SAMSUNG

COLOUR TELEVISION

SP42W4/42W5
SP43J9/43T6/43T7/43T8/43W6
SP47Q7/47W1/47W3
SP48T6
SP52Q7
SP54J9/54T6/54T7/54T8
SP55W3/55W9
SP62J9/62T6/62T8
SP65W3

Owner's Instructions

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

ON-SCREEN MENUS
PICTURE IN PICTURE
TELETEXT

DOLBY SURROUND
PRO · LOGIC

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.
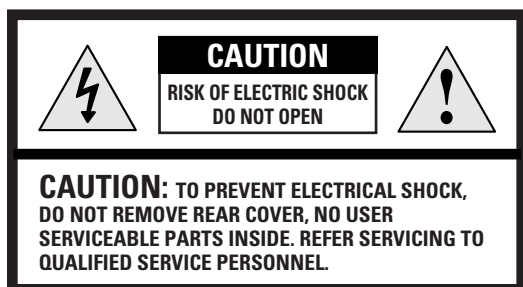
Safety Instructions

◆ *Do not expose the television to extreme temperature conditions or to extreme humidity conditions.*

◆ *Do not expose the television to direct sunlight and other sources of heat.*

◆ *Do not expose the television to any liquids.*

◆ *Never put objects of any kind into the television, and do not place a water-containing vessel on the television.*

◆ *During a storm conditions (especially when there is lightning) unplug the television from the mains socket and aerial.*

◆ *Do not step on or twist the power cord.*

◆ *Do not overload wall outlets or extension cords as this can result in a risk of fire or electric shock.*

◆ *Please use a soft and dry cloth (not containing volatile matter) when you clean the TV.*

◆ *If the television is broken, do not try to repair it yourself. Contact qualified service personnel.*

◆ *If the remote control is not used for a long period of time, remove the batteries and store it in a cool, dry place.*

◆ *Do not drop the remote control.*

☛ *Displaying any stationary images that exceed the long time, it can cause uneven aging of picture tubes 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.*

*This device is not for use in industrial environments.*

Caution

⚡ | **CAUTION**
RISK OF ELECTRIC SHOCK
DO NOT OPEN | ！

CAUTION: TO PREVENT ELECTRICAL SHOCK, DO NOT REMOVE REAR COVER, NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

The lightning flash and arrow head within the triangle is a warning sign alerting you of "dangerous voltage" inside the product.
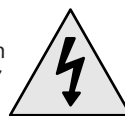
The exclamation point within the triangle is a warning sign alerting you of important instructions accompanying the product.
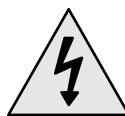
WARNING: TO PREVENT DAMAGE WHICH MAY RESULT IN FIRE OR SHOCK HAZARD. DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

☛ *The main voltage is indicated on the rear of the TV set and the frequency is 50 or 60Hz.*

Contents (continued)

Symbols

▲

☞

➢

Press   **Important**   **Note**

Contents

Control Panels (depending on the model)

> The actual configuration on your television may be different, depending on your model.

TV/VIDEO   MENU   ▼ CH ▲   — VOL +   MUTE   POWER   STAND BY & TIMER
ⓐ   ⓑ   ⓒ   ⓓ   ⓔ   ⓕ   ⓖ   ⓗ   ⓘ   ⓙ

TV/VIDEO   MUTE   MENU   — VOL +   ▼ CH ▲   STAND BY & TIMER   POWER
ⓐ   ⓖ   ⓑ   ⓔ   ⓕ   ⓒ   ⓓ   ⓗ   ⓙ   ⓘ

MUTE   TV/VIDEO   MENU   CH▲   VOL— VOL+   CH▼   POWER   STAND BY & TIMER
ⓖ   ⓐ   ⓑ   ⓔ ⓒ ⓕ   ⓓ   ⓘ   ⓗ   ⓙ

TV/VIDEO   MUTE   MENU   — VOL +   ▼ CH ▲   STAND BY & TIMER   POWER
ⓐ   ⓖ   ⓑ   ⓔ   ⓕ   ⓒ   ⓓ   ⓗ   ⓙ   ⓘ

MENU   TV/VIDEO   MUTE   STAND BY & TIMER   POWER   — VOL +   ▼ CH ▲
ⓗ   ⓑ   ⓐ   ⓖ   ⓙ   ⓘ   ⓔ   ⓕ   ⓒ   ⓓ

TV/VIDEO   MUTE   MENU   — VOL +   ▼ CH ▲   STAND BY & TIMER
ⓐ   ⓖ   ⓑ   ⓔ   ⓕ   ⓒ   ⓓ   ⓗ   ⓙ   ⓘ

(a) **Input Source Selection**	(f)	**Volume Increase**
(b) **Menu Display**	(g)	**Temporary Sound Switch Off**
(c) **Previous Channel**	(h)	**Remote Control Sensor**
(d) **Next Channel**	(i)	**Power On/Off**
(e) **Volume Decrease**	(j)	**Standby & Timer Indicator**

Control Panels (depending on the model)

➢ The actual configuration on your television may be different, depending on your model.

(a)	Input Source Selection	(f)	Volume Increase
(b)	Menu Display	(g)	Temporary Sound Switch Off
(c)	Previous Channel	(h)	Remote Control Sensor
(d)	Next Channel	(i)	Power On/Off
(e)	Volume Decrease	(j)	Standby & Timer Indicator

Using a Display Deck (depending on the model)
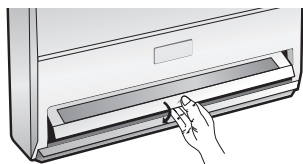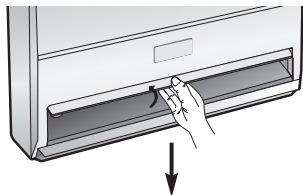
You can display a VCR or DVD Player, etc. by using the display deck.

SP47W3/55W3/65W3

1   Press the symbol " ⛰ " at the center of the display deck.

2   Hold the center of the door and lift it up in the direction of arrow till a 'ttok' sound sounds.

3   After placing a component you have in the display deck, hold the center of the door and pull it down.

4   Shut the door by pressing the symbol " ⛰ ".

SP54T8/55W9/62T8

1   Hold the center of the door and lift it up in the direction of arrow.

2   After placing a component you have in the display deck, hold the center of the door and pull it down.

➤   You should display only the component that is within 126mm high. When displaying a component in the display deck, please space it out 30mm from the front, 20mm from either end.

SP47W3/55W3/65W3

SP54T8/55W9/62T8

Connection Panels (depending on the model)

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

Front of the TV

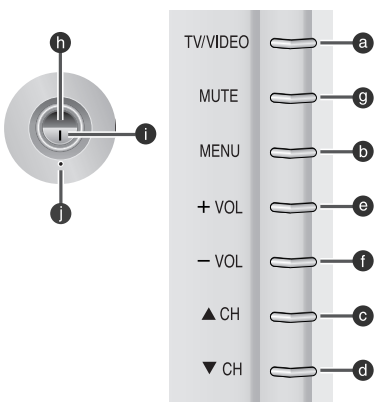Video Input

S-Video Input

ⓐ Perfect Focus

ⓒ Audio Inputs
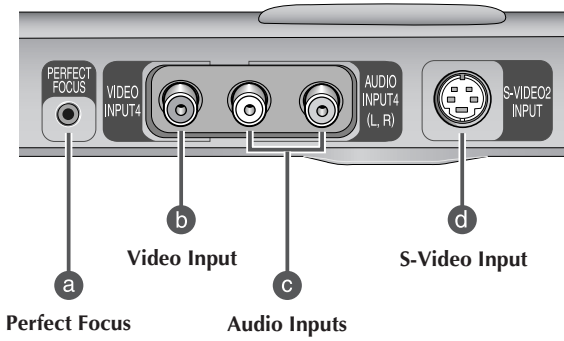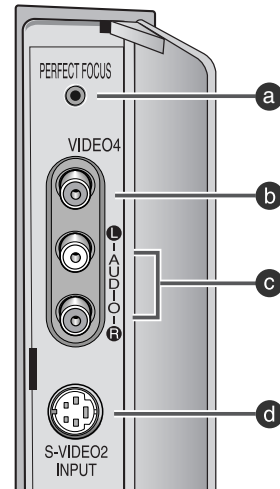
Side of the TV

Rear of the TV

Center Speaker Connectors (Option)

Rear Speaker Connectors

75Ω Coaxial Connector for Aerial or Cable Network

Audio/Video Monitor Outputs

S-Video Input

RCA Audio/Video Inputs

SCART Audio/Video Input/Output

Audio Outputs

DVD Inputs
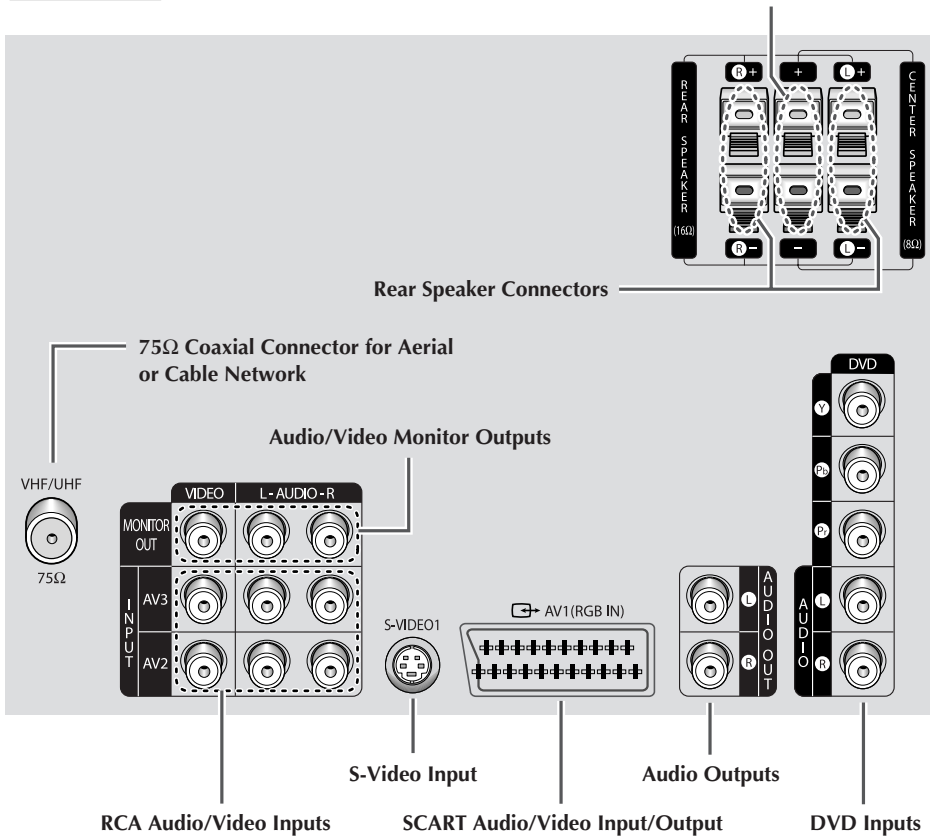
Infrared Remote Control

TELEVISION STANDBY

MAKE THE REMOTE CONTROL WORKS FOR TV, VCR, CABLE, DVD PLAYER

Power

TV VCR Cable DVD SET

REMOTE CONTROL SETUP

NUMERIC BUTTONS FOR DIRECT ACCESS (CHANNEL/TELETEXT PAGE)

ONE, TWO, OR THREE-DIGIT CHANNEL SELECTION (DEPENDING ON THE MODEL)/ TELETEXT STORE (OPTION)

TV

TUNER/CABLE NETWORK SELECTION

FASTEXT TOPIC SELECTION

Surround S.STD P.STD S.Mode

SURROUND ON/OFF DIRECTLY

SOUND EFFECT SELECTION

SOUND MODE SELECTION

PICTURE EFFECT SELECTION

VOLUME INCREASE

Mute VOL P Still

TEMPORARY SOUND SWITCH OFF

VOLUME DECREASE

NEXT CHANNEL/ TELETEXT NEXT PAGE

PICTURE FREEZE

PREVIOUS CHANNEL/ TELETEXT PREVIOUS PAGE

Menu Video

MENU DISPLAY/ PROGRAMME SELECTION BY NAME

EXTERNAL INPUT SELECTION/ TELETEXT MODE (LIST/FLOF) SELECTION (OPTION)

CONTROL THE CURSOR IN THE ON-SCREEN MENU

CHANGE CONFIRMATION

Display P.Size

ON-SCREEN MENUS DISPLAY/ TELETEXT REVEAL

PICTURE SIZE/TELETEXT SIZE

NOT AVAILABLE

AUTOMATIC SWITCH-OFF

Text/Mix Info. Sleep Perfect Focus

TELETEXT DISPLAY/ MIX BOTH TELETEXT INFORMATION AND THE NORMAL BROADCAST

AUTOMATIC ADJUST THE CONVERGENCE

PIP Scan Swap Locate

ON

**VCR/DVD FUNCTIONS;
- STOP
- REWIND
- PLAY/PAUSE
- FAST FORWARD**

**PIP FUNCTIONS;
- PIP ON/OFF
- CHANNEL SCAN
- INTERCHANGE THE MAIN AND SUB PICTURE
- LOCATION SELECTION**

TELETEXT SUB-PAGE

TELETEXT PAGE HOLD

TELETEXT CANCEL

➢ *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, "AA" 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.
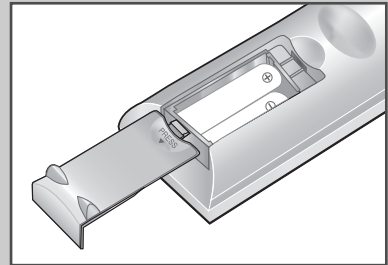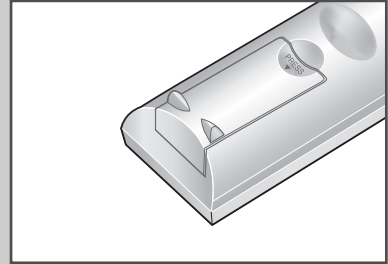
Connecting to an Aerial or Cable Television Network

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

Rear of the TV

VHF/UHF

75Ω

or

Cable Television Network
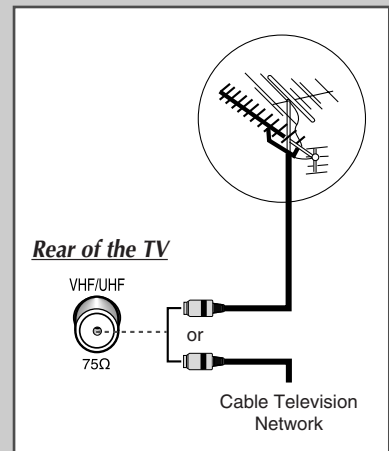
Switching Your Television On and Off
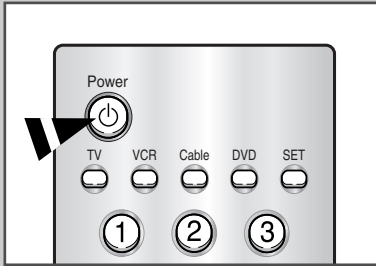
The mains lead is attached to the rear of your television.

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 **POWER** (**I**) button 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 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 **POWER** (**I**) button again.

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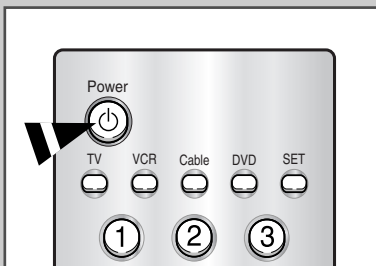
Your television can be placed in Standby mode, in order to reduce the power consumption.

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 in red.

2 To switch the television back on, simply press the **Power** (⏻) button again.

☛ 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 **POWER** (**I**) button 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
∧ P ∨	Used to display the next stored channel. Used to display the previous stored channel.	
⓪ to ⑨	Used to display the corresponding channels.	
-/--/---	Used to select a channel numbered ten or over. Press this button, and enter the two or three-digit channel number (depending on the model).	
+ VOL –	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 **VOL–** or **VOL+** 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/reduce 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.

13
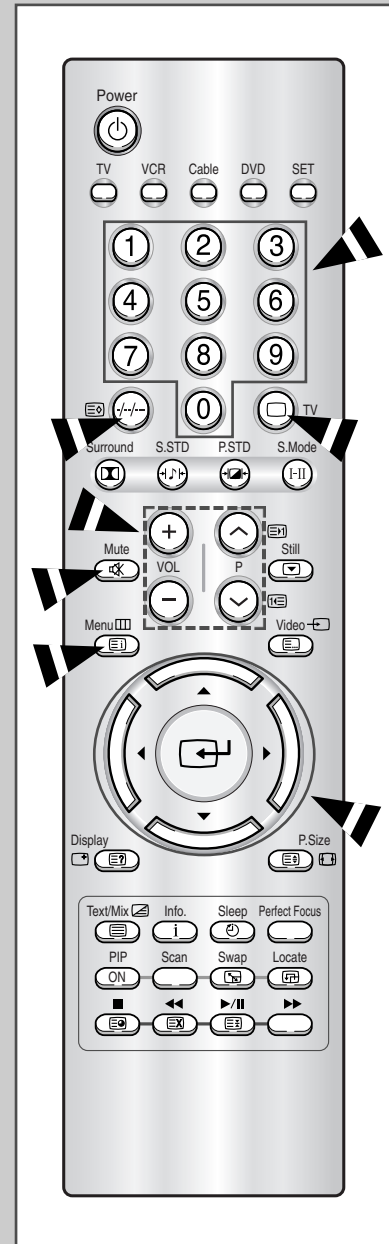
```
                  PLUG & PLAY
```

```
            ANT. INPUT : CHECK

         ◆ SELECT      ▥ EXIT
```

```
                       AUTO STORE
        AREA         : ASIA W/EUROPE
        SEARCH       : –/+




        ◆ SELECT    ◆ ADJUST    ▥ EXIT
```

```
                          TIME
        CLOCK        : -- : -- AM
        TIMER        : OFF



        ◆ SELECT    ◆ ADJUST    ▥ EXIT
```
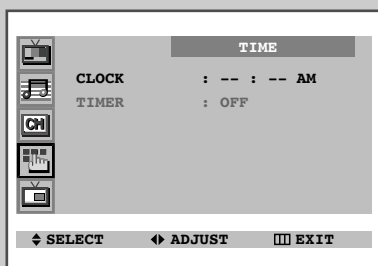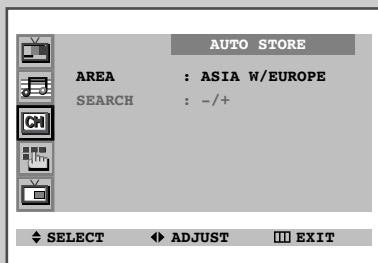
```
            ENJOY YOUR WATCHING
```

When the television is initially powered on, three basic customer settings proceed automatically and subsequently: setting the language, channel and clock.

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

   Result: The message **PLUG & PLAY** is displayed. It flickers for a little while and then **LANGUAGE** menu is automatically displayed.

2   Select the appropriate language by pressing the ▼ or ▲ button. Press the **MENU** button to enter the language.

   Result: The message **ANT. INPUT : CHECK** is displayed.

   ➢   If any language is not selected on the **Language** menu, the **Language** menu will disappear about 30 seconds later.

3   Make sure that the antenna is connected to the TV. Press the ◄ or ► button.

   Result: The **AUTO STORE** menu is displayed with **AREA** is selected.

4   Select your country by pressing the ◄ or ► button. To search the channels, select **SEARCH** by pressing the ▼ or ▲ button, and then press the ◄ or ► button. Press the **MENU** button to stop the search.

   Result: The **TIME** menu is displayed with **CLOCK** is selected.

   ➢   Refer to "Storing Channels Automatically" on page 18.

5   Press the ◄ or ► button to move to the hour or minute. Set the hour or minute by pressing the ▼ or ▲ button.

   ➢   Refer to "Setting and Displaying the Current Time" on page 34.

6   When you have finished, press the **MENU** button.

   Result: The message **ENJOY YOUR WATCHING** is displayed, and then the channel which has been stored will be activated.

Plug and Play Feature

If you want to reset this feature...

1   Press the **MENU** button.

    <u>Result</u>:   The main menu is displayed.

2   Press the ▼ or ▲ button to select **FUNCTION**.

    <u>Result</u>:   The options available in the **FUNCTION** group are
                displayed.

3   Press the ⏎ button.

4   Press the ▼ or ▲ button to select **PLUG & PLAY**. Press the ⏎
    button.

    <u>Result</u>:   This feature starts with the message **PLUG & PLAY** is
                displayed.

FUNCTION	
LANGUAGE	: ENGLISH
TIME	▶
CONVERGENCE	▶
BLUE SCREEN	: ON
PLUG & PLAY	▶
DEMONSTRATION	▶

‡ SELECT   ⏎ ENTER   ▥ EXIT

Viewing the Demonstration

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

	FUNCTION
LANGUAGE	: ENGLISH
TIME	▶
CONVERGENCE	▶
BLUE SCREEN	: ON
PLUG & PLAY	▶
DEMONSTRATION	▶

♦ SELECT   ⏎ ENTER   ▥ EXIT

1   Press the **MENU** button.

     Result: The main menu is displayed.

2   Press the ▼ or ▲ button to select **FUNCTION**.

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

3   Press the ⏎ button.

4   Press the ▼ or ▲ button to select **DEMONSTRATION**. Press the ⏎ button.

     Result: Each of the menu options is displayed in turn.

     ➤   When you wish to exit from the demonstration, press the **TV** button on the remote control.

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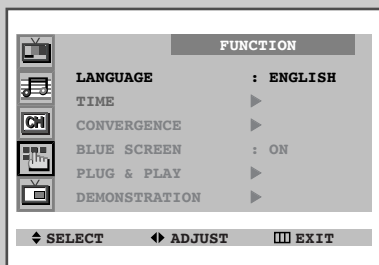
When you start using your television for the first time, you must select the language which will be used for displaying menus and indications.

	FUNCTION
LANGUAGE	: ENGLISH
TIME	▶
CONVERGENCE	▶
BLUE SCREEN	: ON
PLUG & PLAY	▶
DEMONSTRATION	▶

♦ SELECT   ◆ ADJUST   ▥ EXIT

1   Press the **MENU** button.

     Result: The main menu is displayed.

2   Press the ▼ or ▲ button to select **FUNCTION**.

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

3   Press the ⏎ button.

     Result: The **LANGUAGE** is selected.

4   Press the ⏎ button again.

     Result: The languages available are listed.

5   Press the ▼ or ▲ button to select the appropriate language.

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.
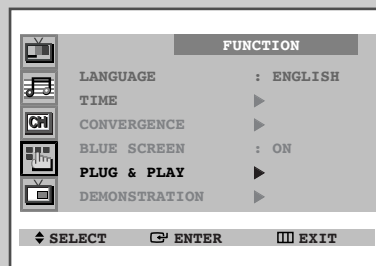
Result: The main menu is displayed.

2   Press the ▼ or ▲ button to select **FUNCTION**.

Result: The options available in the **FUNCTION** group are displayed.
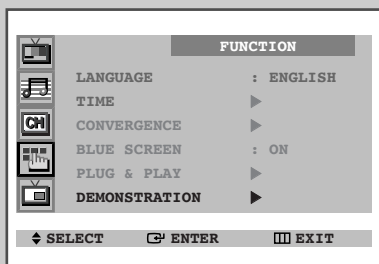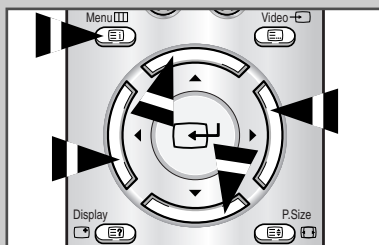
3   Press the ⏎ button.

4   Press the ▼ or ▲ button to select **CONVERGENCE**. Press the ⏎ button.

Result: The options available in the **CONVERGENCE** group are displayed with **RED** is selected.

5   Press the ⏎ button again.

Result: A crosshair pattern is appeared.

6   Adjust convergence by using your remote control.

◆   Use the ▼/▲/◀/▶ buttons to all directions for 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 volume up/down (**VOL +/−**) and channel up/down (**P ⋀ / ⋁**) buttons (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   Select **PERFECT FOCUS** in the **FUNCTION** group, then press the ⏎ button.

Result: Perform Perfect Focus in the following sequence: green → red → blue.

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

➤   You can also adjust simply by pressing the **Perfect Focus** button.

➤   ◆   When the size of the sub picture is selected to the "**12 PIP**" or "**3 PIP**" mode, the Perfect Focus feature does not work.

◆   If any error happens during Perfect Focus, then perform Perfect Focus once again.

◆   If you can not make adjustments after Perfect Focus, then make manual adjustments. Still you can not make adjustments, contact your Service Center.
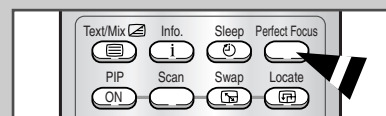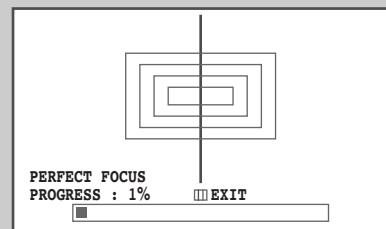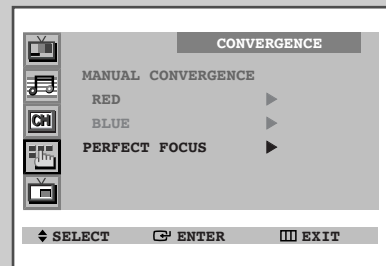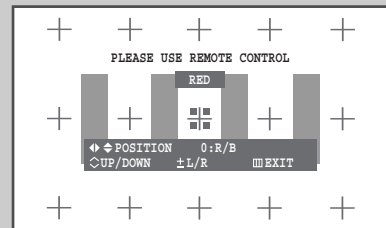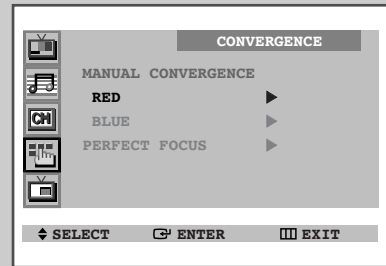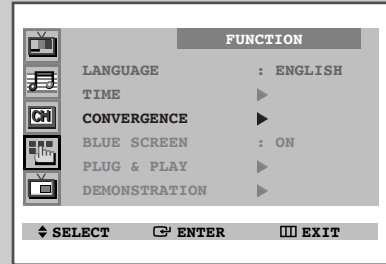
Storing Channels Automatically
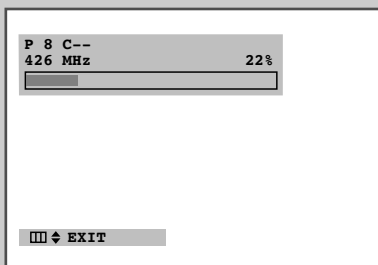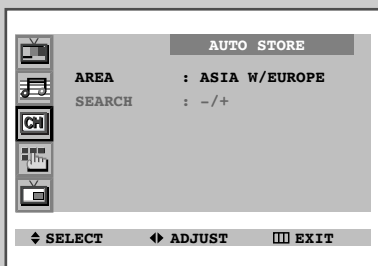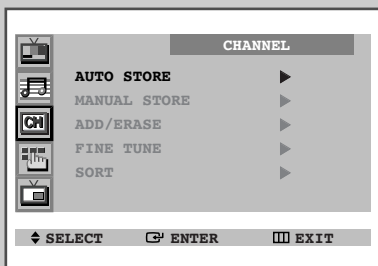
You can scan for the frequency ranges available to you (and availability depends on your country). Automatically allocated programme numbers may not correspond to actual or desired programme numbers. However you can sort numbers manually and clear any channels you do not wish to watch.

```
                        CHANNEL
AUTO STORE              ▶
MANUAL STORE            ▶
ADD/ERASE               ▶
FINE TUNE               ▶
SORT                    ▶

 ♦ SELECT    ↵ ENTER    ⊞ EXIT
```

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.

```
                       AUTO STORE
AREA        : ASIA W/EUROPE
SEARCH      : –/+




 ♦ SELECT    ◀▶ ADJUST    ⊞ EXIT
```

3 Press the ↵ button.

Result: The **AUTO STORE** is selected.

4 Press the ↵ button again.

Result: The options available in the **AUTO STORE** group are displayed with **AREA** is selected.

5 Select your country by pressing the ◀ or ▶ button.
The countries are displayed in the following order:
ASIA W/EUROPE – CIS E/EUROPE – CHINA – HONGKONG/UK – AUSTRALIA – NZ/INDONESIA – SOUTH AFRICA – AMERICA.

```
                       AUTO STORE
AREA        : ASIA W/EUROPE
SEARCH      : –/+




 ♦ SELECT    ◀▶ ADJUST    ⊞ EXIT
```

6 Press the ▼ or ▲ button to select **Search**.

7 Press the ◀ or ▶ button to start the search.

Result: The horizontal bar is displayed, and then channels are stored in an order which reflects their positions in the frequency range. Finally, the search will end automatically.

➢ To stop the search before it has finished, press the **MENU** button.

```
P 8 C––
426 MHz                       22%
▬▬▬




 ⊞ ♦ EXIT
```

8 When searching and storing are complete, the **SORT** menu is displayed.

◆ To sort the stored channels into the desired numerical order, go to Step **6** of the "Sorting the Stored Channels" procedure on page 19.

◆ To exit from the channel store function without sorting the channels, press the **MENU** button repeatedly until the menus disappear.

```
                          SORT
FROM        : P  1
TO          : P–––
STORE       : ?



 ♦ SELECT    ◀▶ ADJUST    ⊞ EXIT
```

9 When the channels have been stored, you can:

◆ Sort them in the order required (refer to page 19)
◆ Assign a name to the stored channels (refer to page 20)
◆ Clear a channel (refer to page 22)
◆ Fine tune channel reception if necessary (refer to page 23)
◆ Activate the Digital Noise Reduction feature (refer to page 26)

Sorting the Stored Channels

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

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 ⏎ button.

4 Press the ▼ or ▲ button to select **SORT**. Press the ⏎ button.

   Result: The options available in the **SORT** group are displayed with **FROM** is selected.

5 Select the channel number that you wish to change by pressing the ◄ or ► button repeatedly.

6 Press the ▼ or ▲ button to select **TO**. Select the new channel number which you wish to identify by pressing the ◄ or ► button repeatedly.

7 Press the ▼ or ▲ button to select **STORE**. Select **OK** to confirm the exchange of channel numbers by pressing the ◄ or ► button.

   Result: The selected channel is exchanged with the one previously stored to the chosen number.

8 For all the channels to move to the required channel numbers, repeat steps **5** to **7** after selecting the **FROM** by pressing the ▼ or ▲ button.

	CHANNEL
AUTO STORE	►
MANUAL STORE	►
ADD/ERASE	►
FINE TUNE	►
SORT	►

‡ SELECT   ⏎ ENTER   ▥ EXIT

	SORT
FROM	: P 1
TO	: P---
STORE	: ?

‡ SELECT   ◄► ADJUST   ▥ EXIT

	SORT
FROM	: P 1
TO	: P 3
STORE	: ?

‡ SELECT   ◄► ADJUST   ▥ EXIT

	SORT
FROM	: P 3
TO	: P 1
STORE	: OK

‡ SELECT   ◄► ADJUST   ▥ EXIT

Storing Channels Manually

```
                    CHANNEL
  AUTO STORE           ▶
  MANUAL STORE         ▶
  ADD/ERASE            ▶
  FINE TUNE            ▶
  SORT                 ▶

  ◆ SELECT    ⏎ ENTER    ▥ EXIT
```

```
                MANUAL STORE
  COLOUR SYSTEM      : AUTO
  SOUND SYSTEM       : BG
  SEARCH             : 105MHZ
  CHANNEL            : C  6
  PROG.NO.           : P  3
  STORE              : ?

  ◆ SELECT    ◀▶ ADJUST    ▥ EXIT
```

```
                MANUAL STORE
  COLOUR SYSTEM      : AUTO
  SOUND SYSTEM       : BG
  SEARCH             : 105MHZ
  CHANNEL            : C  6
  PROG.NO.           : P  3
  STORE              : ?

  ◆ SELECT    ◀▶ ADJUST    ▥ EXIT
```

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.

<u>Result</u>: The main menu is displayed.

---

2 Press the ▼ or ▲ button to select **CHANNEL**.

<u>Result</u>: The options available in the **CHANNEL** group are displayed.

---

3 Press the ⏎ button.

---

4 Press the ▼ or ▲ button to select **MANUAL STORE**. Press the ⏎ button.

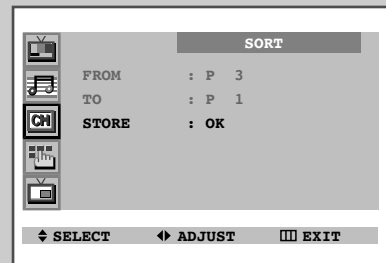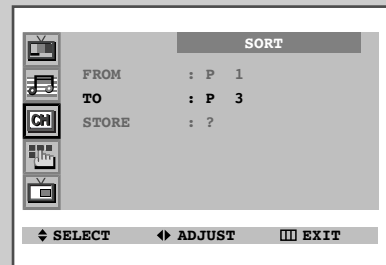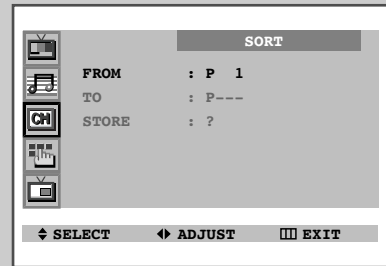<u>Result</u>: The options available in the **MANUAL STORE** group are displayed with **COLOUR SYSTEM** is selected.

---

5 Indicate the broadcasting standard required by pressing the ◄ or ► button repeatedly.

<u>Result</u>: The colour standards are displayed in the following order:
AUTO – PAL – SECAM – NT4.43 – NT3.58.

---

6 Press the ▼ or ▲ button to select **SOUND SYSTEM**. Select the sound standard required by pressing the ◄ or ► button repeatedly.

<u>Result</u>: The sound standards are displayed in the following order:
BG – DK – I – M.

Storing Channels Manually (continued)

7   If you know the number of the channel to be stored, see the
following steps.

◆ Press the t or ▲ button to select **CHANNEL**.

◆ Press the ► button.

◆ Press the ▼ or ▲ button to select **C** (Air channel) or **S** (Cable
channel).

◆ Press the ► button.

◆ Press the ▼ or ▲ button to select indicate the required
number.

➢   If no sound or abnormal sound, re-select the sound
standard required.

8   If you do not know the channel numbers, select **SEARCH** by
pressing the ▼ or ▲ button. Press the ◄ or ► button to start the
search.

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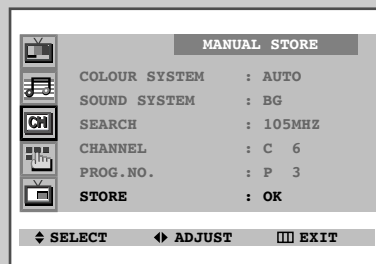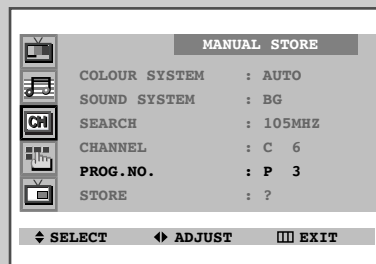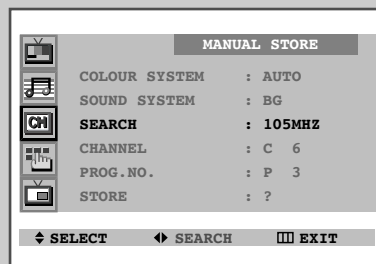on your screen.

9   To assign a programme number to a channel, select **PROG.NO.** by
pressing the ▼ or ▲ button. Press the ◄ or ► button to find the
correct number.

10   To store the channel and associated programme number, select
STORE by pressing the ▼ or ▲ button. Press the ◄ or ► button to
select **OK**.

11   Repeat Steps **7** to **10** 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.

```
             MANUAL STORE
COLOUR SYSTEM    : AUTO
SOUND SYSTEM     : BG
SEARCH           : 105MHZ
CHANNEL          : C  6
PROG.NO.         : P  3
STORE            : ?
⬍ SELECT    ◆▶ ADJUST    ▥ EXIT
```

```
             MANUAL STORE
COLOUR SYSTEM    : AUTO
SOUND SYSTEM     : BG
SEARCH           : 105MHZ
CHANNEL          : C  6
PROG.NO.         : P  3
STORE            : ?
⬍ SELECT    ◆▶ SEARCH    ▥ EXIT
```

```
             MANUAL STORE
COLOUR SYSTEM    : AUTO
SOUND SYSTEM     : BG
SEARCH           : 105MHZ
CHANNEL          : C  6
PROG.NO.         : P  3
STORE            : ?
⬍ SELECT    ◆▶ ADJUST    ▥ EXIT
```

```
             MANUAL STORE
COLOUR SYSTEM    : AUTO
SOUND SYSTEM     : BG
SEARCH           : 105MHZ
CHANNEL          : C  6
PROG.NO.         : P  3
STORE            : OK
⬍ SELECT    ◆▶ ADJUST    ▥ EXIT
```

Skipping Unwanted Channels

```
                        CHANNEL
  AUTO STORE            ▶
  MANUAL STORE          ▶
  ADD/ERASE             ▶
  FINE TUNE             ▶
  SORT                  ▶

  ♦ SELECT    ↵ ENTER      ▥ EXIT
```

```
                     ADD/ERASE
  P  1 : ADDED
  P  2 : ADDED
  P  3 : ADDED
  P  4 : ADDED

  ♦ SELECT    ◀▶ ADJUST     ▥ EXIT
```

```
                     ADD/ERASE
  P  1 : ERASED
  P  2 : ADDED
  P  3 : ADDED
  P  4 : ADDED

  ♦ SELECT    ◀▶ ADJUST     ▥ EXIT
```
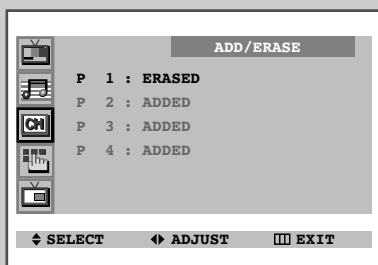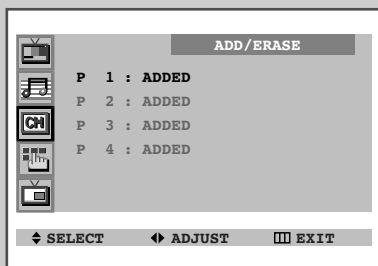
You can exclude the channels you chosen from the channels you scanned. When you scan through the stored channels, those you have chosen to skip are not displayed.

All of the channels that you do not specifically choose to skip are displayed during scanning.

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 ↵ button.

4 Press the ▼ or ▲ button to select **ADD/ERASE**. Press the ↵ button.

Result: The stored channels are displayed.

5 Press the ▼ or ▲ button to select the channel to add or erase. If necessary, select **ADDED** or **ERASED** by pressing the ◀ or ▶ button.

6 Repeat Step **6** for each channel to be added or erased.

Fine Tuning Channel Reception

ENG

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 to select **CHANNEL**.

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

3 Press the ⏎ button.

4 Press the ▼ or ▲ button to select **FINE TUNE**. Press the ⏎ button.

Result: The options available in the **FINE TUNE** group are displayed with **TUNE** is selected.

5 To obtain a sharp and clear picture and good sound quality, press the ◄ or ► button.
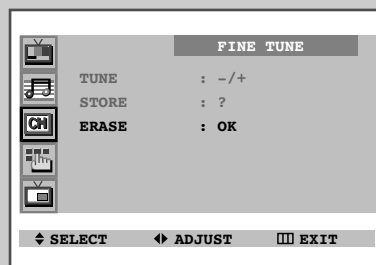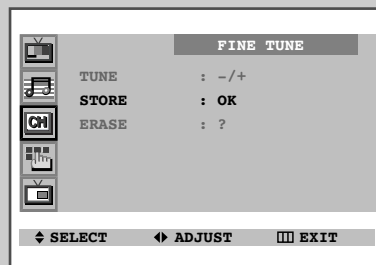
Result: The horizontal bar is displayed. Move the horizontal bar's cursor left or right by pressing the ◄ or ► button.

6 To memorise adjusted picture or sound, select **STORE** by pressing the ▼ or ▲ button. Press the ◄ or ► button.

Result: **OK** is displayed.

7 To erase adjusted picture or sound, select **ERASE** by pressing the ▼ or ▲ button. Press the ◄ or ► button.

Result: **OK** is displayed.

	CHANNEL
AUTO STORE	►
MANUAL STORE	►
ADD/ERASE	►
FINE TUNE	►
SORT	►

‡ SELECT   ⏎ ENTER   ▥ EXIT

	FINE TUNE
TUNE	: –/+
STORE	: ?
ERASE	: ?

‡ SELECT   ◄► ADJUST   ▥ EXIT

FINE TUNE

	FINE TUNE
TUNE	: –/+
STORE	: OK
ERASE	: ?

‡ SELECT   ◄► ADJUST   ▥ EXIT

	FINE TUNE
TUNE	: –/+
STORE	: ?
ERASE	: OK

‡ SELECT   ◄► ADJUST   ▥ EXIT

23
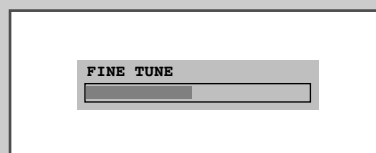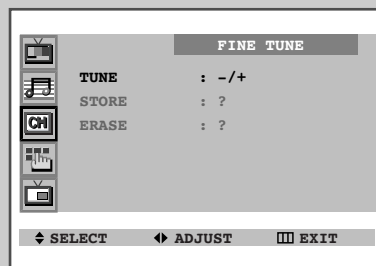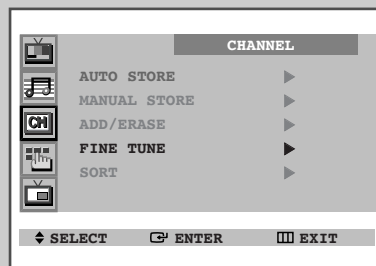
Freezing the Current Picture

You can freeze the picture when watching a television programme simply by pressing the "STILL" button.

➤ To return to normal viewing, press this button again.

Changing the Picture Standard

You can select the type of picture which best corresponds to your viewing requirements.
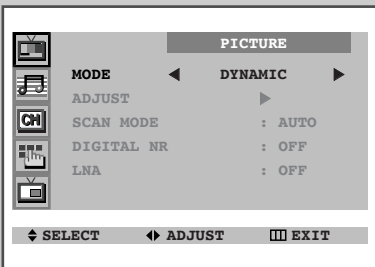
```
                    PICTURE
MODE        ◄   DYNAMIC      ►
ADJUST                     ►
SCAN MODE             : AUTO
DIGITAL NR            : OFF
LNA                  : OFF

♦ SELECT     ◄► ADJUST    ▥ EXIT
```

1 Press the **MENU** button.

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

2 Press the ⏎ button.

Result: The **MODE** is selected.

3 Select the required picture effect by pressing the ◄ or ► button repeatedly.

Result: The following picture effects are available:
DYNAMIC – STANDARD – MOVIE – CUSTOM.

```
                    PICTURE
MODE        ◄   STANDARD     ►
ADJUST                     ►
SCAN MODE             : AUTO
DIGITAL NR            : OFF
LNA                  : OFF

♦ SELECT     ◄► ADJUST    ▥ EXIT
```

➤ You can also set these options simply by pressing the **P.STD** (Picture Standard) button.

Adjusting the Picture Settings

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

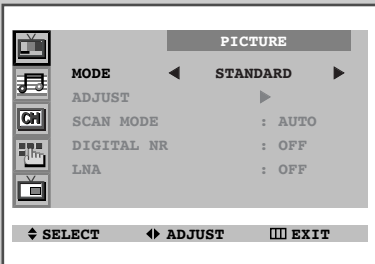|	
1	Press the **MENU** button.
	Result: The options available in the **PICTURE** group are displayed.
2	Press the ⏎ button.
3	Press the ▼ or ▲ button to select **ADJUST**. Press the ⏎ button.
	Result: The options available in the **ADJUST** group are displayed with **COLOUR TONE** is selected.
4	Press the ◄ or ► button to select the option (**COOL2**, **COOL1**, **NORMAL**, **WARM1**, **WARM2**).
5	Press the ▼ or ▲ button to select the option (**CONTRAST**, **BRIGHTNESS**, **SHARPNESS**, **COLOUR** or **TINT**-NTSC only) to be adjusted. Press the ◄ or ► button.
	Result: The horizontal bar is displayed. Move the horizontal bar's cursor left or right by pressing the ◄ or ► button.

```
                      PICTURE
  MODE        ◄   DYNAMIC   ►
  ADJUST               ►
  SCAN MODE        : AUTO
  DIGITAL NR       : OFF
  LNA              : OFF

  ⬍ SELECT    ⬌ ADJUST    ▥ EXIT
```

```
                      ADJUST
  ◗ COLOUR TONE    : NORMAL
  ◖ CONTRAST       : 100
  ☼ BRIGHTNESS     :  50
  ▢ SHARPNESS      :  75
  ◉ COLOUR         :  55

  ⬍ SELECT    ⬌ ADJUST    ▥ EXIT
```

➤ If you make any changes to these settings, the picture standard is automatically switched to **CUSTOM**.
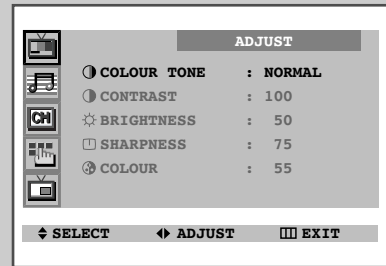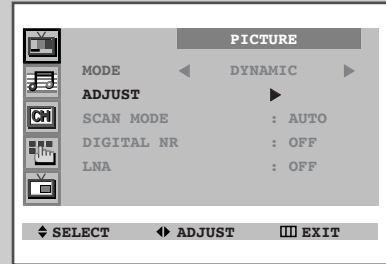

Setting the Blue Screen Mode

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 to select **FUNCTION**.
	Result: The options available in the **FUNCTION** group are displayed.
3	Press the ⏎ button.
4	Press the ▼ or ▲ button to select **BLUE SCREEN**.
5	Select the required option (**ON** or **OFF**) by pressing the ◄ or ► button.

```
                      FUNCTION
  LANGUAGE         : ENGLISH
  TIME                 ►
  CONVERGENCE          ►
  BLUE SCREEN      : ON
  PLUG & PLAY          ►
  DEMONSTRATION        ►

  ⬍ SELECT    ⬌ ADJUST    ▥ EXIT
```

Extra Picture Settings

```
                  PICTURE
  MODE        ◄   DYNAMIC      ►
  ADJUST                       ►
  SCAN MODE           : AUTO
  DIGITAL NR          : OFF
  LNA                 : OFF

 ⬍ SELECT    ⬌ ADJUST   ▥ EXIT
```

```
                  PICTURE
  MODE        ◄   DYNAMIC      ►
  ADJUST                       ►
  SCAN MODE           : AUTO
  DIGITAL NR          : ON
  LNA                 : OFF

 ⬍ SELECT    ⬌ ADJUST   ▥ EXIT
```

```
                  PICTURE
  MODE        ◄   DYNAMIC      ►
  ADJUST                       ►
  SCAN MODE           : AUTO
  DIGITAL NR          : OFF
  LNA                 : ON

 ⬍ SELECT    ⬌ ADJUST   ▥ EXIT
```
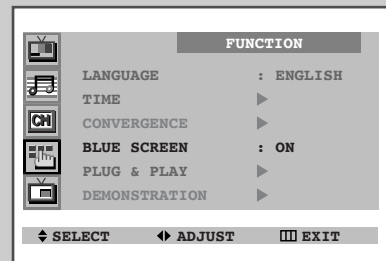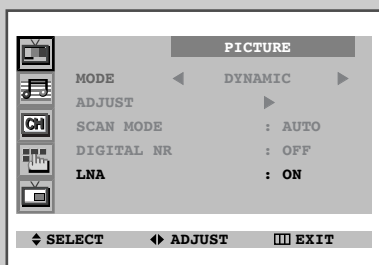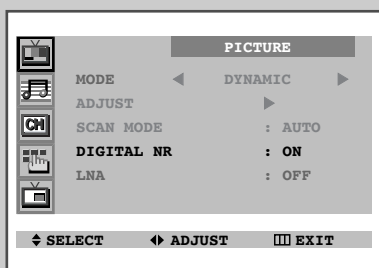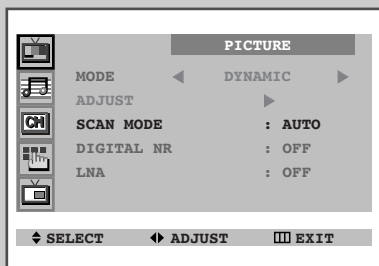
◆ *SCAN MODE*

You will normally find that scan mode is best set to **AUTO** to reduce any slight picture flicker. However, it is possible that some occasional broadcasts (NTSC-M) may benefit by changing the scan mode. **AUTO**, **NATURAL**, **DIGITAL** and **PROG.** (Progressive) modes are available.

◆ *DIGITAL NR*

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

◆ *LNA*

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.

---

1   Press the **MENU** button.

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

---

2   Press the ⏎ button.

---

3   Select the required option (**SCAN MODE**, **DIGITAL NR**, or **LNA**) by pressing the ▼ or ▲ button.

---

4   Press the ◄ or ► button to change the setting.

◆ **SCAN MODE : AUTO**, **NATURAL**, **DIGITAL**, **PROG.** (Progressive)
◆ **DIGITAL NR : OFF** or **ON** (activating)
◆ **LNA : OFF** or **ON** (activating)

Selecting the Picture Size (depending on the model)

You can select the picture size which best corresponds to your viewing requirements simply by pressing the "P.Size" button.

Depending on the model, the following picture sizes are available.

➢ The picture size can not be changed in the PIP mode.

Display			P.Size
Text/Mix	Info.	Sleep	Perfect Focus

Wide	Sets to 16:9 wide mode.
Panorama	Use this mode for the wide aspect ratio of a panoramic picture.
DVD	Magnifies the picture size and moves the magnified picture up. You can also move the picture pressing the ▼ or ▲ button.
Zoom	Magnifies the picture size. You can also move the picture pressing the ▼ or ▲ button.
Normal	Sets to 4:3 normal mode.
Cinema	Automatically expanding the broadcasting signal to appropriate picture. The margins appear grayed. ➢ It is possible to be a little difference to perform a gray letterbox by the specification of the DVD or Video cassette.

Wide (16:9) Model

Wide → Panorama → DVD → Zoom → Normal (4:3) → Cinema → Wide

Normal (4:3) Model

Normal → DVD → Zoom → Cinema
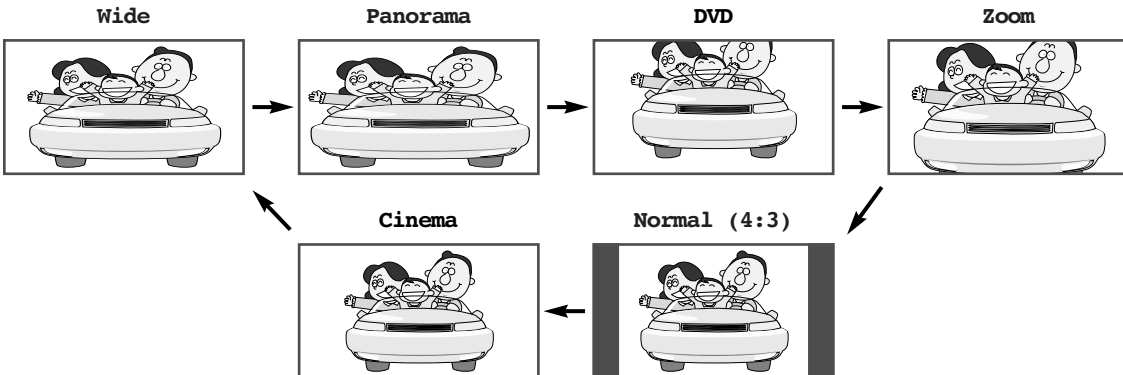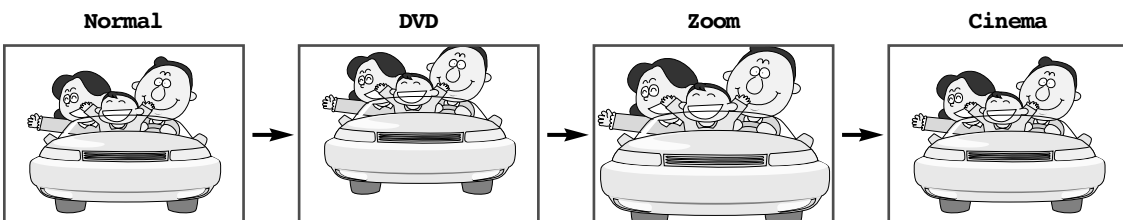
Changing the Sound Standard
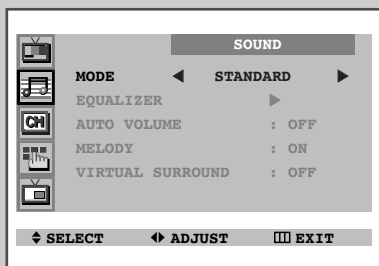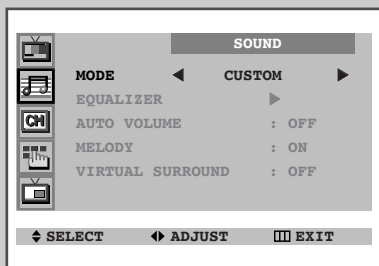
You can select the type of special sound effect to be used when watching a given broadcast.

```
                    SOUND
MODE          ◄     CUSTOM      ►
EQUALIZER                 ►
AUTO VOLUME          : OFF
MELODY               : ON
VIRTUAL SURROUND     : OFF

♦ SELECT      ◄► ADJUST      ▥ EXIT
```

```
                    SOUND
MODE          ◄     STANDARD    ►
EQUALIZER                 ►
AUTO VOLUME          : OFF
MELODY               : ON
VIRTUAL SURROUND     : OFF

♦ SELECT      ◄► ADJUST      ▥ EXIT
```

1	Press the **MENU** button.
	Result: The main menu is displayed.

2	Press the ▼ or ▲ button to select **SOUND**.
	Result: The options available in the **SOUND** group are displayed.

3	Press the ⏎ button.
	Result: The **MODE** is selected.

4	Select the required sound effect by pressing the ◄ or ► button repeatedly.
	Result: The following sound effects are available: **CUSTOM – STANDARD – MUSIC – SPEECH – MOVIE**.

➤ You can also set these options simply by pressing the **S.STD** (Sound Standard) 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 to select **SOUND**.

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

3 Press the ⏎ button.

4 Press the ▼ or ▲ button to select **EQUALIZER**. Press the ⏎
        button.

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

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 these settings, the sound
     standard is automatically switched to **CUSTOM**.

	SOUND	
MODE	◄ CUSTOM	►
EQUALIZER	►	
AUTO VOLUME	: OFF	
MELODY	: ON	
VIRTUAL SURROUND	: OFF	

‡ SELECT   ⏎ ENTER   ▥ EXIT

EQUALIZER

R

L

⋈   100   300   1K   3K   10K

‡ ADJUST   ◄► MOVE   ▥ EXIT
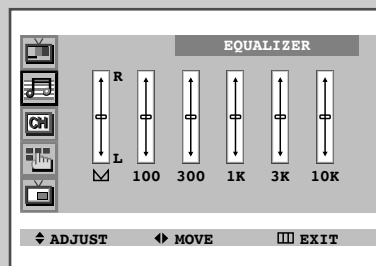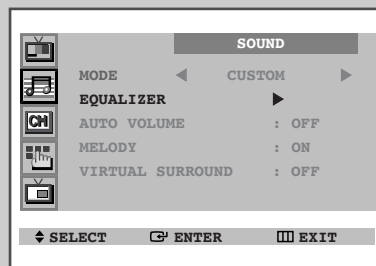
Setting the Dolby Pro Logic (depending on the model)

Rear of the TV

Option
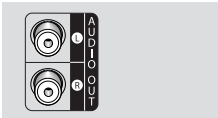
You can enjoy Dolby Pro Logic surround effect fully with only surround speakers are connected to TV.

This allows various modes for the main, center and rear speakers to be selected.

Surround Mode	Input Signal	Speakers		
		Main	Centre	Rear
NORMAL	Stereo	✔	✔	✔
	Mono		✔	
PHANTOM	Stereo	✔		✔
	Mono	✔		
WIDE	Stereo	✔	✔	✔
	Mono		✔	
OFF	Stereo	✔		
	Mono	✔		

➢ ✔ ; Sound

```
                          SOUND
MODE            ◀    CUSTOM      ▶
EQUALIZER                    ▶
AUTO VOLUME               : OFF
MELODY                    : ON
DOLBY PRO LOGIC             ▶

◆ SELECT     ⏎ ENTER      ▥ EXIT
```

1 Press the **MENU** button.
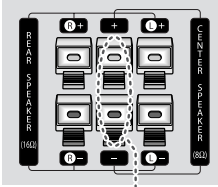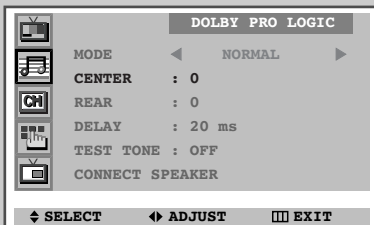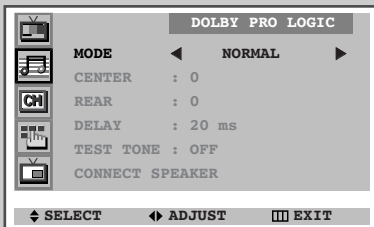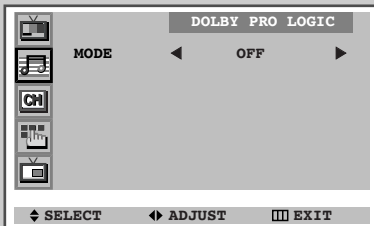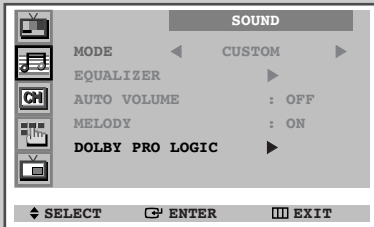
Result: The main menu is displayed.

2 Press the ▼ or ▲ button to select **SOUND**.

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

```
                  DOLBY PRO LOGIC
MODE            ◀    OFF       ▶




◆ SELECT     ◆▶ ADJUST      ▥ EXIT
```

3 Press the ⏎ button.

4 Press the ▼ or ▲ button to select **DOLBY PRO LOGIC**. Press the ⏎ button.

Result: The options available in the **DOLBY PRO LOGIC** group are displayed with the **MODE** selected.

5 Select the required mode (**OFF**, **NORMAL**, **PHANTOM**, **WIDE**) by pressing the ◀ or ▶ button repeatedly.

```
                  DOLBY PRO LOGIC
MODE            ◀    NORMAL     ▶
CENTER   : 0
REAR     : 0
DELAY    : 20 ms
TEST TONE : OFF
CONNECT SPEAKER

◆ SELECT     ◆▶ ADJUST      ▥ EXIT
```

The following Dolby settings can be adjusted to suit your personal preferences.

◆ *Volume of the centre and rear speakers*

◆ *Prologic delay time for the rear speakers (between 15 and 30 ms)*

◆ *Activation/deactivation of the test tone to simulate the volume on each speaker*

```
                  DOLBY PRO LOGIC
MODE            ◀    NORMAL     ▶
CENTER   : 0
REAR     : 0
DELAY    : 20 ms
TEST TONE : OFF
CONNECT SPEAKER

◆ SELECT     ◆▶ ADJUST      ▥ EXIT
```

5	To...	Press the...
	Change a setting	▼ or ▲ button.
	Change the option	◀ or ▶ button.

Extra Sound Settings

◆ *AUTO VOLUME*

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.

◆ *MELODY*

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

◆ *VIRTUAL SURROUND* *(Option)*

This feature converts a monaural sound signal into two identical left and right channels. Once the **VIRTUAL DOLBY** is set to **ON** or **OFF**, the setting applies to the sound effects such as **STANDARD**, **MUSIC**, **MOVIE,** and **SPEECH**.
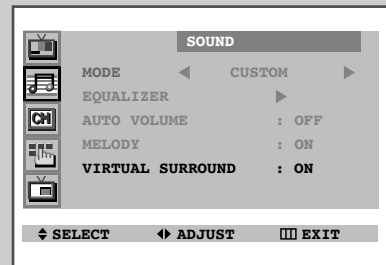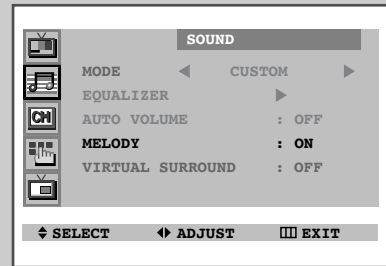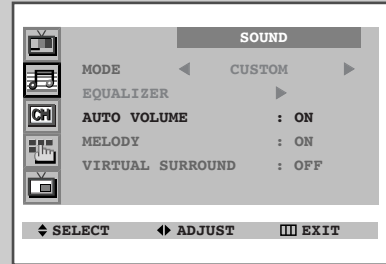
1	Press the **MENU** button.	
	Result:	The main menu is displayed.
2	Press the ▼ or ▲ button to select **SOUND**.	
	Result:	The options available in the **SOUND** group are displayed.
3	Press the ⏎ button.	
4	Select the required option (**AUTO VOLUME**, **MELODY**, or **VIRTUAL SURROUND**) by pressing the ▼ or ▲ button.	
5	To activate each feature, select **ON** by pressing the ◄ or ► button.	

➤ Manufactured under license from Dolby Laboratories. "Dolby' and the double-D symbol ▮◀ are trademarks of Dolby Laboratories.

```
VIRTUAL
▮◀ DOLBY
S U R R O U N D
```
```
▮◀ DOLBY SURROUND
PRO · LOGIC
```

The "S.Mode" 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	**MONO** ↔ **MONO** **NICAM** (Normal)
	NICAM Stereo	**STEREO** ↔ **MONO** **NICAM** (Normal)
	NICAM Dual-I/II	**Dual-I** → **Dual-II** → **MONO** **NICAM** **NICAM** (Normal)
A2 Stereo	Regular broadcast (Standard audio)	**MONO** (Normal use)
	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). If the mono sound comes out only from left speaker, press the **S.Mode** button.

Setting the Sleep Timer

You can select a time period of between 30 and 180 minutes after the television automatically switches to Standby mode by pressing the "SLEEP" button.

1 Press the **Sleep** button on the remote control.

   Result: If the sleep timer is not yet set, **OFF** is displayed.
   If the sleep timer is already set, the screen displays
   the remaining time and then before the television will
   be placed in standby mode.

2 Press the **Sleep** button repeatedly and cycle through the preset
   time intervals (30, 60, 90, 120, 150, 180).

   Result: The television automatically switches to standby mode
   when the timer reaches 0.

3 To cancel the sleep timer feature, press the **Sleep** button
   repeatedly and select **OFF**.

Setting and Displaying the Current Time

```
                        FUNCTION
  LANGUAGE            : ENGLISH
  TIME                 ▶
  CONVERGENCE          ▶
  BLUE SCREEN        : ON
  PLUG & PLAY          ▶
  DEMONSTRATION        ▶

  ◆ SELECT    ⏎ ENTER      ▥ EXIT
```

```
                          TIME
  CLOCK            : -- : -- AM
  TIMER            : OFF




  ◆ SELECT    ◆ ADJUST      ▥ EXIT
```

```
                          TIME
  CLOCK            : 11 : 18 AM
  TIMER            : OFF




  ◆ SELECT    ◆ ADJUST      ▥ EXIT
```
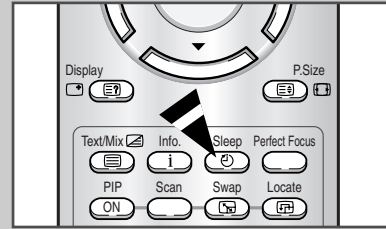
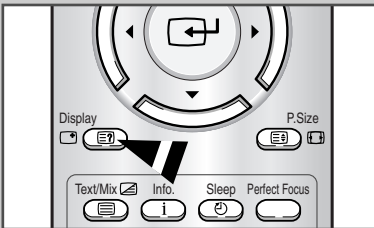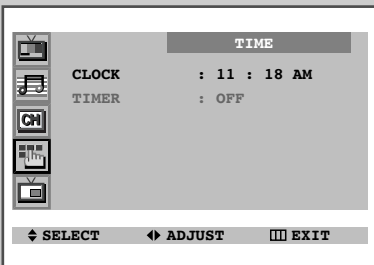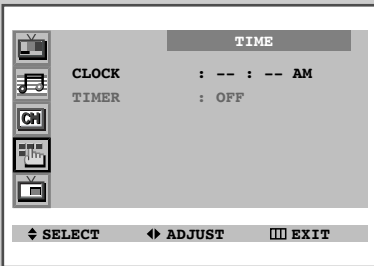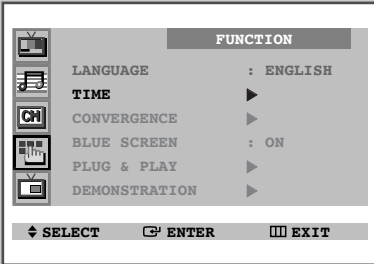*You can set the television's clock so that the current time is displayed by pressing the "DISPLAY" button. You must also set the time if you wish to use the automatic on or off timers.*

➤   When pressing the **POWER** (**I**) button on the front 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 to select **FUNCTION**.

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

3   Press the ⏎ button.

4   Press the ▼ or ▲ button to select **TIME**. Press the ⏎ button.

Result: The options available in the **TIME** group are displayed with **Clock** is selected.

5   Press the ◄ or ► button to move to the hour or minute. Set the hour or minute by pressing the ▼ or ▲ button.

6   When you have finished, press the **TV** button to exit.

7 | To... | Press the "DISPLAY" button... |
|------------------------------------|-------------------------------|
| display the channel information | Once. |
| display the current time | Twice. |
| remove the display | Three times. |

Switching the Television On and Off Automatically

You can set the On/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 and Displaying the Current Time" on the previous page). If you have not yet set the clock, the message **SET THE CLOCK FIRST** is displayed.

```
                    FUNCTION
  LANGUAGE          : ENGLISH
  TIME              ▶
  CONVERGENCE       ▶
  BLUE SCREEN       : ON
  PLUG & PLAY       ▶
  DEMONSTRATION     ▶

  ⬍ SELECT   ⏎ ENTER    ▥ EXIT
```

---

1 Press the **MENU** button.

  <u>Result:</u>   The main menu is displayed.

2 Press the ▼ or ▲ button to select **FUNCTION**.

  <u>Result:</u>   The options available in the **FUNCTION** group are displayed.

3 Press the ⏎ button.

4 Press the ▼ or ▲ button to select **TIME**. Press the ⏎ button.

  <u>Result:</u>   The options available in the **TIME** group are displayed.

5 Press the ▼ or ▲ button to select **TIMER**.
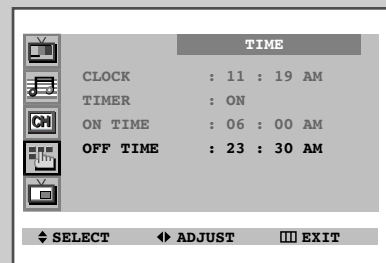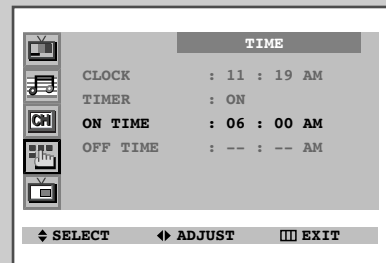
6 Press the ◄ or ► button to set **ON**
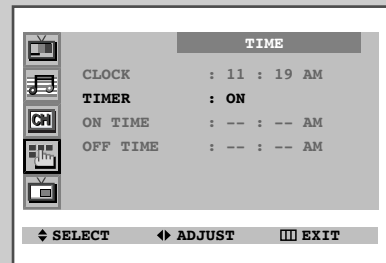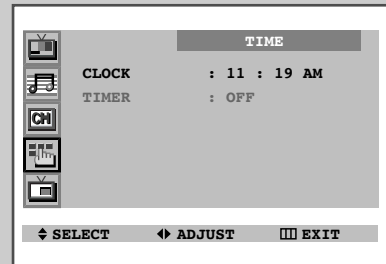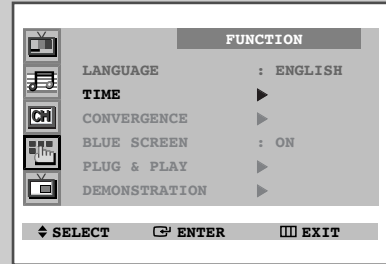
  <u>Result:</u>   The **ON TIME** and **OFF TIME** are displayed.

7 Press the ▼ or ▲ button to select **ON TIME**. Set the time at which you wish the television to be switched on automatically.

 ◆ Press the ◄ or ► button to move to the hour or minute. Set the hour or minute by pressing the ▼ or ▲ button.

---

8 Press the ▼ or ▲ button to select **OFF TIME**. In the same above, set the time at which you wish the television to be switched off automatically.

➢ ◆ When leave the television in Standby mode...
  – During Timer Off, the LED (Stand-by & Timer indicator) lights up Green.
  – During Timer On, the LED lights up Orange.

  ◆ When switching the television On during Timer On, the LED lights up Red.

```
                    TIME
  CLOCK           : 11 : 19 AM
  TIMER           : OFF

  ⬍ SELECT   ◄► ADJUST    ▥ EXIT
```

```
                    TIME
  CLOCK           : 11 : 19 AM
  TIMER           : ON
  ON TIME         : -- : -- AM
  OFF TIME        : -- : -- AM

  ⬍ SELECT   ◄► ADJUST    ▥ EXIT
```

```
                    TIME
  CLOCK           : 11 : 19 AM
  TIMER           : ON
  ON TIME         : 06 : 00 AM
  OFF TIME        : -- : -- AM

  ⬍ SELECT   ◄► ADJUST    ▥ EXIT
```

```
                    TIME
  CLOCK           : 11 : 19 AM
  TIMER           : ON
  ON TIME         : 06 : 00 AM
  OFF TIME        : 23 : 30 AM

  ⬍ SELECT   ◄► ADJUST    ▥ EXIT
```

Viewing the Picture In Picture (PIP)

```
                              PIP
     PIP              : OFF




  ‡ SELECT      ◆ ADJUST      Ⅲ EXIT
```

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.
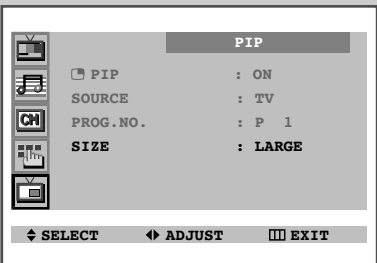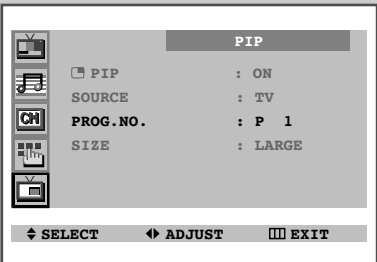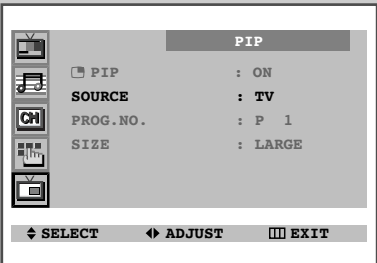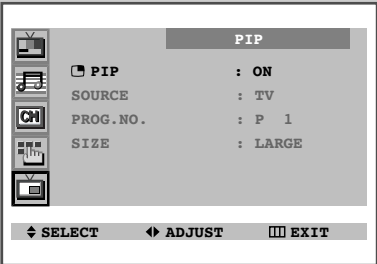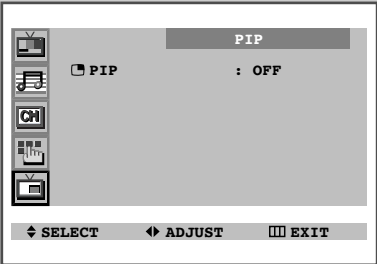
1 Press the **MENU** button.

Result: The main menu is displayed.

2 Press the ▼ or ▲ button to select **PIP**. Press the ⬐ button.

3 Press the ◄ or ► button again to set **ON**.

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

```
                              PIP
     PIP              : ON
     SOURCE           : TV
     PROG.NO.         : P  1
     SIZE             : LARGE


  ‡ SELECT      ◆ ADJUST      Ⅲ EXIT
```

4 Press the ▼ or ▲ button to select **SELECT**. Find a source of the sub picture by pressing the ◄ or ► button.

Result: The sources are displayed in the following order:
TV – AV1 – AV2 – AV3 – AV4 – S–VHS1 – S–VHS2.

```
                              PIP
     PIP              : ON
     SOURCE           : TV
     PROG.NO.         : P  1
     SIZE             : LARGE


  ‡ SELECT      ◆ ADJUST      Ⅲ EXIT
```

5 Press the ▼ or ▲ button to select **PROG.NO.**. If you watching TV program, select the channel that you want to view through the sub picture by pressing the ◄ or ► button.

➢ When the source of the sub picture (**SELECT**) is set to **TV**, you can select the channel of sub picture.

**6** Press the ▼ or ▲ button to select **SIZE**. Select a size of the sub picture by pressing the ◄ or ► button.

Result: The sizes are displayed in the following order (depending on the model):

◆ **LARGE – SMALL – MULTI – 3 PIP**.

◆ **DOUBLE – LARGE – SMALL – MULTI – 3 PIP**.

```
                              PIP
     PIP              : ON
     SOURCE           : TV
     PROG.NO.         : P  1
     SIZE             : LARGE


  ‡ SELECT      ◆ ADJUST      Ⅲ EXIT
```

➢ ◆ **MULTI :** You can view up to 12 memorized channels on the sub picture spontaneously.

◆ On the **MULTI** or **3 PIP** mode, it is impossible to execute swap and locate.

```
                              PIP
     PIP              : ON
     SOURCE           : TV
     PROG.NO.         : P  1
     SIZE             : LARGE


  ‡ SELECT      ◆ ADJUST      Ⅲ EXIT
```

Viewing the Picture In Picture (PIP)

☛ *Easy functions of remote control*

Buttons	Feature
PIP ON	Used to activate or deactivate the PIP function directly.
Scan	Used to scan every memorized channel in order. To stop scanning, press it again.
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.
Locate	Used to move the sub picture counterclockwise.
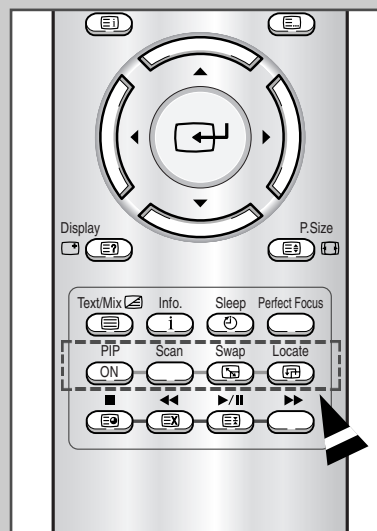
Teletext Feature
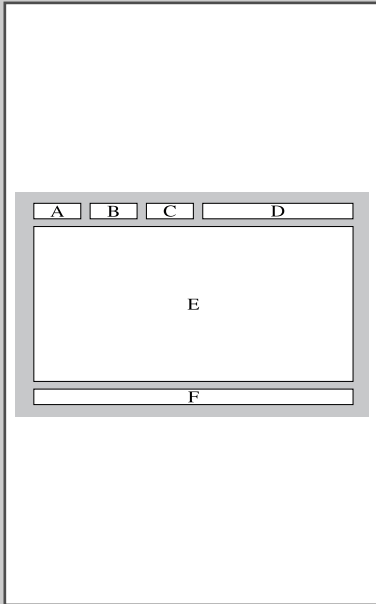
Most television channels provide written information services via teletext. Information provided includes:

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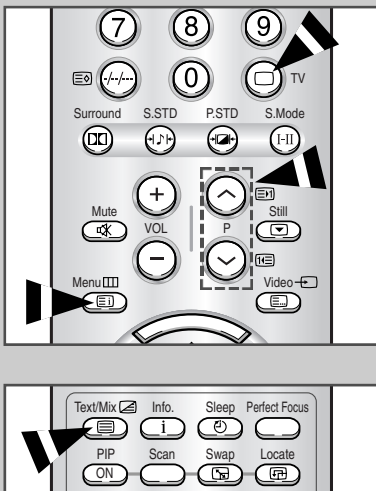
*You can display Teletext information at any time on your television.*

☞ 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 **P∧** 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 If you wish to display the actual broadcast at the same time as the teletext page, press the **Text/Mix** button again.

4 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...
◆ Both teletext information and the normal broadcast	**Text/Mix** twice
◆ Hidden text (answers to quiz games, for example)	≣? (reveal)
◆ The normal screen	≣? (reveal) again
◆ A secondary page, by entering its 4-digit number	≣● (sub-page)
◆ The broadcast when searching for a page	≣X (cancel)
◆ The next page	≣⋙ (page up)
◆ The previous page	1≣ (page down)
◆ Double-size letters in the: • Upper half of the screen • Lower half of the screen	≣⬍ (size) • Once • Twice
◆ Normal screen	• Three times
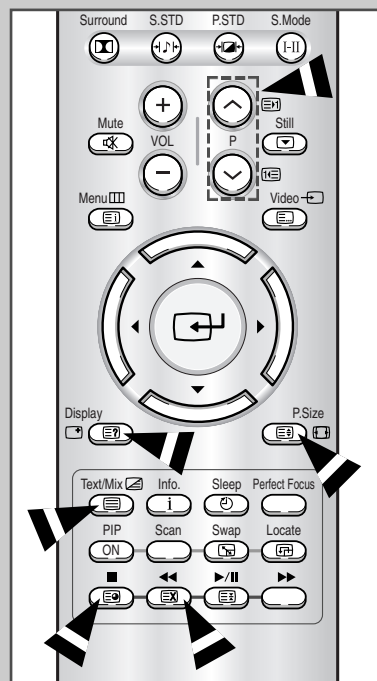
Selecting a Teletext Page
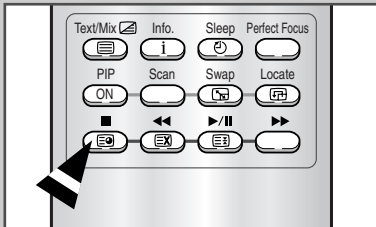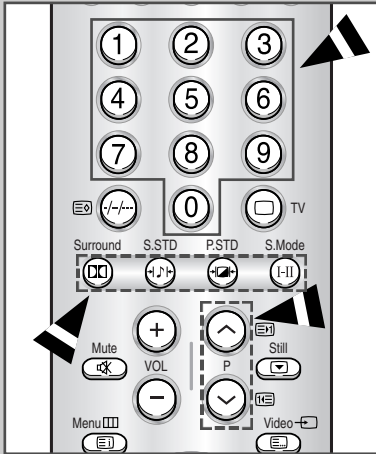
You can enter the page number directly by pressing the numeric buttons on the remote control.

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 the 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.

◆   Enter its 4-digit number by numeric button.

Storing Teletext Pages

You can store up to four teletext pages to display them later at leisure.

1 Select the LIST mode using the ▤ button.

    <u>Result:</u>   Four 3-digit numbers are displayed in different colours.

    ➤   The ▤ button is used to switch between the LIST and FLOF modes.

2 Press the coloured button corresponding to the page that will be replaced.

3 Enter the new page number using the numeric buttons.

4 Repeat steps **2** and **3** for each page to be stored, using a different coloured button each time.

5 Press the ▤ (store) button until the corresponding blocks blink.
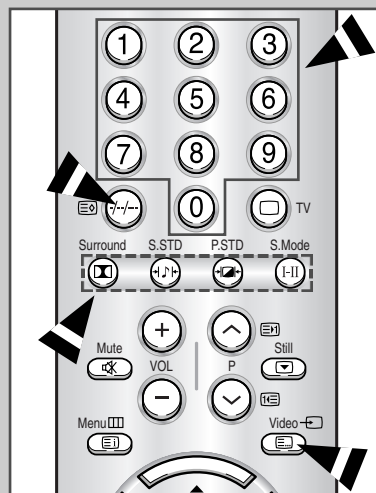
Connecting to the External Input/Outputs

Rear of the TV
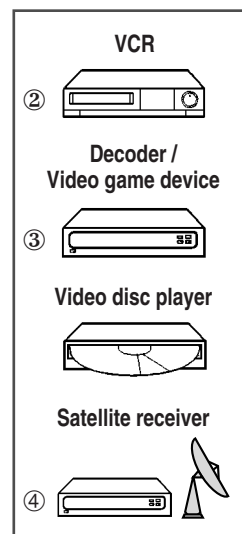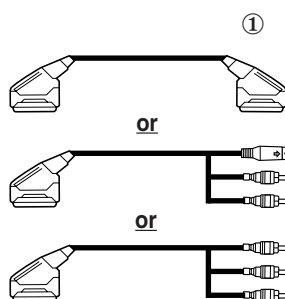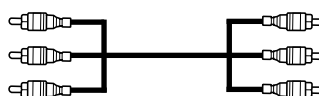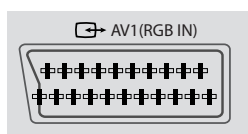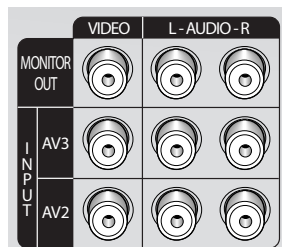
➢ **AV1** is used for the equipment with an RGB output,
   such as video game devices or video disc players.

① This end can be fitted with:
   ◆ A SCART connector
   ◆ An S-Video connector and two audio RCA connectors (L+R); AV2
   ◆ Three RCA connectors (VIDEO + AUDIO-L and R)

② If you have a second VCR and wish to copy cassette tape, connect the source VCR to **AV2** and the target VCR to **AV3** so that you can redirect the signal from **AV2** to **AV3**.

③ If you have a decoder, connect the decoder to the VCR and the VCR to the television.

④ When you wish to record a programme, connect the receiver to **AV2** and the VCR to **AV3** so that you can redirect the signal from **AV2** to **AV3**.

☛ 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.

Connecting to the DVD Input

➢ The **DVD** RCA connectors are used for equipment with a DVD output.

Rear of the TV

DVD
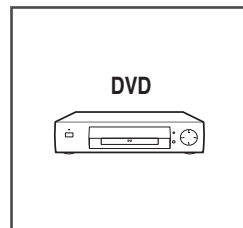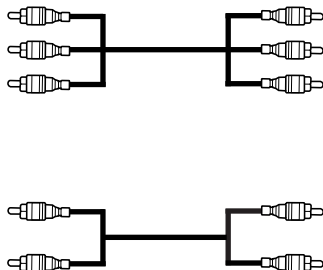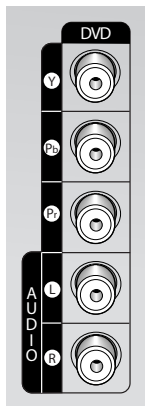
Connecting to the Audio Output

➢ The **AUDIO OUT** RCA connectors are used for equipment, such as an audio system (to take full advantage of the Surround sound effect).

Rear of the TV

Audio system
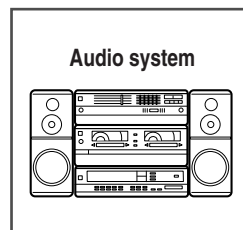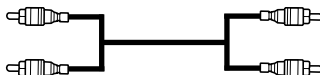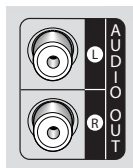
Connecting to the RCA Input (depending on the model)

➢ The RCA (VIDEO + AUDIO-L and R) connectors are used for the equipment, such as camcorders, video disc players, and some video game devices.

Front of the TV

VIDEO
INPUT4   AUDIO
                        INPUT4
                        (L, R)
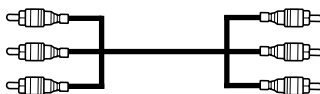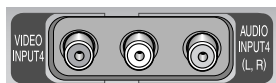
Camcorder
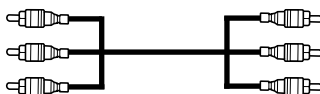
Side of the TV

VIDEO4

AUDIO L R

Video game device
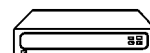
Video disc player

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

Front of the TV

AUDIO
INPUT4
(L, R)   S-VIDEO2
                    INPUT

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

Side of the TV

AUDIO L R

S-VIDEO2
INPUT

①

Camcorder

and

VCR
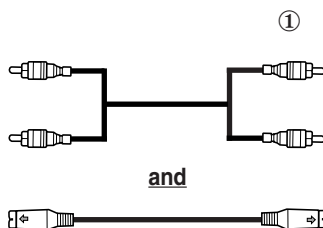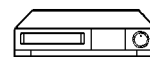
Rear of the TV
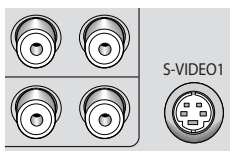
S-VIDEO1

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

Connecting Additional Speakers (depending on the model)

To take advantage of the surround sound system, connect additional speakers.

The speaker terminals are located on the rear of the television:

◆ Two for the left-hand surround speaker (marked **L**)

◆ Two for the right-hand surround speaker (marked **R**)

◆ Two for the center speaker (marked **C**) ; Option

➢ To improve the quality of the sound, connect the:
  ◆ Red wire to the red terminal
  ◆ Black wire to the black terminal

Rear of the TV
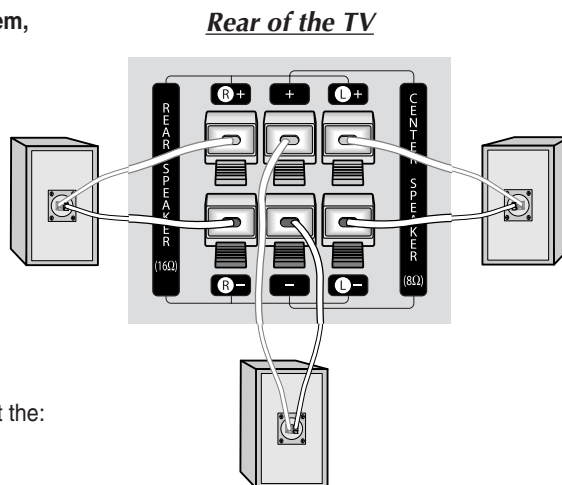
Viewing Pictures From External Sources

Once you have connected up your various audio and video systems, you can view different sources by selecting the appropriate input.

1 Check that all the necessary connections have been made.

2 Switch your television on, then press the **VIDEO** button repeatedly.

Result: The input sources are displayed in the following order:

TV - AV1 - AV2 - AV3 - AV4 - S-VHS1 - S-VHS2 - DVD.

➢ Depending on the source selected, the pictures may appear automatically.

➢ To watch television programmes again, press the **TV** button and select the number of the channel required.

45
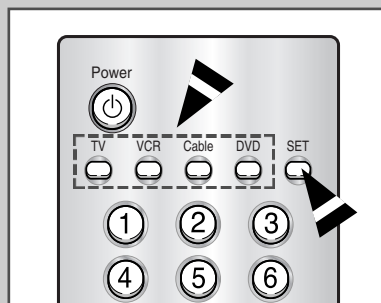
This TV's remote control can operate almost any VCR, Cable box, or DVD, in addition to controlling the TV.

➤ The remote control might not be compatible with the TV manufactured by another company.

1 Turn off your VCR, Cable box, or DVD.

2 Press the appropriate button among the component selection buttons to activate another component (**TV**, **VCR**, **Cable**, **DVD**).

Example: If you want to program the remote control to operate your VCR, press the **VCR** button on the remote control.

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. If no other codes are listed, try each code, "000" through "089" for VCR/DVD and "000" through "077" for Cable box.

6 Once your remote control is set up, press the **SELECT** button any time you want to use the remote to operate your Cable box, VCR or DVD.

➤ ◆ When your remote control is in the **VCR**, **Cable**, or **DVD** mode, the volume buttons still control your TV's volume.

◆ When your remote control is in the **TV** or **Cable** mode, the VCR or DVD control buttons (PLAY, PAUSE, etc.) still operate your VCR or DVD.

Programming the Remote Control for Other Components

ENG

TV Remote Control Codes

A-Mark	88, 37, 90	MTC	26, 15, 6, 49, 93, 20, 8, 75
Admiral	55	NEC	25, 75, 20, 8, 6, 5, 1, 1
Akai	20, 6	Nikei	50
Anam	37, 47, 64, 41, 50	Onking	50
Aoc	6, 37, 20, 56	Onwa	50
Bell & Howell	67	Optonica	69
Broksonic	68	Panasonic	64, 72, 58, 82
Candle	6, 12, 20, 46, 50	Penney	61, 6, 49, 66, 18, 90, 50, 77, 25
Centrion	45	Philco	1, 8, 88, 61, 6, 90, 50, 12, 98, 92, 100, 82, 20
Citizen	20, 46, 6, 50, 12, 90, 45, 9, 10	Philips	88, 1, 61, 6, 90, 12, 98, 92, 82, 20, 5, 57
Classic	50	Pioneer	65, 26
Concerto	6	Portland	88, 6, 90
Contec	50, 78, 83, 81	Proton	1, 31, 6, 90, 77, 78
Coronado	88, 90	Quasar	72, 58
Craig	7, 49, 50	Radio Shack	50, 92, 25, 90
Croslex	30	RCA	61, 6, 71, 66, 87, 20, 90, 1, 62
Crown	50	Realistic	8, 49, 50, 25
Curtis-Mathes	1, 6, 20, 90, 17, 31	Sampo	1, 20, 90, 6, 19, 26, 49
CXC	50	Samsung	88, 0, 61, 28, 44, 29, 81, 48, 49, 90, 92, 51
Daewoo	88, 1, 93, 31, 32, 33, 38, 52, 2, 3, 92, 34,	Sanyo	89, 80, 62, 78, 13, 14
	46, 50, 35, 36, 4, 5, 6, 8	Scott	1, 50, 19, 90, 6
Daytron	1, 6, 20	Sears	88, 61, 6, 8, 90, 91, 89, 80, 15, 19
Dynasty	50	Sharp	88, 90, 85, 24, 25, 69
Emerson	88, 1, 90, 50, 83, 19, 30, 81, 20, 6, 25, 55,	Signature	84, 6, 114
	23, 36	Sony	77, 74
Fisher	8, 80, 61, 15, 125	Soundesign	1, 50, 12, 6, 19
Funai	50, 19, 69, 6	Spectricon	37
General Electric	1, 61, 72, 50, 58, 17, 18, 6, 49, 19, 90	SSS	6, 50
Goldstar	88, 27, 1, 37, 10, 11, 42, 90, 39, 40, 92, 99	Sylvania	1, 61, 6, 12, 98, 92, 20, 100, 82
Hitachi	88, 6, 90, 71, 77, 70, 21, 22, 23, 25	Symphonic	2, 6, 90, 12, 20
Infinity	82	Tatung	72, 69
JBL	82	Techwood	6, 59
JC Penney	91, 92, 17, 20	Teknika	88, 46, 6, 90, 50, 12, 19, 94, 84
JVC	60, 16, 128, 129	Telefunken	96, 97
Kloss	92	Telerent	84
KMC	88, 90, 13	TMK	1, 6, 90
KTV	88, 90, 50, 61, 20		

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VCR Remote Control Codes

Admiral	15, 88	MTC	16, 24
Aiwa	24	Multitech	16, 24, 40, 41
Akai	26, 31, 32	NEC	11, 23, 25, 39, 55, 70, 73
Audio Dynamics	22, 25	Optimus	15
Bell & Howell	11	Panasonic	17, 62, 84, 86
Broksonic	19	Pentax	14, 44
Candle	16, 18 ,22, 54, 55, 61	Pentex Research+	55
Canon	17, 62	Philco	17, 38, 62, 65
Citizen	16, 18, 22, 54, 55, 61	Philips	17
Colortyme	23	Pioneer	14, 25, 42, 59
Craig	16, 21	Portland	53, 54, 61
Curtis-Mathes	9, 16, 17, 23, 24, 55, 62, 73, 76	Proscan	9
Daewoo	3, 4, 5, 6, 7, 8, 22, 54, 85	Quartz	11
DB	23, 25	Quasar	17, 53
Dimensia	9	Radio Shack/Realistic	11, 15, 17, 18, 21, 24, 28, 36, 52, 62
Dynatech	24	RCA	9, 14, 16, 17, 37, 44, 46, 63, 78
Electrohome	36	Samsung	0, 16, 22, 31, 41, 51
Emerson	17, 18, 19, 22, 24, 29, 32, 36, 43, 50, 51, 56, 58, 66, 71, 74, 76, 77, 79	Sansui	25
		Sanyo	11, 21
Fisher	11, 21, 27, 28, 52, 57, 67	Scott	22, 50, 58, 77
Funai	24	Sears	11, 14, 18, 21, 27, 28, 44, 52, 57
General Electric	9, 16, 17, 41, 62	Sharp	15, 36, 48, 54
Go Video	16	Shintom	26, 35, 40, 64
Goldstar	18, 23, 55, 69	Signature	24
Harman Kardon	23	Sony	26, 35, 47
Hitachi	14, 24, 44, 45	Sylvania	17, 24, 38, 62, 65
Instant Replay	17	Symphonic	24
JC Penney	11, 14, 16, 17, 23, 25, 39, 44, 60, 62	Tandy	11, 24
JCL	11, 17, 23, 25, 39, 55	Tatung	39
Kenwood	11, 23, 25, 39, 55	Teac	24, 39, 78
KLH	82	Technics	17
LG	1, 2, 7	Teknika	17, 18, 24, 30
Lloyd	24	TMK	76
Logik	40	Toshiba	14, 22, 28, 57, 58
LXI	24	Toshiko	18
Magnavox	17, 38, 62, 65	Totevision	16,18
Marantz	11, 17, 23, 25, 38, 39, 55, 70		

Programming the Remote Control for Other Components

Cable Box (CATV) Remote Control Codes

Anvision	15, 16	Pioneer	26, 28, 52
Cable Star	15, 16	Randtek	15, 16
DaeHan	5	RCA	8, 35, 74
DaeRyung	3	Regal	11, 20, 21
Dongkuk	4	Regency	10, 41
Eagle	15, 16	SAEWOO	7
Eastern International	20	Samsung	0, 11, 30, 52, 71, 72
General Instrument	54	Signature	54
GI	12, 13, 23, 31, 32, 33, 38, 44, 75, 76, 77	Spruce	35
Hamlim	11, 12, 20, 21, 42, 56	Starcom	54
Hitachi	45, 51, 54	Stargate2000	66
Jerrold	12, 13, 23, 31, 32, 33, 38, 44, 54, 70, 73	Sylvania	19, 67
LG	6	TaePyungYang	2
Macom	45, 51	Texscan	19, 67
Magnavox	15, 16, 27, 29, 34, 36, 37, 40, 41, 48, 49	Tocom	25, 29, 57, 58, 63
Nawoo	1	Unika	39, 40, 49
NSC	17	Universal	59, 60
Oak	24, 46	Viewstar	15, 16, 27, 29, 34, 36, 37, 40, 41, 48, 49
Osk Sigma	24	Warner Amex	52
Panasonic	11, 35, 47, 69	Zenith	22, 50, 65, 69
Philips	15, 16, 27, 29, 34, 36, 37, 40, 41, 48, 49		

DVD Remote Control Codes

Philips	7	ProScan	8
Sony	4	RCA	8
Samsung	0	Toshiba	2
Panasonic	6	Sharp	5
LG	1	CurtisMathes	9
JVC	3		

SCART Connector Wiring (AV1)

If you wish to connect other equipment via the SCART connectors on your television, contact your dealer or a qualified technician to wire the A/V cable as illustrated below.

Pin	Signal
1	Audio output R
2	Audio input R
3	Audio output L
4	Audio chassis return
5	Video chassis return (RGB blue)
6	Audio input L
7	RGB blue input
8	Switching voltage
9	Video chassis return (RGB green)
10	-
11	RGB green input
12	-
13	Video chassis return (RGB red)
14	-
15	RGB red input
16	Blanking signal (RGB switching)
17	Video chassis return
18	Blanking signal ground
19	Video output
20	Video input
21	Screening/chassis return

Troubleshooting: Before Contacting Service Personnel

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	◆ Check that the mains lead has been connected to a wall socket. ◆ Check that you have pressed the **POWER** (I) button and the **Power** (⏻) button. ◆ Check the picture contrast and brightness settings. ◆ Check the volume.
Normal picture but no sound	◆ Check the volume. ◆ Check whether the volume **Mute** button on the remote control has been pressed.
No picture or black and white picture	◆ Adjust the colour settings. ◆ Check that the broadcast system selected is correct.
Sound and picture interference	◆ 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	◆ Check the direction, location and connections of your aerial. This interference is often occurs to the use of an indoor aerial.
Remote control malfunctions	◆ Replace the remote control batteries. ◆ Clean the upper edge of the remote control (transmission window). ◆ Check the battery terminals.

– 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.

SAMSUNG

ELECTRONICS