI>→<AV>→<Component>→<HDMI>
2	[MENU]	Press this button to view the On Screen Display (OSD). This button is also used to exit the OSD or to return to a higher-level OSD menu.
3	[ -/+ ]	Moves from one menu item to another horizontally or adjusts selected menu values. Adjusts the audio volume.
4	[  ]	Use these buttons to navigate the menu or to adjust a value in the OSD. Press to change channels in TV mode.
5	[  ]	Press this button to turn the product on or off. <b>Power LED</b> This LED is turned on when the product works normally.   For information about the power saving function, refer to the power saving function section of the product specifications. When not using the product for a long time, unplugging the power cord is recommended to minimize power consumption.
6	Speaker	-

### 3-3 Remote Control

 The performance of the remote control may be affected by a TV or other electronic device operating near the product, causing a malfunction due to interference with the frequency.

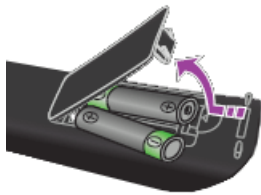
- 1 **POWER**  
Turns the product On/Off.
- 2 **Number Buttons**  
Press to change the channel.
- 3 **□** : Press to select additional channels (digital) being broadcast by the same station. For example, to select channel '54-3', press '54', then press '□' and '3'.
- 4 **+ VOL -**  
Press to increase or decrease the volume.
- 5 **CH LIST**  
It displays "Channel List" on the screen.
- 6 **☰ MENU**  
Opens the on-screen menu and exits from the menu or closes the adjustment menu.
- 7 **TOOLS**  
Use to quickly select frequently used functions.
- 8 **UP ▲/DOWN ▼/LEFT ◀/RIGHT ▶ / ENTER**  : Use to select on-screen menu items and change menu values.
- 9 **i INFO**  
Current picture information is displayed on the upper left corner of the screen.
- 10 **COLOR BUTTONS**  
Press to add or delete channels and to store channels to the favorite channel list in the "Channel List" menu.
- 11 **P.SIZE**  
Picture size selection.



- 12 **TV**  
Selects the TV mode directly.
- 13 **PRE-CH**  
This button is used to return to the previous channel viewed.
- 14 **MUTE**  
Press to temporarily cut off the sound.
- 15 **▲ CH ▼**  
Press to change channels.
- 16 **SOURCE**  
Press the button to change the input signal SOURCE.  
Changing the SOURCE is only allowed for external devices that are connected to the monitor at the time.
- 17 **FAV.CH**  
Press to switch to your favorite channels.
- 18 **RETURN**  
Returns to the previous menu.
- 19 **EXIT**  
Exits from the menu screen.
- 20 **CC**  
Controls the caption decoder.
- 21 **MTS**  
Press to choose stereo, mono or Separate Audio Program (SAP broadcast).

## Installing Batteries in the Remote Control

1. Lift the cover at the back of the remote control upward as shown in the figure.



2. Install two AAA size batteries.



Make sure to match the + and - ends of the batteries with the diagram inside the compartment.

3. Close the cover.



Remove the batteries and store them in a cool, dry place if you won't be using the remote control for a long time.

If the remote control doesn't work, check the following :

- Is the TV power on?
- Are the plus and minus ends of the batteries reversed?
- Are the batteries drained?
- Is there a power outage or is the power cord unplugged?
- Is there a special fluorescent light or neon sign nearby?






### 3-4 Using the Screen Adjustment Menu (OSD: On Screen Display)

#### The Screen Adjustment Menu (OSD: On Screen Display) Structure

TOP MENUS	SUB MENUS				
Picture [PC / DVI]	MagicBright	Contrast	Brightness	Sharpness	Auto Adjustment
	Screen	Picture Options	Picture Reset		
Picture [TV / AV / Component / HDMI]	Mode	Backlight	Contrast	Brightness	Sharpness
	Color	Tint (G/R)	Advanced Settings	Picture Options	Picture Reset
Sound	Mode	Equalizer	SRS TruSurround HD	Preferred Language	Multi-Track Sound
	Auto Volume	Speaker Select	Sound Reset		
Channel	Antenna	Auto Program	Clear Scrambled Channel	Channel List	Fine Tune
Setup	Plug & Play	Language	Time	Game Mode	V-Chip
	Caption	Light Effect	Light Level	Melody	Energy Saving
Input	Source List	Edit Name			
Application	Anynet+ (HDMI-CEC)				
Support	Self Diagnosis	Software Upgrade	HD Connection Guide	Contact Samsung	

#### Available Modes


The icons below represent the input signals that are displayed when selecting an item in the <Source List>.







	Indicates the signal when <PC> or <DVI> is selected in the <Source List >. This is the PC video signal that is connected to and input through the [PC] or [DVI] terminals.
	Indicates the signal when <AV> is selected in the <Source List >. This is the video signal input through the [VIDEO] terminal.
	Indicates the signal when <HDMI> is selected in the <Source List >. This is the signal input through the [HDMI] terminal.
	Indicates the signal when <TV> is selected in the <Source List >. This is the signal input through the [ANT IN] terminal.
	Indicates the signal when <Component> is selected in the <Source List >. This is the signal input through the [COMPONENT] terminal.








## Picture [PC / DVI ]









 The default setting may be different depending on the selected Input Mode (input signal source selected in External Input List) and the selected resolution







MENU	DESCRIPTION
<p>MagicBright</p> <p></p>	<p>&lt;MagicBright&gt; is a feature providing an optimum viewing environment depending on the contents of the image you are watching. Currently five different modes are available: &lt;Entertain&gt;, &lt;Internet&gt;, &lt;Text&gt;, &lt;Dynamic Contrast&gt; and &lt;Custom&gt;. Each mode has its own pre-configured brightness value.</p> <ul style="list-style-type: none"> <li>• &lt;Entertain&gt; High Brightness For watching motion pictures such as a Blu-Ray or DVD.</li> <li>• &lt;Internet&gt; For working with a mixture of images such as texts and graphics.</li> <li>• &lt;Text&gt; For documents or work involving heavy text.</li> <li>• &lt;Dynamic Contrast&gt; &lt;Dynamic Contrast&gt; automatically detects the distribution of the visual signal and adjusts to create an optimum contrast.</li> <li>• &lt;Custom&gt; Although the values are carefully chosen by our engineers, the pre-configured values may not be comfortable to your eyes depending on your taste. If this is the case, adjust the &lt;Brightness&gt; and &lt;Contrast&gt; by using the OSD menu.</li> </ul> <p> Press the [TOOLS] button to display the Tools menu. You can also set the &lt;MagicBright&gt; by selecting &lt;Tools&gt;→&lt;MagicBright&gt;.</p>
<p>Contrast / Brightness / Sharpness</p> <p></p>	<p>You can use the on-screen menus to change the contrast and brightness according to personal preference.</p> <ul style="list-style-type: none"> <li>• &lt;Contrast&gt; - Adjusts the contrast level of the picture.</li> <li>• &lt;Brightness&gt; - Adjusts the brightness level of the picture.</li> <li>• &lt;Sharpness&gt; - Adjusts the edge definition of the picture.</li> </ul>
<p>Auto Adjustment</p> <p></p>	<p>The values of &lt;Fine&gt;, &lt;Coarse&gt; and &lt;PC Position&gt; are adjusted automatically. By changing the resolution in the control panel, auto function is performed.</p> <p> Available in &lt;PC&gt; Mode Only</p> <p> Press the [TOOLS] button to display the Tools menu. You can also set the &lt;Auto Adjustment &gt;by selecting &lt;Tools&gt;→&lt;Auto Adjustment&gt;.</p>

MENU	DESCRIPTION
Screen 	<ul style="list-style-type: none"> <li>• &lt;Coarse&gt; Removes noise such as vertical stripes. &lt;Coarse&gt; adjustment may move the screen image area. You may relocate it to the center using the horizontal control menu</li> <li>• &lt;Fine&gt; Removes noise such as horizontal stripes. If the noise persists even after &lt;Fine&gt; tuning, repeat it after adjusting the frequency (&lt;Coarse&gt;.)</li> <li>• &lt;PC Position&gt; Adjusts the screen location horizontally and vertically.</li> <li>• &lt;Image Reset&gt; Image parameters are replaced with the factory default values.</li> </ul> <p> Available in &lt;PC&gt; Mode Only</p>
Picture Options 	<ul style="list-style-type: none"> <li>• &lt;Color Tone&gt; The tone of the color can be changed.</li> </ul> <p> Available in &lt;PC&gt; / &lt;DVI&gt; mode only</p> <ul style="list-style-type: none"> <li>• &lt;Cool&gt; - &lt;Normal&gt; - &lt;Warm&gt; - &lt;Custom&gt;</li> <li>• &lt;R-Gain &gt; - &lt;G-Gain &gt; - &lt;B-Gain &gt; Adjusts the individual R, G, B (Red, Green, Blue) color controls.</li> <li>• &lt;Size&gt; You can switch the Size.</li> <li>• &lt;16:9&gt; - &lt;4:3&gt;</li> </ul>
Picture Reset 	Picture parameters are replaced with the factory default values. <ul style="list-style-type: none"> <li>• &lt;Reset Picture Mode&gt; - &lt;Cancel&gt;</li> </ul>

## Picture [ TV / AV / Component / HDMI ]








MENU	DESCRIPTION
<p>Mode</p> 	<p>The Monitor has three automatic picture settings (&lt;Dynamic&gt;, &lt;Standard&gt;, and &lt;Movie&gt;) that are preset at the factory.</p> <p>You can activate either &lt;Dynamic&gt;, &lt;Standard&gt;, or &lt;Movie&gt;.</p> <ul style="list-style-type: none"> <li>• &lt;Dynamic&gt; Selects the picture for high-definition in a bright room.</li> <li>• &lt;Standard&gt; Selects the picture for optimum display in a normal environment.</li> <li>• &lt;Movie&gt; Selects the picture for viewing movies in a dark room.</li> </ul> <p> Press the [TOOLS] button to display the Tools menu. You can also set the &lt;Picture Mode&gt; by selecting &lt;Tools&gt;→&lt;Picture Mode&gt;.</p>
<p>Backlight / Contrast / Brightness / Sharpness / Color / Tint (G/R)</p> 	<p>Your television has several setting options that allow you to control the picture quality.</p> <ul style="list-style-type: none"> <li>• &lt;Backlight &gt; - Adjusts the brightness of LCD back light.</li> <li>• &lt;Contrast&gt; - Adjusts the contrast level of the picture.</li> <li>• &lt;Brightness&gt; - Adjusts the brightness level of the picture.</li> <li>• &lt;Sharpness&gt; - Adjusts the edge definition of the picture.</li> <li>• &lt;Color&gt; - Adjusts color saturation of the picture.</li> <li>• &lt;Tint (G/R)&gt; - Adjusts the color tint of the picture.</li> </ul>
<p>Advanced Settings</p> 	<p>Samsung's new TVs allow you to make even more precise picture settings than previous models. See below to adjust detailed picture settings.</p> <p> &lt;Advanced Settings&gt; is available in &lt;Standard&gt; or &lt;Movie&gt; mode.</p> <ul style="list-style-type: none"> <li>• &lt;Black Tone&gt; - You can select the level on the screen to adjust the screen depth. <ul style="list-style-type: none"> <li>• &lt;Off&gt; - &lt;Dark&gt; - &lt;Darker&gt; - &lt;Darkest&gt;</li> </ul> </li> <li>• &lt;Dynamic Contrast&gt; -You can adjust the screen contrast so that the optimal contrast is provided. <ul style="list-style-type: none"> <li>• &lt;Off&gt; - &lt;Low&gt; - &lt;Medium&gt; - &lt;High&gt;</li> </ul> </li> <li>• &lt;Gamma&gt; - You can adjust the Primary Color (Red, Green, Blue) Intensity.</li> <li>• &lt;Color Space&gt; - &lt;Color Space&gt; is a color matrix composed of red, green and blue colors. Select your favorite &lt;Color Space&gt; to experience the most natural color. <ul style="list-style-type: none"> <li>• &lt;Auto&gt; - &lt;Native&gt;</li> </ul> </li> <li>• &lt;White Balance&gt; - You can adjust the color temperature for more natural picture colors. <ul style="list-style-type: none"> <li>• &lt;R-Offset&gt; - &lt;G-Offset&gt; - &lt;B-Offset&gt; - &lt;R-Gain&gt; - &lt;G-Gain&gt; - &lt;B-Gain&gt; - &lt;Reset&gt;</li> </ul> </li> <li>• &lt;Flesh Tone&gt; - You can emphasize the pink &lt;Flesh Tone&gt; in the picture. <p> Changing the adjustment value will refresh the adjusted screen.</p> </li> <li>• &lt;Edge Enhancement&gt; - You can emphasize object boundaries in the picture. <ul style="list-style-type: none"> <li>• &lt;Off&gt; - &lt;On&gt;</li> </ul> </li> </ul>

MENU	DESCRIPTION
Picture Options 	<ul style="list-style-type: none"> <li>• &lt;Color Tone&gt; The tone of the color can be changed.               <ul style="list-style-type: none"> <li>• &lt;Cool&gt; - &lt;Normal&gt; - &lt;Warm1&gt; - &lt;Warm2&gt;</li> <li> <ul style="list-style-type: none"> <li>• &lt;Warm1&gt; or &lt;Warm2&gt; is only activated when the picture mode is &lt;Movie&gt;.</li> <li>• Settings can be adjusted and stored for each external device you have connected to an input of the TV.</li> </ul> </li> </ul> </li> <li>• &lt;Size&gt; You can switch the Size. The direct button on the remote control is [P.SIZE] button.               <ul style="list-style-type: none"> <li>• &lt;16:9&gt; - Sets the picture to 16:9 wide mode.</li> <li>• &lt;Zoom1&gt; - Magnifies the size of the picture on the screen.</li> <li>• &lt;Zoom2&gt; - Magnifies the size of the picture more than &lt;Zoom1&gt;.</li> <li>• &lt;Wide Fit&gt; - Enlarges the aspect ratio of the picture to fit the entire screen.</li> <li>• &lt;4:3&gt; - Sets the picture to 4:3 normal mode.</li> <li>• &lt;Screen Fit&gt; - Use the function to see the original image with no cut-off with HDMI (720p/ 1080i / 1080p), Component (1080i / 1080p) or DTV (1080i) input signals.                   <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>• After selecting &lt;Zoom1&gt;, &lt;Zoom2&gt; or &lt;Wide Fit&gt;: Press the ▲ or ▼ button to select &lt;Position&gt;, then press the [↔] button. Press the ▲ or ▼ button to move the picture up and down.</li> <li>• Reset : Press the ▲ or ▼ button to select Reset , then press the [↔] button. You can initialize the setting.</li> <li>• Settings can be adjusted and stored for each external device you have connected to an input of the TV.                       <ul style="list-style-type: none"> <li>• &lt;TV&gt;, &lt;Component&gt; (480i,480p) - &lt;16:9&gt;, &lt;Zoom1&gt;, &lt;Zoom2&gt;, &lt;4:3&gt;</li> <li>• &lt;DTV&gt; (1080i), &lt;Component&gt; (1080i, 1080p) ,&lt;HDMI&gt;(720p,1080i,1080p) - &lt;16:9&gt;, &lt;Wide Fit&gt;, &lt;4:3&gt;, &lt;Screen Fit&gt;</li> </ul> </li> </ul> </li> </ul> </li> <li>• &lt;Digital NR&gt; Digital Noise Reduction. If the broadcast signal received by your TV is weak, you can activate the Digital Noise Reduction feature to help reduce any static and ghosting that may appear on the screen.               <ul style="list-style-type: none"> <li>• &lt;Off&gt; - &lt;Low&gt; - &lt;Medium&gt; - &lt;High&gt; - &lt;Auto&gt;</li> </ul> </li> <li>• &lt;HDMI Black Level&gt; You can directly select the black level on the screen to adjust the screen depth.               <ul style="list-style-type: none"> <li> This function is active only when the external device is connected via &lt;HDMI&gt;.The &lt;HDMI Black Level&gt; function may not be compatible with all external devices.</li> <li>• &lt;Normal&gt; - &lt;Low&gt;</li> </ul> </li> <li>• &lt;Film Mode&gt; The &lt;Film Mode&gt; feature offers you a theater-quality viewing experience.               <ul style="list-style-type: none"> <li> &lt;Film Mode&gt; is supported in &lt;TV&gt;, &lt;Component&gt; (480i / 1080i) and &lt;HDMI&gt;(480i / 1080i)</li> <li>• &lt;Off&gt; - &lt;Auto&gt;</li> </ul> </li> </ul> </li></ul>
Picture Reset 	Picture parameters are replaced with the factory default values. <ul style="list-style-type: none"> <li>• &lt;Reset Picture Mode&gt; - &lt;Cancel&gt;</li> </ul>

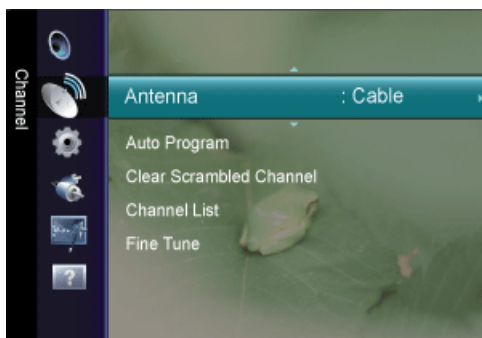
# Sound





















MENU	DESCRIPTION
<p>Mode</p> <p><b>P T C H A</b></p>	<ul style="list-style-type: none"> <li>• &lt;Standard&gt; Choose Standard for the standard factory settings.</li> <li>• &lt;Music&gt; Choose Music when watching music videos or concerts.</li> <li>• &lt;Movie&gt; Choose Movie when viewing movies.</li> <li>• &lt;Clear Voice &gt; Emphasizes voice over other sounds.</li> <li>• &lt;Custom &gt; Choose Custom if you want to adjust the settings according to personal preference .</li> </ul> <p> Press the [TOOLS] button to display the Tools menu. You can also set the &lt;Sound Mode&gt; by selecting &lt;Tools&gt;→&lt;Sound Mode&gt;.</p>
<p>Equalizer</p> <p><b>P T C H A</b></p>	<p>You can adjust the left and right sound balance and equalizer settings as required.</p> <ul style="list-style-type: none"> <li>• &lt;Mode&gt; - You can select a sound mode to suit your personal preferences.</li> <li>• &lt;Balance&gt; - You can adjust the left and right sound balance and equalizer settings as required.</li> <li>• &lt;100Hz&gt; - &lt;300Hz&gt; - &lt;1KHz&gt; - &lt;3KHz&gt; - &lt;10KHz&gt; - &lt;Reset&gt;</li> </ul>
<p>SRS TruSurround HD</p> <p><b>P T C H A</b></p>	<p>&lt;SRS TruSurround HD&gt; is a patented SRS technology that solves the problem of playing 5.1 multi-channel content over two speakers.</p> <p>TruSurround delivers a compelling, virtual surround sound experience through any two-speaker playback system, including internal television speakers. It is fully compatible with all multichannel formats.</p> <ul style="list-style-type: none"> <li>• &lt;Off&gt; - &lt;On&gt;</li> </ul>
<p>Preferred Language</p> <p><b>T</b></p>	<p>Digital-TV broadcasts are capable of simultaneous transmission of many audio tracks (for example, simultaneous translations of the program into foreign languages).</p> <ul style="list-style-type: none"> <li>• &lt;English&gt; - &lt;Spanish&gt; - &lt;French&gt;</li> </ul> <p> You can listen in a language other than the Preferred Language by pressing the MTS button on the remote control.</p> <ul style="list-style-type: none"> <li>• Preferred Language is available only in Digital TV mode.</li> <li>• You can only select the language from among the actual languages being broadcast.</li> </ul>

MENU	DESCRIPTION
Multi-Track Sound <b>T</b>	<ul style="list-style-type: none"> <li>• &lt;Mono&gt; Choose for channels that are broadcasting in mono or if you are having difficulty receiving a stereo signal.</li> <li>• &lt;Stereo&gt; Choose for channels that are broadcasting in stereo.</li> <li>• &lt;SAP&gt; Choose to listen to the Separate Audio Program, which is usually a foreign-language translation.</li> </ul> <p> Available in Analog &lt;TV&gt; Mode Only</p>
Auto Volume <b>P T C H A</b>	Reduces the differences in volume level among channels. <ul style="list-style-type: none"> <li>• &lt;Off&gt; - &lt;On&gt;</li> </ul>
Speaker Select <b>P T C H A</b>	When you watch TV with it connecting to a Home theater, turn the TV speakers off so you can listen to sound from the Home theater's (external) speakers. <ul style="list-style-type: none"> <li>• &lt;External Speaker&gt; Used to listen to the sound of the External (Home Theater) Speakers.</li> <li>• &lt;TV Speaker&gt; Used to listen to the sound of the TV Speakers.</li> </ul> <p> <ul style="list-style-type: none"> <li>• If you select &lt;External Speaker&gt; in the &lt;Speaker Select&gt; menu, the sound settings will be limited.</li> <li>• The volume and [MUTE] buttons do not operate when the &lt;Speaker Select&gt; is set to &lt;External Speaker&gt;. Please set the volume on your Home theater.</li> </ul> </p>
Sound Reset <b>P T C H A</b>	You can restore the Sound settings to the factory defaults. <ul style="list-style-type: none"> <li>• &lt;Reset All&gt; - &lt;Reset Sound Mode&gt; - &lt;Cancel&gt;</li> </ul> <p> &lt;Reset Sound Mode&gt;: Current sound values return to default settings.</p>

## Channel











MENU	DESCRIPTION
Antenna 	<p>You can select antenna or cable TV.</p> <p>If [ANT IN] connected, select the antenna input you want. If the antenna input is not selected properly, noise may appear on the screen.</p> <ul style="list-style-type: none"> <li>• &lt;Air&gt; - &lt;Cable&gt;</li> </ul>
Auto Program 	<p>The TV automatically cycles through all of the available channels and stores them in memory.</p> <p>In rare cases, &lt;Auto program&gt; may miss a few channels due to weak signals and the channels may not be added to the channel memory.</p> <ul style="list-style-type: none"> <li>• &lt;Air&gt; - &lt;Cable&gt; - &lt;Auto&gt;</li> </ul>
Clear Scrambled Channel 	<p>The Clear Scrambled Channel function is used to filter out scrambled channels after "Auto Program" is completed. It removes the scrambled channels from the list by tuning the digital cable channels. This process may take up to 20~30 minutes.</p> <p> This function is only available in &lt;Cable&gt; mode.</p>






MENU	DESCRIPTION
<p>Channel List</p> <p></p>	<p>Using this menu, you can add / delete or set favorite channels and use the program guide for digital broadcasts.</p> <p>You can select these options by simply pressing the [CH LIST] button on the remote control.</p> <ul style="list-style-type: none"> <li>• &lt;All Channels&gt; - Shows all currently available channels.</li> <li>• &lt;Added Channels&gt; - Shows all added channels.</li> <li>• &lt;Favorite&gt; - Shows all favorite channels.</li> </ul> <p> Press the [TOOLS] button to display the &lt;Tools&gt; menu. You can also set the add to (or delete from) Favorites by selecting &lt;Tools&gt;→&lt;Add to Favorite&gt; (or &lt;Delete from Favorite&gt;).</p> <p> To select the favorite channels you have set up, press the [FAV.CH] button on the remote control</p> <ul style="list-style-type: none"> <li>• &lt;Programmed&gt; - Shows all current reserved programs.</li> </ul> <p> • Select a channel in the &lt;All Channels&gt;, &lt;Added Channels&gt; or &lt;Favorite&gt; screen by pressing the ▲ / ▼ buttons, and pressing the [] button. Then you can watch the selected channel.</p> <ul style="list-style-type: none"> <li>• Using the Color buttons with the Channel List <ul style="list-style-type: none"> <li>• &lt;Green&gt; : Enlarges or shrinks a channel number.</li> <li>• &lt;Yellow&gt; : Selects multiple channel lists. You can perform the add / delete or add to Favorite / delete from Favorite function for multiple channels at the same time. Select the required channels and press the yellow button to set all the selected channels at the same time. The  mark appears to the left of the selected channels.</li> <li>• &lt;TOOLS&gt; : Displays the &lt;Add&gt; (or &lt;Delete&gt;), &lt;Add to Favorite&gt; (or &lt;Delete from Favorite&gt;), &lt;Timer Viewing&gt;, &lt;Channel Name Edit&gt;, &lt;Select All&gt; (or &lt;Deselect All&gt;) and &lt;Auto Program&gt; menus (The Options menus may differ depending on the situation.)</li> </ul> </li> <li>• Channel Status Display Icons <ul style="list-style-type: none"> <li>•  : A channel set as a Favorite.</li> <li>•  : A channel selected by pressing the yellow button.</li> <li>•  : A Program currently being broadcast.</li> <li>•  : A reserved program.</li> </ul> </li> </ul>
<p>Fine Tune</p> <p></p>	<p>Use fine tuning to manually adjust a particular channel for optimal reception.</p> <p> • If you do not store the fine-tuned channel in memory, adjustments are not saved.</p> <ul style="list-style-type: none"> <li>• Fine tuned channels that have been saved are marked with an asterisk &lt;*&gt; on the right-hand side of the channel number in the channel banner.</li> <li>• To reset the fine tuning setting, press the ▼ button to select Reset, then press the [] button.</li> </ul> <p> Only Analog TV channels can be fine tuned.</p>














## Setup




MENU	DESCRIPTION
Plug & Play 	This brings up the menu items that appeared when you first plugged in the TV.
Language 	You can set the menu language. The language chosen affects only the language of the OSD.
Time 	<ul style="list-style-type: none"> <li>• &lt;Clock&gt;              Setting the clock is necessary in order to use the various timer features of the TV.             <ul style="list-style-type: none"> <li> • The current time will appear every time you press the [INFO] button.</li> <li>• If you disconnect the power cord, you have to set the clock again.</li> </ul> </li> <li>• &lt;Clock Mode&gt;              You can set up the current time manually or automatically.             <ul style="list-style-type: none"> <li>• &lt;Auto&gt; - &lt;Manual&gt;</li> </ul> </li> <li> • Depending on the broadcast station and signal, the auto time may not be set correctly. If this occurs, set the time manually.</li> <li>• The Antenna or cable must be connected in order to set the time automatically.</li> <li>• &lt;Clock Set&gt;              You can set the current time manually.             <ul style="list-style-type: none"> <li> • This function is only available when &lt;Clock Mode&gt; is set to &lt;Manual&gt;.</li> <li>• You can set the month, day, year, hour and minute directly by pressing the number buttons on the remote control.</li> </ul> </li> <li>• &lt;Time Zone&gt;              Select your time zone.             <ul style="list-style-type: none"> <li> This function is only available when &lt;Clock Mode&gt; is set to &lt;Auto&gt;.</li> </ul> </li> <li>• &lt;DST&gt; (Daylight Saving Time)              Switches the Daylight Saving Time function on or off.             <ul style="list-style-type: none"> <li>• &lt;Off&gt; - &lt;On&gt; - &lt;Auto&gt;</li> </ul> </li> <li> This function is only available when &lt;Clock Mode&gt; is set to &lt;Auto&gt;.</li> </ul>

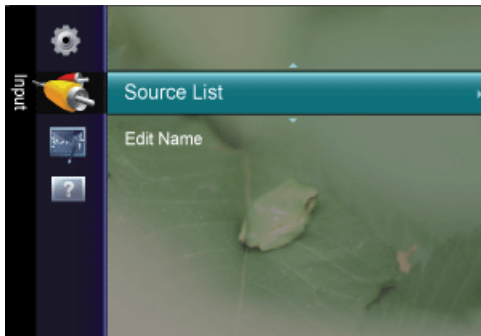
MENU	DESCRIPTION
<p>Time</p> <p><b>P T C H A</b></p>	<ul style="list-style-type: none"> <li>• &lt;Sleep Timer&gt; The sleep timer automatically shuts off the TV after a preset time . <ul style="list-style-type: none"> <li>• &lt;Off&gt; - &lt;30 min.&gt; - &lt;60 min.&gt; - &lt;90 min.&gt; - &lt;120 min.&gt; - &lt;150 min.&gt; - &lt;180 min.&gt;</li> </ul> <p> Press the [TOOLS] button to display the Tools menu. You can also set the sleep timer by selecting &lt;Tools&gt;→&lt;Sleep Timer&gt;.</p> <p> To cancel the &lt;Sleep Timer&gt; function, select &lt;Off&gt;.</p> </li> <li>• &lt;Timer1&gt; / &lt;Timer2&gt; / &lt;Timer3&gt; Three different on / off timer settings can be made. You must set the clock first. <ul style="list-style-type: none"> <li>• &lt;On Time&gt; Set the &lt;hour&gt;, &lt;minute&gt;, &lt;am/pm&gt;, and &lt;activate/inactivate&gt;. (To activate the timer with the setting ve chosen, set to Activate.)</li> <li>• &lt;Off Time&gt; Set the &lt;hour&gt;, &lt;minute&gt;, &lt;am/pm&gt;, and &lt;activate/inactivate&gt;. (To activate the timer with the setting you've chosen, set to Activate.)</li> <li>• &lt;Volume&gt; Set the desired volume level.</li> <li>• &lt;Antenna&gt; View antenna type. (&lt;Air&gt; or &lt;Cable&gt;).</li> </ul> <p> You can set the Antenna by selecting &lt;Channel&gt;→&lt;Antenna&gt;.</p> <ul style="list-style-type: none"> <li>• &lt;Channel&gt; Select the desired channel.</li> <li>• &lt;Repeat&gt; Select &lt;Once&gt;, &lt;Everyday&gt;, &lt;Mon~Fri&gt;, &lt;Mon~Sat&gt;, &lt;Sat~Sun&gt; or &lt;Manual&gt;. <ul style="list-style-type: none"> <li>•  When &lt;Manual&gt; is selected, press the ► button to select the desired day of the week. Press the [☑] button over the desired day and the (✓) mark will appear.</li> <li>• You can set the &lt;hour&gt;, &lt;minute&gt; and channel by pressing the number buttons on the remote control.</li> <li>• Auto Power Off When you set the timer On, the television will eventually turn off if no controls are operated for 3 hours after the TV was turned on by the timer. This function is only available in timer On mode and prevents overheating, which may occur if a TV is on for too long time.</li> </ul> </li> </ul> </li> </ul>
<p>Game Mode</p> <p><b>C H A</b></p>	<p>When connecting to a game console such as PlayStation™ or Xbox™, you can enjoy a more realistic gaming experience by selecting game menu.</p> <ul style="list-style-type: none"> <li>• &lt;Off&gt; - &lt;On&gt;</li> </ul> <p> • Restrictions on game mode (Caution)</p> <ul style="list-style-type: none"> <li>• To disconnect the game console and connect another external device, set &lt;Game Mode&gt; to &lt;Off&gt; in the setup menu.If you display the TV menu in &lt;Game mode&gt;, the screen shakes slightly.</li> <li>• If &lt;Game Mode&gt; is &lt;On&gt; : <ul style="list-style-type: none"> <li>• Picture mode is automatically changed to &lt;Standard&gt; and cannot be changed.</li> <li>• Sound mode is automatically changed to &lt;Custom&gt; and cannot be changed. Adjust the sound using the equalizer.</li> </ul> </li> <li>• &lt;Game Mode&gt; is not available in regular &lt;TV&gt; and &lt;PC&gt; mode.</li> <li>• If the picture is poor when external device is connected to TV, check if &lt;Game Mode&gt; is &lt;On&gt;. Set &lt;Game Mode&gt; to &lt;Off&gt; and connect external devices.</li> </ul>

MENU	DESCRIPTION
V-Chip (U.S.A only) 	<p>The &lt;V-Chip&gt; feature automatically locks out programs that are deemed inappropriate for children. The user must enter a PIN (personal ID number) before any of the &lt;V-Chip&gt; restrictions are set up or changed.</p> <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>• &lt;V-Chip&gt; function is not available in &lt;HDMI&gt;, &lt;Component&gt; or &lt;PC&gt; mode.</li> <li>• The default PIN number of a new TV set is 0-0-0-0</li> <li>• If you forget the PIN, press the remote-control buttons in the following sequence, which resets the pin to 0-0-0-0 : [POWER](off)→[MUTE]→8→2→4→[POWER] (on).</li> <li>• &lt;Allow all&gt;: Press to unlock all TV ratings.</li> <li>• &lt;Block all&gt;: Press to lock all TV ratings.</li> </ul> </li> <li>• &lt;V-Chip Lock&gt; - You can block rated TV Programs.           <ul style="list-style-type: none"> <li>• &lt;Off&gt; - &lt;On&gt;</li> </ul> </li> <li>• &lt;TV Parental Guidelines&gt; - You can block TV programs depending on their rating. This function allows you to control what your children are watching.</li> <li>• &lt;MPAA Rating&gt; - You can block movies depending on their &lt;MPAA rating&gt;. The Motion Picture Association of America(MPAA) has implemented a rating system that provides parents or guardians with information on which films are appropriate for children.</li> <li>• &lt;Canadian English&gt;</li> <li>• &lt;Canadian French&gt;</li> <li>• &lt;Downloadable U.S. Rating&gt; - Parental restriction information can be used while watching DTV channels</li> <li>• &lt;Change PIN&gt; - The &lt;Change PIN&gt; screen will appear. Choose any 4 digits for your PIN and enter them. As soon as the 4 digits are entered, the &lt;Confirm New PIN&gt; screen appears. Re enter the same 4 digits. When the Confirm screen disappears, your PIN has been memorized.</li> </ul> <p><b>How to Reset the TV after the V-Chip Blocks a Channel (“Emergency Escape”)</b></p> <p>- If the TV is tuned to a restricted channel, the V-Chip will block it. The screen will go blank and the following message will appear: &lt;This channel is blocked by a Parental Lock.&gt; &lt;Please enter the PIN to unblock.&gt;</p> <p>Enter your PIN, then press the button  button and press the ▲ or ▼ button to temporarily disable the V-Chip Lock.</p> <ul style="list-style-type: none"> <li> If you forget the PIN, press the remote-control buttons in the following sequence, which resets the pin to 0-0-0-0 : [POWER](off)→[MUTE]→8→2→4→[POWER] (on).</li> </ul>

MENU	DESCRIPTION
Caption(On-Screen Text Messages) 	<ul style="list-style-type: none"> <li>• &lt;Caption&gt; You can switch the caption function on or off. If captions are not available, they will not be displayed on the screen.               <ul style="list-style-type: none"> <li>• &lt;Off&gt; - &lt;On&gt;</li> </ul> </li> <li>  <ul style="list-style-type: none"> <li>• Press the [CC] turn the Caption on or off.</li> <li>• The &lt;Caption&gt; feature doesn't work in &lt;Component&gt;, &lt;HDMI&gt; or &lt;PC&gt; modes.</li> </ul> </li> <li>• &lt;Caption Mode&gt; You can select the desired caption mode.               <ul style="list-style-type: none"> <li>  <ul style="list-style-type: none"> <li>• The availability of captions depends on the program being broadcast.                   <ul style="list-style-type: none"> <li>• &lt;Default&gt; -&lt;CC1&gt;~&lt;CC4&gt; -&lt;Text1&gt;~&lt;Text4&gt; (analog channels only) The Analog Caption function operates in either analog TV channel mode or when a signal is supplied from an external device to TV. (Depending on the broadcasting signal, the Analog Caption function may operate on digital channels.)</li> <li>• &lt;Default&gt; - &lt;CC1~CC4&gt; - &lt;Text1~Text4&gt; - &lt;Service1~Service6&gt; (digital channels only) The Digital Captions function operates on digital channels.                       <ul style="list-style-type: none"> <li>• &lt;Service1~6&gt; in digital caption mode may not be available depending on the broadcast.</li> </ul> </li> </ul> </li> </ul> </li> <li>• &lt;Digital Caption Options&gt; (digital channels only)               <ul style="list-style-type: none"> <li>• &lt;Size&gt; - &lt;Font Style&gt; - &lt;Foreground Color&gt; - &lt;Background Color&gt; - &lt;Foreground Opacity&gt; - &lt;Background Opacity&gt; - &lt;Return to Default&gt;</li> <li>  <ul style="list-style-type: none"> <li>• The &lt;Digital Caption Options&gt; are only enabled when the &lt;Caption Mode&gt; is &lt;Service 1 ~ Service 6&gt;. (If &lt;Caption Mode&gt; is the default, the &lt;Digital Caption Options&gt; are enabled depending on the broadcast.)</li> <li>• The availability of captions depends on the program being broadcast.</li> <li>• &lt;Default&gt; means to follow the standard set by the broadcaster.</li> <li>• Foreground and Background cannot be set to have the same color.</li> <li>• &lt;Foreground Opacity&gt; and &lt;Background Opacity&gt; cannot be both set to Transparent.</li> </ul> </li> </ul> </li> </ul> </li></ul>
Light Effect 	<p>You can turn the LED on/off on the front of monitor. You can turn it off to save power.</p> <ul style="list-style-type: none"> <li>• &lt;Off&gt; : Activates the &lt;Light Effect&gt; (LED) only when a button is pressed.</li> <li>• &lt;On&gt; : Activates the &lt;Light Effect&gt; (LED) only while watching the TV.</li> </ul>
Light Level 	<p>Use to adjust the light level i.e., the brightness of the light.</p> <ul style="list-style-type: none"> <li>• &lt;1&gt; ~ &lt;10&gt;</li> </ul> <p>  The higher the number, the brighter the light of the LED emits.         </p>

MENU	DESCRIPTION
Melody <b>P T C H A</b>	A melody sound can be set to come on when the monitor is powered On or Off. <ul style="list-style-type: none"> <li>&lt;Off&gt; - &lt;Low&gt; - &lt;Medium&gt; - &lt;High&gt;</li> </ul>  The <Melody> does not play <ul style="list-style-type: none"> <li>When no sound is output from the TV because the [MUTE] button has been pressed.</li> <li>When no sound is output from the TV because the volume has been reduced to minimum with the volume [-] button</li> <li>When the TV is turned off by &lt;Sleep Timer&gt; function</li> </ul>
Energy Saving <b>T C H A</b>	This feature adjusts the brightness of the TV in order to reduce power consumption. When watching TV at night, set the <Energy Saving> mode option to <High> to reduce eye fatigue as well as power consumption. <ul style="list-style-type: none"> <li>&lt;Off&gt; : Turns off the energy saving function.</li> <li>&lt;Low&gt; : Sets the TV to low energy saving mode.</li> <li>&lt;Medium&gt; : Sets the TV to medium energy saving mode.</li> <li>&lt;High&gt; : Sets the TV to high energy saving mode.</li> <li>&lt;Auto&gt; : Automatically adjusts the brightness of the TV screen in accordance with the scenes.</li> </ul>

## Input

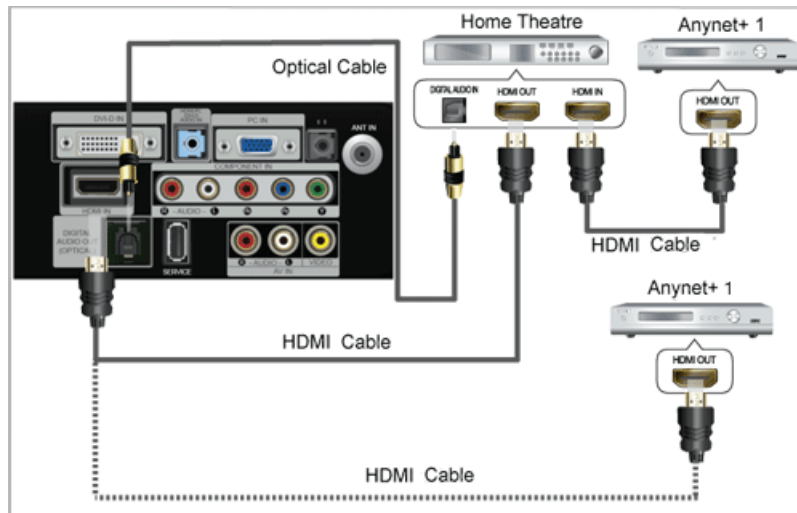


MENU	DESCRIPTION
Source List <b>P T C H A</b>	Use to select <PC>, <TV> or an external input source connected to the Monitor. Use to select the screen of your choice. You can use the [SOURCE] button on the remote control. <ul style="list-style-type: none"> <li>&lt;PC&gt; - &lt;TV&gt; - &lt;DVI&gt; - &lt;AV&gt; - &lt;Component&gt; - &lt;HDMI&gt;</li> </ul>
Edit Name <b>P T C H A</b>	Name the input device connected to the input jacks to make your input source selection easier. <VCR> - <DVD> - <Cable STB> - <Satellite STB> - <PVR STB> - <AV Receiver> - < Game> - <Cam-corder> - <PC> - <DVI PC> - <DVI> - <TV> - <IPTV> - <Blu-Ray> - <HD DVD> - <DMA>

## Application

MENU	DESCRIPTION
Anynet+ (HDMI-CEC)	<p><b>What is &lt;Anynet+&gt;?</b></p> <p>&lt;Anynet+&gt; is a function that enables you to control all connected Samsung devices that support &lt;Anynet+&gt; with your Samsung TV's remote. The &lt;Anynet+ &gt; system can be used only with Samsung devices that have the &lt;Anynet+&gt; feature. To be sure your Samsung device has this feature, check if there is an &lt;Anynet+&gt; logo on it.</p>

### Connecting Anynet+ Devices



1. Connect the **[HDMI IN]** jack on the TV and the HDMI OUT jack of the corresponding <Anynet+> device using an HDMI cable.
2. Connect the **[HDMI IN]** jack of the home theatre and the HDMI OUT jack of the corresponding <Anynet+> device using an HDMI cable.



Connect the Optical cable between the [DIGITAL AUDIO OUT (OPTICAL)] jack on your TV and the Digital Audio Input on the Home Theatre.

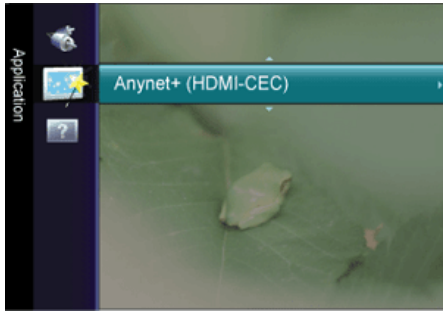
When following the connection above, the Optical jack only outputs 2 channel audio. You will only hear sound from the Home Theatre's Front Left and Right speakers and the subwoofer. If you want to hear 5.1 channel audio, connect the [DIGITAL AUDIO OUT (OPTICAL)] jack on the DVD / Satellite Box (ie Anynet Device 1 or 2) directly to the Amplifier or Home Theatre, not the TV.

Connect only one Home Theatre.

<Anynet+> works when the AV device supporting <Anynet+> is in the Standby or On status.

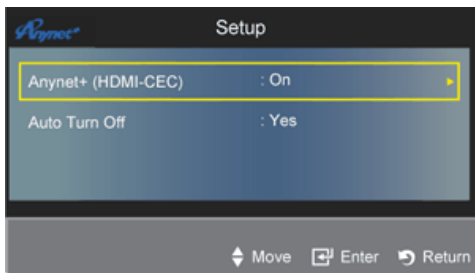
<Anynet+> supports up to 10 AV devices in total. Note that you can connect up to 3 devices of the same type.



## Setting Up Anynet+



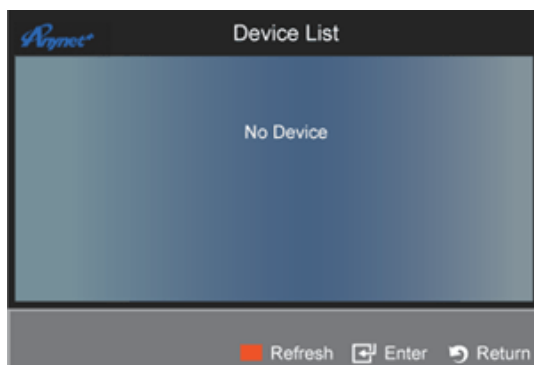
Press the [TOOLS] button to display the Tools menu. You can also display the <Anynet+> menu by selecting <Tools>→<Anynet+ (HDMI-CEC)>

### Setup



MENU	DESCRIPTION
Anynet+ (HDMI-CEC)	To use the <Anynet+> Function, <Anynet+ (HDMI-CEC)> must be set to On.   When the <Anynet+ (HDMI-CEC) >function is disabled, all the< Anynet+> related operations are deactivated.
Auto Turn Off	Setting an <Anynet+> Device to turn Off automatically when the TV is turned off.   The active source on the TV remote must be set to TV to use the <Anynet+> function. If you set Auto Turn Off to Yes, connected external devices are also turned off when the TV is turned off. If an external device is still recording, it may or may not turn off.

### Device List



1. Press the [TOOLS] button. Press the [Enter] button to select <Anynet+ (HDMI-CEC)>.
2. Press the ▲ or ▼ button to select <Device List>, then press the [Enter] button.  
- <Anynet+> devices connected to the TV are listed.

- If you cannot find a device you want, press the red button to scan for devices.

3. Press the ▲ or ▼ button to select a particular device and press the [ENTER] button. It is switched to the selected device.

- <Anynet+ (HDMI-CEC)> must be set to On in the <Application> menu for the <Device List> menu to appear.



Switching to the selected devices may take up to 2 minutes. You cannot cancel the operation during the switching operation.

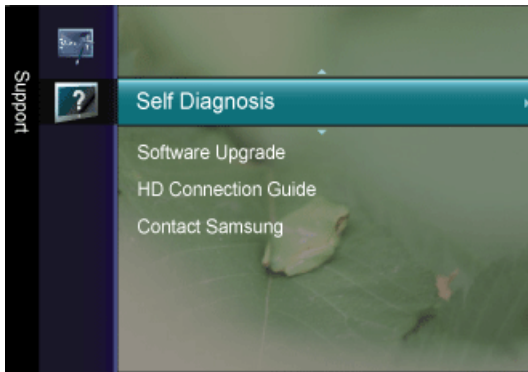
The time required to scan for devices is determined by the number of connected devices.

When the device scan is complete, the number of devices found are not displayed.




Although the TV automatically searches the device list when the TV is turned on via the power button, devices connected to the TV may not always be automatically displayed in the device list. Press the red button to search for the connected device.

If you have selected external input mode by pressing the [SOURCE] button, you cannot use the <Anynet+> function. Make sure to switch to an <Anynet+> device by using the <Device List>.


## Support



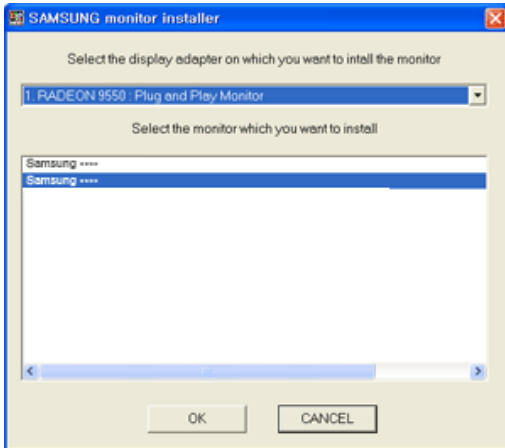


MENU	DESCRIPTION
Self Diagnosis	<ul style="list-style-type: none"> <li>• &lt;Picture Test&gt; If you think you have a picture problem, perform the picture test. Check the color pattern on the screen to see if the problem still exists. <ul style="list-style-type: none"> <li>• &lt;Yes&gt; : If the test pattern does not appear or there is noise in the test pattern, select &lt;Yes&gt;. There may be a problem with the TV. Contact Samsung's call center for assistance.</li> <li>• &lt;No&gt; : If the test pattern is properly displayed, select &lt;No&gt;. There may be a problem with your external equipment. Please check your connections. If the problem still persists, refer to the external device's user manual.</li> </ul> </li> <li>• &lt;Sound Test&gt; If you think you have a sound problem, please perform the sound test. You can check the sound by playing a built-in melody sound through the TV. <ul style="list-style-type: none"> <li>• &lt;Yes&gt; : If during the sound test you can hear sound only from one speaker or not at all, select &lt;Yes&gt;. There may be a problem with the TV. Contact Samsung's call center for assistance.</li> <li>• &lt;No&gt; : If you can hear sound from the speakers, select &lt;No&gt;. There may be a problem with your external equipment. Please check your connections. If the problem still persists, refer to the external device's user manual.</li> </ul> </li> </ul> <p> • If you hear no sound from the TV's speakers, before performing the sound test, make sure &lt;Speaker Select &gt; is set to &lt;TV speaker&gt; in the &lt;Sound&gt; menu.</p> <ul style="list-style-type: none"> <li>• The melody will be heard during the test even if &lt;Speaker Select&gt; is set to &lt;External Speaker&gt; or the sound is muted by pressing the [MUTE] button.</li> </ul>
Self Diagnosis	<ul style="list-style-type: none"> <li>• &lt;Signal Information (digital channels only)&gt; Unlike analog channels, which can vary in reception quality from snowy to clear, digital (HDTV) channels have either perfect reception quality or you will not receive them at all. So, unlike analog channels, you cannot fine tune a digital channel. You can, however, adjust your antenna to improve the reception of available digital channels.</li> </ul> <p> If the signal strength meter indicates that the signal is weak, physically adjust your antenna to increase the signal strength. Continue to adjust the antenna until you find the best position with the strongest signal.</p>
Software Upgrade	<p>Samsung may offer upgrades for TV's firmware in the future. Please visit Samsung.com or contact the Samsung call center at 1-800-SAMSUNG (726-7864) to receive information about downloading upgrades and using a USB drive. Upgrades will be possible by connecting a USB drive to the [SERVICE] port located on your TV.</p> <p> • Insert a USB drive containing the firmware upgrade into the [SERVICE] port on the side of the TV.</p> <ul style="list-style-type: none"> <li>• Please be careful to not disconnect the power or remove the USB drive while upgrades are being applied. The TV will turn off and turn on automatically after completing the firmware upgrade. Please check the firmware version after the upgrades are complete. When software is upgraded, video and audio settings you have made will return to their default (factory) settings. We recommend you write down your settings so that you can easily reset them after the upgrade.</li> </ul>
HD Connection Guide	<p>This menu presents the connection method that provides the optimal quality for the HDTV. Refer to this information when connecting external devices to the TV.</p>
Contact Samsung	<p>View this information when your TV does not work properly or when you want to upgrade the software. You can view the information regarding the call center, product and software file download method.</p>

## 3-5 Installing the Device Driver

 If you install the device driver, you can set up the appropriate resolution and frequency for the product. The device driver is included on the CD supplied with the product. If the supplied drive file is corrupted, please visit the Samsung Electronics website ([www.samsung.com](http://www.samsung.com)), and download the driver.


1. Insert the driver installation CD into the CD-ROM drive.
2. Click on Windows Driver.
3. Select the model of your product from the model list.



4. Complete the remaining installation steps according to the instructions displayed on the screen.
5. Check if the appropriate resolution and screen refresh rate are displayed in the Control Panel settings. For more information, refer to the document about the Windows operating system.

## 3-6 Standard Signal Mode Table

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 An LCD monitor has one optimal resolution for the best visual quality depending on the screen size due to the inherent characteristics of the panel, unlike a CDT monitor.

Therefore, the visual quality will be degraded if the optimal resolution is not set for the panel size. It is recommended setting the resolution to the optimal resolution of the product.

If the signal from the PC is one of the following standard signal modes, the screen is set automatically. However, if the signal from the PC is not one of the following signal modes, a blank screen may be displayed or only the Power LED may be turned on. Therefore, configure it as follows referring to the User Manual of the graphics card.

RESOLUTION	HORIZONTAL FREQUENCY (KHZ)	VERTICAL FREQUENCY (HZ)	CLOCK FREQUENCY (MHZ)	POLARITY (H/V)
IBM, 640 x 350	31.469	70.086	25.175	+/-
IBM, 640 x 480	31.469	59.940	25.175	-/-
IBM, 720 x 400	31.469	70.087	28.322	-/+
MAC, 640 x 480	35.000	66.667	30.240	-/-
MAC, 832 x 624	49.726	74.551	57.284	-/-
MAC, 1152 x 870	68.681	75.062	100.000	-/-
VESA, 640 x 480	37.861	72.809	31.500	-/-
VESA, 640 x 480	37.500	75.000	31.500	-/-
VESA, 800 x 600	35.156	56.250	36.000	+/+
VESA, 800 x 600	37.879	60.317	40.000	+/+
VESA, 800 x 600	48.077	72.188	50.000	+/+
VESA, 800 x 600	46.875	75.000	49.500	+/+
VESA, 1024 x 768	48.363	60.004	65.000	-/-
VESA, 1024 x 768	56.476	70.069	75.000	-/-
VESA, 1024 x 768	60.023	75.029	78.750	+/+
VESA, 1152 x 864	67.500	75.000	108.000	+/+
VESA, 1280 X 800	49.702	59.810	83.500	-/+
VESA, 1280 X 960	60.000	60.000	108.000	+/+
VESA, 1280 X 1024	63.981	60.020	108.000	+/+
VESA, 1280 X 1024	79.976	75.025	135.000	+/+
VESA, 1440 x 900	55.935	59.887	106.500	-/+
VESA, 1600 x 1200	75.000	60.000	162.000	+/+
VESA, 1680 x 1050	65.290	59.954	146.250	-/+
VESA, 1920 x 1080 (RB) (P2770HD)	66.587	59.934	138.500	+/-
VESA, 1920 x 1080 (P2370HD, P2570HD)	67.500	60.000	148.500	+/+

### Horizontal Frequency

The time taken to scan one line from the left-most position to the right-most position on the screen is called the horizontal cycle and the reciprocal of the horizontal cycle is called the horizontal frequency. The horizontal frequency is represented in kHz.

### Vertical Frequency

A panel must display the same picture on the screen tens of times every second so that humans can see the picture. This frequency is called the vertical frequency. The vertical frequency is represented in Hz.

# 4 Installing the Software

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## 4-1 Natural Color

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### What is Natural Color ?

This software is for Samsung products only and enables you to adjust the displayed colors on the product so they more closely match the colors of printed pictures. For more information, refer to the online help of the software (F1).



Natural Color is provided online. You can download it from the website below and install;

[http://www.samsung.com/us/consumer/learningresources/monitor/naturalcolorexpert/pop\\_download.html](http://www.samsung.com/us/consumer/learningresources/monitor/naturalcolorexpert/pop_download.html)

### What is MultiScreen ?



MultiScreen enables you to partition multiple sections on the Monitor.

### Installing the Software

1. Insert the installation CD into the CD-ROM drive.
2. Select the MultiScreen setup program.



If the pop-up screen for the software installation does not appear on the main screen, find and double-click the MultiScreen setup file on the CD-ROM.

3. When the Installation Wizard appears, click [Next].
4. Complete the remaining software installation steps according to the instructions displayed on the screen.



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

### MultiScreen Installation Requirements

The MultiScreen installation may be affected by the graphics card, motherboard and the networking environment.

#### Operating System

##### OS

- Windows 2000
- Windows XP Home Edition
- Windows XP Professional
- Windows Vista



For MultiScreen, Windows 2000 or later operating systems are recommended.

##### Hardware

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

### Removing the Software

Click [Start], select [Settings]/[Control Panel], and then double-click [Add or Remove Programs].


Select MultiScreen from the program list and click the [Add/Delete] button.

# 5 Troubleshooting

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## 5-1 Monitor Self-Diagnosis

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-  You can check if the product is working properly using the Self-Diagnosis function.
- If a blank screen is displayed and the Power LED blinks even if the product and the PC are properly connected, perform the self-diagnosis function according to the procedures below.

1. Turn the product and the PC off.
2. Remove the D-Sub cable from the product.
3. Turn the product on.
4. If the product is working properly, the <Check Signal Cable> message appears.  
In this case, if a blank screen is displayed again, make sure that there is no problem with the PC and the connection.

## 5-2 Before Requesting Service

 Please check the following before requesting After-Sales service. If the problem continues, please contact your nearest Samsung Electronics Service Center.

<b>PROBLEMS RELATED TO INSTALLATION (PC MODE)</b>	
The monitor screen flickers.	Check if the signal cable between the computer and the monitor is securely connected and tightened. (Refer to Connecting to a Computer)
<b>PROBLEMS RELATED TO SCREEN</b>	
Screen is blank and power indicator is off.	Ensure that the power cord is firmly connected and the LCD monitor is on. (Refer to Connecting to a Computer)
<Check Signal Cable> message	Ensure that the signal cable is firmly connected to the PC or video sources. (Refer to Connecting to a Computer)
<Not Optimum Mode> message	Check the maximum resolution and the frequency of the video adapter. Compare these values with the data in the Preset Timing Modes Chart.
Picture rolls vertically.	Check if the signal cable is securely connected. Connect it again securely. (Refer to Connecting to a Computer)
Image is not clear. Picture is blurred.	Run Frequency <Coarse > and < Fine> tuning. Turn on again after removing all accessories(video extension cable, etc.) Set resolution and frequency to the recommended ranges.
Picture image is unstable and vibrates.	Check if the resolution and frequency set for the computer video card falls in the range supported by the monitor. If not, reset them referring to the current <Information> under the monitor menu and Standard Signal Mode Table.
Ghost images are shown in the picture.	
The image is too light or too dark	Adjust the <Brightness> and <Contrast> (Refer to the <Brightness>, <Contrast>)
Screen is blank and the power indicator light blinks every 0.5 or 1 seconds	The monitor is using its power management system Press a key on the keyboard
The screen is blank and is blinking.	If you see the <TEST GOOD>message on the screen when you press the [ MENU] button, check the cable connection between the monitor and the computer to ensure that the connector is properly connected.
<b>PROBLEMS RELATED TO AUDIO</b>	
No sound	Ensure that the audio cable is firmly connected to both the audio-in port on your monitor and the audio-out port on your sound card. (Refer to Connecting to a Computer) Check the volume level.
The sound level is too low.	Check the volume level. If the volume is still too low after turning the control to its maximum, check the volume control on the computer sound card or software program.
<b>PROBLEMS RELATED TO REMOTE CONTROL</b>	
The remote control buttons do not respond.	Check the battery polarities (+/-). Check if the batteries have been exhausted. Check if the power is on. Check if the power cord is securely connected. Check if a special fluorescent or neon lamp is on in the vicinity



**NOTE ON THE PRODUCT APPEARANCE**

You may see small particles if you look closely at the edge of the bezel surrounding the screen.

This is part of the product's design and is not a defect.

FAQ	PLEASE TRY THE FOLLOWING!
How can I change the frequency of the video signal?	<p>You have to change the frequency of the graphics card.</p> <p>(For more information, refer to the User Manual of the computer or the graphics card.)</p>
How can I change the resolution?	<p>Windows XP: Change the resolution by selecting Control Panel → Appearance and Themes → Display → Settings.</p> <p>Windows ME/2000 : Change the resolution by selecting Control Panel → Appearance and Themes → Display → Settings.</p> <p>(For more information, refer to the User Manual of the computer or the graphics card.)</p>
How can I use the power saving function?	<p>Windows XP: Configure it by selecting Control Panel → Appearance and Themes → Display → Screen Saver Setting or configure it in the BIOS SETUP of the computer.</p> <p>Windows ME/2000 : Configure it by selecting Control Panel → Appearance and Themes → Display → Screen Saver Setting or configure it in the BIOS SETUP of the computer.</p> <p>For more information, refer to the Windows user manual for the computer.</p>
How can I clean the outer case/LCD Panel?	<p>Disconnect the power cord and then clean the monitor with a soft, dry or slightly damp cloth.</p> <p>Do not leave any detergent or scratches on the case.</p> <p>Do not let any water enter the monitor.</p>
What is the difference between HDTV and SDTV?	<p>There are various types of digital TVs.</p> <p>The most widely known types of digital TV are HDTV and SDTV. They are classified according to the screen quality and the video specifications.</p> <ul style="list-style-type: none"> <li>• HDTV (High Definition TV): High screen quality.</li> <li>• SDTV (Standard Definition TV): Common standard digital TV.</li> </ul> <p>An SDTV has an aspect ratio of 4:3 which is the same as that of an analog TV. HDTV has an aspect ratio of 16:9 which is similar to a cinema screen. This provides a much better screen quality than SDTV.</p> <p>Digital TV broadcasting in our country is ultimately orientated towards HDTV. (At present, all digital TVs from Samsung Electronics have the 16:9 wide aspect ratio.)</p>
Can I watch HD broadcasting with all digital TVs?	<p>You can receive all digital broadcasts, whether they are SD or HD, using any digital TV. However, you cannot enjoy HD programs, which are the highest quality digital TV programs, using an SD digital TV.</p> <p>(At present, all digital TVs from Samsung Electronics have the 16:9 wide aspect ratio.)</p>
Can I watch digital TV broadcasting with an analog TV?	<p>No.</p> <p>The analog TV cannot interpret digital signals. Therefore, a digital TV is required to watch digital TV broadcasting.</p>
Can I use my present antenna to receive digital broadcasting?	<p>As for existing analog TV, digital TV is designed so that digital broadcasting signals are received via both indoor and outdoor antennas.</p> <p>If signal reception is very good in your environment, you can watch digital broadcasts with your existing indoor antenna. If not, it is better to install an outdoor antenna.</p>

# 6 More Information

## 6-1 Specifications

MODEL NAME		P2370HD	P2570HD	P2770HD
LCD Panel	Screen Size	23 inches (58 cm)	24.6 inches (62 cm)	27 inches (68 cm)
	Display Area	509.76 mm (H) X 286.74 mm (V) ( 20.06 inches X 11.29 inches)	543.46 mm (H) X 305.69 mm (V) ( 21.40 inches X 12.04 inches)	597.89 mm (H) X 336.31 mm (V) ( 23.5 inches X 13.2 inches)
	Pixel Pitch	0.2655 mm (H) X 0.2655 mm (V) (0.01 inches X 0.01 inches)	0.283 mm (H) X 0.283 mm (V) (0.01 inches X 0.01 inches)	0.3114 mm (H) X 0.3114 mm (V) (0.01 inches X 0.01 inches)
Synchronization	Horizontal	30~81 kHz		
	Vertical	56~75 Hz		
Color		16.7M		
Resolution	Optimal Resolution	1920x1080 @ 60 Hz		1920x1080 @ 60 Hz (RB)
	Maximum Resolution	1920x1080 @ 60 Hz		1920x1080 @ 60 Hz (RB)
Input Signal, Terminated		RGB analog, DVI (Digital Visual Interface) compatible digital RGB 0.7 Vp-p ± 5 % Separate Type H/V Sync, Composite TTL Level (V high ≥ 2.0 V, V low ≤ 0.8 V)	RGB analog, DVI (Digital Visual Interface) 0.7 Vp-p ± 5 % Separate Type H/V Sync, Composite TTL Level (V high ≥ 2.0 V, V low ≤ 0.8 V)	RGB analog, DVI (Digital Visual Interface) 0.7 Vp-p ± 5 % Separate Type H/V Sync, Composite TTL Level (V high ≥ 2.0 V, V low ≤ 0.8 V)
Maximum Pixel Clock		162.000MHz (Analog,Digital)		
Power Voltage		AC 100 - 240 V~ (+/- 10 %), 50/60 Hz ± 3 Hz		
Dimension (Width x Height x Depth) / Weight		571 x 364.6 x 65.5 mm (22.5 x 14.4 x 2.6 inches) (Without Stand) 571 x 432.5 x 189.5 mm (22.5 x 17 x 7.5 inches) (With Stand) / 5.8 kg (12.8 lbs)	605 x 384 x 66 mm (23.8 x 15.1 x 2.6 inches) (Without Stand) / 6.3 kg (13.9 lbs) 605 x 453 x 240 mm (23.8 x 17.8 x 9.4 inches) (With Stand) / 7 kg (15.4 lbs)	667 x 422 x 66 mm ( 26.3 x 16.6 x 2.6 inches) (Without Stand) / 7.4 kg ( 16.3 lbs) 667 x 484 x 244 mm (26.3 x 19.1 x 9.6 inches) (With Stand) / 8.2 kg ( 18.1 lbs)
VESA Mounting Interface		75 mm x 75 mm (2.95 x 2.95 inches)	100 mm x 100 mm (3.94 x 3.94 inches)	100 mm x 100 mm (3.94 x 3.94 inches)
Environmental considerations	Operating	Temperature : 50°F ~ 104°F (10°C ~ 40°C) Humidity : 10 % ~ 80 %, non-condensing		
	Storage	Temperature : -4°F ~ 113°F (-20°C ~ 45°C) Humidity : 5 % ~ 95 %, non-condensing		
Tilt		-2° ~ 22°		



**Class B (Information Communication Equipment for Home Use)**

This device has been registered regarding EMI for home use (Class B). It may be used in all areas. (Class B equipment emits less electromagnetic waves than Class A equipment.)

## 6-2 Power Saving Function

This product provides a power saving function that automatically turns the screen off when the product is not used for a predetermined period of time to reduce power consumption. If the product enters power saving mode, the power LED turns to a different color to indicate that the product is in power saving mode.


When the product is in power saving mode, the power is not turned off and you can turn the screen on again by pressing any key or clicking the mouse. However, the power saving function only works when the product is connected to a computer that provides the power saving function.

POWER SAVING FUNCTION		NORMAL OPERATION	POWER SAVING MODE	POWER OFF (POWER BUTTON)
Power LED		On	Blinks	Off
Power Consumption	P2370HD	51 watts	less than 2 watts	less than 1 watts
	P2570HD	59 watts		
	P2770HD	58 watts		



If there is no power cut-off switch, the power consumption is "0" only when the power cord is disconnected.

## 6-3 Contact SAMSUNG WORLDWIDE

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

NORTH AMERICA		
U.S.A	1-800-SAMSUNG(726-7864)	<a href="http://www.samsung.com/us">http://www.samsung.com/us</a>
CANADA	1-800-SAMSUNG(726-7864)	<a href="http://www.samsung.com/ca">http://www.samsung.com/ca</a>
MEXICO	01-800-SAMSUNG(726-7864)	<a href="http://www.samsung.com/mx">http://www.samsung.com/mx</a>
LATIN AMERICA		
ARGENTINA	0800-333-3733	<a href="http://www.samsung.com/ar">http://www.samsung.com/ar</a>
BRAZIL	0800-124-421 4004-0000	<a href="http://www.samsung.com/br">http://www.samsung.com/br</a>
CHILE	800-SAMSUNG(726-7864)	<a href="http://www.samsung.com/cl">http://www.samsung.com/cl</a>
COLOMBIA	01-8000112112	<a href="http://www.samsung.com/co">http://www.samsung.com/co</a>
COSTA RICA	0-800-507-7267	<a href="http://www.samsung.com/latin">http://www.samsung.com/latin</a>
ECUADOR	1-800-10-7267	<a href="http://www.samsung.com/latin">http://www.samsung.com/latin</a>
EL SALVADOR	800-6225	<a href="http://www.samsung.com/latin">http://www.samsung.com/latin</a>
GUATEMALA	1-800-299-0013	<a href="http://www.samsung.com/latin">http://www.samsung.com/latin</a>
HONDURAS	800-7919267	<a href="http://www.samsung.com/latin">http://www.samsung.com/latin</a>
JAMAICA	1-800-234-7267	<a href="http://www.samsung.com/latin">http://www.samsung.com/latin</a>
NICARAGUA	00-1800-5077267	<a href="http://www.samsung.com/latin">http://www.samsung.com/latin</a>
PANAMA	800-7267	<a href="http://www.samsung.com/latin">http://www.samsung.com/latin</a>
PUERTO RICO	1-800-682-3180	<a href="http://www.samsung.com/latin">http://www.samsung.com/latin</a>
REP. DOMINICA	1-800-751-2676	<a href="http://www.samsung.com/latin">http://www.samsung.com/latin</a>
TRINIDAD & TOBAGO	1-800-SAMSUNG(726-7864)	<a href="http://www.samsung.com/latin">http://www.samsung.com/latin</a>
VENEZUELA	0-800-100-5303	<a href="http://www.samsung.com/latin">http://www.samsung.com/latin</a>
EUROPE		
AUSTRIA	0810 - SAMSUNG(7267864,€ 0.07/min)	<a href="http://www.samsung.com/at">http://www.samsung.com/at</a>
BELGIUM	02 201 2418	<a href="http://www.samsung.com/be">http://www.samsung.com/be</a> (Dutch) <a href="http://www.samsung.com/be_fr">http://www.samsung.com/be_fr</a> (French)
CZECH REPUBLIC	800 - SAMSUNG (800-726786)	<a href="http://www.samsung.com/cz">http://www.samsung.com/cz</a>
	Distributor pro Českou republiku: Samsung Zrt., česká organizační složka, Oasis Florenc, Sokolovská394/17, 180 00, Praha 8	
DENMARK	8 - SAMSUNG (7267864)	<a href="http://www.samsung.com/dk">http://www.samsung.com/dk</a>
EIRE	0818 717 100	<a href="http://www.samsung.com/ie">http://www.samsung.com/ie</a>
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