

Owner's Instructions

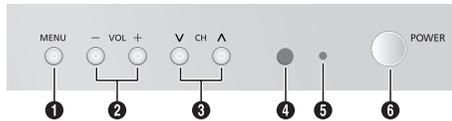
Before operating, please read this manual thoroughly, and retain it for future reference.

Register your product at www.samsung.com/global/register

Control Panel (depending on the model)

➤ The product color and shape may vary depending on the model.

Front Panel



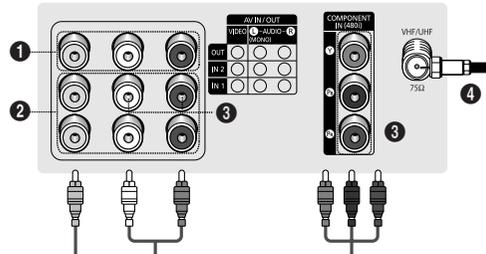
- ❶ On-screen menu display
- ❷ Volume adjustment
- ❸ Channel selection
- ❹ Remote control sensor
- ❺ Indicator (Standby or Timer)
- ❻ Power on/off

- ◆ The ❷ and ❸ buttons also have the same function as the ◀▶/▼/▲ buttons on the remote control.
- ◆ If the remote control no longer works or you have misplaced it, you can use the controls on the panel of the TV.

Connection Panel (depending on the model)

➤ The product color and shape may vary depending on the model.

Rear Jack



➤ Whenever you connect an audio or video system to your TV, ensure that all elements are switched off. Please be sure to match the color coded input terminals and cable jacks.

❶ Audio/Video Output Jacks

Connect to the audio/video input jacks of a recording VCR.

❷ Audio/Video Input Jacks

Connect to the audio/video output jacks of VCRs, DVD players and similar devices.

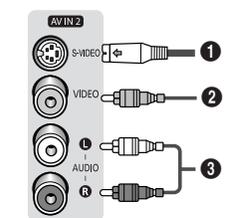
❸ Component Video Input Jacks (Y, Pb, Pr)

Connect to the Component video outputs of a DVD or DTV set-top box. 480i video signal input is available. When using the Component Video input, connect audio jacks to "AV IN 2 (AUDIO-L/R)".

❹ VHF/UHF

Connect to an antenna or to a cable TV system.

Side Jack



➤ Please be sure to match the color coded input terminals and cable jacks. When both the side and rear jacks (AV IN 2) are connected to external equipment, the side receives priority.

❶ S-Video Input Jack

Connect an S-Video signal from a camcorder or video game.

❷ Video Input Jack

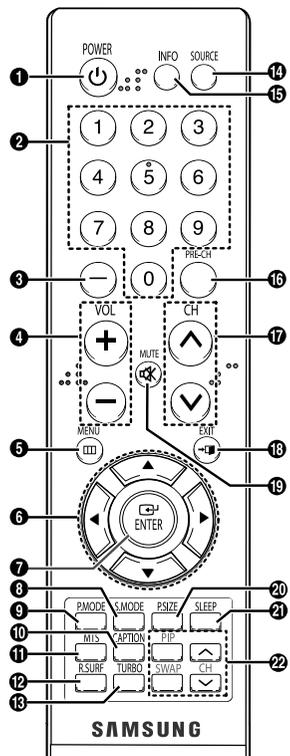
Connect a video signal from a camcorder or video game.

❸ Audio Input Jacks

Connect audio signals from a camcorder or video game.

Remote Control (depending on the model)

- You can use the remote control up to a distance of about 23 feet from the TV. When using the remote, always point it directly at the TV.

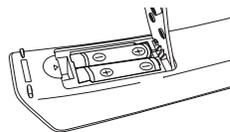


Installing Batteries

Remove the cover. Install two AAA size batteries, then replace the cover.

When the remote control does not operate normally, check that the “+” and “-” ends of the batteries are inserted correctly or the batteries are drained.

- Do not mix battery types, i.e. alkaline and manganese.



1 POWER

Turns the TV on and off.

2 Number buttons

Press to select channels directly on the TV.

3 -

Press to select channels over 100. For example, for channel 122, press “-”, then “2”, then “2”.

4 VOL +, VOL -

Press to increase or decrease the volume.

5 MENU

Displays the main on-screen menu.

6 ▲/▼/◀▶

Controls the cursor in the menu.

7 ENTER

While using the on-screen menus, press ENTER to activate (or change) a particular item.

8 S.MODE (or SOUND)

Press to select the sound mode.

9 P.MODE (or PICTURE)

Press to select the picture mode.

10 CAPTION

Controls the caption decoder.

11 MTS

(Multi-channel Television Sound)

Press to choose “Stereo”, “Mono”, or “SAP” (Secondary Audio Program).

12 R.SURF

Press to automatically return to a preferred channel after a user-preset time delay.

13 TURBO

Press to select Turbo sound.

14 SOURCE

Press to display all of the available video sources.

15 INFO

Press to display information on the TV screen.

16 PRE-CH

Tunes to the previous channel.

17 CH ^, CH v

Press to change channels.

18 EXIT

Press to exit the menu.

19 MUTE

Press to temporarily cut off the sound.

20 P.SIZE

Press to change the picture size.

21 SLEEP

Press to select a preset time interval for automatic shut off.

22 PIP Controls

(depending on the model)

PIP: Press to activate or deactivate the PIP function.

SWAP

Press to interchange the main picture and sub-picture.

CH v, CH ^

Press to select a channel of the sub-picture only when the “Source” is set to “TV”.

Turning the TV On and Off

Press the **POWER** button on the remote control. You can also use the **POWER** button on the TV.

Viewing the Menus

- Press the **MENU** button. The main menu is displayed on the screen. Its left side has five icons: **Input, Picture, Sound, Channel, and Setup.**
- Press the **▲** or **▼** button to select one of the icons. Press the **ENTER** button to access the icon's sub-menu.
- Press the **▲** or **▼** button to move to items in the menu. Press the **ENTER** button to enter items in the menu.
- Press the **▲/▼/◀▶** button to change the selected items. Press the **MENU** button to return to the previous menu.
- Press the **EXIT** button to exit from the menu.

Setup - Plug & Play

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

The following settings are available.

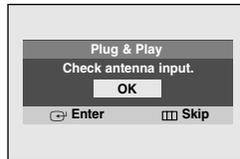
- 1 Press the **POWER** button on the remote control. The "Start Plug & Play" is displayed. Press the **ENTER** button, then the "Language" is displayed.



- 2 Press the **▲** or **▼** button to select the desired language, then press the **ENTER** button. The "Check antenna input." is displayed.



- 3 Make sure that the antenna is connected to the TV. Press the **ENTER** button, then the "Auto Program" is displayed.



- 4 Press the **ENTER** button to start. The TV begins memorizing all available channels. Press the **ENTER** button to stop.



- 5 After all available channels are stored, the "Clock Set" is displayed. Press the **◀** or **▶** button to move to the hour or minute. Set the clock by pressing the **▲** or **▼** button.



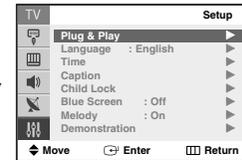
- 6 When you have finished, press the **MENU** button. The "Enjoy your watching." is displayed.



- > Plug & Play feature doesn't work in the AV mode.

Re-setting the Plug & Play

Method: MENU → ▲/▼
 (Setup) → ENTER → ▲/▼
 (Plug & Play) → ENTER

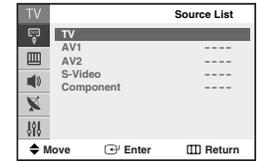


Input - Source List / Edit Name

(depending on the model)

◆ Source List

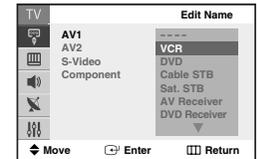
You can switch between viewing signal from connected equipment, such as a VCR, DVD, set-top box, and the TV source (broadcast or cable).



- > Press the **SOURCE** button on the remote control repeatedly to select the desired signal source.

◆ Edit Name

You can give a name to the external source.



Channel - Memorizing the Channels

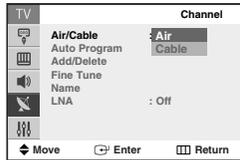
Your TV can memorize and store all of the available channels for both “off-air” (antenna) and cable channels. After the available channels are memorized, use the **CH** \wedge and **CH** \vee buttons to scan through the channels.

This eliminates the need to change channels by entering the channel digits. There are three steps for memorizing channels: “Air/Cable”, “Auto Program” and “Add/Delete”.

◆ Air/Cable

Before your TV 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).

Select “Air” or “Cable” by pressing the \blacktriangle or \blacktriangledown button.



◆ Auto Program

All available channels are automatically stored in memory when channels are selected by the direct tuning function.

Press the **ENTER** button at any time to interrupt the memorization process.



◆ Add/Delete

You can add or delete a channel to display the channels you want only. To use the Add/Delete function, first run Auto Program.

Select “Deleted” or “Added” by pressing the \blacktriangle or \blacktriangledown button.



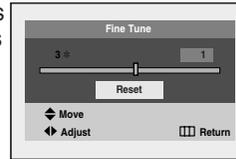
Channel - Fine Tune

The Fine Tuning function lets you manually adjust the TV's tuner if you have difficulty tuning channels.

Adjust the fine tuning by pressing the \blacktriangleleft or \blacktriangleright button.

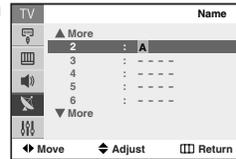
To store the fine tuning setting in the TV's memory, press the **MENU** button.

To reset the fine tuning to “0”, select “Reset” by pressing the \blacktriangle or \blacktriangledown button, then press the **ENTER** button.



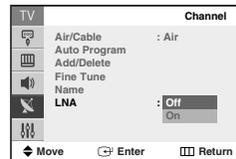
Channel - Name

Use this feature to assign an easy-to-remember label to any channel (i.e., “CBS”, “ESPN”, “PBS2”, “CNN1”, etc.). A label consists of four fields, where each field is a letter (A-Z), a number (0-9), -, or a blank. When the **INFO** button is pressed, the channel label will appear next to the channel number.



Channel - LNA (depending on the model)

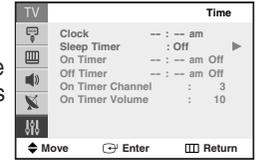
When a weak broadcast signal causes an unclear, noisy picture, the “LNA” feature improves the picture quality by setting to “On”. If you experience noise on a certain channel, set the “LNA” to “On” or “Off” for this channel, to obtain the optimum picture.



Setup - Time

◆ Clock

Setting the clock is necessary in order to use the various timer features of the TV. Also, you can check the time while watching the TV. (Just press the **INFO** button.)



◆ Sleep Timer

You can select a time period of between 30 and 180 minutes after which the TV automatically switches to standby mode.

➤ Press the **SLEEP** button on the remote control repeatedly until the appropriate time interval appears (any of the preset values from “30 Min.” to “180 Min.”).

◆ On Timer / Off Timer

You can set the On/Off timers so that the TV will switch on or off automatically at the time you select.

➤ You must set the clock first.

◆ On Timer Channel

The preferred channel can be set for when the timer automatically turns on the TV.

◆ On Timer Volume

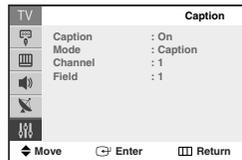
The preferred volume can be set for when the timer automatically turns on the TV.

◆ Auto Power Off

When you set the timer “On”, the TV will eventually turn off, if no controls are operated for 3 hours after the TV was turned on by timer. This function is only available in timer “On” mode and prevents overheating or leakages, which may occur if a TV is on for too long.

Setup - Caption

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 TV 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 TV schedule and on the tape's packaging: .



◆ Caption: On/Off

You can activate or deactivate the Caption function.

- Press the **CAPTION** button on the remote control repeatedly to select “On” or “Off”.

◆ Mode

- 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.

◆ Channel / Field

Depending on the particular broadcast, it might be necessary to make changes to “Channel” and “Field”.

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.)

- ☛ 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.

Setup - Child Lock (depending on the model)

This feature allows you to prevent unauthorized users, such as children, from watching unsuitable programs by muting out video and audio. Child Lock cannot be released using front panel buttons. Only remote control can release the Child Lock setting, so keep the remote control away from children.



◆ Child Lock: On/Off

You can activate or deactivate the Child Lock function.

◆ Channel: Channel number to be locked.

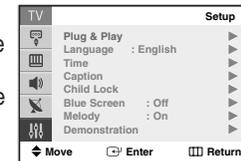
◆ Lock: When press the **ENTER** button, the “Locked” is displayed.

- If any channel is locked, you can not access to the “Channel” and “Child Lock” menu by using the control buttons on the TV panel (the “Not Available” is displayed in the “Child Lock” menu). You can access by using the remote control only.

Setup - Language / Blue Screen / Melody / Demonstration

◆ Language

When you start using the TV for the first time, you must select the language which will be used for displaying menus and indications.



◆ Blue Screen

If no signal is being received or the signal is very weak, a blue screen automatically replaces the noisy picture background. If you wish to continue viewing the poor picture, you must set the “Blue Screen” to “Off”.

◆ Melody

You can hear melody sound when the TV is powered on or off.

◆ Demonstration

To become familiar with the various menus provided by the TV, you can view the in built demonstration. Each of the menu options is displayed in turn. When you wish to stop the demonstration, press any button on the remote control.

R.Surf Feature

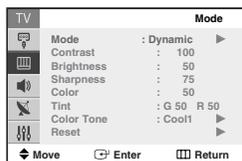
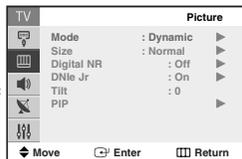
This feature allows you to set the TV to return to a particular channel after a certain amount of time. For example, you may be watching a channel when commercials start. You can set the R.Surf to "5 minutes", then switch channels. After minutes, the TV will return to the original channel.



Press the **R.SURF** button repeatedly to set the timer in thirty second intervals, up to five minutes.

Picture - Mode / Custom / Color Tone / Size / Digital NR / DNie Jr / Tilt

- ◆ **Mode: Dynamic/Standard Movie/Custom**
You can select the type of picture which best corresponds to your viewing requirements.
➤ Press the **P.MODE** button on the remote control to select one of the standard picture settings.



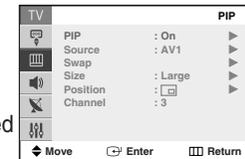
- ◆ **Contrast/Brightness/Sharpness/Color/Tint**
The TV has several settings which allow you to control the picture quality.

- ◆ **Color Tone: Cool2/Cool1/Normal/Warm1/Warm2**
You can change the color of the entire screen according to your preference.
- ◆ **Reset**
The previously adjusted picture settings will be reset to the factory defaults.
- ◆ **Size: Normal/Zoom**
You can select the picture size which best corresponds to your viewing requirements.
➤ Press the **P.SIZE** button on the remote control to change the picture size.
- ◆ **Digital NR**
If the signal received by the TV is weak, you can activate this feature to reduce any static and ghosting that may appear on the screen.
- ◆ **DNie Jr (Digital Natural Image engine Junior)** (depending on the model)
This feature bring you more detailed image with detail enhancement, contrast enhancement and white enhancement. New image compensation algorithm gives brighter, clearer, much detailed image to you.
DNie Jr technology will fit every signals into your eyes.
- ◆ **Tilt** (depending on the model)
If you find that the picture received is slightly tilted to one side, you can adjust the tilt setting.

Picture - PIP (depending on the model)

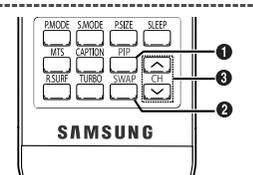
You can display a sub picture within the main picture of TV program or external A/V devices such as VCR or DVD.
In this way you can watch TV program or monitor the video input from any connected devices while watching TV or other video input.

- ◆ **PIP: On/Off (1)**
You can activate or deactivate the PIP function.
➤ If the PIP is activated (On) when the picture size is set to "Zoom" mode, the picture size is automatically converted into "Normal" mode. However, you can select "Zoom" after activating the PIP.
➤ You can hear only the sound of the main picture while the PIP is activated.
➤ The PIP function is not available in "Component" mode.



- ◆ **Source**
You can select a source of the sub-picture.
- ◆ **Swap (2)**
You can interchange the main picture and the sub-picture.
- ◆ **Size: Small/Large**
You can select a size of the sub-picture.
- ◆ **Position:** []/[]/[]/[]
You can select a position of the sub-picture.
- ◆ **Channel (3)**
You can select a channel of the sub-picture only when the "Source" is set to "TV".

Easy functions of the remote control

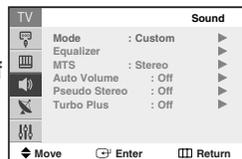


Sound - Mode / Equalizer / MTS Auto Volume / Pseudo Stereo / Turbo Plus

◆ **Mode: Standard/Music/ Movie/Speech/Custom**

You can select the type of special sound effect to be used when watching a given broadcast.

- Press the **S.MODE** button on the remote control to select one of the standard sound settings.



◆ **Equalizer**

The TV has several settings which allow you to control the sound quality.

- If you make any changes to these settings, the sound mode is automatically switched to "Custom".

◆ **MTS (Multi-channel Television Sound)**

Depending on the particular program being broadcast, you can listen to Mono, Stereo, or SAP.

- Press the **MTS** button on the remote control repeatedly to select "Stereo", "Mono", or "SAP" (Secondary Audio Program).

◆ **Auto Volume**

Each broadcasting station has its own signal conditions, and so it is not easy to adjust the volume every time the channel is changed. This feature 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.

◆ **Pseudo Stereo**

This feature converts a monaural sound signal into two identical left and right channels. Once the "Pseudo Stereo" is set to "On" or "Off", the setting applies to the sound effects such as "Standard", "Music", "Movie" and "Speech".

◆ **Turbo Plus**

This feature emphasizes the bass and treble frequencies to add fullness to the sound.

- Press the **TURBO** button on the remote control repeatedly to select "On" or "Off".

Troubleshooting

If the TV seems to have a problem, first try this list of possible problems and solutions. If none of these troubleshooting tips apply, then call your nearest Samsung authorized service center.

Poor picture.

- ◆ Try another channel.
- ◆ Adjust the antenna.
- ◆ Check all wire connections.

Poor sound quality.

- ◆ Try another channel.
- ◆ Adjust the antenna.

No picture or sound.

- ◆ Try another channel.
- ◆ Press the **TV/VIDEO** button.
- ◆ Make sure the TV is plugged in.
- ◆ Check the antenna connections.
- ◆ Make sure the **MUTE** button is off.

No color, wrong colors or tints.

- ◆ Make sure the program is broadcast in color.
- ◆ Adjust the picture settings.

Picture rolls vertically.

- ◆ Adjust the antenna.
- ◆ Check all wire connections.
- ◆ If you are using a VCR, check the tracking.

The TV operates erratically.

- ◆ Unplug the TV for 30 seconds, then try operating it again.

Your remote control does not operate your TV.

- ◆ Make sure the remote has batteries.
- ◆ Check that the "+" and "-" ends of the batteries are inserted correctly.
- ◆ Check that the batteries are drained.

The TV won't turn on.

- ◆ Make sure the wall outlet is working.
- ◆ Make sure the TV is plugged in.
- ◆ Make sure the remote has batteries.

Remote control malfunctions

- ◆ Replace the remote control batteries.
- ◆ Clean the upper edge of the remote control (transmission window).
- ◆ Check that the "+" and "-" ends of the batteries are inserted correctly.
- ◆ Check that the batteries are drained.

OSD Map

* : It is variable depending on the model.

 Input	<ul style="list-style-type: none">- Source List *- Edit Name *	<ul style="list-style-type: none">- VCR / DVD / Cable STB / Sat. STB / AV Receiver / DVD Receiver / Game / Camcorder / DVD Combo
 Picture	<ul style="list-style-type: none">- Mode<ul style="list-style-type: none">- Dynamic / Standard / Movie / Custom- Contrast / Brightness / Sharpness / Color / Tint- Color Tone<ul style="list-style-type: none">- Cool2 / Cool1 / Normal / Warm1 / Warm2- Reset- Size- Digital NR<ul style="list-style-type: none">- Off / On- DNle Jr *- Tilt *- PIP *<ul style="list-style-type: none">- PIP<ul style="list-style-type: none">- Off / On- Source *- Swap- Size- Position- Channel	
 Sound	<ul style="list-style-type: none">- Mode<ul style="list-style-type: none">- Standard / Music / Movie / Speech / Custom- Equalizer- MTS<ul style="list-style-type: none">- Mono / Stereo / SAP- Auto Volume<ul style="list-style-type: none">- Off / On- Pseudo Stereo<ul style="list-style-type: none">- Off / On- Turbo Plus<ul style="list-style-type: none">- Off / On	
 Channel	<ul style="list-style-type: none">- Air/Cable<ul style="list-style-type: none">- Air / Cable- Auto Program<ul style="list-style-type: none">- Added / Deleted- Fine Tune- Name- LNA *<ul style="list-style-type: none">- Off / On	
 Setup	<ul style="list-style-type: none">- Plug & Play- Language<ul style="list-style-type: none">- English / Español / Português / Français- Time<ul style="list-style-type: none">- Clock- Sleep Timer<ul style="list-style-type: none">- On Timer- Off Timer- On Timer Channel- On Timer Volume- Caption<ul style="list-style-type: none">- Caption<ul style="list-style-type: none">- Off / On- Mode<ul style="list-style-type: none">- Caption / Text- Channel<ul style="list-style-type: none">- 1 / 2- Field<ul style="list-style-type: none">- 1 / 2- Child Lock *<ul style="list-style-type: none">- Child Lock<ul style="list-style-type: none">- Off / On- Channel- Lock- Blue Screen<ul style="list-style-type: none">- Off / On- Melody<ul style="list-style-type: none">- Off / On- Demonstration	

Important Warranty Information Regarding Television Format Viewing

Standard screen format televisions (4:3, the aspect ratio of the screen width to height) are primarily designed to view standard format full-motion video. The images displayed on them should primarily be in the standard 4:3 ratio format and constantly moving. Displaying stationary graphics and images on screen, such as the dark top and bottom letterbox bars (wide screen pictures), should be limited to no more than 15% of the total television viewing per week.

Wide screen format televisions (16:9, the aspect ratio of the screen width to height) are primarily designed to view wide screen format full-motion video. The images displayed on them should primarily be in the wide screen 16:9 ratio format, or expanded to fill the screen if your model offers this feature, and constantly moving. Displaying stationary graphics and images on screen, such as the dark side-bars on non-expanded standard format television video and programming, should be limited to no more than 15% of the total television viewing per week.

Additionally, viewing other stationary images and text such as stock market reports, video game displays, station logos, web sites or computer graphics and patterns, should be limited as described above for all televisions. ***Displaying any stationary images that exceed the above guidelines can cause uneven aging of picture tubes (CRTs) that leave subtle, but permanent burned-in ghost images in the television picture. To avoid this, vary the programming and images, and primarily display full screen moving images, not stationary patterns or dark bars.*** On television models that offer picture sizing features, use these controls to view the different formats as a full screen picture.

Be careful in the selection and duration of television formats used for viewing. Uneven CRT aging as a result of format selection and use, as well as other burned-in images, is not covered by your Samsung limited warranty.