



COLOR TELEVISION

SP47Q7

SP52Q7

SP43T9

SP54T9

Owner's Instructions

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

**ON-SCREEN MENUS
PICTURE IN PICTURE (PIP)**



Important Warranty Information Regarding Television Format Viewing

ENG

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.

Contents

◆ FOREWORD	
■ Important Warranty Information Regarding Television Format Viewing.....	3
◆ CONNECTING AND PREPARING YOUR TELEVISION	
■ Control Panel of Your Television (depending on the model)	6
■ Connection Panel of Your Television (depending on the model)	7
■ Infrared Remote Control.....	8
■ Inserting the Batteries in the Remote Control.....	9
■ Connecting to an Aerial or Cable Television Network	10
■ Connecting a Satellite Receiver or Decoder.....	10
■ Switching Your Television On and Off.....	11
■ Placing Your Television in Standby Mode	11
■ Becoming Familiar with the Remote Control	12
■ Plug & Play Feature (depending on the model).....	13~14
■ Viewing the Demonstration.....	15
■ Displaying Information	15
■ Choosing Your Language (depending on the model).....	16
■ Adjusting Convergence	17
◆ SETTING THE CHANNELS	
■ Storing Channels Automatically.....	18
■ Sorting the Stored Channels	19
■ Storing Channels Manually.....	20~21
■ Skipping Unwanted Channels	22
■ Activating the Child Lock	23
■ Fine Tuning Channel Reception	24
◆ USING YOUR TELEVISION	
■ Using the LNA (Low Noise Amplifier) Feature.....	25
■ Changing the Picture Standard	26
■ Customizing the Picture Settings.....	27
■ Selecting the Picture Size.....	28
■ Using the Digital NR (Digital Noise Reduction) Feature	29
■ Freezing the Current Picture	29
■ DNIe™ (Digital Natural Image engine) DNIe™	30
■ Setting the Blue Screen Mode.....	31
■ Viewing the Picture In Picture (PIP)	32~33
■ Changing the Sound Standard	34
■ Adjusting the Sound Settings	35
■ Setting the SRS TSXT.....	35

Contents (continued)

◆ USING YOUR TELEVISION (continued)	
■ Adjusting the Volume Automatically	36
■ Setting the Melody Sound	36
■ Selecting the Sound Mode (depending on the model)	37
■ Setting the Current Time	38
■ Setting the Sleep Timer	39
■ Switching the Television On and Off Automatically	40
■ Viewing an External Signal Source	41
■ Setting the PC Display (PC Mode)	42
◆ USING THE TELETEXT FEATURE	
■ Teletext Feature	43
■ Displaying the Teletext Information	44
■ Selecting Display Options.....	45
■ Selecting a Teletext Page.....	46
◆ ADDITIONAL INFORMATION AND CONNECTIONS	
■ Connecting to the External Devices (depending on the model)	47
■ Connecting to the S-Video Input (depending on the model).....	48
■ Connecting to the Audio Outputs.....	49
■ Connecting to the Component Input.....	50
■ Connecting to the DVI Input (depending on the model)	51
■ Connecting to the PC Input	52
■ PC Input Mode.....	53
◆ RECOMMENDATIONS FOR USE	
■ Programming the Remote Control for Other Components	54
- VCR Remote Control Codes	55
- CATV Remote Control Codes	56
- DVD Remote Control Codes	56
■ Troubleshooting: Before Contacting Service Personnel	57

Symbols



Press



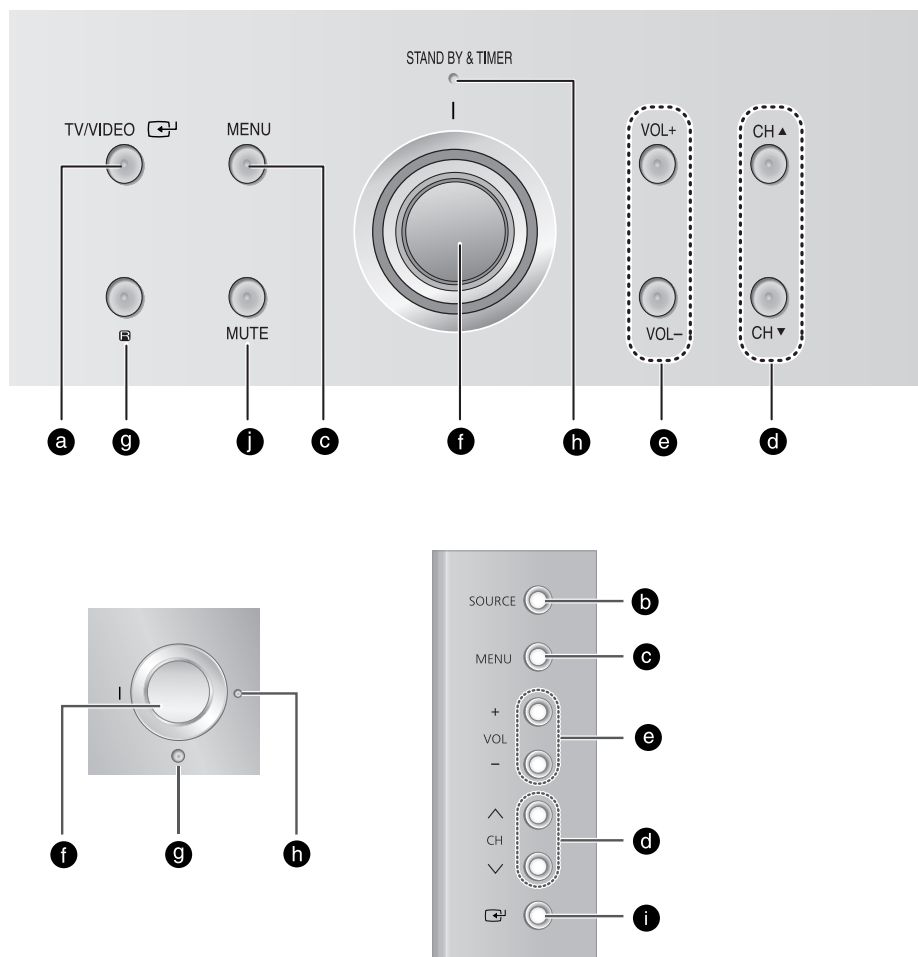
Important



Note

Control Panel of Your Television (depending on the model)

➤ The actual configuration on your TV may be different, depending on your model.



- | | |
|---|--|
| (a) Input Source Selection/
Accessing to the Selected Option on the
Menu System | (f) Power On/Off |
| (b) Input Source Selection | (g) Remote Control Sensor |
| (c) Menu Display | (h) Standby & Timer Indicator |
| (d) Channel Selection | (i) Accessing to the Selected Option
on the Menu System |
| (e) Volume Adjustment | (j) Temporary Sound Switch Off |

➤ Using the Buttons on the Panel

If the remote control no longer works or you have lost it, you can use controls on the panel of the TV to:

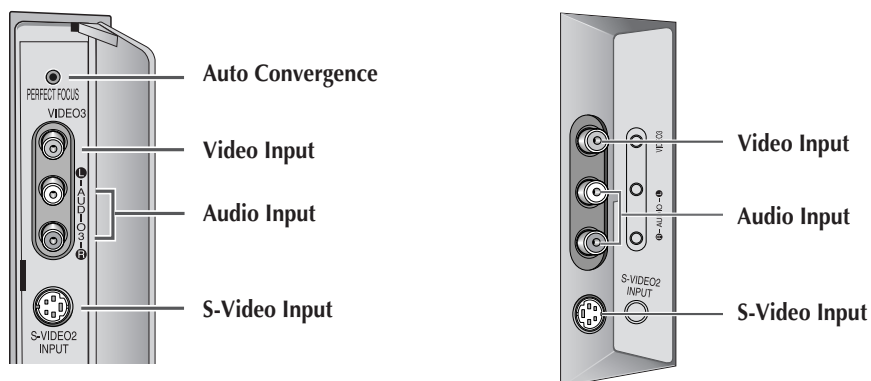
- ◆ Switch on the TV when it is in Standby mode and select channels (▲ CH ▼ or ^ CH v).
- ◆ Access the menu (MENU).
- ◆ Adjust the volume (- VOL +).
- ◆ Switch among Video input modes (TV/VIDEO or SOURCE) and access to the selected option on the menu system ().

Connection Panel of Your Television (depending on the model)

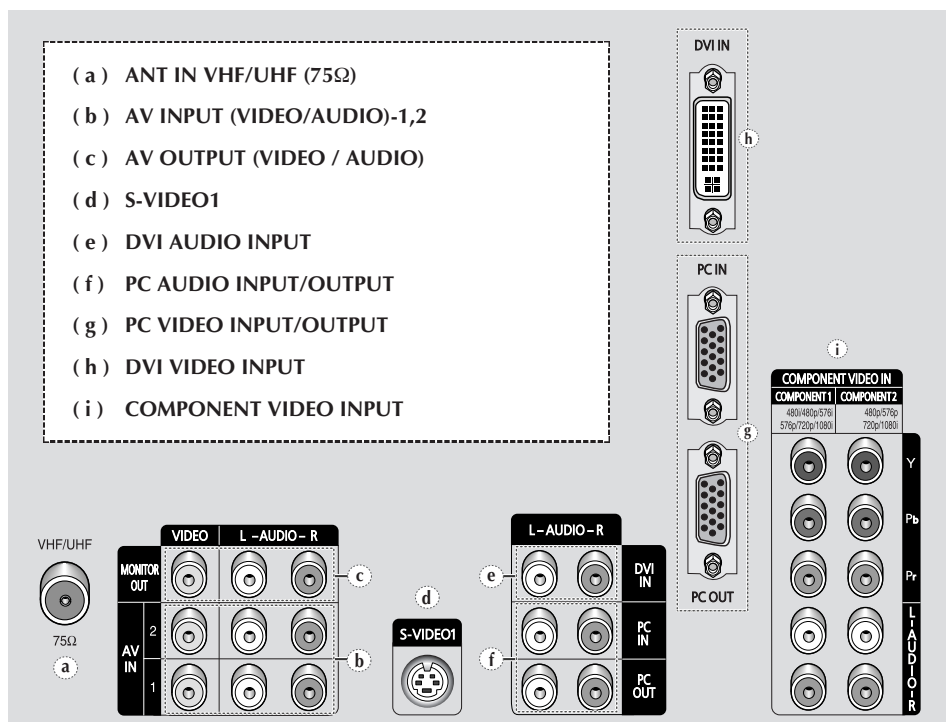
- The actual configuration on your TV may be different, depending on your model.

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Side of the TV



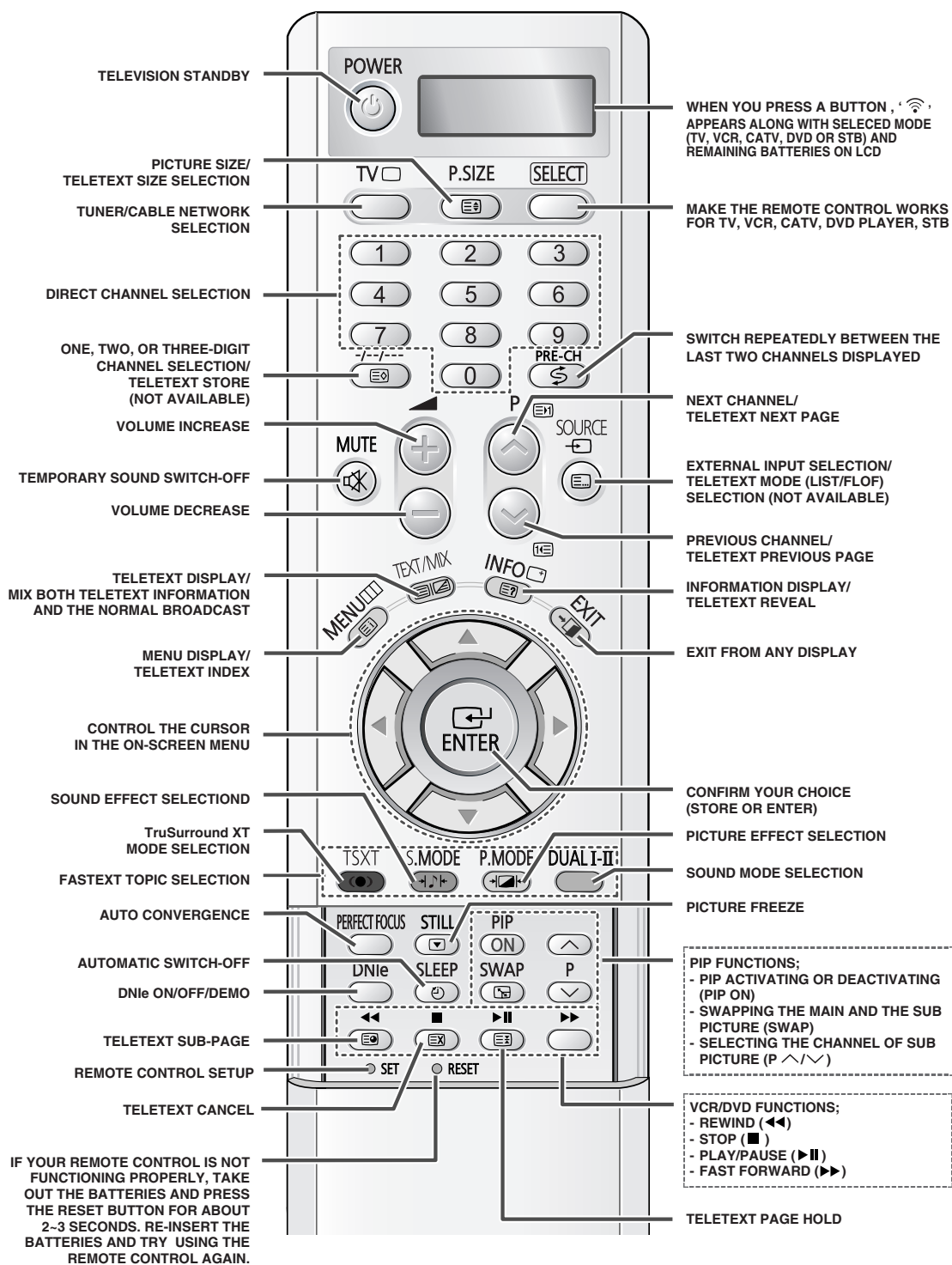
Rear of the TV



- For further details about connection, refer to pages 47~53.

- ☞ Whenever you connect an audio or video system to your television, ensure that all elements are switched off. Refer to the documentation supplied with your equipment for detailed connection instructions and associated safety precautions.

Infrared Remote Control



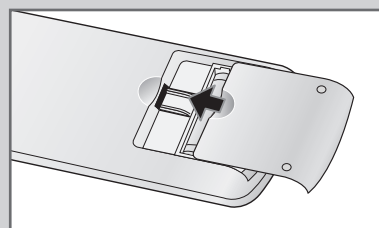
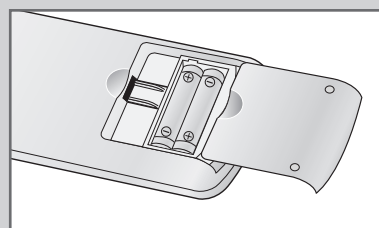
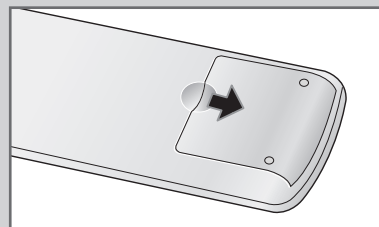
➤ The performance of the remote control may be affected by bright light.

Inserting the Batteries in the Remote Control

You must insert or replace the batteries in the remote control when you:

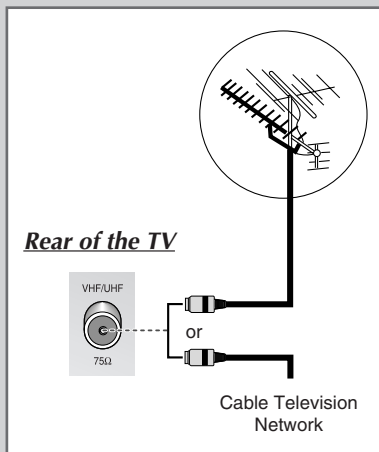
- ◆ *Purchase the television*
- ◆ *Find that the remote control is no longer operating correctly*

- 1 Remove the cover on the rear of the remote control by pressing the symbol (▼) downwards and then pulling firmly to remove it.
- 2 Insert two R03, UM4, "AAA" 1.5V or equivalent batteries taking care to respect the polarities:
 - ◆ - on the battery against - on the remote control
 - ◆ + on the battery against + on the remote control
- 3 Replace the cover by aligning it with the base of the remote control and pressing it back into place.



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Connecting to an Aerial or Cable Television Network

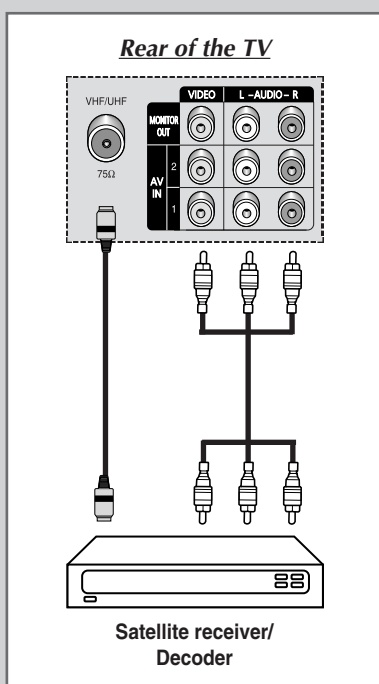


To view television channels correctly, a signal must be received by the set from one of the following sources:

- ◆ An outdoor aerial
- ◆ A cable television network
- ◆ A satellite network

- 1 In the first three cases, connect the aerial or network input cable to the 75Ω coaxial socket on the rear of the television.
- 2 If you are using an indoor aerial, you may need to turn it when tuning your television until you obtain a picture that is both sharp and clear.
For further details, refer to:
 - ◆ "Storing Channels Automatically" on page 18
 - ◆ "Storing Channels Manually" on page 20

Connecting a Satellite Receiver or Decoder



In order to watch television programmes broadcast via a satellite network, you must connect a satellite receiver to the rear of TV. Also, in order to descramble a coded transmission signal, you must connect a decoder to the rear of TV.

Using a Coaxial cable

- Connect a coaxial cable to the:
- ◆ Receiver (or Decoder) output socket.
 - ◆ Television aerial input socket.

➤ If you wish to connect both a satellite receiver (or decoder) and a VCR, you should connect the:

- ◆ Receiver (or Decoder) to the VCR
- ◆ VCR to the television

Otherwise, connect the receiver (or decoder) directly to the television.

Switching Your Television On and Off

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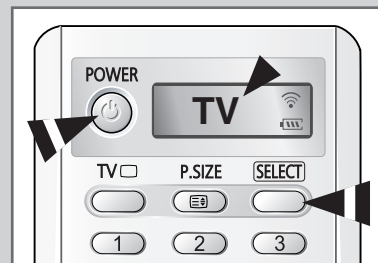
The mains lead is attached to the rear of your television.

- 1 Plug the mains lead into an appropriate socket.
 - The main voltage is indicated on the rear of the television and the frequency is 50 or 60Hz.
- 2 Press the “I” button (On/Off) on the front of the television.

Result: The Standby indicator on the front of the television lights up.
- 3 Press the **POWER** (⏻) button on the remote control to switch the television on.

Result: The programme that you were watching last is re-selected automatically.

 - ♦ If your television isn’t turned on when the **POWER** (⏻) button is pressed, press the **SELECT** button to check if the “TV” mode has been chosen.
 - ♦ If you have not yet stored any channels, No clear picture appears. Refer to “Storing Channels Automatically” on page 18 or “Storing Channels Manually” on page 20.
- 4 To switch your television off, press the “I” button (On/Off) again.



Placing Your Television in Standby Mode

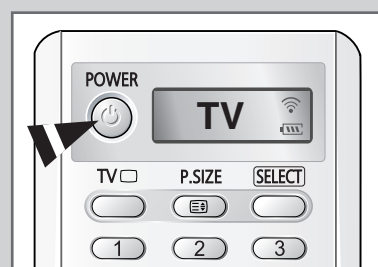
Your television can be placed in Standby mode, in order to reduce the power consumption.

The Standby mode can be useful when you wish to interrupt viewing temporarily (during a meal, for example).

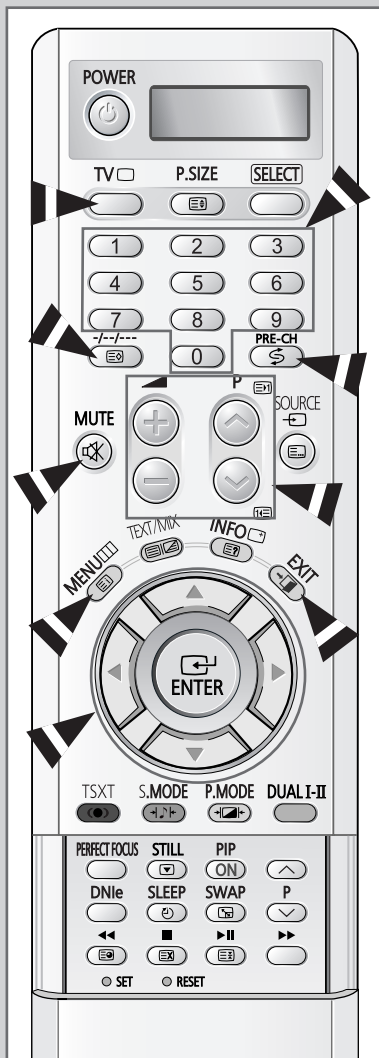
- 1 Press the **POWER** (⏻) button on the remote control.

Result: The screen is turned off and the Standby indicator on the front of the television lights up.
- 2 To switch the television back on, simply press the **POWER** (⏻) button again or a numeric button.
 - You can also switch on by pressing the **TV** (□) or channel up/ down (P ⏻/⏻) button.

👉 Do not leave your television in Standby mode for long periods of time (when you are away on holiday, for example). Turn your television off by pressing the “I” button (On/Off) on the front of the television. It is best to unplug the set from the mains and aerial.



Becoming Familiar with the Remote Control



The remote control is used mainly to:

- ◆ Change channels and adjust the volume
- ◆ Set up the television using the on-screen menu system

The following table presents the most frequently used buttons and their functions.

Button	Viewing Function	Menu Function
	Used to display the next stored channel.	—
	Used to display the previous stored channel.	—
0 to 9	Used to display the corresponding channels. ➤ For double digit channels, the second digit must be pushed immediately after the first. Failure to do this will result in a single digit channel being displayed.	
-/-/-	Used to select a channel numbered ten or over. Press this button, and the “--” or “---” symbol is displayed. Enter the two or three-digit channel number (depending on the model).	
PRE-CH (\$)	Press the PRE-CH button. The TV will switch to the last channel viewed. To quickly switch between two channels that are far apart, tune to one channel, then use the number button to select second channel. Then, use the PRE-CH button to quickly alternate between them.	
	Used to increase the volume.	—
	Used to decrease the volume.	—
MUTE ()	Used to switch the sound off temporarily. ➤ To turn the sound back on, press this button again, or press the or button.	
MENU ()	Used to display the on-screen menu system.	Used to return to the previous menu or normal viewing.
	—	Used to: ◆ Display a submenu containing selections for the current menu option ◆ Increase/decrease a menu option value
	—	Used to confirm your choice.
TV ()	Used to switch the television on when it is in Standby mode.	Used to exit from the menu system and return to normal viewing directly
EXIT ()	—	Used to exit from the menu system and return to normal viewing directly.

Plug & Play Feature (depending on the model)

When the television is initially powered ON, several basic customer settings proceed automatically and subsequently. The following settings are available.

➤ This feature does not work in PC mode.

- 1 If the television is in Standby mode, press the **POWER** (⏻) button on the remote control.

Result: The message **Plug & Play** is displayed.

- 2 To start the Plug & Play, press the **ENTER** (⏻) button.

Result: The **Language** menu is displayed.

- 3 Press the **ENTER** (⏻) button to confirm the language.

Result: The message **Antenna Input : Check.** is displayed.

- 4 Make sure that the antenna is connected to the TV, and then press the **ENTER** (⏻) button.

Result: The **Country** menu is displayed.

- 5 Select your country by pressing the **▲** or **▼** button. Press the **ENTER** (⏻) button to confirm your choice.

Result: The **Auto Store** menu is displayed.

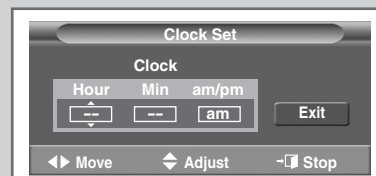
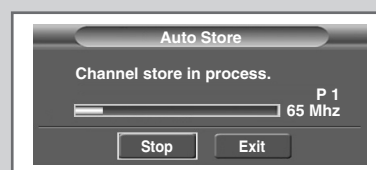
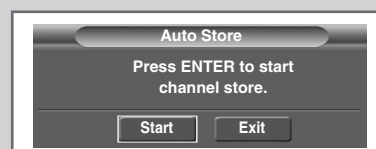
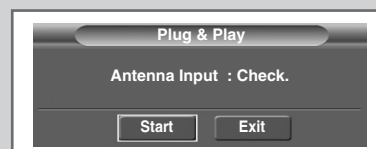
- 6 To start the channel store, press the **ENTER** (⏻) button.

Result: The search will end automatically. Channels are sorted and stored in an order which reflects their position in the frequency range (with lowest first and highest last). When it has finished, the **Clock Set** menu is displayed.

➤ To stop the search before it has finished or return to normal viewing, press the **EXIT** (⏻) button.

- 7 Press the **◀** or **▶** button to move to the hour or minute. Set the hour or minute by pressing the **▲** or **▼** button.

- 8 When the setting has finished all, the message **Enjoy Your Watching** is displayed, and then the channel which has been stored will be activated.



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Plug & Play Feature (depending on the model) (continued)



If you want to reset this feature...

- 1 Press the **MENU** button.
Result: The main menu is displayed.
- 2 Press the **▲** or **▼** button until the **Setup** is selected.
Result: The options available in the **Setup** group are displayed.
- 3 Press the **ENTER** (**↵**) button.
- 4 Press the **▲** or **▼** button until the **Plug & Play** option is selected.
Press the **ENTER** (**↵**) button.
Result: The message **Plug & Play** is displayed.
- 5 For further details on how to set, refer to the opposite page.

Viewing the Demonstration

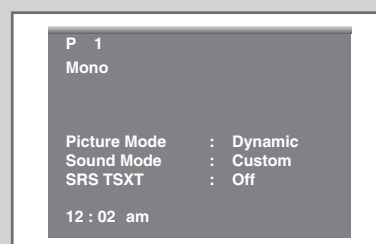
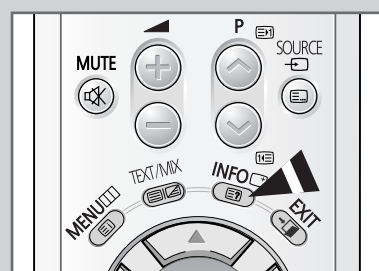
To become familiar with the various menus provided by your television, you can view the inbuilt demonstration.

- 1 Press the **MENU** button.
Result: The main menu is displayed.
- 2 Press the **▲** or **▼** button until the **Setup** is selected.
Result: The options available in the **Setup** group are displayed.
- 3 Press the **ENTER** (**↵**) button.
- 4 Press the **▲** or **▼** button until the **Demonstration** option is selected. Press the **ENTER** (**↵**) button.
Result: Each of the menu options is displayed in turn.
➤ When you wish to exit from the demonstration, press the **MENU** (**⏏**) or **EXIT** (**→**) button on the remote control.



Displaying Information





*You can view the channel information and setting status you select by pressing the "INFO (**ⓘ**)" button on the remote control.*



Choosing Your Language (depending on the model)



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

- 1 Press the **MENU** button.
Result: The main menu is displayed.
- 2 Press the **▲** or **▼** button until the **Setup** is selected.
Result: The options available in the **Setup** group are displayed.
- 3 Press the **ENTER** () button.
- 4 Press the **▲** or **▼** button until the **Language** is selected. Press the **ENTER** () button.
Result: The languages available are listed.
- 5 Select the appropriate language by pressing the **▲** or **▼** button. Press the **ENTER** () button to confirm your choice.
- 6 When you are satisfied with your choice, press the **EXIT** () button to return to normal viewing.

Adjusting Convergence

If the color appears spread out or smeared on the screen, the convergence probably needs alignment. Be sure to use the remote control for the convergence adjustments. (The Convergence Adjustment can not be made by using the control buttons on the front panel.)

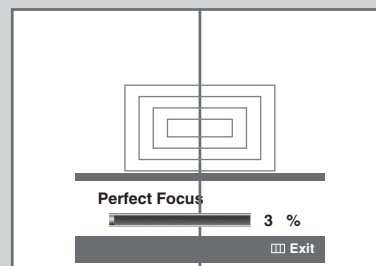
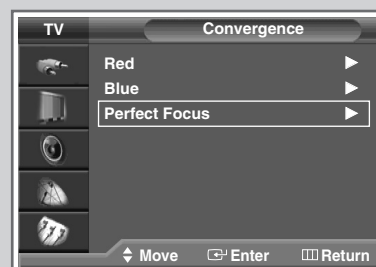
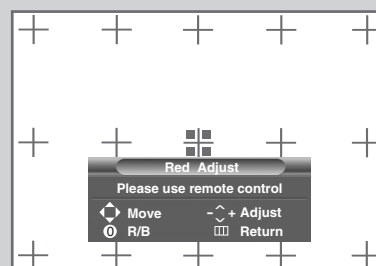
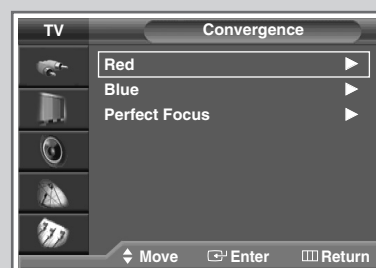
- 1 Press the **MENU** button.
Result: The main menu is displayed.
- 2 Press the **▲** or **▼** button until the **Setup** is selected.
Result: The options available in the **Setup** group are displayed.
- 3 Press the **ENTER** (**↵**) button.
- 4 Press the **▲** or **▼** button until the **Convergence** is selected. Press the **ENTER** (**↵**) button.
Result: The options available in the **Convergence** group are displayed with **Red** is selected.
- 5 Press the **ENTER** (**↵**) button again.
Result: A crosshair pattern is appeared.
- 6 Adjust convergence by using your remote control.
 - ◆ Use the **▼**, **▲**, **◀**, or **▶** button to select the position.
 - ◆ Press the **"0"** button to select red or blue convergence.
 - ◆ To move the line so that it is superimposed on the horizontal or vertical center-line, use the **▼**, **▲**, **◀**, or **▶** button (i.e., make a signal horizontal or vertical line that is as white as possible).
 - ◆ Press the **MENU** (**⏏**) button to exit.

You can adjust convergence automatically for the optimum in the factory.

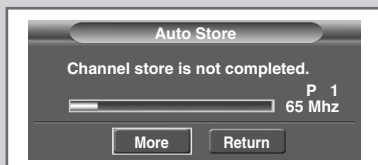
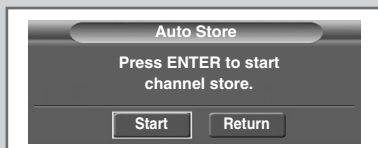
- 7 Press the **▲** or **▼** button until the **Perfect Focus** is selected. Press the **ENTER** (**↵**) button.
Result: Perform Perfect Focus in the following sequence: green → red → blue.

After the cursor flickers for one second, the perfect focus feature ends.








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Storing Channels Automatically



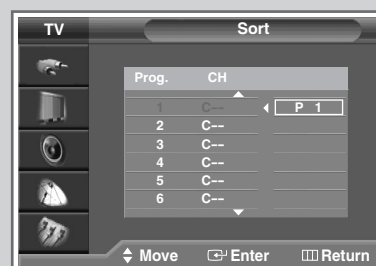
You can scan for the frequency ranges available to you, (availability depends on your country). Automatically allocated programme numbers may not correspond to actual or desired programme numbers. However you can sort numbers manually and clear any channels you do not wish to watch.

- 1 Press the **MENU** button.
Result: The main menu is displayed.
- 2 Press the **▲** or **▼** button until the **Channel1** is selected.
Result: The options available in the **Channel1** group are displayed.
- 3 Press the **ENTER** () button.
Result: The **Auto Store** is selected.
- 4 Press the **ENTER** () button.
Result: The **Auto Store** menu is displayed with **Country** option selected.
- 5 Press the **ENTER** () button again.
Result: The countries available are listed.
- 6 Select your country by pressing the **▲** or **▼** button. Press the **ENTER** () button to confirm your choice
- 7 Press the **▲** or **▼** button until the **Search** is selected. Press the **ENTER** () button.
- 8 Select the **Start** and press the **ENTER** () button to start the search.
Result: The search will end automatically. Channels are sorted and stored in an order which reflects their position in the frequency range, (with lowest first and highest last). The programme originally selected is then displayed.
➤ To stop the search before it has finished or return to normal viewing, press the **EXIT** () button.
- 9 When the channels have been stored, you can:
 - ◆ Sort them in the order required (see page 19)
 - ◆ Clear a channel (see page 22)
 - ◆ Fine-tune channel reception if necessary (see page 24)
 - ◆ Activate/deactivate the **LNA** (Low Noise Amplifier) feature (see page 25)
 - ◆ Activate/deactivate the **Digital NR** (Digital Noise Reduction) feature (see page 29)

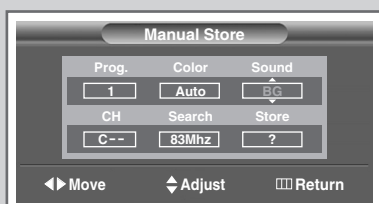
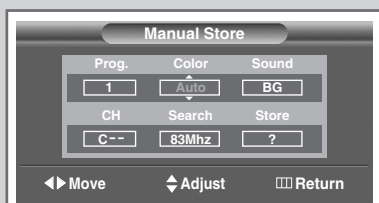
Sorting the Stored Channels

This operation allows you to change the programme numbers of stored channels. This operation may be necessary after using the auto store. You can delete those channels you do not want to keep.

- 1 Press the **MENU** button.
Result: The main menu is displayed.
- 2 Press the **▲** or **▼** button until the **Channel1** is selected.
Result: The options available in the **Channel1** group are displayed.
- 3 Press the **ENTER** (**↵**) button.
- 4 Press the **▲** or **▼** button until the **Sort** is selected. Press the **ENTER** (**↵**) button.
Result: The **Sort** menu is displayed.
- 5 Select the channel that you wish to move by pressing the **▲** or **▼** button. Press the **ENTER** (**↵**) button.
- 6 Select the number of the programme to which the channel is to be moved by pressing the **▲** or **▼** button. Press the **ENTER** (**↵**) button.
Result: The channel is moved to its new position and all other channels are shifted accordingly.
- 7 Repeat Steps 5 to 6 until you have moved all the channels to the required programme numbers.



Storing Channels Manually



You can store the television channels, including those received via cable networks.

When storing channels manually, you can choose:

- ◆ Whether or not to store each of the channels found
- ◆ The programme number of each stored channel which you wish to identify

- 1 Press the **MENU** button.
Result: The main menu is displayed.
- 2 Press the **▲** or **▼** button until the **Channel** is selected.
Result: The options available in the **Channel** group are displayed.
- 3 Press the **ENTER** (**↵**) button.
- 4 Press the **▲** or **▼** button until the **Manual Store** is selected. Press the **ENTER** (**↵**) button.
Result: The current channels are displayed.
- 5 Select the channel that you wish to move by pressing the **▲** or **▼** button. Press the **ENTER** (**↵**) button.
- 6 To assign a programme number to a channel, select the **Prog.** by pressing the **◀** or **▶** button. Press the **▲** or **▼** button until you find the correct number.
- 7 If necessary, select the broadcasting standard required. Press the **◀** or **▶** button until the **Color** is selected and press the **▲** or **▼** button. The color standards are displayed in the following order.
Auto — PAL — SECAM — NT4.43 — NT3.58
- 8 Press the **◀** or **▶** button until the **Sound** is selected and press the **▲** or **▼** button. The sound standards are displayed in the following order.
BG — DK — I — M

Storing Channels Manually (continued)

ENG

- 9 If you know the number of the channel to be stored, see the following steps.
- ◆ Press the ◀ or ▶ button until the **CH** is selected.
 - ◆ Press the ▲ or ▼ button to select **C** (Air channel) or **S** (Cable channel).
 - ◆ Press the ▶ button
 - ◆ Press the ▲ or ▼ button to select the required number.
- If no sound or abnormal sound can be heard, re-select the sound standard required.

- 10 If you do not know the channel numbers, select the **Search** by pressing the ◀ or ▶ button. To start the search, press the ▲ or ▼ button.

Result: The tuner scans the frequency range until the first channel or the channel that you selected is received on your screen.

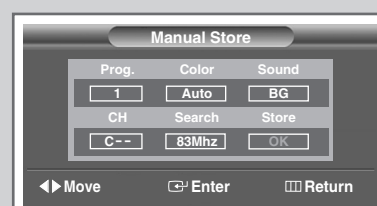
- 11 Press the ◀ or ▶ button until the **Store** is selected to store the channel and associated programme number. Set to **OK** by pressing the **ENTER** (↵) button.

- 12 Repeat Steps 9 to 11 for each channel to be stored.

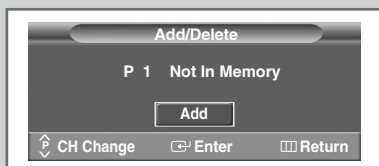
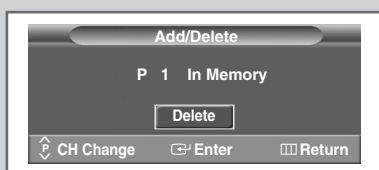


Channel mode




- ◆ **P** (Programme mode): When completing tuning, the broadcasting stations in your area have been assigned to position numbers from P00 to max P99. You can select a channel by entering the position number in this mode.
- ◆ **C** (Real channel mode): You can select a channel by entering the assigned number to each air broadcasting station in this mode.
- ◆ **S** (Cable channel mode): You can select a channel by entering the assigned number for each cable channel in this mode.



Skipping Unwanted Channels



You can exclude the channels of your choice from the channel scan operation. When you scan through the stored channels, those that you have chosen to skip are thus not displayed. All channels that you do not specifically choose to skip are displayed during scanning.

- 1 First, select the channel to be added or erased , then press the **MENU** button.
Result: The main menu is displayed.
- 2 Press the ▲ or ▼ button until the **Channel1** is selected.
Result: The options available in the **Channel1** group are displayed.
- 3 Press the **ENTER** () button.
- 4 Press the ▲ or ▼ button until the **Add/Delete** is selected. Press the **ENTER** () button.
Result: The **Add/Delete** menu is displayed with the current channel selected.
- 5 To delete or add the required channel, select the **Delete** or **Add** and press the **ENTER** () button.

Activating the Child Lock

This feature allows you to lock the television so that it cannot be switched on via the front panel. It can, however, still be switched on via the remote control. Thus, by keeping the remote control away from unauthorised users, such as children, you can prevent them from watching unsuitable programme.

- 1 Press the **MENU** button.
Result: The main menu is displayed.
- 2 Press the ▼ or ▲ button to select **Channel**.
Result: The options available in the **Channel** group are displayed.
- 3 Press the **ENTER** (↵) button.
- 4 Press the ▼ or ▲ button to select **Child Lock**. Press the **ENTER** (↵) button.
Result: The **Child Lock** menu is displayed and the current channel is shown as selected.
- 5 Press the ▼ or ▲ button to select the channel to be locked.
- 6 Press the **ENTER** (↵) button. To lock the channel, select **Locked** by pressing the ▼ or ▲ button (to unlock the channel, select **Unlocked**). Press the **ENTER** (↵) button to confirm.



Fine Tuning Channel Reception



If the reception is clear, you do not have to fine tune the channel, as this is done automatically during the search and store operation. If the signal is weak or distorted, you may have to fine tune the channel manually.

- 1 Press the **MENU** button.
Result: The main menu is displayed.
- 2 Press the **▲** or **▼** button until the **Channel1** is selected.
Result: The options available in the **Channel1** group are displayed.
- 3 Press the **ENTER** (**↵**) button.
- 4 Press the **▲** or **▼** button until the **Fine Tune** is selected. Press the **ENTER** (**↵**) button.
Result: The horizontal bar is displayed.
- 5 To obtain a sharp and clear picture and good sound quality, press the **◀** or **▶** button until you reach the setting.

Using the LNA (Low Noise Amplifier) Feature

This feature is very useful in the situation that the TV is used in a weak signal, and amplifies the TV signal in the weak signal area, but not noise.

This feature is working only in a weak signal condition, and that is memorized on relevant channel's additional information.


- 1 Press the **MENU** button.


Result: The main menu is displayed.

- 2 Press the **▲** or **▼** button until the **Channel** is selected.

Result: The options available in the **Channel** group are displayed.

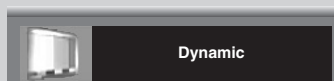
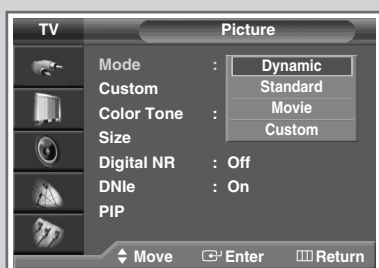
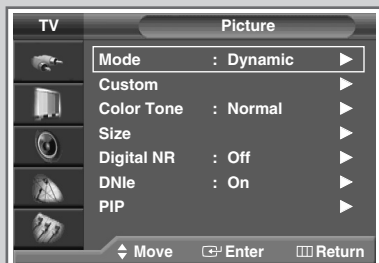
- 3 Press the **ENTER** () button.

- 4 Press the **▲** or **▼** button until the **LNA** is selected. Press the **ENTER** () button.




- 5 Select **off** or **On** by pressing the **▲** or **▼** button. Press the **ENTER** () button to confirm.




Changing the Picture Standard



You can select the picture mode which best corresponds to your viewing requirements.

- 1 Press the **MENU** button.
Result: The main menu is displayed.
- 2 Press the **▲** or **▼** button until the **Picture** is selected.
Result: The options available in the **Picture** group are displayed.
- 3 Press the **ENTER** () button.
Result: The **Mode** is selected.
- 4 Press the **ENTER** () button again.
Result: The options available are listed.
- 5 Select the option by pressing the **▼** or **▲** button.
Result: The following modes are available:
Dynamic — Standard — Movie — Custom
- 6 Press the **ENTER** () button to confirm.

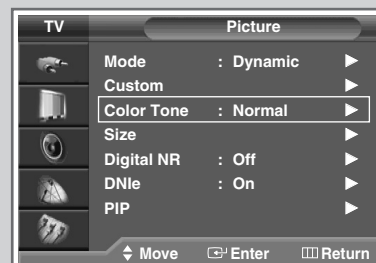
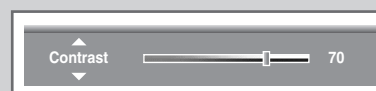
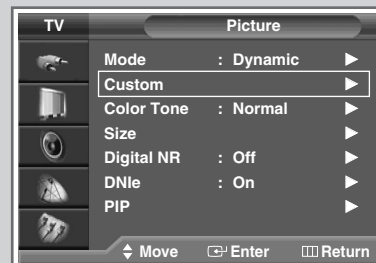
➤ You can select these options by simply pressing the **P.MODE** ( : Picture Mode) button on the remote control.

Customizing the Picture Settings

Your television has several settings options that allow you to control picture quality.

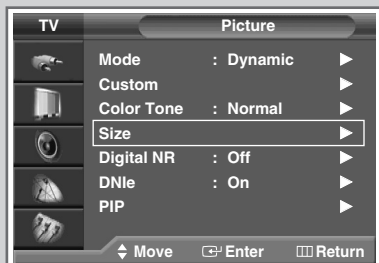
- 1 Press the **MENU** button.
Result: The main menu is displayed.
- 2 Press the **▲** or **▼** button until the **Picture** is selected.
Result: The options available in the **Picture** group are displayed.
- 3 Press the **ENTER** (**↵**) button.
- 4 Select the required option (**Custom**, **Color Tone**) pressing the **▼** or **▲** button.
- 5 Press the **▲** or **▼** button until the **Custom** is selected. Press the **ENTER** (**↵**) button.
Result: The **Custom** menu is displayed.
- 6 Press the **ENTER** (**↵**) button.
- 4 Select the option (**Contrast**, **Brightness**, **Sharpness**, **Color** or **Tint**-NTSC only) to be adjusted by pressing the **▲** or **▼** button. Press the **◀** or **▶** button.
Result: The horizontal bar is displayed. Move the horizontal bar's cursor left or right by pressing the **◀** or **▶** button.
- 5 Press the **MENU** button to return the **Picture** menu. Press the **▲** or **▼** button until the **Color Tone** is selected. Press the **ENTER** (**↵**) button.
Result: The following modes are available:
Cool 2 — Cool 1 — Normal — Warm 1 — Warm 2
- 6 Select the required color tone by pressing the **▲** or **▼** button. Press the **ENTER** (**↵**) button to confirm.

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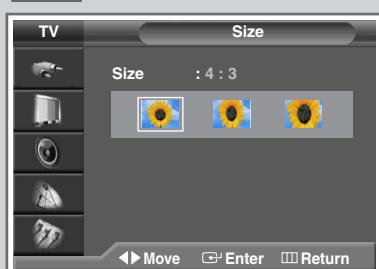


Selecting the Picture Size

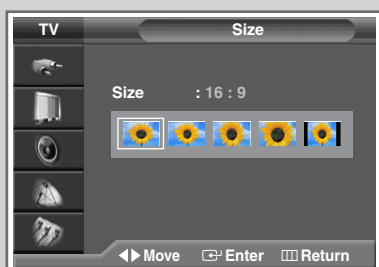
You can select the picture size which best corresponds to your viewing requirements.



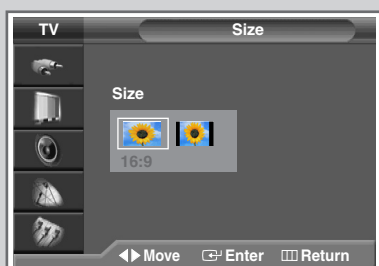
Normal






Wide



PC Mode : Wide



- 1 Press the **MENU** button.
Result: The main menu is displayed.
- 2 Press the **▲** or **▼** button until the **Picture** is selected.
Result: The options available in the **Picture** group are displayed.
- 3 Press the **ENTER** () button.
- 4 Press the **▲** or **▼** button until the **Size** is selected. Press the **ENTER** () button.
Result: The following modes are available: (depending on the model)
 - ◆ 4:3 - Zoom 1 - Zoom 2
 - ◆ 16:9 - Panorama - Zoom 1 - Zoom 2 - 4:3
 - ◆ 16:9 - 4:3 (PC Mode)

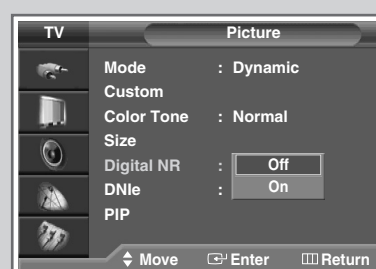
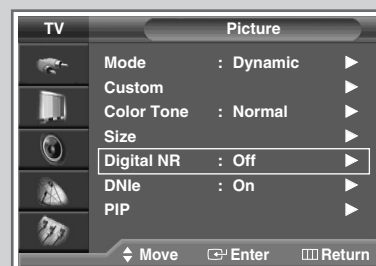
16:9	Adjusting the ratio of picture from 4:3 to 16:9.
Panorama	Adjusting the wide picture to natural size.
Zoom 1	Enlarging the normal 4:3 picture by 120%.
Zoom 2	Enlarging the normal 4:3 picture by 150%.
4:3	Normal 4:3 ratio picture.
- 5 Press the **ENTER** () button to confirm.

-
- ◆ You can select these options by simply pressing the **P.SIZE** button on the remote control. At this time, lifting is available in the **Zoom1** or **Zoom2** mode by pressing the **▲** or **▼** button.
 - ◆ The picture size can not be changed in the PIP mode.

Using the Digital NR (Digital Noise Reduction) Feature

If the signal received by your television is weak, you can activate this feature to help reduce any static and ghosting that may appear on the screen.

- 1 Press the **MENU** button.
Result: The main menu is displayed.
- 2 Press the **▲** or **▼** button until the **Picture** is selected.
Result: The options available in the **Picture** group are displayed.
- 3 Press the **ENTER** (**↵**) button.
- 4 Press the **▲** or **▼** button until the **Digital NR** is selected. Press the **ENTER** (**↵**) button.
- 5 Select **Off** or **On** by pressing the **▲** or **▼** button. Press the **ENTER** (**↵**) button to confirm.



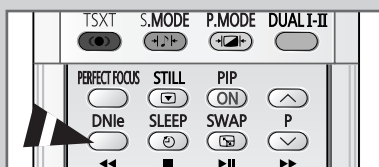
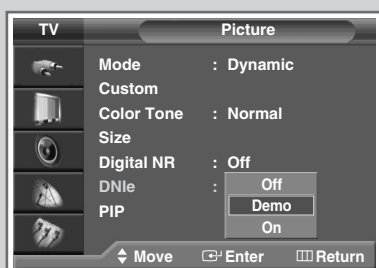
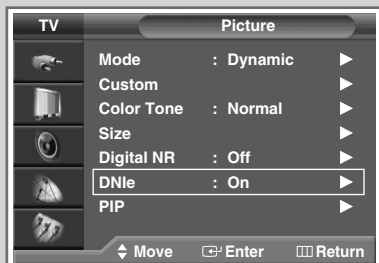
Freezing the Current Picture

You can freeze the picture when watching a television programme simply by pressing the "STILL (▼)" button. To return to normal viewing, press it again.





DNle™ (Digital Natural Image engine) **DNle™**

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


This feature brings you more detailed image with 3D noise reduction, detail enhancement, contrast enhancement and white enhancement. New image compensation Algorithm presents brighter, clearer, much detailed image. DNle™ technology will fit every signals into your eyes...

- 1 Press the **MENU** button.
Result: The main menu is displayed.
- 2 Press the **▲** or **▼** button until the **Picture** is selected.
Result: The options available in the **Picture** group are displayed.
- 3 Press the **ENTER** () button.
- 4 Press the **▲** or **▼** button until the **DNle** is selected. Press the **ENTER** () button.
- 5 Press the **▲** or **▼** button to change the setting.
 - ◆ **On:** Switches on the DNle mode.
 - ◆ **Demo** (Option): The screen before applying DNle appears on the right and the screen after applying DNle appears on the left.
 - ◆ **off:** Switches off the DNle mode.

➤ You can also set these options simply by pressing the **DNle** button.

Setting the Blue Screen Mode

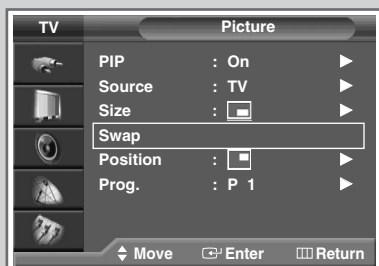
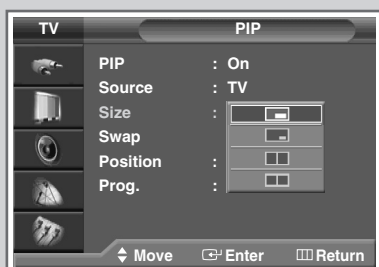
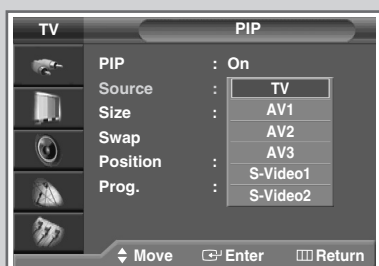
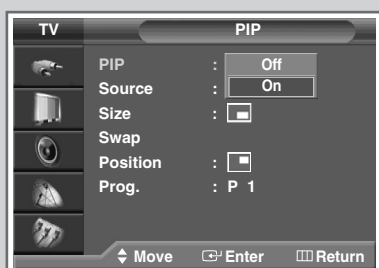
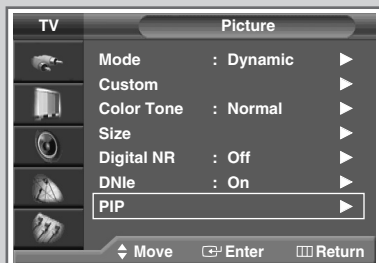
If no signal is being received or the signal is very weak, a blue screen automatically replaces the noisy picture background. If you wish to continue viewing the poor picture, you must set the Blue Screen mode to Off.












- 1 Press the **MENU** button.
Result: The main menu is displayed.
- 2 Press the **▲** or **▼** button until the **Setup** is selected.
Result: The options available in the **Setup** group are displayed.
- 3 Press the **ENTER** () button.
- 4 Press the **▲** or **▼** button until the **Blue Screen** is selected. Press the **ENTER** () button.
- 5 Select **Off** or **On** by pressing the **▲** or **▼** button. Press the **ENTER** () button to confirm.



Viewing the Picture In Picture (PIP)

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



- 1 Press the **MENU** button.
Result: The main menu is displayed.
- 2 Press the **▲** or **▼** button until the **Picture** is selected.
Result: The options available in the **Picture** group are displayed.
- 3 Press the **ENTER** () button.
- 4 Press the **▲** or **▼** button until the **PIP** is selected.
Result: The options available in the **PIP** group are displayed.
- 5 Press the **ENTER** () button.
- 6 To activate, set the **PIP** to **on** by pressing the **▼** or **▲** button.
- 7 Press the **▲** or **▼** button until the **Source** is selected. Press the **ENTER** () button.
Result: The sources available are displayed.
TV — AV1 — AV2 — AV3 — S-Video1 — S-Video2
- 8 Select a source of the sub picture by pressing the **▲** or **▼** button. Press the **ENTER** () button.
- 9 Press the **▲** or **▼** button until the **Size** is selected. Press the **ENTER** () button.
Result: The sizes available are displayed.
   
(Large) — (Small) — (Double1) — (Double2)
- 10 Select a size of the sub picture by pressing the **▲** or **▼** button. Press the **ENTER** () button.
- 11 Press the **▲** or **▼** button until the **Swap** is selected. Press the **ENTER** () button.
Result: The main picture and the sub picture are interchanged.

Viewing the Picture In Picture (PIP) (continued)

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- 12 Press the ▲ or ▼ button until the **Position** is selected. Press the **ENTER** (↵) button.

Result: The positions available are displayed.

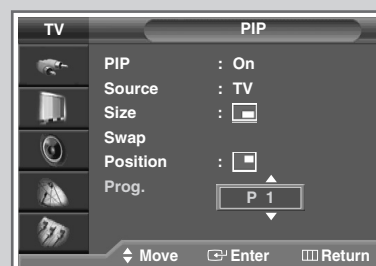
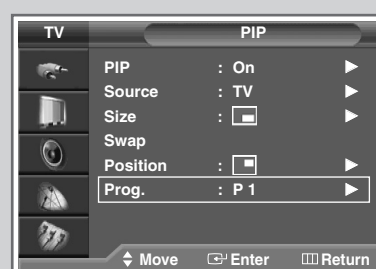
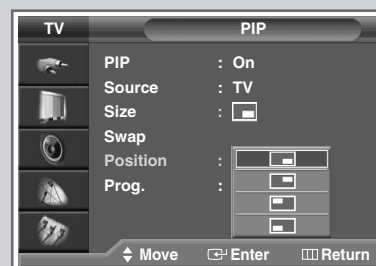


➤ The **Position** menu is available when the **Size** is Large or Small.

- 13 Select a position of the sub picture by pressing the ▲ or ▼ button. Press the **ENTER** (↵) button.

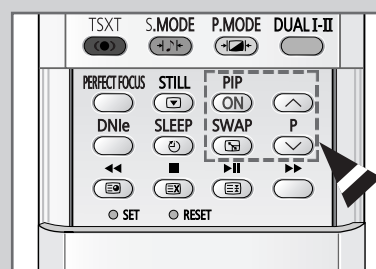
- 14 Press the ▲ or ▼ button until the **Prog.** is selected. You can select the channel that you want to view through sub picture by pressing the ▲ or ▼ button.

➤ When the **Source** is set to **TV**, you can select the channel of sub picture.

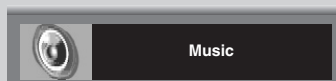
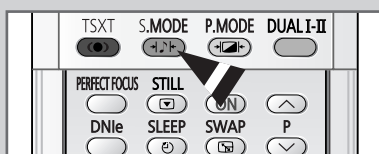
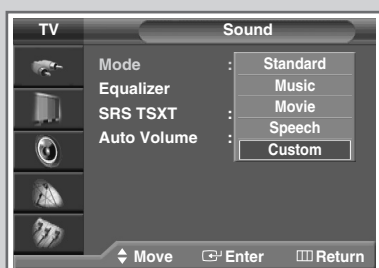
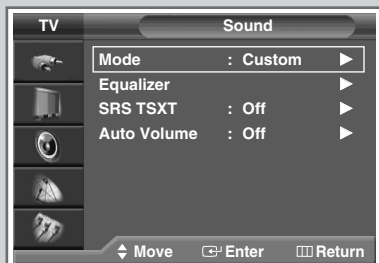


Easy functions of remote control.




Buttons	Feature
PIP	Used to activate or deactivate the PIP function directly.
SWAP	Used to interchange the main picture and the sub picture. ➤ When the main picture is in the Video mode and the sub picture is in the TV mode, you might not hear the sound of main picture when pressing the SWAP (↔) button after changing the sub picture channel. At this time, reselect the channel of main picture.
P ▲ / ▼	Used to select the channel of sub picture.




Changing the Sound Standard



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

- 1 Press the **MENU** button.
Result: The main menu is displayed.
- 2 Press the **▲** or **▼** button until the **Sound** is selected.
Result: The options available in the **Sound** group are displayed.
- 3 Press the **ENTER** () button.
Result: The **Mode** is selected.
- 4 Press the **ENTER** () button again.
- 5 Select the option by pressing the **▼** or **▲** button. The sound effects are displayed in the following order.
Standard - Music - Movie - Speech - Custom.
- 6 Press the **ENTER** () button to confirm.

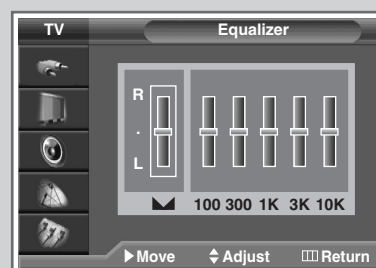
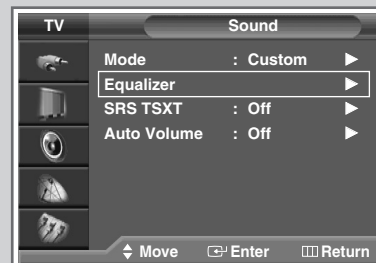
➤ You can also set these options simply by pressing the **S.MODE** ( : Sound Mode) button.

Adjusting the Sound Settings

The sound settings can be adjusted to suit your personal preferences.

- 1 Press the **MENU** button.
Result: The main menu is displayed.
- 2 Press the **▲** or **▼** button until the **Sound** is selected.
Result: The options available in the **Sound** group are displayed.
- 3 Press the **ENTER** (**↵**) button.
- 4 Press the **▲** or **▼** button until the **Equalizer** is selected. Press the **ENTER** (**↵**) button.
Result: The **Equalizer** menu is displayed with the current option.
- 5 Select the option to be adjusted by pressing the **◀** or **▶** button. Press the **▼** or **▲** button to reach the required setting.

➤ If you make any changes to the equalizer settings, the sound standard is automatically switched to the **Custom**.

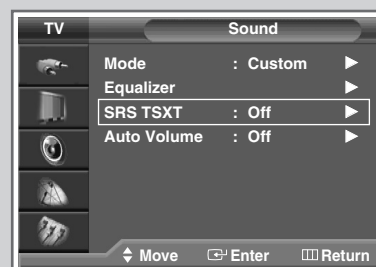


Setting the SRS TSXT

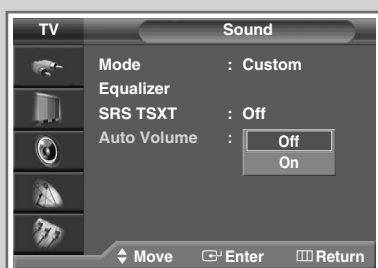
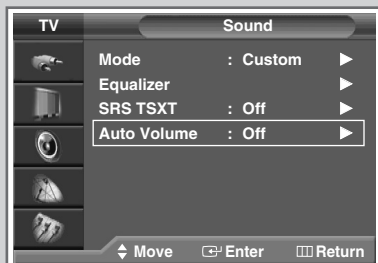
TruSurround XT is a patented SRS technology that solves the problem of playing 5.1 multichannel content over two speakers. Trusurround delivers a compelling, virtual surround sound experience through any two-speaker playback system, including internal television speakers. It is fully compatible with all multichannel formats.

- 1 Press the **MENU** button.
Result: The main menu is displayed.
- 2 Press the **▲** or **▼** button until the **Sound** is selected.
Result: The options available in the **Sound** group are displayed.
- 3 Press the **ENTER** (**↵**) button.
- 4 Press the **▲** or **▼** button until the **SRS TSXT** is selected. Press the **ENTER** (**↵**) button.
- 5 Press the **▼** or **▲** button to change the setting. (**Off**, **3D Mono** or **Stereo**). Press the **ENTER** (**↵**) button to confirm.




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



Adjusting the Volume Automatically






Each broadcasting station has its own signal conditions, and so it is not easy for you 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.

- 1 Press the **MENU** button.
Result: The main menu is displayed.
- 2 Press the **▲** or **▼** button until the **Sound** is selected.
Result: The options available in the **Sound** group are displayed.
- 3 Press the **ENTER** () button.
- 4 Press the **▲** or **▼** button until the **Auto Volume** is selected. Press the **ENTER** () button.
- 5 Select the option (**Off** or **On**) by pressing the **▼** or **▲** button.
- 6 Press the **ENTER** () button to confirm.

Setting the Melody Sound



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

- 1 Press the **MENU** button.
Result: The main menu is displayed.
- 2 Press the **▲** or **▼** button until the **Setup** is selected.
Result: The options available in the **Setup** group are displayed.
- 3 Press the **ENTER** () button.
- 4 Press the **▲** or **▼** button until the **Melody** is selected. Press the **ENTER** () button.
- 5 Select the option (**Off** or **On**) by pressing the **▼** or **▲** button.
- 6 Press the **ENTER** () button to confirm.

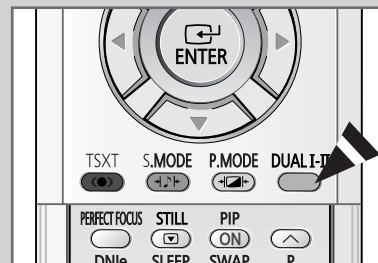
Selecting the Sound Mode (depending on the model)

The “DUAL I-II” button displays/controls the processing and output of the audio signal. When power is switched on, the mode is automatically preset to either “Dual-I ” or “Stereo”, depending on the current transmission.

	Type of broadcast	On-screen indication
NICAM Stereo	Regular broadcast (Standard audio)	Mono (Normal use)
	Regular + NICAM Mono	NICAM Mono ↔ Mono
	NICAM Stereo	NICAM Stereo ↔ Mono (Forced mono)
	NICAM Dual-I/II	NICAM Dual-I → NICAM Dual-II → Mono
A2 Stereo	Regular broadcast (Standard audio)	Mono
	Bilingual or Dual-I/II	DUAL-I ↔ DUAL-II
	Stereo	Stereo ↔ Mono (Forced mono)

- ◆ If the receiving conditions deteriorate, listening will be easier if the mode is set to the **Mono**.
- ◆ If the stereo signal is weak and an automatic switching occurs, then switch to the **Mono**.
- ◆ When receiving a mono sound in the AV mode, connect to the “AUDIO-L” input connector on the panel (front or side, depending on the model). If the mono sound comes out only from left speaker, press the **DUAL I-II** button.

ENG



Setting the Current Time



You can set the television's clock so that the current time is displayed by pressing the "INFO ()" button. You must also set the time if you wish to use the automatic on or off timers.

➤ When pressing the "I" button (On/Off) on the panel of the television, the clock setting will be reset.

- 1 Press the **MENU** button.
Result: The main menu is displayed.
- 2 Press the **▲** or **▼** button until the **Setup** is selected.
Result: The options available in the **Setup** group are displayed.
- 3 Press the **ENTER** () button.
- 4 Press the **▲** or **▼** button until the **Time** is selected. Press the **ENTER** () button.
Result: The options available in the **Time** group are displayed with **Clock** is selected.
- 5 Press the **ENTER** () button.
- 6 Press the **◀** or **▶** button to move to the **Hour**, **Min** (Minute) or **am/pm**. Set the hour or minute by pressing the **▼** or **▲** button.
- 7 Press the **INFO** () button to display the current time.

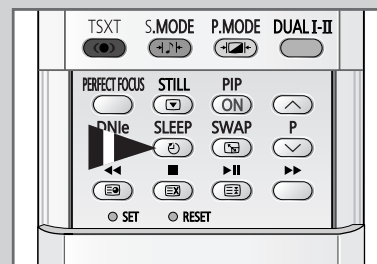
➤ You can also set the hour and minute by pressing the numeric buttons directly.

Setting the Sleep Timer

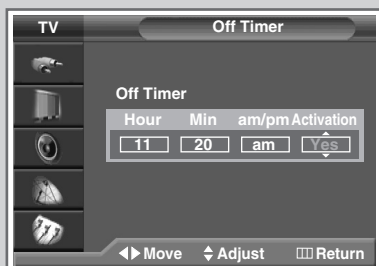
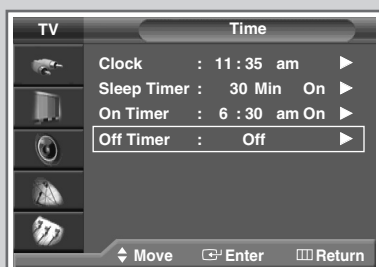
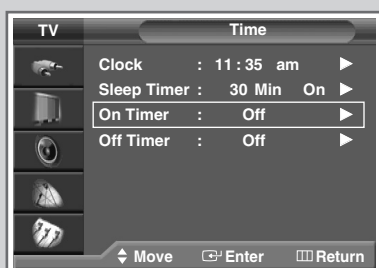
You can select a time period of between 10 and 180 minutes after which the television automatically switches to Standby mode.

- 1 Press the **MENU** button.
Result: The main menu is displayed.
- 2 Press the **▲** or **▼** button until the **Setup** is selected.
Result: The options available in the **Setup** group are displayed.
- 3 Press the **ENTER** (**↵**) button.
- 4 Press the **▲** or **▼** button until the **Time** is selected. Press the **ENTER** (**↵**) button.
Result: The options available in the **Time** group are displayed.
- 5 Press the **▲** or **▼** button until the **Sleep Timer** is selected. Press the **ENTER** (**↵**) button.
Result: The **Sleep Timer** menu is displayed with the **Min** is selected.
- 6 Select the preset time interval (**30**, **60**, **90**, **120**, **150**, **180**) for staying on by pressing the **▲** or **▼** button. Press the **ENTER** (**↵**) button to confirm.

- ◆ You can also set these options simply by pressing the **SLEEP** (**⏸**) button.
- ◆ If the sleep timer is not yet set, **off** is displayed. If the sleep timer is already set, the remaining time before which the television switches to Standby mode is displayed.



Switching the Television On and Off Automatically



You can set the On or Off timers so that the television will:

- ◆ Switch on automatically and tune to the channel of your choice at the time you select
- ◆ Switch off automatically at the time you select

➤ The first step is to set the television's clock (refer to "Setting the Current Time" on page 38). If you have not yet set the clock, the message **Set the clock first** is displayed.

- 1 Press the **MENU** button.
Result: The main menu is displayed.
- 2 Press the **▲** or **▼** button until the **Setup** is selected.
Result: The options available in the **Setup** group are displayed.
- 3 Press the **ENTER** (**↵**) button.
- 4 Press the **▲** or **▼** button until the **Time** is selected. Press the **ENTER** (**↵**) button.
Result: The options available in the **Time** group are displayed.
- 5 Press the **▲** or **▼** button until the **On Timer** is selected. Press the **↵** button.
Result: The options available in the **On Timer** group are displayed.
- 6 Select the **Hour**, **Min**, **am/pm**, **Prog.No** (programme number) or **Volume** by pressing the **◀** or **▶** button. And Set these by pressing the **▲** or **▼** button.
- 7 When you are satisfied with the settings, select **Activation** to **Yes** or **No** by pressing the **▼** or **▲** button.
- 8 Press the **MENU** button.
Result: The options available in the **Time** group are displayed again.
- 9 Press the **▲** or **▼** button until the **Off Timer** is selected. Press the **ENTER** (**↵**) button.
Result: The **Off Timer** menu is displayed.
- 10 Select the **Hour**, **Min**, **am/pm** or **Activation** by pressing the **◀** or **▶** button. Set these by pressing the **▼** or **▲** button.

➤ Absent Power Off

When you set the timer "On", your television will eventually be turned off, if you do not operate any controls during the 3 hours after the TV is turned on by timer. This function is available in only the timer "On" mode and will prevent a leakage accident or overheating, caused by your TV left on for a long time due to the timer "On" (when you are away on holiday, for example).

Viewing an External Signal Source

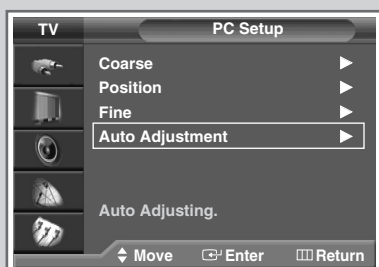
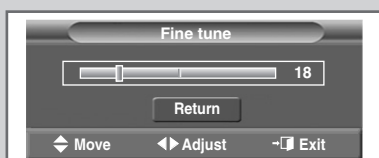
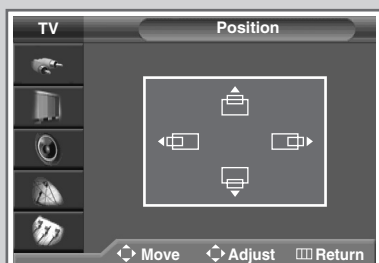
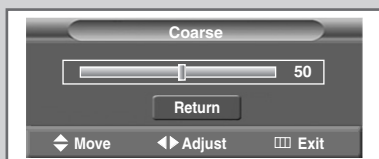
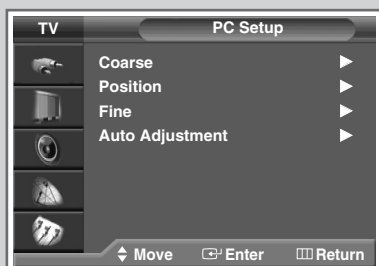
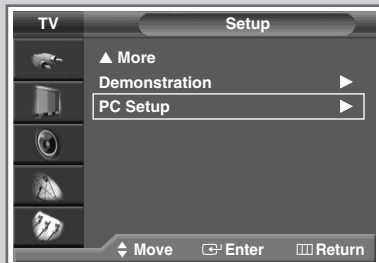
Use the remote control to switch between viewing signal from connected equipment, such as VCR, DVD, Set-Top-boxes and the TV source (broadcast or cable)







- 1 Press the **MENU** button.
Result: The main menu is displayed.
- 2 Press the **▲** or **▼** button until the **Input** is selected.
Result: The options available in the **Input** group are displayed.
- 3 Press the **ENTER** (**↵**) button.
- 4 Press the **▲** or **▼** button until the **Source List** is selected. Press the **ENTER** (**↵**) button.
Result: The options available in the **Source List** group are displayed.
- 5 Press the **▼** or **▲** button to select signal source, then press the **ENTER** (**↵**) button.
➤ When you connect equipment to the TV, you can choose between the following sets of jacks : **AV1**, **AV2**, **Component1**, **Component2**, **DVI** or **PC** on the TV's rear panel, and **AV3** or **S-Video** on the TV's side panel.
- 6 Press the **MENU** button and select **Input**.
- 7 Press the **▲** or **▼** button until the **Edit Name** is selected. Press the **ENTER** (**↵**) button.
Result: The options available in the **Edit Name** group are displayed.
- 8 Press the **▼** or **▲** button to select the edited external source. Press the **ENTER** (**↵**) button.
Result: The device names available are listed.
VCR - DVD - Cable STB - HD STB - Satellite STB - AV Receiver - DVD Receiver - Game - Camcorder - DVD Combo - DHR (DVD HDD Recorder).
- 9 Select the required device by pressing the **▼** or **▲** button. Press the **ENTER** (**↵**) button to confirm.

➤ You can also set these options simply by pressing the **SOURCE** (**⏏**) button. If you change the external source while viewing, pictures might take a short period of time to be switched.





Setting the PC Display (PC Mode)





- 1 Press the **MENU** button.
Result: The main menu is displayed.
- 2 Press the **▲** or **▼** button until the **Setup** is selected.
Result: The options available in the **Setup** group are displayed.
- 3 Press the **ENTER** () button.
- 4 Press the **▲** or **▼** button until the **PC Setup** is selected. Press the **ENTER** () button.
- 5 Press the **▲** or **▼** button until the **Coarse** is selected. Press the **ENTER** () button.
Result: The horizontal bar is displayed. Press the **◀** or **▶** button until you reach the setting.
- 6 Press the **ENTER** () button to confirm your choice
- 7 When you are satisfied with the setting, press the **MENU** () button to return to the **PC Setup** menu.
- 8 Press the **▲** or **▼** button until the **Position** is selected. Press the **ENTER** () button.
- 9 Select the required position by using the **▼**, **▲**, **◀**, or **▶** button.

You can fine tune and get the best picture by removing noises that create unstable images with jitters and shimmers.

- 10 When you are satisfied with the setting, press the **MENU** () button to return to the **PC Setup** menu.
- 11 Press the **▲** or **▼** button until the **Fine Tune** is selected. Press the **ENTER** () button.
Result: The horizontal bar is displayed. Press the **◀** or **▶** button until you reach the setting.

You can adjust the quality and position of displayed picture to the optimum automatically.

- 12 When you are satisfied with the setting, press the **MENU** () button to return to the **PC Setup** menu.
- 13 Press the **▲** or **▼** button until the **Auto Adjustment** is selected. Press the **ENTER** () button.
Result: The picture quality and position are automatically adjusted, and the picture returns to original view about a few seconds later.

Teletext Feature

ENG

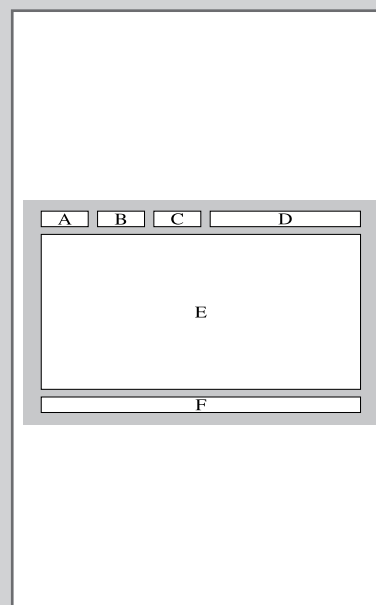
Most television channels provide written information services via teletext. Information provided includes:

- ◆ *Television programme times*
- ◆ *News bulletins and weather forecasts*
- ◆ *Sports results*
- ◆ *Travel information*

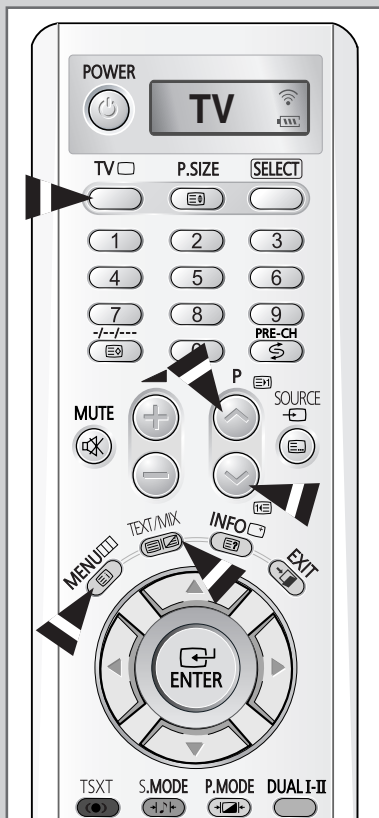
This information is divided into numbered pages (see diagram).

Part	Contents
A	Selected page number.
B	Broadcasting channel identity.
C	Current page number or search indications.
D	Date and time.
E	Text.
F	Status information. FASTEXT information.

- Teletext information is often divided between several pages displayed in sequence, which can be accessed by:
- ◆ Entering the page number
 - ◆ Selecting a title in a list
 - ◆ Selecting a coloured heading (FASTEXT system)



Displaying the Teletext Information



You can display Teletext information at any time on your television.

- 👂 For Teletext information to be displayed correctly, channel reception must be stable; otherwise:
 - ◆ Information may be missing
 - ◆ Some pages may not be displayed

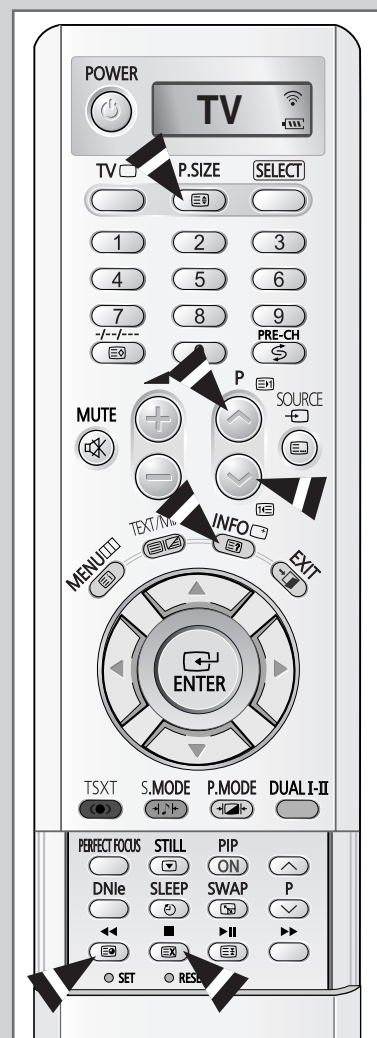
- 1 Select the channel providing the Teletext service using the **P** or **CH** button.
- 2 Press the **TEXT/MIX** (≡|/|) button to activate the teletext mode.
Result: The contents page is displayed. It can be redisplayed at any time by pressing the **≡i** (index) button.
- 3 Press the **TEXT/MIX** (≡|/|) button again.
Result: The screen will be split into two. This Double Teletext feature lets you view the actual broadcast and teletext information separately on the screen.
- 4 If you wish to display the actual broadcast at the same time as the teletext page, press the **TEXT/MIX** (≡|/|) button again.
- 5 Press the **TV** (□) button again to exit from the teletext display.

Selecting Display Options

When you have displayed a Teletext page, you can select various options to suit your requirements.

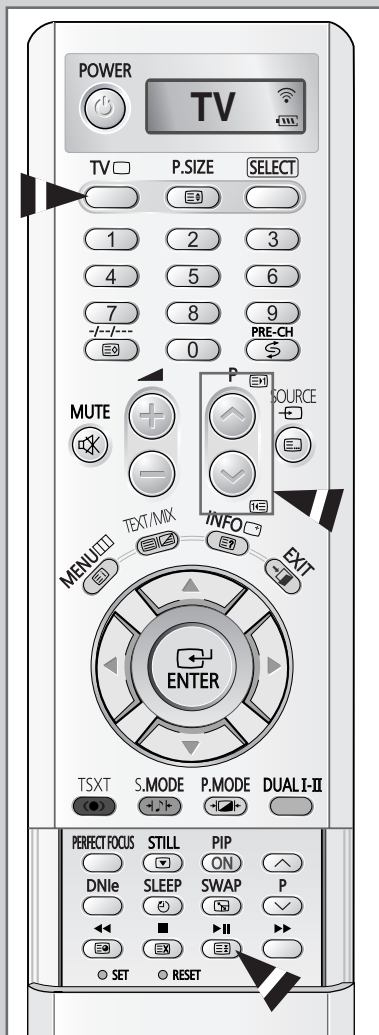
To display...	Press the...
◆ Hidden text (answers to quiz games, for example)	(reveal)
◆ The normal screen	(reveal) again
◆ A secondary page	(sub-page)
◆ The broadcast when searching for a page	(cancel)
◆ The next page	(page up)
◆ The previous page	(page down)
◆ Double-size letters in the: • Upper half of the screen • Lower half of the screen	(size) • Once • Twice
◆ Normal screen	• Three times

➤ To return to the normal display after using the reveal or size feature, press the **TV** () button again.








ENG

Selecting a Teletext Page



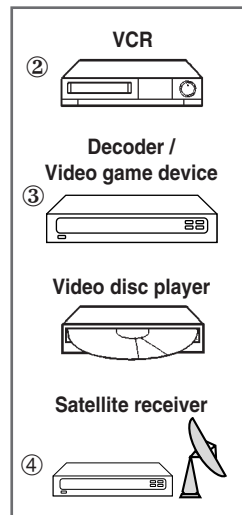
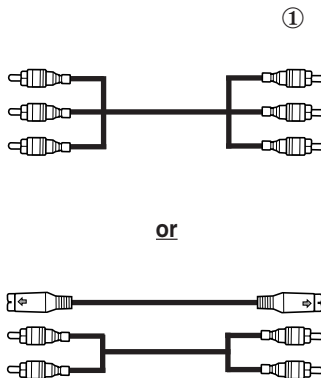
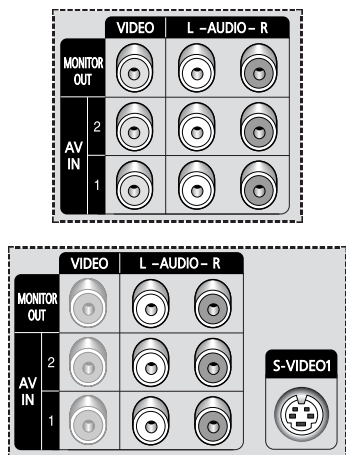
You can enter the page number directly by pressing the numeric buttons on the remote control.

- 1 Enter the three-digit page number given in the content by pressing the corresponding numeric buttons.
Result: The current page counter is incremented and the page is then displayed. If the selected page is linked with several secondary pages, the secondary pages are displayed in sequence. To freeze the display on a given page, press the  (hold). Press it again to resume.
- 2 If the FASTEXT system is used by the broadcasting company, the different topics covered on a Teletext page are colour-coded and can be selected by pressing the coloured buttons on the remote control.
 Press the coloured button corresponding to the topic that you wish to select; the available topics are given on the status line.
Result: The page is displayed with other colored information that can be selected in the same way.
- 3 To display the previous or next page, press the corresponding coloured button.
- 4 To display the subpage, see the following steps.
 - ◆ Press the  (sub-page) button.
Result: The available subpages appear.
 - ◆ Select the required sub-page. Sub-pages can be scrolled by pressing the  or  button.
- 5 When you have finished, press the TV () button to return to your normal broadcast.

Connecting to the External Devices (depending on the model)

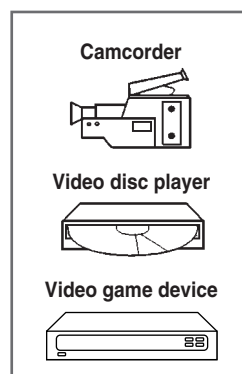
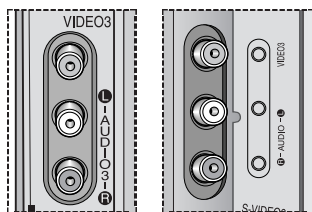
ENG

Rear of the TV (Input/Output)



- ① This end can be fitted with:
 - ◆ Three RCA connectors (VIDEO + AUDIO-L and R)
 - ◆ An S-Video connector and two audio RCA connectors (L+R); AV-1, AV-2
- ② If you have a second VCR and wish to copy cassettes tape, connect the source VCR to "AV-1" and the target VCR to "MONITOR OUT" so that you can redirect the signal from source VCR to target VCR.
- ③ If you have a decoder, connect the decoder to the VCR and the VCR to the television.
- ④ "MONITOR OUT" is used for displaying the current picture to an external device. When you wish to record the current picture, connect the VCR to "MONITOR OUT".

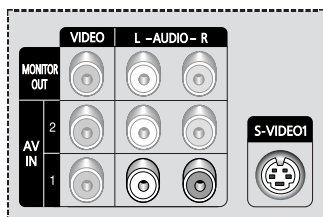
Side of the TV (Input)



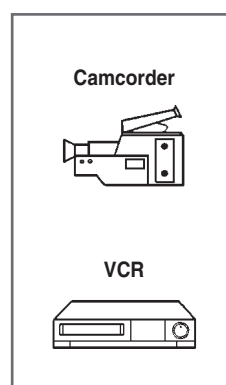
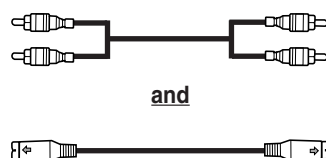
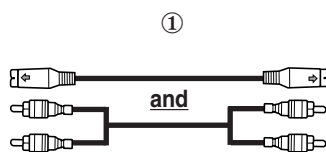
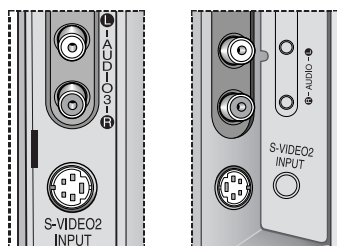
Connecting to the S-Video Input (depending on the model)

The “**S-VIDEO**” and RCA (**AUDIO-L/R**) connectors are used for equipment with an S-Video output, such as a camcorder or VCR.

Rear of the TV



Side of the TV



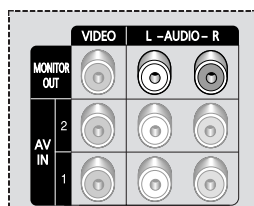
- ① To play pictures and sound, both the S-VIDEO and RCA connectors must be used.

Connecting to the Audio Outputs

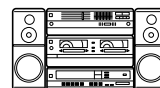
ENG

The “AUDIO OUT” connectors are used for equipment, such as an audio system or external amplifier (to take full advantage of the Surround sound effect).

Rear of the TV

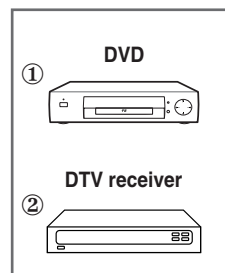
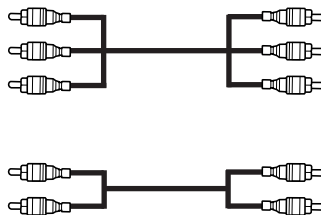
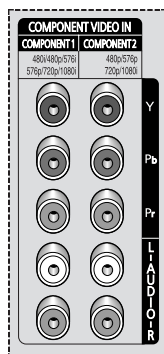


Audio System/ External Amplifier



Connecting to the Component Input

Rear of the TV



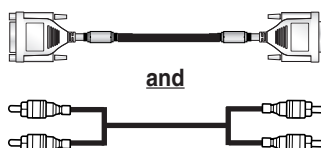
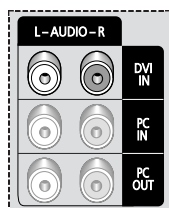
- ① The “**COMPONENT 1**” connectors are used for equipment with a DVD output. (480i, 480p, 576i, 576p, 720p, 1080i)
- ② The “**COMPONENT 2**” connectors are used for DTV receiver. (480p, 576p, 720p, 1080i)

Connecting to the DVI Input (depending on the model)

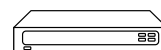
ENG

The **DVI IN** and RCA (**AUDIO-L/R**) connectors are used for equipment with a DVI output.

Rear of the TV



DTV receiver

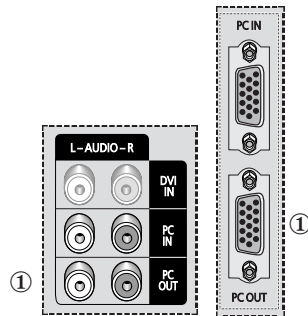


Personal Computer



Connecting to the PC Input

Rear of the TV



The “PC IN” and “AUDIO-L/R” (PC IN-RCA) connectors are used for interfacing with your PC.



and



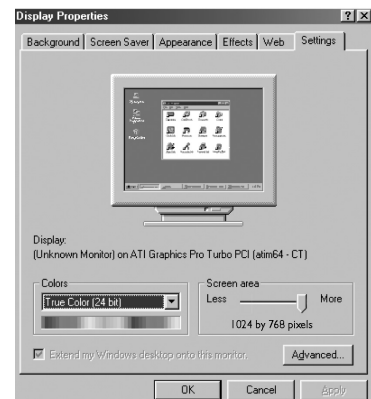
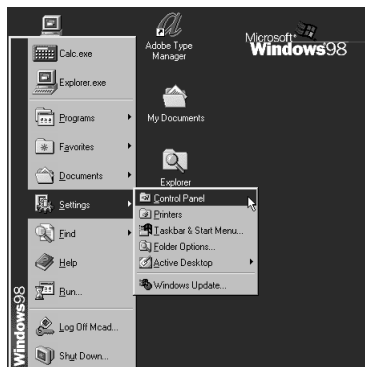
Personal Computer



- ① The “PC OUT” and “AUDIO-L/R” (PC OUT-RCA) connectors are used for some other computer device, such as a multi-media PC monitor.

Setting up Your PC Software (Windows only)

The Windows display-settings for a typical computer are shown below. But the actual screens on your PC will probably be different, depending upon your particular version of Windows and your particular video card. But even if your actual screens look different, the same, basic set-up information will apply in almost all cases. (If not, contact your computer manufacturer or Samsung Dealer.)



First, click on **Settings** on the Windows start menu.

While **Settings** is highlighted, move the cursor so that **Control Panel** is highlighted.

When the control panel screen appears, click on **Display** and a display dialog-box will appear.

Navigate to the **Settings** tab on the display dialog-box.

The correct setting of size (resolution) is **1024 x 768 pixels**.

If a vertical-frequency option exists on your display settings dialog box, the correct value is **60 Hz**. Otherwise, just click **OK** and exit the dialog box.

PC Input Mode


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Both screen position and size will vary depending on the type of PC monitor and its resolution. The table below shows all of the display modes that are supported:

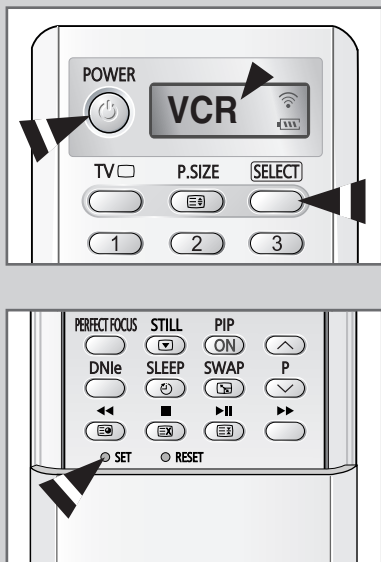
Mode	Resolution	Vertical frequency (Hz)
VGA	640 x 480	60.00
	640 x 480	75.00
SVGA	800 x 600	60.00
	800 x 600	75.00
XGA	1024 x 768	60.00
	1024 x 768	75.00

- ◆ The interlace mode is not supported.
- ◆ The television might operate abnormally if a non-standard video format is selected.

Notes

- ◆ When this television is used as a PC display, 32-bit color is supported (over 16 million colors).
- ◆ Your PC display screen might appear different depending on the manufacturer (and your particular version of Windows). Check your PC instruction book for information about connecting your PC to a television.
- ◆ If a vertical and horizontal frequency-select mode exists, select 60Hz (vertical) and 31.5kHz (horizontal). In some cases, abnormal signals (such as stripes) might appear on the screen when the PC power is turned off (or if the PC is disconnected). If so, press the **SOURCE** () button to enter the Video mode. Also, make sure that the PC is connected.
- ◆ When horizontal synchronous signals seem irregular in PC mode, check PC power saving mode or cable connections.
- ◆ Same modes as PC are supported for the signal input to the DVI jack. Only a separate sync signal is supported.

Programming the Remote Control for Other Components



This TV's remote control can operate almost any VCR, Cable box, DVD, or Set-top box (STB), in addition to controlling the TV.

➤ *The remote control is not compatible with the TV manufactured by another company.*

- 1 Turn off your VCR, Cable box, DVD, or Set-top box (STB).
- 2 Press the **SELECT** button. Mode is changed whenever **SELECT** button is pressed.
- 3 Press the **SET** button.
- 4 Use the numeric buttons to enter the code by manufacturer. Each code must be three digits long.
 Example: To enter the code "6", press 0, 0, and 6.
 To enter the code "76", press 0, 7, and 6.
 ➤ See the remote control code tables to find the appropriate code for your particular component. If more than one code is listed, try each one separately until you find the one that works.
- 5 Press the **POWER** (⏻) button on the remote control. The component you select 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 **SELECT** button any time you want to use the remote control to operate your VCR, Cable box, DVD or STB.
 ➤ ♦ When your remote control is in the **VCR, CATV, DVD** or **STB** mode, the volume buttons still control your television's volume.
 ♦ When your remote control is in the **TV** or **CATV** mode, the VCR or DVD control buttons (PLAY, PAUSE, etc.) still operate your VCR or DVD.

Programming the Remote Control for Other Components

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VCR Remote Control Codes

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

Programming the Remote Control for Other Components

VCR Remote Control Codes (continued)

Sylvania	021, 025, 036, 056, 059	Totevision	002, 006
Symphonic	025	Unitech	002
Tandy	018, 025	Vector Research	007, 026
Tashika	006	Victor	026
Tatung	037	Video Concepts	007, 026
Teac	025, 037, 068	Videosonic	002
Technics	021	Wards	002, 003, 006, 019, 020, 021, 024, 025, 034, 038, 041
Teknika	006, 021, 025, 031		
TMK	066	Yamaha	007, 008, 018, 026, 037
Toshiba	003, 019, 029, 051, 052	Zenith	023, 027, 033, 073

Cable Box (CATV) Remote Control Codes

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

DVD Remote Control Codes

Samsung	000, 001	LG (Goldstar)	006
JVC	002	Sony	007
PROSCAN/RCA	003	Denon	008
Panasonic	005	Curtis Mathes	009

Troubleshooting: Before Contacting Service Personnel

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Before contacting Samsung after-sales service, perform the following simple checks.

If you cannot solve the problem using the instructions below, note the model and serial number of the television and contact your local dealer.

No sound or picture	<ul style="list-style-type: none">◆ Check that the mains lead has been connected to a wall socket.◆ Check that you have pressed the "I" button (On/Off) and the POWER (⏻) button.◆ Check the picture contrast and brightness settings.◆ Check the volume.
Normal picture but no sound	<ul style="list-style-type: none">◆ Check the volume.◆ Check whether the volume MUTE (🔇) button on the remote control has been pressed.
No picture or black and white picture	<ul style="list-style-type: none">◆ Adjust the colour settings.◆ Check that the broadcast system selected is correct.
Sound and picture interference	<ul style="list-style-type: none">◆ Try to identify the electrical appliance that is affecting the television, then move it further away.◆ Plug your television into a different mains socket.
Blurred or snowy picture, distorted sound	<ul style="list-style-type: none">◆ Check the direction, location and connections of your aerial. This interference often occurs due to the use of an indoor aerial.
Remote control malfunctions	<ul style="list-style-type: none">◆ Replace the remote control batteries.◆ Clean the upper edge of the remote control (transmission window).◆ Check the battery terminals.

Memo

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Memo

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– AFTER SALES SERVICE

- Do not hesitate to contact your retailer or service agent if a change in the performance of your product indicates that a faulty condition may be present.

