SAMSUNG

COLOUR TELEVISION

Owner's Instructions

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

ON-SCREEN MENUS
PICTURE IN PICTURE (PIP)
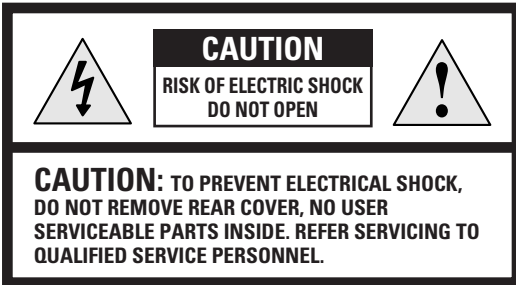### TELETEXT / TELEWEB (OPTION)

DOLBY DIGITAL

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.*

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.

WARNING: TO PREVENT DAMAGE WHICH MAY RESULT IN FIRE OR SHOCK HAZARD. DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

The lightning flash and arrow head within the triangle is a warning sign alerting you of "dangerous voltage" inside the product.
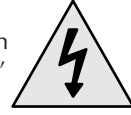
The exclamation point within the triangle is a warning sign alerting you of important instructions accompanying the product.
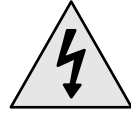
☛ *The main voltage is indicated on the rear of the TV set and the frequency is 50 or 60Hz.*

☛ *EUROPEAN NOTICE*

Products with the CE marking comply with the EMC Directive (89/336/EEC), (92/31/EEC), (93/68/EEC) and the Low Voltage Directive (73/23/EEC) issued by the Commission of the European Community. Compliance with these directives implies conformity to the following European Norms:

- **EN55022:1998+A1:2000**
  Radio Frequency Interference

- **EN55024:1998**
  Electromagnetic Immunity

- **EN55013:1990+A12:1994+A13:1996+A14:1999**
  Radio Frequency Interference

- **EN55020:1994+A11:1996+A12/A13/A14:1999**
  Electromagnetic Immunity

- **EN61000-3-2:1995+A1/A2:1998**
  Power Line Harmonics

- **EN61000-3-3:1995**
  Voltage Fluctuations

- **EN60065:1997** or **EN60095:1998**
  Product Safety

Contents (continued)

Contents

Symbols

Press   Important   Note

Control Panel of Your Television

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

Power On/Off

Standby Indicator

Remote Control Sensor

TV/VIDEO ENTER — **Input Source Selection/ Accessing to the Selected Option on the Menu System**

MENU — **Menu Display**

+ — **Volume Increase**

– — **Volume Decrease**

▲ — **Next Channel**

C/P. ⏻

▼ — **Previous Channel**
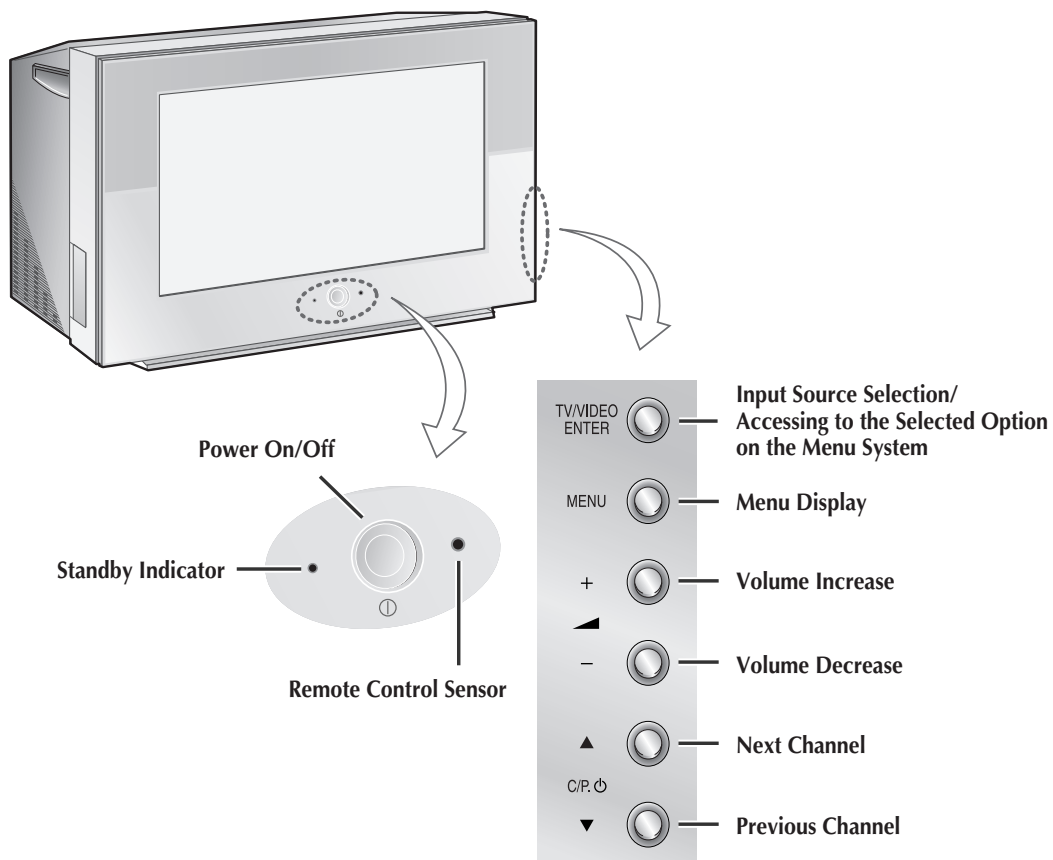
➢ *Using the Buttons on the Panel*

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

◆ Switch on the TV when it is in Standby mode and select channels (▲ **C/P.**⏻ ▼)

◆ Adjust the volume (**+** ◢ **–**)

◆ Access the menu (**MENU**)

◆ Switch among Video input modes (**TV/VIDEO**) and access to the selected option on the menu system (**ENTER**)

Connection Panel of Your Television

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

Audio Input (R, L)

Video Input

S-Video Input

Headphone connector

PC Input

R
AUDIO
L
(MONO)

VIDEO4
INPUT

S-VIDEO
INPUT

PC
INPUT
(RGB)

Rear of the TV

VIDEO
Y   Pb   Pr

DVD

SURROUND (8Ω)
⊕ – R – ⊖   ⊖ – L – ⊕

WOOFER (12Ω)

(MONO)
L – AUDIO – R   COAXIAL IN   OPTICAL IN   L – MAIN – R   CENTER   L – SURR – R   WOOFER
AUDIO OUT

EXT 2
(VCR)

75Ω

VHF/UHF

EXT 1

EXT 3
(DECORDER)
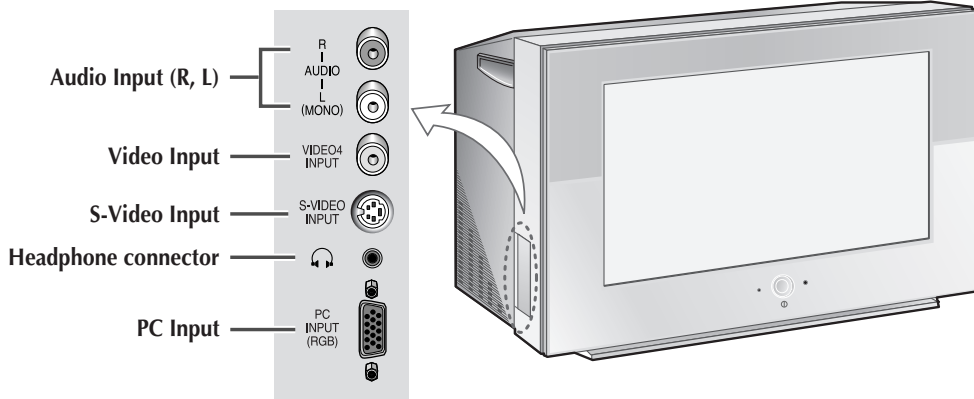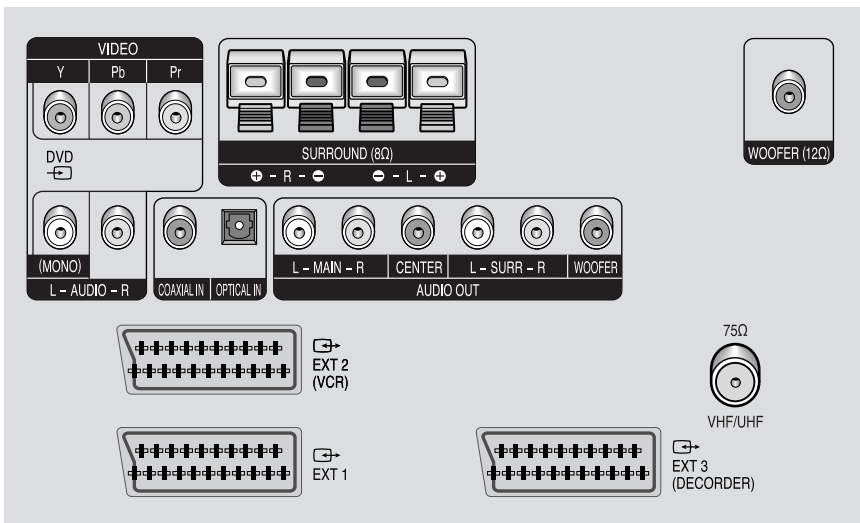
➤ For further details about connection, refer to pages 53~57.

☞ Whenever you connect an audio or video system to your television, ensure that <u>all</u> elements are switched <u>off</u>.

Refer to the documentation supplied with your equipment for detailed connection instructions and associated safety precautions.

Infrared Remote Control (Television Functions)

POWER

TELEVISION STAND-BY

MAKE THE REMOTE CONTROL WORK FOR TV, VCR, CATV, DVD, STB.
➢ The remote control might not be compatible with the TV manufactured by another company.

SELECT

DIRECT CHANNEL SELECTION

SURROUND

DOLBY PROLOGIC MODE SELECTION

SLEEP

AUTOMATIC SWITCH-OFF

STILL   **SWAP**   **PIP**   **ON**

PICTURE FREEZE

VOLUME INCREASE

VIDEO

EXTERNAL INPUT SELECTION

P

NEXT CHANNEL

MUTE

TEMPORARY SOUND SWITCH-OFF

PREVIOUS CHANNEL

VOLUME DECREASE

MENU

MENU DISPLAY

TTX/MIX

CONTROL THE CURSOR IN THE MENU

CHANGE CONFIRMATION

ENTER   **SIZE**

EXIT/TV   **INFO**

EXIT FROM MENU DISPLAY/ TUNER/CABLE NETWORK SELECTION

INFORMATION DISPLAY

DVR MENU   **TeleWeb**   **S.MODE**   **P.MODE**

PICTURE EFFECT SELECTION

SOUND EFFECT SELECTION

HOME   **P.SIZE**   **DUAL MODE I-II**   **DNIe**

DNIe ON/OFF

PICTURE SIZE SELECTION

SOUND MODE SELECTION

DVR   **LIVE**   **REC**   **QUICK REPLAY**

REW   **STOP**   **PLAY/PAUSE**   **FF**

○ SET   ○ RESET

SET THE MBR CODE OF REMOTE CONTROL FOR THE PRODUCTS EXCEPT SAMSUNG PRODUCT (REFER TO PAGES 58~60)

INITIALIZE THE REMOTE CONTROL SETTINGS WHEN IT HAS SOME PROBLEMS OR DOESN'T WORK WELL
➢ Please take off the batteries while resetting. If not so, the remote control will get damaged

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

Infrared Remote Control (All Functions Except Television Functions)

POWER

SELECT

SURROUND

SLEEP

1 2 3

4 5 6

7 8 9

STILL SWAP PIP

0 ON

VIDEO

P

MUTE

F

MENU TTX/MIX

TELETEXT INDEX

SIZE

ENTER

EXIT/TV

INFO

DVR MENU TeleWeb S.MODE P.MODE

HOME P.SIZE DUAL MODE DNIe

DVR LIVE REC QUICK REPLAY

REW STOP PLAY/PAUSE FF

SET RESET

SUB PICTURE (PIP) FREEZE

SUB PICTURE (PIP) NEXT CHANNEL

TELETEXT INDEX

SUB PICTURE (PIP) LOCATION SELECTION

TELEWEB DISPLAY

DVR SETUP MENU DISPLAY

TELETEXT SIZE SELECTION

TELETEXT SUB PAGE/
TELEWEB HOME PAGE

VCR, CATV, DVD, DVR OR STB FUNCTIONS:
- REWIND
- STOP
- PLAY/PAUSE
- FAST FORWARD

INTERCHANGE THE MAIN AND SUB PICTURE (PIP)
PIP ON/OFF

TELETEXT NEXT PAGE/
TELEWEB FORWARD

TELETEXT PREVIOUS PAGE/
TELEWEB BACKWARD

TELETEXT DISPLAY/
MIX BOTH TELETEXT INFORMATION AND THE NORMAL BROADCAST

SUB PICTURE (PIP) SIZE SELECTION

TELETEXT REVEAL

SUB PICTURE (PIP) PREVIOUS CHANNEL

FASTEXT TOPIC SELECTION

TELETEXT CANCEL

DVR FUNCTIONS;
(REFER TO PAGES 46~48)

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Inserting the Batteries in the Remote Control

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

◆ *Purchase the television*

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

1 Remove the cover on the rear of the remote control by pressing the symbol (⬆) downwards and then pulling firmly to remove it.

2 Insert two R03, UM4, "AAA" 1.5V or equivalent batteries taking care to respect the polarities:
◆ **+** on the battery against **+** on the remote control
◆ **–** on the battery against **–** on the remote control

3 Replace the cover by aligning it with the base of the remote control and pressing it back into place.

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 16
◆ "Storing Channels Manually" on page 17

Rear of the TV

75Ω

or

VHF/UHF

Cable Television Network
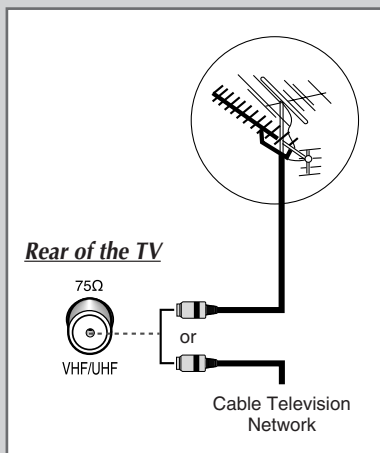
Switching Your Television On and Off

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

☛ If you have purchased this television in the United Kingdom, refer to page 61 for further instructions on plug wiring.

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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 "⏻" button (On/Off) on the front of the television.

Result: The Standby indicator on the front of the television lights up.

---

3 Press the **POWER** button on the remote control to switch the television on.

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

➢ If you have not yet stored any channels, No clear picture appears. Refer to "Storing Channels Automatically" on page 16 or "Storing Channels Manually" on page 17.

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4 To switch your television off, press again the "⏻" button (On/Off) on the front of the television.

➢ If your television isn't turned on when the "⏻" button (On/Off) is pressed, press the **SELECT** button to check if the "**TV**" mode has been chosen.

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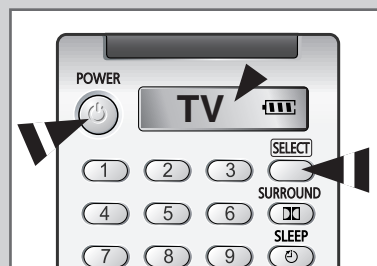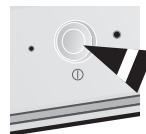
Placing Your Television in Standby Mode
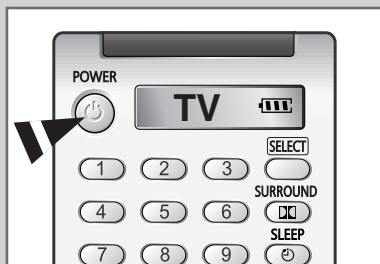
Your television can be placed in Standby mode, in order to reduce the power consumption.

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

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

Result: The screen is turned off and the Standby indicator on the front of the television lights up.

2   To switch the television back on, simply press again the **POWER** button on the remote control.

☛   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 "⏻" button (On/Off) on the front of the television. It is best to unplug the set from the mains and aerial.

Becoming Familiar with the Remote Control

The remote control is used mainly to:

◆ *Change channels and adjust the volume*

◆ *Set up the television using the on-screen menu system*

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

Button	Viewing Function	Menu Function
⌃	Used to display the next stored channel.	–
⌄	Used to display the previous stored channel.	–
⓪ to ⑨	Used to display the corresponding channels.	
＋	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 ⊕ or ⊖ button.	
MENU ▥	Used to display the on-screen menu system.	Used to return to the previous menu or normal viewing.
◄ ▲ ▼ ►	–	Used to... ◆ Display a submenu containing selections for the current menu option. ◆ Increase/reduce a menu option value.
⊞ ENTER	–	Used to confirm your choice.
EXIT/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.

Plug and Play Feature

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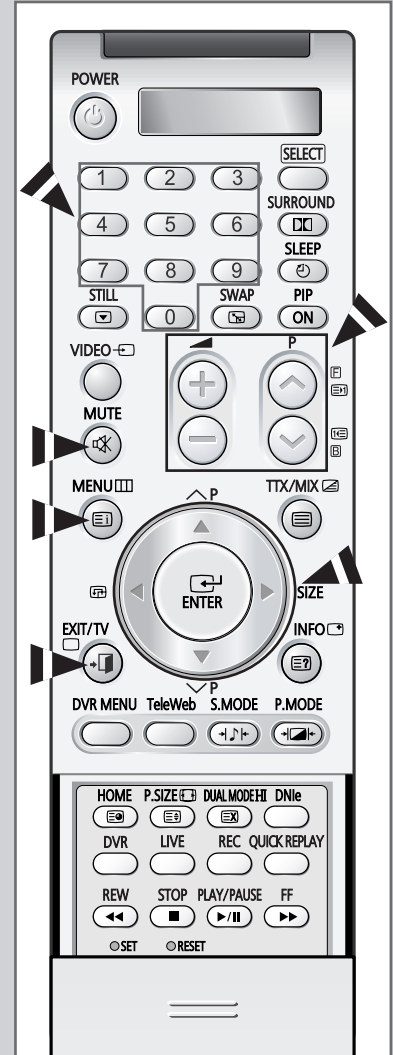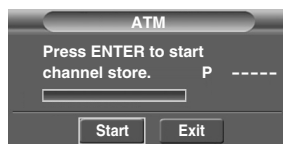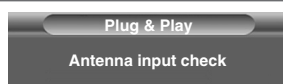
When the television is initially powered on, several basic customer settings proceed automatically and subsequently. The following settings are available.

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

<u>Result</u>:   The **Plug & Play** is displayed.

---

2   To start the Plug & Play, press the **ENTER** button.

<u>Result</u>:   The **Language** menu is displayed.

---

3   Select the appropriate language by pressing the ▼ or ▲ button. Press the **ENTER** button to confirm your choice.

<u>Result</u>:   The message **Antenna input check** is displayed.

---

4   Make sure that the antenna is connected to the TV.

<u>Result</u>:   After a little while, the **Country** menu is displayed.

---

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

<u>Result</u>:   The **ATM** menu is displayed.

---

6   To start the channel store, press the **ENTER** button.

<u>Result</u>:   The search will end automatically. Channels are sorted and stored in an order which reflects their position in the frequency range (with lowest first and hialghest last).

➣   To stop the search before it has finished or return to normal viewing, select the **Exit** and press the **ENTER** button.

---

7   When the setting has finished all, the message **Enjoy viewing your new TV** is displayed, and then the channel which has been stored will be activated.

Side panel menus

Plug & Play
Press ENTER to start
Plug & Play.
Start   Exit

Language
English
БЪЛГАРСКИ
Hrvatski
Čeština
Netherland
Français
⬥ Move   Enter

Plug & Play
Antenna input check

Country
Austria
Belgium
Croatia
Denmark
Finland
France
Germany
⬥ Move   Enter

ATM
Press ENTER to start
channel store.   P -----
Start   Exit

Enjoy viewing your new TV

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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 **Setup**.
	<u>Result</u>: The options available in the **Setup** group are displayed.
3	Press the **ENTER** button.
	<u>Result</u>: The **Plug & Play** is selected.
4	Press the **ENTER** button again.
	<u>Result</u>: This feature starts with the message **Plug & Play** is displayed.

```
                        Setup
   Plug & Play                        ▶
   Language       : English           ▶
   Time                               ▶
   Teletext Source   : Main           ▶
   AV Setup                           ▶

  ⬦ Move        Enter          Return
```

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.

1	Press the **MENU** button.
	<u>Result</u>: The main menu is displayed.
2	Press the ▼ or ▲ button to select **Setup**.
	<u>Result</u>: The options available in the **Setup** group are displayed.
3	Press the **ENTER** button.
4	Press the ▼ or ▲ button to select **Language**. Press the **ENTER** button.
	<u>Result</u>: The languages available are listed.
5	Press the ▼ or ▲ button to select the appropriate language.

```
                        Setup
   Plug & Play         English      ▶
   Language       :   БЬЛГАРСКИ     ▶
   Time                Hrvatski     ▶
   Teletext Source     Čeština      ▶
   AV Setup            Nederland    ▶
                       Français
                          ▼
  ⬦ Move        Enter          Return
```

15

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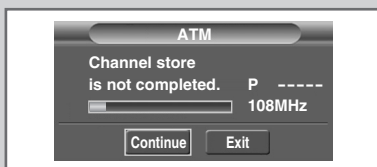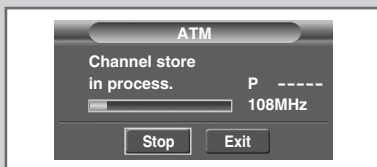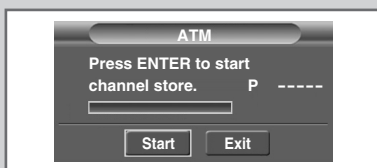
You can scan for the frequency ranges available to you (and availability depends on your country). Automatically allocated programme numbers may not correspond to actual or desired programme numbers. However you can sort numbers manually and clear any channels you do not wish to watch.

Channel

	Country : A	**Austria**
	ATM	**Belgium**
	Manual Store	**Croatia**
	Channel Edit	**Denmark**
	Fine Tune	**Finland**
		France
		▼

◆ Move   ⏎ Enter   ▥ Return

Channel

	Country : Austria	►
	ATM	►
	Manual Store	►
	Channel Edit	►
	Fine Tune	►

◆ Move   ⏎ Enter   ▥ Return

ATM

Press ENTER to start
channel store.   P -----

Start	Exit

ATM

Channel store
in process.   P -----
108MHz

Stop	Exit

ATM

Channel store
is not completed.   P -----
108MHz

Continue	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.

3   Press the **ENTER** button.
Result: The **Country** is selected.

4   Press the **ENTER** button again. Select your country by pressing the ▼ or ▲ button.
The countries are displayed in the following order:
Austria – Belgium – Croatia – Denmark – Finland – France – Germany – Iceland – Ireland – Italia – Netherlands – Norway – Poland – Spain – Sweden – Swizerland – Turkey – United Kingdom – Others – East Europe.
➢   If you have selected the **Others** option but do not wish to scan the PAL frequency range, store the channels manually (see page 17).

5   Press the **ENTER** button to confirm your country selected.

6   Press the ▼ or ▲ button to select **ATM**. Press the **ENTER** button.

7   Press the **ENTER** button again to start the search.
Result: The 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 or return to normal viewing, select the **Exit** and press the **ENTER** button.

8   When the channels have been stored, you can:
◆ Clear a channel (refer to page 19)
◆ Sort them in the order required (refer to page 20)
◆ Assign a name to the stored channels (refer to page 21)
◆ Fine tune channel reception if necessary (refer to page 24)

Storing Channels Manually

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

When storing channels manually, you can choose:

- ◆ *Whether or not to store each of the channels found*

- ◆ *The programme number of each stored channel which you wish to identify*

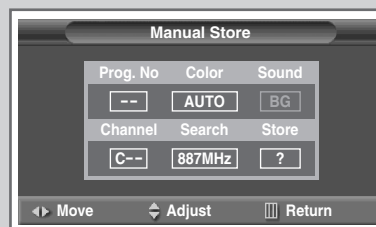|	
1	Press the **MENU** button.
	Result: The main menu is displayed.
2	Press the ▼ or ▲ button to select **Channel**.
	Result: The options available in the **Channel** group are displayed.
3	Press the **ENTER** button.
4	Press the ▼ or ▲ button to select **Manual Store**. Press the **ENTER** button.
	Result: The current channels are displayed.
5	Select required channel by pressing the ▼ or ▲ button. Press the **ENTER** button.
	Result: The **Manual Store** menu is displayed with the **Prog.No** is selected.
6	To assign a programme number to a channel, press the ▼ or ▲ button to find the correct number.
7	If necessary, select the broadcasting standard required. Press the ◄ or ► button to select **Color**. Press the ▼ or ▲ button repeatedly.
	Result: The color standards are displayed in the following order (depending on the model).
	◆ `Auto — PAL — SECAM`
	◆ `Auto — NTSC3.58 — NTSC4.43 — PAL60`
8	Press the ◄ or ► button to select **Sound**. Press the ▼ or ▲ button repeatedly.
	Result: The sound standards are displayed in the following order (depending on the model).
	◆ `BG — DK — I — M`
	◆ `BG — DK — I — L`

Channel

Country	: Austria	►
ATM		►
Manual Store		►
Channel Edit		►
Fine Tune		►

‡ Move   Enter   Return

Manual Store

Prog. No	Color	Sound
--	AUTO	BG

Channel	Search	Store
C--	887MHz	?

◄► Move   ‡ Adjust   Return

Manual Store

Prog. No	Color	Sound
--	AUTO	BG

Channel	Search	Store
C--	887MHz	?

◄► Move   ‡ Adjust   Return

Manual Store

Prog. No	Color	Sound
--	AUTO	BG

Channel	Search	Store
C--	887MHz	?

◄► Move   ‡ Adjust   Return

Manual Store

Prog. No	Color	Sound
--	AUTO	BG
Channel	Search	Store
C--	887MHz	?

◄► Move   ♦ Adjust   ▥ Return

Manual Store

Prog. No	Color	Sound
--	AUTO	BG
Channel	Search	Store
C--	887MHz	?

◄► Move   ⓪..⑨ Adjust   ▥ Return

Manual Store

Prog. No	Color	Sound
--	AUTO	BG
Channel	Search	Store
C--	887MHz	?

◄► Move   ♦ Adjust   ▥ Return

Manual Store

Prog. No	Color	Sound
--	AUTO	BG
Channel	Search	Store
C--	887MHz	OK

◄► Move   ♦ Adjust   ▥ Return

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

   ◆ Press the ◄ or ► button to select **Channel**.

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

   ◆ Press the ► button

   ◆ Press the numeric buttons (0~9) to select the required number. (The input range for numeric buttons may vary within different regions.)

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

10 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.

11 To store the channel and associated programme number, select **Store** by pressing the ◄ or ► button. Set to **OK** by pressing the ▼ or ▲ button.

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

☛ *Channel mode*

   ◆ **P** (Programme mode): When completing tuning, the broadcasting stations in your area have been assigned to position numbers from P00 to max P99. You can select a channel by entering the position number in this mode.

   ◆ **C** (Real channel mode): You can select a channel by entering the assigned number to each air broadcasting station in this mode.

   ◆ **S** (Cable channel mode): You can select a channel by entering the assigned number for each cable channel in this mode.

Skipping Unwanted Channels

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

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

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

3	Press the **ENTER** button.

4	Press the ▼ or ▲ button to select **Channel Edit**. Press the **ENTER** button.
	Result: The **Channel Edit** menu is displayed with the **Add/Delete** selected.

5	Press the **ENTER** button again.
	Result: The current channels are displayed.

6	Select the channel that you wish to delete by pressing the ▼ or ▲ button. Press the **ENTER** button.

7	Select **Erased** or **Added** by pressing the ▼ or ▲ button. Press the **ENTER** button.

Channel

Country : Austria ►
ATM ►
Manual Store ►
Channel Edit ►
Fine Tune ►

Move   Enter   Return

Channel Edit

Add/Delete ►
Sort ►
Name ►
LNA ►
Child Lock ►

Move   Enter   Return

Add/Delete

Prog. No
1 ✳
2 ✳
3 ✳ Added
4 ✳
5 ✳

Move   Enter   Return

Add/Delete

Prog. No
1 ✳
2 ✳
3 ✳ Erased
4 ✳
5 ✳

Move   Enter   Return

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.

Channel

Country	: Austria	▶
ATM		▶
Manual Store		▶
Channel Edit		▶
Fine Tune		▶

♦ Move   Enter   Return

Channel Edit

Add/Delete	▶
Sort	▶
Name	▶
LNA	▶
Child Lock	▶

♦ Move   Enter   Return

Sort

Prog. No

1	✳
2	✳
3	✳
4	✳
5	✳

♦ Move   Enter   Return

Sort

Prog. No

1	✳
2	✳
3	✳
4	✳
5	✳

♦ Move   Enter   Return

1 Press the **MENU** button.

Result: The main menu is displayed.

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

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

3 Press the **ENTER** button.

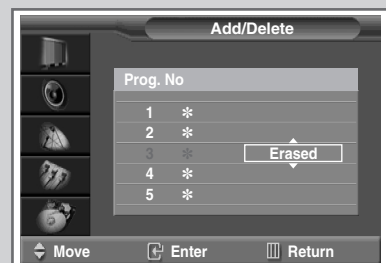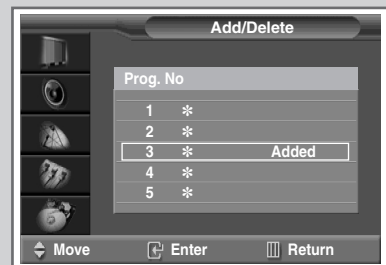**4** Press the ▼ or ▲ button to select **Channel Edit**. Press the **ENTER** button.

Result: The **Channel Edit** menu is displayed.

5 Press the ▼ or ▲ button to select **Sort**. Press the **ENTER** button.

Result: The current channels are displayed.

6 Select the channel that you wish to move by pressing the ▼ or ▲ button. Press the **ENTER** button.

7 Select the number of the programme to which the channel is to be moved by pressing the ▼ or ▲ button. Press the **ENTER** button.

Result: The channel is moved to its new position and all other channels are shifted accordingly.

8 Repeat Steps **6** to **7** until you have moved all the channels to the required programme numbers.

Assigning Names to Channels

Channel names will be assigned automatically when channel information is broadcast. These names can be changed, allowing you to assign new names.

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 **ENTER** button.

4   Press the ▼ or ▲ button to select **Channel Edit**. Press the **ENTER** button.

<u>Result</u>:   The **Channel Edit** menu is displayed.

5   Press the ▼ or ▲ button to select **Name**. Press the **ENTER** button.

<u>Result</u>:   The current channels are displayed.

6   If necessary, select the channel to be assigned to a new name by pressing the ▼ or ▲ button. Press the **ENTER** button.

<u>Result</u>:   Arrow indications are displayed around the name box.

7   Press the ▼ or ▲ button to select a letter (A~Z), a number (0~9) or a symbol (−, __, space). Move on the previous or next letter by pressing the ◄ or ► button.

8   When you have finished entering the name, press the **ENTER** button to confirm the name.

9   Repeat Steps **6** to **8** for each channel to be assigned to a new name.

	Channel Edit	
Add/Delete		►
Sort		►
Name		►
LNA		►
Child Lock		►

‡ Move   ⏎ Enter   ▥ Return

Name
Prog. No
1 ✳
2 ✳
3 ✳
4 ✳
5 ✳

‡ Move   ⏎ Enter   ▥ Return

Name
Prog. No
1 ✳
2 ✳
3 ✳
4 ✳
5 ✳

‡ Move   ⏎ Enter   ▥ Return

Using the LNA (Low Noise Amplifier) Feature

Channel Edit

Add/Delete ▶
Sort ▶
Name ▶
LNA ▶
Child Lock ▶

‡ Move   Enter   Return

LNA

Prog. No

1 ✳
2 ✳
3 ✳   Off
4 ✳
5 ✳

‡ Move   Enter   Return

LNA

Prog. No

1 ✳
2 ✳
3 ✳   On
4 ✳
5 ✳

‡ Move   Enter   Return

This function is very useful in the situation that the TV is used in weak signal. LNA amplifies the TV signal in the weak signal area, but not noise.

This feature is working only weak signal condition, and that is memorized on current channel, additional.

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 **ENTER** button.
4	Press the ▼ or ▲ button to select **Channel Edit**. Press the **ENTER** button.
	<u>Result</u>: The **Channel Edit** menu is displayed.
5	Press the ▼ or ▲ button to select **LNA**. Press the **ENTER** button.
	<u>Result</u>: The current channels are displayed.
6	Select the required channel by pressing the ▼ or ▲ button. Press the **ENTER** button.
7	Select **On** or **Off** by pressing the ▼ or ▲ button. Press the **ENTER** button.

Activating the Child Lock

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

1   Press the **MENU** button.

   Result: The main menu is displayed.

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

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

3   Press the **ENTER** button.

4   Press the ▼ or ▲ button to select **Channel Edit**. Press the **ENTER** button.

   Result: The **Channel Edit** menu is displayed.

5   Press the ▼ or ▲ button to select **Child Lock**. Press the **ENTER** button.

   Result: The current channels are displayed.

6   Select the required channel by pressing the ▼ or ▲ button. Press the **ENTER** button.

7   Select **Unlocked** or **Locked** by pressing the ▼ or ▲ button. Press the **ENTER** button.

	Channel Edit	
Add/Delete		►
Sort		►
Name		►
LNA		►
Child Lock		►

◆ Move   ⏎ Enter   ▥ Return

	Child Lock	
Prog. No		
1	✳	
2	✳	
3	✳	Unlocked
4	✳	
5	✳	

◆ Move   ⏎ Enter   ▥ Return

	Child Lock	
Prog. No		
1	✳	
2	✳	
3	✳	Locked
4	✳	
5	✳	

◆ Move   ⏎ Enter   ▥ Return

Fine Tuning Channel Reception

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

Channel

Country   : Austria   ▶
ATM   ▶
Manual Store   ▶
Channel Edit   ▶
Fine Tune   ▶

◆ Move   ↵ Enter   ▥ Return

Fine Tune

P 1
                                31
Reset   Return
◆ Move   ◀▶ Adjust

Fine Tune

P 1 is fine tuned.
                                32
Reset   Return
◆ Move   ◀▶ Adjust

Fine Tune

P 1 is fine tuned.
                                32
Reset   Return
◆ Move   ↵ Enter

1 Press the **MENU** button.

Result: The main menu is displayed.
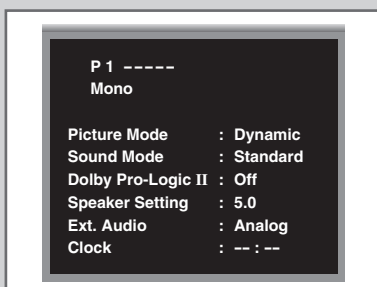
2 Press the ▼ or ▲ button to select **Channel**.

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

3 Press the **ENTER** button.

4 Press the ▼ or ▲ button to select **Fine Tune**. Press the **ENTER** button.

Result: The horizontal bar is displayed. Move the horizontal bar's cursor left or right by pressing the ◀ or ▶ button to reach the required setting.

Displaying Information

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

EXIT/TV   INFO⬚
⬚
▼
⌄P
DVR MENU TeleWeb S.MODE P.MODE

P 1 -----
Mono

Picture Mode   : Dynamic
Sound Mode   : Standard
Dolby Pro-Logic II : Off
Speaker Setting   : 5.0
Ext. Audio   : Analog
Clock   : -- : --

Changing the Picture Standard

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

Picture

Picture Mode :	**Dynamic**
Custom Picture	**Standard**
Scan Mode :	**Movie**
Digital NR :	**Custom**
DNIe : On	►
PIP	►
▼ More	

◆ Move   ⊡ Enter   ▥ Return

1   Press the **MENU** button.

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

2   Press the **ENTER** button.

<u>Result</u>:   The **Picture Mode** is selected.

3   Press the **ENTER** button again. Select the required picture effect by pressing the ▼ or ▲ button.

<u>Result</u>:   The following picture effects are available:
Dynamic – Standard – Movie – Custom.

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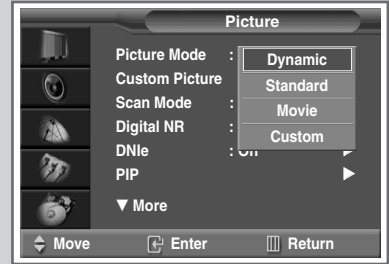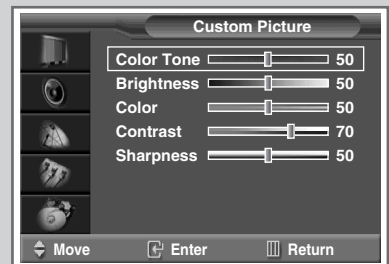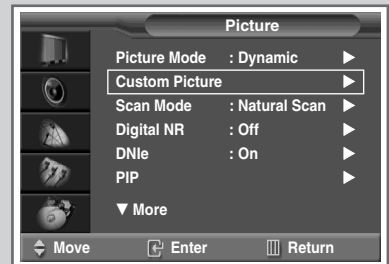

Adjusting the Picture Settings

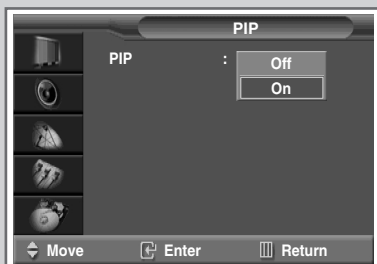*Your television has several settings which allow you to control picture quality.*

Picture

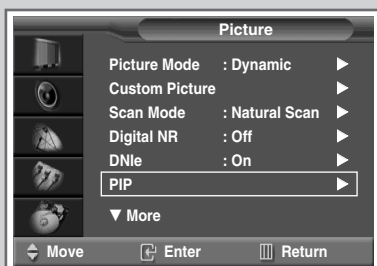|		
Picture Mode	: Dynamic	►
Custom Picture		►
Scan Mode	: Natural Scan	►
Digital NR	: Off	►
DNIe	: On	►
PIP		►
▼ More		

◆ Move   ⊡ Enter   ▥ Return

1   Press the **MENU** button.
<u>Result</u>:   The options available in the **Picture** group are displayed.

2   Press the **ENTER** button.

3   Press the ▼ or ▲ button to select **Custom Picture**. Press the **ENTER** button.

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

Custom Picture

Color Tone	▭	50
Brightness	▭	50
Color	▭	50
Contrast	▭	70
Sharpness	▭	50

◆ Move   ⊡ Enter   ▥ Return

4   Press the ▼ or ▲ button to select the option to be adjusted (**Color Tone**, **Brightness**, **Color**, **Contrast**, **Sharpness** or **Tint**-NTSC only). Press the **ENTER** button.

<u>Result</u>:   The horizontal bar is displayed. Move the horizontal bar's cursor left or right by pressing the ◄ or ► button.

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

Picture

Picture Mode	: Dynamic	▶
Custom Picture		▶
Scan Mode	: Natural Scan	▶
Digital NR	: Off	▶
DNIe	: On	▶
PIP		▶
▼ More		

| ⬍ Move | ⮠ Enter | ▥ Return |

PIP

PIP	:	Off
		On

| ⬍ Move | ⮠ Enter | ▥ Return |

PIP

PIP	:	On
TV/Video	:	TV
Swap		EXT1
Size	:	EXT2
Position	:	EXT3
Prog. No		EXT4
		S-VIDEO

| ⬍ Move | ⮠ Enter | ▥ Return |

PIP

PIP	:	On
TV/Video	:	TV
Swap		▶
Size	:	▣
Position	:	▣
Prog. No		P 1

| ⬍ Move | ⮠ Enter | ▥ Return |

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

➢   If the current (main) picture is the DVR, DVD or PC mode, the PIP feature does not work.

1   Press the **MENU** button.

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

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

Result: The **PIP** option is selected.

3   Press the **ENTER** button again.

4   To activate the PIP feature, select the **On** by pressing the ▼ or ▲ button. Press the **ENTER** button.

➢   You can also activate the PIP simply by pressing the **PIP ON** button. To deactivate, press it again.

5   Press the ▼ or ▲ button to select **TV/Video**. Press the **ENTER** button.

Result: The sources available are displayed.

TV — EXT1 — EXT2 — EXT3 — EXT4 — S-VIDEO

6   Select a source of the sub picture by pressing the ▼ or ▲ button. Press the **ENTER** button.

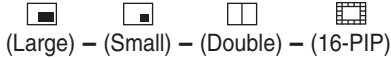**7**   Press the ▼ or ▲ button to select **Swap**. Press the **ENTER** button.

Result: The main picture and the sub picture are interchanged.

Viewing the Picture In Picture (PIP)

8   Press the ▼ or ▲ button to select **Size**. Press the **ENTER** button.

<u>Result</u>: The sizes available are displayed.
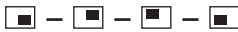
(Large) **–** (Small) **–** (Double) **–** (16-PIP)

9   Select a size of the sub picture by pressing the ▼ or ▲ button. Press the **ENTER** button.

➢ You can select these options simply by pressing the **SIZE** button.

10   Press the ▼ or ▲ button to select **Position**. Press the **ENTER** button.

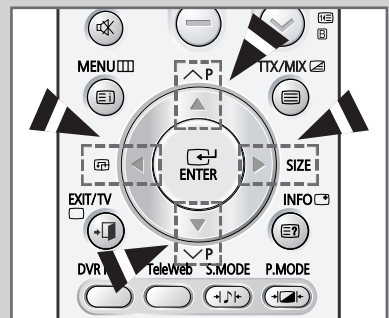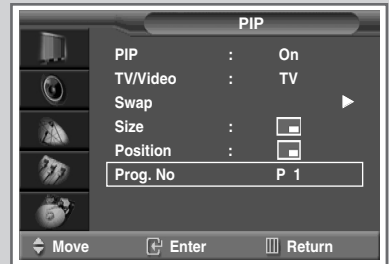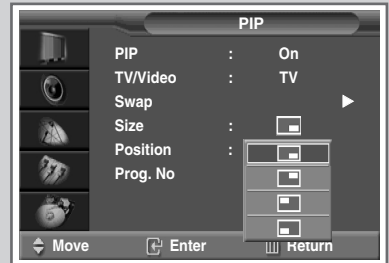<u>Result</u>: The positions available are displayed.

▢ **–** ▢ **–** ▢ **–** ▢

➢ You can select these options simply by pressing the 🖼 button.

11   Select a position of the sub picture by pressing the ▼ or ▲ button. Press the **ENTER** button.

12   Press the ▼ or ▲ button to select **Prog.No**. You can select the channel that you want to view through sub picture by pressing the ◄ or ► button.
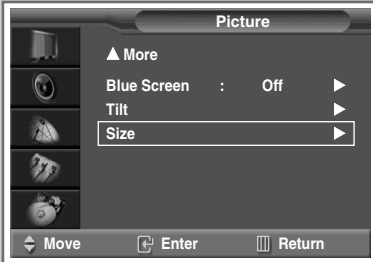
➢ ◆ When the **TV/Video** is set to **TV**, you can select the channel of sub picture.

◆ You can select the channel of the sub picture simply by pressing the ▼ or ▲ button.

➢ ◆ To freeze the sub picture, press the **STILL** button. Press it again to return to normal viewing. (If you press it when the PIP feature is deactivating, you can freeze the current picture.)

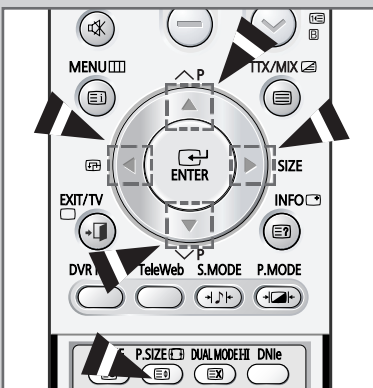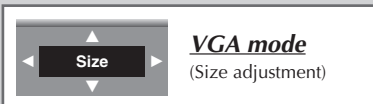◆ If you press it during on the 16-PIP mode, serial scenes of the last sub picture will be captured.

	PIP	
PIP	:	On
TV/Video	:	TV
Swap		►
Size	:	
Position	:	
Prog. No		

◆ Move   🖰 Enter   ▥ Return

	PIP	
PIP	:	On
TV/Video	:	TV
Swap		►
Size	:	
Position	:	
Prog. No		

◆ Move   🖰 Enter   ▥ Return

	PIP	
PIP	:	On
TV/Video	:	TV
Swap		►
Size	:	
Position	:	
Prog. No		P 1

◆ Move   🖰 Enter   ▥ Return

Selecting the Picture Size (depending on the model)

Picture

	Picture	
	▲ More	
	Blue Screen : Off	►
	Tilt	►
	Size	►
⬍ Move	⏎ Enter	Ⅲ Return

Wide CRT

	Size	
◄		►
	Auto wide Wide Panorama	
◄► Move	⏎ Enter	Ⅲ Return

⬍ Position	⬍ Size
	Auto wide	

▲	VGA mode
◄ Adjust ►	(Position adjustment)
▼	

▲	VGA mode
◄ Size ►	(Size adjustment)
▼	
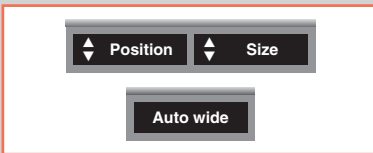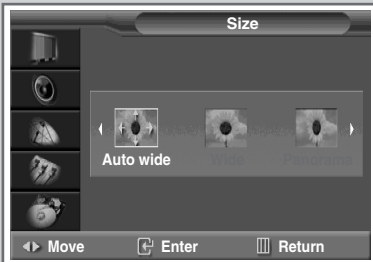
You can select the picture size which best corresponds to your viewing requirements.

1 Press the **MENU** button.

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

2 Press the **ENTER** button.

3 Press the ▼ or ▲ button to select **Size**. Press the **ENTER** button.

Result: Depending on the model, the following modes are available:

◆ Wide CRT:
Auto wide – Wide – Panorama – Zoom1 – Zoom2 – 4:3

➢ You can control the vertical size and position of the screen by using the ▼ or ▲ button in **Auto wide** mode when the vertical size is changed automatically by **Auto wide** mode.

◆ Normal (4:3) CRT:
Normal – Zoom1 – Zoom2 – Wide
Normal – 16:9 (In the DTV mode)

➢ ◆ You can select these options by simply pressing the **P.SIZE** button on the remote control. At this time, lifting is available in the **Zoom1** or **Zoom2** mode by pressing the ▼ or ▲ button.

◆ If the PC is connected, you can adjust the VGA mode by using the ◄, ►, ▼, or ▲ button.

4 Press the ◄ or ► button to change the setting. When you are satisfied with the setting, press the **ENTER** button to store.

➢ You can shift the screen to your required position in the VGA mode by pressing the **P.SIZE** button followed use the ◄, ►, ▼, or ▲ button. To adjust the screen size, press the **P.SIZE** button again followed use the ◄, ►, ▼, or ▲ button.

Extra Picture Settings

◆ *Scan Mode*

You will normally find that scan mode is best set to **Natural Scan** to reduce any slight picture flicker. However, it is possible that some occasional broadcasts (NTSC-M) may benefit by changing the scan mode. The **Natural Scan**, **Digital Scan** and **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.

◆ *DNIe* (**D**igital **N**atural **I**mage **e**ngine DNIe™)

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

◆ *Blue Screen*

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

◆ *Tilt*

If you find that the picture received is slightly tilted to one side, you can adjust the tilt setting.
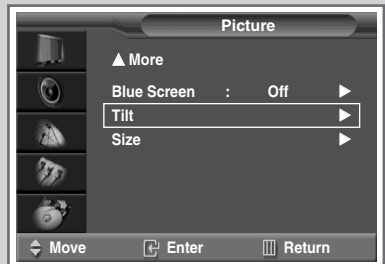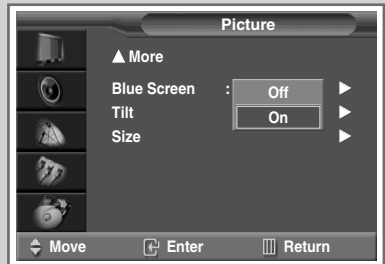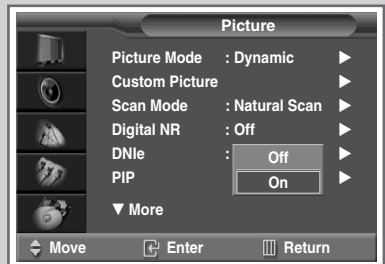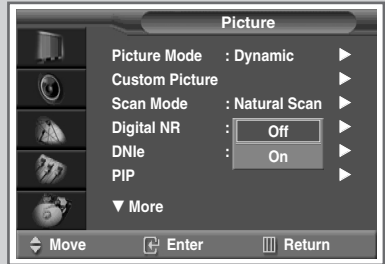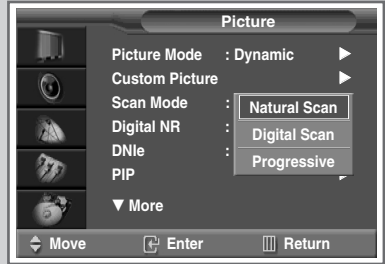
---

1 Press the **MENU** button.

Result: The options available in the **Picture** group are displayed.
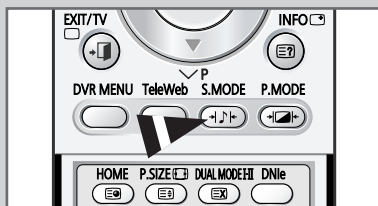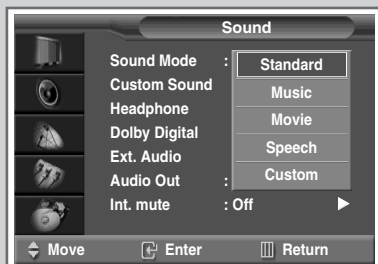
2 Press the **ENTER** button.

---

3 Select the required option (**Scan Mode**, **Digital NR**, **DNIe**, **Blue Screen** or **Tilt**) by pressing the ▼ or ▲ button. Press the **ENTER** button.

---

4 Press the ▼ or ▲ button to change the setting.

◆ **Scan Mode : Natural Scan**, **Digital Scan**, **Progressive**
◆ **Digital NR : Off** or **On** (activating)
◆ **DNIe : Off** or **On** (activating)
➢ You can select these options simply by pressing the **DNIe** button.
◆ **Blue Screen : Off** or **On** (activating)
◆ **Tilt :** Press the ◄ or ► button to reach the required setting.

5 When you are satisfied with the settings, press the **ENTER** button to store them.

Picture

Picture Mode : Dynamic ►
Custom Picture
Scan Mode : | Natural Scan |
Digital NR : | Digital Scan |
DNIe : | Progressive |
PIP ►
▼ More

⬍ Move   ⏎ Enter   ⫿⫿⫿ Return

Picture

Picture Mode : Dynamic ►
Custom Picture ►
Scan Mode : Natural Scan ►
Digital NR : | Off | ►
DNIe : | On | ►
PIP ►
▼ More

⬍ Move   ⏎ Enter   ⫿⫿⫿ Return

Picture

Picture Mode : Dynamic ►
Custom Picture ►
Scan Mode : Natural Scan ►
Digital NR : Off ►
DNIe : | Off | ►
PIP | On | ►
▼ More

⬍ Move   ⏎ Enter   ⫿⫿⫿ Return

Picture

▲ More
Blue Screen : | Off | ►
Tilt | On | ►
Size ►

⬍ Move   ⏎ Enter   ⫿⫿⫿ Return

Picture

▲ More
Blue Screen : Off ►
Tilt ►
Size ►

⬍ Move   ⏎ Enter   ⫿⫿⫿ Return

Tilt

Changing the Sound Standard

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

Sound

	Sound Mode :	**Standard**
	Custom Sound	**Music**
	Headphone	**Movie**
	Dolby Digital	**Speech**
	Ext. Audio	**Custom**
	Audio Out :	
	Int. mute : Off	▶

‡ Move   Enter   Return

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 **ENTER** button.
	Result: The **Sound Mode** is selected.
4	Press the **ENTER** button again. Select the required sound effect by pressing the ▼ or ▲ button.
	Result: The following sound effects are available: **Standard – Music – Movie – Speech – Custom**.

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

Adjusting the Sound Settings
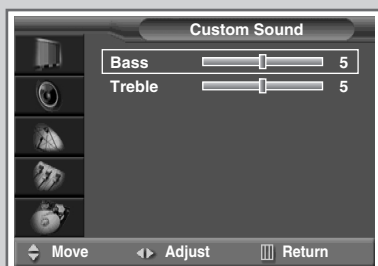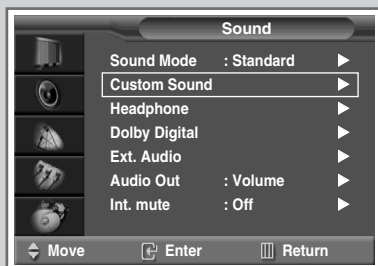
The sound settings can be adjusted to suit your personal preferences.

Sound

	Sound Mode : Standard	▶
	Custom Sound	▶
	Headphone	▶
	Dolby Digital	▶
	Ext. Audio	▶
	Audio Out : Volume	▶
	Int. mute : Off	▶

‡ Move   Enter   Return

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 **ENTER** button.
4	Press the ▼ or ▲ button to select **Custom Sound**. Press the **ENTER** button.
	Result: The options available in the **Custom Sound** group are displayed.

Custom Sound

	Bass	5
	Treble	5

‡ Move   ◀▷ Adjust   Return

5	Press the ▼ or ▲ button to select the option to be adjusted (**Bass** or **Treble**). Press the **ENTER** button.
	Result: The horizontal bar is displayed. Move the horizontal bar's cursor left or right by pressing the ◀ or ▶ button.

➢ If you make any changes to these settings, the sound mode is automatically switched to **Custom**.
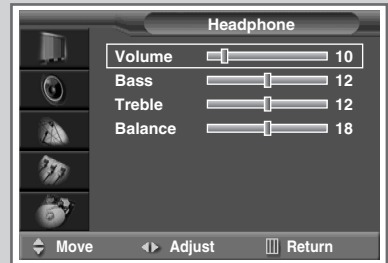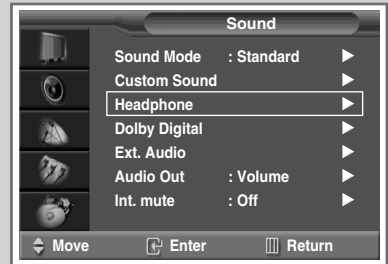
Adjusting Your Headphone Preferences

You can adjust the headphone settings to suit your preferences.
The following headphone settings are available:
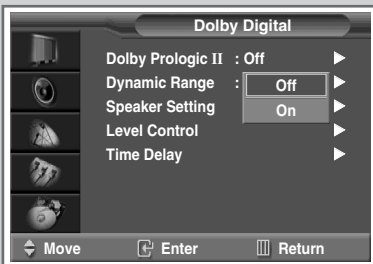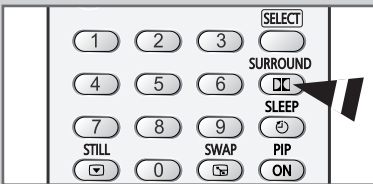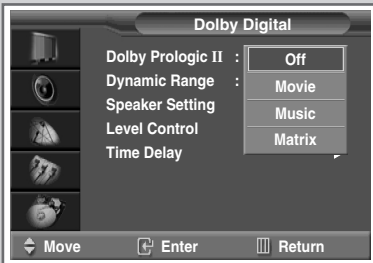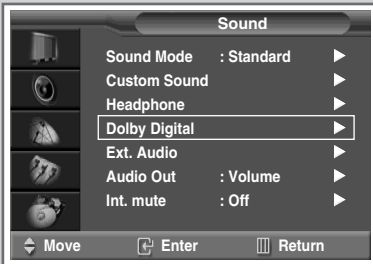
    ◆ *Volume, Bass, Treble, Balance.*

1	Press the **MENU** button.
	<u>Result</u>: The main menu is displayed.
2	Press the ▼ or ▲ button to select **Sound**.
	<u>Result</u>: The options available in the **Sound** group are displayed.
3	Press the **ENTER** button.
4	Press the ▼ or ▲ button to select **Headphone**. Press the **ENTER** button.
	<u>Result</u>: The options available in the **Headphone** group are displayed.
5	Press the ▼ or ▲ button to select the option to be adjusted (**Volume**, **Bass**, **Treble** or **Balance**). Press the **ENTER** button.
	<u>Result</u>: The horizontal bar is displayed. Move the horizontal bar's cursor left or right by pressing the ◄ or ► button.

➢   When either **COAXIAL IN** or **OPTICAL IN** on the rear of the television is connected, you can not hear from the headphone.

Sound

Sound Mode	: Standard	►
Custom Sound		►
Headphone		►
Dolby Digital		►
Ext. Audio		►
Audio Out	: Volume	►
Int. mute	: Off	►

◆ Move   ⏎ Enter   ⫿⫿⫿ Return

Headphone

Volume	▭	10
Bass		12
Treble		12
Balance		18

◆ Move   ◄► Adjust   ⫿⫿⫿ Return

Setting the Dolby Digital (continued)

Sound	
Sound Mode : Standard	▶
Custom Sound	▶
Headphone	▶
Dolby Digital	▶
Ext. Audio	▶
Audio Out : Volume	▶
Int. mute : Off	▶
⬍ Move ↵ Enter ▥ Return	

Dolby Digital	
Dolby Prologic II :	Off
Dynamic Range :	Movie
Speaker Setting	Music
Level Control	Matrix
Time Delay	
⬍ Move ↵ Enter ▥ Return	

Dolby Digital	
Dolby Prologic II : Off	▶
Dynamic Range :	Off
Speaker Setting	On
Level Control	
Time Delay	▶
⬍ Move ↵ Enter ▥ Return	

The Dolby Digital mode allows you enjoy Dolby Digital sound effect fully with the speakers are connected to the television. This allows various modes for the main, center, surround and woofer speakers to be selected.

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 **ENTER** button.

4 Press the ▼ or ▲ button to select **Dolby Digital**. Press the **ENTER** button.

Result: The **Dolby Digital** menu is displayed with the **Dolby Prologic II** is selected.

5 Press the **ENTER** button again. Select the option (**Off** or **On**) by pressing the ▼ or ▲ button. Press the **ENTER** button.

➢ ◆ You can select these options simply by pressing the **SURROUND** button on the remote control.

◆ For further details of output depending on the each options, refer to page 34.

6 If you wish to adjust the volume properly during night viewing, press the ▼ or ▲ button to select **Dynamic Range**. Press the **ENTER** button.

7 Select **Off** or **On** by pressing the ▼ or ▲ button. Press the **ENTER** button.

➢ Manufactured under license from Digital Theater Systems, Inc. US Pat. No. 5,451,942, 5,956,674, 5,974,380, 5,978,762 and other world-wide patents issued and pending. "DTS" and "DTS Digital Surround" are registered trademarks of Digital Theater Systems, Inc. Copyright 1996, 2000 Digital Theater Systems, Inc. All Rights Reserved.

➢ Manufactured under license from Dolby Laboratories. "Dolby", "Pro Logic", and the double-D symbol are trademarks of Dolby Laboratories.

Setting the Dolby Digital

Dolby Digital

Dolby Prologic II : Off	▶
Dynamic Range : Off	▶
Speaker Setting	▶
Level Control	▶
Time Delay	▶

⇕ **Move**   ↵ **Enter**   ▥ **Return**

8   Press the ▼ or ▲ button to select **Speaker Setting**. Press the **ENTER** button.

Result: The **Speaker Setting** menu is displayed with the main left speaker is selected.

9   Select the speaker (**Front L**, **Center**, **Front R**, **Rear R**, **Rear L**, **Sub Woofer**) to be adjusted by pressing the ▼ or ▲ button. Press the **ENTER** button.

◆   The **Sub Woofer** option can control the External Woofer only when **Audio Out** is set to **Volume**. (For more details, refer to the page 36)

◆   The output of the built-in woofer is changed depending on the output of the main speakers.

Speaker Setting

Front L	: Small
Center	: On
Front R	: Small
Rear R	: On
Rear L	: On
Sub Woofer	: On

⇕ **Move**   ↵ **Enter**   ▥ **Return**

10   Press the ▼ or ▲ button to select your required option of selected speaker.

11   When you have finished the speaker settings, press the **MENU** button.

Result: The **Dolby Digital** menu is displayed again.

12   Press the ▼ or ▲ button to select **Level Control**. Press the **ENTER** button.

Result: The **Level Control** menu is displayed with the **Test Tone** is selected.

Level Control

Test Tone	: Off ▶	
Front L	On	0
Center		0
Front R		0
Rear R		0
Rear L		0
Sub Woofer		0

◀▶ **Move**   ↵ **Enter**   ▥ **Return**

13   To simulate the volume on each speaker, press the **ENTER** button and select the **On** by pressing the ▼ or ▲ button. Press the **ENTER** button.

14   Select the speaker (**Front L**, **Center**, **Front R**, **Rear R**, **Rear L**, **Sub Woofer**) to be adjusted by pressing the ▼ or ▲ button. Press the **ENTER** button.

15   Press the ◀ or ▶ button to adjust the volume.

Level Control

Test Tone	: Off ▶	
Front L		0
Center		0
Front R		0
Rear R		0
Rear L		0
Sub Woofer		0

⇕ **Move**   ◀▶ **Adjust**   ▥ **Return**

16   When you have finished the level control, press the **MENU** button.

Result: The **Dolby Digital** menu is displayed again.

17   To set the delay time of surround channel, select the **Time Delay** by pressing the ▼ or ▲ button. Press the **ENTER** button.

18   Select the speaker (**Rear L**, **Rear R**) to be adjusted by pressing the ▼ or ▲ button. Press the **ENTER** button.

19   Press the ◀ or ▶ button to adjust the delay time.

Time Delay

Rear L		5
Rear R		5

⇕ **Move**   ◀▶ **Adjust**   ▥ **Return**
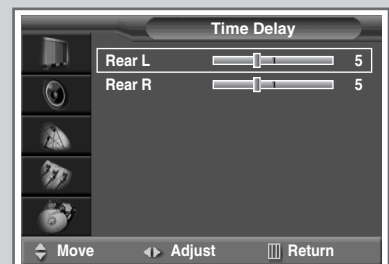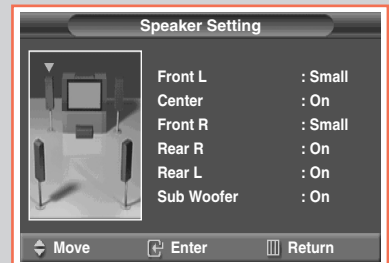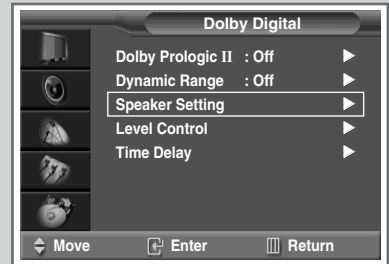
Setting the Dolby Prologic II

In case of "Dolby Prologic II : Off"

Input (Source)	Output	Main Left	Center	Main Right	Rear		Sub Woofer (L/R Small)	Sub Woofer (L/R Large)
					Right	Left		
Mono		✔		✔			✔	
PCM Stereo (L/R)		✔		✔			✔	
Dolby Digital	Mono	✔		✔			✔	
	Lo/Ro	✔		✔			✔	
	Lt/Rt	✔		✔			✔	
	5.1ch	✔	✔	✔	✔	✔	✔	✔
DTS		✔	✔	✔	✔	✔	✔	✔

➢ In case of **DTS**, **DTS 5.1** is employed.

In case of "Dolby Prologic II : Movie"

Input (Source)	Output	Main Left	Center	Main Right	Rear		Sub Woofer (L/R Small)	Sub Woofer (L/R Large)
					Right	Left		
Mono		✔	✔	✔	✔	✔	✔	
PCM Stereo (L/R)		✔	✔	✔	✔	✔	✔	
Dolby Digital	Mono	✔	✔	✔	✔	✔	✔	
	Lo/Ro	✔	✔	✔	✔	✔	✔	
	Lt/Rt	✔	✔	✔	✔	✔	✔	
	5.1ch	✔	✔	✔	✔	✔	✔	✔
DTS		✔	✔	✔	✔	✔	✔	✔

Setting the Dolby Prologic Ⅱ

In case of "Dolby Prologic II : Music"

Input (Source) / Output		Main Left	Center	Main Right	Rear		Sub Woofer (L/R Small)	Sub Woofer (L/R Large)
					Right	Left		
Mono		✔	✔	✔	✔	✔	✔	
PCM Stereo (L/R)		✔	✔	✔	✔	✔	✔	
Dolby Digital	Mono	✔	✔	✔	✔	✔	✔	
	Lo/Ro	✔	✔	✔	✔	✔	✔	
	Lt/Rt	✔	✔	✔	✔	✔	✔	
	5.1ch	✔	✔	✔	✔	✔	✔	✔
DTS		✔	✔	✔	✔	✔	✔	✔

In case of "Dolby Prologic II : Matrix"

Input (Source) / Output		Main Left	Center	Main Right	Rear		Sub Woofer (L/R Small)	Sub Woofer (L/R Large)
					Right	Left		
Mono		✔	✔	✔	✔	✔	✔	
PCM Stereo (L/R)		✔	✔	✔	✔	✔	✔	
Dolby Digital	Mono	✔	✔	✔	✔	✔	✔	
	Lo/Ro	✔	✔	✔	✔	✔	✔	
	Lt/Rt	✔	✔	✔	✔	✔	✔	
	5.1ch	✔	✔	✔	✔	✔	✔	✔
DTS		✔	✔	✔	✔	✔	✔	✔

Setting the External Digital Sound

Sound	
Sound Mode	: Standard ▶
Custom Sound	▶
Headphone	▶
Dolby Digital	▶
Ext. Audio	▶
Audio Out	: Volume ▶
Int. mute	: Off ▶
⬍ Move	↵ Enter ▥ Return

Ext. Audio	
Optical	: -----
Coaxial	: Ext1 Audio
	Ext2 Audio
	Ext3 Audio
	DVD
⬍ Move	↵ Enter ▥ Return

Sound	
Sound Mode	: Standard ▶
Custom Sound	▶
Headphone	▶
Dolby Digital	▶
Ext. Audio	▶
Audio Out	: Fixed
Int. mute	: Volume
⬍ Move	↵ Enter ▥ Return

Sound	
Sound Mode	: Standard ▶
Custom Sound	▶
Headphone	▶
Dolby Digital	▶
Ext. Audio	▶
Audio Out	: Volume ▶
Int. mute	: Off
	On
⬍ Move	↵ Enter ▥ Return

This feature allows you enjoy Digital sound when the equipment with Digital output is connected to the television.

1   Press the **MENU** button.

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

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

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

3   Press the **ENTER** button.

4   Press the ▼ or ▲ button to select **Ext. Audio**. Press the **ENTER** button.

     <u>Result</u>:   The **Ext. Audio** menu is displayed.

5   Select the option (**Optical** or **Coaxial**) by pressing the ▼ or ▲ button. Press the **ENTER** button.

     ➤   The **Optical** and **Coaxial** options are for digital signal inputs, such as the Dolby Digital (5.1ch), Dolby Prologic (4ch), DTS, or MPEG.

6   Select the required output (**Ext1 Audio**, **Ext2 Audio**, **Ext3 Audio**, **DVD**) by pressing the ▼ or ▲ button.

7   Press the **MENU** button repeatedly.

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

8   Press the ▼ or ▲ button to select **Audio Out**. Press the **ENTER** button.

     ➤   For information about connection of audio outputs, refer to "Connecting to the Audio Outputs" on page 54.

9   Select the required option (**Fixed** or **Volume**) by pressing the ▼ or ▲ button. Press the **ENTER** button.

     ◆   If you want to adjust the volume level with the volume control on the TV or external amplifier, set to **Volume**.

     ◆   If you set to **Fixed**...

       – You can adjust the volume level with the volume control on the audio amplifier. And the **Int. mute** is set to **On** automatically, and you can not select it.

       – The volume control buttons (**MUTE**, ⊕, ⊖) of the television and remote control do not work.

10   Press the ▼ or ▲ button to select **Int. mute**. Press the **ENTER** button.

      If you set to **On**, no sound outputs of all internal and external speakers.

     ➤   When the **Audio Out** is set to **Volume**, you can select the **Int. mute** and control it.

Selecting the Sound Mode (depending on the model)

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

	Type of broadcast	On-screen indication
NICAM Stereo	Regular broadcast (Standard audio)	**Mono** (Normal use)
	Regular + NICAM Mono	**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 "**DUAL MODE I-II**" button.

Setting the Current Date and Time

Setup

	Plug & Play	▶
	Language : English	▶
	Time	▶
	Teletext Source : Main	▶
	AV Setup	▶

‡ Move   ⏎ Enter   ⫼ Return

Time

	Date	▶
	Clock	▶
	Sleep Timer	▶
	On Time	▶
	Off Time	▶

‡ Move   ⏎ Enter   ⫼ Return

Date

Year	Month	Date
2003	2	14

◀▶ Move   ‡ Adjust   ⫼ Return

Time

	Date	▶
	Clock	▶
	Sleep Timer	▶
	On Time	▶
	Off Time	▶

‡ Move   ⏎ Enter   ⫼ Return

Clock

Clock set by TTX Channel

Channel	Activation
P 1	Yes

Clock Set

Hour	Min
11	30

◀▶ Move   ‡ Adjust   ⫼ Return

You can set the current date and time so that they are displayed by pressing the "Info." button. You must also set the time if you wish to use the automatic on or off timers.

➤ When pressing the "①" button (On/Off) on the front of the television, the date and clock setting will be reset.

---

1 Press the **MENU** button.

   Result: The main menu is displayed.

---

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

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

---

3 Press the **ENTER** button.

---

4 Press the ▼ or ▲ button to select **Time**. Press the **ENTER** button.

   Result: The options available in the **Time** group are displayed with **Date** is selected.

---

5 Press the **ENTER** button again.

---

6 Press the ◀ or ▶ button to move to the **Year**, **Month** or **Date**. Set these by pressing the ▼, ▲, or numeric button.

---

7 When you have finished, press the **ENTER** button to confirm.

---

8 Press the **MENU** button repeatedly.

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

---

9 Press the ▼ or ▲ button to select **Clock** . Press the **ENTER** button.

---

10 To set the time automatically by Teletext channel with time information, press the ◀ or ▶ button to move to the **Channel** or **Activation**. Set these by pressing the ▼ or ▲ button.

   Result: If the **Activation** is set to **Yes**, the correct time will be displayed after a few second. This method, when enabled, prohibits manual time setting.

---

11 To set the usery time, press the ◀ or ▶ button to move to the **Hour** or **Min**.
Set these by pressing the ▼, ▲, or numeric button.

---

12 When you have finished, press the **ENTER** button to confirm.

Setting the Sleep Timer

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

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

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

3 Press the **ENTER** button.

4	Press the ▼ or ▲ button to select **Time**. Press the **ENTER** button.	
	Result:	The options available in the **Time** group are displayed.

5	Press the ▼ or ▲ button to select **Sleep Timer**. Press the **ENTER** button.	
	Result:	The **Sleep Timer** menu is displayed with the **Min** is selected.

6 Select the preset time interval (10, 20, 30, 60, 90, 120, 150, 180) for staying on by pressing the ▼ or ▲ button. Press the **ENTER** button.

You can set the sleep timer by simply pressing the "SLEEP" button on the remote control.

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

2 Select the preset time interval for staying on by pressing the **SLEEP** button repeatedly.

➤ The message **Sleep Timer** is automatically displayed one minute before the television will be placed in standby mode.

Time

Date ►
Clock ►
Sleep Timer ►
On Time ►
Off Time ►

⬍ Move   Enter   Return

Sleep Timer

Min   Activation
---   No

⬍ Adjust   Enter   Return

Sleep Timer

Min   Activation
10   Yes

⬍ Adjust   Enter   Return
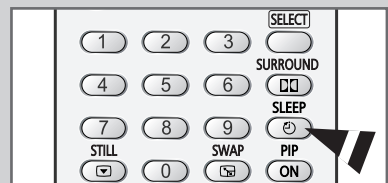
Switching the Television On and Off Automatically

Time
Date ▶
Clock ▶
Sleep Timer ▶
On Time ▶
Off Time ▶

‡ Move ↵ Enter ▥ Return

On Time
Hour Min
-- --
Prog. No
P 1
Volume Activation
10 No

◀▶ Move ‡ Adjust ▥ Return

Time
Date ▶
Clock ▶
Sleep Timer ▶
On Time ▶
Off Time ▶

‡ Move ↵ Enter ▥ Return

Off Time
Hour Min Activation
-- -- No

◀▶ Move ‡ Adjust ▥ Return
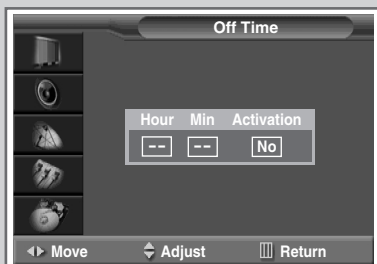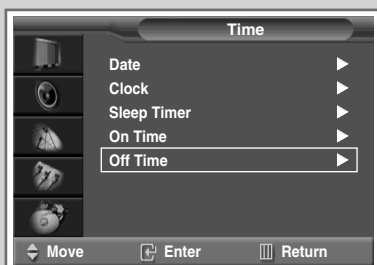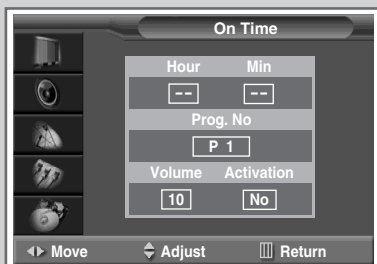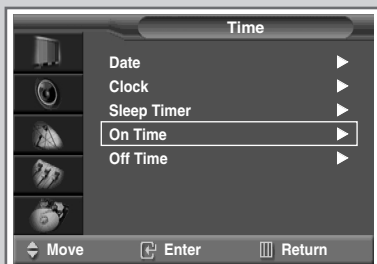
You can set the On/Off timers so that the television will:

◆ *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 the Current Date and Time" on page 38). If you have not yet set the clock, you can not set the timers.

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

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

3 Press the **ENTER** button.

4 Press the ▼ or ▲ button to select **Time**. Press the **ENTER** button.
Result: The options available in the **Time** group are displayed.

5 Press the ▼ or ▲ button to select **On Time**. Press the **ENTER** button.
Result: The **On Time** menu is displayed.

6 Select the **Hour**, **Min**, **Prog.No**, **Volume** or **Activation** by pressing the ◀ or ▶ button.
Set these by pressing the ▼ or ▲ button.

➣ You can also set the **Hour**, **Min**, and **Prog.No** directly by using the numeric buttons.

7 Press the **ENTER** button to confirm.

8 Press the **MENU** button repeatedly.
Result: The options available in the **Time** group are displayed again.

9 Press the ▼ or ▲ button to select **Off Time**. Press the **ENTER** button.
Result: The **Off Time** menu is displayed.

10 Select the **Hour**, **Min** or **Activation** by pressing the ◀ or ▶ button.
Set these by pressing the ▼ or ▲ button.

➣ You can also set the **Hour** and **Min** directly by using the numeric buttons.

11 Press the **ENTER** button to confirm.

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

Redirecting an Input to the External Output

Your television enables you to choose which audio/video signals are output to the external connector.

1	Press the **MENU** button.	
	Result:	The main menu is displayed.
2	Press the ▼ or ▲ button to select **Setup**.	
	Result:	The options available in the **Setup** group are displayed.
3	Press the **ENTER** button.	
4	Press the ▼ or ▲ button to select **AV Setup**. Press the **ENTER** button.	
	Result:	The **AV Setup** menu is displayed.
5	Select the required output (**Ext.2** or **Ext.3**) by pressing the ▼ or ▲ button. Press the **ENTER** button.	
6	Select the source to be directed to the output by pressing the ▼ or ▲ button.	
7	Press the **ENTER** button to confirm the change.	

```
                                    Setup
        Plug & Play                              ►
        Language          : English             ►
        Time                                    ►
        Teletext Source   : Main                ►
        AV Setup                                ►

        ◆ Move          🕀 Enter        ▥ Return
```

```
                                    AV Setup
        Ext. 1  (TV)               :    TV   ►
        Ext. 2  Selectable out  :      TV
        Ext. 3  Decoder out     :      EXT1
                                       EXT2
                                       EXT3
                                       EXT4
                                       DVR
        ◆ Move          🕀 Enter        ▥ Return
```
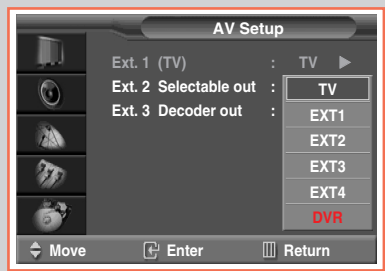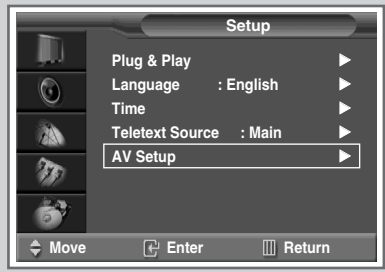
Viewing Pictures From External Sources

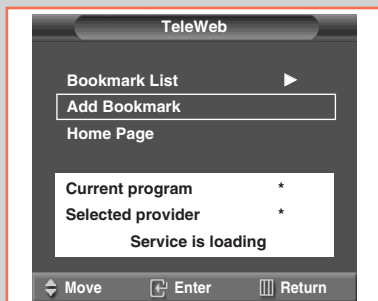*Once you have connected up your various audio and video systems, you can view different sources by selecting the appropriate input.*

1	Check that all the necessary connections have been made.
2	Switch your television on, then press the **VIDEO** button repeatedly. The input sources are displayed in the following order:

Ext1 Video – Ext2 Video – Ext3 Video – (S–Video) – (Ext4 Video) – (DVD) – (VGA)

◆ **S–Video**, **Ext4 Video**, **DVD**, **VGA** :
When the side inputs of your television is connected, it is selected.
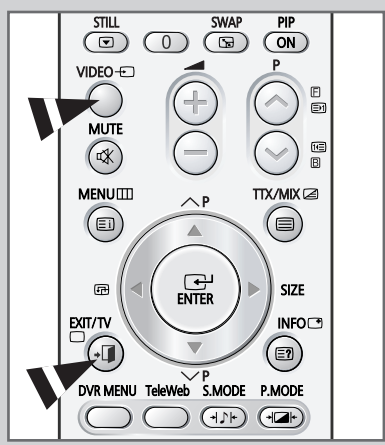
➤ ◆ Depending on the source selected, the pictures may appear automatically.

◆ To watch television programme again, press the **EXIT/TV** button and select the number of the channel required.

(ENG)

Setup	
Plug & Play	▶
Language : English	▶
Time	▶
TeleWeb	▶
AV Setup	▶

‹ Move   Enter   Return

TeleWeb	
TeleWeb :	**Off** ▶
Provider Search	**On** ▶
Provider Select : -- ----- ---------- ▶
Download : Off	▶

‹ Move   Enter   Return

TeleWeb	
TeleWeb : On	▶
Provider Search	▶
Provider Select : -- ----- ---------- ▶
Download : Off	▶

‹ Move   Enter   Return

Provider Search
Provider store in process.
Added   P   1
▬▬▬▬▬▬▬   ZDF
Return

TeleWeb	
TeleWeb : On	▶
Provider Search	▶
Provider Select : P3 KABLE Service 15 ▶
Download : Off	▶

‹ Move   Enter   Return
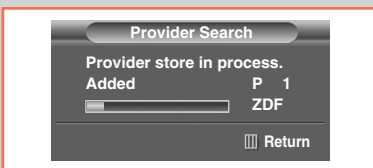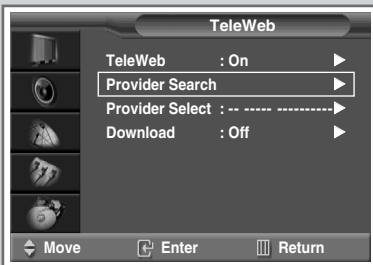
TeleWeb is the new television broadcasting standard for Teletext services. TeleWeb is similar to Teletext, just easy to use. TeleWeb can transmit the News, TV programme information, and advertising in excellent picture quality and directly access via the remote control.

1 Press the **MENU** button.

Result: The main menu is displayed.

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

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

3 Press the **ENTER** button.

4 Press the ▼ or ▲ button to select **TeleWeb**. Press the **ENTER** button.

Result: The **TeleWeb** option is selected.

5 Press the **ENTER** button again. To activate the TeleWeb feature, select **On** by pressing the ▼ or ▲ button. Press the **ENTER** button.

◆ If you set to **On**, 400 teletext pages can be stored.

◆ If you set to **Off**, 2100 teletext pages can be stored.

6 Press the ▼ or ▲ button to select **Provider Search**. Press the **ENTER** button. Start the provider search by moving the joystick left or right.

Result: It will be search only the channels stored. If find a provider, the **Added** is displayed and continue the search.

➢ To stop the search before it has finished, press the **EXIT/TV** button.

7 When the search has been finished, press the ▼ or ▲ button to select **Provider Select**. Find the required provider by pressing the ◀ or ▶ button.

➢ Select a provider and then the teleweb downloading will start.

TeleWeb Feature (depending on the model)

8   Press the **TeleWeb** button to enter the TeleWeb mode.

9   If you want to download the TeleWeb information before switch the television off, select **Download** by pressing the ▼ or ▲ button. Press the **ENTER** button.

10   Select **On** by pressing the ▼ or ▲ button. Press the **ENTER** button.

      Result: Even though you turn off the TV on the channel no provider is selected, the channel will be automatically switched to the selected channel and TeleWeb downloading will start. During downloading, the picture will not be shown and only status bar will be displayed on the screen. (It takes 30 minutes to one hour depending on the program.)

➤   ◆   When pressing the "⏻" button (On/Off) on the panel of the television, the existing downloaded information will disappear.

     ◆   If you enter the TeleWeb mode on the channel where no provider is selected, you can view only the information downloaded up to now.

TeleWeb

TeleWeb	: On ▶
Provider Search	▶
Provider Select	: P3 KABLE Service 15 ▶
Download	: Off ▶
	On

◆ Move   ⏎ Enter   ▥ Return

Using the TeleWeb Menu after Displaying the TeleWeb

TeleWeb

Bookmark List ▶
Add Bookmark
Home Page

Current program *
Selected provider *
Service is loading

◆ Move   ↵ Enter   ▥ Return

TeleWeb

Bookmark List ▶
Add Bookmark
Home Page

Current program *
Selected provider *
Service is loading

◆ Move   ↵ Enter   ▥ Return

Bookmark List

SAMSUNG ELECTRONICS
TARA SYSTEMS
KIA MOTORS
MICRONAS
OLYMPIC NEWS
ECONOMICS

◆ Move   ⬤ Erase   ↵ Enter

TeleWeb

Bookmark List ▶
Add Bookmark
Home Page

Current program *
Selected provider *
Service is loading

◆ Move   ↵ Enter   ▥ Return

Bookmarking the current page.

1   On the page you wish to add to the bookmark list press the **MENU** button.

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

2   Press the ▼ or ▲ button to select **Add Bookmark** is selected. Press the **ENTER** button.

   Result: The current page is added to the bookmark list.

   ➢   You can register up to six pages. If you add another URL when six bookmarks have been listed, the first URL will be deleted and the new URL will be listed as the sixth.

Entering the bookmarked URL.

1   Press the **MENU** button.

   Result: The **TeleWeb** menu is displayed with the **Bookmark List** is selected.

2   Press the **ENTER** button.

   Result: The stored URLs are listed.

3   To erase a URL, select a required URL and press the **TeleWeb** button.

   Result: The selected URL is erased and the listed URLs moves up one by one.

4   Select the URL you wish to enter by pressing the ▼ or ▲ button. Press the **ENTER** button.

   Result: The current page moves to the selected URL and the menu is disappeared.

5   To delete the bookmarked list, select the required list and press the **Red** button.

Opening the Home Page

1   Press the **MENU** button.

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

2   Press the ▼ or ▲ button to select **Home Page**. Press the **ENTER** button.

   Result: It moves to a home page.

Easy Accessing the TeleWeb Service via the Remote Control

Button	Function
TeleWeb	Activate or deactivate the TeleWeb feature directly.
HOME	Move the home page of the TeleWeb.
∧	Display the forward page of the TeleWeb.
∨	Display the backward page of the TeleWeb.
○	Select a option.
ENTER	Confirm your choice.

45
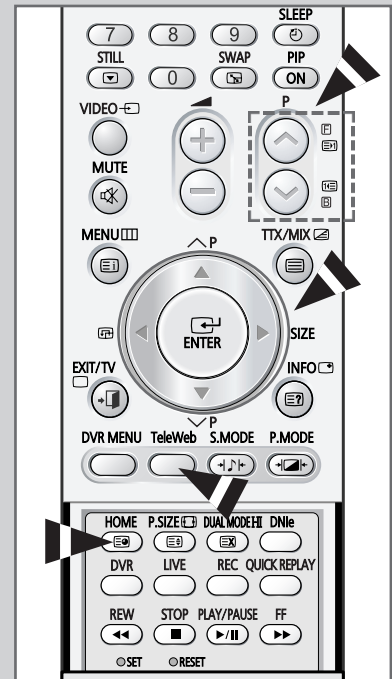
DVR converts analog video and sound signal to digital signal and saves to HDD.

DVR

Power On Record .... Off ▶
Timer Record .... On ▶
Record List .... ▶

◆ Move   ↵ Enter   ▥ Return

DVR

Power On Record : Off ▶
Timer Record .... ▶
Record List .... ▶

◆ Move   ↵ Enter   ▥ Return

Timer Record

Prog. No
P 1

Month .... Date
2 14

Start ..... Stop ..... Store
20 30 ... 21 30 ... ?

◆ Move   ↵ Enter   ▥ Return

DVR

Power On Record : Off ▶
Timer Record .... ▶
Record List .... ▶

◆ Move   ↵ Enter   ▥ Return

Record List

Prog. No	Date	Start	Stop
01 *	02, 14	20:30	21:30
03 *	02, 15	17:30	18:20
04 *	02, 16	18:00	21:40

◆ Move   ⬤ Erase   ▥ Return

1 Press the **MENU** button.

Result: The main menu is displayed.

2 Press the ▼ or ▲ button to select **DVR** . Press the **ENTER** button.

Result: The options available in the **DVR** group are displayed with the **Power On Record** selected.

3 Press the **ENTER** button again. Select **On** by pressing the ▼ or ▲ button. Press the **ENTER** button.

– On : DVR will turn ON at the same time as the power for the TV (Standby Indicator: Orange color will be lit up).

– Off : Default is **Off**. Only the TV will turn ON when power is supplied.

4 Press the ▼ or ▲ button to select **Timer Record** . Press the **ENTER** button.

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

➢ If you have not yet set the clock, the message **Set the clock first** is displayed, and then the **Clock** menu is displayed to set the clock.

5 You can set the month, date, time, and channel for timer recording. Select the **Prog.No**, **Month**, **Date**, **Start**, **Stop** or **Store** by pressing the ◀ or ▶ button. Set these by pressing the ▼ or ▲ button.

◆ **Prog.No :** Set to required channel.

◆ **Month** / **Date :** Set to record start month and date.

◆ **Start :** Set to record start time (hour and minute).

◆ **Stop :** Set to record stop time (hour and minute).

➢ ◆ You can also set the **Prog.No**, **Month**, **Date**, **Start** and **Stop** directly by using the numeric buttons.

◆ A warning notice will be displayed if the recording time overlaps with another program. ⫸ **Time-conflict with another programme!!. Please refer to Programme List.**

6 Press the ▼ or ▲ button to select **Record List**. Press the **ENTER** button.

Result: The timer record lists are displayed.

➢ ◆ If you have not yet set the timer record, you can not enter.

◆ The items for which recording has finished or been stopped will be automatically deleted from the **Record List**.

7 To delete the record list, select the required list and press the **Red** button.

Setting up the DVR

1   Press the **DVR** button.

Result: The message **DVR Initializing** is displayed and
change to the DVR mode.

2   Press the **DVR MENU** button.

Result: The **DVR SETUP** menu is displayed.

3   Select the required option by pressing the ▼ or ▲ button.
Press the **ENTER** button. Change the setting. When you have
finished, press the **ENTER** button to confirm.

◆   **Program List**
Displays the record list saved on HDD. You can edit the list by
using the **INFO** button (Play/Delete/Rename/Cancel) after
selecting an item.
➢   A warning notice will be displayed if the HDD is full...
➠ **HDD capacity is not enough.**
At this time, please delete some items from the program
list.

◆   **Live Video**
Change to live video mode.
➢   ◆ You can also change simply by pressing the **LIVE**
button.
◆ You can time shift a maximum of 30 minutes by
pressing the **REW** (◄◄) button in live video mode. In
time shift mode, press the **LIVE** button and you can
change to a live picture.

◆   **DVR Control**
– Recording Mode : Set to record quality.
– XP (10 hours)
– SP (13 hours)
– LP (20 hours)
– EP (40 hours)

◆   **Disk Tools**
– Repair Disk : HDD Disk scanning for HDD optimization.
– Format Disk : Formatting HDD. (All recorded programs
are erased)

4   When you have finished DVR function setup, press the **EXIT/TV**
(DVR mode "ON") or **DVR** (DVR mode "OFF") button to return to
the TV mode.
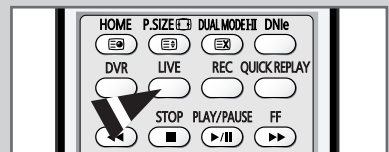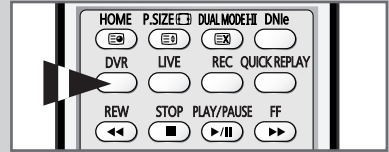
☞   ◆ During live recording, other functions related to DVR
(QUICK REPLAY/REW/PLAY/PAUSE/FF) are not
available except for the STOP function. At this time, the
●**REC** will flash 3 times.

◆ If the DVR hardware is On, the Standby indicator on the
front of the television lights yellow. If the DVR hardware is
Off, you need more time (13 seconds) for changing to
DVR mode from TV mode.

◆ When the HDD becomes full during recording mode, the
system will automatically stop the recording.

◆ Buttons not available in DVR mode: **PIP**, **SWAP**, **VIDEO**,
TTX/MIX, **TELEWEB**, **HOME**, **ASPECT**.
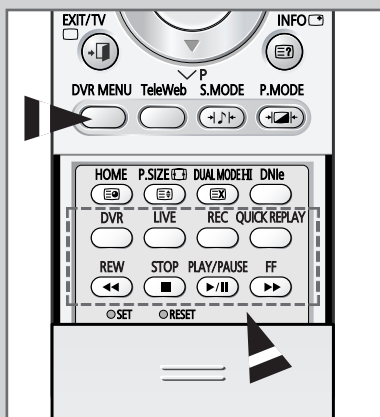
Button	Function
DVR MENU (Red button)	Displays the **DVR SETUP** menu in the DVR mode.
DVR	Changes to DVR mode.
LIVE	Moves to the live video when program list is displayed.
REC	Starts recording.
QUICK REPLAY	Moves back to the program played 8 seconds before.
REW	Reverses the program being played searches in faster speed.
STOP	Stops the program being played.
PLAY/PAUSE	Starts playing or instantly stops.
FF	Forwards the program being played searches in faster speed.

Selecting the DVR Search Speed

During Pause Mode...
 – Press the **FF** button to select slow motion play for 1/2, 1/4 or 1/8 of normal speed.
 – Press the **REW** button to select the level of fast speed reverse (2X/4X/8X/16X/32X/128X).

During Play, press the **FF** (forward) or **REW** (reverse) button to search at a faster speed (2X/4X/8X/16X/ 32X/128X).

☞ *HELP Sentence Display per DVR Function Situation*

◆ If the preset channel for timer recording is different than the current PIP channel when it's time for timer recording:
  ▥▶ **Change PIP channel to Timer record channel?**

◆ When TV power is Off during timer recording,
  When **16-PIP** should be On to do PIP On during the timer recording…
  When the user wants to change the PIP source during the timer recording…
  When the user wants to change the PIP size to **16-PIP** during timer recording….
  When the user wants to change PIP channel numbers during the timer recording….
  When the user wants to perform a PIP Swap during the timer recording…
  When the user wants to change the clock during timer recording…
  When the user wants to enter DVR mode with the **DVR** button during timer recording…
  When the user wants to delete an item from the record list during timer recording…
  ▥▶ **Recording a Timer Record, would you like to continue?**

◆ When it nears the time for timer recording to begin while playing or watching in DVR mode...
  ▥▶ **Would you like to stop for recording a Timer Record?**

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.
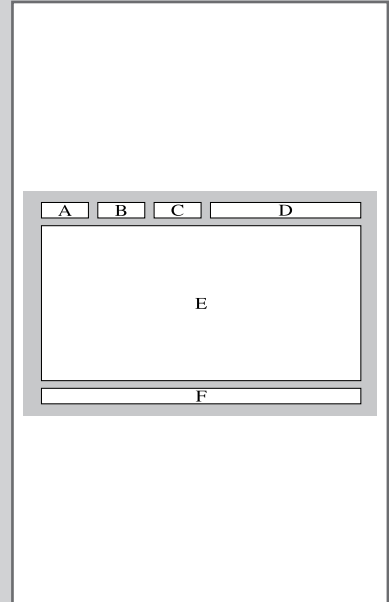
➤   Teletext information is often divided between several pages displayed in sequence, which can be accessed by:

- ◆ Entering the page number
- ◆ Selecting a title in a list
- ◆ Selecting a coloured heading (FASTEXT system)

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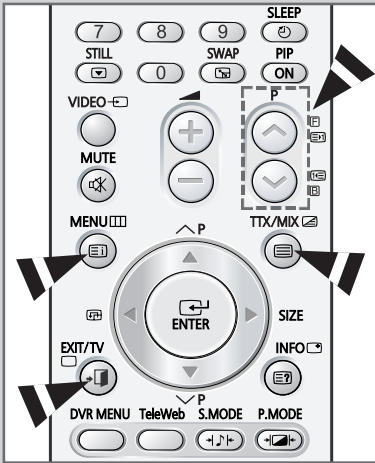
You can display Teletext information at any time on your television.

☛ 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 **TTX/MIX** button to activate the teletext mode.

Result: The contents page is displayed. It can be redisplayed at any time by pressing the ⊟ᵢ (index) button.

3 Press the **TTX/MIX** button again.

Result: The screen will be split into two. This Double Teletext feature lets you view the actual broadcast and teletext information separately on the screen.

4 If you wish to display the actual broadcast at the same time as the teletext page, press the **TTX/MIX** button again.

5 Press the **EXIT/TV** button to exit from the teletext display.

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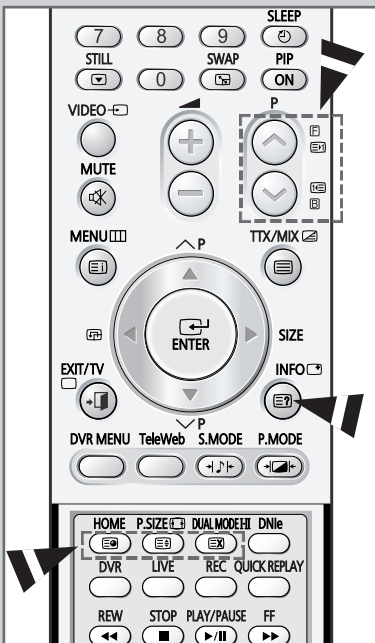
When you have displayed a Teletext page, you can select various options to suit your requirements.

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

➤ To return to the normal display after using the reveal or size feature, press the **EXIT/TV** button.

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Selecting the Teletext Source (depending on the model)

When you watching the current channel you can display the Teletext information of other channel.

1	Press the **MENU** button.	
	<u>Result</u>:	The main menu is displayed.
2	Press the ▼ or ▲ button to select **Setup**.	
	<u>Result</u>:	The options available in the **Setup** group are displayed.
3	Press the **ENTER** button.	
4	Press the ▼ or ▲ button to select **Teletext Source**. Press the **ENTER** button.	
5	Select the required option (**Main** or **Sub**) by pressing the ▼ or ▲ button	

    ◆ If you set to **Main**, you can display the teletext information of current channel.

    ◆ If you set to **Sub**, you can display the teletext information of other channel.

        – If the PIP feature is activating, you can display the teletext information of sub channel. If change the channel of sub picture, you can display the teletext information of the changed sub channel.

        – If the Double Teletext feature is activating, you can display the teletext information of other channel at the same time as the current channel.

Setup	
Plug & Play	►
Language : English	►
Time	►
Teletext Source :	Main
AV Setup	Sub

✦ Move   ⏎ Enter   ⫿⫿⫿ Return

Selecting a Teletext Page
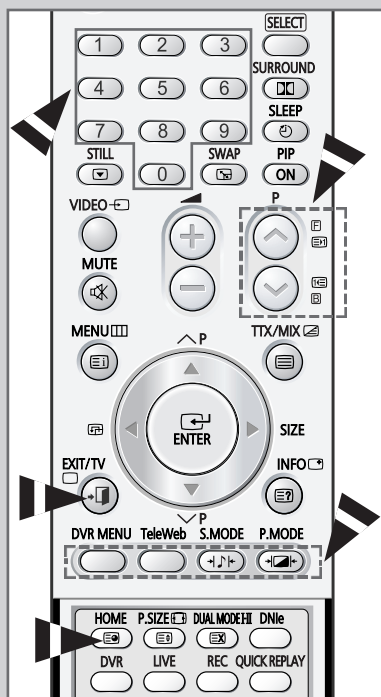
You can enter the page number directly by pressing the numeric buttons on the remote control.

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.

2   If the FASTEXT system is used by the broadcasting company, the different topics covered on a Teletext page are colour-coded and can be selected by pressing the coloured buttons on the remote control.
Press the coloured button corresponding to the topic that you wish to select; the available topics are given on the status line.

Result: The page is displayed with other colored information that can be selected in the same way.

3   To display the previous or next page, press the corresponding coloured button.

4   To display the subpage, see the following steps.

◆   Press the ⊟◉ (sub-page) button.
Result: The available subpages appear.

◆   Select the required sub-page. Sub-pages can be scrolled by pressing the ⊟⟩ or ⟨⊟ button.

5   When you have finished, press the **EXIT/TV** button to return to your normal broadcast.

Connecting to the External Input/Output

"EXT 1" is used for the equipment with an RGB output, such as video game devices or video disc players.

**Rear of the TV**
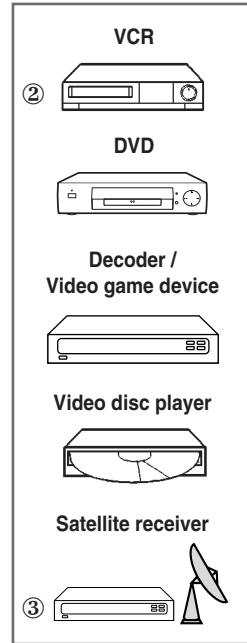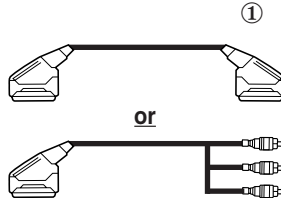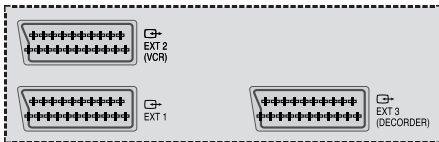
① This end can be fitted with:
   ◆ A SCART connector
   ◆ Three RCA connectors (VIDEO + AUDIO-L/R)

② If you have a second VCR and wish to copy cassettes tape, connect the source VCR to "**EXT 1**" and the target VCR to "**EXT 2**" so that you can redirect the signal from "**EXT 1**" to "**EXT 2**".

③ When you wish to record a programme, connect the receiver to "**EXT 1**" and the VCR to "**EXT 2**" so that you can redirect the signal from "**EXT 2**" to "**EXT 2**".

VCR

DVD

Decoder / Video game device

Video disc player

Satellite receiver

Connecting to the DVD Input

The RCA connectors are used for equipment with a DVD output. (480i)

**Rear of the TV**

DVD
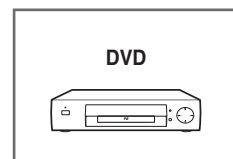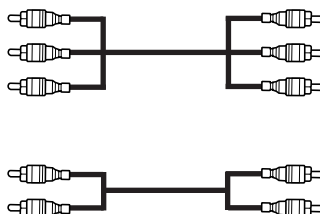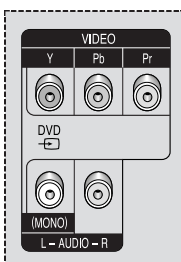
Connecting to the Audio Outputs

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

Rear of the TV

L – MAIN – R   CENTER   L – SURR – R   WOOFER
AUDIO OUT

**Audio System/
External Amplifier**
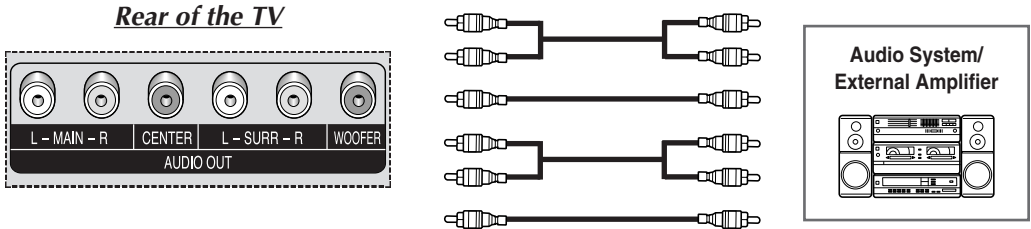
➤   External speakers not supplied must be purchased seperately.

Connecting to the Digital Audio Inputs

The COAXIAL and OPTICAL connectors are used for equipment with a digital output (to take digital sound).

Rear of the TV

COAXIAL IN | OPTICAL IN

DVD
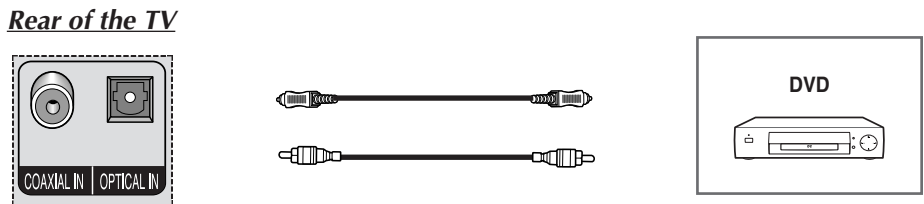
Connecting Headphones

You can connect a set of headphones to your television if you wish to watch a television programme without disturbing the other people in the room.

➢ Prolonged use of headphones at a high volume may damage your hearing.

Side of the TV
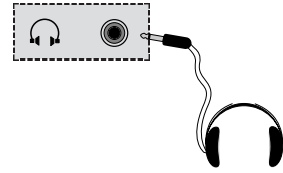
Connecting Additional Speakers

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**)

➢ 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

SURROUND (8Ω)
⊕ - R - ⊖   ⊖ - L - ⊕
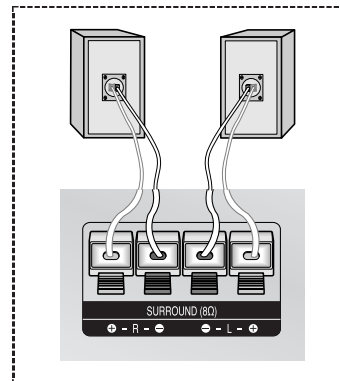
Connecting to the Audio/Video Input

The RCA (AUDIO-L/R + VIDEO) connectors are used for equipment such as camcorders, video disc players and some video game devices.
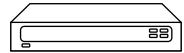
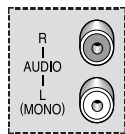*Side of the TV*
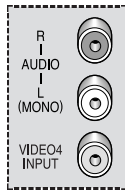
Camcorder
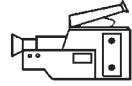
Video disc player

Video game device

Connecting to the S-Video 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.
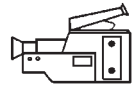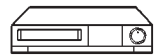
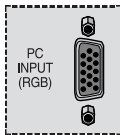*Side of the TV*

①

Camcorder

and

VCR

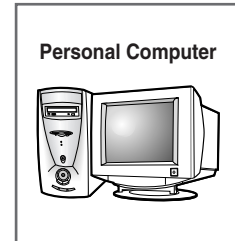① To play pictures and sound, both the S-VIDEO and RCA connectors must be used.

Connecting to the PC Input

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

Side of the TV

| R |
| AUDIO |
| L |
| (MONO) |

and

PC
INPUT
(RGB)

Personal Computer

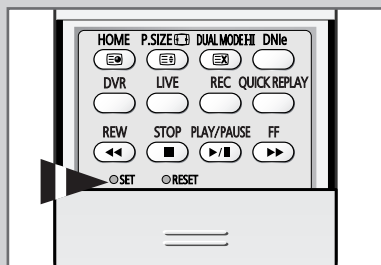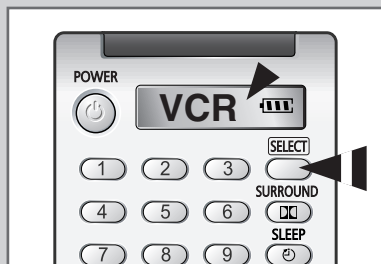### _Setting up Your PC Software (Windows only)_

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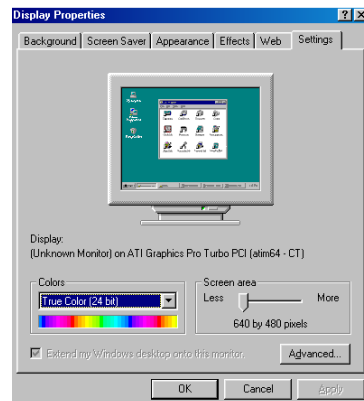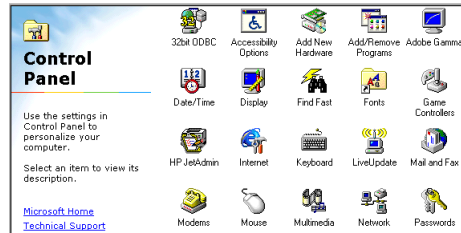
First, click on **Settings** on the Windows start menu.

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

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

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

The correct setting of size (resolution) is **640 x 480 pixels**.

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

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 **SELECT** button repeatedly to activate another component (**TV**, **VCR**, **CATV**, **DVD**).

Example: If you want to program the remote control to operate your VCR, make sure that **VCR** is displayed

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 **SET** button any time you want to use the remote to operate your VCR, Cable box, or DVD.

> ➢ ◆ When your remote control is in the **VCR**, **CATV**, or **DVD** mode, the volume buttons still control your TV's volume.
>
> ◆ When your remote control is in the **TV** or **CATV** mode, the VCR or DVD control buttons (PLAY, PAUSE, etc.) still operate your VCR or DVD.

Programming the Remote Control for Other Components

VCR Remote Control Codes

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

VCR Remote Control Codes (continued)

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

Cable Box (CATV) Remote Control Codes

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

DVD Remote Control Codes

Samsung	000, 001	LG	006
JVC	002	Sony	007
ProScan, RCA	003	DENON	008
Panasonic	004	Curtis Mathes	009

ENG

SCART Connector Wiring (EXT1, EXT2 or EXT3)

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

➤ Pins 5, 7, 9, 11, 13, 15 and 16 are used for RGB processing and are only wired on the EXT1 or EXT3 connector.

Wiring the Mains Power Supply Plug (UK Only)

IMPORTANT NOTICE

The mains lead on this equipment is supplied with a moulded plug incorporating a fuse. The value of the fuse is indicated on the pin face of the plug and, if it requires replacing, a fuse approved to BSI1362 of the same rating must be used.
Never use the plug with the fuse cover omitted if the cover is detachable. If a replacement fuse cover is required, it must be of the same colour as the pin face of the plug. Replacement covers are available from your dealer.
If the fitted plug is not suitable for the power points in your house or the cable is not long enough to reach a power point, you should obtain a suitable safety approved extension lead or consult your dealer for assistance.
However, if there is no alternative to cut off the plug, remove the fuse and then safely dispose of the plug.
Do NOT connect the plug to a mains socket as there is a risk of shock hazard from the bared flexible cord.

IMPORTANT

The wires in the mains lead are coloured in accordance with the following code:
      BLUE - NEUTRAL   BROWN - LIVE

As these colours may not correspond to the coloured markings identifying the terminals in your plug, proceed as follows:
The wire coloured BLUE must be connected to the terminal marked with the letter N or coloured BLUE or BLACK.
The wire coloured BROWN must be connected to the terminal marked with the letter L or coloured BROWN or RED.

WARNING: **DO NOT CONNECT EITHER WIRE TO THE EARTH TERMINAL, WHICH IS MARKED WITH THE LETTER E OR BY THE EARTH SYMBOL ⏚ , OR COLOURED GREEN OR GREEN AND YELLOW.**

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 "①" button (On/Off) 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.

Technical Specifications

The descriptions and characteristics in this booklet are given for information purposes only and are subject to modification without notice.

Model name		WS32Z10
Tube type		16:9
Screen size		32 inch (76/82 cm)
Colour systems		PAL (PAL60), SECAM, NTSC3.58 (OPTION), NTSC4.43 (OPTION)
TV standards		BG, DK, I, L (OPTION), M (OPTION), N (OPTION)
Sound		A2 Stereo, NICAM Stereo, DTS(Dolby Theater System), Dolby Pro Logic II
Audio output power		15 W x 5 (**L-MAIN-R** / **CENTER** / **L-SURR-R**), 25 W x 1 (**WOOFER**)
Power supply		160 ~ 300V, 50Hz
Power consumption		200 watts
Sockets	Rear	External input/output (**EXT1** / **EXT2** / **EXT3**) DVD video/audio inputs (**Y** / **Pb** / **Pr** / **(MONO)L-AUDIO-R**) Surround speaker outputs (**+-R-–** / **–-L-+**) Audio outputs (**L-MAIN-R** / **CENTER** / **L-SURR-R** / **WOOFER**) Digital audio inputs (**COAXIAL IN** / **OPTICAL IN**)
	Side	Audio/Video inputs (**R-AUDIO-L(MONO)** / **VIDEO4 INPUT**) S-Video input (**S-VIDEO INPUT**) Headphone jack PC video input (**PC INPUT (RGB)** - 15Pin)
Demensions (H x W x D)		892 x 560 x 574 mm
Weight		62 kg

– **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

AA68-02796A-00 (ENG)