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BN68-00665D-02

SAMSUNG LCD TV Owner's Instructions

SAMSUNG

TFT-LCD TV

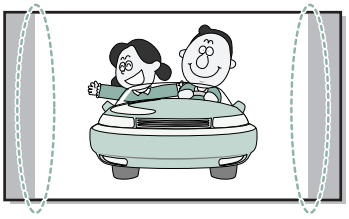
Owner's Instructions | LT-P468W

This device is a Class B digital apparatus.

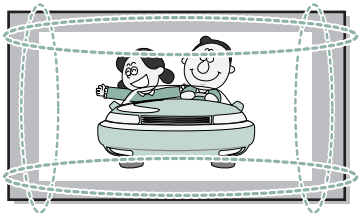
Precautions When Displaying a Still Image

A still image may cause permanent damage to the TV screen.

- Digital Ready TV: When you select the regular screen (4:3) mode to watch an SD-grade digital broadcast (and the set-top box output is 480p).



- Digital Ready TV: When you select the wide screen (16:9) mode to watch an SD-grade digital broadcast (and the set-top box output is 1080i).



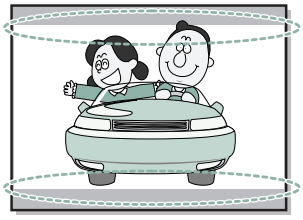
Although digital broadcasting must be in the wide screen (16:9) HD format, broadcasters sometimes show programs made originally in the regular screen format (4:3) by converting the signals into digital form, in which case the left and right side edges of the screen are cropped.

Caution

If the borders at the left, right and the center of the screen remain fixed for an extended period of time, the amount of light transmission will also remain varied and as a result the borders may leave traces.

Do not leave the screen in pause mode for extended periods of time as you may experience temporary or permanent image burn.

- Digital Ready TV: When the TV receives HD-grade signals (and the set-top box output is 1080i).



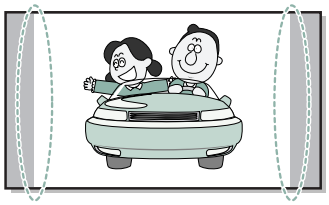
When you watch a digital HD-grade broadcast on a regular (4:3) TV with the screen size "16:9" or "Panorama" selected, you will be able to watch the program but the top and bottom edges of the screen will be cropped.

Caution

If the borders at the top, bottom and the center of the screen remain fixed for an extended period of time, the amount of light transmission will also remain varied and as a result the borders may leave traces.

Do not leave the screen in pause mode for extended periods of time as you may experience temporary or permanent image burn.

- Integrated Digital TV (wide-screen): When the TV receives SD-grade (regular) broadcasting signals (receives 480p regular signals).
- Digital Ready TV (wide-screen): When the TV receives SD-grade (regular) broadcasting signals (with a set-top box).
- When you watch an analogue (regular) broadcast on a wide-screen TV (with the 4:3 screen mode selected).



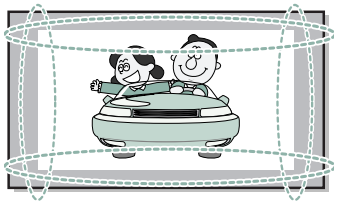
Although digital broadcasting must be in the wide screen (16:9) HD format, broadcasters sometimes show programs made originally in the regular screen format (4:3) by converting the signals into digital form, in which case the left and right side edges of the screen are cropped.

Caution

If the borders at the left, right and the center of the screen remain fixed for an extended period of time, the amount of light transmission will also remain varied and as a result the borders may leave traces.

Do not leave the screen in pause mode for extended periods of time as you may experience temporary or permanent image burn.

- When you watch a DVD, CD or a video in wide screen (21:9) format on a wide-screen (16:9) TV.
- When you connect a computer or a game console to the TV and select the 4:3 screen mode.



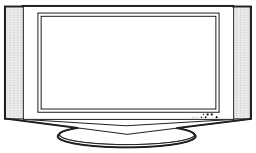
If you connect a DVD player, computer or a game console to the wide-screen TV and watch a movie or play a game in regular (4:3) or wide (21:9) screen mode, the left and right side edges, or the top and bottom edges of the screen will be cropped.

Caution

If the borders at the left, right and the center of the screen remain fixed for an extended period of time, the amounts of light transmission will also remain varied and as a result the borders may leave traces.

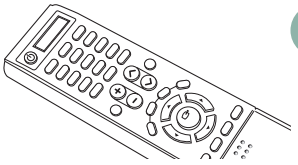
Do not leave the screen in pause mode for extended periods of time as you may experience temporary or permanent image burn.

Features



A TV with High-Definition and SRS TruSurround XT sound

- No image distortion with a viewing angle over 160 degrees
- Simulated 5.1 Channel sound using the SRS TruSurround XT function
  ► See page 80
- Enjoy DVDs in higher definition with Progressive Scan ► See page 30



Easier viewing with multiple functions

- The Auto Volume function solves volume control problems experienced when changing channels. ► See page 79
- Variable Screen Size: 4 : 3 for TV programs and Widescreen for movies
  ► See page 68

My Color Control

Users can set colors to their preference by adjusting blue, green and pink tones.
► See page 62

Dynamic Contrast

Automatically detects the input video signal and adjusts to create optimum contrast ► See page 65

Anynet

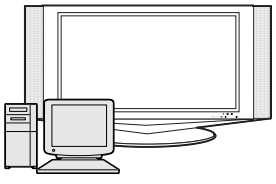
Anynet is an AV network system that enables you to easily control Samsung audio-video (AV) devices from this TV.
► Please refer to the supplied Anynet owner's instructions.

Brightness Sensor

Adjusts the screen brightness automatically depending on the surrounding environment. ► See page 66

Color Weakness Enhancement Mode

This enables those with a color weakness to view images as those with normal vision do. ► See page 67



A simple connection to a PC enables you to use this TV as a Monitor

- Automatic recognition of the PC connection using VESA Plug & Play
  ► See page 101
- By connecting both a PC VIDEO and AUDIO CABLE (sold separately) to your TV, you can enjoy both picture and sound. ► See page 100

Before Reading This Manual:

Please refer to the following before reading the remainder of this manual.

Symbols Used Throughout the Text

Symbol	Name	Definition
Before You Begin!	Before You Begin	Checklist Prior to Activating Functions
	One-Touch Button	Functions Controlled by a Single Button
	Caution	Situations where a function could be disabled or the setup could be erased
	Note	General advice for product operation and relevant page numbers

Using the Owner's Instructions

1. Read all the safety instructions before using this product.
► Please refer to the safety Guide Manual
2. Refer to Troubleshooting if problems arise. ► See page 108
3. Refer to the Index to quickly search for information. ► See page 120
4. Refer to the Glossary for term definitions. ► See page 112
5. Refer to the Screen Menu for an easy understanding of the menu structure. ► See page 113

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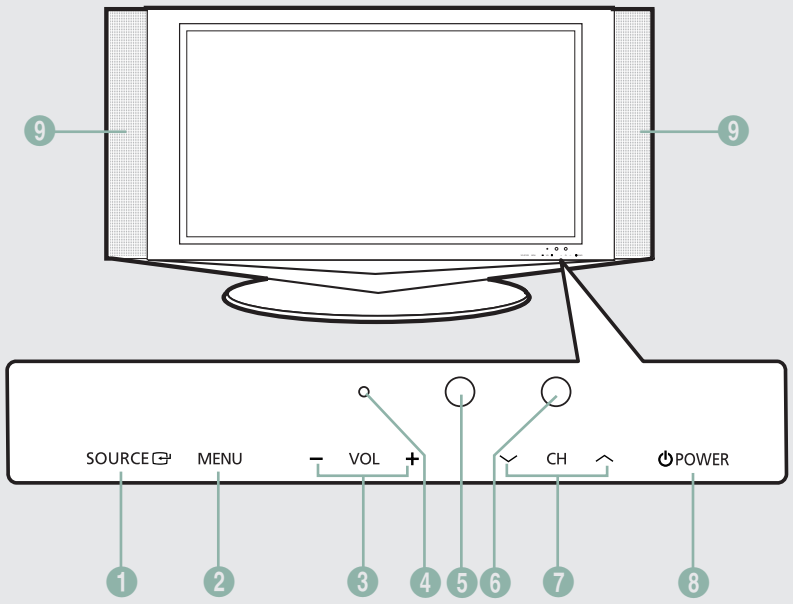
Front Panel/Rear Panel

Front Panel Buttons



1 SOURCE Button
Checks the connection status of all input sources or selects an item from the menu screen.

2 MENU Button
Press to open or exit from the on-screen menu, or return to the previous item.

3 VOLUME Button
Press to adjust the volume. Also used to select an item or make an adjustment in the on-screen menu.

4 TIMER indicator
When the TV is turned on, the TIMER indicator blinks several times. This indicator illuminates when the TIMER mode is set to the "On" position with the remote control after setting the clock and the On or Off timer. Even if the power is turned off, this indicator stays lit. (Clock must be set before using this function.)

5 Remote Control Sensor
Aim the remote control towards this spot on the TV.

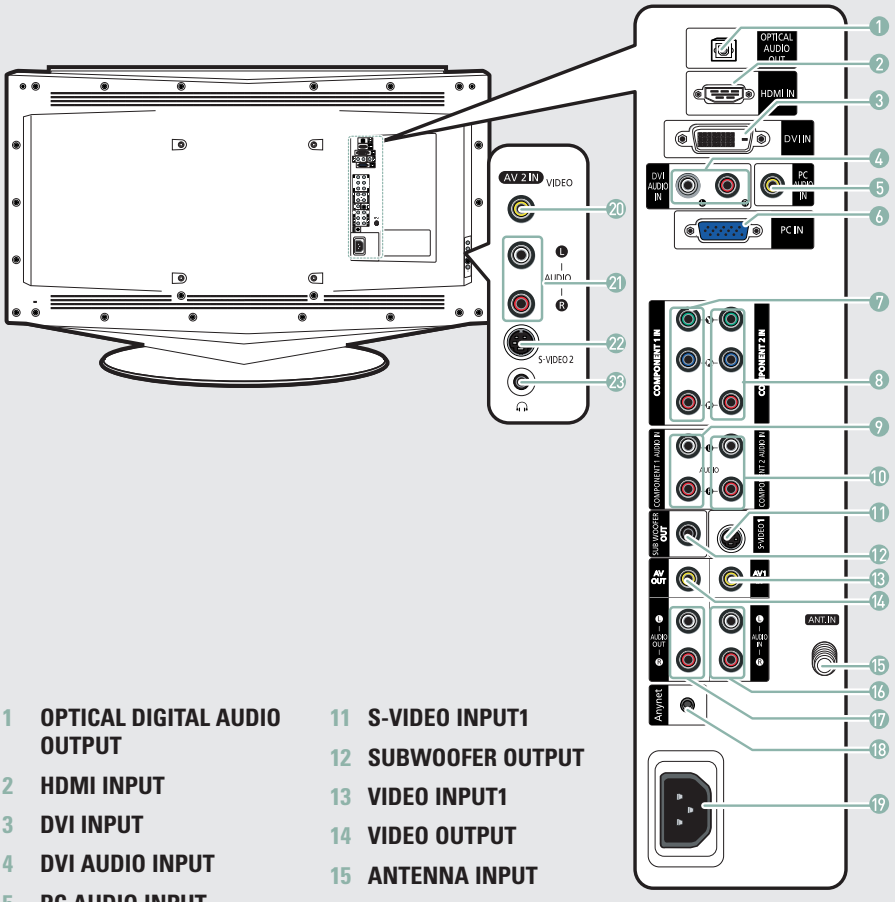
6 BRIGHT Sensor
Senses the ambient light and adjusts the brightness automatically.

7 CHANNEL Button
Press to change channels. Also press to move up or down in the on-screen menu.

8 POWER Button
Press to turn the TV on and off.

9 Speakers
You can hear TV sound from the speakers.

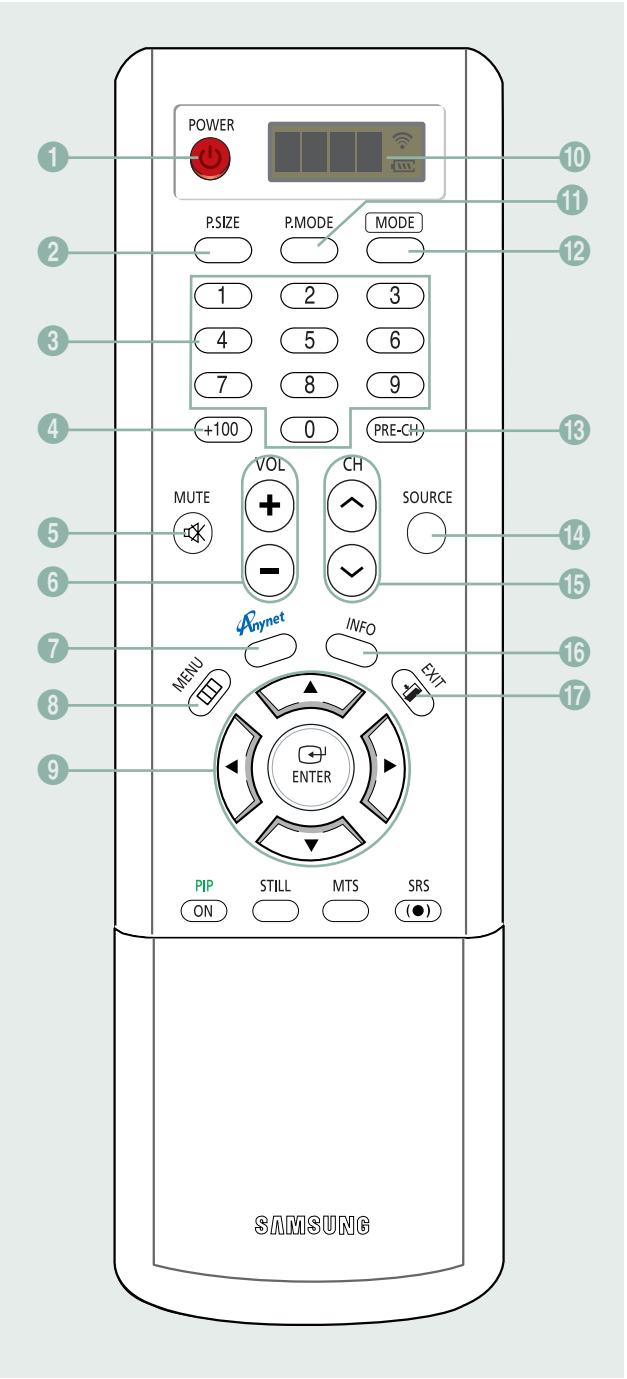
Rear Panel Jacks



1 OPTICAL DIGITAL AUDIO OUTPUT
2 HDMI INPUT
3 DVI INPUT
4 DVI AUDIO INPUT
5 PC AUDIO INPUT
6 PC INPUT
7 COMPONENT1 VIDEO INPUT
8 COMPONENT2 VIDEO INPUT
9 COMPONENT1 AUDIO INPUT
10 COMPONENT2 AUDIO INPUT
11 S-VIDEO INPUT1
12 SUBWOOFER OUTPUT
13 VIDEO INPUT1
14 VIDEO OUTPUT
15 ANTENNA INPUT
16 AUDIO INPUT
17 AUDIO OUTPUT
18 ANYNET
19 POWER INPUT
20 VIDEO INPUT2
21 AUDIO INPUT
22 S-VIDEO INPUT2
23 HEADPHONE JACK

Remote Control and Accessories

Remote Control Buttons



1 **POWER**

2 **P.SIZE** ▶ See page 69
Press to change the screen size.

3 **Numbers** ▶ See pages 43~45
Press to select channels.

4 **+100** ▶ See page 43
Press to select channels over 100.

5 **MUTE**
Press to temporarily cut off the sound.

6 **Volume Control**
Press to increase or decrease the volume.

7 **Anynet**
Please refer to the Anynet Owner's Instructions.

8 **MENU**
Press to display the on-screen menu.

9 **Move & ENTER** ▶ See page 12
Press to select or move to menu values.

10 **LCD Display**
Shows the battery status and selected input source device.

11 **P.MODE** ▶ See page 52
Adjust the TV picture by selecting one of the preset factory settings (or select your personal, customized picture settings).

12 **MODE** ▶ See page 13

13 **PRE-CH**
Press to return to the previous viewing channel.

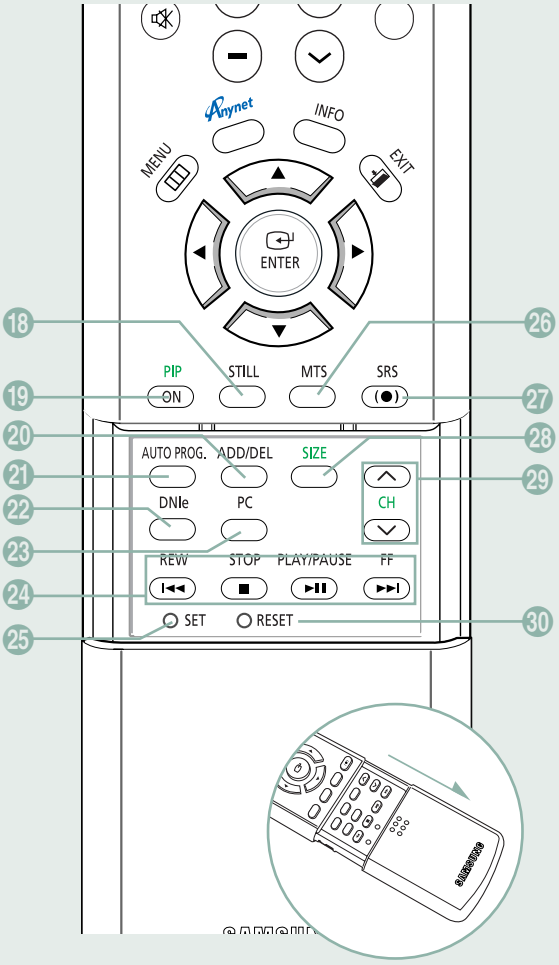
14 **SOURCE** ▶ See pages 28~35
Press to select or check the status of the TV, AV1, AV2, S-Video1, S-Video2, Component1, Component2, HDMI, DVI or PC.

15 **Channel Buttons** ▶ See pages 43~45
Press to change channels.

16 **INFO**
Displays current channel's receiving sensitivity, input signal, picture standard, sound standard, and time.

Signal Strength ( ) display
The < > (Signal Strength) symbol is displayed by pressing the [INFO] button. This symbol displays signal strength for your watching TV channel. The more signal bar is the better TV gets sensitivity on current channel.

17 **EXIT**
Press to exit from the menu.



18 **STILL** ▶ See page 73
Press to stop the action during a particular scene. Press again to resume normal video.

19 **PIP** ▶ See page 56
Press this button to control the PIP window.

20 **ADD/DEL** ▶ See pages 44~45
Press to add or erase channels.

21 **AUTO PROG.** ▶ See page 42
Press to automatically store selected channels.

22 **DNIe** ▶ See page 55
Press to improve picture quality.

23 **PC**
Press to check the status of the PC connection or select PC mode.

24 **VIDEO/DVD Buttons**

25 **SET** ▶ See page 13
Press to set to VIDEO, Cable TV or DVD.

26 **MTS** ▶ See page 78
Press to choose stereo, mono or Secondary Audio Program (SAP broadcast).

27 **SRS TSXT** ▶ See page 80
Press to enjoy simulated 5.1 Channel surround sound with 2.1 channel speakers.

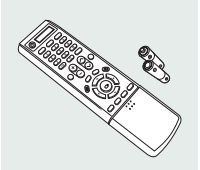
28 **SIZE (PIP)** ▶ See page 59
Press to make PIP window small, double1. double2.

29 **Channel (PIP)** ▶ See page 61
Displays the available channels in sequence (These buttons change channels in the PIP window only).

30 **RESET**
If your Remote Control does not work, change the batteries and press the RESET button for 2-3 seconds before use.

Accessories

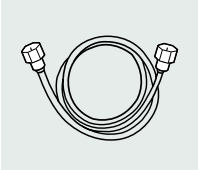
Remote Control (BN59-00435B)
Batteries (1.5V, AAA type)
(4301-000103)



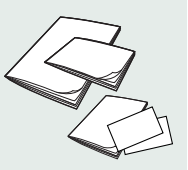
Power Cable
(3903-000085)

Anynet Cable
(BN39-00518A)

Antenna Cable
(AA39-00039A)

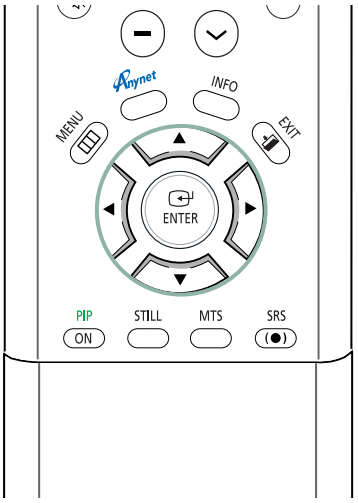


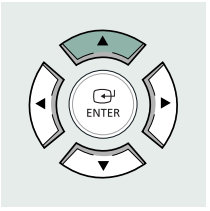
Owner's Instructions/Anynet AV Owner's Instructions/ Safety Guide Manual/ Warranty Card ; 2EA/Registration Card



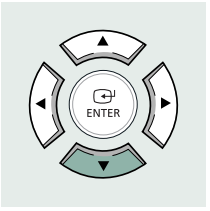
Using Your Remote Control

Using the Move and ENTER Buttons

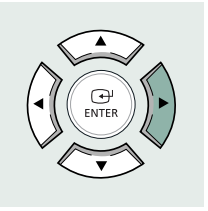




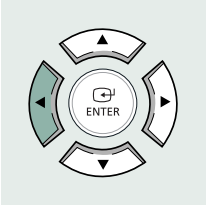
Moves to an upper menu item.



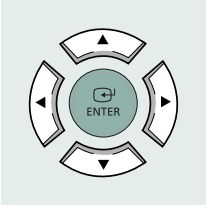
Moves to a lower menu item.



Adjusts the selected item (to the right)



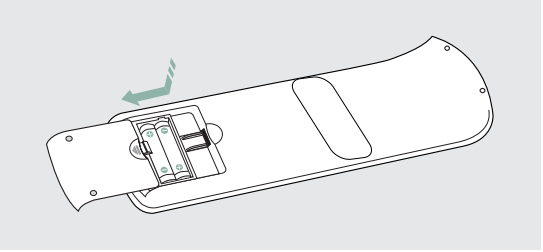
Adjusts the selected item (to the left)



Press to select the chosen item.

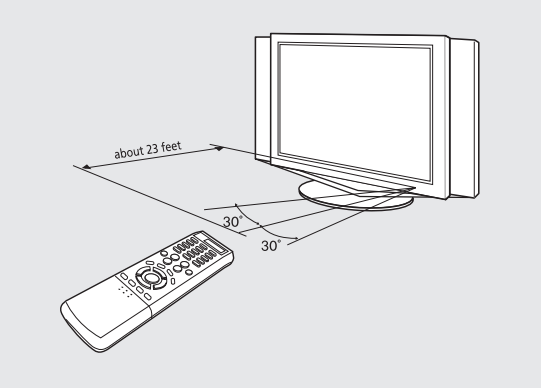
Inserting Batteries in the Remote Control

1. Hold down the ▼ area and slide the cover out.
2. Install two AAA size 1.5V batteries ensuring that the "+" and "-" ends of the batteries are correctly aligned.
3. Replace the cover.



Remote Control Operation Angle

The remote control operation angle lies within a 30˚ angle to the right or left of the TV and up to a distance of about 23 feet from the TV.



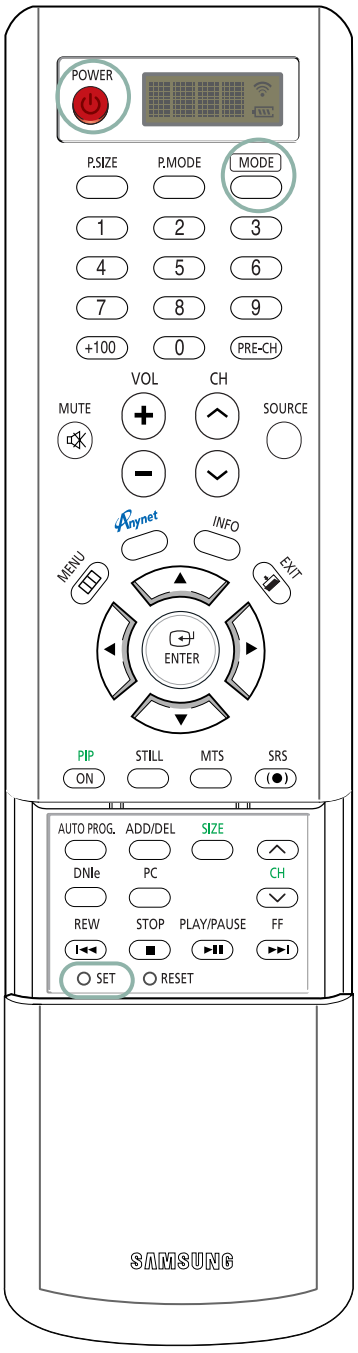
Caution

- Properly dispose of the expired batteries. Contact your local government or community disposal service for disposal practices in your area. Keep them away from small children.
- Do not mix old and new batteries. When replacing the batteries, replace them both.
- If the Remote Control will not be in use for a while, remove the batteries.

Setting Up Your Remote Control

This TV's remote control can operate almost any VCR, cable box or DVD. It can also operate Samsung set-top boxes. After it has been set up properly, your remote control can operate in five different modes: TV, VCR, CATV, DVD or STB. Pressing the corresponding button on the remote control allows you to switch between these modes, and control whichever piece of equipment you choose.

Setting Up the Remote to Operate Your VCR, Cable box or DVD player



1 Turn off your VCR. (or Cable box, DVD player)

2 Press the [MODE] button.
The Mode is changed whenever [MODE] button is pressed.

3 Press the [SET] button on your TV's remote control.

4 Enter 3 digits of the VCR (Cable box or DVD) code listed on next page for your VCR (Cable box or DVD).

5 Press the [POWER] button. Your VCR (Cable box or DVD) should turn on. If it turns on, your remote control is now set correctly.
If it does not turn on, repeat steps above, but try one of the other codes listed for the brand of particular yours.

6 Once your remote control is set up, press the [MODE] button any time you want to use the remote control to operate VCR (Cable box or DVD).

Note

- The remote control may not be compatible with all DVD Players, VCRs, Cable boxes.
- The remote control can only operate STB made by Samsung.
- When your remote control is in the VCR, CATV, DVD or STB mode, the volume buttons still control your TV's volume.
- When your remote control is in the TV mode, the VCR or DVD control buttons (rewind, stop, play/pause and fast forward) still operate your VCR or DVD.

Programming the Remote Control for Other Components

VCR Remote Control Codes

Brand	Codes
Admiral	020
Aiwa	025
Akai	027 004 032
Audio Dynamics	007 026
Bell&Howell	018
Broksonic	022
Candle	002 006 003 015 008 055
Canon	021 056
Citizen	002 003 006 008 015 055
Colortyme	007
Craig	002 024
Curtis Mathes	002 017 007 008 021 025 056 064 066
Daewoo	003 015 010 011 012 013 014 016
DBX	007 026
Dimensia	017
Dynatech	034
Emerson	001 003 006 021 022 025 030 032 034 040 047 050 052 060 063 065 066 067 069
Fisher	018 024 028 029 048 051 061
Funai	025
General Electric	017 002 021 005 056
Go Video	002
LG(Goldstar)	006 007 008 009 010
Harman Kardon	007
Hitachi	019 025 041 042
InstantReplay	021
JC Penny	002 007 018 019 021 026 037 041 054 056
JVC	007 008 018 021 026 037
Kenwood	007 008 018 026 037
KLH	070
Lioyd	025
Logik	038
LXI	025
Magnavox	021 036 056 059
Marantz	008 007 018 021 026 036 037 062
Marta	006
MEI	021
Memorex	006 021 024 025
MGA	034
Midland	005
Minolta	019 041
Mitsubishi	019 034 041 046
Montgomery Ward	020
MTC	002 025
Multitech	002 025 038 005
NEC	018 007 026 037 008 062 064
Optimus	020
Panasonic	021 056 071 072
Pentax	019 041
Pentex Research	008
Philco	021 036 056 059
Philips	021 036
Pioneer	019 026 039 053
Portland	015 049 055
PROSCAN	017
Quartz	018
Quasar	021 056
Radio Shack/Realistic	006 018 020 021 024 025 029 034 048 056
RCA	017 019 002 021 035 041 043 057 068
Samsung	000 001 002 003 004 005
Sansui	026
Sanyo	018 024
Scott	003 047 052 067
Sears	018 019 006 024 028 029 041 048 051
Sharp	020 034 045 015
Shimom	027 033 038 058
Signature	025
Sony	027 033 044
Sylvania	021 025 036 056 059
Symphonic	025
Tandy	018 025
Tashika	006
Tatung	037
Teac	025 037 068
Technics	021
Teknika	021 006 025 031
TMK	066
Toshiba	003 019 029 051 052
Totevision	002 006
Unitech	002
VectorResearch	007 026
Victor	026
Video Concepts	007 026
Videosonic	002
Wards	002 003 006 019 020 021 024 025 034 038 041
Yamaha	007 008 018 026 037
Zenith	023 027 033 073

Cable Box (CATV) Remote Control Codes

Brand	Codes	Brand	Codes	Brand	Codes
Anvision	017 018	Philips	019 021 023 028	Sprucer	022
GI	041	Pioneer	018 020 004 044	Stargate 2000	036
Hamlin	003 024 031	RCA	014 022 040	Sylvania	016
Hitachi	025 030	Regal	003	Texscan	016
Jerrold	038 039	Regency	015 023	Tocom	032
Macom	025 030	SA	042 043	Universal	033 034
Magnavox	019 023 028	Samsung	000 001 002 003 004 005	Viewstar	019 021 023 028
Oak	026		006 007	Wamer amex	046
Panasonic	003 022 027 037 044	Scientific Atlanta	042 043	Zenith	017 029 035 037 045

DVD Remote Control Codes

Brand	Codes
Samsung	000 001
JVC	002
PROSCAN	003
RCA	003
LG(Goldstar)	006
Sony	007
Denon	008
Curtis Mathes	009

Notes & Checking Parts

Installation Notes

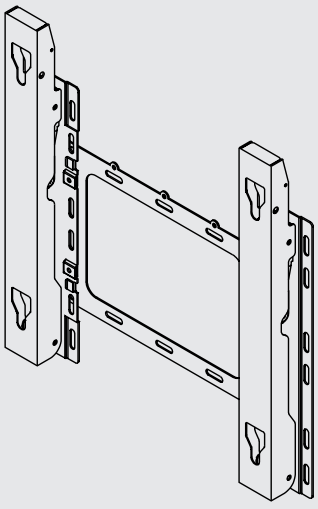
1. The Wall Attachment Panel is sold separately.

2. Do not install the product in any location other than a vertical wall.

3. To protect the performance of your product and prevent problems, avoid the following locations:
   - Any place vulnerable to vibration or impact: The product may come off and break.
   - Near smoke and fire detectors: The sprinkler may be activated upon detecting heat from the product.
   - Near high voltage: The reception for your product may be interrupted.
   - Near heat sources: The product may get overheated.

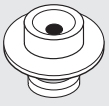
List of Contents (Sold Separately)

[VMTL-4600]



Wall Mount Bracket

Screws



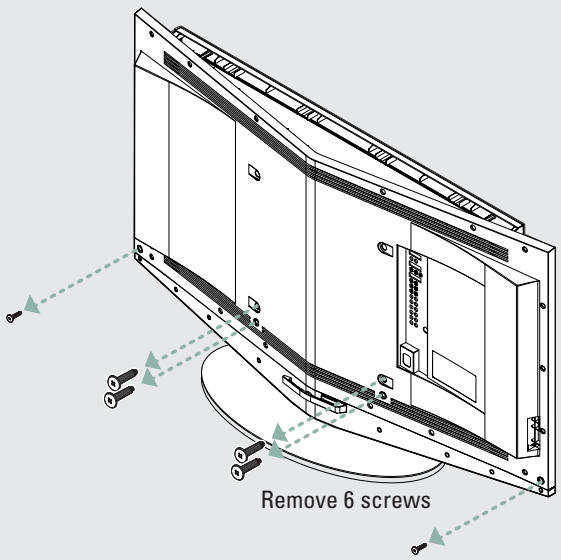
Plastic Screw Anchors

Wall Installation Instructions

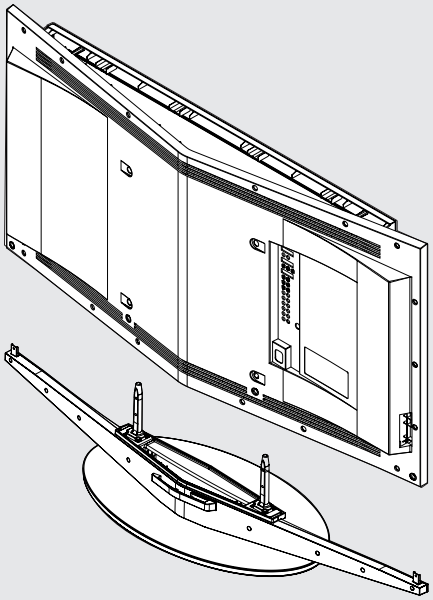
Attaching Your TV to the Wall Attachment Panel Bracket

How to Attach the TV to the Bracket (sold separately)

1. Remove the 6 screws from the back of the TV.

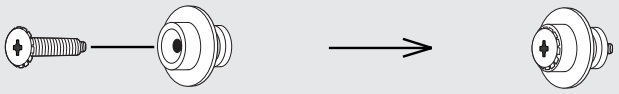


2. Separate the stand from the monitor.

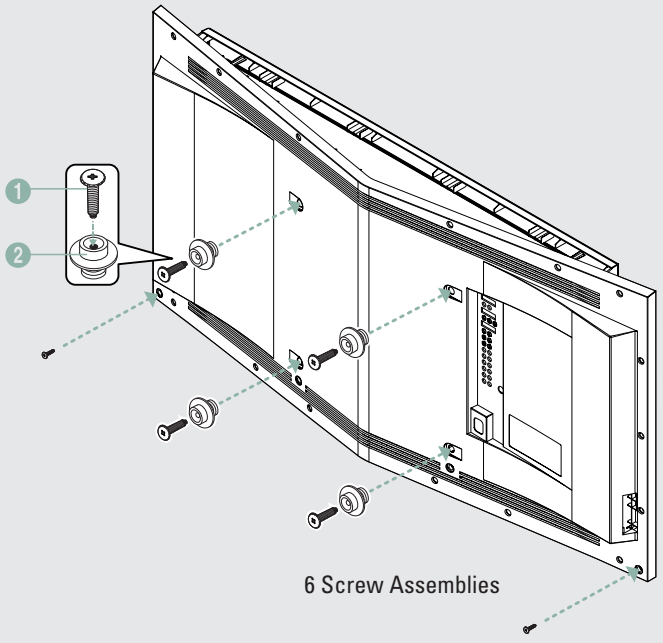


Attaching Your TV to the Wall Attachment Panel Bracket

3. Assemble the plastic screw anchors and the screws. (See the picture below.)

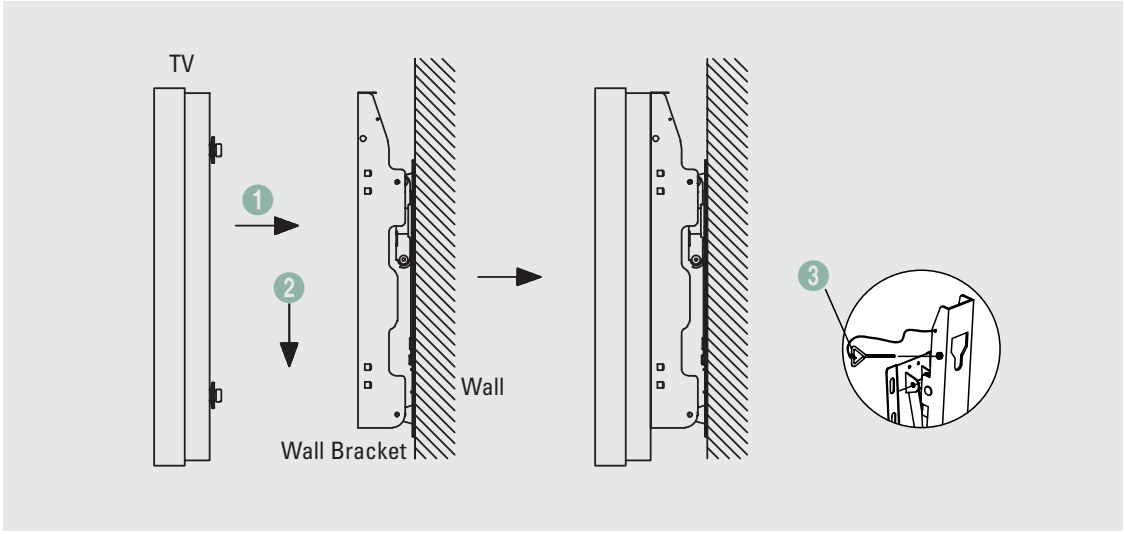


4. Tighten the screw assemblies (as shown in Picture 3) to the back of the TV.



6 Screw Assemblies

5. Put the four holders on the back of the TV into the holes on the wall bracket ①, lower the TV ②, and hang the TV on the bracket. Fasten the TV securely to the wall bracket with stick screws as shown in ③ so that the two will not separate.

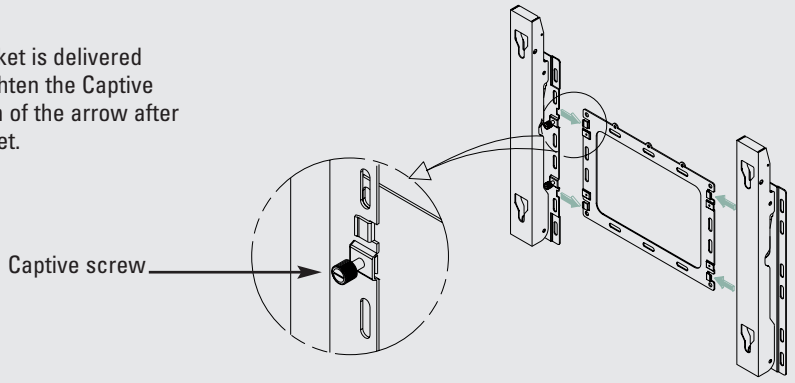


Wall Installation Instructions

Adjusting the Angle of the Bracket

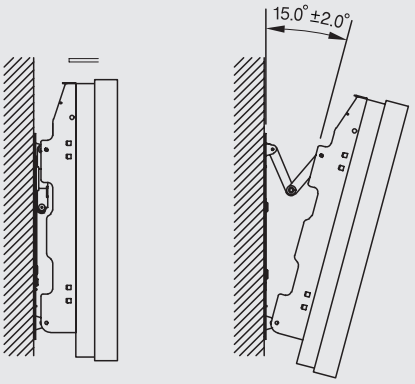
How to Adjust the Mounting Angle

Factory Default
The Wall Mount Bracket is delivered separately. Please tighten the Captive Screw in the direction of the arrow after assembling the bracket.



Changing the Angle

1. Attach the TV to the wall bracket. (Follow the instructions below.)
2. Pull the upper part of the TV (which has been attached to the bracket) forward in the direction of the arrow and adjust the angle.
3. You can adjust the angle to your liking between 0-15˚. (±2˚)



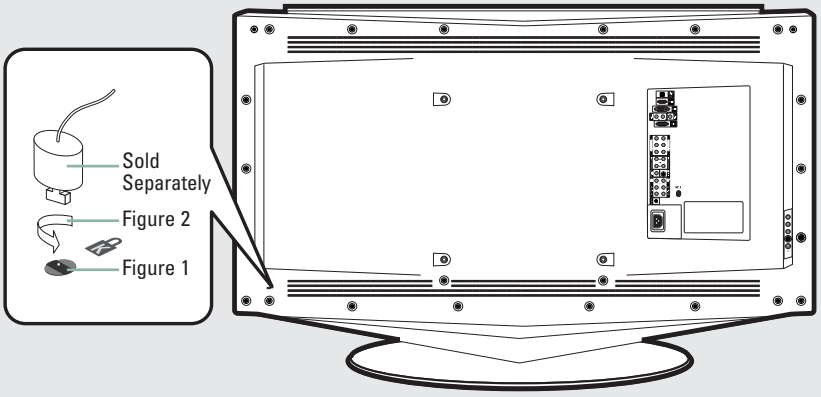
Caution

1. Contact an authorized technician when installing the wall attachment panel.
2. After hanging the TV on the wall bracket, check from both sides to see if the plastic screw anchors are securely in place.
3. Be careful not to get your fingers caught during installation or while adjusting the angle of the bracket.
4. Make sure the wall brackets are tight. Otherwise, the TV may fall from the wall and hurt someone.

Using the Anti-Theft Lock

The Kensington lock is a device used to physically secure the LCD TV when using it in a public place.

- The LCD TV is designed to use the anti-theft lock.
- The lock device is used to secure the LCD TV when it is used in a public place.
- The appearance and locking method may differ depending on the manufacturer. Please refer to the Owner's Instructions provided with the lock for proper use.



1. Insert the locking device into the Kensington slot on the LCD TV (Fig. 1), and turn it in the locking direction (Fig. 2).
2. Connect the Kensington lock cable.
3. Secure the Kensington lock to a desk or a heavy stationary object.

Connection & Input Source Setup

Checklist Before Installation 24

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Checklist Before Installation

Please check the following before connecting other devices to your TV.

Check Before Installation

1. Please read the Owner's Manual of the device you are going to connect.

   The device may have a different number of terminals and locations depending on the model.
2. Do not supply power to the device until all connections are complete.

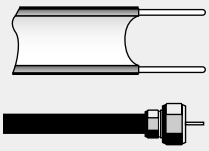
   Supplying power in the middle of connecting may cause damage to your product.
3. Make sure that the right (red) and left (white) audio jacks are correctly connected.
4. Check the type of jacks on the back of the product you wish to connect to your TV.

Please refer to the table below for the connection order of products you own.

Products You Own	Connection Order
LCD TV + VIDEO Devices	Please refer to the User's Manual regarding Input on Page 28
LCD TV + CATV Devices	Please refer to the User's Manual regarding Input on Pages 26~27
LCD TV + SATELLITE Devices	Please refer to the User's Manual regarding Input on Page 29
LCD TV + DVD Devices	Please refer to the User's Manual regarding Input on Page 30
LCD TV + STB Devices	Please refer to the User's Manual regarding Input on Page 31
LCD TV + CAMCORDER/ Devices GAMING DEVICE	Please refer to the User's Manual regarding Input on Page 32
LCD TV + Amplifier/Home Devices Theater(Variable Audio Output)	Please refer to the User's Manual regarding Input on Page 34
LCD TV + HDMI Devices CORRESPONDING DEVICE	Please refer to the User's Manual regarding Input on Page 35
LCD TV + DIGITAL AUDIO Devices SYSTEM	Please refer to the User's Manual regarding Input on Page 36
LCD TV + SUB WOOFER Devices	Please refer to the User's Manual regarding Input on Page 36

Connecting VHF and UHF Antennas

If your antenna has a set of leads that look like this, see “Antennas with 300-ohm Flat Twin Leads” below.



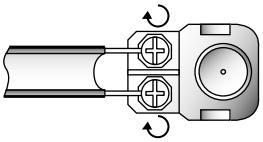
If your antenna has one lead that looks like this, see “Antennas with 75-ohm Round Leads” on next page.

If you have two antennas, see “Separate VHF and UHF Antennas” on next page.

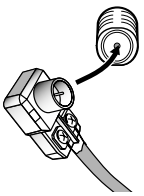
Antennas with 300-ohm Flat Twin Leads

If you are using an off-air antenna (such as a roof antenna or “rabbit ears”) that has 300-ohm twin flat leads, follow the directions below.

1 Place the wires from the twin leads under the screws on the 300-75 ohm adaptor (not supplied). Use a screwdriver to tighten the screws.



2 Plug the adaptor into the VHF/UHF terminal on the bottom of the back panel.



Antennas with 75-ohm Round Leads

If you are using an off-air antenna (such as a roof antenna or “rabbit ears”) that has 300-ohm twin flat leads, follow the directions below.

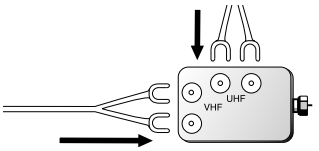
Plug the antenna lead into the VHF/UHF terminal on the bottom of the back panel.

Connecting VHF and UHF Antennas

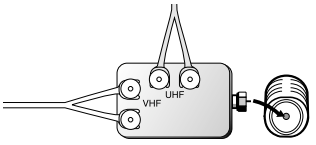
Separate VHF and UHF Antennas

If you have two separate antennas for your TV (one VHF and one UHF), you must combine the two antenna signals before connecting the antennas to the TV. This procedure requires an optional combiner-adaptor (available at most electronics shops).

1. Connect both antenna leads to the combiner.



2. Plug the combiner into the VHF/UHF terminal on the bottom of the rear panel.



Connecting Cable TV

You can connect different cable systems to your TV, including cable without a cable box, and cable with a cable box that descrambles some or all channels.

Cable without a Cable Box

If you want to connect cable, and you do not need to use a cable box:

Plug the incoming cable into the VHF/UHF antenna terminal on back of the TV.

Connecting to a Cable Box that Descrambles All Channels

1. Find the cable that is connected to the ANTENNA OUT terminal on your cable box.

2. Connect the other end of this cable to the VHF/UHF antenna terminal on the back of the TV.

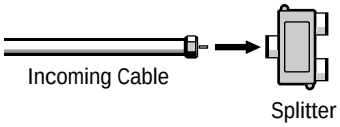
Connecting Cable TV

Connecting to a Cable Box that Descrambles Some Channels

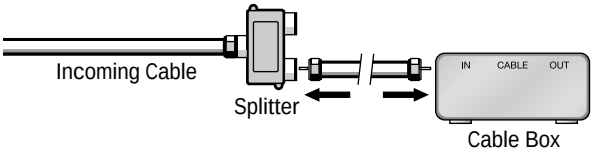
If your cable box descrambles only some channels (such as premium channels), follow the instructions below. You will need a two-way splitter, an RF (A/B) switch and four lengths of coaxial cable. (These items are available at most electronics stores.)

1 Find and disconnect the cable that is connected to the ANTENNA IN terminal on your cable box.
This terminal might be labeled "ANT IN", "VHF IN" or simply, "IN".

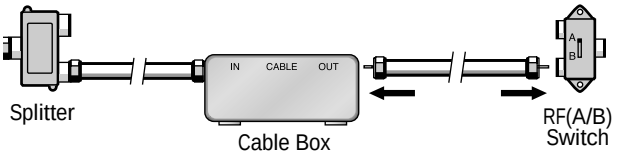
2 Connect this cable to a two-way splitter.



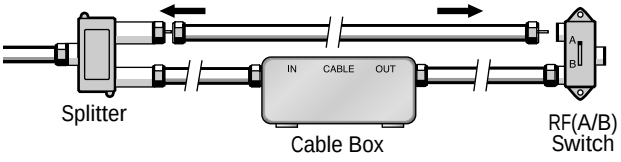
3 Connect a coaxial cable between an OUTPUT terminal on the splitter and the IN terminal on the cable box.



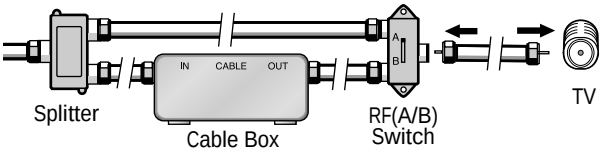
4 Connect a coaxial cable between the ANTENNA OUT terminal on the cable box and the B–IN terminal on the RF(A/B) switch.



5 Connect another cable between the other OUT terminal on the splitter and the A–IN terminal on the RF (A/B) switch.

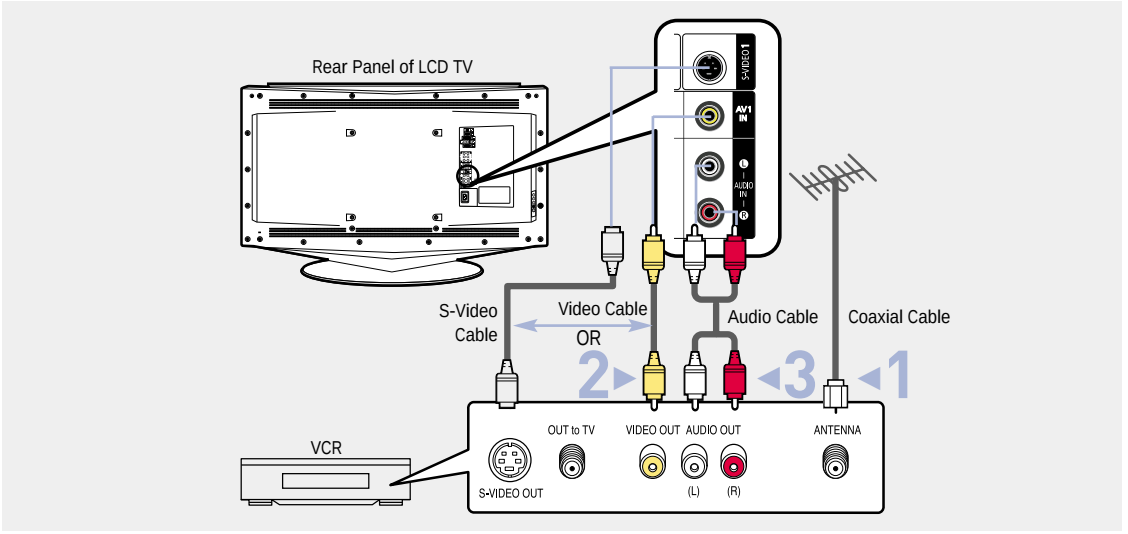


6 Connect the last coaxial cable between the OUT terminal on the RF (A/B) switch and the VHF/UHF terminal on the rear of the TV.



After you've made this connection, set the A/B switch to the "A" position for normal viewing. Set the A/B switch to the "B" position to view scrambled channels. (When you set the A/B switch to "B", you will need to tune your TV to the cable box's output channel, which is usually channel 3 or 4.)

Connecting a VCR



1 Connect the antenna cable to the ANTENNA IN terminal on the back of the VCR.
- Connect either the indoor/outdoor antenna cable, the CATV antenna cable or the Satellite antenna cable.

2 Connect the video cable between the [Video 1 In (yellow)] terminal on the back of the TV or the [Video2 In (yellow)] terminal on the side of the TV and the [Video Out (yellow)] terminal on the back of the VCR.

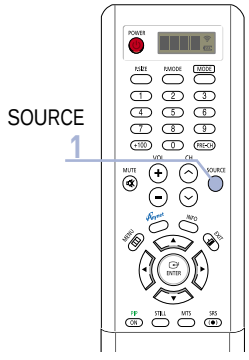
3 Connect the audio cable between the [Left (white) -Audio- Right (red)] terminals on the side or back of the TV and the [Audio (white/red) Out] terminals on the VCR.

4 Supply power to your TV and VCR after making all the connections.

Note

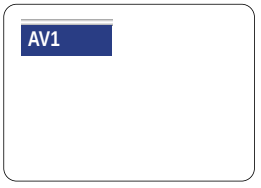
For a VCR with an S-VIDEO terminal, connect the S-Video cable between the [S-Video In] on the TV and the [S-Video Out] terminal on the VCR. For connection of the audio cable please follow the instructions above.

Viewing VCR Playback



1 Turn your TV on, then press the [SOURCE] button to select <AV1> or <AV2>.
- If <AV1> or <AV2> is unavailable, please check that the video cable is connected correctly.

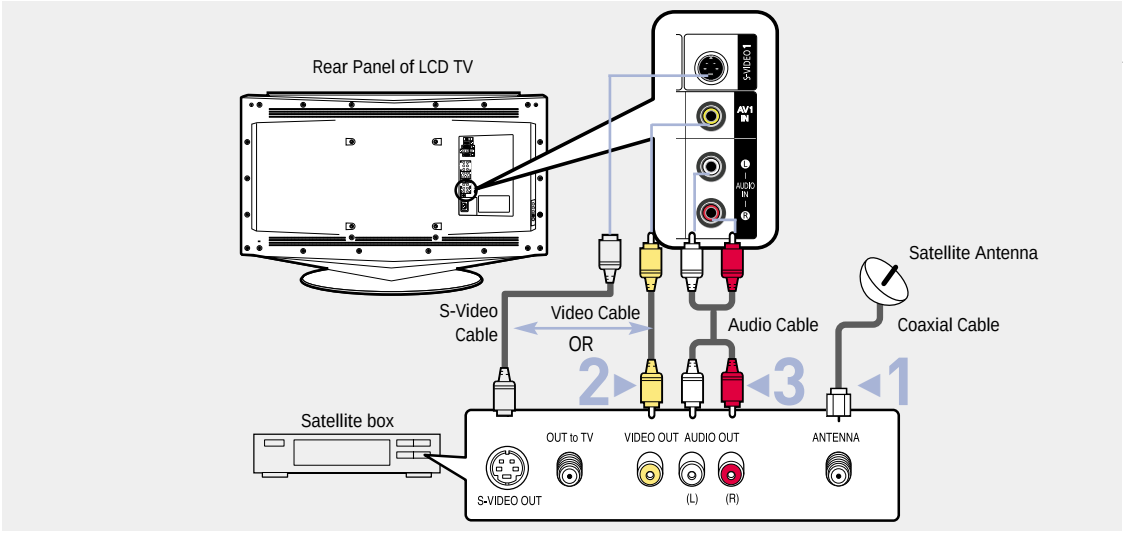
2 Turn on your VCR, then press the [PLAY] button.



Note

- If you have connected the TV and the VCR using an S-Video cable, press the [SOURCE] button to select <S-Video1> or <S-Video2>.
- If you have connected the video cable to the [AV2] terminal, select <AV2>.
- Audio and video cables are sold separately.

Connecting & Viewing Satellite TV



1 Connect the Satellite cable to the Antenna Input terminal on the back of the Satellite box.

2 Connect the video cable between the [Video 1In (yellow)] terminal on the back of the TV or the [Video2 In (yellow)] terminal on the side of the TV and the [Video Out (yellow)] on the back of the Satellite box.

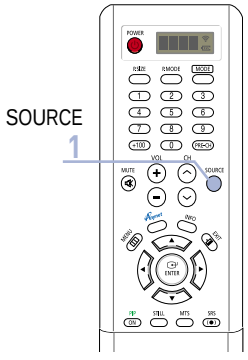
3 Connect the Audio cable between the [Left (white) -Audio- Right (red)] terminals on the side or back of the TV and [Audio Out (white/red)] terminals on the back of the Satellite box.

4 Supply power to your TV and the Satellite box after making all the connections.

Note

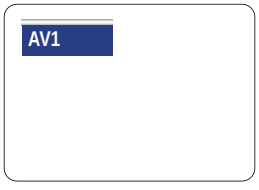
For a Satellite box with an S-VIDEO terminal, connect the S-Video cable between the [S-Video In] on the TV and [S-Video Out] terminal on the Satellite box.
For connection of the audio cables please follow the instructions above.

Viewing Satellite TV



1 Turn your TV on, then press the [SOURCE] button to select <AV1> or <AV2>.
- If <AV1> or <AV2> is unavailable, please check that the video cable is connected correctly.

2 Turn on the Satellite TV and select the channel of your choice using the Satellite remote control.

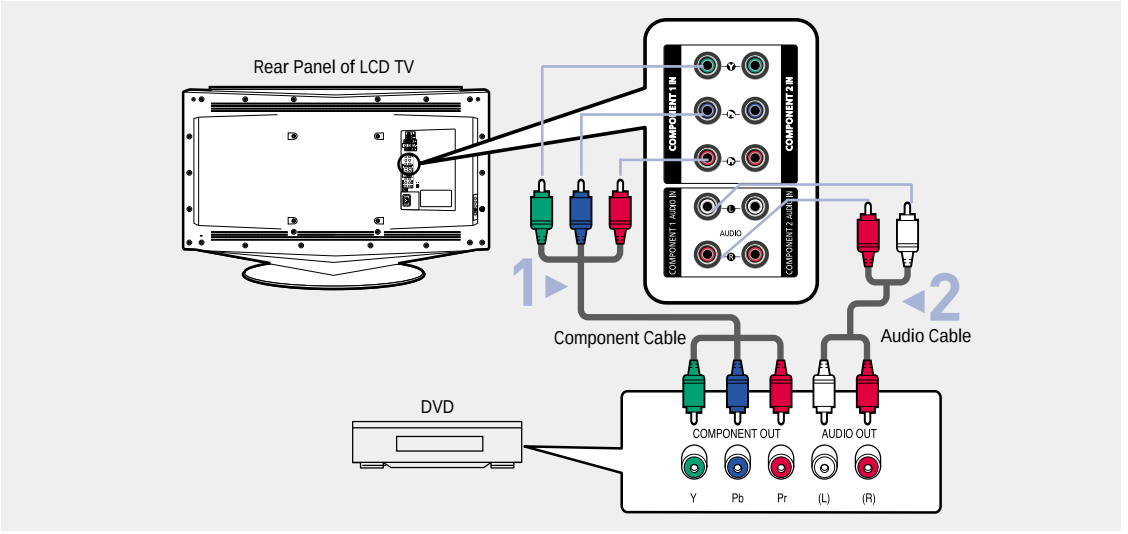


Note

- If you have connected the TV and the VCR using the S-Video cable, press the [SOURCE] button to select <S-Video1> or <S-Video2>.
- If you have connected the video cable to the [AV2] terminal, select <AV2>.
- Audio and video cables are sold separately.

Connecting a DVD Player

To Connect Using Component Cable



1 Connect the component cable between the [Component In1 (Y/Pb/Pr)] or [Component In 2 (Y/Pb/Pr)] terminals on the back of the TV and the [Component Out] terminals on the back of the DVD player.

2 Connect the audio cable between the [Left (white) -Audio- Right (red)] terminals on the back of the TV and [Audio Out (white/red)] terminals on the DVD player.

3 Supply power to the TV and the DVD player after making all the connections.

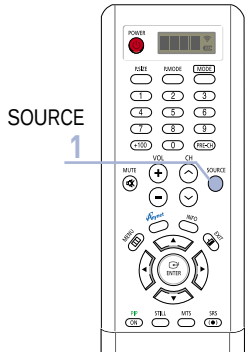
Caution

If Y, Pb, or Pr cables are not connected properly, the picture will be red or blue or not appear at all.

Note

Depending on the manufacturer, the DVD terminals may be identified as “Y, PB, PR” or “Y, B-Y, R-Y” or “Y, CB, CR”.

Viewing a DVD Title



1 Turn on your TV, then press the [SOURCE] button to select <Component1> or <Component2>.

- If <Component1> or <Component2> is unavailable please check that the component cables are connected correctly.

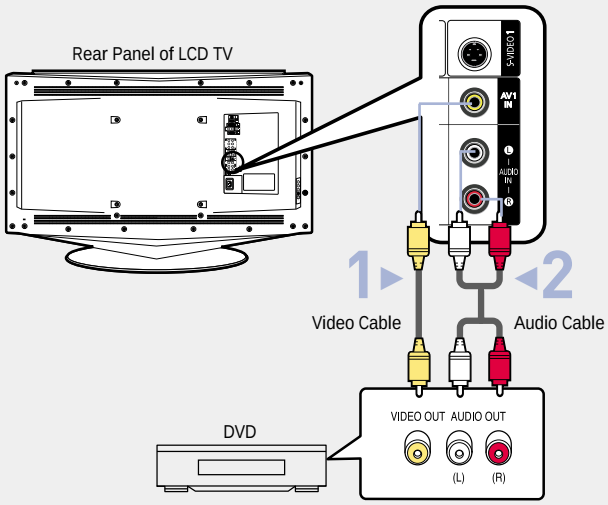
2 Turn on the DVD player and press the [PLAY] button.

Component1

Note

- If you have connected the video cable to the [Component2] terminal instead of [Component1], press the [SOURCE] button to select <Component2>.
- Component and audio cables are sold separately.

To Connect Using Regular Audio and Video Cables

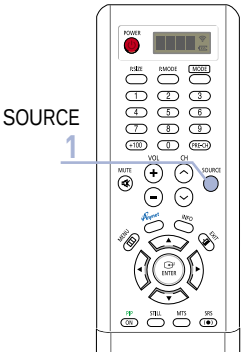


1 Connect the video cable between the [Video 1 In (yellow)] terminal on the back of the TV or the [Video2 In (yellow)] terminal on the side of the TV and the [Video Out (yellow)] terminal on the back of the DVD.

2 Connect the audio cable between the [Left (white) -Audio- Right (red)] terminals on the side or back of the TV and the [Audio (white/red) Out] terminals on the DVD.

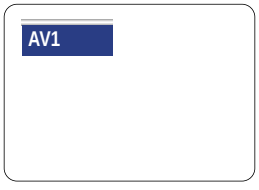
3 Supply power to the TV and the DVD player after making all the connections.

Viewing VCR Playback

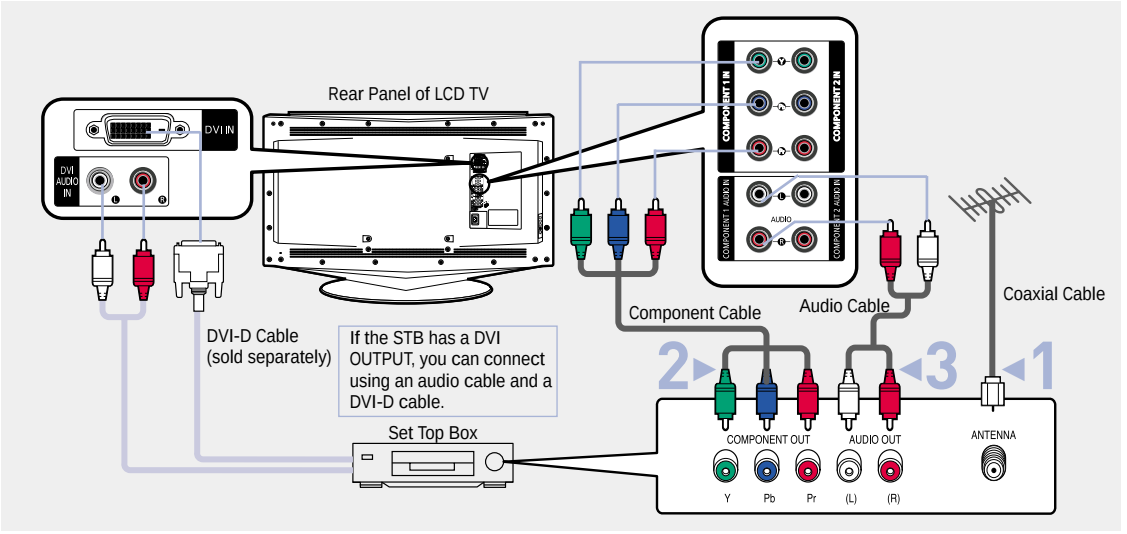


1 Turn your TV on, then press the [SOURCE] button to select <AV1> or <AV2>.
- If <AV1> or <AV2> is unavailable, please check that the video cable is connected correctly.

2 Turn on your DVD, then press the [PLAY] button.



Connecting a Digital Set-Top Box (STB)



1 Connect the antenna cable to the antenna input terminal on the back of the Set Top Box.

2 Connect the component cable between the [Component In1 (Y/Pb/Pr)] or the [Component In2 (Y/Pb/Pr)] terminals on the back of the TV and the [Component Out] terminals on the back of the Set Top Box.

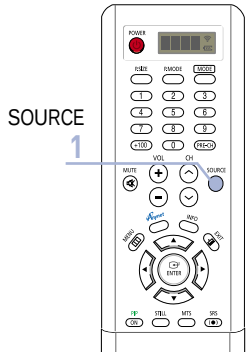
3 Connect the audio cable between the [Left (white) -Audio- Right (red)] terminals on the back of the TV and the [Audio Out (white/red)] terminals on the back of the Set Top Box.

4 Supply power to the TV and the Set Top Box after making all the connections.

Caution

If the Y, Pb, or Pr cables are cross wired when connecting the component cables, the picture will be red or blue.

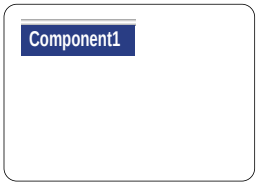
Viewing a Digital Broadcasting Program



1 Turn your TV on, then press the [SOURCE] button to select <Component1> or <Component2>.

- If <Component1> or <Component2> is unavailable, please check that the component cables are connected correctly.

2 Turn on the STB and select the mode of your choice.

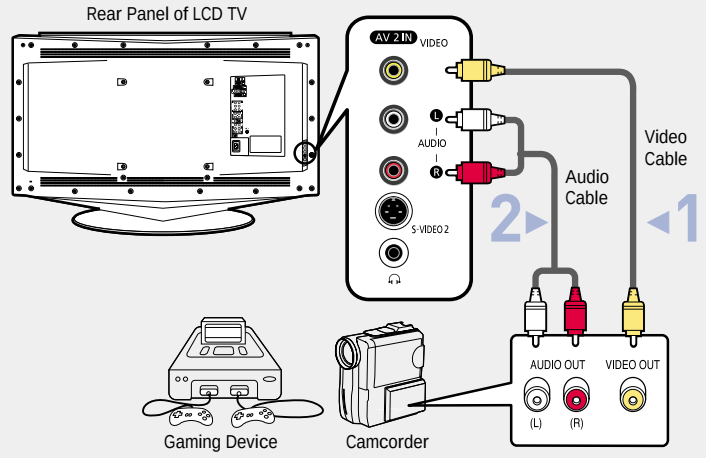


Note

- If you have connected the video cable to the [Component2] terminals instead of the [Component1] terminals, press the [SOURCE] button to select <Component2>.
- If you have connected using a DVI-D cable, press the [SOURCE] button to select <DVI>. In this case connect the audio cable to the [Left-Audio-Right] terminals below the DVI terminal.
- Component and audio cables are sold separately.

Connecting a Camcorder/Gaming Device

This applies to all external input devices connected using the video and audio terminals.



1 Connect the video cable between the [Video 1In (yellow)] terminal on the back of the TV or the [Video2 In (yellow)] terminal on the side of the TV and the [Video Out (yellow)] terminal on the back of the Camcorder.

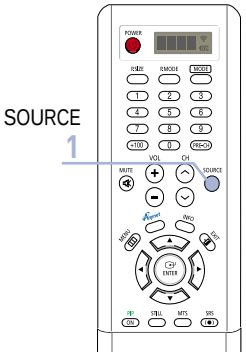
2 Connect the Audio cable between the [Left (white) -Audio- Right (red)] terminals on the side or back of the TV and [Audio Out (white/red)] terminals on the back of the Camcorder.

3 Supply power to your TV and the Camcorder after making all the connections.

Note

- Connect all other external input devices in the same manner as listed above.
- Connecting to the [AV2 IN] terminal on the side of the TV will make it easy to use the camcorder or a gaming device.

Viewing a Camcorder Recording

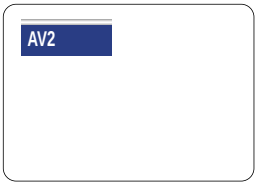


1 Turn your TV on, then press the [SOURCE] button to select <AV1> or <AV2>.

- If <AV1> or <AV2> is unavailable, please check that the video cable is connected correctly.

2 Turn on the Camcorder and press the [PLAY] button.

- Please refer to the Camcorder User's Manual.

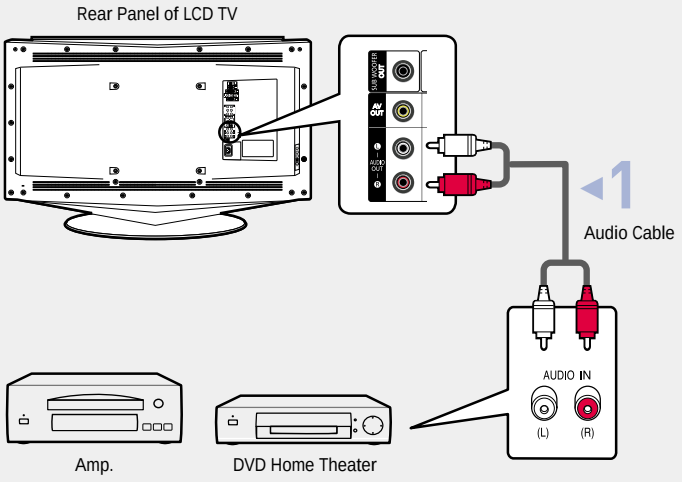


Note

- If you have connected the video cable to the [AV1] or [AV2] terminal, press the [SOURCE] button to select [AV1] or [AV2].
- Set the Gaming Device or other external input devices in the same way listed above.
- Audio and video cables are sold separately.

Connecting an Amplifier/Home Theater (Variable Audio Output)

Use the Monitor Out Audio terminal.



1 Connect the audio cable between the AUDIO OUT [Left (white) -Audio- Right (red)] terminals and the DVD Home Theater (or AV Amp) [Audio In] terminals.

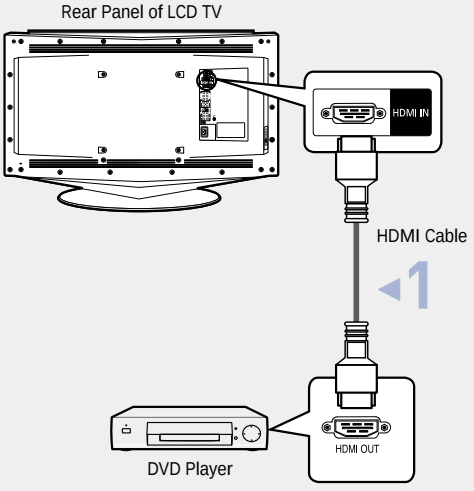
2 Press the [MUTE] button on the remote control to cut off the sound, then adjust the volume using the Home Theater (or AV Amp) volume button.

Note

- For connecting speakers to the DVD Home Theater (or AV Amp) please refer to the instructions provided by the Amplifier/Home Theater manufacturer.
- In order to enjoy the sound from the Home Theater (or AV Amp), press the [MUTE] button on the TV remote control, or press the [Volume] button to minimize the volume or to cut off the sound from the TV.
- Once you minimize the volume you can hear the sound from the Home Theater (or AV Amp).

Connecting an HDMI Corresponding Device

HDMI Corresponding Device Output Terminal

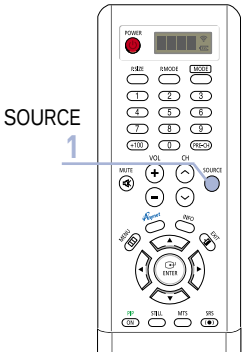


1 Connect the HDMI cable between the [HDMI IN] on the back of the TV and the [HDMI OUT] of the DVD player (or the HDMI Corresponding Device).

Note

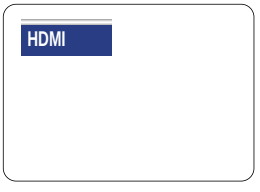
HDMI cable is sold separately.

Viewing a HDMI Device



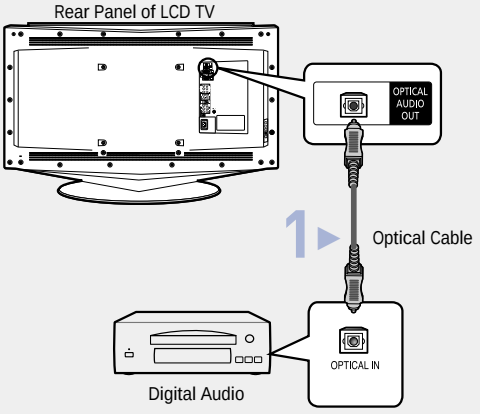
1 Turn your TV on, then press the [SOURCE] button to select <HDMI>.

- If <HDMI> is unavailable, please check that the HDMI cable is connected correctly.



Connecting to a Digital Audio System

There are many types of audio systems on the market today.
A simplified illustration of an audio system is shown below. For more information, see your audio system owner's manual.

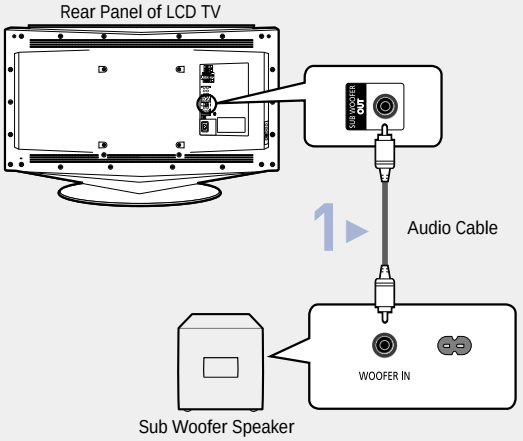


1 Connect the Optical cable between the [Optical Audio Out] terminal on the back of the TV and the [Optical Audio In] terminal on the Digital Audio.
For better sound quality, use an optical cable for an audio device that corresponds to the optical digital audio input.

Note

- The optical cable is sold separately.
- The optical out is available only when you use the HDMI digital in.

Connecting a Sub Woofer Speaker



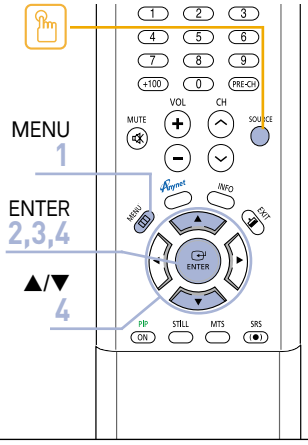
1 Connect the audio cable between the [SUB WOOFER OUT] on the back of the TV and the [SUB WOOFER in] of the Sub Woofer Speaker.

Note

The audio cable is sold separately.

Source List Setup

Use the remote control to switch between viewing signals from connected equipment, such as a VCR, DVD, Set-Top box and the TV source (broadcast or cable).



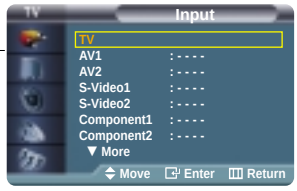
SOURCE

Press the [SOURCE] button.
Each press of the [SOURCE] button cycles through <TV> ➔ <AV1> ➔ <AV2> ➔ <S-Video1> ➔ <S-Video2> ➔ <Component1> ➔ <Component2> ➔ <HDMI> ➔ <DV1> ➔ <PC>.
You can only select a source if it is connected to your TV.

1 Press the [MENU] button.
The menu will be displayed

2 Press the [ENTER] button to select <Input>.
The <Input> menu will be displayed.

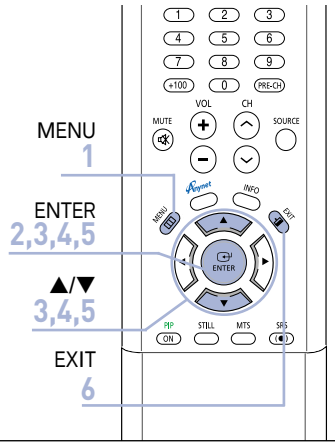
3 Press the [ENTER] button to select <Source List>.
The input source list will be displayed.



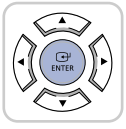
4 Press the [▲/▼] buttons to move to the source of your choice, then press the [ENTER] button.
The selected source will be displayed.
Please check the connections if the source of your choice is unavailable.

Editing Input Source Names

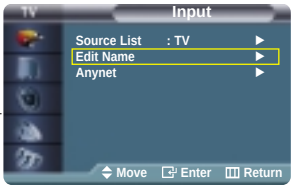
You can edit the name of the input devices connected.

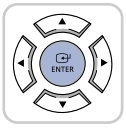


1 Press the [MENU] button.
The menu will be displayed

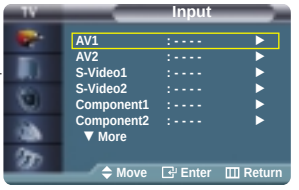


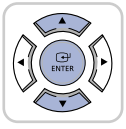
2 Press the [ENTER] button to select <Input>.
The <Input> menu will be displayed.



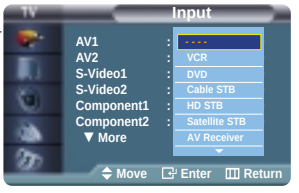


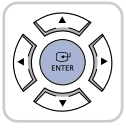
3 Press the [▲/▼] buttons to move to <Edit Name>, then press the [ENTER] button.
The <Edit Name> screen will be displayed.





4 Press the [▲/▼] buttons to move to the source list to edit, then press the [ENTER] button.





5 Press the [▲/▼] buttons to move to the device of your choice, then press the [ENTER] button.
Setup is switched to the selected device.

6 Press the [EXIT] button to finish.

Note

DHR: DVD HDD Recorder.

Setting the Initialization

Plug & Play Feature 40

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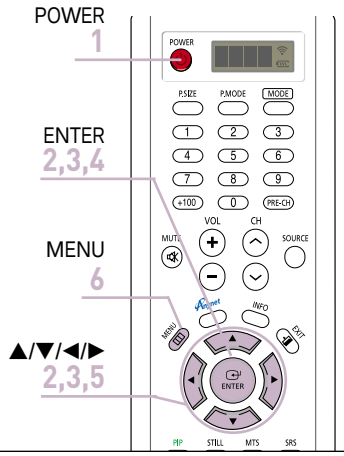
Customizing the Picture 46

Choosing a Menu Language..... 48

Viewing Closed Captions 49

Plug & Play Feature

When the TV is initially powered On, four basic customer settings proceed automatically and subsequently: Setting the language, Video signal source, Auto program and Clock.



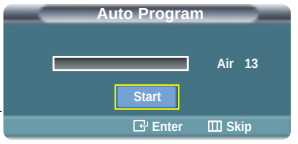
POWER

1 Press the [POWER] button to turn on the TV.
The message <Plug & Play> is displayed.
In a moment the Language menu will be displayed.

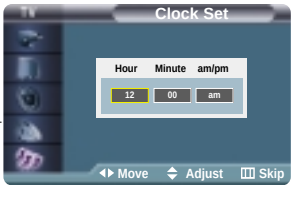
2 Press the [▲/▼] buttons to move to language of your choice, then press the [ENTER] button.
The signal source setup menu will be displayed after a moment.

3 Press the [▲/▼] buttons to move to signal source of your choice: <Air, STD, HRD and IRC>, then press the [ENTER] button.
The <Auto Program> menu will be displayed after a moment.

4 Press the [ENTER] button then select <START>.
The TV will begin memorizing all of the available channels.
To stop, press the [ENTER] button again.
In a moment the <Clock Set> menu will be displayed.

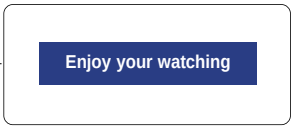


5 Press the [▲/▼/◀/▶] buttons to set the current time.



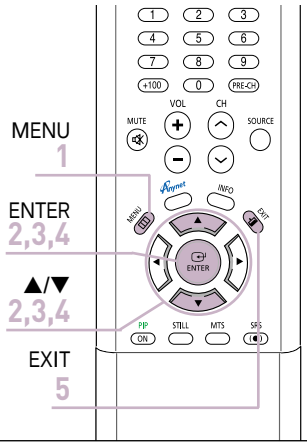
MENU

6 Press the [MENU] button to finish.

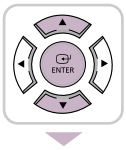


Selecting the Video Signal-Source

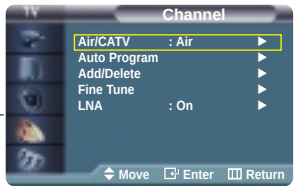
Before your television can begin memorizing the available channels, you must specify the type of signal source that is connected to the TV (i.e., an antenna or a cable system).

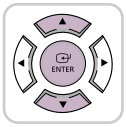


1 Press the [MENU] button.
The menu will be displayed.

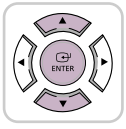


2 Press the [▲/▼] buttons to move to <Channel>, then press the [ENTER] button.
The <Channel> menu will be displayed.





3 Press the [▲/▼] buttons to move to <Air/CATV>, then press the [ENTER] button.
The signal source menu will be displayed.



4 Press the [▲/▼] buttons to move to signal source of your choice, then press the [ENTER] button.

5 Press the [EXIT] button to finish.

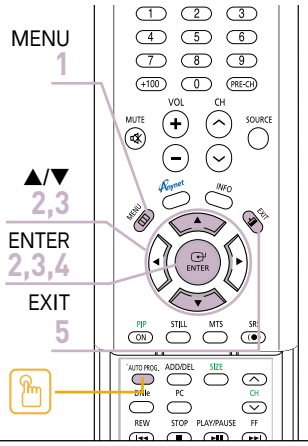
Note

STD, HRC and IRC identify various types of cable TV systems. Contact your local cable company to identify the type of cable system that exists in your particular area.
At this point the signal source has been selected. Proceed to “Storing Channels Automatically” (next page).

Setting Channels

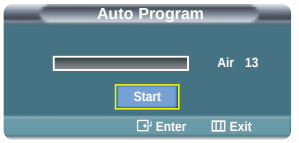
Storing Channels Automatically

The AUTO PROGRAM feature automatically stores all of the available Air / CATV channels in the memory.

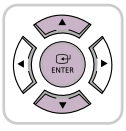


AUTO PROG.

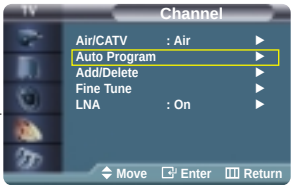
Press the [AUTO PROG.] button while viewing a TV program.
Press the [ENTER] button, then select <Start> to commence.

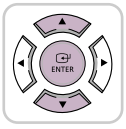


1 Press the [MENU] button.
The menu will be displayed.

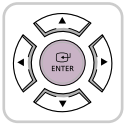


2 Press the [▲/▼] button to move to <Channel>, then press the [ENTER] button.
The <Channel> menu will be displayed.

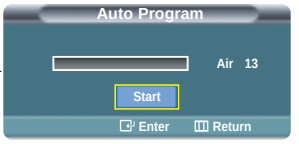




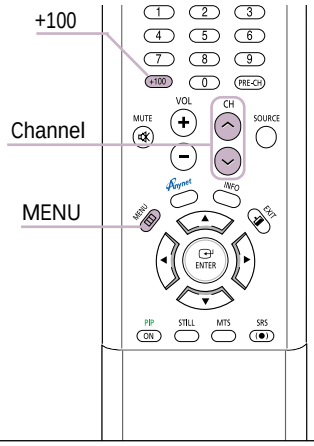
3 Press the [▲/▼] button to move to <Auto Program>, then press the [ENTER] button.
The <Auto Program> menu will be displayed.



4 Press the [ENTER] button and select <Start> to begin the Auto Program function.



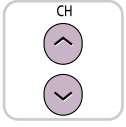
5 Press the [EXIT] button to finish.



To Stop the Auto Program Function

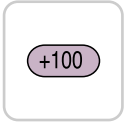
Press the [MENU] button while the function is being executed.
Also you can press the [ENTER] button to stop the setup.

Checking which Channels are Stored in Memory



Press the [Channel] button.
Only the channels stored in memory will be selected (in order).

Selecting Channels Over 100



Press the [+100] button followed by the rest of the number.
For example, press +100 ➔ [0] ➔ [8] to select Cable Channel 108.

+100 ➡ 0 ➡ 8

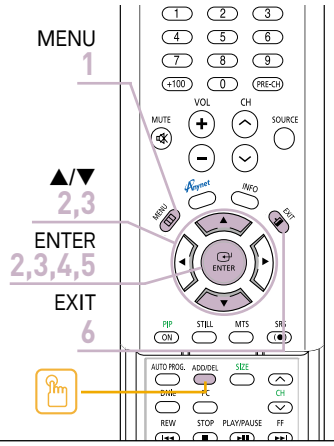
Note

All available channels will be displayed if there are fewer than two channels stored in the memory.

Setting Channels

Adding Channels

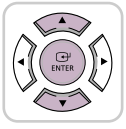
You can add channels of your choice to memory.



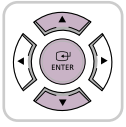
ADD/DEL

Press the channel number of your choice, then press the [ADD/DEL] button.
For Example: To add Channel 3 to memory, press [0] ➔ [3], then press the [ADD/DEL] button, then press the [ENTER] button.

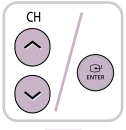
1 Press the [MENU] button.
The menu will be displayed.



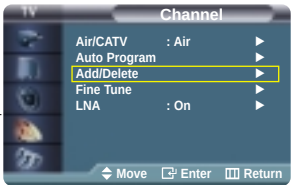
2 Press the [▲/▼] button to move to <Channel>, then press the [ENTER] button.
The <Channel> menu will be displayed.

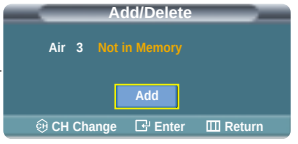


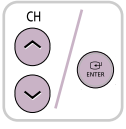
3 Press the [▲/▼] button to move to <Add/Delete>, then press the [ENTER] button.
The <Add/Delete> menu will be displayed.



4 Press the [Channel] button to select a channel to store, then press the [ENTER] button.
The channel status will be changed from <Not in Memory> to <In Memory>.





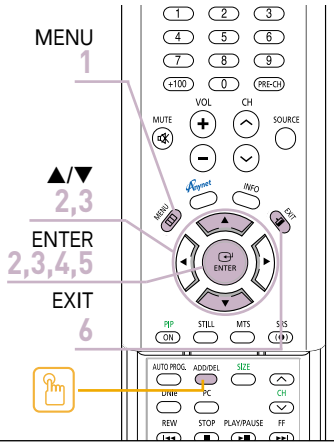


5 Repeat Steps 3 and 4 for each channel to be stored.

6 Press the [EXIT] button to finish.

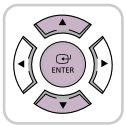
Erasing Channels

You can erase any channel you choose from memory.

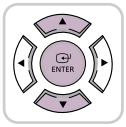


Press the channel number to erase, then press the [ADD/DEL] button.
For Example: To erase Channel 3 from memory, press [0] ➔ [3], then press the [ADD/DEL] button, then press the [ENTER] button.

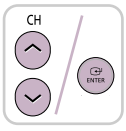
1 Press the [MENU] button.
The menu will be displayed.



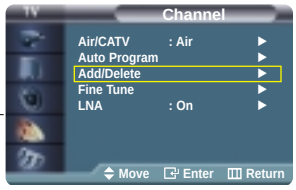
2 Press the [▲/▼] button to move to <Channel>, then press the [ENTER] button.
The <Channel> menu will be displayed.

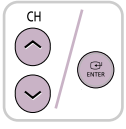


3 Press the [▲/▼] button to move to <Add/Delete>, then press the [ENTER] button.
The <Add/Delete> menu will be displayed.



4 Press the [Channel] button to select a channel to erase, then press the [ENTER] button.
The channel status will be changed from <Not in Memory> to <In Memory>.





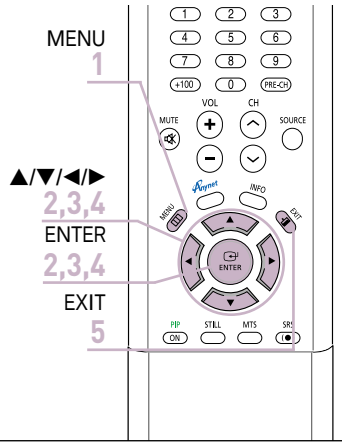
5 Repeat Steps 3 and 4 for each channel to be deleted.

6 Press the [EXIT] button to finish.

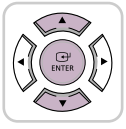
Customizing the Picture

Fine Tuning the Channels

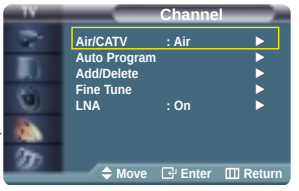
If you experience intermittent lines, blurry colors or unstable picture quality, you can fine tune the channel for optimal picture quality.

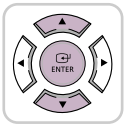


1 Press the [MENU] button.
The menu will be displayed.

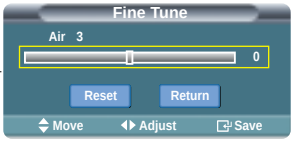


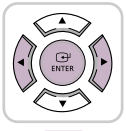
2 Press the [▲/▼] buttons to move to <Channel>, then press the [ENTER] button.
The <Channel> menu will be displayed.



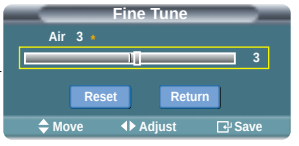


3 Press the [▲/▼] buttons to move to <Fine Tune>, then press the [ENTER] button.
The <Fine Tune> window will be displayed.





4 Press the [◀/▶] buttons to adjust the fine tuning, then press the [ENTER] button to save the adjustment.
Adjust the number until the picture is obtained.
i.e. This is an example of the Fine Tuning Channel 3.



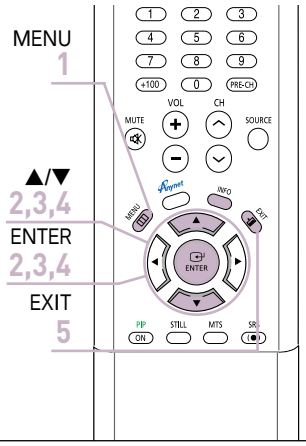
5 Press the [EXIT] button to finish.

To deselect the Fine Tuning

Instead of following Step 4 above, press the [▲/▼] buttons to select <Reset>, then press the [ENTER] button. The number will change to <0> and the Fine Tuning is set to off.

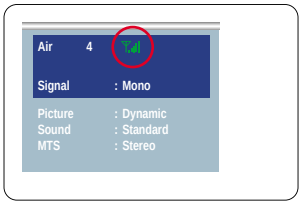
Setting the LNA (Low Noise Amplifier)

If picture noise occurs on a particular channel, the LNA function can be used to improve reception.

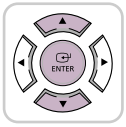


Before You Begin

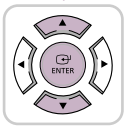
Press the [INFO] button to display the receiving sensitivity.
For broadcasting signal, it displays the receiving sensitivity of the selected channel.
More bars indicate better reception.



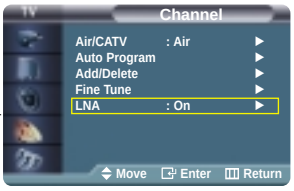
1 Press the [MENU] button.
The menu will be displayed.

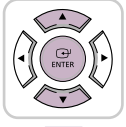


2 Press the [▲/▼] buttons to move to <Channel>, then press the [ENTER] button.
The <Channel> menu will be displayed.

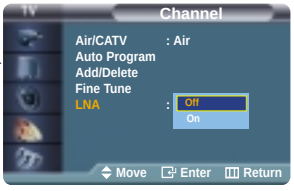


3 Press the [▲/▼] buttons to move to <LNA>, then press the [ENTER] button to display the <LNA> selections.





4 Press the [▲/▼] buttons to select <On>, then press the [ENTER] button.
The <LNA> is set to <On>.
Select <Off> to deselect the LNA function.



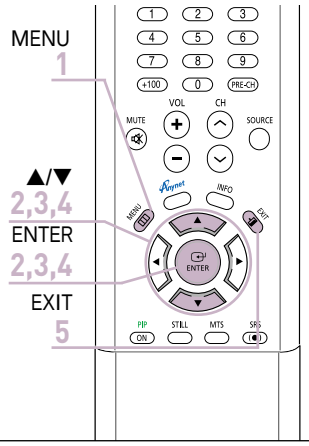
5 Press the [EXIT] button to finish.

Receiving Sensitivity Indication

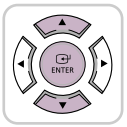
Indicator	Reception Quality
	Hardly receives the signal and disables TV watching.
	Reception with severe interference and noise.
	Reception with interference and noise.
	Relatively good reception for TV watching.
	Fine reception quality for picture display.
	Excellent reception quality for picture display.

Choosing a Menu Language

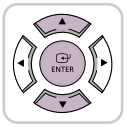
Your can select a MENU language.
English, Français, Español or Português is available for the MENU language.



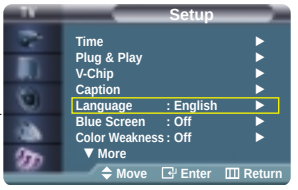
1 Press the [MENU] button.
The menu will be displayed.

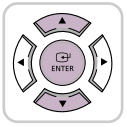


2 Press the [▲/▼] buttons to move to <Setup>, then press the [ENTER] button.
The <Setup> menu will be displayed.



3 Press the [▲/▼] buttons to move to <Language>, then press the [ENTER] button to display the <Language> selection.



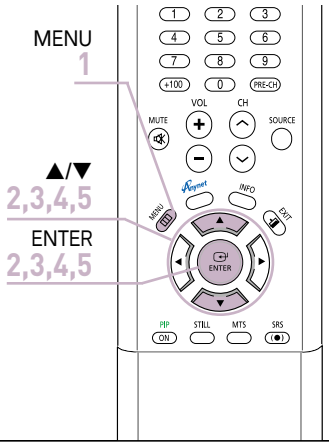


4 Press the [▲/▼] buttons to select the language of your choice, then press the [ENTER] button to change the menu language.

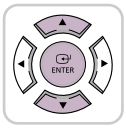
5 Press the [EXIT] button to finish.

Viewing Closed Captions

Your TV decodes and displays the closed captions that are broadcast with certain TV shows. These captions are usually subtitles for the hearing impaired or foreign-language translations. All VCRs record the closed caption signal from television programs, so home-recorded video tapes also provide closed captions. Most pre-recorded commercial video tapes provide closed captions as well. Check for the closed caption symbol in your television schedule and on the tape's packaging: CC .

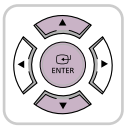


1 Press the [MENU] button.
The menu will be displayed.

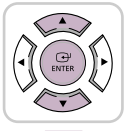


2 Press the [▲/▼] buttons to move to <Setup>, then press the [ENTER] button.
The <Setup> menu will be displayed.

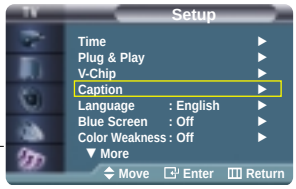
3 Press the [▲/▼] buttons to move to <Caption>, then press the [ENTER] button.
The <Caption> menu will be displayed.



4 After pressing the [ENTER] button, press the [▲/▼] buttons to move to <On>, then press the [ENTER] button.
The <Caption> is set to On.
The <Caption> mode is exited if Off is selected.



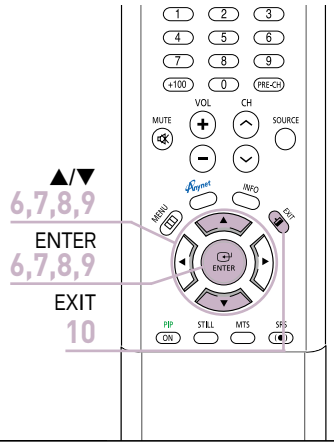
5 Press the [▲/▼] buttons to move to <Mode>, then press the [ENTER] button.
Select desired Mode by using the [▲/▼] buttons, then press the [ENTER] button.

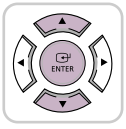


Note

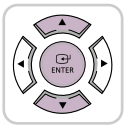
- In "Caption" mode, captions appear at the bottom of the screen, and they usually cover only a small portion of the picture.
- In "Text" mode, information unrelated to the program, such as news or weather, is displayed. Text often covers a large portion of the screen.

Viewing Closed Captions

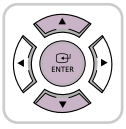




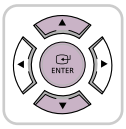
6 Press the [▲/▼] buttons to select <Channel>, then press the [ENTER] button.



7 Press the [▲/▼] buttons to select <1> or <2>, then press the [ENTER] button.



8 Press the [▲/▼] buttons to select <Field>, then press the [ENTER] button.



9 Press the [▲/▼] buttons to select <1> or <2>, then press the [ENTER] button.

10 Press the [EXIT] button to finish.

Note

- Different channels and fields display different information: “Field 2” carries additional information that supplements the information in “Field 1”. (For example, “Channel 1” may have subtitles in English, while “Channel 2” has subtitles in Spanish.)
- The Caption function doesn’t operate when the PIP is active.
- Misspellings and unusual characters sometimes occur during closed caption transmissions, especially those of live events. There may be a small delay before captions appear when you change channels. These are not malfunctions of the TV.

Setting the Picture

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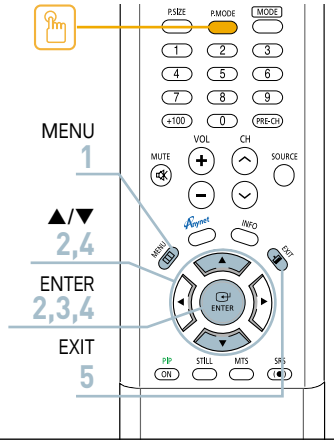
Freezing the Picture 73

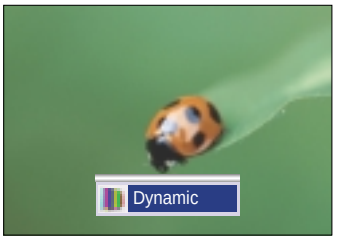
Selecting a Picture Mode

Your can change the picture settings to <Dynamic>, <Standard>, <Movie> or <Custom> to suit the circumstances.



P.MODE

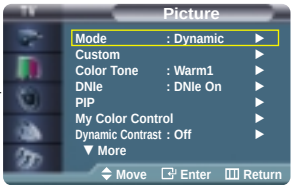
Press the [P.Mode] button.
Each press of the [P.MODE] button cycles through the settings in the order of <Dynamic>, <Standard>, <Movie>, and <Custom>.



MENU

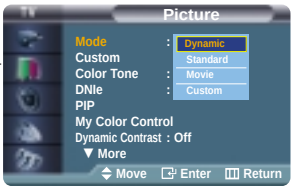
1 Press the [MENU] button.
The menu will be displayed.

2 Press the [▲/▼] buttons to move to <Picture>, then press the [ENTER] button.
The <Picture> menu will be displayed.



3 Press the [ENTER] button to select <Mode>.

4 Press the [▲/▼] buttons to move to the desired picture mode, then press the [ENTER] button.
Keep pressing the [▲/▼] buttons to cycle through the settings in the order of <Dynamic>, <Standard>, <Movie>, and <Custom>.



EXIT

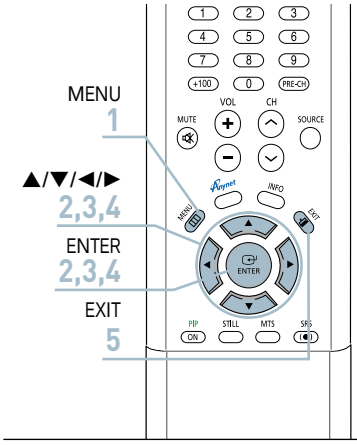
5 Press the [EXIT] button to finish.

Picture Mode

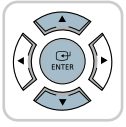
Dynamic	Choose Dynamic to increase the clarity and sharpness of the picture.
Standard	Choose Standard if viewing in a well-lit room for optimum sharpness of the picture.
Movie	Choose Movie when viewing in a dark room to lessen eye strain.
Custom	Choose Custom to view using your preferred settings. ► See page 53

Customizing the Picture Settings

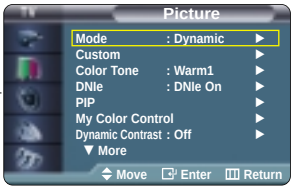
You can change the contrast, brightness, sharpness, color and tint to suit your preferences.

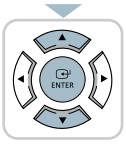


1 Press the [MENU] button.
The menu will be displayed.



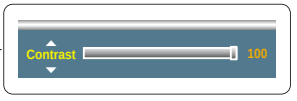
2 Press the [▲/▼] buttons to move to <Picture>, then press the [ENTER] button.
The <Picture> menu will be displayed.





3 Press the [▲/▼] button to move to <Custom>, then press the [ENTER] button.
The <Custom> menu will be displayed.

4 Press the [▲/▼] button to move to the mode of your choice, then press the [ENTER] button. When the mode of your choice is selected, press the [◀/▶] button to make an adjustment.
During the adjustment, a status window will be displayed.
The window will disappear after about 10 seconds once the adjustment is complete.



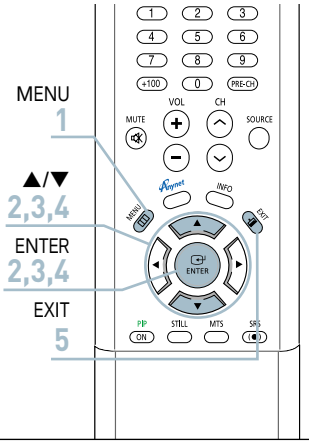
5 Press the [EXIT] button to finish.

Picture Adjustment

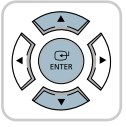
Contrast	Adjusts the lightness and darkness between objects and the background.
Brightness	Adjusts the brightness of the whole screen.
Sharpness	Adjusts the outline of objects to either sharpen it or make it more dull.
Color	Adjusts the colors making them lighter or darker.
Tint	Adjusts the color of objects making them more red or green for a more natural look.

Adjusting the Color Tone

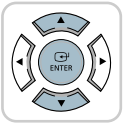
Your can change the color according to your preference.



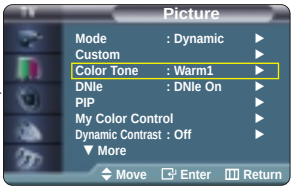
1 Press the [MENU] button.
The menu will be displayed.

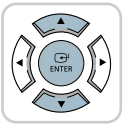


2 Press the [▲/▼] buttons to move to <Picture>, then press the [ENTER] button.
The <Picture> menu will be displayed.

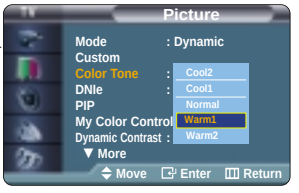


3 Press the [▲/▼] button to move to <Color Tone>, then press the [ENTER] button.
The <Color Tone> menu will be displayed.





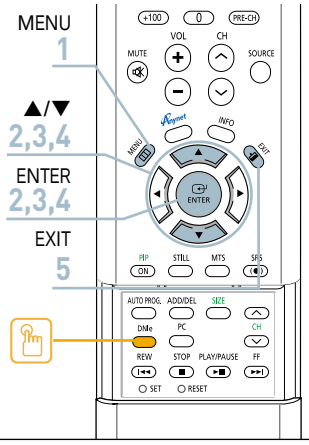
4 Press the [▲/▼] buttons to move to a tone, then press the [ENTER] button.
Keep pressing the [▲/▼] button to cycle through the tones in the order of <Cool2>, <Cool1>, <Normal>, <Warm1>, and <Warm2>.



5 Press the [EXIT] button to finish.

Setting the DNIe

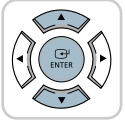
The DNIe (Digital Natural Image engine) function is unique to Samsung bringing you brighter, sharper and finer picture images.



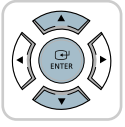
DNIe

Press the [DNIe] button on the lower part of the remote control.
Each press of the [DNIe] button cycles through <DNIe On>, <DNIe Off> and <DNIe Demo>.

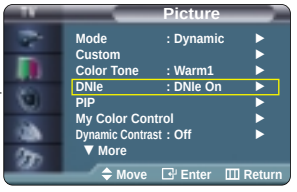
1 Press the [MENU] button.
The menu will be displayed.

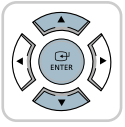


2 Press the [▲/▼] buttons to move to <Picture>, then press the [ENTER] button.
The <Picture> menu will be displayed.

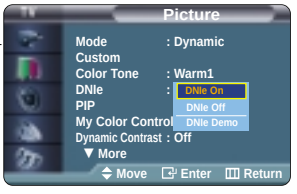


3 Press the [▲/▼] buttons to move to <DNIe>, then press the [ENTER] button.





4 Press the [▲/▼] buttons to move to <DNIe On>, then press the [ENTER] button.
If you select <DNIe Demo>, the screen shows the improved image <DNIe On> on the left-hand side and the original image <DNIe Off> on the right-hand side.

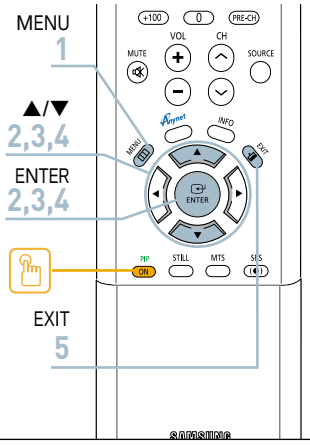


5 Press the [EXIT] button to finish.

Picture-in-Picture Function

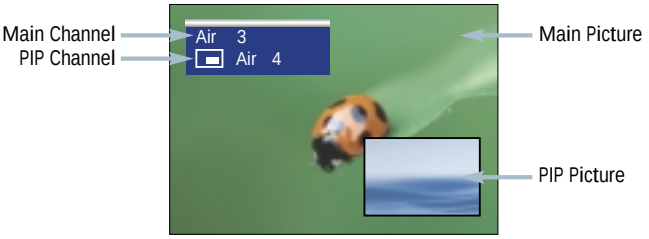
Picture-in-Picture Function

You can use the PIP function to simultaneously watch two video sources.



PIP ON

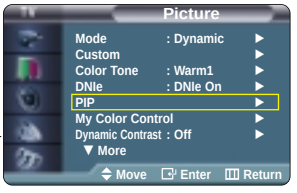
Press the [PIP] button.
Each press of the [PIP] button cycles through <PIP On> and <PIP Off>.



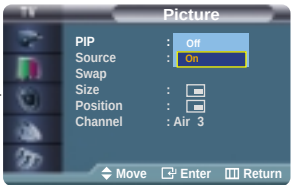
1 Press the [MENU] button.
The menu will be displayed.

2 Press the [▲/▼] buttons to move to <Picture>, then press the [ENTER] button.
The <Picture> menu will be displayed.

3 Press the [▲/▼] buttons to move to <PIP>, then press the [ENTER] button.
The <PIP> menu will be displayed.
Press the [ENTER] button to select PIP.



4 Press the [▲/▼] buttons to move to <On>, then press the [ENTER] button to set the PIP.
The <PIP> is set to <On>.
Select <Off> to deselect the PIP mode.



5 Press the [EXIT] button to finish.

PIP Settings

O: PIP Enabled, Swapping Enabled
X: PIP Disabled

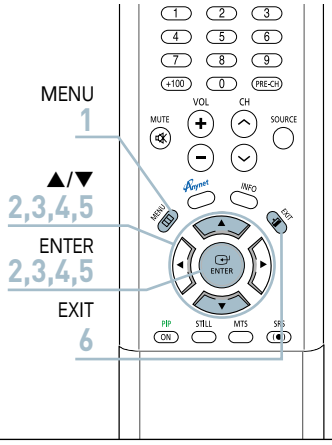
PIP \ Main Picture	TV	AV1	AV2	S-Video1	S-Video2	Component1	Component2	HDMI	DVI	PC
TV	O	O	O	O	O	O	O	O	O	O
AV1	O	X	O	O	O	O	O	O	O	O
AV2	O	O	X	O	O	O	O	O	O	O
S-Video1	O	O	O	X	O	O	O	O	O	O
S-Video2	O	O	O	O	X	O	O	O	O	O
Component1	O	O	O	O	O	X	X	O	O	X
Component2	O	O	O	O	O	X	X	O	O	X
HDMI	O	O	O	O	O	O	O	X	X	O
DVI	O	O	O	O	O	O	O	X	X	O
PC	X	X	X	X	X	X	X	X	X	X

Note

- While the PIP is in operation, the size of the main picture will change to Widescreen format.
- If one of the screens is in PC mode, the SWAP function will not work.
- Check if the V-Chip Lock (see to page 93) is On if the PIP On/Off will not function. PIP does not function when the V-Chip Lock is set to On. Change the setting to Off and try it again.

Changing the Contents of the PIP Image

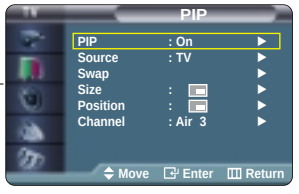
You can alternate between the external input devices connected to your TV in the PIP window.



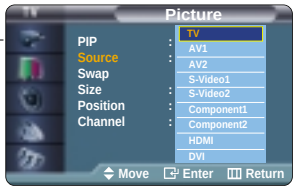
1 Press the [MENU] button.
The menu will be displayed.

2 Press the [▲/▼] buttons to move to <Picture>, then press the [ENTER] button.
The <Picture> menu will be displayed.

3 Press the [▲/▼] buttons to move to <PIP>, then press the [ENTER] button.
The <PIP> menu will be displayed.
Select PIP On. ▶ See page 56



4 Press the [▲/▼] buttons to move to <Source>, then press the [ENTER] button.
The list of <Input Sources> which can be shown in the PIP window will be displayed.



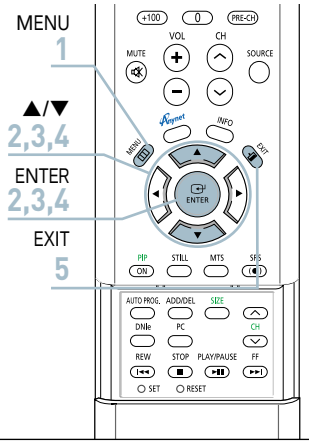
5 Press the [▲/▼] buttons to move to an input source connected to your TV, then press the [ENTER] button.
The <Source> will be selected.

6 Press the [EXIT] button to finish.

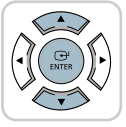
Picture-in-Picture Function

Swapping the Main Image and PIP Image

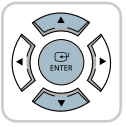
You can swap the image in the PIP window and the image on the main screen.



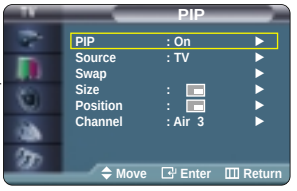
1 Press the [MENU] button.
The menu will be displayed.

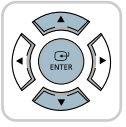


2 Press the [▲/▼] buttons to move to <Picture>, then press the [ENTER] button.
The <Picture> menu will be displayed.

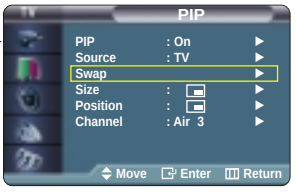


3 Press the [▲/▼] buttons to move to <PIP>, then press the [ENTER] button.
The <PIP> menu will be displayed.
Select PIP On. ▶ See page 56





4 Press the [▲/▼] buttons to move to <Swap>, then press the [ENTER] button.
Each time you press the [ENTER] button the PIP image and Main image will be swapped.



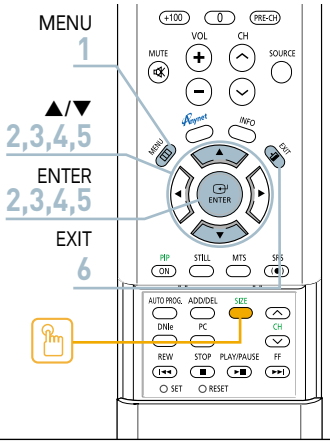
5 Press the [EXIT] button to finish.

Note

If one of the screens is in PC mode the SWAP function will not work.

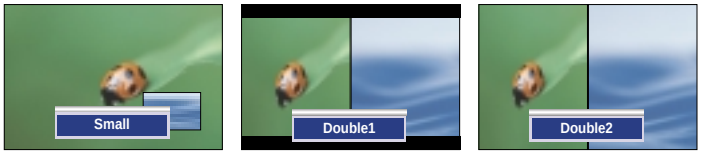
Changing the Size of the PIP Window

You can change the size of the PIP window.

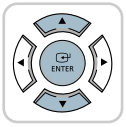


SIZE

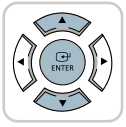
Press the [SIZE] button on the lower part of the remote control.
Each press of the [SIZE] button cycles through <Small>, <Double1> and <Double2>.



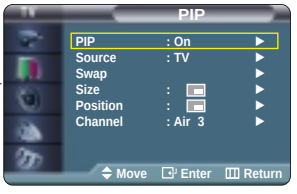
1 Press the [MENU] button.
The menu will be displayed.

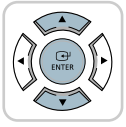


2 Press the [▲/▼] buttons to move to <Picture>, then press the [ENTER] button.
The <Picture> menu will be displayed.

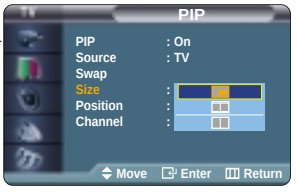


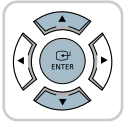
3 Press the [▲/▼] buttons to move to <PIP>, then press the [ENTER] button.
The <PIP> menu will be displayed.
Select PIP On. ▶ See page 56





4 Press the [▲/▼] buttons to move to <Size>, then press the [ENTER] button to display the <Size> selections.





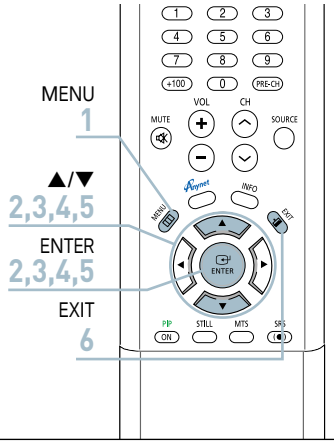
5 Press the [▲/▼] buttons to move to a size of your choice, then press the [ENTER] button.
The size of the PIP window will be changed.

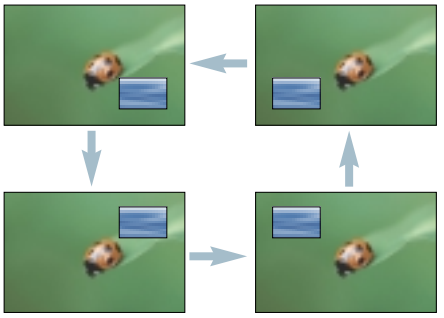
6 Press the [EXIT] button to finish.

Picture-in-Picture Function

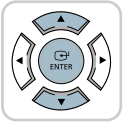
Changing the Position of the PIP window

You can alternate the position of the PIP window between the four corners of the screen.

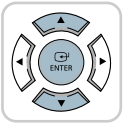




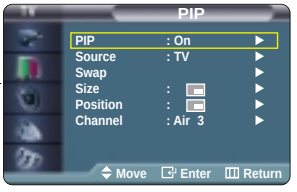
1 Press the [MENU] button.
The menu will be displayed.

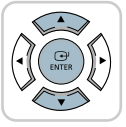


2 Press the [▲/▼] buttons to move to <Picture>, then press the [ENTER] button.
The <Picture> menu will be displayed.

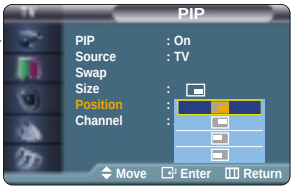


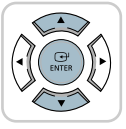
3 Press the [▲/▼] buttons to move to <PIP>, then press the [ENTER] button.
The <PIP> menu will be displayed.
Select PIP On. ▶ See page 56





4 Press the [▲/▼] buttons to move to <Position>, then press the [ENTER] button to display the <Position> selections.





5 Press the [▲/▼] buttons to move to the position of your choice, then press the [ENTER] button.
The position of the PIP window will be changed.

6 Press the [EXIT] button to finish.

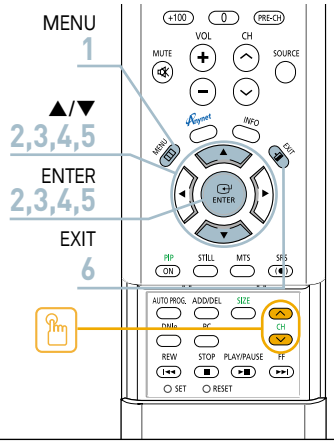
Note

You cannot select Position when the PIP window size is in the Double 1 or Double 2 modes.

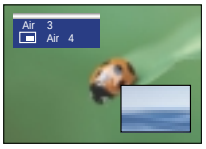
Picture-in-Picture Function

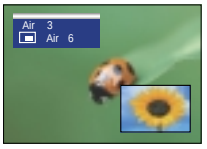
Changing the PIP Channel

You can change the PIP channel.

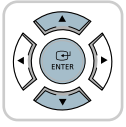


Press the [CH] button on the lower part of the remote control.
When the [CH] button is pressed, the PIP channel will be changed.

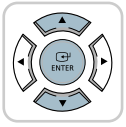




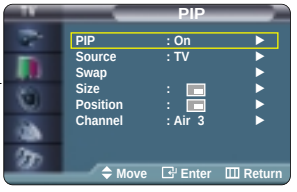
1 Press the [MENU] button.
The menu will be displayed.

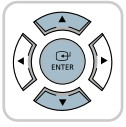


2 Press the [▲/▼] buttons to move to <Picture>, then press the [ENTER] button.
The <Picture> menu will be displayed.

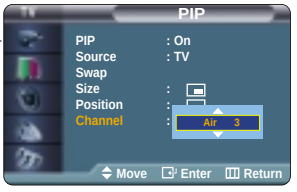


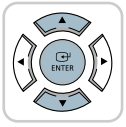
3 Press the [▲/▼] buttons to move to <PIP>, then press the [ENTER] button.
The <PIP> menu will be displayed.
Select PIP On. ▶ See page 56





4 Press the [▲/▼] buttons to move to <Channel>, then press the [ENTER] button to display the Channel selections.





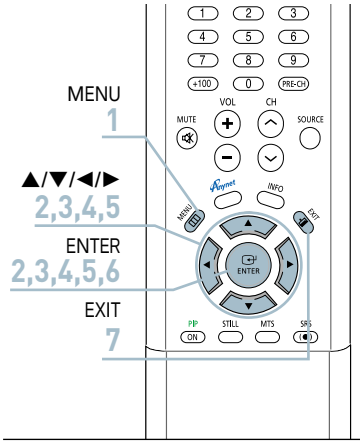
5 Press the [▲/▼] buttons to move to a channel of your choice, then press the [ENTER] button.
The PIP channel will be changed.

6 Press the [EXIT] button to finish.

Setting the My Color Control

My Color Control

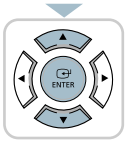
Blue, Green and Pink tones are easily adjustable to suit your preferences.



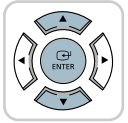
My Color Control?

My Color Control allows users to adjust colors to their preference, by adjusting Blue, Green and Pink tones using the predefined settings (Blue, Green, Pink, Standard and Custom) without affecting the other colors in the picture.

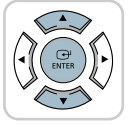
1 Press the [MENU] button.
The menu will be displayed.



2 Press the [▲/▼] buttons to move to <Picture>, then press the [ENTER] button.
The <Picture> menu will be displayed.



3 Press the [▲/▼] buttons to move to <My Color Control>, then press the [ENTER] button.
The <My Color Control> menu will be displayed.

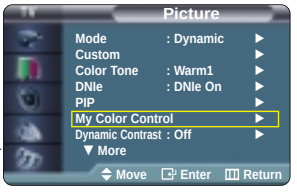


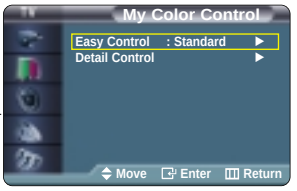
4 Press the [▲/▼] buttons to move to <Easy Control>, then press the [ENTER] button.
The <Easy Control> window will be displayed.

5 Press the [◀/▶] buttons to select among the various picture settings.
The original picture is shown on the left side, while the selected mode is shown on the right side.

6 When the mode of your preference is shown on the right side, press the [ENTER] button.
The selected mode is now set and fills the screen.

7 Press the [EXIT] button to finish.





Note

- There are three My Color Control modes: Blue, Green, Pink, Standard and Custom.
- The My Color Control function can only be used in while in DNIe mode.
- It does not work in PC mode.

My Color Control Mode Characteristics

Using My Color Control mode, you can enjoy the vivid colors shown below.

Standard Picture

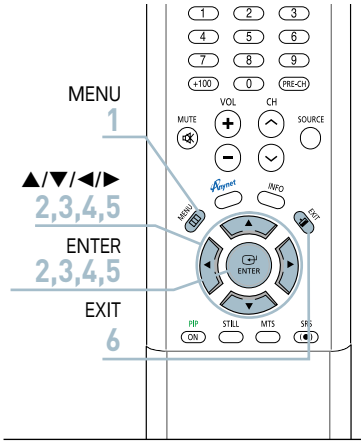
Emphasizing Clear Blues

Emphasizing Mild Greens

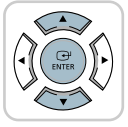
Emphasizing Warm Skin Colors

Above illustrations are provided for instruction. Actual adjustment screen may differ from illustrations shown above.

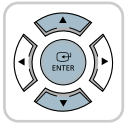
My Color Control Custom Settings



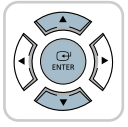
1 Press the [MENU] button.
The menu will be displayed.



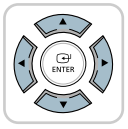
2 Press the [▲/▼] buttons to move to <Picture>, then press the [ENTER] button.
The <Picture> menu will be displayed.



3 Press the [▲/▼] buttons to move to <My Color Control>, then press the [ENTER] button.
The <My Color Control> menu will be displayed.

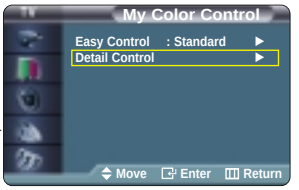


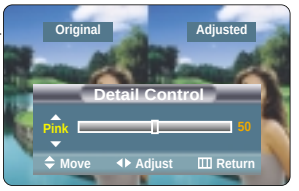
4 Press the [▲/▼] buttons to move to <Detail Control>, then press the [ENTER] button.
The <Detail Control> menu will be displayed.



5 Press the [▲/▼] buttons to move to the desired color, press the [ENTER] button, then press the [◀/▶] button to adjust the desired color.

6 Press the [EXIT] button to finish.

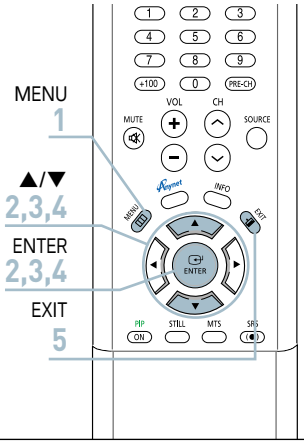




Note

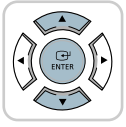
- To return to the factory default settings, press the [▲/▼] button to select <Reset>.
- This function can only be used in DNIe mode.
- It does not work in PC mode.

Dynamic Contrast Settings

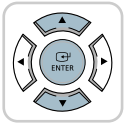


Dynamic Contrast?
Dynamic Contrast automatically detects the visual signal and adjusts to create optimum contrast.

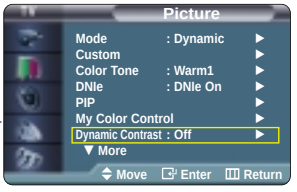
1 Press the [MENU] button.
The menu will be displayed.

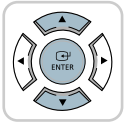


2 Press the [▲/▼] buttons to move to <Picture>, then press the [ENTER] button.
The <Picture> menu will be displayed.

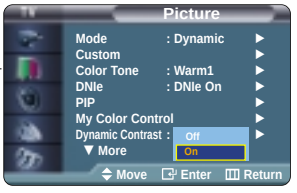


3 Press the [▲/▼] buttons to move to <Dynamic Contrast>, then press the [ENTER] button.
The <Dynamic Contrast> menu will be displayed.



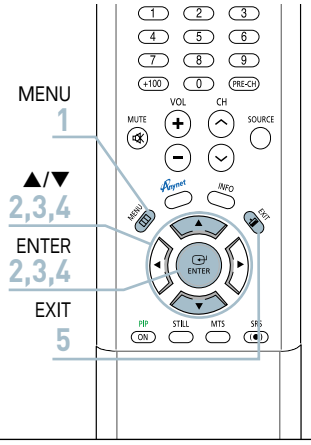


4 Press the [▲/▼] buttons to move to <On>, then press the [ENTER] button.
The <Dynamic Contrast> is to set <On>.
Select <Off> to deselect the Dynamic Contrast function.



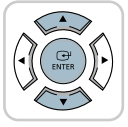
5 Press the [EXIT] button to finish.

Brightness Sensor Settings

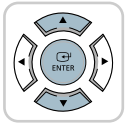


Brightness Sensor?
Brightness Sensor adjusts the screen brightness automatically depending on the surrounding lighting conditions.

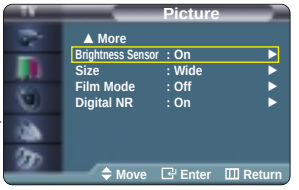
1 Press the [MENU] button.
The menu will be displayed.

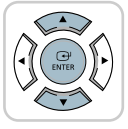


2 Press the [▲/▼] buttons to move to <Picture>, then press the [ENTER] button.
The <Picture> menu will be displayed.

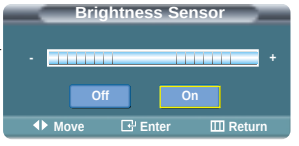


3 Press the [▲/▼] buttons to move to <Brightness Sensor>, then press the [ENTER] button to select <Brightness Sensor>.





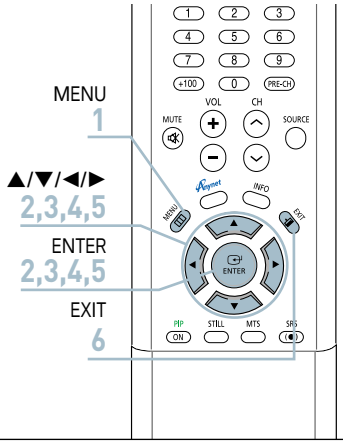
4 Press the [◀/▶] buttons to move to <On>, then press the [ENTER] button to set the Brightness Sensor function.
Alternatively select <Off> to deselect the Brightness Sensor function.



5 Press the [EXIT] button to finish.

Setting the Color Weakness Enhancement Mode

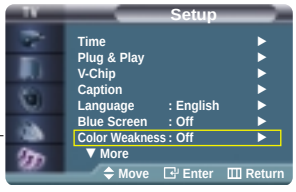
This option adjusts the Red, Blue or Green color to enhance the image according to the user's particular color weakness.



1 Press the [MENU] button.
The menu will be displayed.

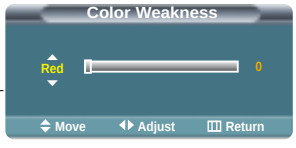
2 Press the [▲/▼] buttons to move to <Picture>, then press the [ENTER] button.
The <Picture> menu will be displayed.

3 Press the [▲/▼] buttons to move to <Color Weakness>, then press the [ENTER] button.
The <Color Weakness> menu will be displayed.



4 Press the [ENTER] button again, and press the [▲/▼] button to move to <On>, then press the [ENTER] button.

5 Press the [▲/▼] buttons to move to a color to adjust, then press the [ENTER] button. When the desired item is selected, press the [◀/▶] button to adjust to your preference.
An additional window will appear during the adjustment.
This window will disappear after about 7 seconds when the adjustment is complete.



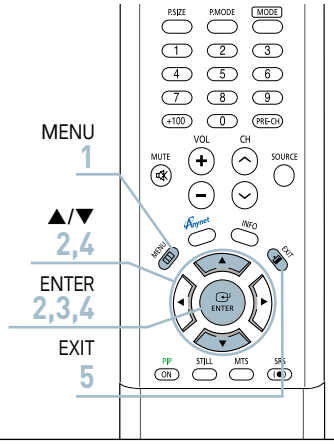
6 Press the [EXIT] button to finish.

Note

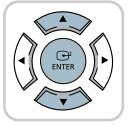
- This function can only be used in DNIe mode.
- It does not work in PC mode.

Changing the Screen Size

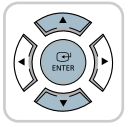
You can change the size of the screen according to the image.



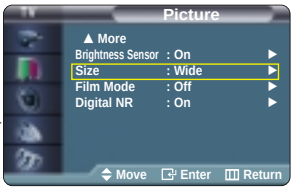
1 Press the [MENU] button.
The menu will be displayed.

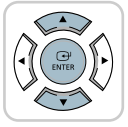


2 Press the [▲/▼] buttons to move to <Picture>, then press the [ENTER] button.
The <Picture> menu will be displayed.

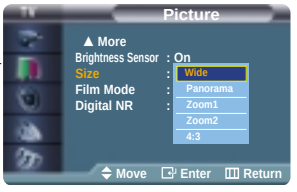


3 Press the [▲/▼] buttons to move to <Size>, then press the [ENTER] button to display the <Size> selections.





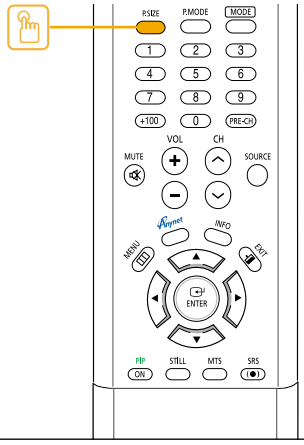
4 Press the [▲/▼] buttons to move to the size of your choice, then press the [ENTER] button.
Setup is switched to the selected screen size.



5 Press the [EXIT] button to finish.

Note

In [PC] and [DVI] mode, only <Wide> and <4:3> sizes are available.



P.SIZE

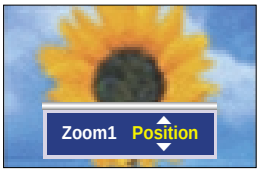
Press the [P.SIZE] button to change the screen size. Each press of the [P.SIZE] button switches the picture size between <Wide>, <Panorama>, <Zoom1>, <Zoom2> and <4:3>.

Picture Size

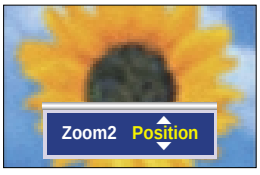
Wide
Sets the picture to 16:9 Wide Mode suitable for DVD or Wide pictures.

Panorama
Use this mode to change from 16:9 to 4:3 mode.

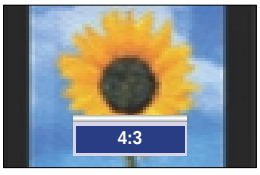
Zoom1
Magnifies the 16:9 mode to fill the full screen.
Press the [▲/▼] button to move the picture up or down.



Zoom2
Magnifies the size of the screen in Zoom1 mode.
Press the [▲/▼] button to move the picture up or down.



4:3
Sets the video or current picture to 4:3 standard mode.



Caution

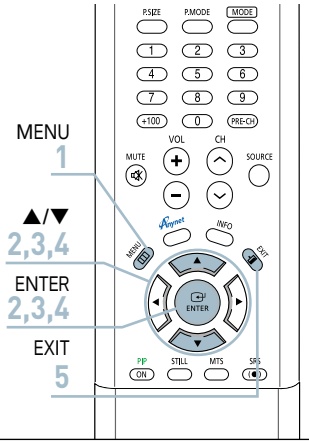
Displaying stationary images that exceed the above guidelines can cause uneven aging of the display that leave subtle, but permanent burned-in ghost images in the picture.
To avoid this, vary the programming and images, and primarily display full screen moving images, not stationary patterns or dark bars that may appear when you select the 4:3(Normal) picture mode. Be careful in the selection and duration of television formats used for viewing. Uneven display aging as a result of format selection and use, as well as burned-in images, are not covered by your Samsung limited warranty.

Note

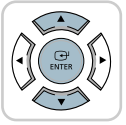
- Zoom mode is only enabled when the input source is TV, AV, S-Video or Component.
- Panorama, Zoom 1 or Zoom 2 is disabled in PC or DVI mode.
- The screen size can be adjusted in each input mode, and the PIP is only enabled in Wide mode.
- The Panorama mode is disabled in Component modes (480p, 720p, 1080i, 1080p).

Film Mode Setup

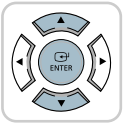
Use Film Mode for the best picture quality when viewing a film.



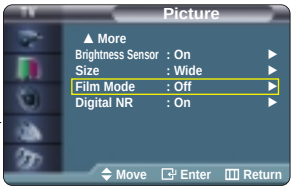
1 Press the [MENU] button.
The menu will be displayed.

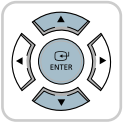


2 Press the [▲/▼] buttons to move to <Picture>, then press the [ENTER] button.
The <Picture> menu will be displayed.

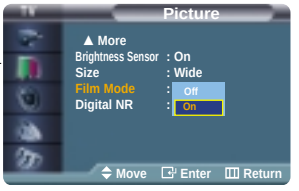


3 Press the [▲/▼] buttons to move to <Film Mode>, then press the [ENTER] button to display the <Film Mode> selections.





4 Press the [▲/▼] buttons to move to <On>, then press the [ENTER] button.
The <Film Mode> is set to <On>.
Select <Off> to deselect Film Mode.



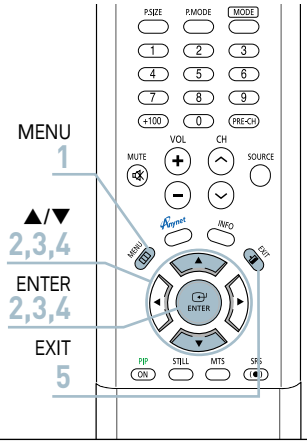
5 Press the [EXIT] button to finish.

Note

Film Mode is only enabled in Video, S-Video or Component (480i) mode.

Digital Noise Reduction

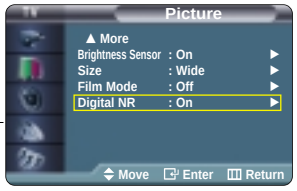
If the broadcast signal received by your TV is weak, you can activate the Digital Noise Reduction feature to help reduce any static and ghosting that may appear on the screen.



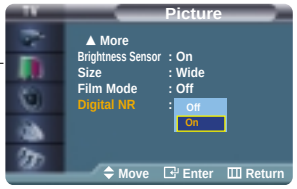
1 Press the [MENU] button.
The menu will be displayed.

2 Press the [▲/▼] buttons to move to <Picture>, then press the [ENTER] button.
The <Picture> menu will be displayed.

3 Press the [▲/▼] buttons to move to <Digital NR>, then press the [ENTER] button to display the <Digital NR> selections.



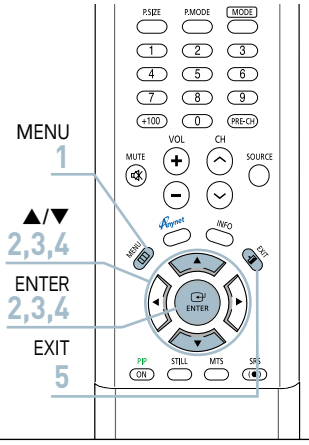
4 Press the [▲/▼] buttons to move to <On>, then press the [ENTER] button.
The <Digital NR> is set to <On>.
Select <Off> to deselect the Digital NR function.



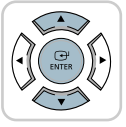
5 Press the [EXIT] button to finish.

Blue Screen Mode Setup

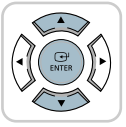
If no signal is being received or the signal is very weak, a blue screen automatically replaces the noisy picture. To view channels with weak signals, it may be necessary to turn the Blue Screen mode Off.



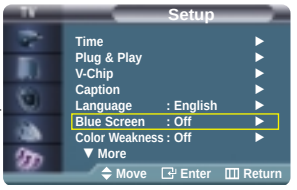
1 Press the [MENU] button.
The menu will be displayed.

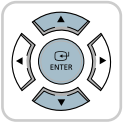


2 Press the [▲/▼] buttons to move to <Setup>, then press the [ENTER] button.
The <Setup> menu will be displayed.

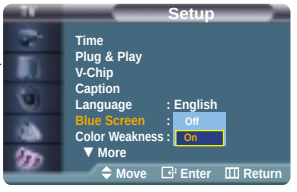


3 Press the [▲/▼] buttons to move to <Blue Screen>, then press the [ENTER] button to display the <Blue Screen> selections.



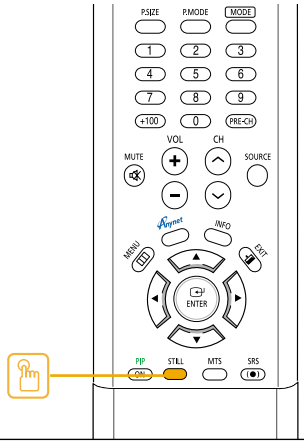


4 Press the [▲/▼] buttons to select <On>, then press the [ENTER] button.
The <Blue Screen> is set to <On>.
Select <Off> to deselect the Blue Screen function.



5 Press the [EXIT] button to finish.

Freezing the Picture



STILL

Press the [STILL] button.
Each press of the [STILL] button toggles between On and Off.

Note

Normal sound will still be heard when the picture is frozen.

Setting the Sound

Selecting the Sound Mode 76

Adjusting the Equalizer 77

Setting Multi-Channel Sound (MTS) 78

Automatic Volume Control 79

SRS TruSurround XT Setup 80

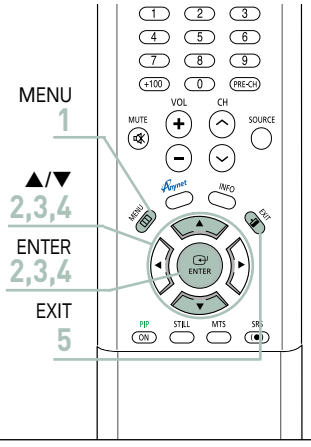
Setting the Sub Woofer Output 81

Selecting the Sub(PIP) Window Sound 82

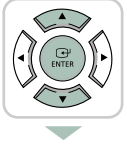
Setting up the Melody Sound 83

Selecting the Sound Mode

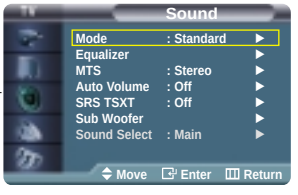
You can select a sound setting among <Music>, <Movie> or <Speech>.

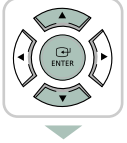


1 Press the [MENU] button.
The menu will be displayed.

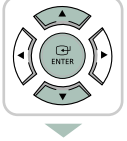


2 Press the [▲/▼] buttons to move to <Sound>, then press the [ENTER] button.
The <Sound> menu will be displayed.

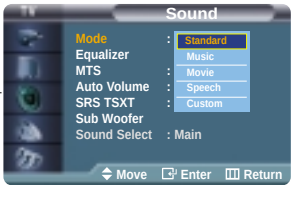




3 Press the [ENTER] button to select <Mode>.



4 Press the [▲/▼] buttons to move to the desired sound mode, then press the [ENTER] button.
Each time you press the [▲/▼] button you cycle through <Standard>, <Music>, <Movie>, <Speech> and <Custom>.



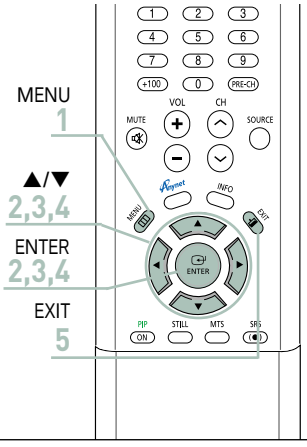
5 Press the [EXIT] button to finish.

Sound Mode

Standard	Standard settings suitable for all programs.
Music	Enhances of playback of music.
Movie	Emphasizes bass tones.
Speech	Emphasizes crisp, clear dialogue.
Custom	Recalls your personalized settings. ▶ See page 77

Adjusting the Equalizer

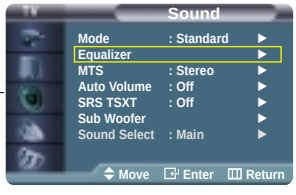
You can adjust the L/R balance and different frequencies.

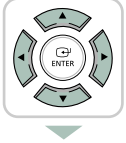


1 Press the [MENU] button.
The menu will be displayed.

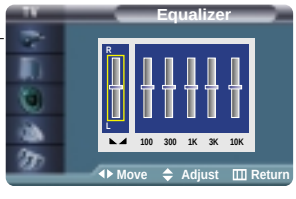
2 Press the [▲/▼] buttons to move to <Sound>, then press the [ENTER] button.
The <Sound> menu will be displayed.

3 Press the [▲/▼] buttons to move to <Equalizer>, then press the [ENTER] button to display the <Equalizer> adjustments.



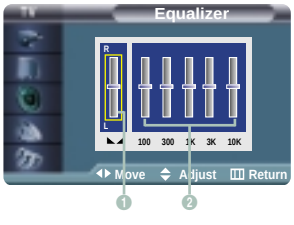


4 Press the [◀/▶] buttons to move to the item of your choice, then press the [▲/▼] buttons to adjust.



5 Press the [EXIT] button to finish.

Sound Adjustment

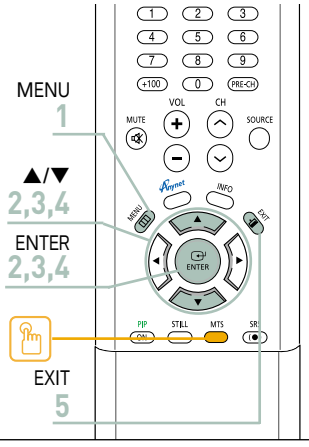


1 **L/R Sound Balance Adjustment**
To adjust the sound balance of the L/R speakers.

2 **Bandwidth Adjustment**
To adjust the level of different bandwidth frequencies.

Setting Multi-Channel Sound (MTS)

Depending on the particular program being broadcast, you can listen to stereo, mono, or a Secondary Audio Program. (SAP audio is usually a foreign-language translation. Sometimes SAP has unrelated information like news or weather.)



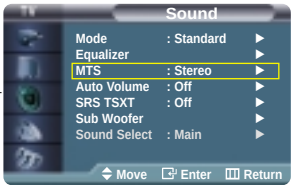
MTS

Press the [MTS] button.
Each press of the [MTS] button cycles through <Mono>, <Stereo> and <SAP>.

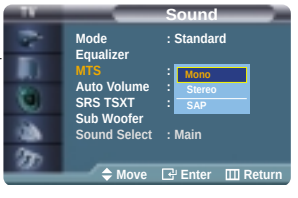
1 Press the [MENU] button.
The menu will be displayed.

2 Press the [▲/▼] buttons to move to <Sound>, then press the [ENTER] button.
The <Sound> menu will be displayed.

3 Press the [▲/▼] buttons to move to <MTS>, then press the [ENTER] button to display the <MTS> selections.



4 Press the [▲/▼] buttons to move to the desired MTS Setting, then press the [ENTER] button.
Each time you press the [▲/▼] button you cycle through “Mono”, “Stereo” and “SAP”.



5 Press the [EXIT] button to finish.

Note

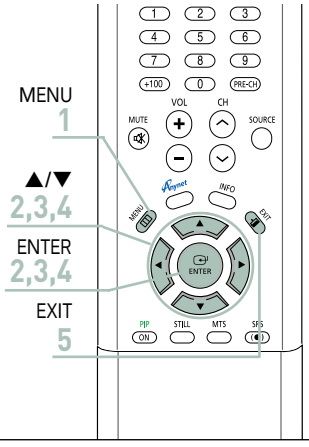
- The MTS function operates in TV mode only.

MTS Setting

Stereo	Choose Stereo for channels that are broadcasting in stereo.
Mono	Choose Mono for channels that are broadcasting in mono, or if you are having difficulty receiving a stereo signal.
SAP	Choose SAP to listen to the Secondary Audio Program, which is usually a foreign-language translation.

Automatic Volume Control

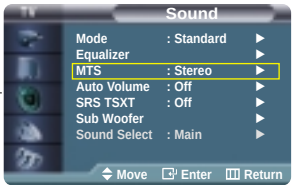
Each broadcasting station has its own signal conditions, which can make it necessary to adjust the volume every time the channel is changed. “Auto volume” lets you automatically adjust the volume of the desired channel by lowering the sound output when the modulation signal is high or by raising the sound output when the modulation signal is low.

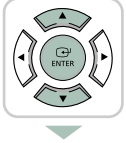


1 Press the [MENU] button.
The menu will be displayed.

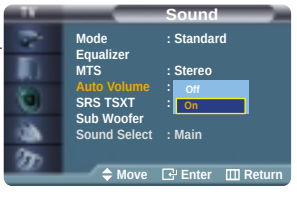
2 Press the [▲/▼] buttons to move to <Sound>, then press the [ENTER] button.
The <Sound> menu will be displayed.

3 Press the [▲/▼] buttons to move to <Auto Volume>, then press the [ENTER] button to display the <Auto Volume> selections.





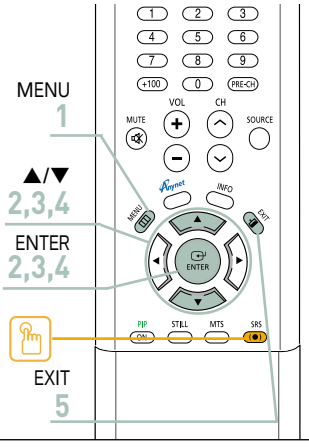
4 Press the [▲/▼] buttons to move to <On>, then press the [ENTER] button to select the Auto Volume function.
The <Auto Volume> is set to <On>.
Select <Off> to deselect the Auto Volume function.



5 Press the [EXIT] button to finish.

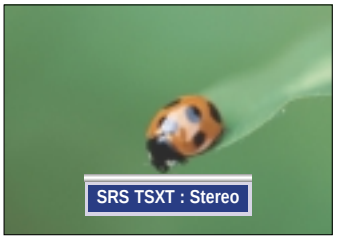
SRS TruSurround XT Setup

TruSurround XT is a patented SRS technology that solves the problem of playing 5.1 multichannel content over two speakers. 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.



SRS

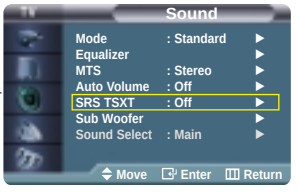
Press the [SRS TSXT] button.
Each press of the [SRS TSXT] button cycles through the selections in this order: <Off>, <3D Mono> and <Stereo>.



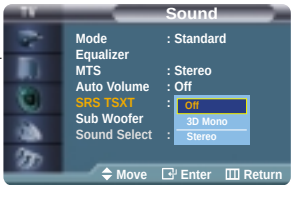
1 Press the [MENU] button.
The menu will be displayed.

2 Press the [▲/▼] buttons to move to <Sound>, then press the [ENTER] button.
The <Sound> menu will be displayed.

3 Press the [▲/▼] buttons to move to <SRS TSXT>, then press the [ENTER] button to display the <SRS TSXT> selections.



4 Press the [▲/▼] buttons to move to <3D Mono> or <Stereo>, then press the [ENTER] button to select either the 3D Mono or Stereo setting.
Select <Off> to deselect TruSurround XT.



5 Press the [EXIT] button to finish.

SRS TruSurround XT

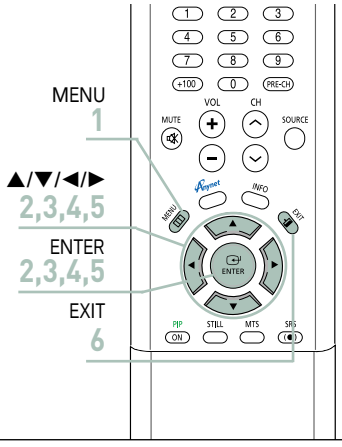
TruSurround XT, SRS and (●) Symbol are trademarks of SRS Labs, Inc. TruSurround XT technology is incorporated under license from SRS Labs, Inc.

SRS TSXT Mode

3D Mode	Select if the audio signals are Mono.
Stereo	Select if the audio signals are stereo.

Setting the Sub Woofer Output

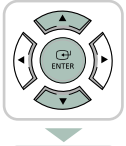
If your TV is connected to a Sub Woofer, you can select the Sub Woofer output, volume and cut-off frequencies.



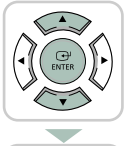
Sub Woofer Menu

Sub Woofer	Select <On> or <Off>. Select <On> to use the Sub Woofer Functions.
Volume	Adjust the Volume of the Sub Woofer.
Cut off Freq.	Adjust the cut off frequency for the subwoofer for the best bass response in your room.

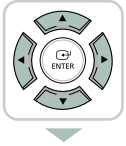
1 Press the [MENU] button.
The menu will be displayed.



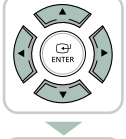
2 Press the [▲/▼] buttons to move to <Sound>, then press the [ENTER] button.
The <Sound> menu will be displayed.



3 Press the [▲/▼] buttons to move to <Sub Woofer>, then press the [ENTER] button.
The <Sub Woofer> menu will be displayed.

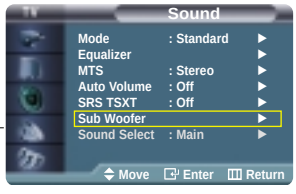


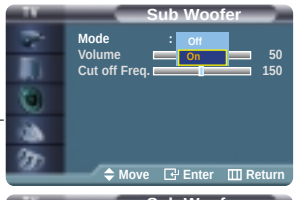
4 Press the [ENTER] button again, then press the [▲/▼] buttons to move to <On>. Press the [ENTER] button.
The <Mode> is set to <On>.
Select <Off> to deselect the Sub Woofer setting.

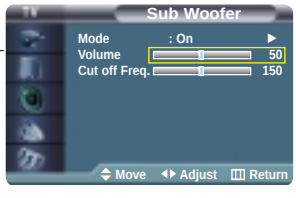


5 Press the [▲/▼] buttons to move to an item of your choice, then press the [◀/▶] button to make adjustments.

6 Press the [EXIT] button to finish.





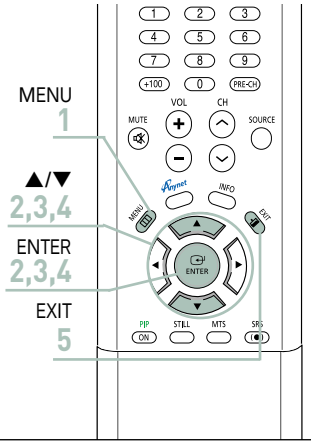


Note

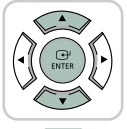
- Low bass is not played back through the speakers (L/R) when the Sub Woofer is activated.
- Use an Active type Sub Woofer to hear the bass when using the Sub Woofer Line Out terminal.

Selecting the Sub(PIP) Window Sound

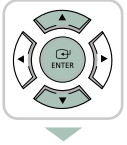
You can select a sound type for the Sub Window.



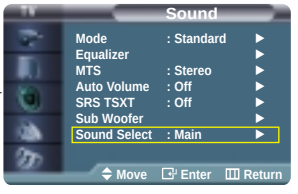
1 Press the [MENU] button.
The menu will be displayed.

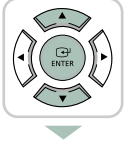


2 Press the [▲/▼] buttons to move to <Sound>, then press the [ENTER] button.
The <Sound> menu will be displayed.

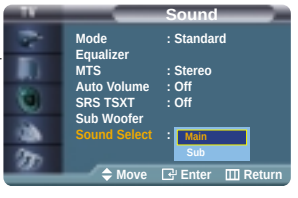


3 Press the [▲/▼] buttons to move to <Sound Select>, then press the [ENTER] button to display the <Sound Select> selections.





4 Press the [▲/▼] buttons to move to <Sub>, then press the [ENTER] button to select a sound for the sub window.



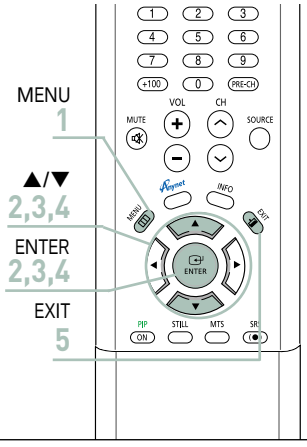
5 Press the [EXIT] button to finish.

Note

- This function only works in PIP mode.

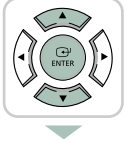
Setting up the Melody Sound

You can select a melody sound to play each time you turn the TV on or off with the remote control.

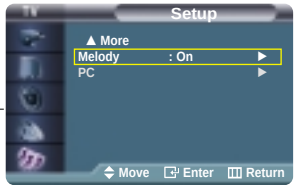


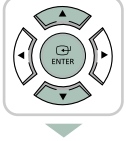
1 Press the [MENU] button.
The menu will be displayed.

2 Press the [▲/▼] buttons to move to <Setup>, then press the [ENTER] button.
The <Setup> menu will be displayed.

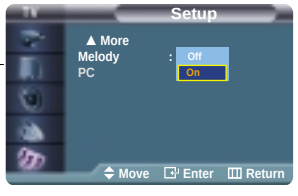


3 Press the [▲/▼] buttons to move to <Melody>, then press the [ENTER] button to display the <Melody> selections.





4 Press the [▲/▼] buttons to move to <On>, then press the [ENTER] button.
The <Melody> is set to <On>.
Select <Off> to deselect the Melody.



5 Press the [EXIT] button to finish.

Setting the Clock

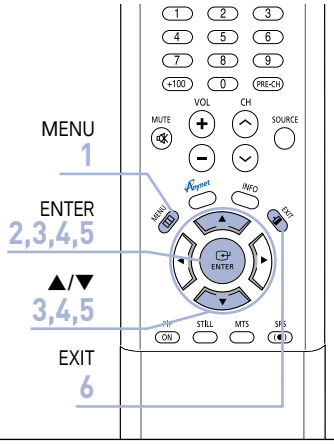
Setting the Current Time 86

Setting the On/Off Timer..... 87

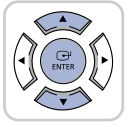
Setting the Sleep Timer..... 90

Setting the Current Time

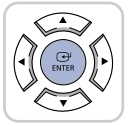
Setting the clock enables the use of the various TV timer features.



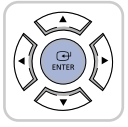
1 Press the [MENU] button.
The menu will be displayed.



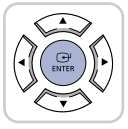
2 Press the [▲/▼] buttons to move to <Setup>, then press the [ENTER] button.
The <Setup> menu will be displayed.



3 Press the [ENTER] button to select the <Time>.
The <Time> setting menu will be displayed.

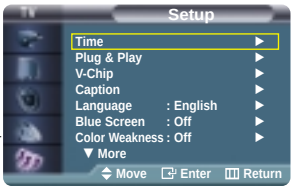


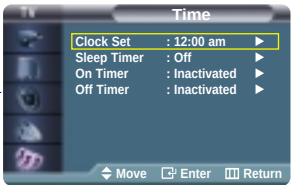
4 Press the [ENTER] button to select <Clock Set>.
The <Clock Set> menu will be displayed.



5 Press the [▲/▼/◀/▶] buttons to set <Hour>, <Minute> and <am/pm>.

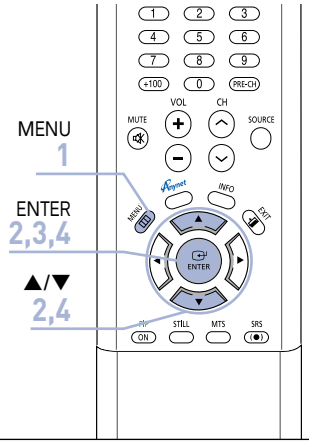
6 Press the [EXIT] button to finish.





Setting the On/Off Timer

You can set the TV to be automatically turned on or off at a preset time.

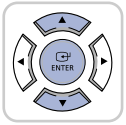


Before You Begin

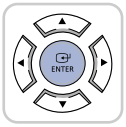
Set the TV's clock first. ▶ See page 86

Setting the On/Off Timer

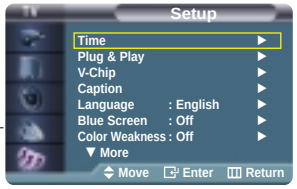
1 Press the [MENU] button.
The menu will be displayed.

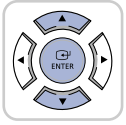


2 Press the [▲/▼] buttons to move to <Setup>, then press the [ENTER] button.
The <Setup> menu will be displayed.

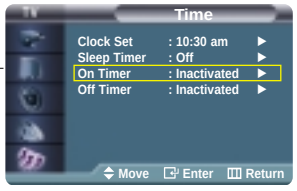


3 Press the [ENTER] button to select the <Time>.
The <Time> setting menu will be displayed.



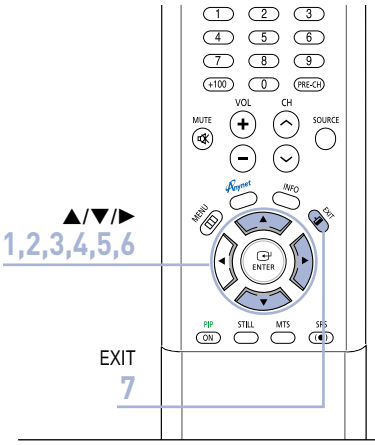


4 Press the [▲/▼] buttons to move to <On Timer> or <Off Timer>, then press the [ENTER] button to display the <On Timer> or <Off Timer> menu.
This is an example of the <On Timer> being selected.

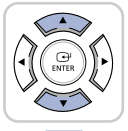


5 Please refer to the examples on the following pages to set the <On Timer> or <Off Timer>.

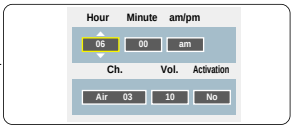
Setting the On/Off Timer

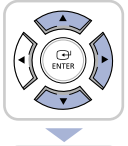


You can set the timer to turn the TV on at 6:30am, to Channel 6 with the Volume set at level 10.

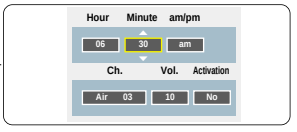


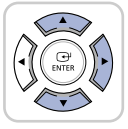
1 Press the [▲/▼] buttons to set it to <6>.
The <Hour> setting of the <On Timer> is now set to <6>.



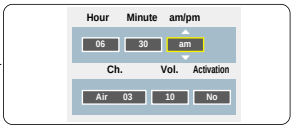


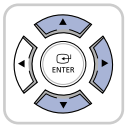
2 Press the [►] button to move to <Minute>, then press the [▲/▼] buttons to set it to <30>.
The <Minute> setting of the <On Timer> is now set to <30>.



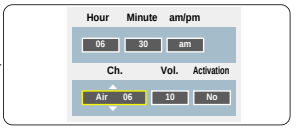


3 Press the [►] button to move to <am/pm>, then press the [▲/▼] buttons to select <am>.
The <am/pm> setting of the <On Timer> is set to <am>.

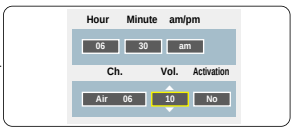


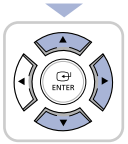


4 Press the [►] button to move to <Ch.>, then press the [▲/▼] buttons to select <Air 06>.
The <Ch.> setting of the <On Timer> is now set to <Air 06>.

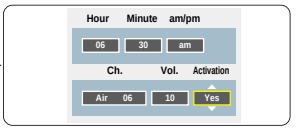


5 Press the [► button to move to <Vol.>, then press the [▲/▼] buttons to set it to <10>.
The <Vol.> setting of the <On Timer> is now set at <10>.

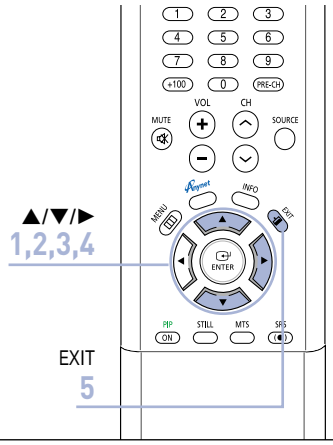




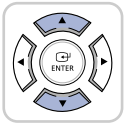
6 Press the [►] button to move to <Activation>, then press the [▲/▼] buttons to select <Yes>.
The <On Timer> is now setup.
Select <No> to deselect the <On Timer>.



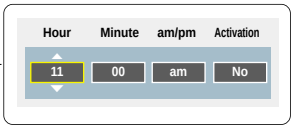
7 Press the [EXIT] button to finish.

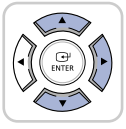


For example: You can set the timer to turn the TV off at 11:30pm

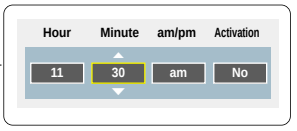


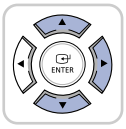
1 Press the [▲/▼] buttons to set it to <11>.
The <Hour> setting of the <Off Timer> is now set to <11>.



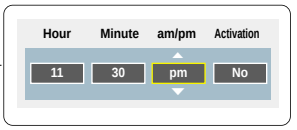


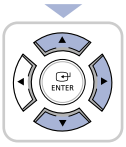
2 Press the [►] button to move to <Minute>, then press the [▲/▼] buttons to set it to <30>.
The <Minute> setting of the <Off Timer> is now set to <30>.



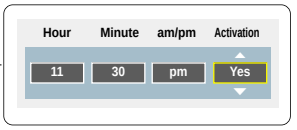


3 Press the [►] button to move to <am/pm>, then press the [▲/▼] buttons to select <pm>.
The <am/pm> setting of the <Off Timer> is set to <pm>.





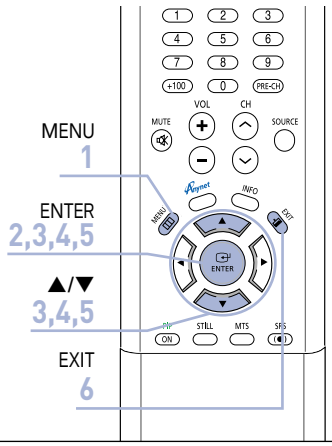
4 Press the [►] button to move to <Activation>, then press the [▲/▼] buttons to select <Yes>.
The <Off Timer> is now setup.
Select <No> to deselect the <Off Timer>.



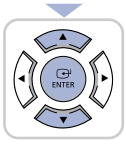
5 Press the [EXIT] button to finish.

Setting the Sleep Timer

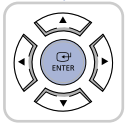
For example: You can set the timer so that the TV will turn off automatically at a preset time.



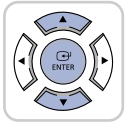
1 Press the [MENU] button.
The menu will be displayed.



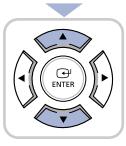
2 Press the [▲/▼] buttons to move to <Setup>, then press the [ENTER] button.
The <Setup> menu will be displayed.



3 Press the [ENTER] button to select the <Time>.
The <Time> setting menu will be displayed.

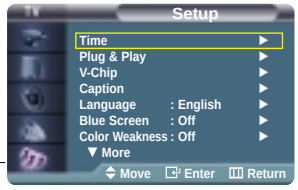


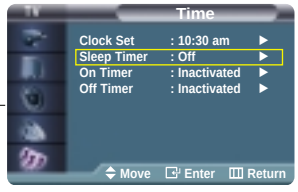
4 Press the [▲/▼] buttons to move to <Sleep Timer>, the press the [ENTER] button to display the <Sleep Timer> selections.

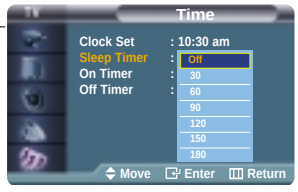


5 Press the [▲/▼] buttons to set the sleep timer, then press the [ENTER] button.
The number on the screen changes from 30 to 180 minutes in 30 minute units.

6 Press the [EXIT] button to finish.







To deselect the <Sleep Timer>

Press the [▲/▼] buttons to move to <Off> (in Step 5 above), then press the [ENTER] button.

Using the V-Chip

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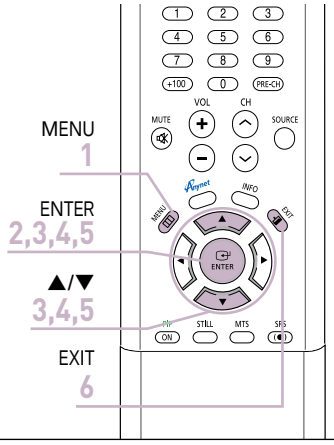
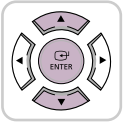
English 97

How to Set up Restrictions Using the Canadian
French 98

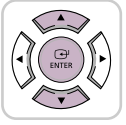
Setting up your Personal ID Number (PIN)



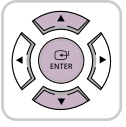
1 Press the [MENU] button.
The menu will be displayed.



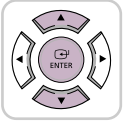
2 Press the [▲/▼] button to move to <Setup>, then press the [ENTER] button.
The <Setup> will be displayed.



3 Press the [▲/▼] buttons to move to <V-Chip>, then press the [ENTER] button.
The message <Enter PIN> will appear. Enter your 4 digit PIN number.
The <V-Chip> screen will appear.

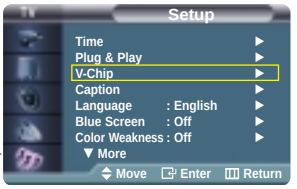


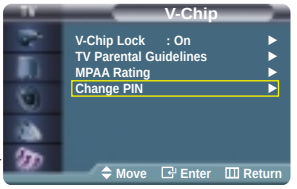
4 Press the [▲/▼] button to move to <Change PIN>, then press the [ENTER] button.
The Change PIN screen will appear. Choose any 4 digits for your PIN and enter them.
The default PIN number for a new TV set is <0-0-0-0>.
The <Confirm new PIN> screen appears.



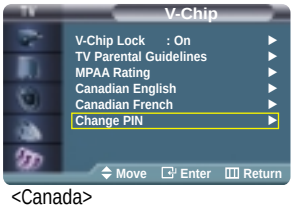
5 Re-enter the same 4 digits. When the Confirm screen disappears, your PIN has been memorized.

6 Press the [EXIT] button to finish.

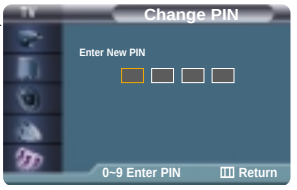




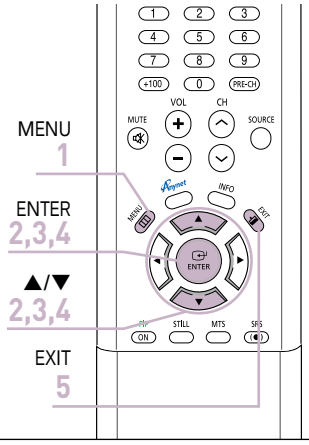
<USA>



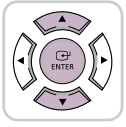
<Canada>



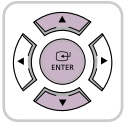
How to Enable/Disable the V-Chip



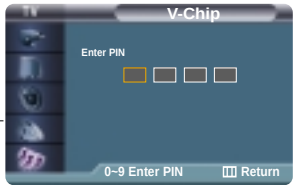
1 Press the [MENU] button.
The menu will be displayed.

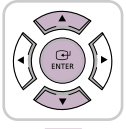


2 Press the [▲/▼] button to move to <Setup>, then press the [ENTER] button.
The <Setup> will be displayed.

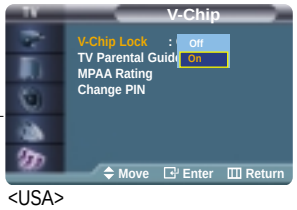


3 Press the [▲/▼] buttons to move to <V-Chip>, then press the [ENTER] button.
The message <Enter PIN> will appear. Enter your 4 digit PIN number.
The <V-Chip> screen will appear.





4 **To enable the V-Chip feature**
Press the [ENTER] button, then press the [▲/▼] button to move to <On>, then press the [ENTER] button.

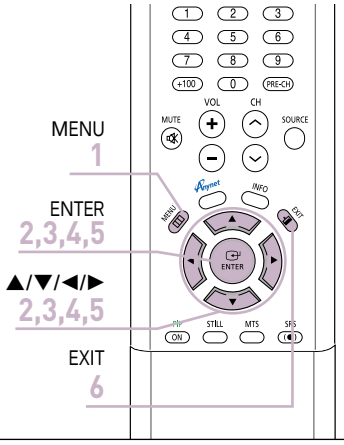


<USA>

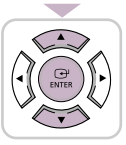
<Canada>

5 Press the [EXIT] button to finish.

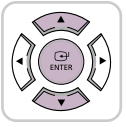
How to Set-Up Restrictions using the “TV Parental Guidelines”



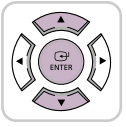
1 Press the [MENU] button.
The menu will be displayed.



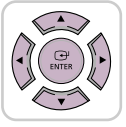
2 Press the [▲/▼] button to move to <Setup>, then press the [ENTER] button.
The <Setup> will be displayed.



3 Press the [▲/▼] buttons to move to <V-Chip>, then press the [ENTER] button.
The message <Enter PIN> will appear. Enter your 4 digit PIN number.
The <V-Chip> screen will appear.

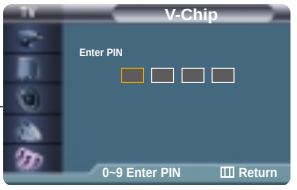


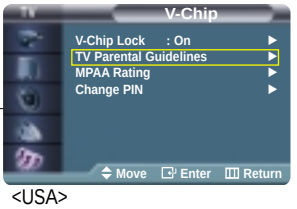
4 Press the [▲/▼] button to move to <TV Parental Guidelines>, then press the [ENTER] button.
The <TV Parental Guidelines> screen will appear.



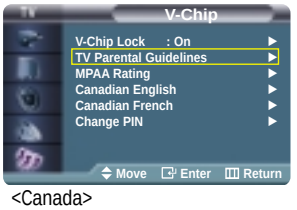
5 You can independently lock the TV ratings. The blocked TV(FCC) ratings are indicated by a <B>. Press the [▲/▼/◄/►] buttons and the [ENTER] button to activate the appropriate restrictions for TV(FCC) Rating system.

6 Press the [EXIT] button to finish.

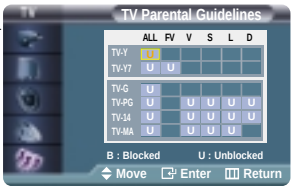




<USA>



<Canada>

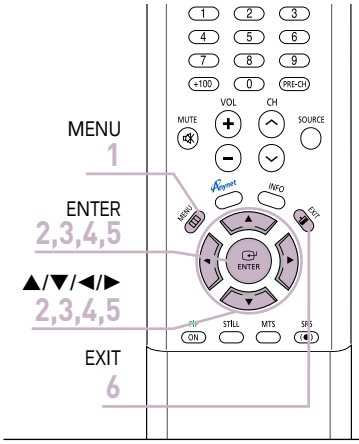


Note

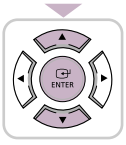
- These categories consist of two separate groups: <TV-Y> and <TV-Y7>(young children through age 7), and <TV-G> through <TV-MA>(everybody else).
- The restrictions for these two groups work independently: If a household includes very young children as well as young adults, the TV parental guidelines must be set up separately for each age group.

How to Set up Restrictions Using the “MPAA Rating”

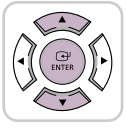
The Movie rating system uses the “MPAA” (Motion Picture Association of America) system, and its main application is for movies. When the rating control is on, the TV will automatically block any programs that are coded with objectionable ratings (either “MPAA Rating” or “TV Parental Guidelines”).



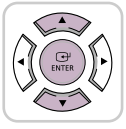
1 Press the [MENU] button.
The menu will be displayed.



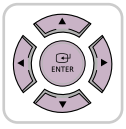
2 Press the [▲/▼] button to move to <Setup>, then press the [ENTER] button.
The <Setup> will be displayed.



3 Press the [▲/▼] buttons to move to <V-Chip>, then press the [ENTER] button.
The message <Enter PIN> will appear. Enter your 4 digit PIN number.
The <V-Chip> screen will appear.

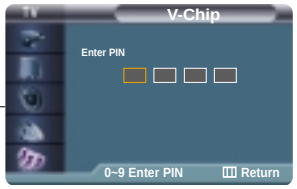


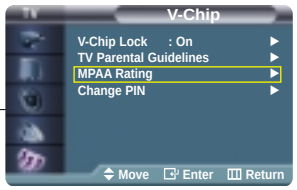
4 Press the [▲/▼] button to move to <MPAA Rating>, then press the [ENTER] button.
The <MPAA Rating> screen will appear.



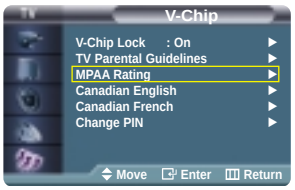
5 You can independently lock the TV ratings. The blocked TV(FCC) ratings are indicated by a <B>. Press the [▲/▼/◄/►] buttons and the [ENTER]button to activate the appropriate restrictions for TV(FCC) Rating system.

6 Press the [EXIT] button to finish.

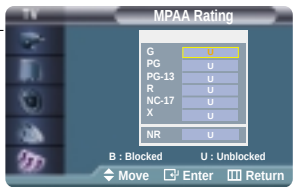




<USA>



<Canada>



Important Notes About Parental Locks

Explanation of the MPAA and TV (FCC) Rating Systems:

TV (FCC) Age-Based Ratings

TV-MA
Mature audiences only. This program may contain mature themes, profane language, graphic violence and explicit sexual content.

TV-14
Parents strongly cautioned. This program may contain sophisticated themes, sexual content, strong language and more intense violence.

TV-PG
Parental guidance suggested. The program may contain infrequent coarse language, limited violence, some suggestive sexual dialog and situations.

TV-G
General audience. It contains little or no violence, no strong language, and little or no sexual dialog or situations.

TV-Y7
Directed to older children. Themes and elements in this program may include mild physical or comedic violence, or may frighten children under the age of seven.

TV-Y
All children. The themes and elements in this program are specifically designed for a very young audience, including children from ages two – six.

TV (FCC) Content Category

V	Violence.
S	Sexual content.
L	Offensive language.
D	Dialog sexual innuendo.
FV	Fantasy or cartoon violence.

MPAA Rating System (Movies)

G
General audience. No restriction.

PG
Children under 13 should be accompanied by an adult.

PG-13
Parental guidance suggested. Children under 13 should be accompanied by an adult.

R
Restricted. Viewers should be 17 or older.

NC-17
Not classified. Viewers should be 17 or older.

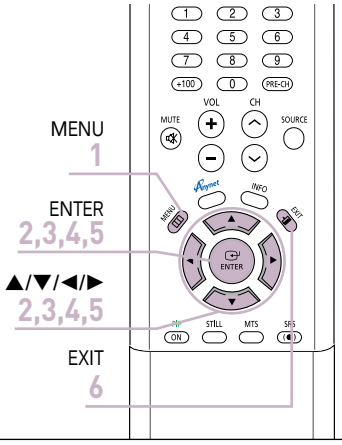
X
Adults only.

NR
Not rated.

Note

- TV (FCC) ratings: The particular rating that you have selected will be blocked (and indicated as a amber <B> on a blue background). Also, all of the age-based ratings will be blocked within the particular group (i.e., <group 1> or <group 2>). Suppose that the TV-G rating and all of its contents (V, S, L, and D) are blocked. In that case, more restrictive ratings (TV-PG, TV-14, and TV-MA) and all of their contents (V, S, L, and D) are automatically blocked as well.
- MPAA ratings: The particular rating that you have selected will be blocked. In addition, more restrictive ratings will be blocked as well.
- Neither TV (FCC) ratings nor MPAA ratings apply to news programs.

How to Set up Restrictions Using the Canadian English



Canadian English

E
Exempt programming includes ...news, sports, documentaries and other information programming, talk shows, music videos, and variety programming.

C
Programming intended for children under age 8.

C8+
Programming generally considered acceptable for children 8 years and over to watch on their own.

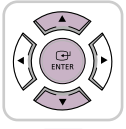
G
General programming, suitable for all audiences.

PG
Parental Guidance.

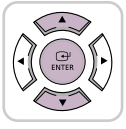
14+
Programming contains themes or content which may not be suitable for viewers under the age of 14.

18+
Adult programming.

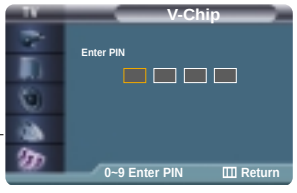
1 Press the [MENU] button.
The menu will be displayed.

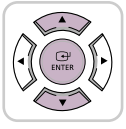


2 Press the [▲/▼] button to move to <Setup>, then press the [ENTER] button.
The <Setup> will be displayed.

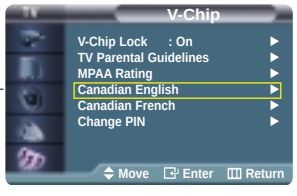


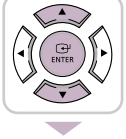
3 Press the [▲/▼] buttons to move to <V-Chip>, then press the [ENTER] button.
The message <Enter PIN> will appear. Enter your 4 digit PIN number.
The <V-Chip> screen will appear.





4 Press the [▲/▼] button to move to <Canadian English>, then press the [ENTER] button.
The <Canadian English> screen will appear.

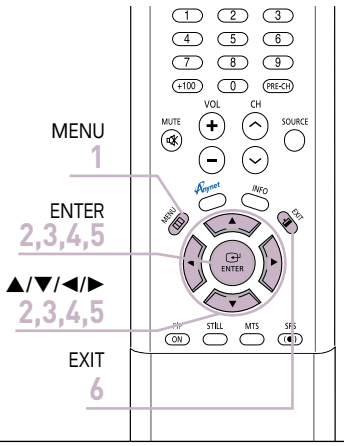




5 Press the [▲/▼] button to select a appropriate restriction. Press the [ENTER] button to activate the restriction selected.
The <B> is indicated.

6 Press the [EXIT] button to finish.

How to Set up Restrictions Using the Canadian French



Canadian French

E
Exempt programming includes...news, sports, documentaries and other information programming, talk shows, music videos, and variety programming.

G
General.

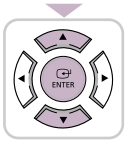
8 ans+
8+ General-Not recommended for young children.

13 ans+
Programming may not be suitable for children under the age of 13.

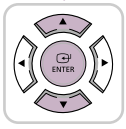
16 ans+
Programming is not suitable for children under the age of 16.

18 ans+
Programming restricted to adults.

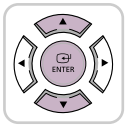
1 Press the [MENU] button.
The menu will be displayed.



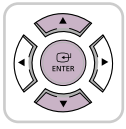
2 Press the [▲/▼] button to move to <Setup>, then press the [ENTER] button.
The <Setup> will be displayed.



3 Press the [▲/▼] buttons to move to <V-Chip>, then press the [ENTER] button.
The message <Enter PIN> will appear. Enter your 4 digit PIN number.
The <V-Chip> screen will appear.

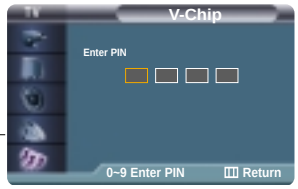


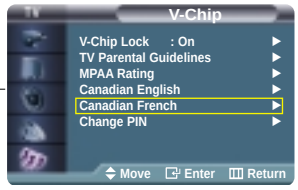
4 Press the [▲/▼] button to move to <Canadian French>, then press the [ENTER] button.
The <Canadian French> screen will appear.



5 Press the [▲/▼] button to select a appropriate restriction. Press the [ENTER] button to activate the restriction selected.
The <B> is indicated.

6 Press the [EXIT] button to finish.





Connecting to a PC

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Fine Tuning (Vertical Tuning) 106
Adjusting the Screen Position 107
Initializing the Screen Settings.....108

Checklist Before Connecting to a PC

Please check the following before connecting your TV to a PC.

Checklist Before Connecting to a PC

- Adjust the PC Display Setup to the resolution and frequency values that are supported by the TV.
- Please read the user's manual provided with the PC (Graphic Card & Sound Card).
- Do not supply power to either device until all connections are complete. Supplying power in the middle of connecting may cause damage to the product.
- Check the terminal types for the PC's graphic card.

Setting the Display Modes to be Compatible with Your TV

Mode	Resolution (Dot x Line)	Vertical Frequency (Hz)	Horizontal Frequency (kHz)	Vertical Polarity	Horizontal Polarity
IBM	640x350	70.086	31.469	N	P
	720x400	70.087	31.469	P	N
VESA	640x480	59.940	31.469	N	N
		72.809	37.861	N	N
		75.000	37.500	N	N
	800x600	56.250	35.156	P/N	P/N
		60.317	37.897	P	P
		72.188	48.077	P	P
		75.000	46.875	P	P
	1024x768	60.004	48.363	N	N
		70.069	56.476	N	N
		75.029	60.023	P	P
	1280x1024	60.020	63.981	P	P
		75.025	79.976	P	P
	1920x1080	59.988	66.647	N	P

Note

- The Modes Table conforms to the regulations of IBM/VESA and is prepared based on analog input standards.
- The Mode for DVI is the same as those for the PC.
- The optimal resolution is 1920 x 1080 @ 60Hz.
- The optimal timing per each mode is the Vertical Frequency 60Hz.

PC Software Setup

The Windows (MS Windows XP) display-settings for a typical computer are shown below.

1. Right click the mouse on the Windows Desktop, then click on [Properties].
The <Display Dialog-Box> will be displayed.

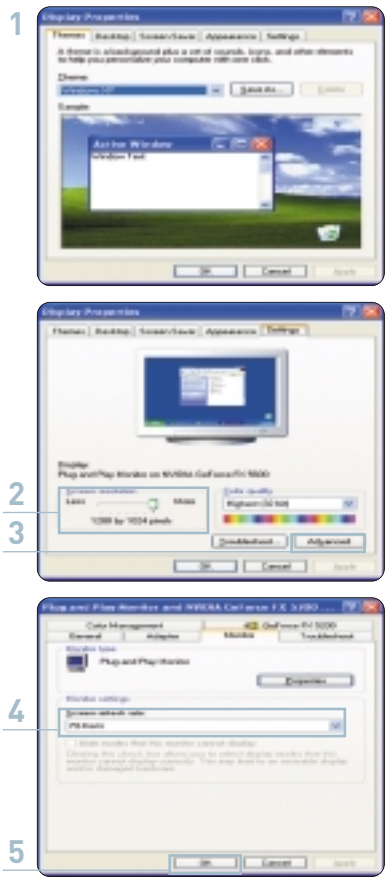
2. Click on [Settings], then set the <Display Mode> with reference to the Display Modes Table.
You do not need to change the <Colors> settings.

3. Click on [Advanced].
A new settings dialog box will be displayed.

4. Click on the [Monitor] tab, then set the <Screen Refresh Rate> with reference to the Display Modes Table.
Set the <Vertical Frequency> and <Horizontal Frequency> individually if you can do so instead of setting the <Screen Refresh Rate>.

5. Press the [OK] button, close the window, then press the [OK] button on the <Display Registration Information> window.
Automatic re-booting may commence at this moment.

6. Shutdown the PC, and connect it to your TV.
► See page 100

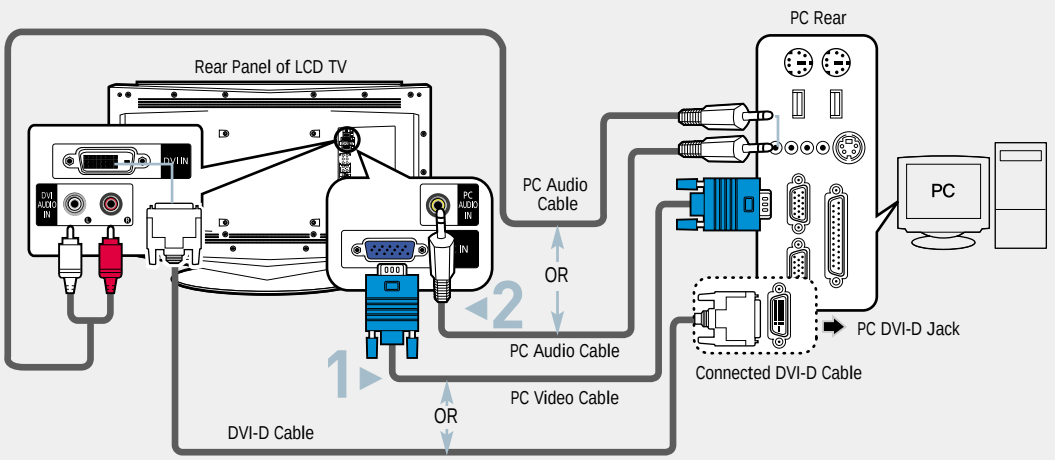


Note

- The actual screens on your PC may look different, depending on your particular version of Windows and the type of your PC.
- When you use your TV as a PC monitor, it supports <Colors> up to 32 bits.
- In this case, the display on the TV may look different depending on your particular version of Windows or the PC manufacturer.
- When connecting a PC (including the DVI connection), you must set it to the display settings that are supported by the TV. Otherwise, the message <Out of input range> will be displayed.

Connecting to a PC

You can connect a PC to your TV and use the TV as the PC monitor.



1 Connect the PC Video cable between the [PC Input] jack on the back of the TV and [Monitor Output] port on the PC.

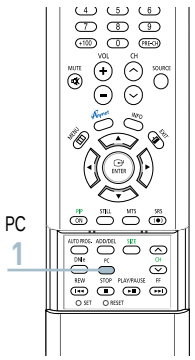
2 To hear PC sound through the TV speakers, connect a PC Audio cable between the [PC Audio In] jack on the back of the TV and [Audio Output] port on the PC.

3 Supply power to the PC and TV after making all the connections.

Note

There is no need to set up a drive on your PC in Windows XP as this product supports the Plug & Play function.

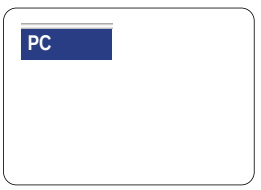
To View a PC Image on the TV



1 Turn on the TV, then press the [PC] button to select <PC>.
If <PC> mode is unavailable, please check that the PC video cable has been connected correctly.

2 Turn on the PC and change the PC settings if necessary. ▶ See pages 98~99

3 Adjust the screen. ▶ See pages 102~106



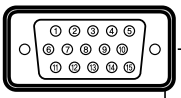
Note

- If there is a DVI port, connect the DVI-D cable (supports digital signals only) instead of the PC Video cable for better picture quality.
- Refer to the picture above for connecting the PC Audio cable if you connect the DVI-D cable.
- You cannot use a DVI-I cable (supports analog signals also). You must use the DVI-D cable (supports digital signals only).
- If you connect the PC Audio to the PC In Audio jack on the TV, the sound is heard from the TV speakers.
- The PC Video cable, PC Audio cable and DVI-D cable are all sold separately.
- When viewing the PC with a DVI cable connected, make sure the [SOURCE] is set to [DVI].

Connecting to a PC

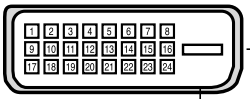
Signal per Pin of the PC Video Jack Plug

PC Video Cable (15-Pin Signal Cable)



Pin Number	PC In	PC In
1	Red	Red
2	Green	Green
3	Blue	Blue
4	Ground	Ground
5	Ground (DDC)	Ground (DDC)
6	Red Ground	Red Ground
7	Green Ground	Green Ground
8	Blue Ground	Blue Ground
9	Spare	Spare
10	Sync	Sync
11	Ground	Ground
12	Data (DDC)	Data (DDC)
13	Horizontal Sync	Horizontal Sync
14	Vertical Sync	Vertical Sync
15	Clock (DDC)	Clock (DDC)

DVI-D Cable (Supports Digital Signals Only)



Pin Number	Signal Arrangement	Pin Number	Signal Arrangement
1	T.M.D.S. DATA2-	13	T.M.D.S. DATA3+
2	T.M.D.S. DATA2+	14	+5V Power
3	T.M.D.S. DATA2/4 Shield	15	Ground for 5V
4	T.M.D.S. DATA4-	16	Hot Plug Detect
5	T.M.D.S. DATA4+	17	T.M.D.S. DATA0-
6	Clock (DDC)	18	T.M.D.S. DATA0+
7	Data (DDC)	19	T.M.D.S. DATA0/5 Shield
8	Access Disabled	20	T.M.D.S. DATA5-
9	T.M.D.S. DATA1-	21	T.M.D.S. DATA5+
10	T.M.D.S. DATA1+	22	T.M.D.S. Clock Shield
11	T.M.D.S. DATA1/3 Shield	23	T.M.D.S. Clock +
12	T.M.D.S. DATA3-	24	T.M.D.S. Clock -

VESA Plug & Play

Automatically recognized when a PC is connects, as VESA Plug & Play is connected.

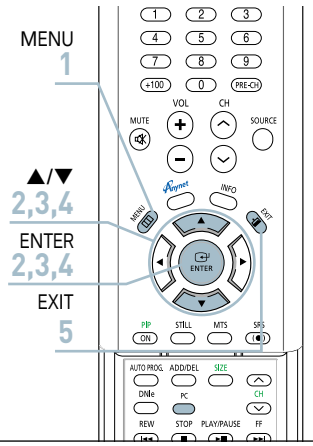
Note

- The DVI-D cable does not support analog RGB signals.

Connecting to a PC

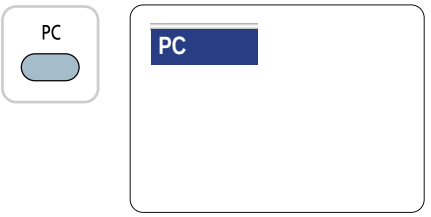
Auto Screen Adjustment

The frequency and positioning of the PC screen can be automatically adjusted.



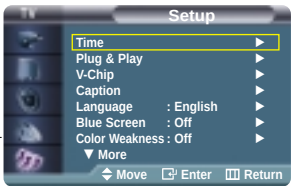
Before You Begin

Set the Input Mode to <PC>.

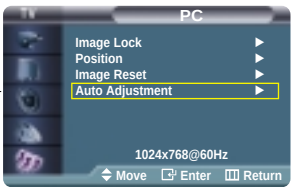


1 Press the [MENU] button.
The menu will be displayed.

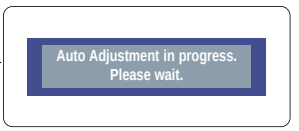
2 Press the [▲/▼] buttons to move to <Setup>, then press the [ENTER] button.
The <Setup> menu will be displayed.



3 Press the [▲/▼] buttons to move to <PC>, then press the [ENTER] button.
The <PC> menu will be displayed.



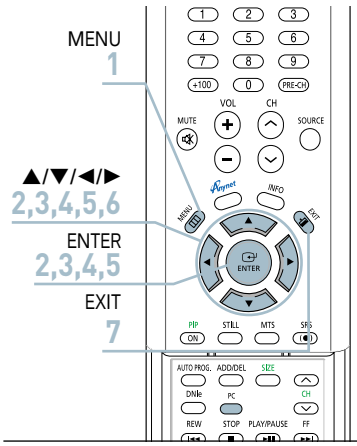
4 Press the [▲/▼] buttons to move to <Auto Adjustment>, then press the [ENTER] button.
The message <Auto Adjustment in progress. Please wait.> will be displayed and the PC screen is automatically adjusted.



5 Press the [EXIT] button to finish.

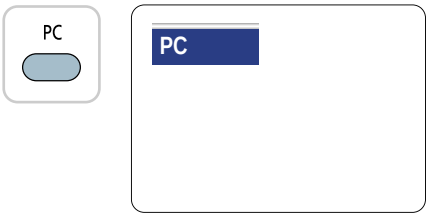
Adjusting the Frequency

If vertical patterns appear on the PC screen, adjust the frequency.



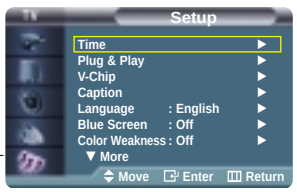
Before You Begin

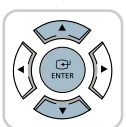
Set the Input Mode to <PC>.



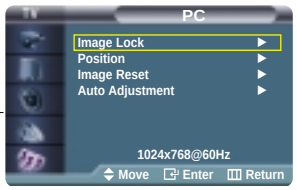
1 Press the [MENU] button.
The menu will be displayed.

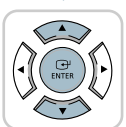
2 Press the [▲/▼] buttons to move to <Setup>, then press the [ENTER] button.
The <Setup> menu will be displayed.



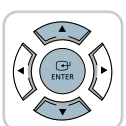


3 Press the [▲/▼] buttons to move to <PC>, then press the [ENTER] button.
The <PC> menu will be displayed.

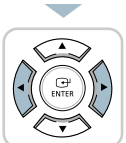




4 Press the [▲/▼] buttons to move to <Image Lock>, then press the [ENTER] button.
The <Image Lock> menu will be displayed.



5 Press the [▲/▼] buttons to move to <Coarse>, then press the [ENTER] button.

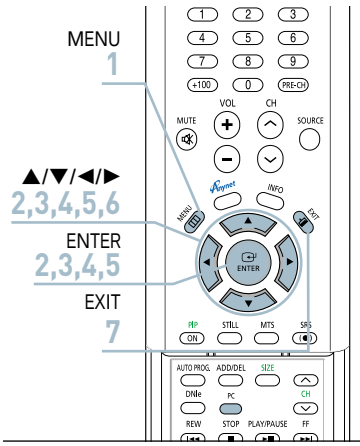


6 Press the [◀/▶] button to adjust the frequency.

7 Press the [EXIT] button to finish.

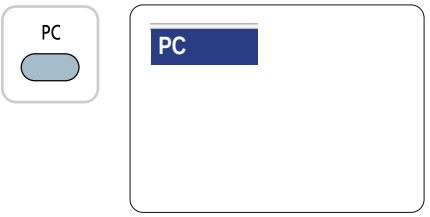
Fine Tuning (Vertical Tuning)

Fine tune the PC screen for improved picture quality.



Before You Begin

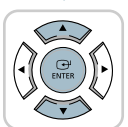
Set the Input Mode to <PC>.



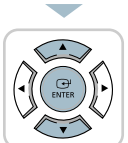
1 Press the [MENU] button.
The menu will be displayed.

2 Press the [▲/▼] buttons to move to <Setup>, then press the [ENTER] button.
The <Setup> menu will be displayed.

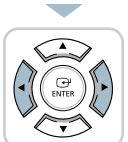
3 Press the [▲/▼] buttons to move to <PC>, then press the [ENTER] button.
The <PC> menu will be displayed.



4 Press the [▲/▼] buttons to move to <Image Lock>, then press the [ENTER] button.
The <Image Lock> menu will be displayed.

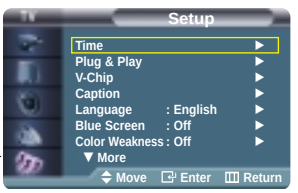


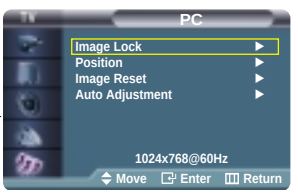
5 Press the [▲/▼] buttons to move to <Fine>, then press the [ENTER] button.

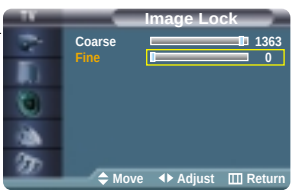


6 Press the [◀/▶] buttons to fine tune the picture.

7 Press the [EXIT] button to finish.

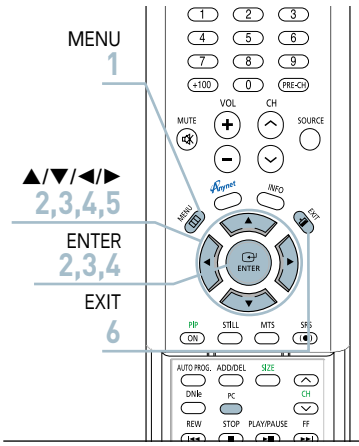






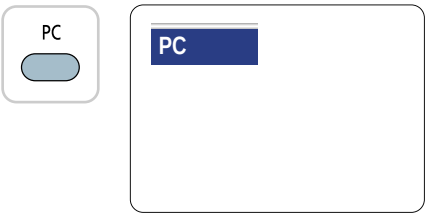
Adjusting the Screen Position

Adjust the PC's screen positioning if it does not fit the TV screen.



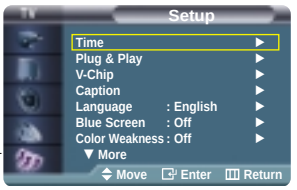
Before You Begin

Set the Input Mode to <PC>.

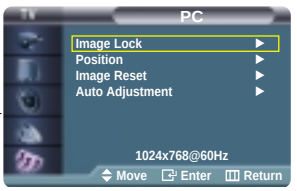


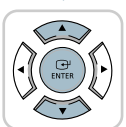
1 Press the [MENU] button.
The menu will be displayed.

2 Press the [▲/▼] buttons to move to <Setup>, then press the [ENTER] button.
The <Setup> menu will be displayed.

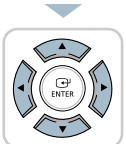


3 Press the [▲/▼] buttons to move to <PC>, then press the [ENTER] button.
The <PC> menu will be displayed.

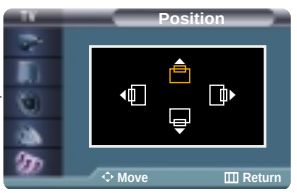




4 Press the [▲/▼] buttons to move to <Position>, then press the [ENTER] button.
The <Position> screen will be displayed.



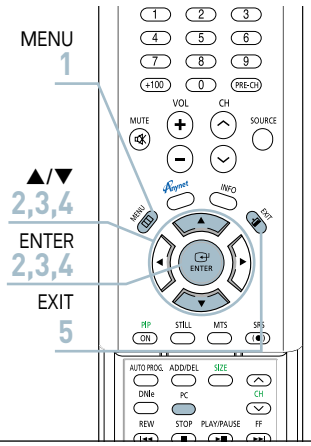
5 Press the [▲/▼/◀/▶] buttons to adjust and set the position of the PC screen.



6 Press the [EXIT] button to finish.

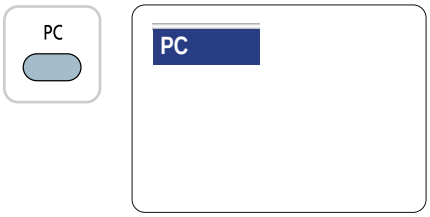
Initializing the Screen Settings

Use this function to return the screen settings to the default values.

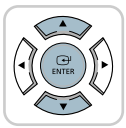


Before You Begin

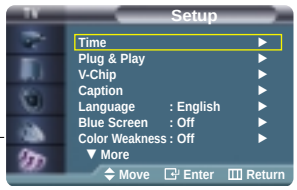
Set the Input Mode to <PC>.



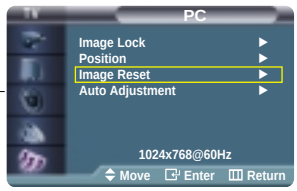
1 Press the [MENU] button.
The menu will be displayed.



2 Press the [▲/▼] buttons to move to <Setup>, then press the [ENTER] button.
The <Setup> menu will be displayed.



3 Press the [▲/▼] buttons to move to <PC>, then press the [ENTER] button.
The <PC> menu will be displayed.



4 Press the [▲/▼] buttons to move to <Image Reset>, then press the [ENTER] button to reset the image.

5 Press the [EXIT] button to finish.

Troubleshooting

Troubleshooting 110

Troubleshooting

If the TV seems to have a problem, first try finding the solution in this Troubleshooting List. If none of these troubleshooting tips apply, call your nearest Samsung Service Center or 1-800-SAMSUNG.

Installation & Connection

Problem	Possible Solution	Reference
The TV does not turn on.	Check if the power cord is correctly connected.	
TV reception is poor.	Connect the antenna cable.	pages25~27

Menu & Remote Control

Problem	Possible Solution	Reference
The Remote Control does not work.	• Press the [MODE] button to select the TV or an external device. • Replace the batteries in the remote control. • Install batteries ensuring that the <+> and <-> ends of the batteries are inserted correctly. • Check the angle and distance of the remote control to the TV. Make sure there are no obstacles between the remote control and the TV. • Check that the correct function button has been pressed. • Change the location of light sources or the direction of the TV to avoid glare.	page 13 page 12 page 12 page 12
Cannot change the channel with the remote control.	• Press the [SOURCE] button to select <TV>. • Change the channel with the Cable or Satellite receiver remote control.	
Cannot select a channel from an external input device.	Press the [SOURCE] button and check if the input source is shaded in gray. If this is the case, you cannot select a channel through that input source. Check the connection of that source to the TV.	
Cannot select the menu.	Check if [MENU] is shaded in gray. [MENU] cannot be selected if this is the case.	

Troubleshooting

Picture

Problem	Possible Solution	Reference
No picture or sound.	• Check if the power cord is connected correctly. • Turn the power on. • Select an input source channel appropriate for that particular source.	page 28~35
No picture or dark picture	Adjust the <Brightness>.	page 53
Blue screen/ No picture from the connected source.	• Check the connection between the TV and the input source. • Select an input source channel appropriate for that particular source	pages 28~35
Overlaping picture.	• Reconnect the antenna cable. • Adjust the location, direction and angle of the antenna.	page 25~27
Black and white picture	• Adjust the <Color>. • Reconnect the cable between the TV and the input source.	page 53 pages 25~27
Abnormal picture colors.	Adjust the <Tint>.	page 53
Abnormal lines on the picture	Place the antenna cable away from other power cords or cables.	
Abnormal lines when viewing a video or recording a video.	Place the VCR away from the TV.	

Sound

Problem	Possible Solution	Reference
No sound	• Adjust the volume. • Adjust the volume or press the [MUTE] button again to deselect the mute function.	
Sound too low	• Adjust the volume. • Set the Auto Volume Adjustment to <On>.	page 79
Noise	Place the antenna cable away from other power cords or cables.	
Language is not selected.	Press the [MTS] button and select the language of your choice.	page 78

Troubleshooting

Troubleshooting

PC

Problem	Possible Solution	Reference
Cannot change the resolution	Update the graphic card driver on your PC to the latest version.	
Cannot see words properly	Lower the resolution. (1024x768 ➔ 640x480)	page 99

Channels

Problem	Possible Solution	Reference
Not all channels are available.	Reconnect the antenna cable.	pages 25~27
Some channels do not show up.	• Adjust the location, direction or angle of the antenna. • Activate the <LNA> function. • Press the number buttons to select a particular channel, then press the [ADD/DEL] button to store in the memory.	page 47 pages 44~45

The TFT LCD panel uses a panel consisting of sub pixels (2,073,600) which require sophisticated technology to produce.
However, there may be few bright or dark pixels on the screen.
These pixels will have no impact on the performance of the product.

Troubleshooting

Miscellaneous Information

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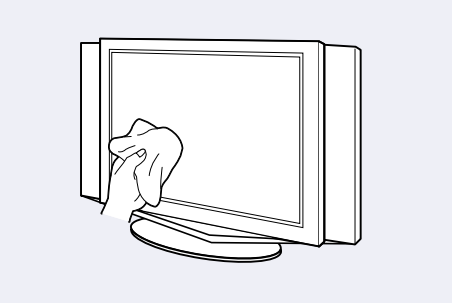
Storage & Maintenance

Cleaning and Maintaining Your TV.

Maintaining the Exterior of the TV and the Screen

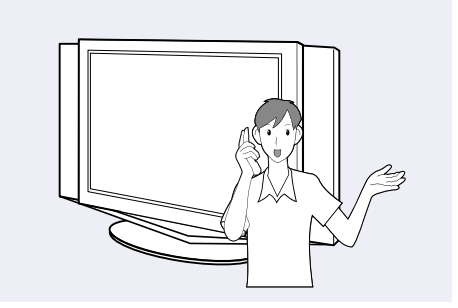
Wipe with a dry soft cloth.

- Do not use a wet cloth or any flammable substance such as benzene or thinner. They can damage your TV.
- Do not touch the screen with fingernails or other sharp objects. This may scratch the surface of the screen.



Cleaning the Inside of the TV

Contact a Samsung retailer or service center for cleaning the inside of the product.



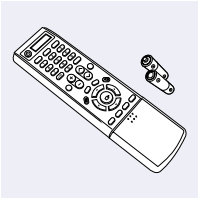
Accessories and Items Sold Separately

Check the purchase information for parts and accessories.

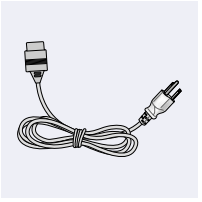
Accessories

0Remote Control, Power Cord, Owner's Instructions, Batteries, Anynet Cable
: Contact a Samsung Retail or Service Center.

Remote Control (BN59-00435B)
Batteries (1.5V, AAA type)
(4301-000103)

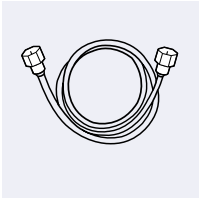


Power Cable
(3903-000085)

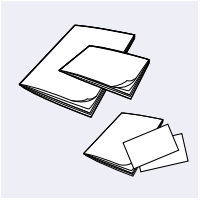


Anynet Cable
(BN39-00518A)

Antenna Cable
(AA39-00039A)



Owner's Instructions/Anynet AV Owner's Instructions/ Safety Guide Manual/ Warranty Card ; 2EA/Registration Card

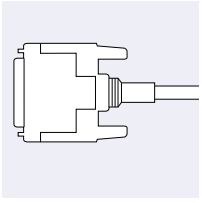


Items Sold Separately

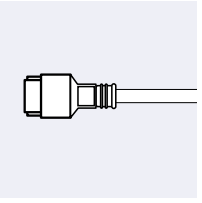
DVI-D/HDMI Cable
: Purchase at an electronics supply shop or via the Internet.

Wall Brackets
: Contact a Samsung Retailer or Service Center.

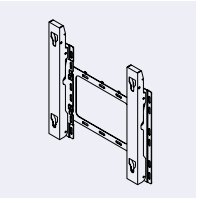
DVI-D Cable



HDMI Cable

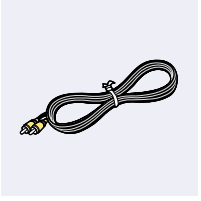


Wall Brackets

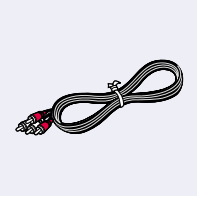


Video Cable, Audio Cable, S-Video Cable, Component Cable, PC Video Cable, PC Audio Cable, Optical Digital Audio Cable
: Purchase at an electronics supply shop or via the Internet, or contact a Samsung Retailer or Service Center.

Video Cable

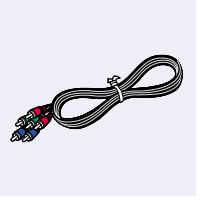


Audio Cable

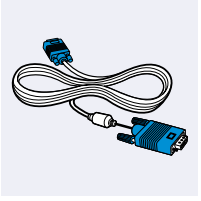


S-Video Cable

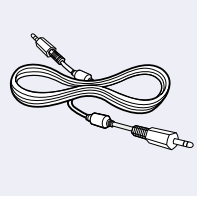
Component Cable



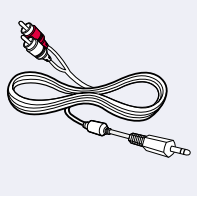
PC Video Cable



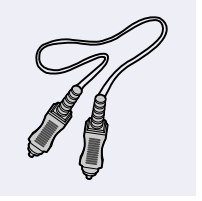
PC Audio Cable



PC Audio Cable



Optical Digital



Glossary

Terms listed in alphabetical order.

Analog Broadcast Signals

Analog video/audio signals are non-digital signals sent by broadcasting companies in the existing NTSC format.

Antenna Input Jack

The jack to connect the TV antenna cable. Typically in the round coaxial shape and used for watching Air channels.

Brightness Sensor

Brightness Sensor enables comfortable viewing without eye strain by providing the optimal picture brightness through automatic detection of the surrounding lighting conditions.

Color Weakness Mode

Viewers who have a color weakness can enjoy the same vivid colors as people without color weakness.

Component Jacks (Green, Blue, Red)

By separating the three color-contrast signals the jack enables video signals to be sent and received with the highest picture quality.

Digital Broadcasting Signals

Video/Audio signals are digitized at a broadcasting company which transmits the digitized signals according to the ATSC, the American Ground Digital Broadcasting Standard.

DVD (Digital Versatile Disc)

Using MPEG-2 video compression technology, a DVD stores massive multimedia files such as videos, games, and audio applications even though it is the same physical size as a CD.

DVI (Digital Visual Interface) Jack

The jack for sending digital signals. It uses the TMDS transmission method. It reduces signal loss and enables clear picture quality.

DVI-D Cable

One kind of DVI cable. It only sends digital signals.

DVI-I Cable

One kind of DVI cable. It sends both digital and analog signals.

Dynamic Contrast

Dynamic Contrast automatically detects the video signal and adjusts to create optimum contrast.

HDMI (High Definition Multimedia Interface)

An interface that enables one cable to provide high quality video signals as well as digital audio signals without compression.

LNA

LNA (Low Noise Amplifier)
Technology used in satellites, LNA (Low Noise Amplifier) fortifies weak signals for viewing in poor reception areas.

My Color Control

My Color Control enables the adjustment of Blue, Green and Pink tones to suit the users' preferences without changing any other colors.

Mono

Audio signals received through a single channel. No surround sound effect. Playable with one speaker.

MTS

Two languages are provided for foreign movies, news or dramas. One or both languages can be selected.

Picture-in-Picture (PIP)

This enables you to view two pictures simultaneously. For instance, you can view a TV channel and a video.

S-Video Jack

Super-Video enables a max. 800 horizontal lines for sharper images.

SRS TruSurround XT

With 2 speakers, you can enjoy simulated 5.1 channel sound Effective in the STEREO Input.

Stereo

Audio signals sent through two channels.

Sub Woofer

Sub-woofers are specifically designed to produce deep, precise bass at frequencies usually below 150Hz . There are Passive Sub Woofers containing no amplification, and Active Sub Woofers containing built-in amplification. This unit must be used with an Active Sub.

Video/Audio Jack

The Video jack is yellow, and the Audio jacks are white (L) and red(R).

Wide Picture

Picture is in 16:9 format, wider than the ordinary TV picture in 4:3 format.

Screen Menu Structure

The Screen Menu Structure is shown below.

Buttons used for the screen menu control

[MENU] button
Press this button to open/exit the menu

[▲/▼/◀/▶], [ENTER] button
Press this button to select/adjust the menu item

When selecting the input source (TV/Video/S-Video/Component/HDMI)

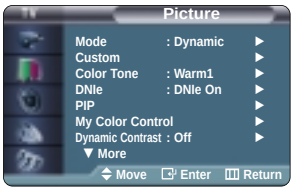
Input

- **Source List** — TV/AV1/AV2/S-Video1/S-Video2/Component1/Component2/HDMI/DVI/PC
- **Edit Name** — AV1/AV2/S-Video1/S-Video2/Component1/Component2/HDMI/DVI/PC
  VCR/DVD/Cable STB/HD STB/Satellite STB/AV Receiver/DVD Receiver/Game/Camcorder/DVD Combo/DHR/PC
- **Anynet**
  - **Watch TV**
  - **Watch STB**
  - **Play DVD**
  - **Play VCR**
  - **Setup** — TV Sound/Typical Setup/Customized Setup/TV Menu

Picture

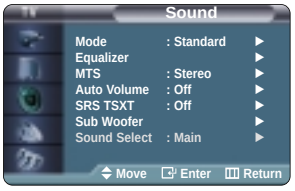
- **Mode** — Dynamic/Standard/Movie/Custom
- **Custom**
  - **Contrast** — 0~100
  - **Brightness** — 0~100
  - **Sharpness** — 0~100
  - **Color** — 0~100
  - **Tint** — G50~R50

Screen Menu Structure



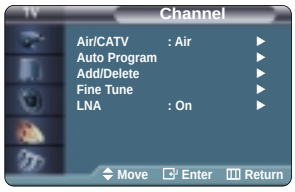
Picture

- **Color Tone** — Cool2/Cool1/Normal/Warm1/Warm2
- **DNIe** — DNIe On/DNIe Off/DNIe Demo
- **PIP**
  - **PIP** — On/Off
  - **Source** — TV/AV1/AV2/S-Video1/S-Video2/Component1 /Component2/HDMI/DVI
  - **Swap**
  - **Size**
  - **Position**
  - **Channel**
- **My Color Control**
  - **Easy Control** — Blue/Green/Pink/Standard/Custom
  - **Detail Control** — Pink/Green/Blue/Reset
- **Dynamic Contrast** — On/Off
- **Brightness Sensor** — On/Off
- **Size** — Wide/Panorama/Zoom1/Zoom2/4:3
- **Film Mode** — On/Off
- **Digital Nr** — On/Off



Sound

- **Mode** — Standard/Music/Movie/Speech/Custom
- **Equalizer**
- **MTS** — Mono/Stereo/SAP
- **Auto Volume** — On/Off
- **SRS TSXT** — Off/3D Mono/Stereo
- **Sub Woofer**
  - **Mode** — On/Off
  - **Volume** — 0~100
  - **Cut off Freq.** — 50~200
- **Sound Select** — Main/Sub



Channel

- **Air/CATV** — Air/STD/HRC/IRC
- **Auto Program**
- **Add/Delete**
- **Fine Tune**
- **LNA** — On/Off

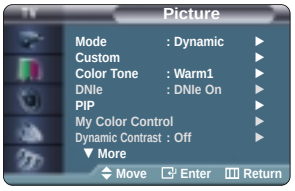
Setup

- **Time**
  - **Clock Set** — Hour/Minute/am/pm
  - **Sleep Timer** — Off/30/60/90/120/150/180
  - **On Timer** — Hour/Minute/am/pm/Ch./Vol./Activation
  - **Off Timer** — Hour/Minute/am/pm/Activation
- **Plug & Play**
- **V-Chip**
  - **V-Chip Lock** — On/Off
  - **TV Parental Guidelines** — TV-Y/TV-Y7/TV-G/TV-PG/TV-14/TV-MA
  - **MPAA Rating** — G/PG/PG-13/R/NC-17/X/NR
  - **Change PIN** — Enter New PIN/Confirm New PIN
- **Caption**
  - **Caption** — On/Off
  - **Mode** — Caption/Text
  - **Channel** — 1/2
  - **Field** — 1/2
- **Language** — English/Français/Español/Português
- **Blue Screen** — On/Off
- **Color Weakness**
  - **Color Weakness** — On/Off
  - **RED** — 0~9
  - **Green** — 0~9
  - **Blue** — 0~9
- **Melody** — On/Off

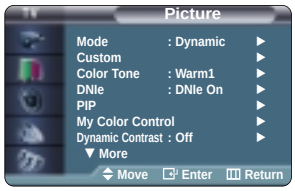
Screen Menu Structure

When selecting the input source (PC/DVI)

- **Input**
  - **Source List** — TV/AV1/AV2/S-Video1/S-Video2/Component1/Component2/HDMI/DVI/PC
  - **Edit Name** — AV1/AV2/S-Video1/S-Video2/Component1/Component2/HDMI/DVI/PC
    VCR/DVD/Cable STB/HD STB/Satellite STB/AV Receiver/
    DVD Receiver/Game/Camcorder/DVD Combo/DHR/PC
  - **Anynet**
    - **Watch TV**
    - **Watch STB**
    - **Play DVD**
    - **Play VCR**
    - **Setup** — TV Sound/Typical Setup/Customized Setup/TV Menu

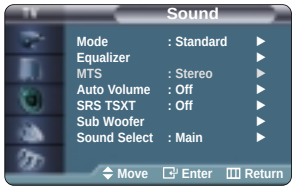


- **Picture**
  - **Mode** — Dynamic/Standard/Movie/Custom
  - **Custom**
    - **Contrast** — 0~100
    - **Brightness** — 0~100
    - **Sharpness** — 0~100
    - **Color** — 0~100
    - **Tint** — G50~R50
  - **Color Tone** — Cool2/Cool1/Normal/Warm1/Warm2



Picture

- **PIP**
  - **PIP** — On/Off
  - **Source** — TV/AV1/AV2/S-Video1/S-Video2/Component1/Component2/HDMI/DVI
  - **Swap**
  - **Size**
  - **Position**
  - **Channel**
- **Size** — Wide/Panorama/Zoom1/Zoom2/4:3



Sound

- **Mode** — Standard/Music/Movie/Speech/Custom
- **Equalizer**
- **Auto Volume** — On/Off
- **SRS TSXT** — Off/3D Mono/Stereo
- **Sub Woofer**
  - **Mode** — On/Off
  - **Volume** — 0~100
  - **Cut off Freq.** — 50~200
- **Sound Select** — Main/Sub

Screen Menu Structure

- **Setup**
  - **Time**
    - **Clock Set** — Hour/Minute/am/pm
    - **Sleep Timer** — Off/30/60/90/120/150/180
    - **On Timer** — Hour/Minute/am/pm/Ch./Vol./Activation
    - **Off Timer** — Hour/Minute/am/pm/Activation
  - **Language** — English/Français/Español/Português
  - **Blue Screen** — On/Off
  - **Melody** — On/Off
  - **PC**
    - **Image Lock** — Coarse 1209~1478; Fine 0~255
    - **Position** — ◀/▶/▲/▼
    - **Image Reset**
    - **Auto Adjustment**

Specifications

The product design and specifications can be changed for improvement in performance without prior notice.
This device is a Class B digital apparatus which can be used in residential and industrial areas.
Class B devices are registered for electromagnetic waves, and suitable for any area as well as home.
Class A devices are suitable for office use. Class B devices have fewer electromagnetic wave emissions.

Model Name			LT-P468W
LCD	Screen Size		46 Type (Diagonal Length)
	Display Size		1018.08 (H) X 572.67 (V) mm
	Pixel Pitch		0.17675 (H) X 0.53025 (V)
	Type		a-si TFT LCD
	Viewing Angle		Horizontal 170, Vertical 170
Video Signal			VHF, UHF: 75Ω Unbalanced
Video	Video Signal		NTSC-M
	Video Type		CVBS, S-VHS
Component 1	YPbPr		480i, 480p, 720p, 1080i, 1080p
Component 2			
PC	Sync	Horizontal Frequency	30 ~ 80kHz
		Vertical Frequency	56 ~ 85kHz
	Display Color		16,772,216 Colors
	Maximum Resolution		1920 X 1080 / 60Hz
	Sync. (Separate)		TTL, P or N
Audio Out			15Wx2
Power Supply			AC 120V, 60Hz
Power Consumption			Max 350W
Power Saving			< 1.0W
Dimensions (WxDxH)	Body (with Stand)		1374x402x786 mm/54.09x15.83x30.94 inches
	Body		1374x144.5x688 mm/54.09x15.83x27.09 inches
Weight	Body (with Stand)		47 Kg/103.62 lbs
	Body		37 Kg/81.57 lbs
Control Method			Remote Control: Infrared Rays Method
			Electronic Function Control

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