LG

LCD TV

OWNER'S MANUAL

MODELS: 32LP1D | 37LP1D | 42LP1D



DVB
Digital Video Broadcasting

Trade Mark of the DVB Digital Video Broadcasting Project (1991 to 1996)

ID Number(s): 3508: 32LP1D
3509: 37LP1D
3551: 42LP1D

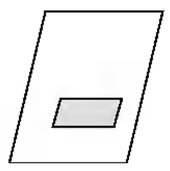
Please read Information Manual included together before reading this manual and operating your set.

Retain it for future reference.
Record model number and serial number of the set.
See the label attached on the back cover and quote this information to your dealer when you require service.

P/NO : 3828TUL308B (0509-REV02)
Printed in Korea

Accessories

Ensure that the following accessories are included with your TV. If any accessory is missing, please contact the dealer from where you purchased the product.



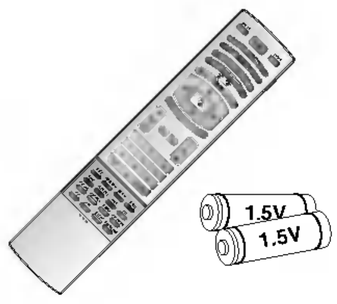
Owner's Manual



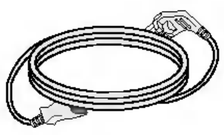
Twister Holder
Arrange the wires with the twister holder.



Polishing Cloth (Option)
Polish the screen with the cloth.



Remote Control / Batteries



Power Cord



DVI-D Cable



D sub to DVI Cable



PC Sound Cable

Contents

Introduction

2	**Accessories**
5	**Controls**
6	**Connection Options**
7~9	**Remote Control Key Functions**

Installation

Installation Instruction

10	Various Installation
11	How to use back cover
11	Swivel Stand

External Equipment Connections

12	Antenna Connection
12	How to use antenna loop through socket
13	External AV Source Setup
13	Headphone Socket
13	Picture Out Setup
14~15	VCR Setup
16~17	DVD Setup
17	Insertion of CI Module
18	HDSTB Setup
19~20	PC Setup
20	Power Cord Connection

Operation

Basic operation

21	Turning on the TV
21	Volume Adjustment
21	Programme Selection
22	On Screen Menus Selection and Adjustment

Station Menu Options

	In Digital mode
23	Auto Programme
23	Programme Edit
24	Favourite Programme List
24	System Information
	In Analogue mode
25	Auto Programme Tuning
26	Manual Programme Tuning
27	Fine Tuning
27	Assigning a Station Name
28	Programme Edit
29	Favourite Programme
29	Calling the Programme Table

Picture Menu Options

30	PSM (Picture Status Memory)
31	Picture Adjustment (PSM-User option)
31	CSM (Colour Status Memory)
32	Manual Colour Temperature Control
32	XD Function
33	Picture Format / Picture Out for AV2 Euro Scart

Sound Menu Options

34	SSM (Sound Status Memory)
34	Sound Frequency Adjustment (SSM-User Option)
35	Balance Adjustment
35	AVL (Auto Volume Leveler)
36	SRS WOW
36	Audio Language (In Digital mode only)
37	Stereo/Dual Reception (In Analogue mode only)
37	NICAM Reception (In Analogue mode only)
37	Speaker Sound Output Selection (In Analogue mode only)

Time Menu Options

38	Clock Setup
38	On/Off Time
39	Auto Sleep
39	Sleep Timer

Operation

Special Menu Options

40 Input Source Selection
40 Auto AV Switching
41 Child Lock
41 Lightening Logo Display Lamp
42 Software update (In Digital mode only)
43 Subtitle Language (In Digital mode only)
43 CI [Common Interface] Information (In Digital mode only)

Screen Menu Options

44 Adjusting Horizontal/vertical Position
44 Manual Configure (Clock & Phase)
45 Auto Configure
45 Selecting WXGA Mode

PIP (Picture-In-Picture) / Double Window / POP

46 Watching PIP/Double Window/POP
46 Sub Picture Freeze
46 Programme Selection for Sub Picture
47 Input Source Selection for Sub Picture
47 Sub Picture Size Adjustment (PIP mode only)
48 Moving the Sub Picture (PIP mode only)
48 Swapping between main and sub pictures
49 POP (Picture-out-of-Picture: Programme Scan)

TELETEXT

In Digital mode
50 Teletext within Digital Service
50 Teletext in Digital Service
In Analogue mode
51 Switch on/off
51 SIMPLE Text
52 TOP Text / FASTEXT
53 Special Teletext Functions

EPG (Electronic Programme Guide)

54 Switch on/off EPG
54 Select a programme
55 Button Function in NOW/NEXT Guide Mode
55 Button Function in 8 Days Guide Mode
56 Button Function in Channel Guide Mode
56 Button Function in Date Change Mode

XSTUDIO

Notes on Memory Card
57 Memory Card
57 Precaution for Using the Memory Card

XSTUDIO
58 Available Memory Card
58 Supported Files
59 The JPEG Decoding/Thumbnail Supplied Spec
59 How to insert and eject the card
59 Basic Operation
JPEG File Viewing Options
60 Photo Media OSD Display
60 Picture Selection and Viewing
61 Mark/Unmark for JPEG file
61 Jump Media
62 Image Adjustment
63 Slide Show
64 JPEG File Deletion and Cancel
64 File Information / Screen Saver

MP3 File Playing Operation
65 Music Media OSD Display
65 MP3 File Selection and Playback
66 Stop/Pause Playback
66 Mark/Unmark for MP3 File
67 Jump Media / Screen Saver
68 MP3 File deletion and Cancel / File Information

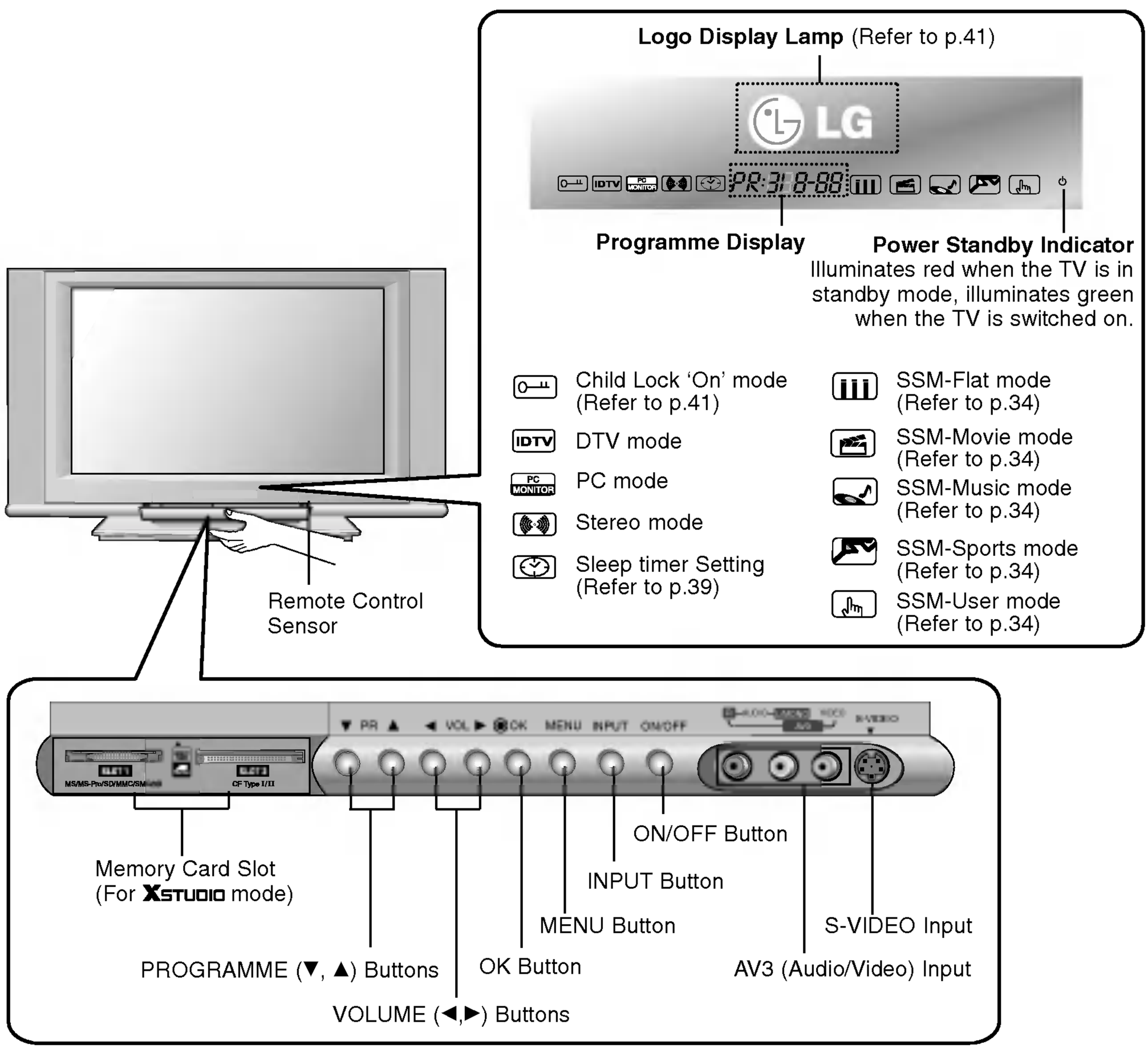
Reference

69~70 IR Codes
71~72 Programming the Remote
73~74 Troubleshooting Checklist

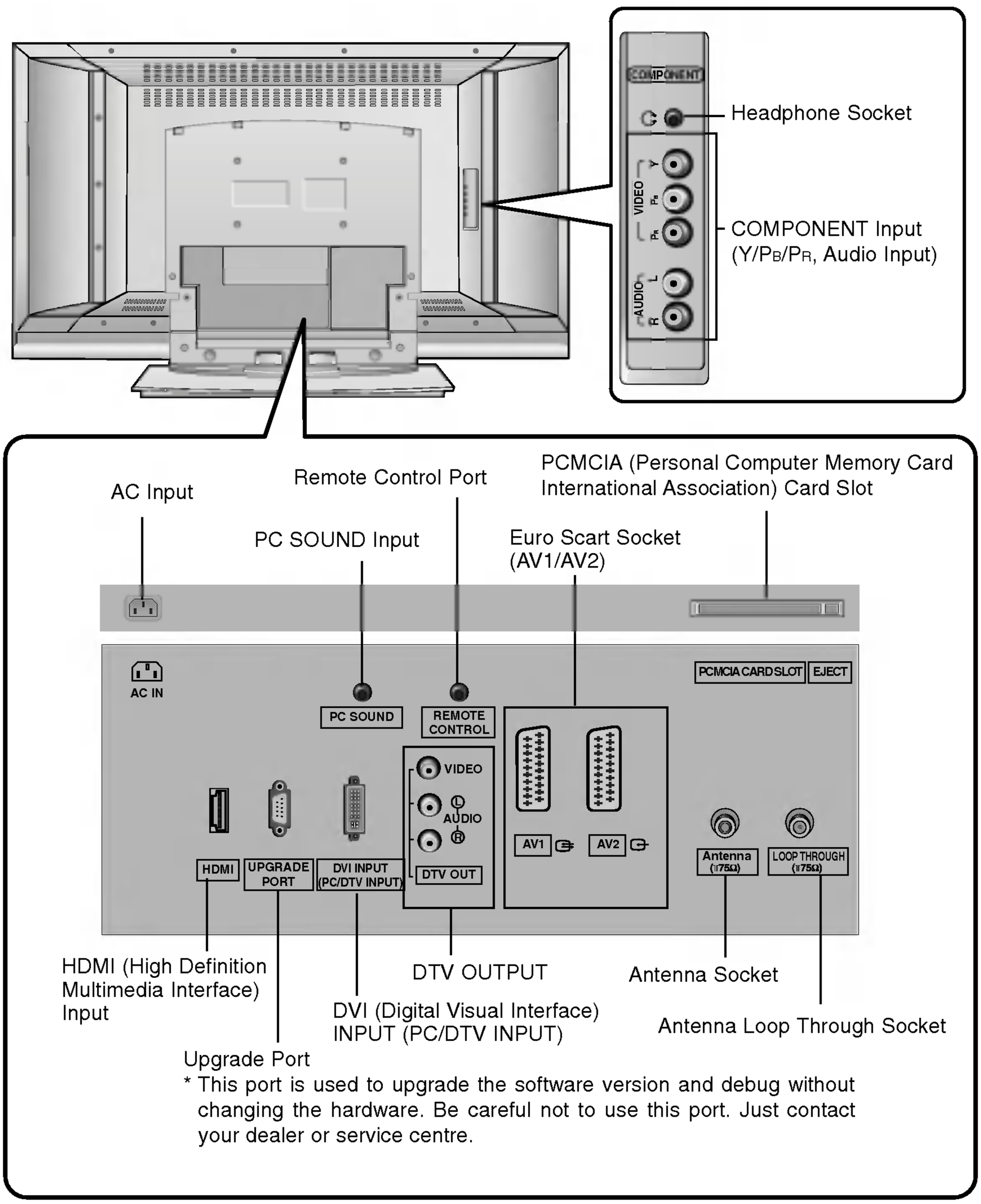
Introduction

Controls

- This is a simplified representation of front panel.
- Here shown may be somewhat different from your TV.

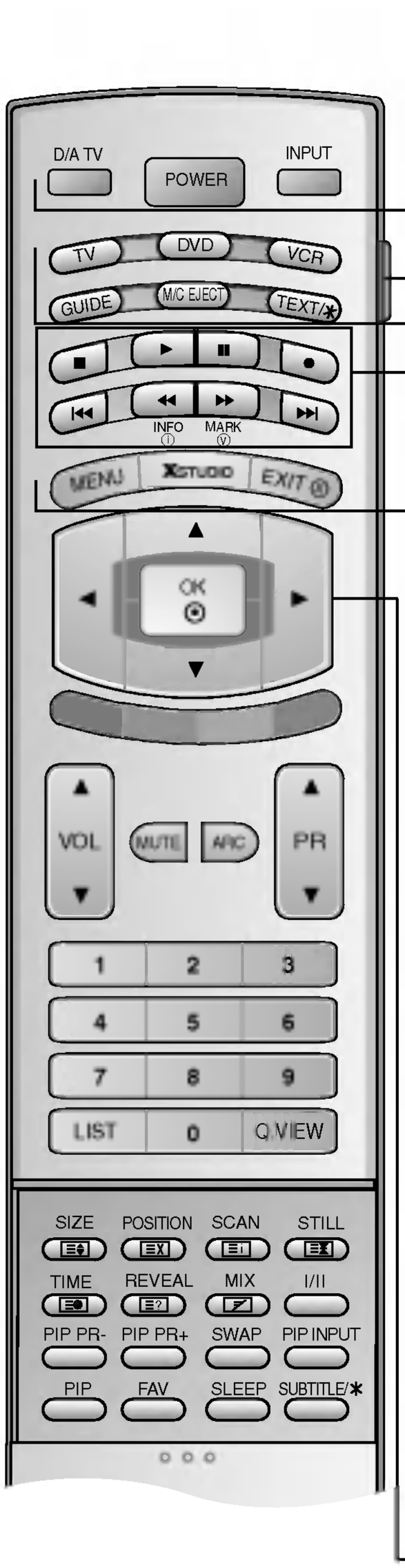


Connection Options



* This port is used to upgrade the software version and debug without changing the hardware. Be careful not to use this port. Just contact your dealer or service centre.

Remote Control Key Functions



POWER
Switches the set between ON and STANDBY.

D/A TV (Digital TV / Analogue TV)
Selects digital or analogue mode.

INPUT



If you press the button once, the input source OSD will appear on screen as shown. Select the desired input source (**DTV**, **TV**, **AV1/2/3**, **S-Video**, **Component**, **DVI PC**, **DVI DTV**, or **HDMI**) using the ▲ / ▼ button.

LIGHT
Illuminates the remote control buttons.

TV, DVD, VCR,
Selects the remote operating mode: TV, VCR, DVD. Select other operating modes, for the remote to operate external devices.

GUIDE (Refer to p.54)
Shows programme schedule.

M/C EJECT (Refer to p.59)
When removing the memory card, this button is used.

VCR / XSTUDIO Mode Control BUTTONS (Refer to p.58~68)
Controls a LG video cassette recorder.
Controls the XSTUDIO Mode.
For further details, see the 'XSTUDIO Mode' section.

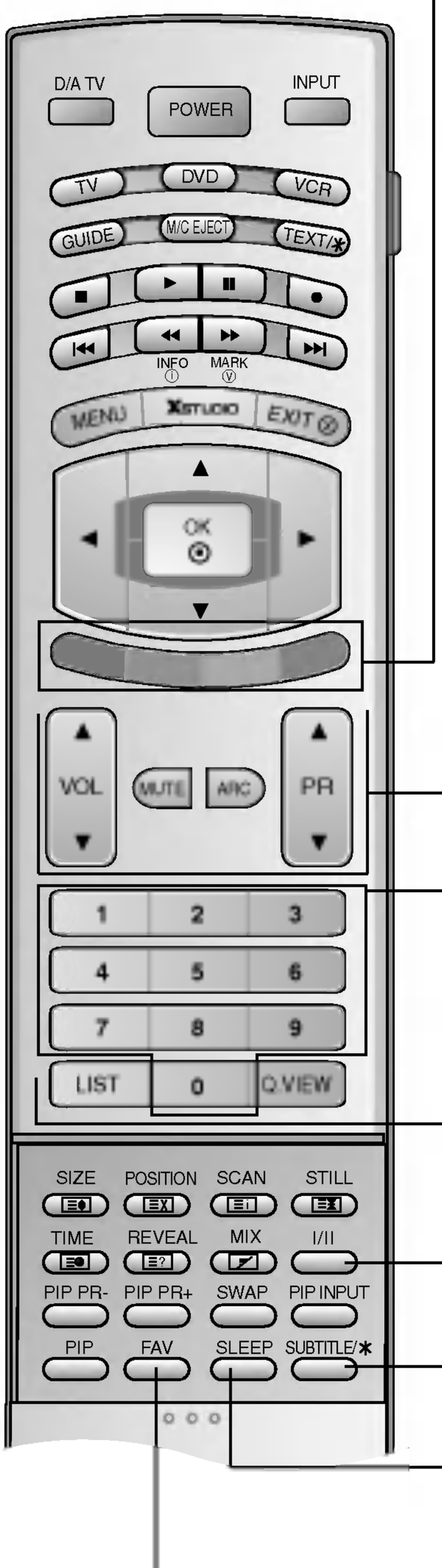
MENU
Selects a menu.

XSTUDIO
Enter to the XSTUDIO mode.

EXIT
Returns to TV viewing from any menu.

OK
Accepts your selection or displays the current mode.

▲ / ▼ / ◄ / ►
Adjusts menu settings.
Selects menu item.



COLOURED BUTTONS
They are used as per the indications or functions displayed on TV screen in case of Text displays (Teletext, EPG) and programme edit.

VOL ▲ / ▼ (Volume Up/Down)
Increases/decreases sound level.
PR ▲ / ▼ (Programme Up/Down)
Selects a programme.

MUTE
Switches the sound on or off.

ARC (Aspect Ratio Control) (Refer to p.33)
Selects your desired picture format.

NUMBER BUTTONS

LIST (Refer to p.29)
Displays the programme table.

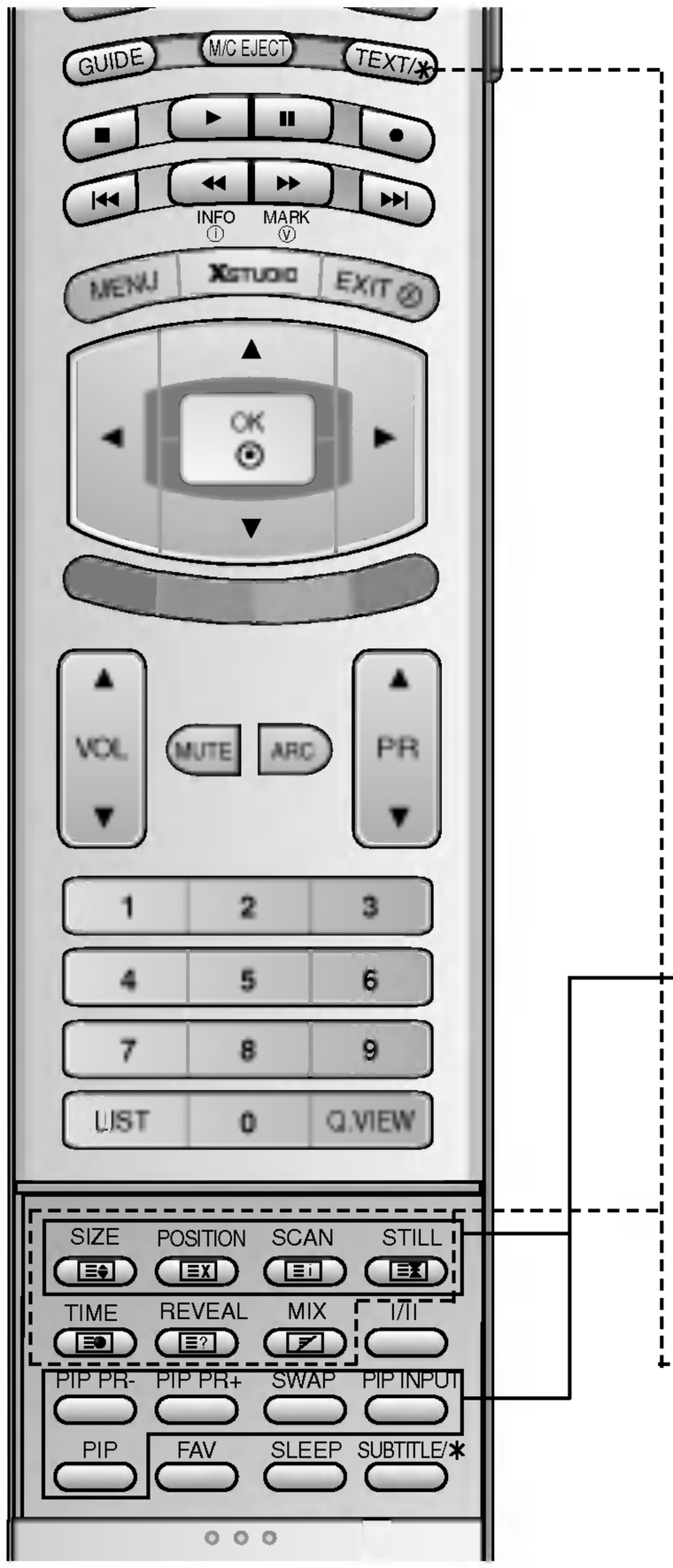
Q.VIEW
Returns to the previously viewed programme.

I/II
Selects the language during dual language broadcast. (Refer to p.36)
Selects the sound output. (Refer to p.37)

SUBTITLE / ✱ (Refer to p.43)
Recalls your preferred subtitle in digital mode.

SLEEP (Refer to p.39)
Sets the sleep timer.

FAV (FAVOURITE)
Displays the selected favourite programmes.



SIZE (Refer to p.47)
Adjusts the sub picture size.

POSITION (Refer to p.48)
Moves the sub picture position.

SCAN (Refer to p.49)
Switches on the programme scan mode.

STILL (Refer to p.46)
Freezes motion of the sub picture.

PIP PR +/- (Refer to p.46)
Selects a programme for the sub picture.

SWAP (Refer to p.48)
Alternates between main and sub picture.

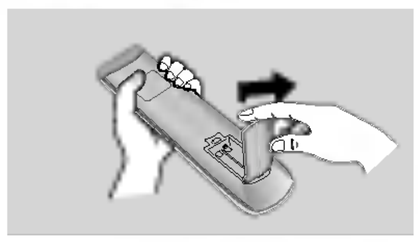
PIP INPUT (Refer to p.47)
Selects the input mode for the sub picture.

PIP (Refer to p.46)
Switches the sub picture on or off,select PIP, DW1/2 or POP modes.

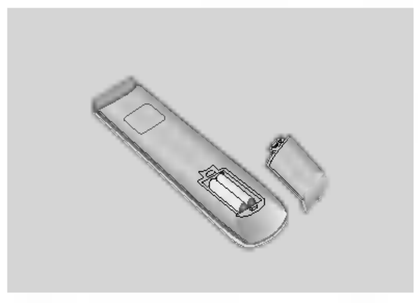
TELETEXT BUTTONS
These buttons are used for teletext.
Text button is used to enable teletext services while other buttons are for teletext functions.
* For further details, see the 'Teletext' section. (Refer to p.50~53)

Installing Batteries

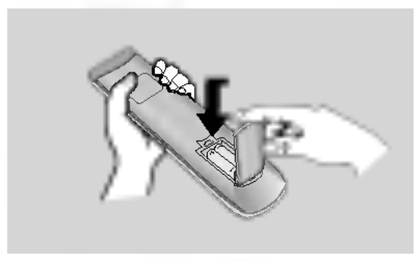
1 Open the battery compartment cover on the back side.

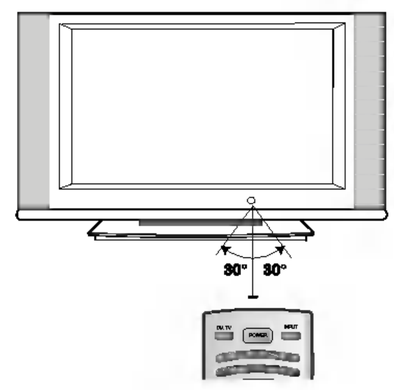


2 Insert two 1.5V batteries in correct polarity (+ with +, - with -). Don't mix old or used batteries with new ones.



3 Close the cover.





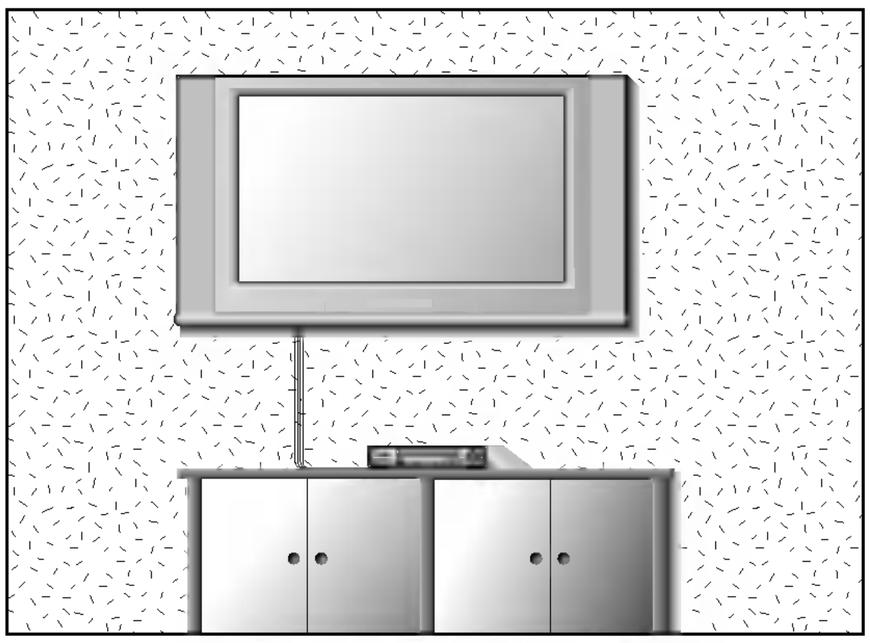
* Point the remote towards the remote control sensor of the wireless TV and use it within about 7 meters.

* Put the used batteries into the recycling bin since it can negatively affect the environment.

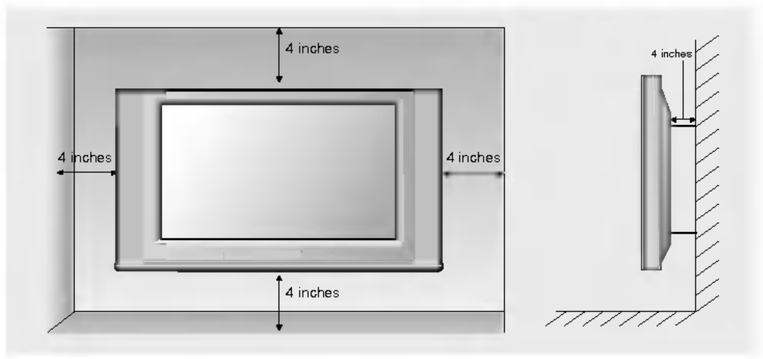
Installation

Various Installation

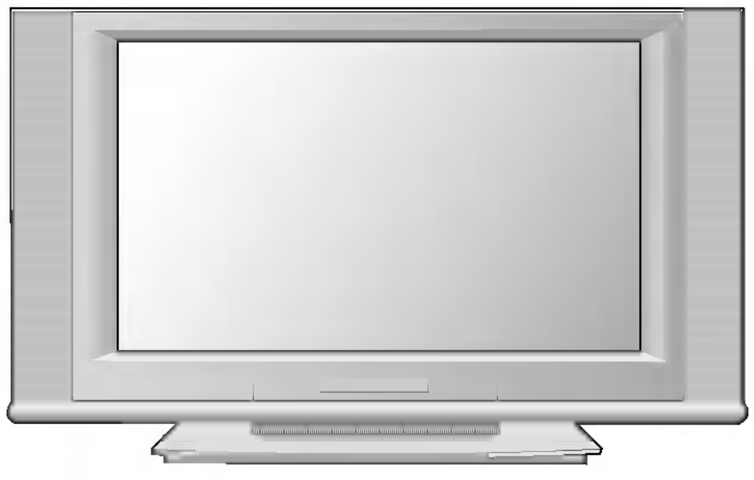
Wall Mount: Horizontal installation



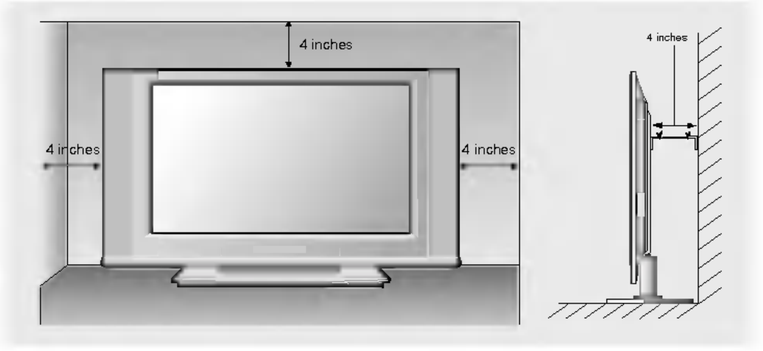
For proper ventilation, allow a clearance of 4" on each side and from the wall. Detailed installation instructions are available from your dealer, see the optional Tilt Wall Mounting Bracket Installation and Setup Guide.



Desktop Pedestal Installation

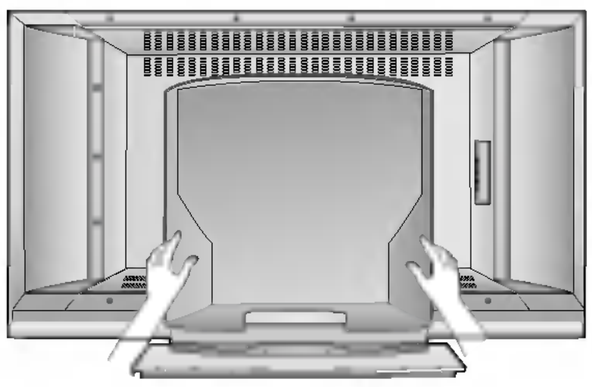


For proper ventilation, allow a clearance of 4" on each side and from the wall.

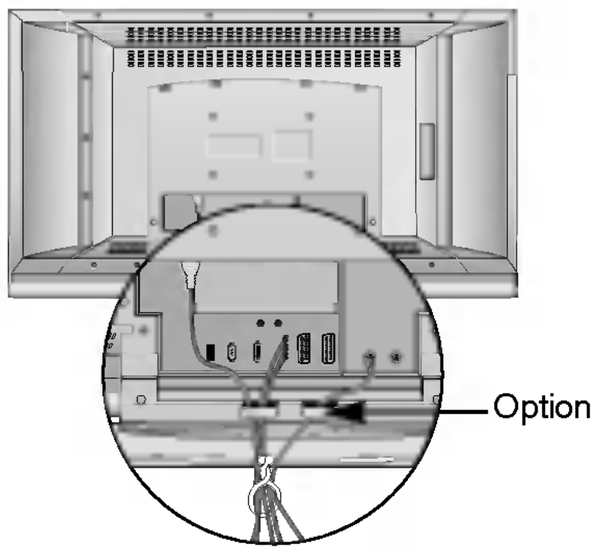


How to use back cover

1 Hold the cover with both hands and pull it backward.

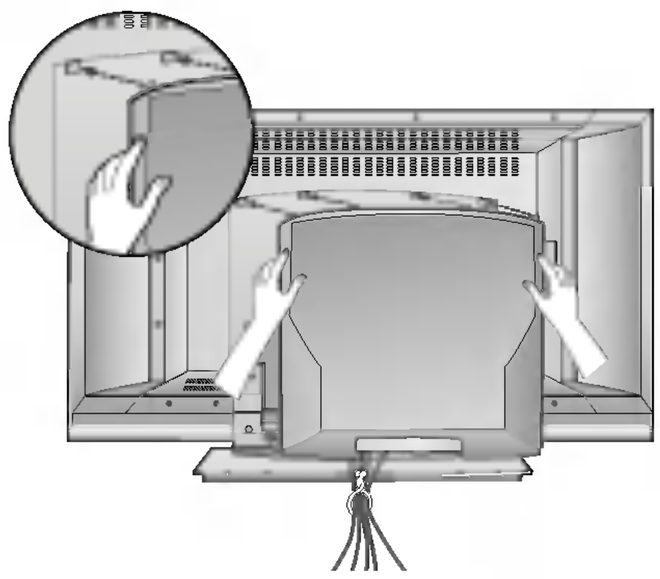


2 Install wires as necessary.
(To install various wires, refer to p.12~20.)

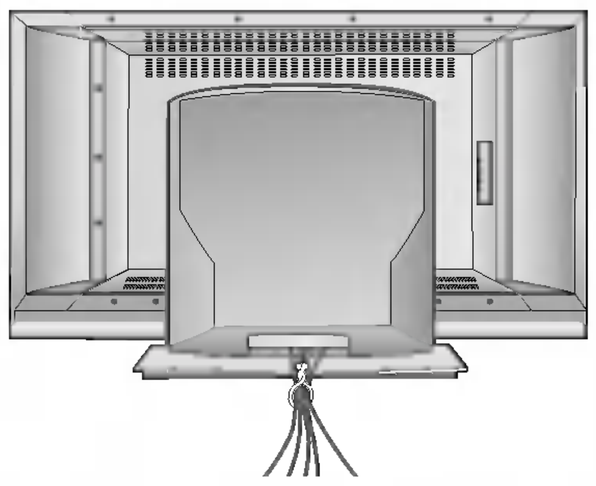


* Arrange the signal input cable and the power cord by holder, as shown.

3 Align the holes on the TV back panel with the four protuberance on the back cover and insert.



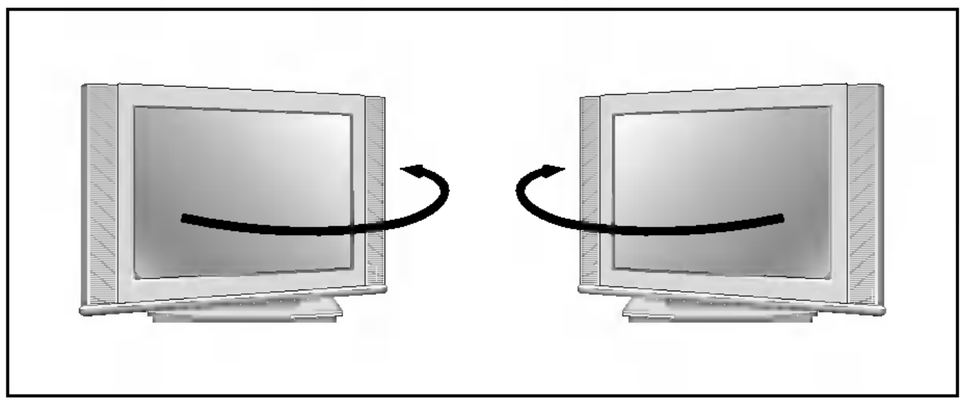
4 Reinstall the cover.



Wire Arrangement

- Pull the cables through the hole on the set.

Swivel Stand

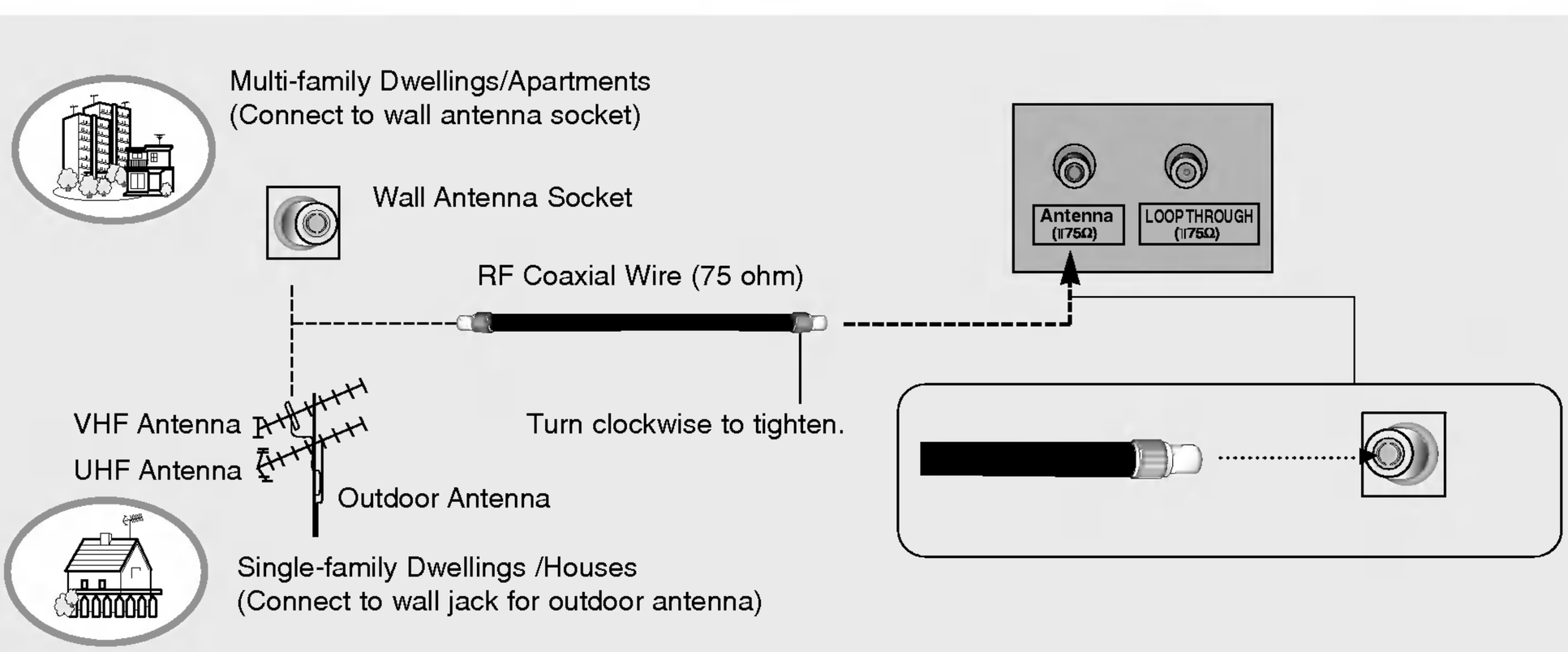


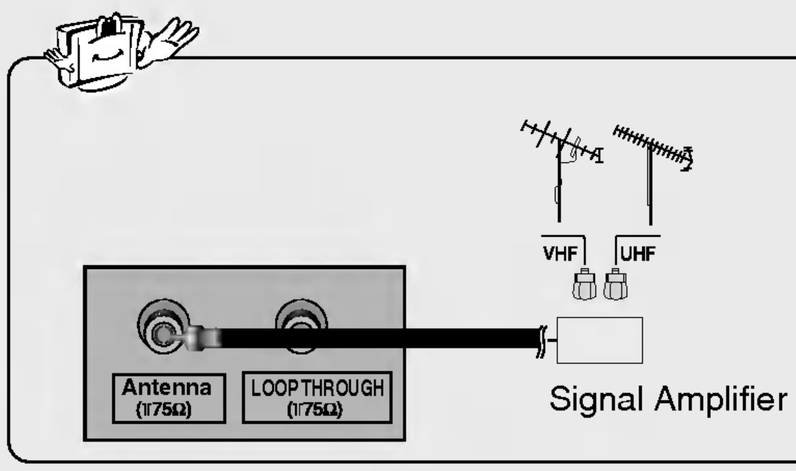
- The TV can be conveniently swivelled on its stand 30° to the left or right to provide the optimum viewing angle.

External Equipment Connections

Antenna Connection

- **For optimum picture quality, adjust antenna direction if needed.**

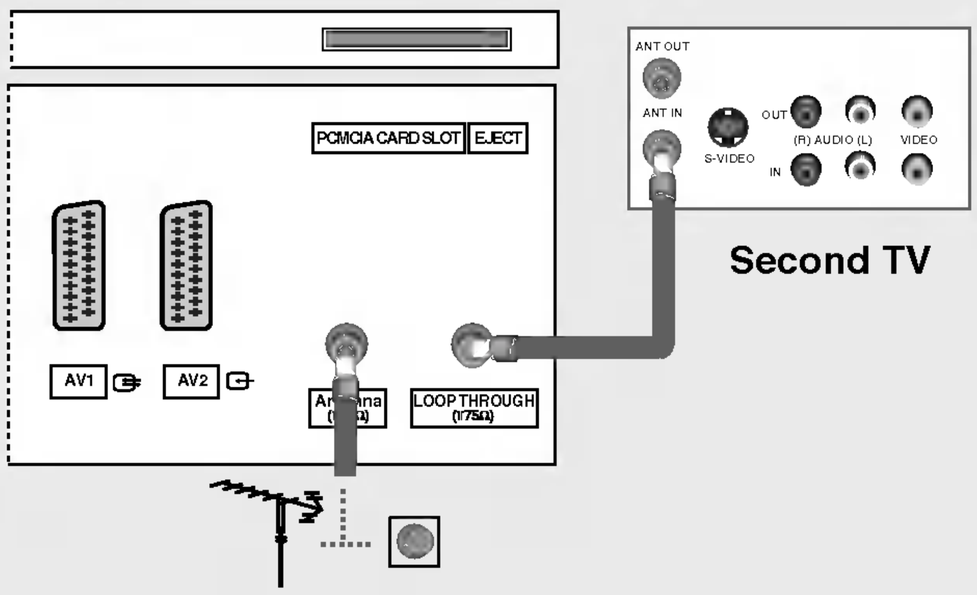




- In a poor signal area to improve picture quality, purchase and install a signal amplifier.
- If the antenna needs to be split for two TV's, install a "2-Way Signal Splitter" in the connections.
- If the antenna is not installed properly, contact your dealer for assistance.

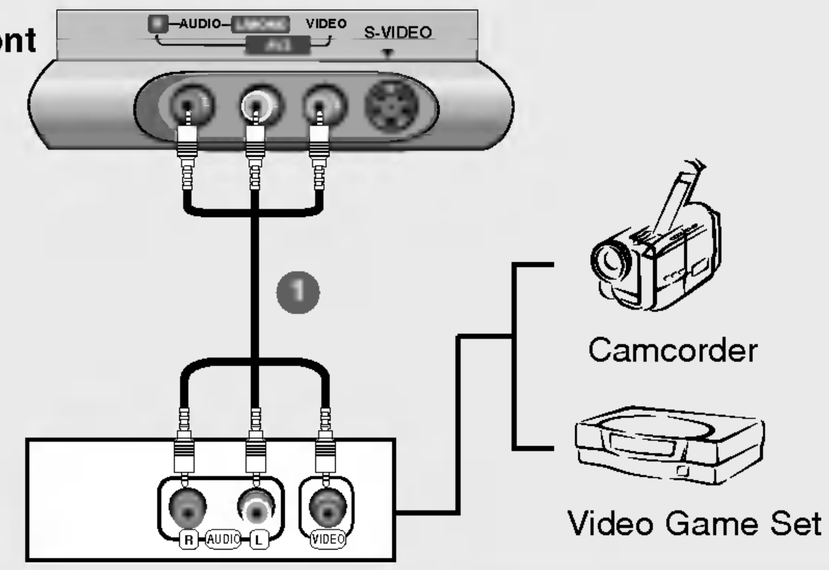
How to use antenna loop through socket

- **The TV has a special signal output capability which allows you to hook up a second TV.**



1. Connect the wall antenna socket or outdoor antenna to the TV's **Antenna** socket.
2. Connect a second TV's antenna socket to the TV's **LOOP THROUGH** socket.

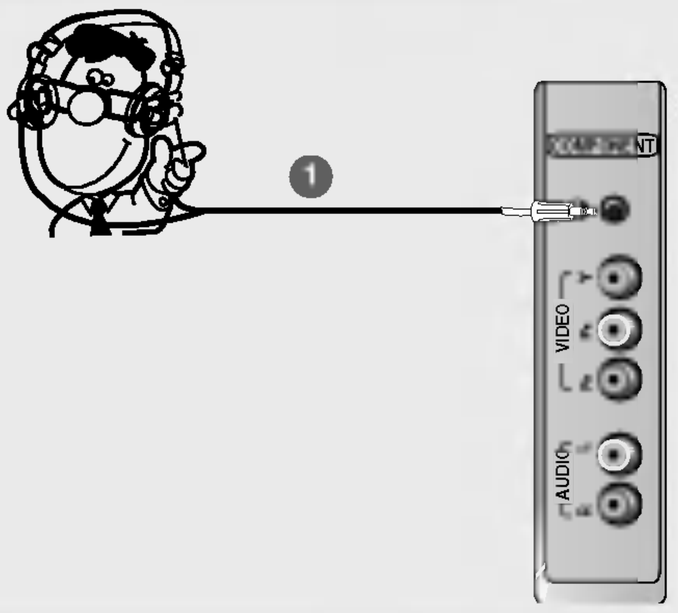
External AV Source Setup



1. Connect the **AUDIO/VIDEO** jacks between TV and external equipment. Match the jack colours (Video = yellow, Audio Left = white, and Audio Right = red).
2. Select **AV3** input source with using the **INPUT** button on the remote control.
3. Operate the corresponding external equipment. Refer to external equipment operating guide.

Headphone Socket

- You can listen to the sound through the headphone.

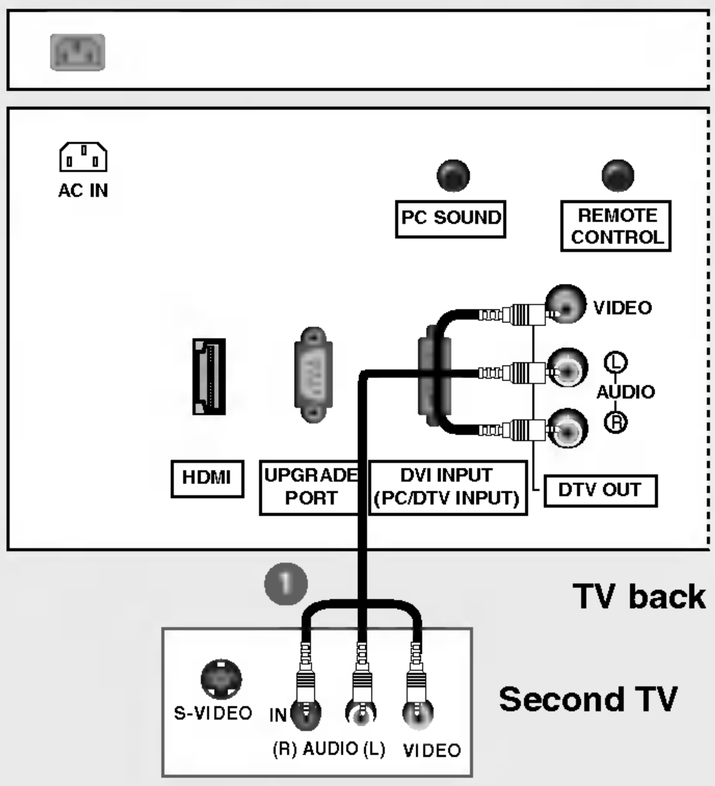


1. Plug the headphone into the headphone socket.
2. To adjust the headphone volume, press the **VOL** ▲ / ▼ button. If you press the **MUTE** button, the sound from the headphone is switched off.

• While you are listening to sound through a headphone, TV speakers will not be heard.

Picture Out Setup

- The TV has a special signal output capability which allows you to hook up a second TV or monitor.



1. Connect the second TV or monitor to the TV's **DTV OUT** jacks.
2. See the Operating Manual of the second TV or monitor for further details regarding that device's input settings.

• It's possible to output other signal with Euro scart socket.

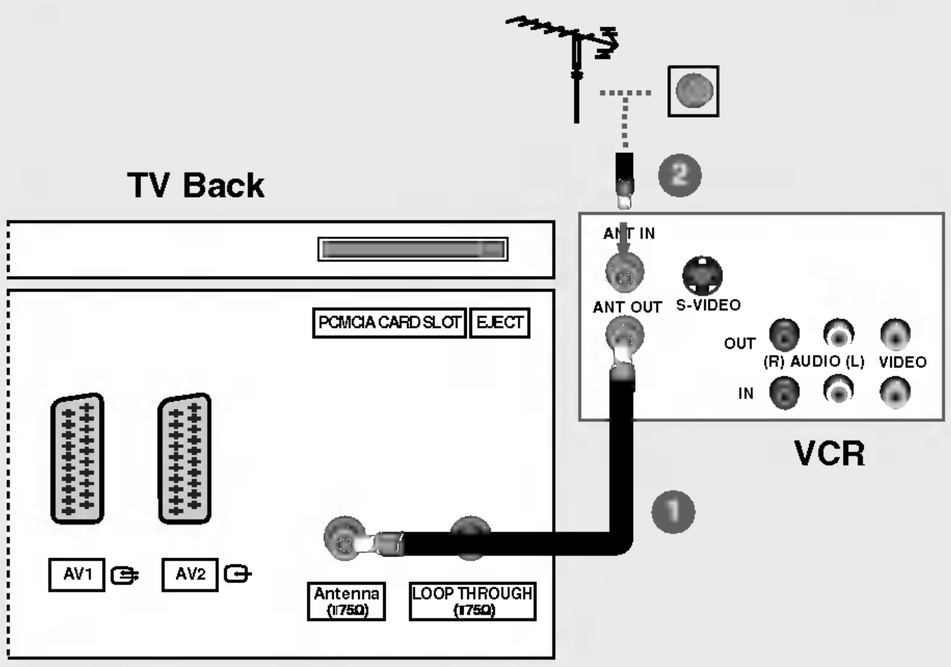
Picture Out Jack	Available Picture Out Signal
DTV OUT Jacks	DTV
AV1 Euro Scart	TV
AV2 Euro Scart	Current viewing Input Source DTV (Refer to p.33)

NOTE: All cables shown are not included with the TV.

VCR Setup

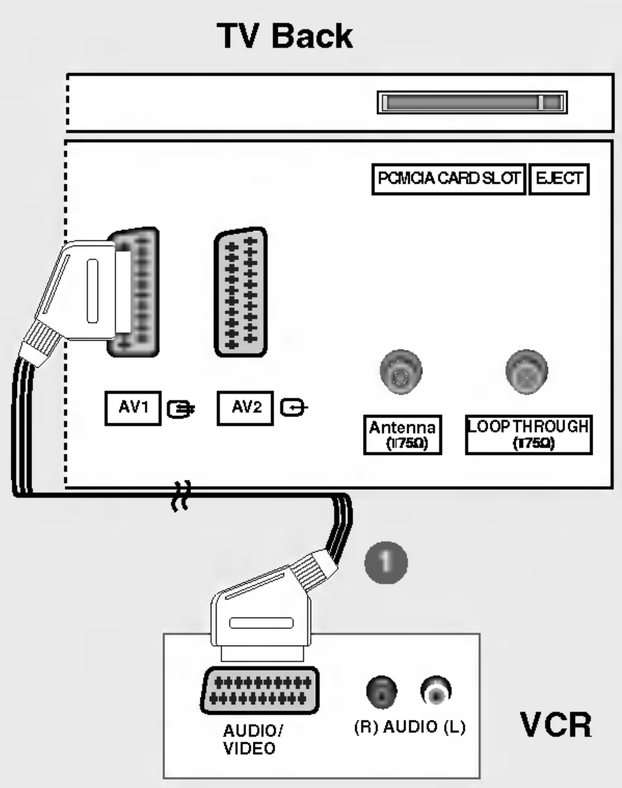
- **To avoid picture noise (interference), leave an adequate distance between the VCR and TV.**
- **Typically a frozen still picture from a VCR appears. If the 4:3 picture format is used; the fixed images on the sides of the screen may remain visible on the screen.**

When connecting with an antenna



1. Connect the RF out socket of the VCR to the **Antenna** socket on the set.
2. Connect the antenna cable to the RF antenna socket of the VCR.
3. Press the **PLAY** button on the VCR and match the appropriate programme between the TV and VCR for viewing.

When connecting with a Euro Scart

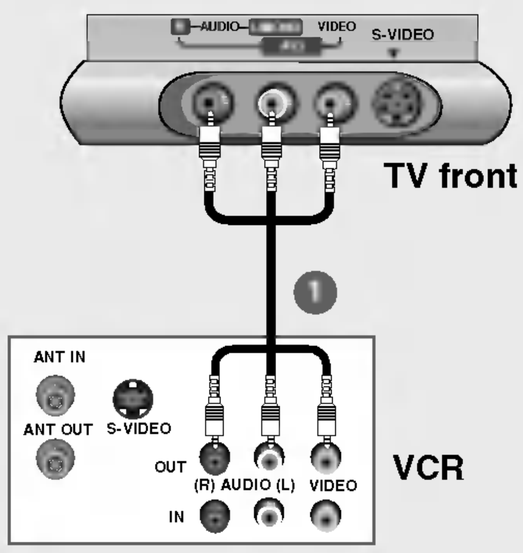


*** Please the use shield scart cable.**

1. Connect the Euro scart socket of the VCR to the **AV1** Euro scart socket on the set.
2. Insert a video tape into the VCR and press PLAY on the VCR. (Refer to the VCR owner's manual.)
3. Select **AV1** input source with using the **INPUT** button on the remote control.
   - If connected to **AV2** Euro scart socket, select **AV2** input source.

- If your VCR outputs an AV switching signal via the **AV1** or **AV2** Euro scart sockets, the set will switch to **AV1** input source automatically. But if you want to keep on watching TV mode, press the PR ▲ / ▼ or number buttons.
- You can also record programmes received by the TV on video tape.
- The signal type RGB (the signals red, green and blue) can only be selected for the **AV1** Euro scart socket and the **AV1** input source can be received. These signals are transmitted, for example, by a pay TV decoder, game machine or photo CD unit, etc and that digital signal can be recorded via **AV1** Euro scart socket.
- If the **AV1**, **2** Euro scart sockets have been connected to the VCRs simultaneously, only the **AV2** input source can be received.

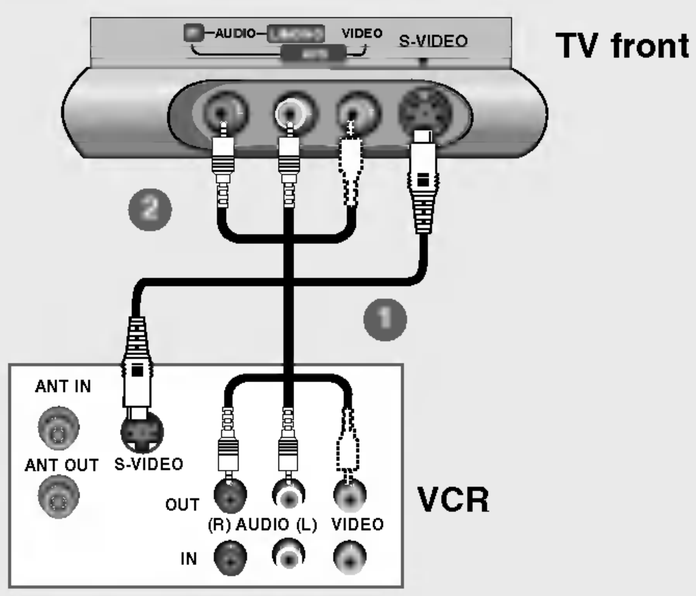
When connecting with a RCA cable



1. Connect the **AUDIO/VIDEO** jacks between TV and VCR. Match the jack colours (Video = yellow, Audio Left = white, and Audio Right = red)
2. Insert a video tape into the VCR and press PLAY on the VCR. (Refer to the VCR owner's manual.)
3. Select **AV3** input source with using the **INPUT** button on the remote control.

- If you have a mono VCR, connect the audio cable from the VCR to the **AUDIO L/MONO** jack of the set.

When connecting with an S-Video cable



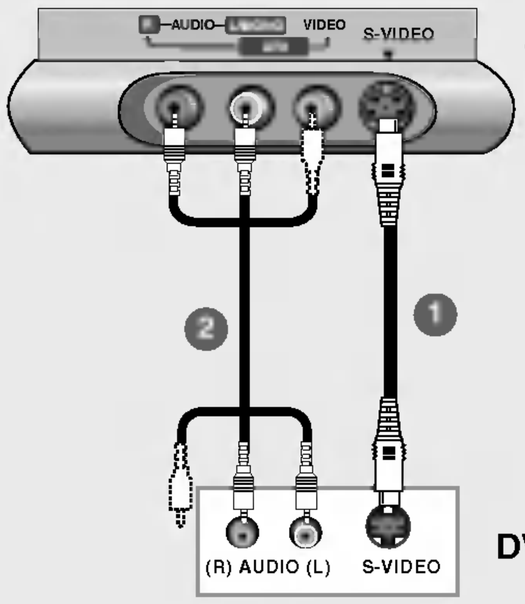
1. Connect the S-VIDEO output of the VCR to the S-VIDEO input on the set. The picture quality is improved; compared to normal composite (RCA cable) input.
2. Connect the audio outputs of the VCR to the **AUDIO** input jacks on the set.
3. Insert a video tape into the VCR and press PLAY on the VCR. (Refer to the VCR owner's manual.)
4. Select **S-Video** input source with using the **INPUT** button on the remote control.

Do not connect to both Video and S-Video at the same time.

NOTE: All cables shown are not included with the TV.

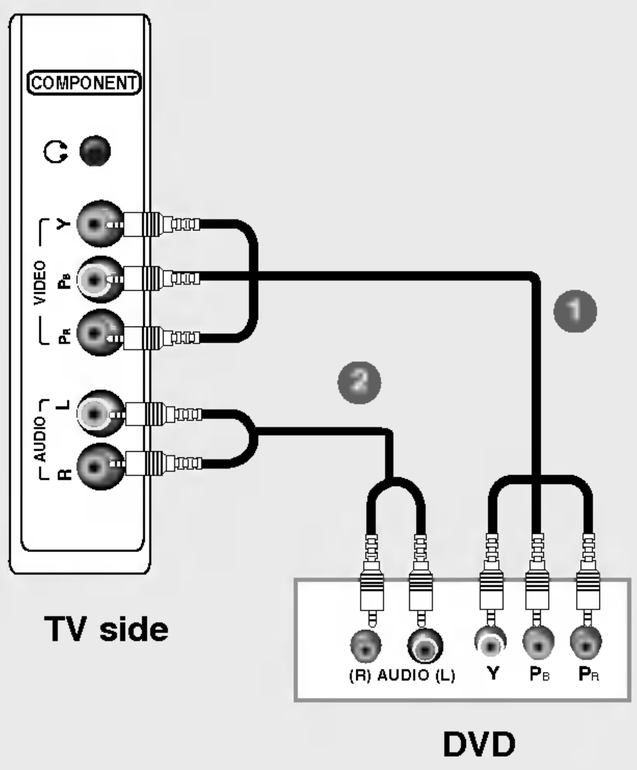
DVD Setup

When connecting with a S-Video cable



1. Connect the S-VIDEO output of the DVD to the **S-VIDEO** input on the set.
2. Connect the audio outputs of the DVD to the **AUDIO** input jacks on the set.
3. Turn on the DVD player, insert a DVD.
4. Select **S-Video** input source with using the **INPUT** button on the remote control.
5. Refer to the DVD player's manual for operating instructions.

When connecting with a component cable

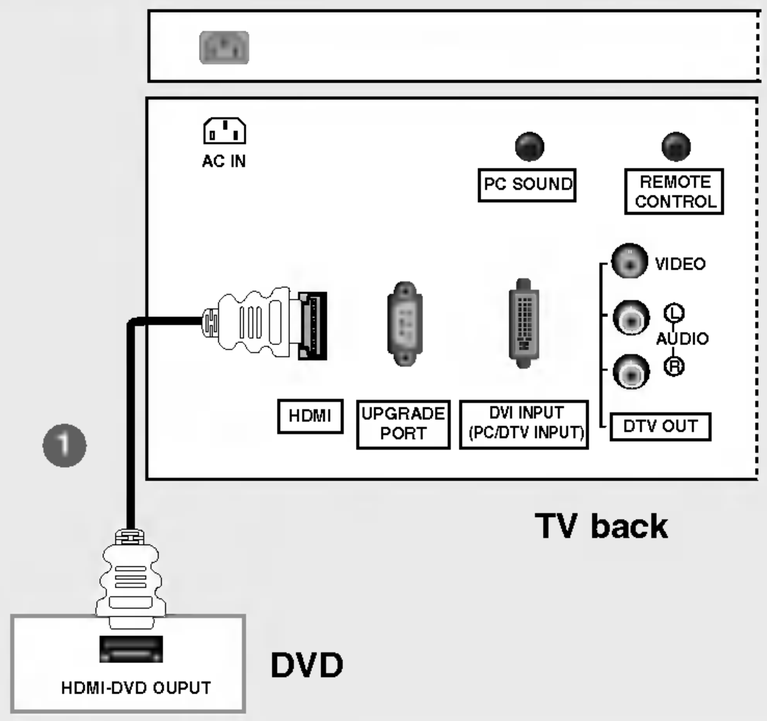


1. Connect the video outputs (Y, PB, PR) of the DVD to the **COMPONENT VIDEO (Y, PB, PR)** jacks on the set.
2. Connect the audio outputs of the DVD to the **COMPONENT AUDIO** jacks on the set.
3. Turn on the DVD player, insert a DVD.
4. Select **Component** input source with using the **INPUT** button on the remote control.
5. Refer to the DVD player's manual for operating instructions.

- **Component Input ports**
  To get better picture quality, connect a DVD player to the component input ports as shown below.

Component ports on the TV	Y	PB	PR
Video output ports on DVD player	Y	Pb	Pr
	Y	B-Y	R-Y
	Y	Cb	Cr
	Y	PB	PR

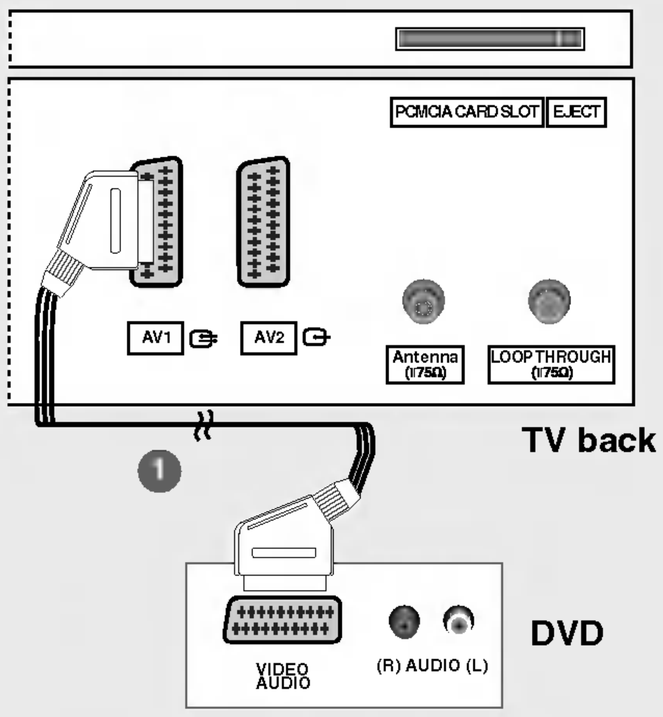
When connecting with a HDMI cable



1. Connect the HDMI output of the DVD to the **HDMI** jack on the set.
2. Select **HDMI** input source with using the **INPUT** button on the remote control.
3. Refer to the DVD player's manual for operating instructions.

- TV can receive the video and audio signal simultaneously with using a HDMI cable.

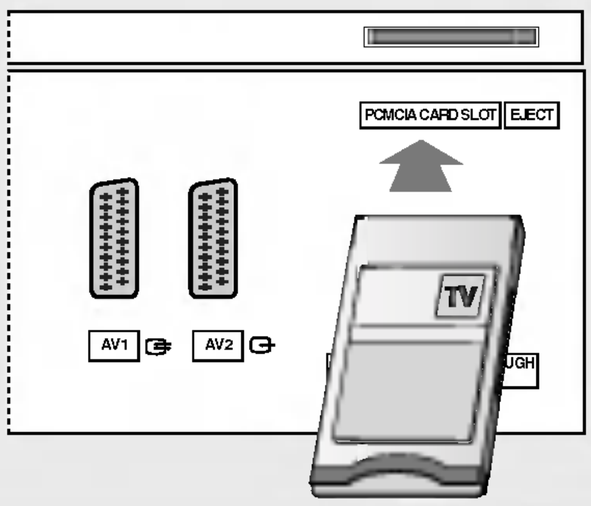
When connecting with a Euro scart



1. Connect the Euro scart socket of the DVD to the **AV1** Euro scart socket on the set.
2. Turn on the DVD player, insert a DVD.
3. Select **AV1** input source with using the **INPUT** button on the remote control.
   - If connected to **AV2** Euro scart socket, select **AV2** input source.

*** Please use the shield scart cable.**

Insertion of CI Module



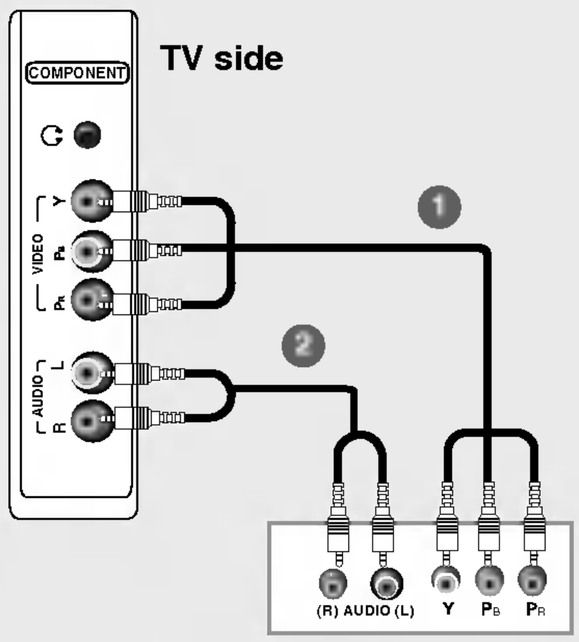
- To view the scrambled (pay) services in digital TV mode

Insert the CI Module to **PCMCIA** (Personal Computer Memory Card International Association) **CARD SLOT** of TV as shown.
For further information, see p.43.

HDSTB Setup

- **This TV can receive Digital signals without an external digital set-top box. However, if you do receive Digital signals from a digital set-top box or other digital external device, refer to the figure as shown.**

When connecting with a component cable

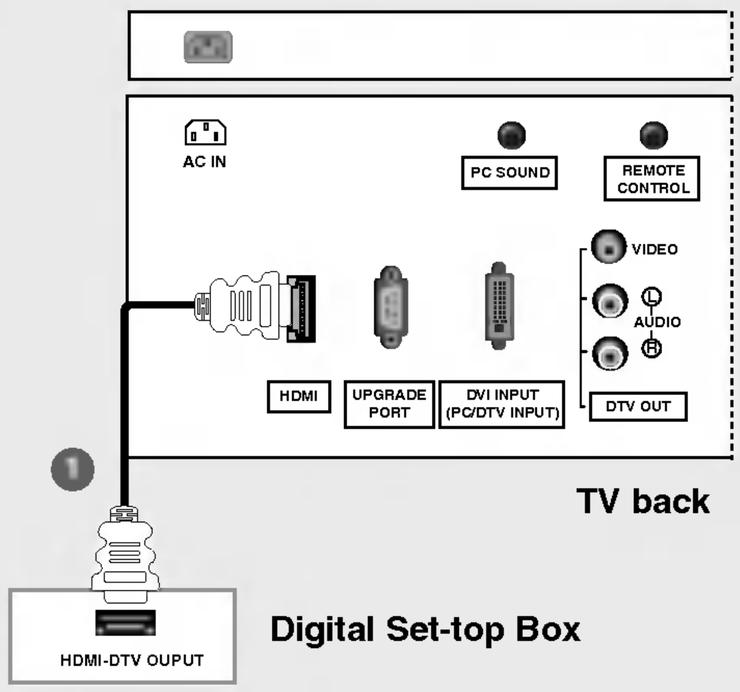


Digital Set-top Box

1. Connect the video outputs (Y, PB, PR) of the digital set-top box to the **COMPONENT VIDEO (Y, PB, PR)** jacks on the set.
2. Connect the audio outputs of the digital set-top box to the **COMPONENT AUDIO** jacks on the set.
3. Turn on the digital set-top box. (Refer to the owner's manual for the digital set-top box.)
4. Select **Component** input source with using the **INPUT** button on the remote control.

Signal	Component	DTV
480i/576i	Yes	No
480p/720p/1080i	Yes	Yes

When connecting with a HDMI cable



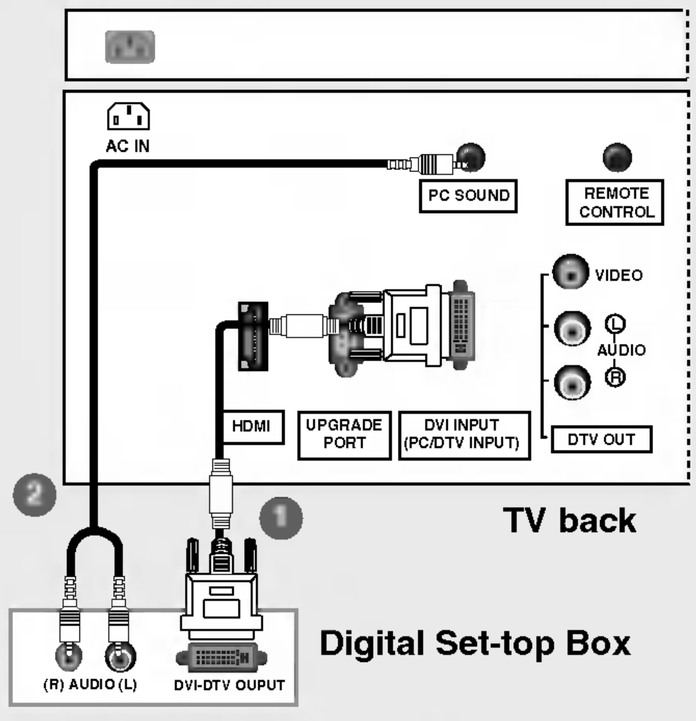
Digital Set-top Box

1. Connect the HDMI output of the digital set-top box to the **HDMI** jack on the set.
2. Turn on the digital set-top box. (Refer to the owner's manual for the digital set-top box.)
3. Select **HDMI** input source with using the **INPUT** button on the remote control.

Signal	HDMI
480p/576p/720p/1080i	Yes

- TV can receive the video and audio signal simultaneously with using a HDMI cable

When connecting with a DVI cable



Digital Set-top Box

1. Connect the DVI output of the digital set-top box to the **DVI INPUT (PC/DTV INPUT)** jack on the set.
2. Connect the audio outputs of the set-top box to the **PC SOUND** jack on the set.
3. Turn on the digital set-top box. (Refer to the owner's manual for the digital set-top box.)
4. Select **DVI DTV** input source with using the **INPUT** button on the remote control.

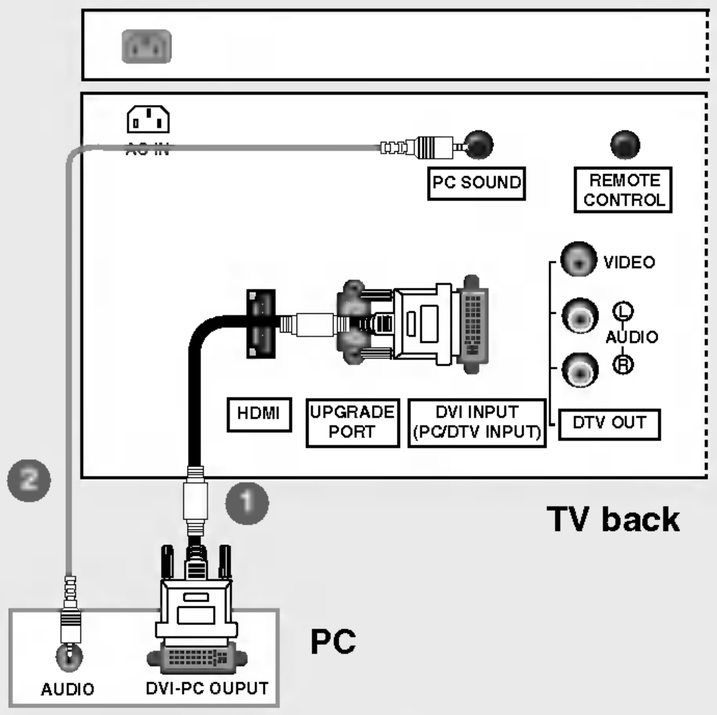
Signal	DVI
480p/576p/720p/1080i	Yes

- It's impossible to receive the RGB-DTV input source via **DVI INPUT** jack.

PC Setup

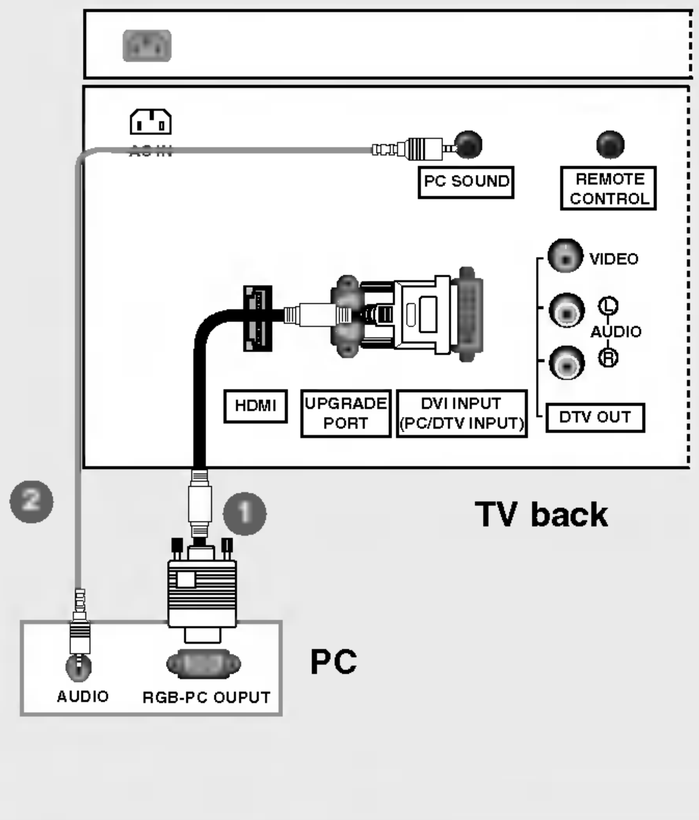
- **This TV provides Plug and Play capability, meaning that the PC adjusts automatically to the TV's settings. The TV sends configuration information (EDID) to the PC using the Video Electronics Standard Association (VESA) Display Data Channel (DDC) protocol.**

When connecting with a DVI cable



1. Connect the DVI output of the PC to the **DVI INPUT (PC/DTV INPUT)** jack on the set.
2. Connect the PC audio outputs to the **PC SOUND** jack on the set.
3. Turn on the PC and the set.
4. Select **DVI PC** input source with using the **INPUT** button on the remote control.

When connecting with a D-sub to DVI cable



1. Connect the RGB output of the PC to the **DVI INPUT (PC/DTV INPUT)** jack on the set.
2. Connect the PC audio outputs to the **PC SOUND** jack on the set.
3. Turn on the PC and the set.
4. Select **DVI PC** input source with using the **INPUT** button on the remote control.

1. To get the best picture quality, adjust the PC graphics card to 1024x768, 60Hz.
2. If using a sound card, adjust the PC sound as required.
3. Check the image on your TV. There may be noise associated with the resolution, vertical pattern, contrast or brightness in PC mode. If noise is present, change the PC mode to another resolution, change the refresh rate to another rate or adjust the brightness and contrast on the menu until the picture is clear. If the refresh rate of the PC graphic card can not be changed, change the PC graphic card or consult the manufacturer of the PC graphic card.
4. Avoid keeping a fixed image on the TV's screen for a long period of time. The fixed image may become permanently imprinted on the screen.
5. The synchronization input form for Horizontal and Vertical frequencies is separate.

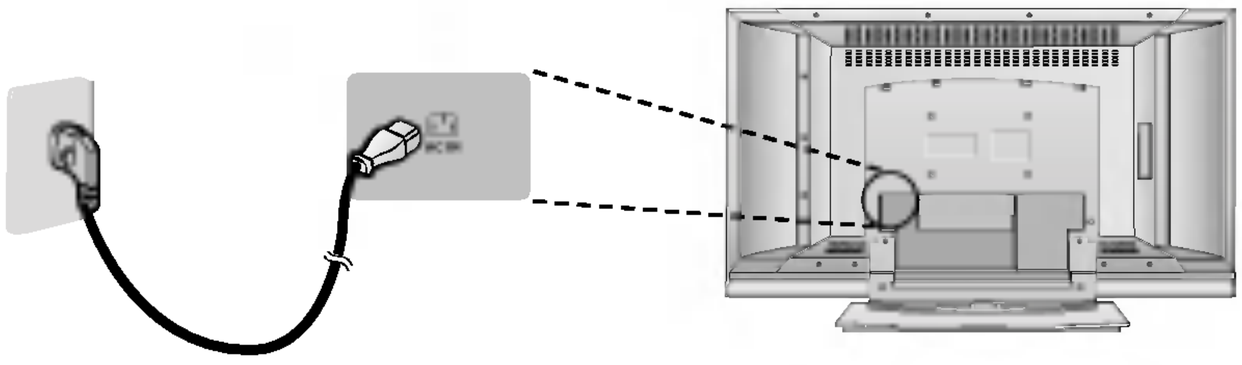
* DPM (Display Power Management) Mode
  When the PC is in the power saving mode, automatically the set goes into DPM mode to save the energy.
* Use the supplied signal cable with the set. Otherwise, DPM mode may not work.

Monitor Display Specifications

Resolution	Horizontal Frequency (kHz)	Vertical Frequency (Hz)
720x400	31.469KHz	70.08Hz
640x480	31.469KHz	59.94Hz
	37.861KHz	72.80Hz
	37.500KHz	75.00Hz
800x600	35.156KHz	56.25Hz
	37.879KHz	60.31Hz
	48.077KHz	72.18Hz
	46.875KHz	75.00Hz
1024x768	48.363KHz	60.00Hz
	56.476KHz	70.06Hz
	60.023KHz	75.02Hz
1280x768	47.693KHz	60.00Hz
1360x768	49.020KHz	60.00Hz

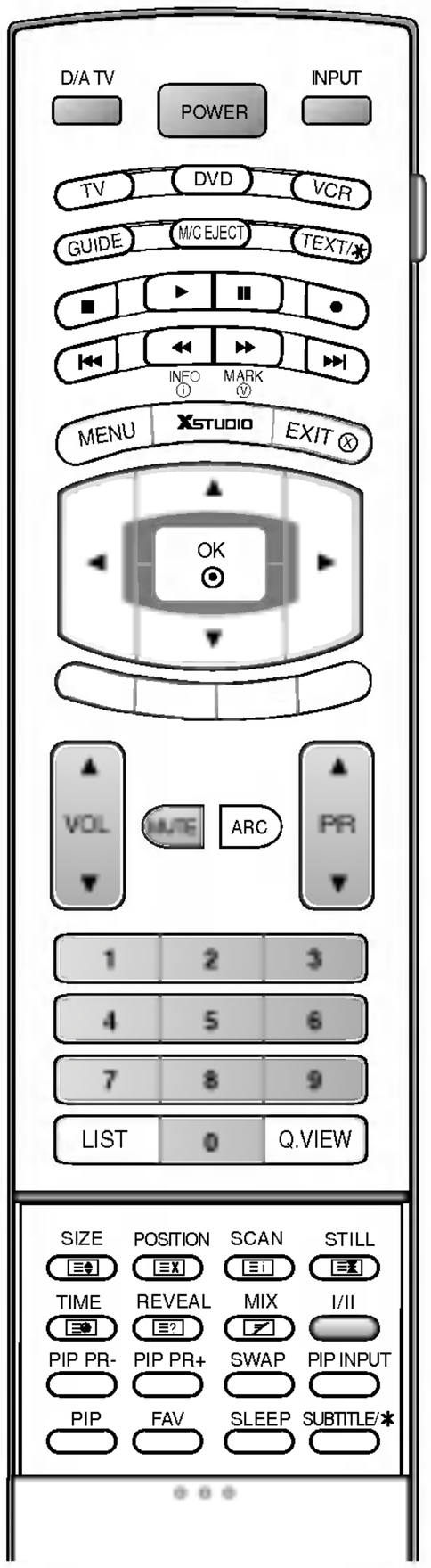
Power Cord Connection

- Connect the power cord correctly as shown.



Operation

Basic operation



Turning on the TV

1. Connect the power cord correctly. Now, the TV is switched to standby mode.
2. Press the **ON/OFF**, **INPUT**, **PR ▲ / ▼** button on the TV or press the **POWER**, **INPUT**, **D/V TV**, **PR ▲ / ▼**, **Number (0 ~ 9)** button on the remote control and then the TV will switch on.

Volume Adjustment

1. Press the **VOL ▲ / ▼** button to adjust the volume.
2. If you want to switch the sound off, press the **MUTE** button.
3. You can cancel this function by pressing the **MUTE**, **VOL ▲ / ▼**, or **I/II** button.

Programme Selection

Press the **PR ▲ / ▼** or NUMBER buttons to select a programme number.



- If you intend to be away on vacation, disconnect the power plug from the wall power outlet.

On Screen Menus Selection and Adjustment

How to adjust the OSD screen

1. Press the **MENU** button and then ▲ / ▼ button to select each menu.
2. Press the ► button and then use ▲ / ▼ / ◄ / ► button to display the available menus.
   Note: The OSD display differs from DTV mode and analog mode. Refer to below figure.

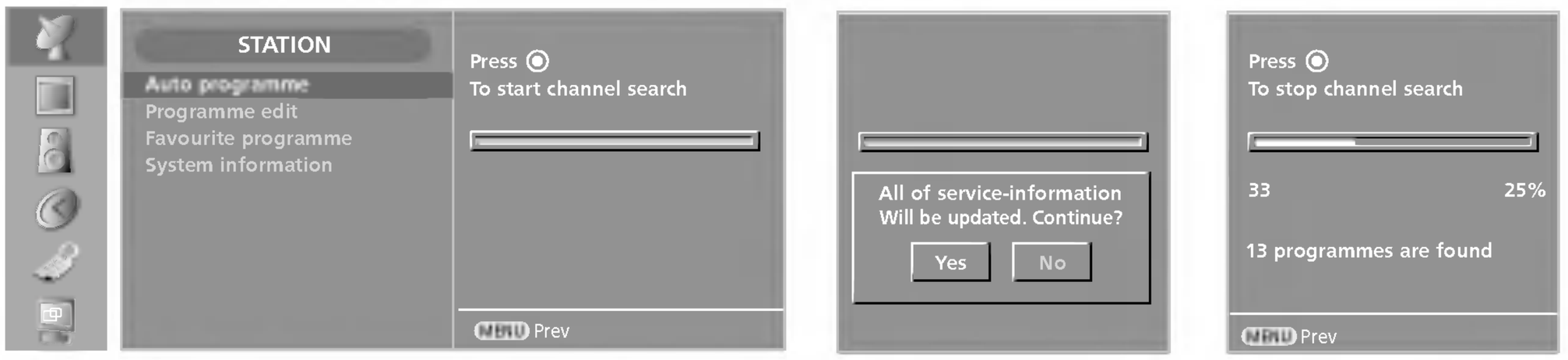
OSD Display

Menu ICON	Sub Menu Function	
	DTV mode	Analog TV mode
STATION	Auto programme Programme edit Favourite programme System information	Auto programme Manual programme Programme edit Favourite programme
PICTURE	PSM CSM XD AV2 Out	
SOUND	SSM Balance AVL SRS WOW Audio language	SSM Balance AVL SRS WOW
TIME	Clock Off time On time Auto sleep Sleep timer	
SPECIAL	Input Child lock Logo display lamp Software update Subtitle language CI Information	Input Child lock Logo display lamp
	DVI mode	
SCREEN	Position Clock Phase Auto configure WXGA	

- The OSD (On Screen Display) function enables you to adjust the screen status conveniently since it provides graphical presentation.
- In this manual, the OSD (On Screen Display) may be different from your TV's because it is just example to help the TV operation.

Station Menu Options (In Digital Mode)

Auto programme

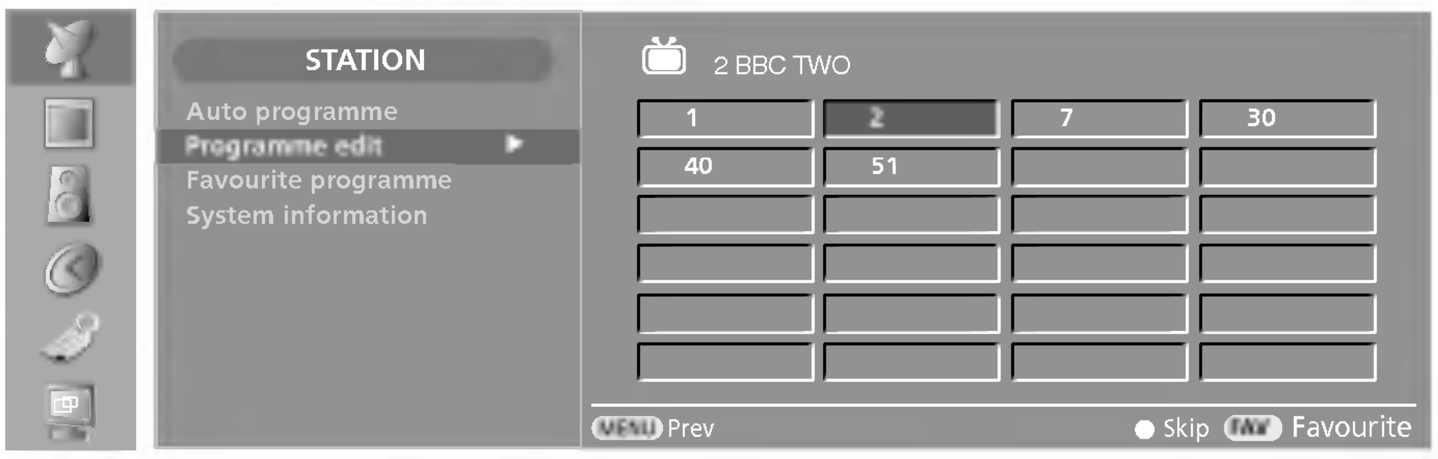


- *Use it to automatically find and store all of the programmes.*
- *When you start auto programming in digital mode, all the stored service information will be deleted.*

1. Press the **MENU** button and then ▲ / ▼ button to select the **STATION** menu.
2. Press the ► button and then ▲ / ▼ button to select **Auto programme**.
3. Press the ► button and then **OK** button to begin auto programming. The message **"All of service-information will be updated. Continue?"** will appear. If you want to keep on auto programming select **YES** with using the ◄ / ► button. Then, press the **OK** button. Otherwise select **NO**.
   To stop auto programming, press the **MENU** button.
4. Press the **EXIT** button to return to TV viewing or press the **MENU** button to return to the previous menu.

Programme Edit

- *This function enables you to skip the stored programmes or to set favourite programmes.*



1. Press the **MENU** button and then ▲ / ▼ button to select the **STATION** menu.
2. Press the ► button and then ▲ / ▼ button to select **Programme edit**.
3. Press the ► button to enter the **Programme edit** menu.

■ **Skipping a programme number**

a. Select a programme number to be skipped with ▲ / ▼ / ◄ / ► button.
b. Press the **BLUE** button. The skipped programme number turns to blue.
c. Press the **BLUE** button to release the skipped programme.
d. When a programme number is skipped it means that you will be unable to select it using the **PR** ▲ / ▼ button during normal TV viewing. If you want to select the skipped programme, directly enter the programme number with the NUMBER buttons or select it in the programme edit or table menu.

■ **Selecting Favourite Programme**

a. Select your favourite programme number with ▲ / ▼ / ◄ / ► button.
b. Press the **FAV** button. The selected programme will be added to the favourite programme list and heart-mark will appear in back of that programme number.

4. Press the **EXIT** button to return to TV viewing or press the **MENU** button to return to the previous menu.

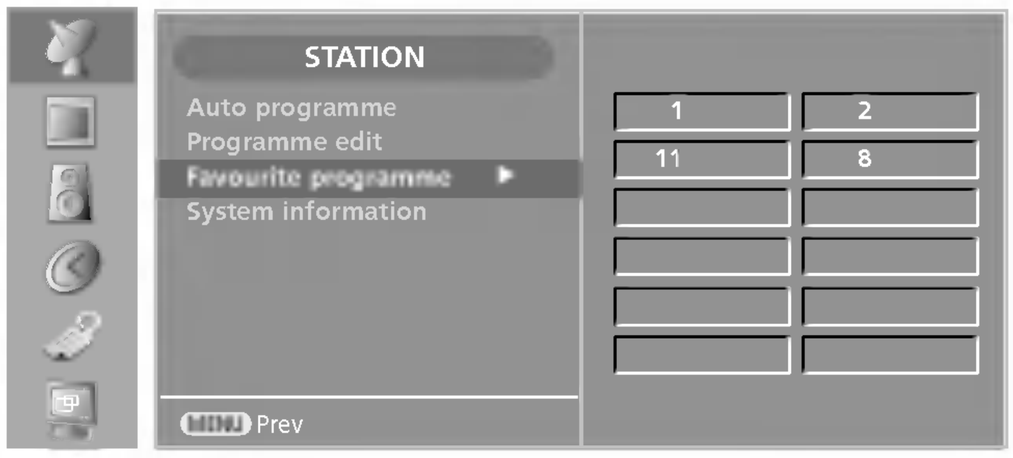
Mini Glossary

- Displayed when the TV Programme.
- Displayed when the RADIO Programme.
- Displayed when the Teletext Programme.

Station Menu Options continued (In Digital Mode)

Favourite Programme List

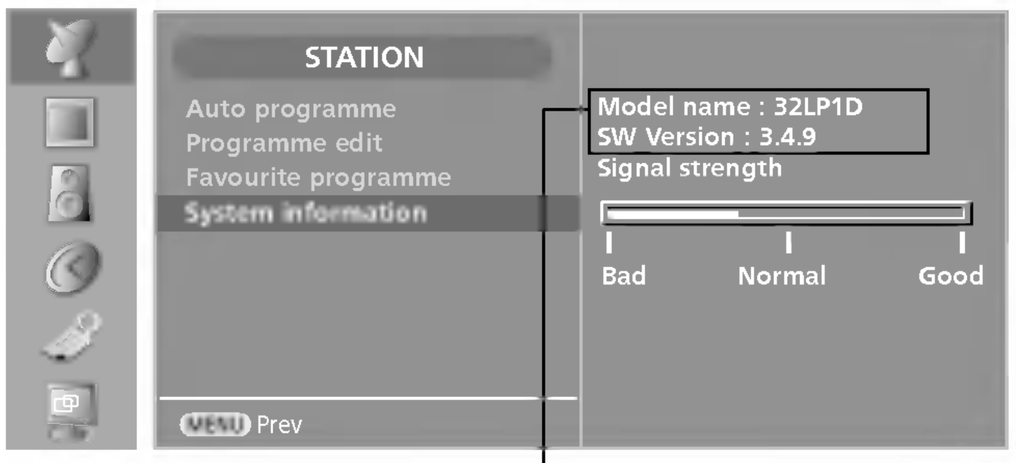
- *Repeatedly press the **FAV** button to select stored favourite programmes in normal TV viewing.*



1. Press the **MENU** button and then ▲ / ▼ button to select the **STATION** menu.
2. Press the ► button and then ▲ / ▼ button to select **Favourite programme**.
3. Press the ► button. Favourite programme list is displayed.
4. Press the ▲ / ▼ / ◄ / ► button to select the desired programme.
5. Press the **OK** button to display the selected programme.

System Information

- *Shows how strong your DTV signal.*
- *The higher the signal strength, the less likely you are to experience picture degradation.*
- *If signal strength is weak, check the RF cable or antenna direction.*



- 37 inch: 37LP1D
- 42 inch: 42LP1D

* This OSD is only for illustration and the options are different according to the models.

1. Press the **MENU** button and then ▲ / ▼ button to select the **STATION** menu.
2. Press the ► button and then ▲ / ▼ button to select **System information**. You can see the model name, Software version, and signal strength on screen.
3. Press the **EXIT** button to return to TV viewing or press the **MENU** button to return to the previous menu.

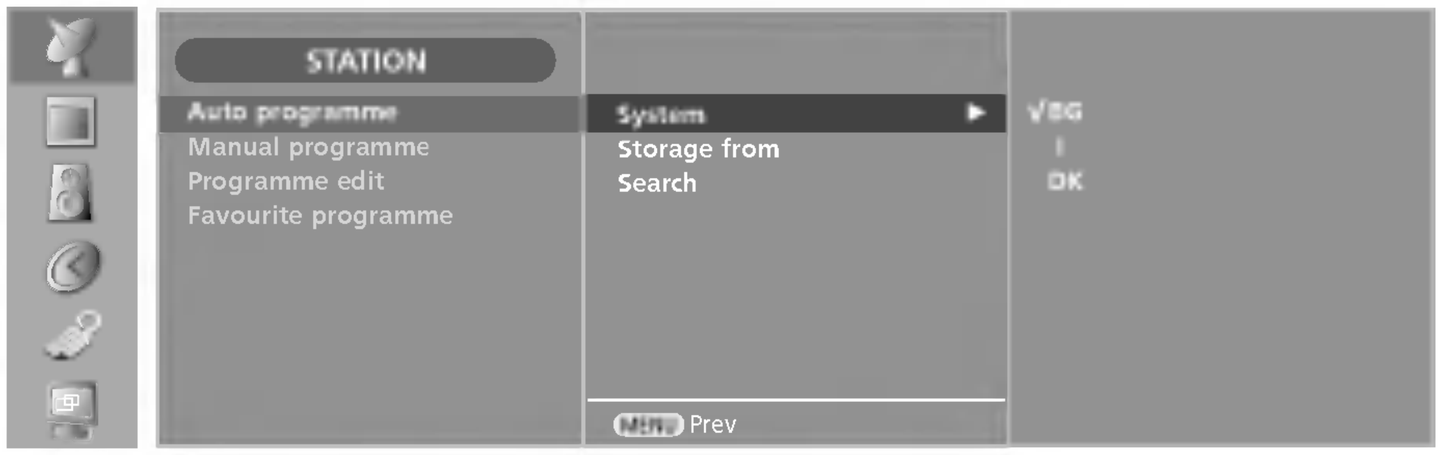
Station Menu Options (In Analogue Mode)

Auto Programme Tuning

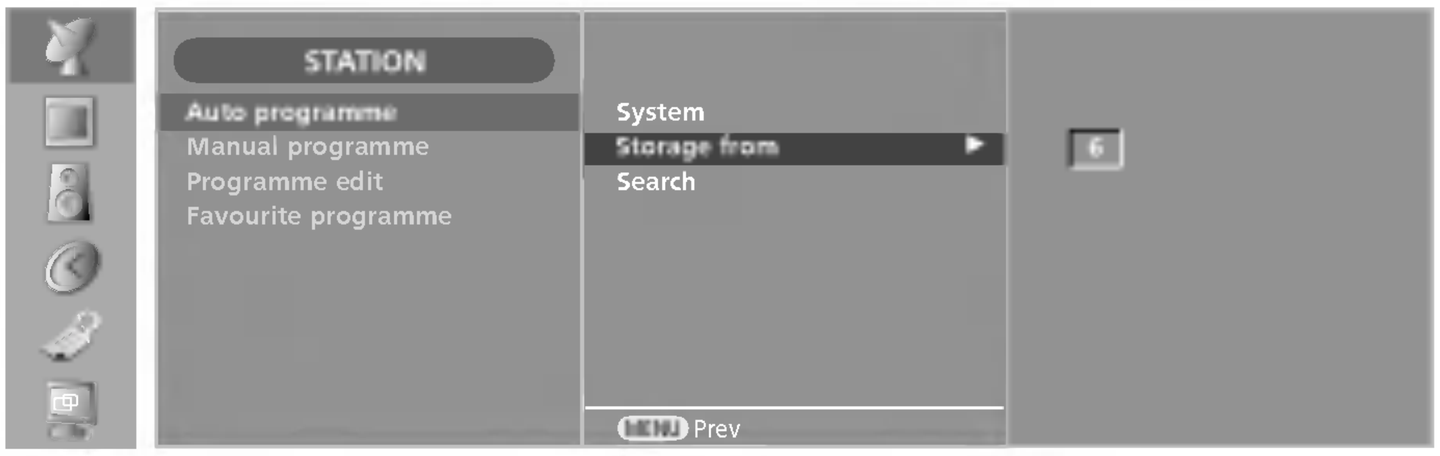
- *Up to 100 TV stations can be stored by programme numbers (0 to 99). Once you have preset the stations, you will be able to use the ▲ / ▼ or NUMBER buttons to scan the stations you have programmed. Stations can be tuned using automatic or manual modes.*

- *All stations that can be received are stored by this method. It is recommended that you use auto programme during installation of this set.*

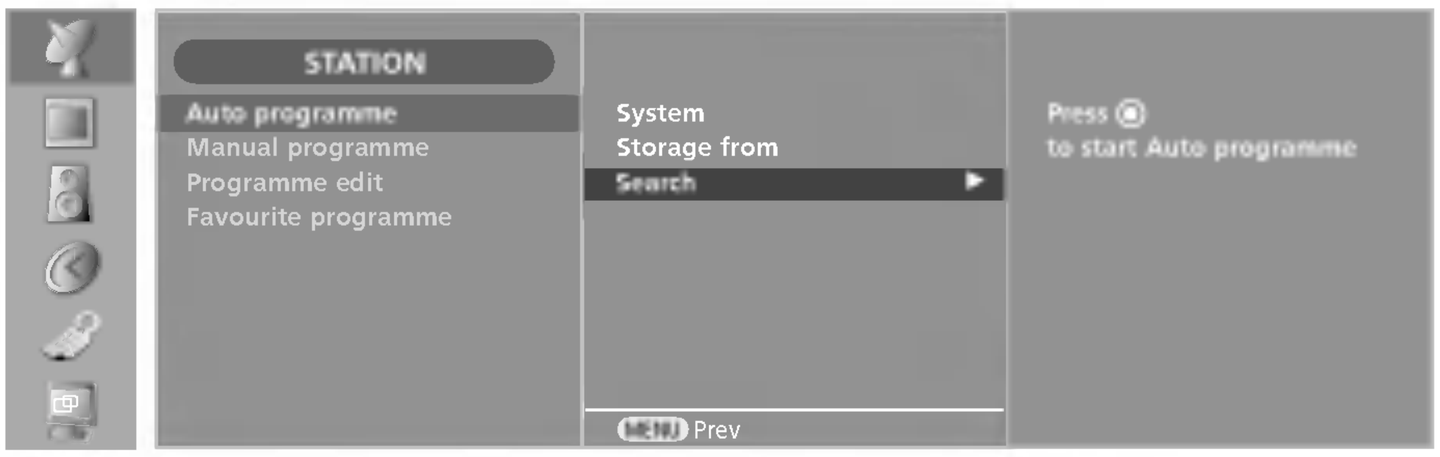
1. Press the **MENU** button and then ▲ / ▼ button to select the **STATION** menu.
2. Press the ► button and then ▲ / ▼ button to select **Auto programme**.
3. Press the ► button and then ▲ / ▼ button to select **System**.



4. Press the ► button and then ▲ / ▼ button to select a TV system (**BG**, **I**, **DK**).
5. Press the **OK** button and then ▲ / ▼ button to select **Storage from**.



6. Press the ► button. Select the beginning programme number with ▲ / ▼ button or NUMBER buttons. If you use NUMBER buttons, any number under 10 is entered with a numeric '0' in front of it, i.e.'**05**' for 5.
7. Press the **OK** button and then ▲ / ▼ button to select **Search**.



8. Press the **OK** button to begin auto programming. All receivable stations are stored. To stop auto programming, press the **MENU** button.
   When auto programming is completed, the **PROGRAMME LIST** menu appears on the screen.
9. Press the **EXIT** button to return to TV viewing or press the **MENU** button to return to the previous menu.

Mini Glossary

BG PAL B/G (Europe/East Europe)
I PAL I/II (U.K./Ireland)
DK PAL D/K (East Europe)

Mini Glossary

Programme number C
V/UHF 01-69
Programme number S
Cable 01-47



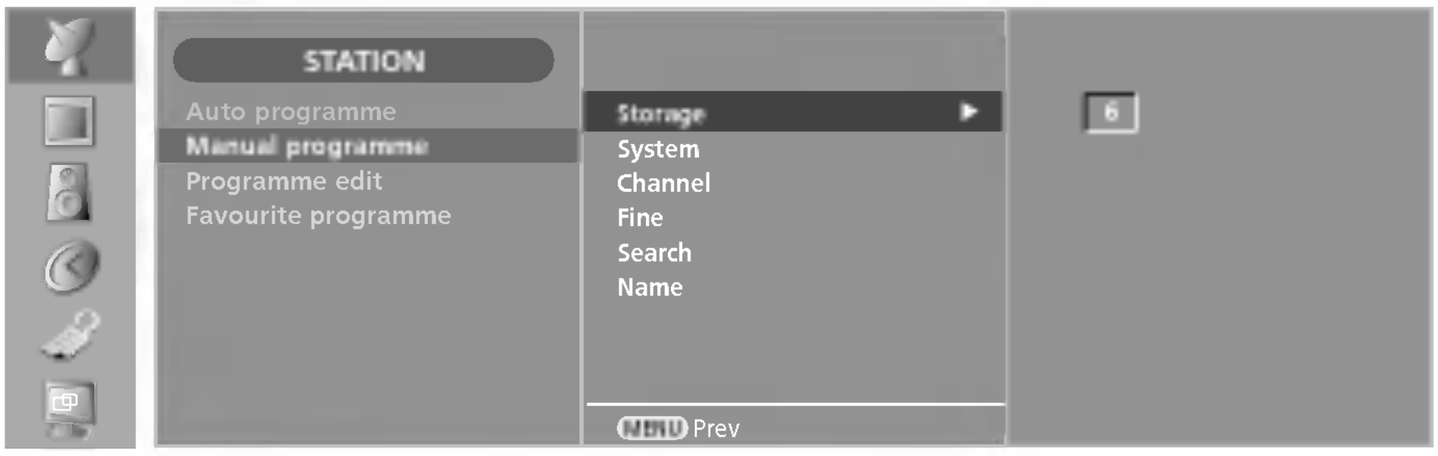
The station name is stored for stations which broadcast VPS (Video Programme Service), PDC (Programme Delivery Control) or TELETEXT data. If no station name can be assigned to a station, the channel number is assigned and stored as **C** (V/UHF 01-69) or **S** (Cable 01-47), followed by a number.

Station Menu Options continued (In Analogue Mode)

Manual Programme Tuning

- *Manual programme lets you manually tune and arrange the stations in whatever order you desire.*

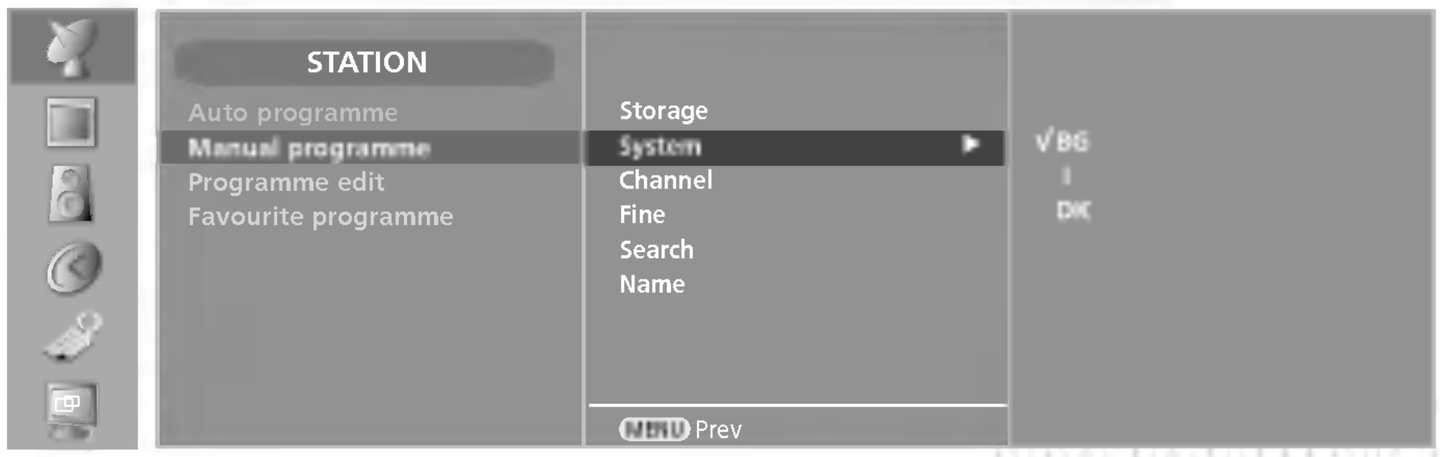
1. Press the **MENU** button and then ▲ / ▼ button to select the **STATION** menu.
2. Press the ► button and then ▲ / ▼ button to select **Manual programme**.
3. Press the ► button and then ▲ / ▼ button to select **Storage**.



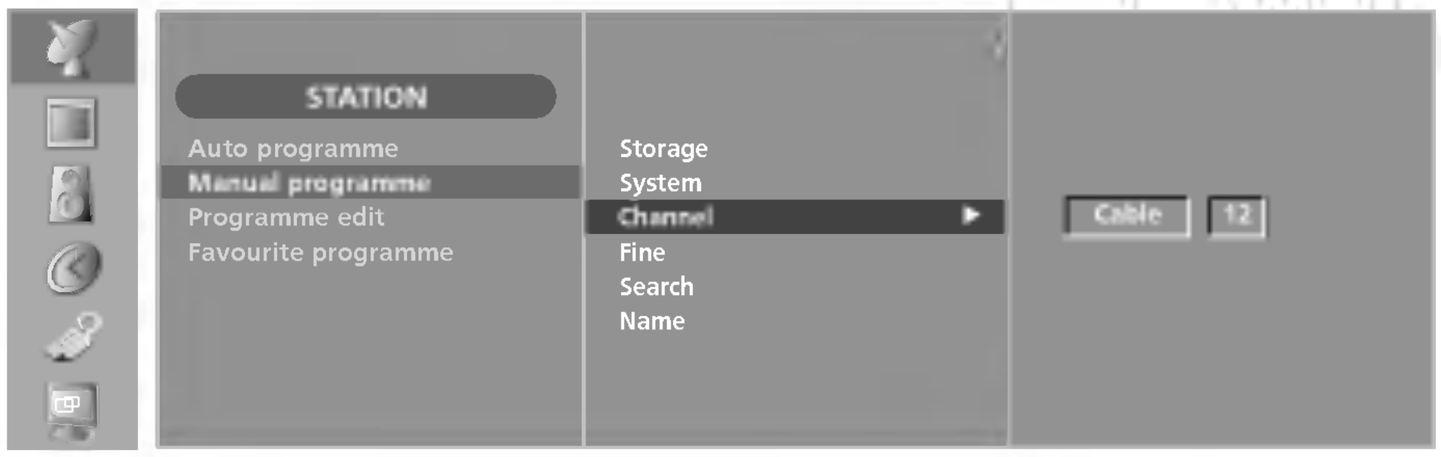
Mini Glossary

BG	PAL B/G (Europe/East Europe)
I	PAL I/II (U.K./Ireland)
DK	PAL D/K (East Europe)

4. Press the ► button. Select the desired programme number (0 to 99) with ▲ / ▼ button or NUMBER buttons. If you use NUMBER buttons, any number under 10 is entered with a numeric '0' in front of it, i.e.'**05**' for 5.
5. Press the **OK** button.
6. Press the ▲ / ▼ button to select **System**.



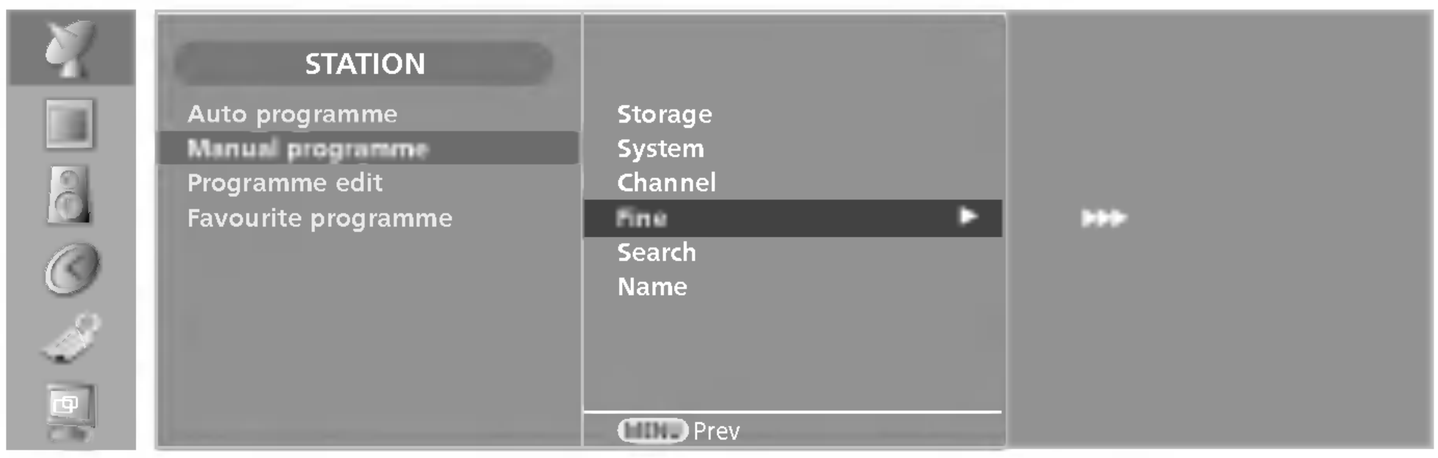
7. Press the ► button and then ▲ / ▼ button to select a TV system (**BG**, **I**, **DK**).
8. Press the **OK** button.
9. Press the ▲ / ▼ button to select **Channel**.



10. Press the ► button and then ▲ / ▼ button to select **V/UHF** or **Cable**.
11. Press the ► button and then select the channel number directly with the number buttons. Any number under 10 is entered with a numeric '0'in front of it, i.e. '**05**' for 5.
12. Press the **OK** button and then ▲ / ▼ button to select **Search**.
13. Press the ► button and then ◄ / ► button to commence searching. If a station is found the search will stop.
14. To store another station, repeat steps 3 to 13.

Fine Tuning

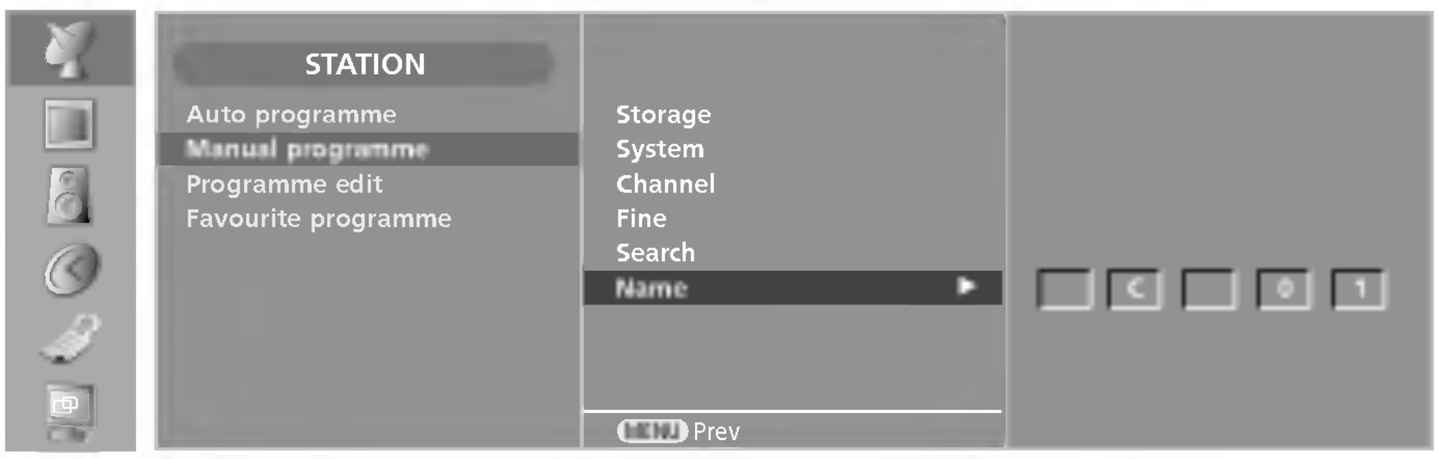
- *Normally fine tuning is only necessary if reception is poor.*
- *The finely tuned programme will be indicated by a yellow number during programme selection.*



1. Press the **MENU** button and then ▲ / ▼ button to select the **STATION** menu.
2. Press the ► button and then ▲ / ▼ button to select **Manual programme**.
3. Press the ► button and then ▲ / ▼ button to select **Fine**.
4. Press the ► button and then ◄ / ► button to fine tune for the best picture and sound.
5. Press the **OK** button to store it.
6. Press the **EXIT** button to return to TV viewing or press the **MENU** button to return to the previous menu.

Assigning a Station Name

- *You can assign a station name with five characters to each programme number.*

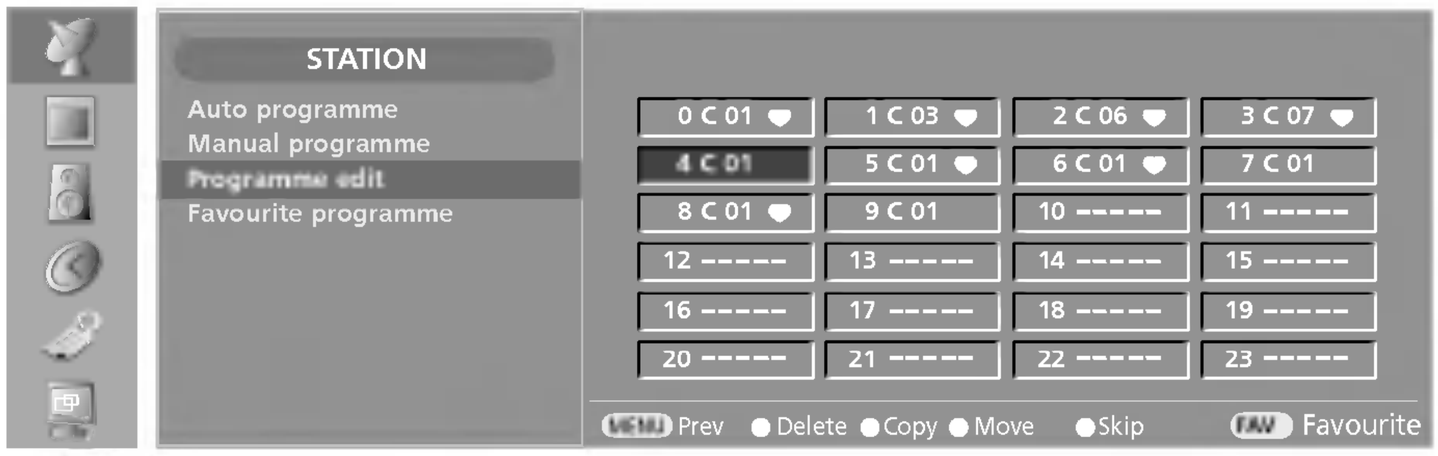


1. Press the **MENU** button and then ▲ / ▼ button to select the **STATION** menu.
2. Press the ► button and then ▲ / ▼ button to select **Manual programme**.
3. Press the ► button and then ▲ / ▼ button to select **Name**.
4. Press the ► button and then ▲ / ▼ button. You can use a the alphabet **A** to **Z**, the number **0** to **9**, **+**/ **-**, and blank.
5. Press the ◄ / ► button to select the position and make your choice of the second character, and so on.
6. Press the **OK** button to store it.
7. Press the **EXIT** button to return to TV viewing or press the **MENU** button to return to the previous menu.

Station Menu Options continued (In Analogue Mode)

Programme Edit

- *This function enables you to delete or skip the stored programmes. Also you can move some stations to other programme numbers or copy a blank station data into the selected programme number.*



1. Press the **MENU** button and then ▲ / ▼ button to select the **STATION** menu.
2. Press the ► button and then ▲ / ▼ button to select **Programme edit**.
3. Press the ► button.

■ **Deleting a programme**

a. Select a programme to be deleted with the ▲ / ▼ / ◄ / ► button.
b. Press the **RED** button twice. The selected programme is deleted, all the following programmes are shifted up one position.

■ **Copying a programme**

a. Select a programme to be copied with the ▲ / ▼ / ◄ / ► button.
b. Press the **GREEN** button. All the following programmes are shifted down one position.

■ **Moving a programme**

a. Select a programme to be moved with ▲ / ▼ / ◄ / ► button.
b. Press the **YELLOW** button.
c. Move the programme to the desired programme number with the ▲ / ▼ / ◄ / ► button.
d. Press the **YELLOW** button again to release this function.

■ **Skipping a programme number**

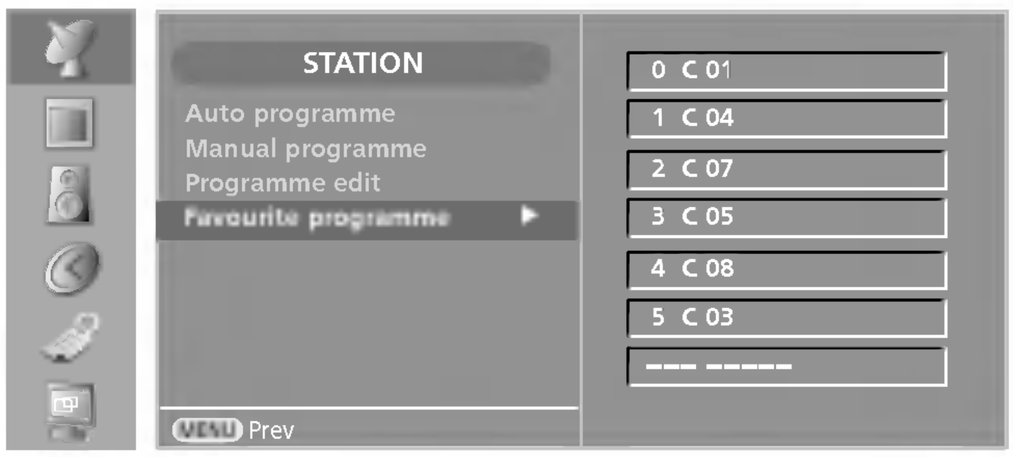
a. Select a programme number to be skipped with ▲ / ▼ / ◄ / ► button.
b. Press the **BLUE** button. The skipped programme number turns to blue.
c. Press the **BLUE** button to release the skipped programme.
d. When a programme number is skipped it means that you will be unable to select it using the **PR** ▲ / ▼ button during normal TV viewing. If you want to select the skipped programme, directly enter the programme number with the NUMBER buttons or select it in the programme edit or table menu.

■ **Selecting Favourite Programme**

a. Select your favourite programme number with ▲ / ▼ / ◄ / ► button.
b. Press the **FAV** button. The selected programme will be added to the favourite programme list and heart-mark will appear in back of that programme number.

Favourite Programme

- *This function lets you select your favourite programmes directly.*



1. Press the **MENU** button and then ▲ / ▼ button to select the **STATION** menu.
2. Press the ► button and then ▲ / ▼ button to select **Favourite programme**.
3. Press the ► button and then ▲ / ▼ button to select - - - - - - - - -.
4. Select a desired programme with the ◄ / ► button or NUMBER buttons. Any number under 10 is entered with a numeric '0'in front of it, i.e.'**05**' for 5.
5. To store another programme, repeat steps 3 to 4. You can store up to 7 programmes.
6. Press the **EXIT** button to return to TV viewing or press the **MENU** button to return to the previous menu.
   Repeatedly press the **FAV** button to select stored favourite programmes.

Calling the Programme Table

- *You can check the programmes stored in the memory by displaying the programme table.*



■ Displaying programme LIST

1. Press the **LIST** button to display the **PROGRAMME LIST** menu.
2. The programme list appears on the screen. One programme list contains 24 programmes.

- You may find some blue programmes. They have been set up to be skipped by auto programming or in the programme edit mode.
- Some programmes with the channel number shown in the programme LIST indicate there is no station name assigned.

■ Selecting a programme in the programme list

1. Select a programme with the ▲ / ▼ / ◄ / ► button.
2. Press the **OK** button. The set switches to the chosen programme number.

■ Paging through a programme list

There are 5 programme LIST pages which total contain 100 programmes.

1. Press the ▲ / ▼ / ◄ / ► button repeatedly to turns the pages.
2. Press the **EXIT** button to return to TV viewing.

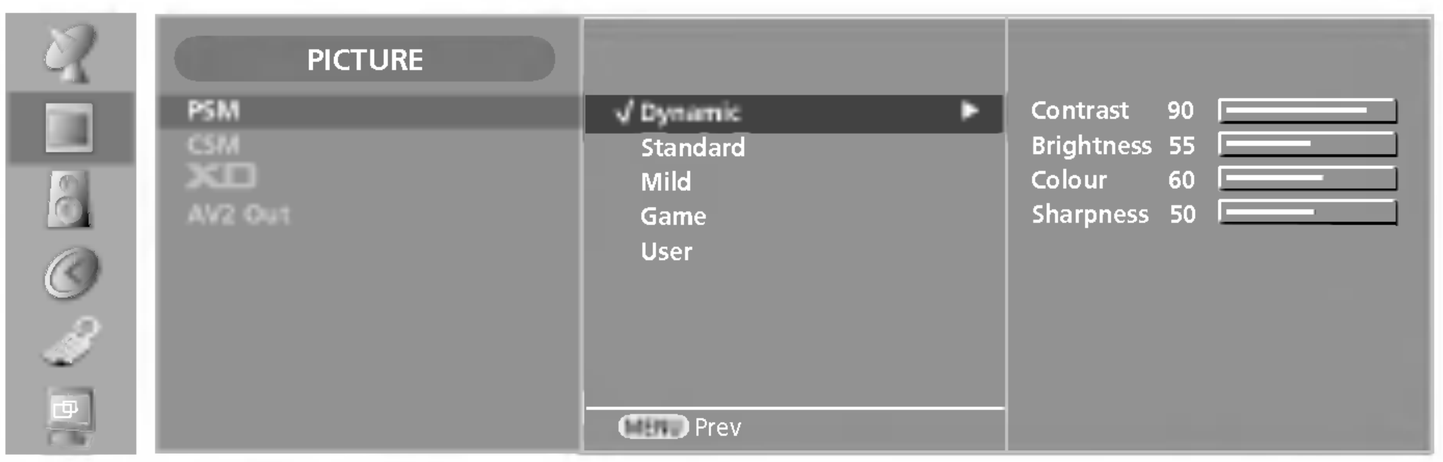
Picture Menu Options

PSM (Picture Status Memory)

- *PSM adjusts the TV for the best picture appearance. Select the preset value in the PSM menu based on the programme category.*

- *When adjusting User options (contrast, brightness, colour, and sharpness) manually, PSM automatically changes to* ***User****.*

- ***Dynamic****,* ***Standard****,* ***Mild****, and* ***Game*** *are programmed for optimum picture reproduction at the factory and cannot be changed.*



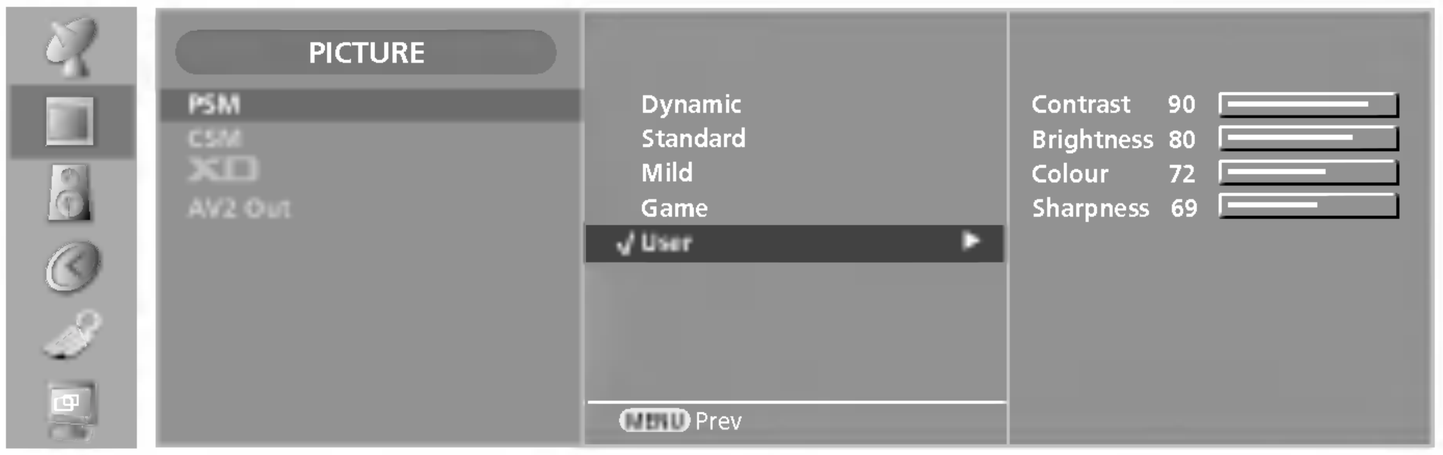
1. Press the **MENU** button and then ▲ / ▼ button to select the **PICTURE** menu.
2. Press the ► button and then ▲ / ▼ button to select **PSM**.
3. Press the ► button and then ▲ / ▼ button to select **Dynamic**, **Standard**, **Mild**, **Game**, or **User**.
4. Press the **EXIT** button to return to TV viewing or press the **MENU** button to return to the previous menu.

Mini Glossary

Dynamic	Select this option to display with a sharp image.
Standard	The most general and natural screen display status.
Mild	Select this option to display with a mild image.
Game	Select this option to enjoy dynamic image when playing a game.
User	Select this option to use the user-defined setting.

Picture Adjustment (PSM-User option)

- *You can adjust picture contrast, brightness, colour intensity, sharpness and tint (NTSC AV only) to the levels you prefer.*



1. Press the **MENU** button and then ▲ / ▼ button to select the **PICTURE** menu.
2. Press the ► button and then ▲ / ▼ button to select **PSM**.
3. Press the ► button and then ▲ / ▼ button to select **User**.
4. Press the ► button and then ▲ / ▼ button to select the desired picture option (**Contrast**, **Brightness**, **Colour**, or **Sharpness**).
5. Press the ◄ / ► button to make appropriate adjustments.
6. Press the **EXIT** button to return to TV viewing or press the **MENU** button to return to the previous menu.

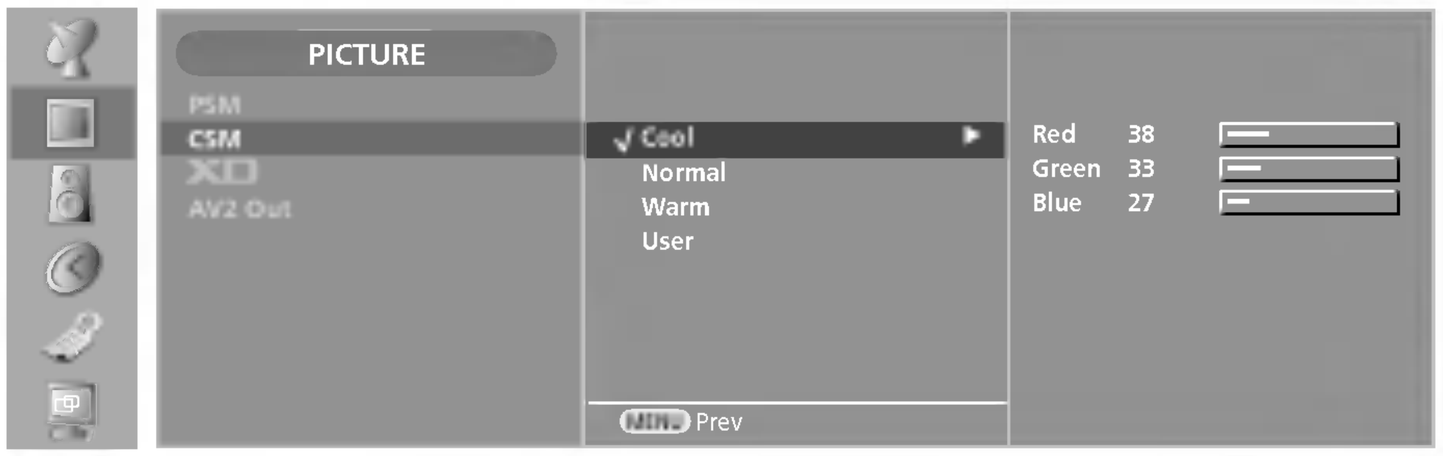
• Only **Contrast** and **Brightness** are displayed in PC mode.

Mini Glossary

Contrast	Adjusts the difference between the light and dark levels in the picture.
Brightness	Increases or decreases amount of white in the your picture.
Colour	Adjusts intensity of all colours.
Sharpness	Adjusts the level of crispness in the edges between the light and dark areas of the picture. The lower the level, the softer the image.
Tint	Adjusts the balance between red and green levels.

CSM (Colour Status Memory)

- *To initialize values (reset to default settings), select the **Normal** option.*
- *When adjusting colour temperature options (red, green, or blue) manually, CSM automatically changes to **User**.*
- *Choose one of three automatic colour adjustments. Set to warm to enhance hotter colours such as red, or set to cool to see less intense colours with more blue.*

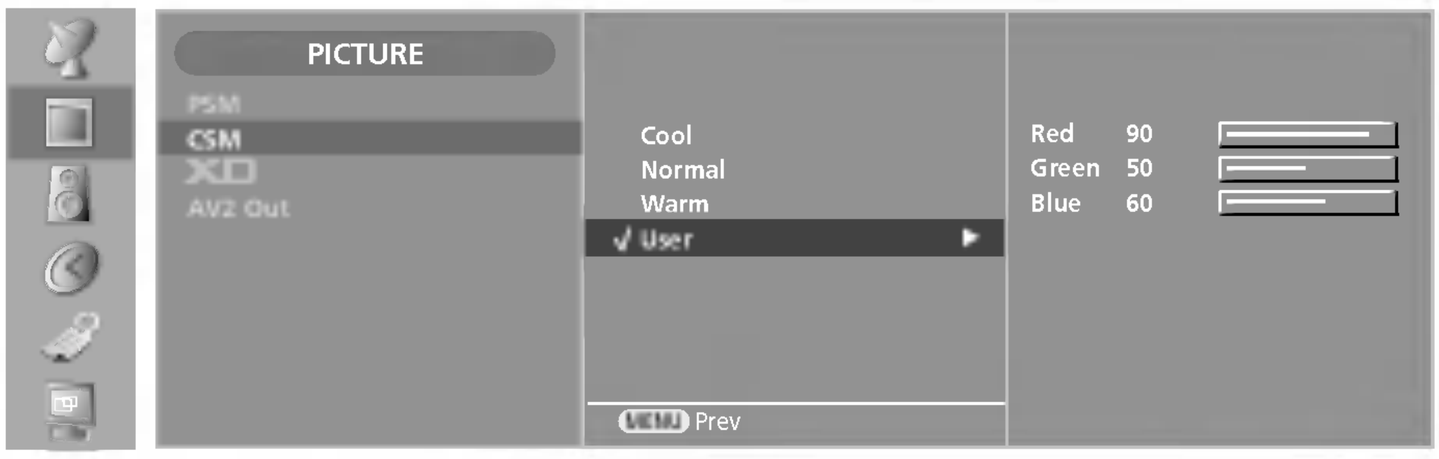


1. Press the **MENU** button and then ▲ / ▼ button to select the **PICTURE** menu.
2. Press the ► button and then ▲ / ▼ button to select **CSM**.
3. Press the ► button and then ▲ / ▼ button to select either **Cool**, **Normal**, **Warm**, or **User**.
4. Press the **EXIT** button to return to TV viewing or press the **MENU** button to return to the previous menu.

Picture Menu Options continued

Manual Colour Temperature Control (CSM - User option)

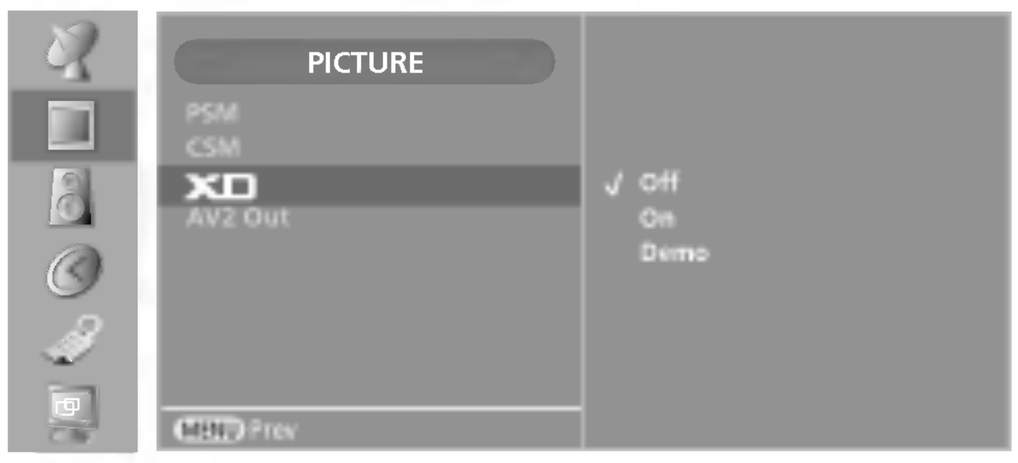
- *You can adjust red, green, blue to any colour temperature you prefer.*



1. Press the **MENU** button and then ▲ / ▼ button to select the **PICTURE** menu.
2. Press the ► button and then ▲ / ▼ button to select **CSM**.
3. Press the ► button and then ▲ / ▼ button to select **User**.
4. Press the ► button and then ▲ / ▼ button to select **Red**, **Green**, or **Blue**.
5. Press the ◄ / ► button to make appropriate adjustments.
6. Press the **EXIT** button to return to TV viewing or press the **MENU** button to return to the previous menu.

XD Function

- *XD is LG electronic's unique picture improving technology to display a real HD source through an advanced digital signal processing algorithm.*



1. Press the **MENU** button and then ▲ / ▼ button to select the **PICTURE** menu.
2. Press the ► button and then ▲ / ▼ button to select **XD**.
3. Press the ► button and then ▲ / ▼ button to select **Off**, **On**, or **Demo**.
4. Press the **EXIT** button to return to TV viewing or press the **MENU** button to return to the previous menu.



- **Demo**
  Use it to see the difference between XD demo on and XD Demo off. To release XD Demo, press the **EXIT** button.

Picture Format

- *You can watch TV in various picture formats; Wide, 14:9, Zoom, Auto, 4:3.*
- *If a fixed image is displayed on the screen for a long time, that fixed image may become imprinted on the screen and remain visible.*



1. Repeatedly press the **ARC** button to select your desired picture format.

Wide

You can enjoy the cinema (the picture format of 16:9) or general TV programme through the 16:9 mode.
The screen 16:9 is viewed just like that but the screen 4:3 is magnified to the left and right so that the screen 16:9 is full.

14:9

You can enjoy the picture format of 14:9 or general TV programme through the 14:9 mode.
The screen 14:9 is viewed just like that the screen 4:3 is magnified to the upper / lower and left / right.
Press the ▲ / ▼ button to see the invisible part in this picture format.

Zoom

You can enjoy the cinema in a vast screen through the Zoom mode.
The screen 4:3 is magnified to the upper / lower and left / right sides so that the screen 16:9 is full. The bottom and top of the picture may be lost.
Press the ▲ / ▼ button to see the invisible part in this picture format.

Auto

When your set receives the wide screen signal, it will be automatically changed to the picture format to be sent.

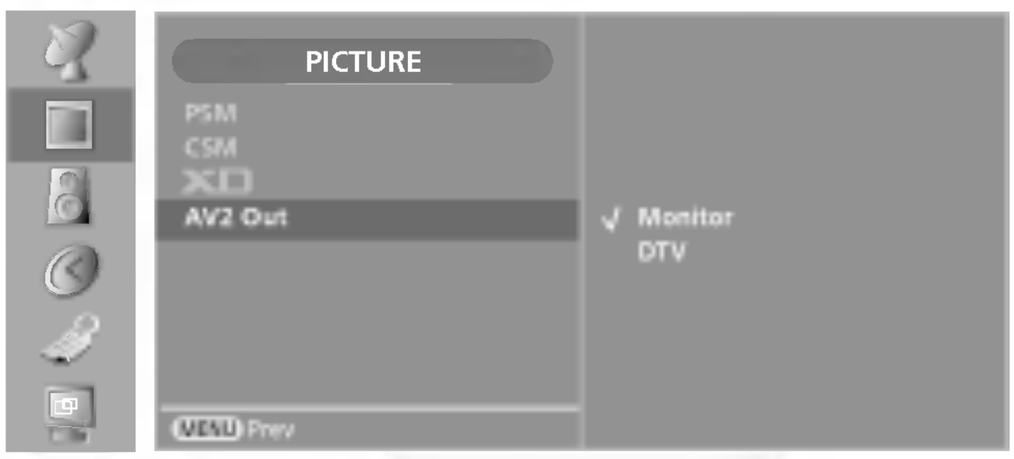
4:3

This picture format is 4 to 3 of general TV.

• You are available to Wide and 4:3 in PC mode.

Picture Out for AV2 Euro Scart

- *Use it to select your desired picture out input source for AV2 Euro scart socket.*
- *If you select **DTV** while viewing the HDMI input source, the video and audio is unavailable.*



1. Press the **MENU** button and then ▲ / ▼ button to select the **PICTURE** menu.
2. Press the ► button and then ▲ / ▼ button to select **AV2 Out**.
3. Press the ► button and then ▲ / ▼ button to select **Monitor** or **DTV**.
   • If you select **Monitor**, the current viewing input source outputs.
   • If you select **DTV**, the DTV input source outputs.
4. Press the **EXIT** button to return to TV viewing or press the **MENU** button to return to the previous menu.

Sound Menu Options

SSM (Sound Status Memory)

- *You can select your preferred sound setting; Flat, Music, Movie or Sports and you can also adjust the sound frequency of the equalizer.*

- *SSM lets you enjoy the best sound without any special adjustment because the TV sets the appropriate sound options based on the programme content.*

- *When adjusting sound equalizer manually, SSM automatically switches **User**.*

- ***Flat**, **Music**, **Movie**, and **Sports** are preset for good sound quality at the factory and are not adjustable.*



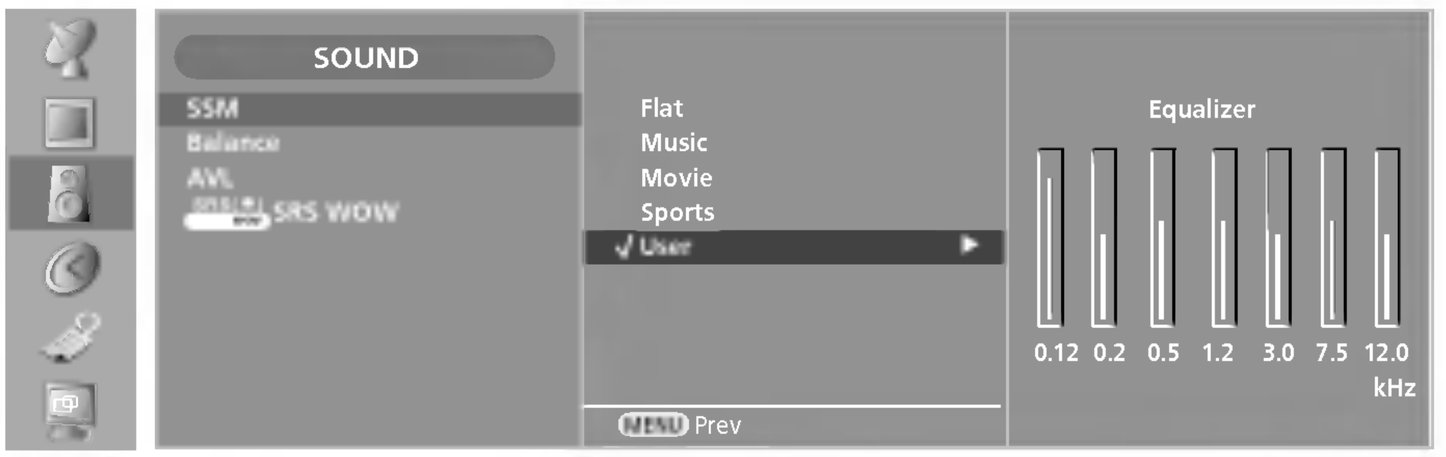
1. Press the **MENU** button and then ▲ / ▼ button to select the **SOUND** menu.
2. Press the ► button and then ▲ / ▼ button to select **SSM**.
3. Press the ► button and then ▲ / ▼ button to select **Flat**, **Music**, **Movie**, **Sports**, or **User**.
4. Press the **EXIT** button to return to TV viewing or press the **MENU** button to return to the previous menu.

Mini Glossary

Flat	The most commanding and natural audio.
Music	Select this option to enjoy the original sound when listening to the music.
Movie	Select this option to enjoy sublime sound.
Sports	Select this option to watch sports broadcasting.
User	Select this option to use the user-defined audio settings.

Sound Frequency Adjustment (SSM - User option)

- *Adjust the sound equalizer.*



1. Press the **MENU** button and then ▲ / ▼ button to select the **SOUND** menu.
2. Press the ► button and then ▲ / ▼ button to select **SSM**.
3. Press the ► button and then ▲ / ▼ button to select **User**.
4. Press the ► button.
5. Select a sound band by pressing the ◄ / ► button.
   Make appropriate sound level with the ▲ / ▼ button.
6. Press the **EXIT** button to return to TV viewing or press the **MENU** button to return to the previous menu.

Balance Adjustment

- *You can adjust the sound balance of speaker to the levels you prefer.*



1. Press the **MENU** button and then ▲ / ▼ button to select the **SOUND** menu.
2. Press the ► button and then ▲ / ▼ button to select **Balance**.
3. Press the ► button and then ◄ / ► button to make desired adjustment.
4. Press the **EXIT** button to return to TV viewing or press the **MENU** button to return to the previous menu.

AVL (Auto Volume Leveler)

- *AVL automatically keeps on an equal volume level even if you change programmes.*



1. Press the **MENU** button and then ▲ / ▼ button to select the **SOUND** menu.
2. Press the ► button and then ▲ / ▼ button to select **AVL**.
3. Press the ► button and then ▲ / ▼ button to select **Off** or **On**.
4. Press the **EXIT** button to return to TV viewing or press the **MENU** button to return to the previous menu.

Sound Menu Options continued

SRS WOW

- *The SRS WOW function plays back the mono or stereo sound input with the dynamic surround effects. It will provide rich and profound sound tone.*

- *If you set the **SRS WOW** ON, **SSM** can not be adjusted.*



1. Press the **MENU** button and then ▲ / ▼ button to select the **SOUND** menu.
2. Press the ► button and then ▲ / ▼ button to select **SRS WOW**.
3. Press the ► button and then ▲ / ▼ button to select **Off** or **On**.
4. Press the **EXIT** button to return to TV viewing or press the **MENU** button to return to the previous menu.

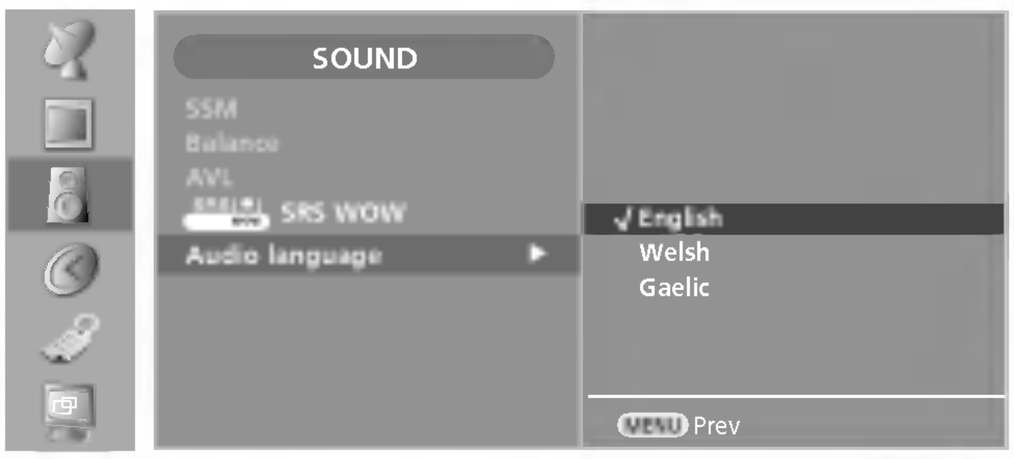
Mini Glossary

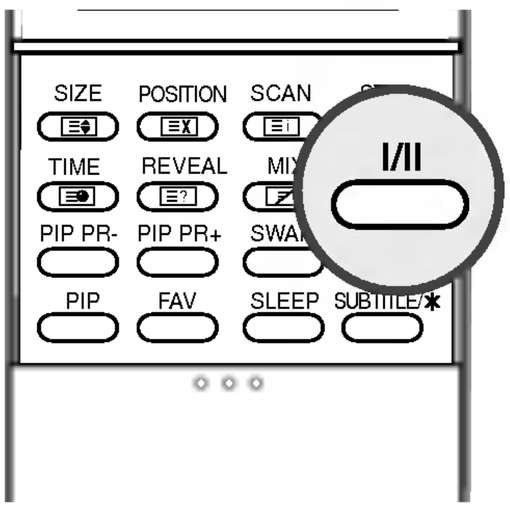
SRS WOW is a trademark of SRS Labs, Inc. technology is incorporated under license from SRS Labs, Inc.

Audio Language (In Digital mode only)

- *This function lets you select your preferred language for audio.*

- *If the audio data in selected language is not broadcasted, English audio will be played.*





1. Press the **MENU** button and then ▲ / ▼ button to select the **SOUND** menu.
2. Press the ► button and then ▲ / ▼ button to select **Audio language**.
3. Press the ► button and then ▲ / ▼ button to select **English**, **Welsh**, or **Gaelic**.
   • You can select the audio language with the **I/II** button on the remote control when broadcasting two or more Audio languages.
4. Press the **EXIT** button to return to TV viewing or press the **MENU** button to return to the previous menu.

Stereo/Dual Reception (In Analogue mode only)

- *When a programme is selected, the sound information for the station appears after the programme number and station name disappear.*

Broadcast	On Screen Display
Mono	**MONO**
Stereo	**STEREO**
Dual	**DUAL I**

Mini Glossary

DUAL I Sends the primary broadcast language to the loudspeakers.

DUAL II Sends the secondary broadcast language to the loudspeakers.

DUAL I+II Sends a separate language to each loudspeaker.

■ Mono sound selection

If the stereo signal is weak in stereo reception, you can switch to mono by pressing the **I/II** button twice. In mono reception, the depth of sound is improved. To switch back to stereo, press the **I/II** button twice again.

■ Language selection for dual language broadcast

If a programme received two languages (dual language), you can switch to **DUAL I**, **DUAL II** or **DUAL I+II** by pressing the **I/II** button repeatedly.

NICAM Reception (In Analogue mode only)

- *If the set is equipped with the receiver for NICAM reception, the high quality NICAM (Near Instantaneous Companding Audio Multiplex) digital sound can be received.*

- *Sound output can be selected according to the type of received broadcast as follows by pressing the **I/II** button repeatedly.*

1. When NICAM mono is received, you can select **NICAM MONO** or FM MONO.
2. When NICAM stereo is received, you can select **NICAM STEREO** or FM MONO. If the stereo signal is weak, switch to FM mono.
3. When NICAM dual is received, you can select **NICAM DUAL I**, **NICAM DUAL II** or **NICAM DUAL I+II** or **MONO**.

Speaker Sound Output Selection (In Analogue mode only)

- *In AV, S-Video, Component, and DVI mode, you can select output sound for the left and right loudspeakers.*

Repeatedly press the **I/II** button to select the sound output.

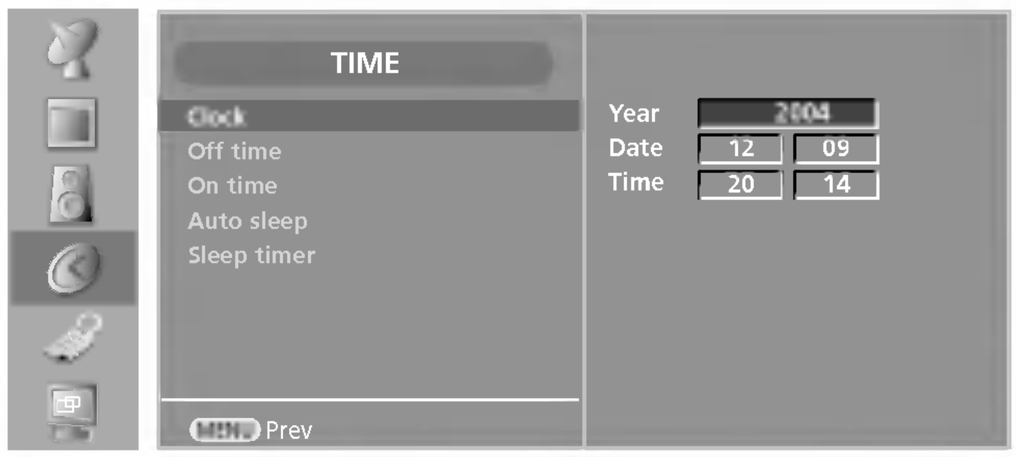
L+R: Audio signal from audio L input is sent to the left loud speaker and audio signal from audio R input is sent to the right loud speaker.
L+L: Audio signal from audio L input is sent to left and right loud speakers.
R+R: Audio signal from audio R input is sent to left and right loud speakers.

Time Menu Options

Clock Setup

- *The clock is set automatically when receiving the digital signal. (You can set the clock if the TV has no DTV signal.)*

- *You must set to the time correctly before using on/off time function.*



1. Press the **MENU** button and then ▲ / ▼ button to select the **TIME** menu.
2. Press the ► button and then ▲ / ▼ button to select **Clock**.
3. Press the ► button and then ◄ / ► button to select either the year, date, or time option. Once selected, use the ▲ / ▼ button to set the year, date, and time options.
4. Press the **EXIT** button to return to TV viewing or press the **MENU** button to return to the previous menu.

On/Off Time

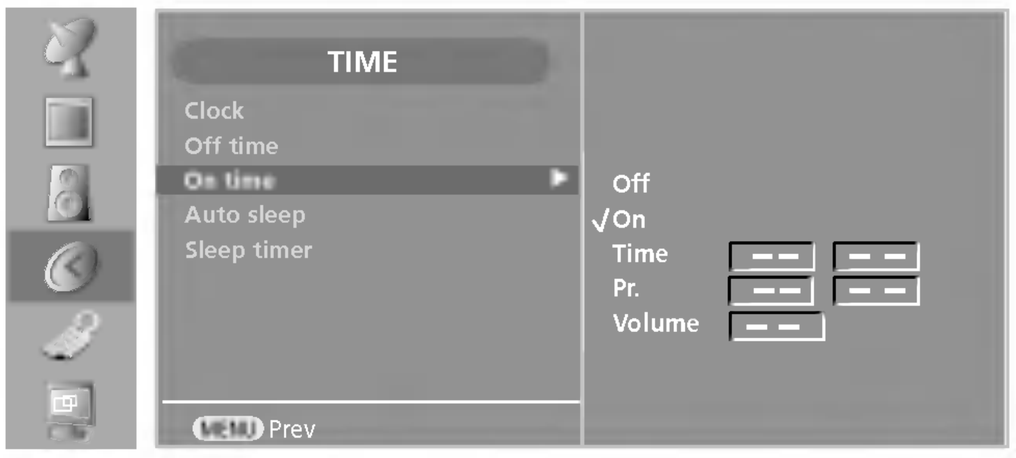
- *The Off time automatically switches the set to standby at the preset time.*

- *Two hours after the set is switched on by the on time function it will automatically switch back to standby mode unless a button has been pressed.*

- *Once the on time/off time is set, these functions operate daily at the preset time.*

- *Off time function overrides On timer function if they are set both to the same time.*

- *The set must be in standby mode for the On timer to work.*



1. Press the **MENU** button and then ▲ / ▼ button to select the **TIME** menu.
2. Press the ► button and then ▲ / ▼ button to select **Off time**/**On time**.
3. Press the ► button and then ▲ / ▼ button to select **On**.
   • To cancel **On**/**Off timer** function, select **Off**.
4. Press the ► button and then ▲ / ▼ button to set the hour.
5. Press the ► button and then ▲ / ▼ button to set the minutes.
6. **For only On timer function**
   • **Programme**: Press the ► button and then ▲ / ▼ button to select **TV** or **DTV**. And then, Press the ► button and then ▲ / ▼ button to select the programme.
   • **Volume**: Press the ► button and then ▲ / ▼ button to adjust volume level at turn-on.
7. Press the **EXIT** button to return to TV viewing or press the **MENU** button to return to the previous menu.

Auto Sleep

- *If set to on and there is no input signal, the TV turns off automatically after 10 minutes.*

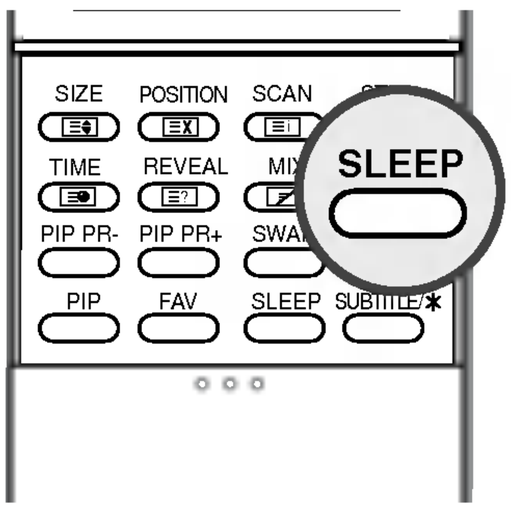


1. Press the **MENU** button and then ▲ / ▼ button to select the **TIME** menu.
2. Press the ► button and then ▲ / ▼ button to select **Auto sleep**.
3. Press the ► button and then ▲ / ▼ button to select **Off** or **On**.
4. Press the **EXIT** button to return to TV viewing or press the **MENU** button to return to the previous menu.

Sleep Timer

- *You don't have to remember to switch the set off before you go to sleep.*
- *The sleep timer automatically switches the set to standby after the preset time has elapsed.*
- *You can also use the **TIME** menu to adjust **Sleep timer**.*



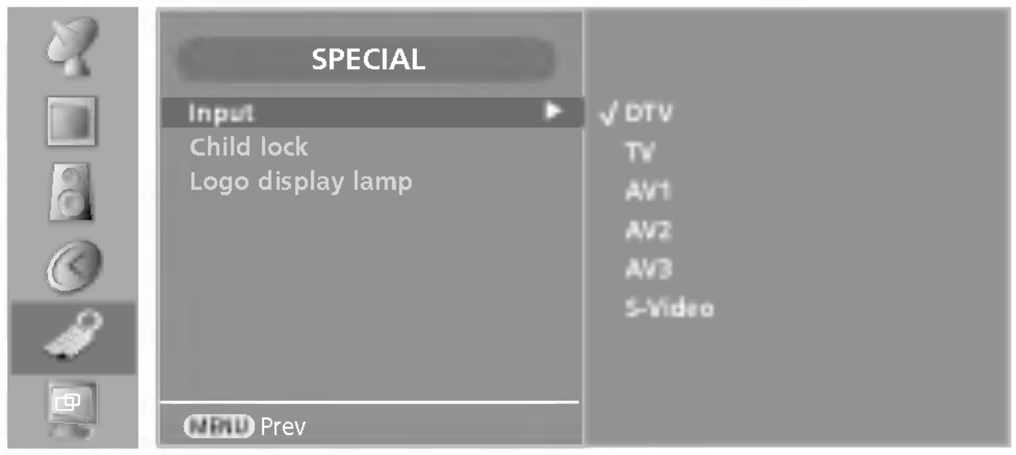


1. Press the **SLEEP** button repeatedly to select the number of minutes. The display ' - - - ' will appear on the screen, followed by 10, 20, 30, 60, 90, 120, 180 and 240.
2. When the number of minutes you want is displayed on the screen, the timer begins to count down from the number of minutes selected.
3. To view the remaining sleep time, press the **SLEEP** button once.
4. To cancel the sleep time, repeatedly press the **SLEEP** button until the display ' - - - ' appears.
5. When you switch the set off, the set releases the preset sleep time.

Special Menu Options

Input Source Selection

- *Change the picture source so you can watch your off-air TV, VCR, DVD, or any devices that are connected to your TV.*



1. Press the **MENU** button and then ▲ / ▼ button to select the **SPECIAL** menu.
2. Press the ► button and then ▲ / ▼ button to select **Input**.
3. Press the ► button and then ▲ / ▼ button to select **DTV**, **TV**, **AV1**, **AV2**, **AV3**, **S-Video**, **Component**, **DVI PC**, **DVI DTV**, or **HDMI**.
4. Press the **OK** button to save.

- You can also select the Input source (TV, AV, S-Video, Component, DVI PC, DVI DTV, or HDMI mode) with using the **INPUT** button on remote control.
- When a VCR is connected via the antenna socket, the set is used in TV mode. See the 'External Equipment Connections' section.
- It's available to output the PCM (Pulse Code Modulation) sound in HDMI input source. In some models, the sound is muted for other sound format.

Auto AV Switching

If your VCR outputs an AV switching voltage when connected to the Euro scart socket, the set will switch to AV1 or AV2 mode automatically. But if you want to keep on watching TV mode, press the **PR ▲ / ▼** or NUMBER buttons. Use the **INPUT** button to return to AV modes.

Child Lock

- *The TV can be set so that the remote control is needed to control it. This feature can be used to prevent unauthorized viewing.*



1. Press the **MENU** button and then ▲ / ▼ button to select the **SPECIAL** menu.
2. Press the ► button and then ▲ / ▼ button to select **Child lock**.
3. Press the ► button and then ▲ / ▼ button to select **Off** or **On**.
4. Press the **EXIT** button to return to TV viewing or press the **MENU** button to return to the previous menu.

• With the Child lock on, the display "**Child lock on**" appears on the screen if any button on the front panel is pressed while viewing the TV.

Lightening Logo Display Lamp

- *If you select on, LG logo of TV front panel turns the lamp on.*

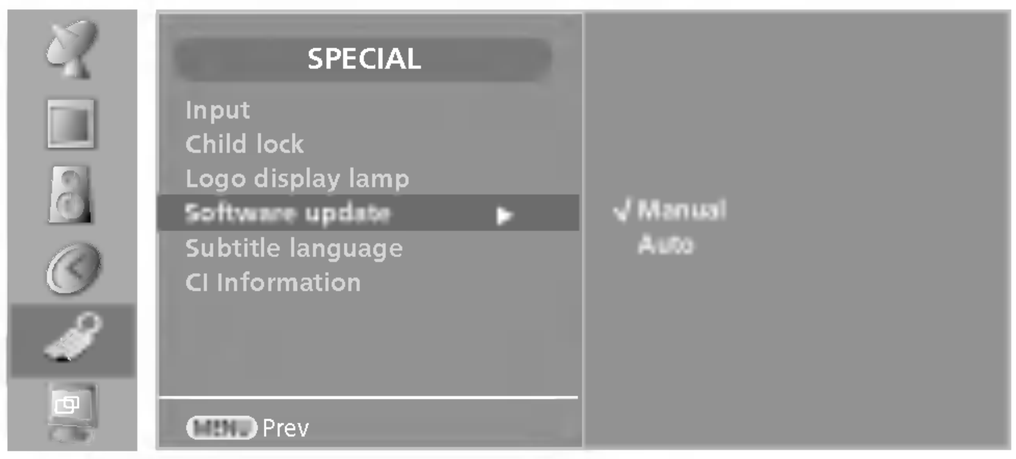


1. Press the **MENU** button and then ▲ / ▼ button to select the **SPECIAL** menu.
2. Press the ► button and then ▲ / ▼ button to select **Logo display lamp**.
3. Press the ► button and then ▲ / ▼ button to select **Off** or **On**.
4. Press the **EXIT** button to return to TV viewing or press the **MENU** button to return to the previous menu.

Special Menu Options continued

Software Update (In Digital mode only)

- *Software Update, means software can be downloaded through the digital terrestrial broadcasting system.*



1. Press the **MENU** button and then ▲ / ▼ button to select the **SPECIAL** menu.
2. Press the ► button and then ▲ / ▼ button to select **Software update**.
3. Press the ► button and then ▲ / ▼ button to select **Manual** or **Auto**.
   - If you select **Manual**, a user confirm message box will be displayed to notify that new software is found.
   - If you select **Auto**, software will be updated automatically, and you will not be asked whether you accept the update or not. And progress bar will be displayed automatically.
4. Press the **EXIT** button to return to TV viewing or press the **MENU** button to return to the previous menu.

*** When setting "Software Update- Manual"**

- ***During Progress of Software Update, please note the following:***
- *The power of the TV must not be interrupted.*
- *The set must not be switched off.*
- *The antenna must not be disconnected.*
- *During this time, you should not switch off the power to the set.*
- *At this time, you should not work power On/Off.*
- *After Software Update, you can confirm the updated software version in* ***System information*** *menu.*



Occasionally, a transmission of updated digital software information will result in the following menu on the TV screen.



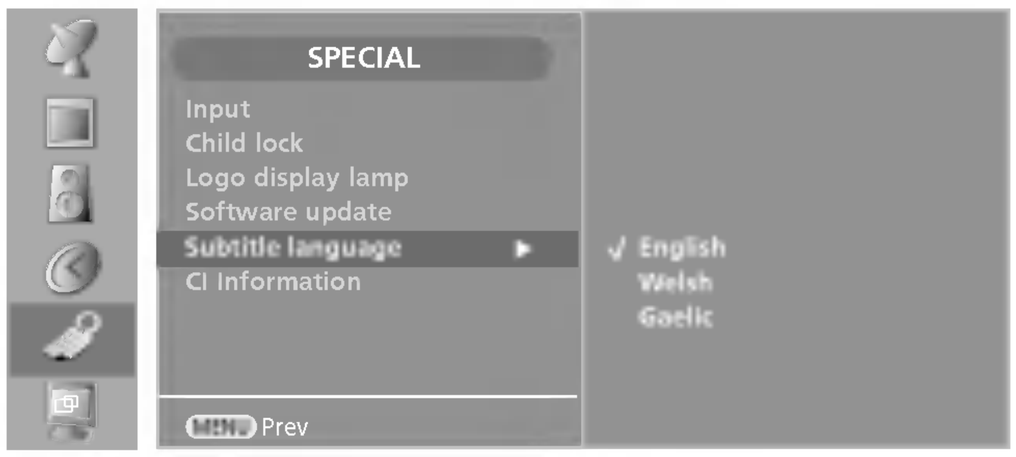
Select the YES using the ◄ / ► button and when you see the following picture.

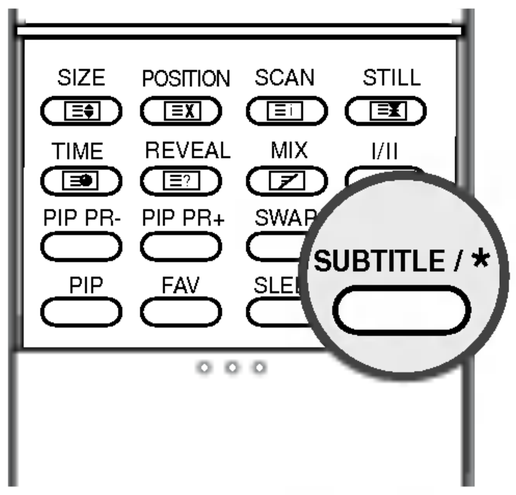


After Software Update is completed, the System takes about one minute to restart.

Subtitle Language (In Digital mode only)

- *If the subtitle data in selected language is not broadcasted, English subtitle will be displayed.*
- *Use this function when two or more subtitle languages are broadcasted.*

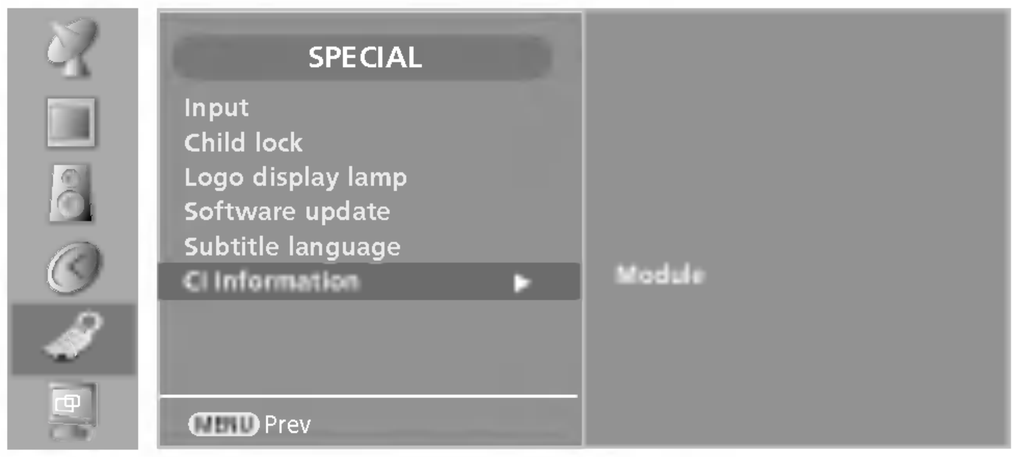


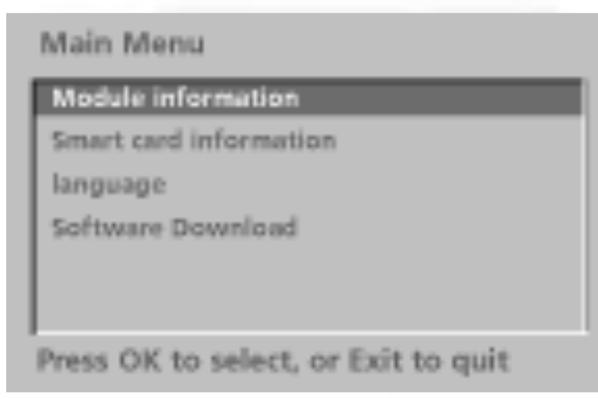


1. Press the **MENU** button and then ▲ / ▼ button to select the **SPECIAL** menu.
2. Press the ► button and then ▲ / ▼ button to select **Subtitle language**.
3. Press the ► button and then ▲ / ▼ button to select **English**, **Welsh**, or **Gaelic**.
   - You can select Subtitle language with the **SUBTITLE / ✱** on the remote control. When two or more subtitle languages are broadcasted.

CI [Common Interface] Information (In Digital mode only)

- *This function enables you to watch some scrambled services (pay services).*
- *If you remove the CI Module, you can't watch the pay services.*
- *When the module is inserted to CI slot, you can access the module menu.*
- *To purchase a module and smart card, contact your supplying dealer.*
- *Do not often insert or remove a CAM module from the set. It may cause a trouble.*
- *When the set turned on after inserting the CI Module, you often can't hear the sound.*





- This OSD is only for illustration and the menu options and screen format will vary according to the Digital pay services provider.
- It's possible for you to change CI (Common Interface) menu screen and service by your dealer.

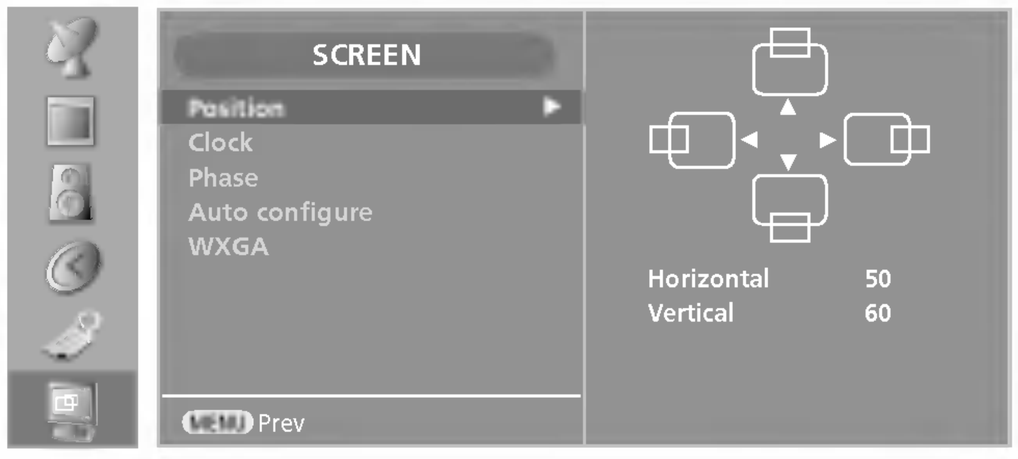
1. Press the **MENU** button and then ▲ / ▼ button to select the **SPECIAL** menu.
2. Press the ► button and then ▲ / ▼ button to select **CI Information**.
3. Press the ► button and then **OK** button.
4. Press the ▲ / ▼ button to select the desired item: Module information, smart card information, language, or software download etc.
5. Press the **OK** button.
6. Press the **EXIT** button to return to TV viewing.

Screen Menu Options

*** Be sure to select the DVI PC input source before operation.**
When connecting a DVI PC and RGB PC with DVI INPUT jack on the set, Select the DVI PC input source.

Adjusting Horizontal/vertical Position

- *This function is to adjust picture to left/right and up/down as you prefer.*



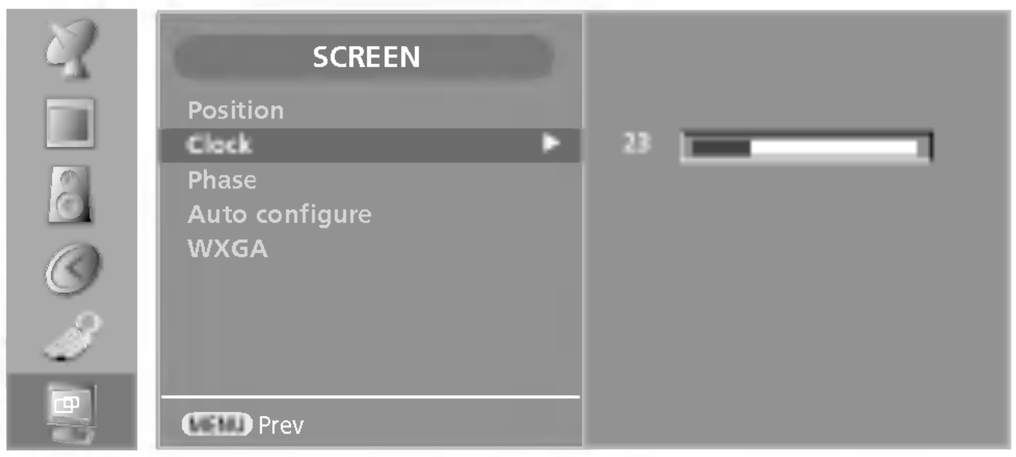
1. Press the **MENU** button and then use ▲ / ▼ button to select the **SCREEN** menu.
2. Press the ► button and then use ▲ / ▼ button to select **Position**.
3. Press the ► button and then use ▲ / ▼ / ◄ / ► button to adjust the position.
4. Press the **EXIT** button to return to TV viewing or press the **MENU** button to return to the previous menu.

Manual Configure (Clock & Phase)

- *If the picture isn't clear after auto adjustment and especially that characters are still trembling, adjust the picture phase manually. To correct the screen size, adjust **Clock**.*

Mini Glossary

Clock	This function is to minimize any vertical bars or stripes visible on the screen background. And the horizontal screen size will also change.
Phase	This function allows you to remove any horizontal noise and clear or sharpen the image of characters.



1. Press the **MENU** button and then use ▲ / ▼ button to select the **SCREEN** menu.
2. Press the ► button and then use ▲ / ▼ button to select **Clock** or **Phase**.
3. Press the ► button and then use ◄ / ► button to make appropriate adjustments.
   • The adjustment range of **Phase** is 0~63.
   • The adjustment range of **Clock** is 0~100.
4. Press the **EXIT** button to return to TV viewing or press the **MENU** button to return to the previous menu.

Auto Configure

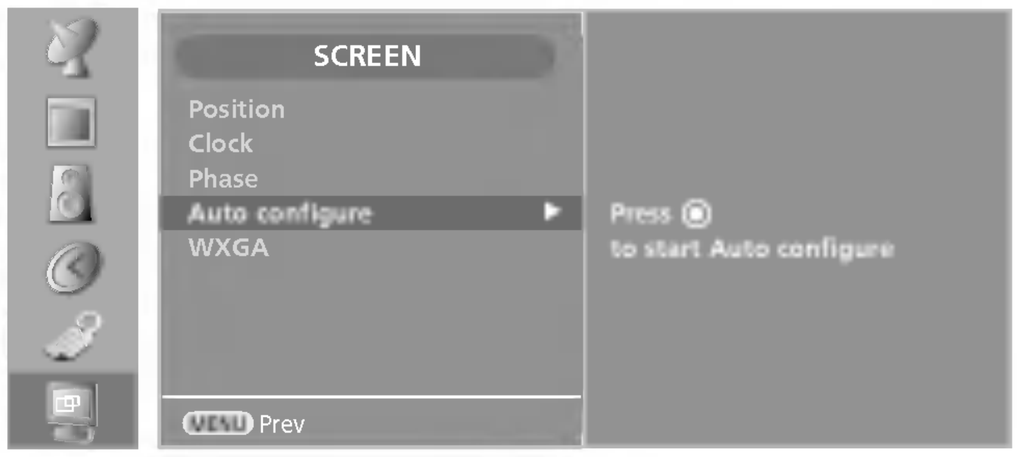
- *Automatically adjusts picture position and minimizes image shaking.*

- *After adjustment, if the image is still not correct, your TV is functioning properly but needs further adjustment.*

Mini Glossary

Auto configure

This function is for the automatic adjustment of the screen position, clock, and phase. The displayed image will disappear for a few seconds while the auto configuration is in progress.



1. Press the **MENU** button and then use ▲ / ▼ button to select the **SCREEN** menu.
2. Press the ► button and then use ▲ / ▼ button to select **Auto configure**.
3. Press the ► button to start **Auto configure**.
   • If the position of the image is still not correct, try it again.

Selecting WXGA Mode

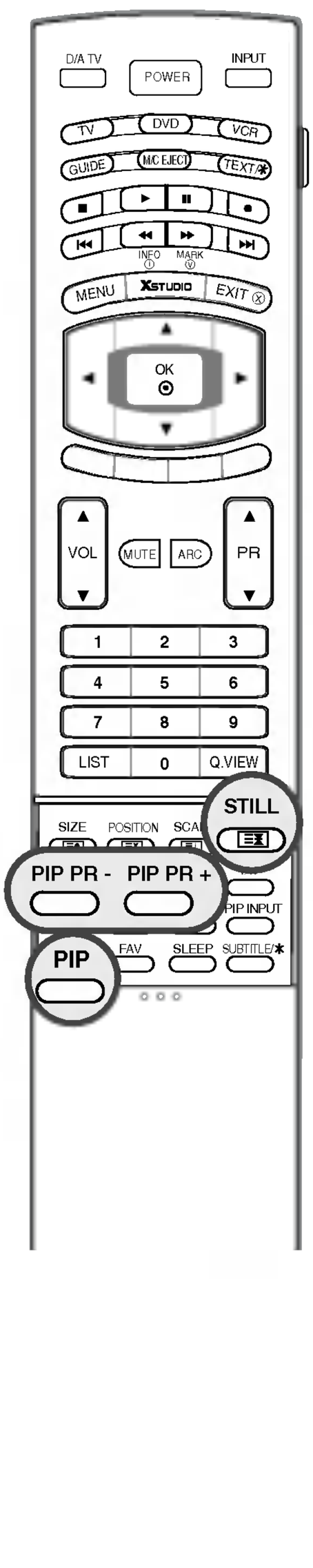
- *To see a normal picture, match the resolution of DVI PC mode and selection of WXGA mode.*



1. Press the **MENU** button and then use ▲ / ▼ button to select the **SCREEN** menu.
2. Press the ► button and then use ▲ / ▼ button to select **WXGA**.
3. Press the ► button and then use ▲ / ▼ button to select **1360x768** or **1280x768**. From this point on, the adjustment starts.

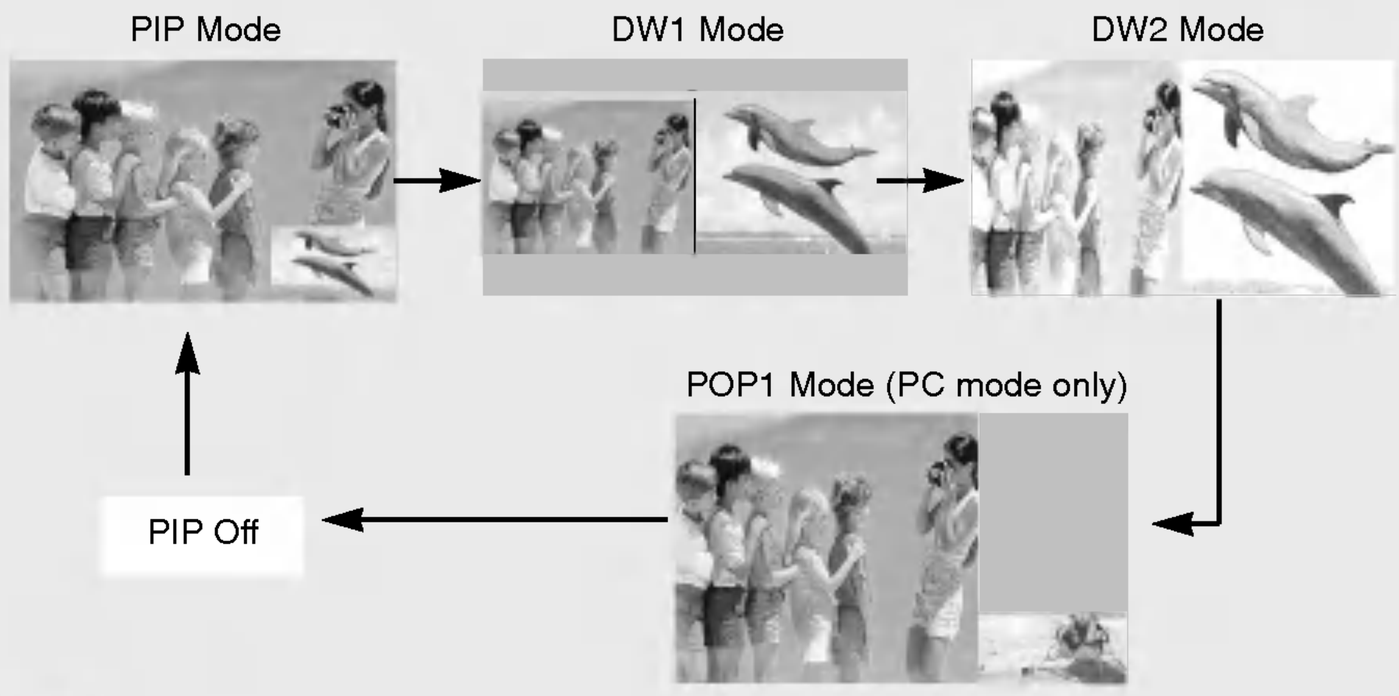
PIP (Picture-In-Picture) / Double Window / POP

- *PIP lets you view 2 different inputs (sources) on your TV screen at the same time. One source will be large, and the other source will show a smaller inset image.*
- *Double window mode splits the screen into 2, allowing 2 picture sources to be shown on the TV screen at the same time. Each source is given half the screen.*



Watching PIP/Double Window/POP

Press the **PIP** button to access the sub picture. Each press of PIP changes the PIP options as shown below.



- You can hear the main picture sound in PIP mode. Exchange the main and sub picture to hear the sub picture sound.

Sub Picture Freeze

1. Press the **STILL** button to freeze motion of the sub picture.
2. Press the **STILL** button again to release the freeze motion.

Programme Selection for Sub Picture

1. Press the **PIP PR +/-** button to select a programme for the sub picture.
   The selected programme number is displayed just below the programme number of main picture.

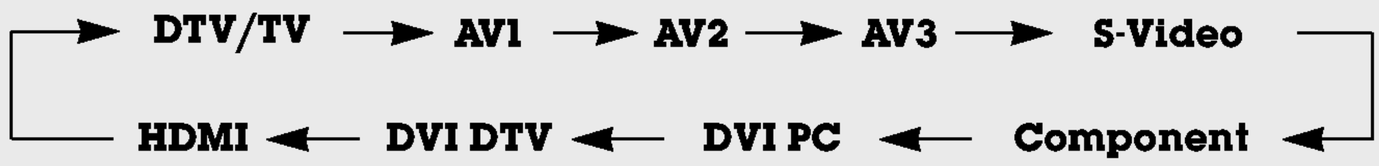
- When you press the **PIP PR +/-** button to select a programme for the sub picture, the sub picture is automatically changed to DTV mode.

Sub Picture Input Source		Sub Picture Input Source
AV1, AV2, AV3 S-Video Component DVI PC, DVI DTV HDMI	Press the **PIP PR +/-** button	DTV

- If you press the **PIP PR +/-** button in DTV mode for main picture, the sub picture is changed to Analog mode.

Input Source Selection for Sub Picture

Press the **PIP INPUT** button to select the input source for the sub picture.
Each press of **PIP INPUT** button is pressed, each input source for the sub picture is displayed as shown below.



Main picture Input	Available Sub Picture Input for Each PIP Mode		
	PIP / DW1 / DW2	POP1	POP3
DTV	All (Except DTV)	Not available	TV Only
TV	All (Except TV)	Not available	DTV Only
AV1	All (Except AV1)	Not available	TV / DTV
AV2	All (Except AV2)	Not available	TV / DTV
AV3	All (Except AV3)	Not available	TV / DTV
S-Video	All (Except S-Video)	Not available	TV / DTV
Component	DTV, TV, AV1, AV2, AV3, S-Video	Not available	TV / DTV
DVI DTV	DTV, TV, AV1, AV2, AV3, S-Video	DTV, TV, AV1, AV2, AV3, S-Video	TV / DTV
DVI PC	DTV, TV, AV1, AV2, AV3, S-Video	Not available	TV / DTV
HDMI	DTV, TV, AV1, AV2, AV3, S-Video	Not available	TV / DTV

Sub Picture Size Adjustment (PIP mode only)

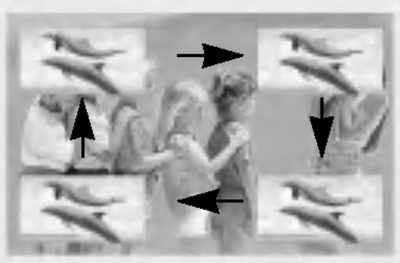
There are 2 types of sub picture size according to main and sub picture input source.

<table>
<tr><th colspan="2">Input source</th><th rowspan="2">Sub Picture Size</th></tr>
<tr><th>Main Picture Input</th><th>Sub Picture Input</th></tr>
<tr><td>DTV</td><td>TV, AV1, AV2, AV3, S-Video</td><td rowspan="3">Press the SIZE button and then press the ◄ / ► button until desired size is achieved.
</td></tr>
<tr><td>TV
AV1
AV2
AV3
S-Video</td><td>DTV, AV1, AV2, AV3, S-Video
DTV, TV, AV2, AV3, S-Video
DTV, TV, AV1, AV3, S-Video
DTV, TV, AV1, AV2, S-Video
DTV, TV, AV1, AV2, AV3</td></tr>
<tr><td>DTV, TV,
AV1, AV2, AV3,
S-Video</td><td>Component,
DVI DTV, DVI PC,
HDMI</td><td rowspan="2">Press the SIZE button in PIP mode.
And press the ◄ / ► button until desired size is achieved.
</td></tr>
<tr><td>Component,
DVI DTV, DVI PC,
HDMI</td><td>DTV, TV,
AV1, AV2, AV3,
S-Video</td></tr>
</table>

PIP (Picture-In-Picture) / Double Window / POP continued

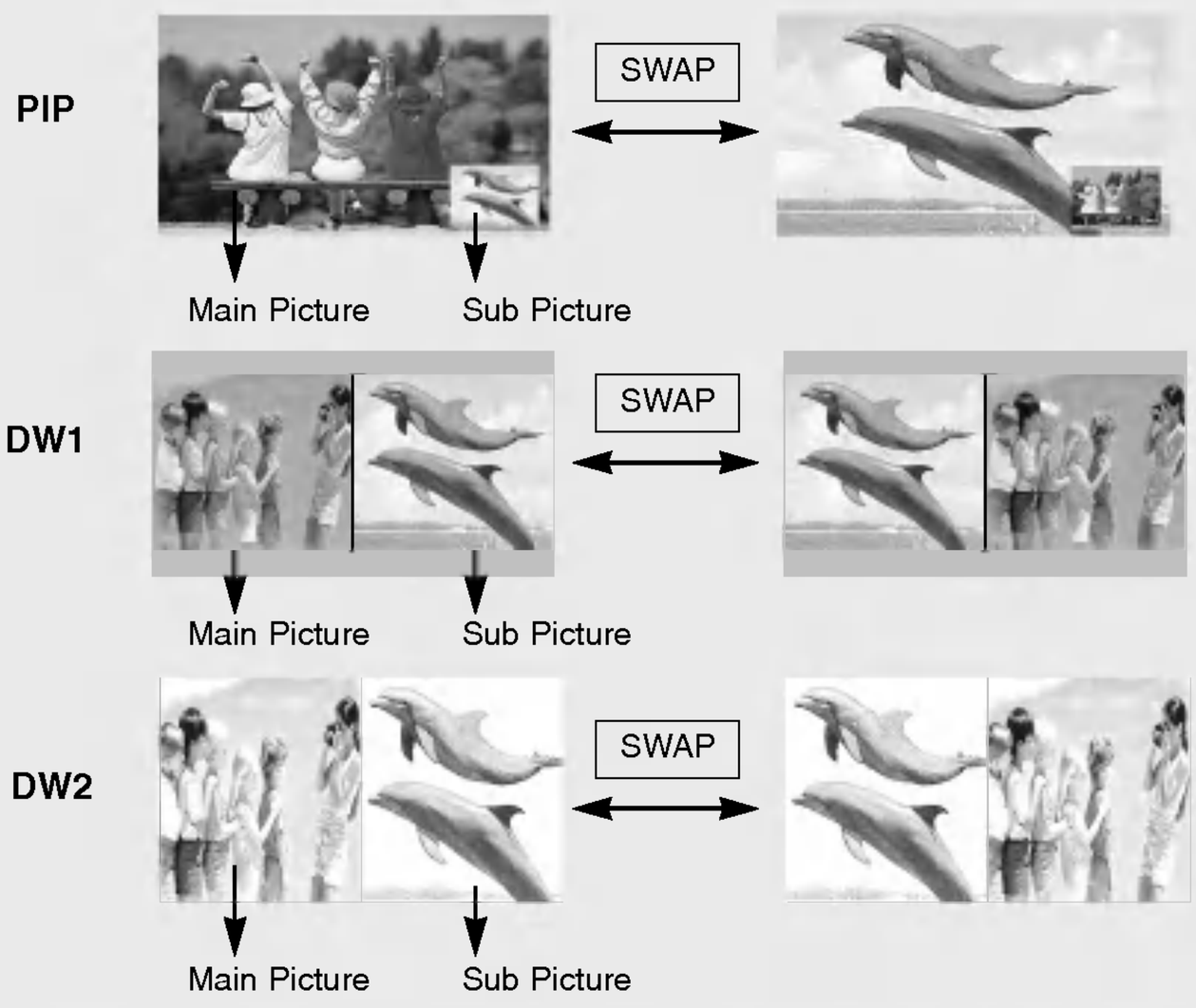
Moving the Sub Picture (PIP mode only)

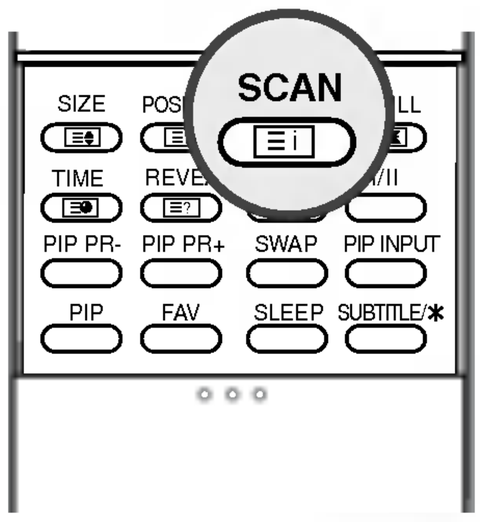
There are 2 types of sub picture position according to main and sub picture input source.

Input Source		Sub Picture Position
Main Picture Input	Sub Picture Input	
DTV	TV, AV1, AV2, AV3, S-Video	 Press the **POSITION** button in PIP mode. Each press of the **POSITION** button will move the sub picture to a different position on the screen in a clockwise direction.
TV	DTV, AV1, AV2, AV3, S-Video	
AV1	DTV, TV, AV2, AV3, S-Video	
AV2	DTV, TV, AV1, AV3, S-Video	
AV3	DTV, TV, AV1, AV2, S-Video	
S-Video	DTV, TV, AV1, AV2, AV3	
DTV, TV, AV1, AV2, AV3, S-Video	Component, DVI DTV, DVI PC, HDMI	 Press the **POSITION** button in PIP mode. And press the ▲ / ▼ or ◄ / ► button until desired position is achieved.
Component, DVI DTV, DVI PC, HDMI	DTV, TV, AV1, AV2, AV3, S-Video	

Swapping between main and sub pictures

Press the **SWAP** button to exchange the main and sub pictures.





POP (Picture-out-of-Picture: Programme Scan)

- This function enables you to search all the stored stations on 3 sub pictures.
- Note: Run Auto programme channel search before using POP mode.



1. Press the **SCAN** button to activate the programme scan mode while in PIP/DW/POP1 mode.
   The selected sub pictures search all the stored stations.
2. Press the **EXIT** button to cancel POP3 mode.

TELETEXT (In Digital mode)

- *The set gives you access to a digital teletext which is greatly improved in various aspects such as text, graphics and so on.*
- *This digital teletext can be accessed by special digital teletext services and specific services which broadcast digital teletext.*
- *You should select off from the subtitle language to display teletext by pressing SUBTITLE.*

Teletext within Digital Service



Press the numeric or **PR ▲ / ▼** button to select a digital service which broadcasts digital teletext.
To know which are digital teletext services, refer to the EPG service list.

Follow the indications on digital teletext and move onto the next step by pressing **TEXT**, **OK**, **▲ / ▼ , ◄ / ►**, RED, GREEN, YELLOW, BLUE or NUMBER buttons and so on.

To exit digital teletext service, just select a different service by the numeric or **PR ▲ / ▼** button.

If pressing the **MENU** or **GUIDE** button, the teletext service disappear temporaily. When pressing these buttons again, the teletext service is appeared.

Teletext in Digital Service



Press the numeric or **PR ▲ / ▼** button to select a certain service which broadcasts digital teletext.

Press the **TEXT** or colour button to switch on teletext.

Follow the indications on digital teletext and move onto the next step by pressing **OK**, **▲ / ▼ , ◄ / ►**, RED, GREEN, YELLOW, BLUE or NUMBER buttons and so on.

Press the **TEXT** or colour button to switch off digital teletext and return to TV viewing.

Some services may allow you to access text services by pressing the red button.

If pressing the **MENU** or **GUIDE** button, the screen is changed to black for a moment.

TELETEXT (In Analogue mode)

- *Teletext is a free service broadcast by most TV stations which gives up-to-the-minute information on news, weather, television programmes, share prices and many other topics.*

- *The teletext decoder of this TV can support the SIMPLE, TOP and FASTEXT systems. SIMPLE (standard teletext) consists of a number of pages which are selected by directly entering the corresponding page number. TOP and FASTEXT are more modern methods allowing quick and easy selection of teletext information.*

Switch on/off

Press the **TEXT** button to switch to teletext. The initial page or last page appears on the screen.
Two page numbers, TV station name, date and time are displayed on the screen headline. The first page number indicates your selection, while the second shows the current page displayed.
Press the **TEXT** or **EXIT** button to switch off teletext. The previous mode reappears.

SIMPLE Text

■ Page selection

1. Enter the desired page number as a three digit number with the NUMBER buttons. If during selection you press a wrong number, you must complete the three digit number and then re-enter the correct page number.
2. The ▲ / ▼ button can be used to select the preceding or following page.

TELETEXT Continued (In Analogue mode)

TOP Text

- The user guide displays four fields-red, green, yellow and blue at the bottom of the screen. The yellow field denotes the next group and the blue field indicates the next block.

■ Block / group / page selection

1. With the blue button you can progress from block to block.
2. Use the yellow button to proceed to the next group with automatic overflow to the next block.
3. With the green button you can proceed to the next existing page with automatic overflow to the next group.
   Alternatively the ▲ button can be used.
4. The red button permits to return to previous selection. Alternatively the ▼ button can be used.

■ Direct page selection

Corresponding to the SIMPLE teletext mode, you can select a page by entering it as a three digit number using the NUMBER buttons in TOP mode.

FASTEXT

- The teletext pages are colour coded along the bottom of the screen and are selected by pressing the corresponding coloured button.

■ Page selection

1. Press the ☰i button to select the index page.
2. You can select the pages which are colour coded along the bottom line with the same coloured buttons.
3. Corresponding to the SIMPLE teletext mode, you can select a page by entering its three digit page number with the NUMBER buttons in FASTEXT mode.
4. The ▲ / ▼ button can be used to select the preceding or following page.

Special Teletext Functions



REVEAL
Press this button to display concealed information, such as solutions of riddles or puzzles.
Press this button again to remove the information from the display.



SIZE
Selects double height text.
Press this button to enlarge the top half of the page.
Press this button again to enlarge the bottom half of the page.
Press this button again to return to the normal display.



POSITION
Displays the TV picture on the screen while waiting for the new teletext page. The display  will appear at the top left hand corner of the screen. When the updated page is available then display  will change to the page number.
Press this button to view the updated teletext page.



STILL
Stops the automatic page change which will occur if a teletext page consists of 2 or more sub pages. The number of sub pages and the sub page displayed is, usually, shown on the screen below the time. When this button is pressed the stop symbol is displayed at the top left-hand corner of the screen and the automatic page change is inhibited.
To continue press this button again.



MIX
Displays the teletext pages superimposed on the TV picture.
To switch the TV picture off press this button again.



TIME
When viewing a TV programme, press this button to display the time at the top right hand corner of the screen. Press this button again to remove the display. In the teletext mode, press this button to select a sub page number. The sub page number is displayed at the bottom of the screen. To hold or change the sub page, press the RED/GREEN, ▲ / ▼ or NUMBER buttons.
Press again to exit this function.

EPG (Electronic Programme Guide) (In Digital mode)

- *This system has an Electronic Programme Guide (EPG) to help your navigation through all the possible viewing options.*
- *The EPG supplies information such as programme listings, start and end times for all available services. In addition, detailed information about the programme is often available in the EPG (the availability and amount of these programme details will vary, depending on the particular broadcaster).*
- *This function can be used only when the EPG information is broadcasted by broadcasting companies.*
- *The EPG displays the programme description for next 8 days.*

Switch on/off EPG

1. Press the **GUIDE** button to switch on EPG.
2. Press the **GUIDE** or **EXIT** button again to switch off EPG and return to TV viewing.

Select a programme



Press the ▲ / ▼ , ◄ / ► , **PR** ▲ / ▼ button to select desired programme, then press the **OK** button to display the selected programme.

Button Function in NOW/NEXT Guide Mode



Remote Control Buttons	Function
RED	Shows the favourite programmes or all programmes
GREEN	The detail information on or off
YELLOW	Mode change to 8 days Guide
◉	Change to the selected channel
◄ / ►	Select NOW or NEXT mode
▲ / ▼	Select the Broadcasting Programme
PR ▲ / ▼	Page Up/Down
GUIDE/EXIT	Switch off EPG

Button Function in 8 Days Guide Mode



Remote Control Buttons	Function
RED	Shows the favourite programmes or all programmes
GREEN	The detail information on or off
YELLOW	Mode change to Channel Guide
BLUE	Show or hide the 8 days OSD (On Screen Display)
◉	Change to the selected channel
◄ / ►	Select the programme for other time
▲ / ▼	Select the other programme for same time
PR ▲ / ▼	Page Up/Down
GUIDE/EXIT	Switch off EPG

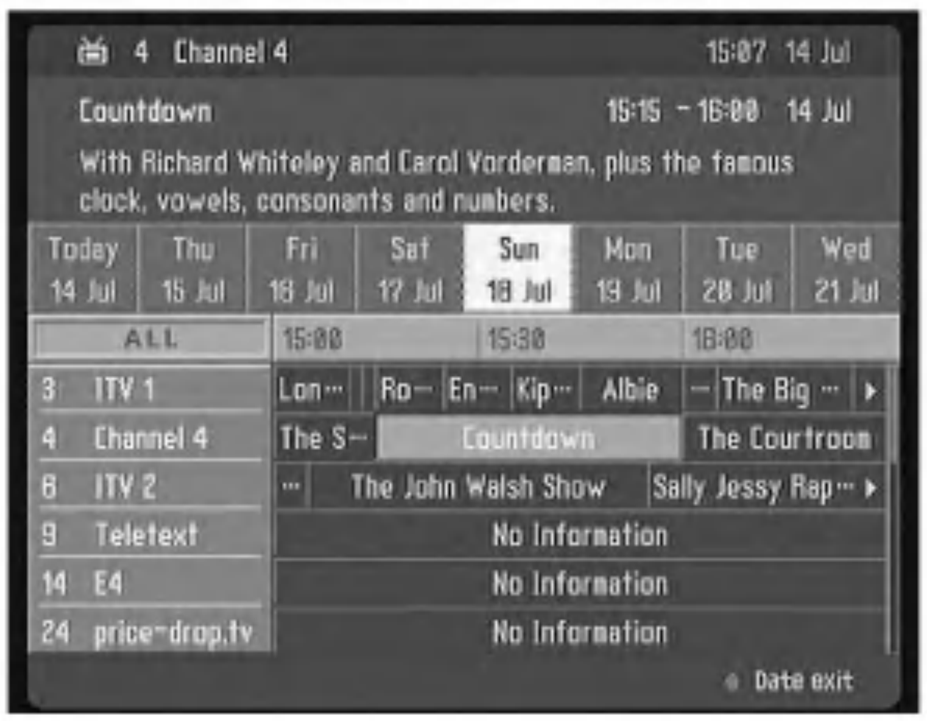
EPG (Electronic Programme Guide) (In Digital mode) Continued

Button Function in Channel Guide Mode



Remote Control Buttons	Function
RED	Shows the favourite programmes or all programmes
GREEN	The detail information on or off
YELLOW	Mode change to NOW/NEXT Guide
BLUE	Show or hide the 8 days OSD (On Screen Display)
◉	Change to the selected channel
◄ / ►	Select a broadcasting station
▲ / ▼	Select a broadcasting programme time
PR ▲ / ▼	Page Up/Down
GUIDE/EXIT	Switch off EPG

Button Function in Date Change Mode



Remote Control Buttons	Function
BLUE	Show or hide the 8 days
◉	Change to the selected channel
◄ / ►	Change a date
▼	Hide the 8 days OSD (On Screen Display)
GUIDE/EXIT	Switch off EPG

Notes on Memory card

Memory Card

This is a device equipment to communicate the data between AV external equipment. It's used to a digital camera, camcorder, MP3 player, notebook or PDA.

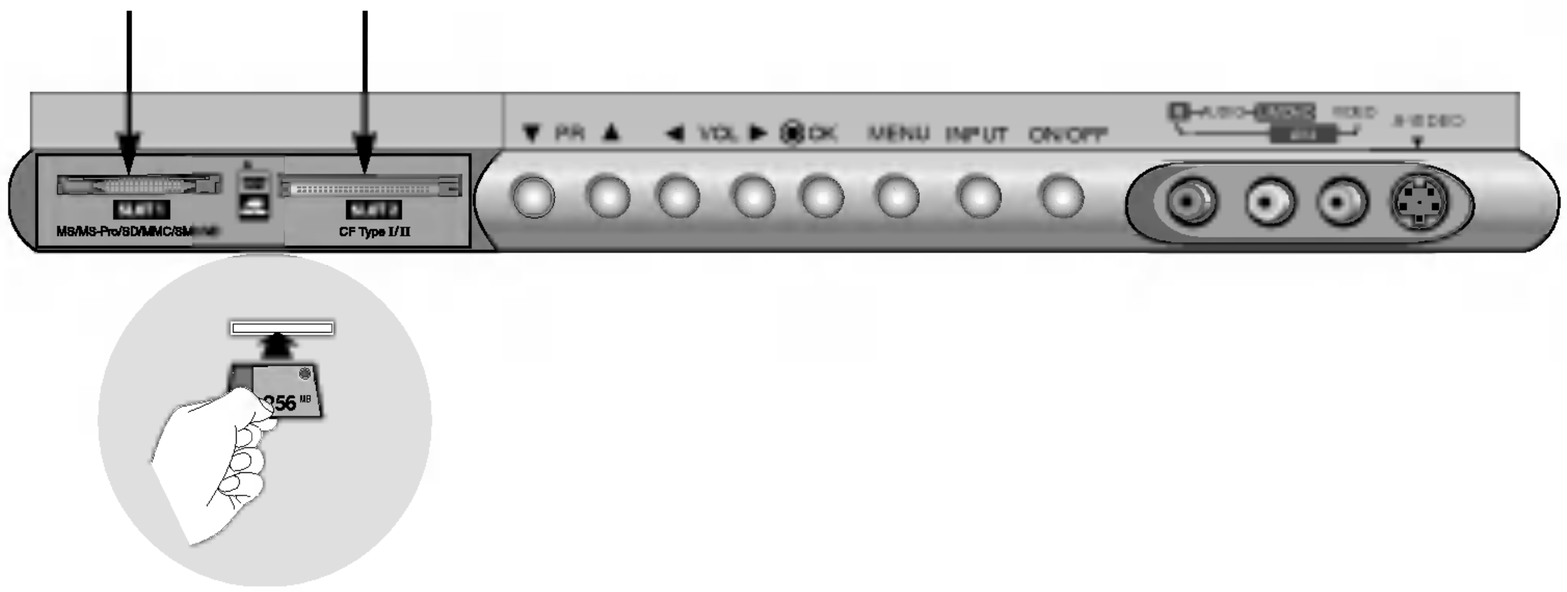
Precaution for Using the Memory Card

- Insert the memory card correctly.
- Don't insert metal substances into the slots of the memory card.
- Do not bend, drop or allow a strong shock to memory card.
- After pulling the memory card out from the TV, please keep it in an appropriate case to prevent static shock.
- Stored data may be changed or lost as a result of misuse or static electricity.
- Do not turn the power off while using the memory card (loading or erasing).
- Don't eject the memory card while using the it. Otherwise, it may cause a data loss or card damage.
- Only Insert one card into each slot.
- To prevent a change or loss for stored data, don't misuse the TV or don't let static electricity or electrical noise for TV.
- This Company takes no responsibility for problems such as the damage or malfunction that occurs while using the TV set, inappropriate TV settings, or any other reasons, except for defects or malfunctions intrinsic to the product.
- Ensure to use a memory card that lists the manufacturers name and serial number.
- The manufacturer shall not be responsible for damaged data. Be careful to avoid data damage, and back up your files.
- Make sure to comply with the following steps when ejecting a memory card.

XSTUDIO

- XSTUDIO *mode supports JPEG images and MP3 music files.*

Available Memory Card



- Use the specified card based on the slot location.
- **Some MagicStor Plus card is unavailable.**

Slot 1					Slot 2		
MS / MS-Pro (Memory Stick /Memory Stick Pro)	SD (Secure Digital)	MMC (MultiMedia Card)	SMC (Smart Media Card)	xD (xD-Picture Card)	CF I (CompactFlash)	CF II (MD, Microdrive)	CF II (Magicstor)

Supported Files

A sort of file	Photo Image (JPEG)	Music File (MP3)
Compatilbility	*.jpg	*.mp3
Memory card capacity	CF: 2GB Microdrive: 2GB Magicstor: 2.2GB MMC: 256MB SD: 512MB An error may occur if you use a memory card with greater than the specified capacity.	SMC: 128MB XD: 512MB MS: 128MB MS Pro: 1GB
Unsupported or damaged file	Unsupported or damaged JPEG or MP3 files can cause errors. Do not try to change the file extension of unsupported file types to the file extension of supported file types.	

- Playback speed can vary dependent on the card type.
- You can assign 8 characters for the file name of the card. If the file name is longer than 8 characters, it will be truncated at 6 digits and "~1, 2, 3, and 4" will be appended to the 7-8th position.

The JPEG Decoding/Thumbnail Supplied Spec

	Compression Method		Colour format		
	Baseline	**Progressive**	**4:4:4 11:11:11 (Y, Cb, Cr)**	**4:2:2 21:11:11 (Y, Cb, Cr) 12:11:11 (Y, Cb, Cr)**	**4:2:0 22:11:11 (Y, Cb, Cr)**
JPEG Decoding Support	O	X	X	O	O
Image Display	Image	invalid format	invalid format	Image	Image
Thumbnail Display	Display when there is no thumbnail.			Display when there is no thumbnail.	Display when there is no thumbnail.

- If an error occur when decoding a JPEG, “Corrupted file” is displayed on screen.

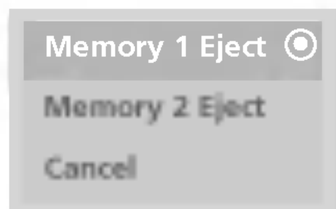
How to insert and eject the card

■ Insert card

1. Insert the card into the Slot 1 and/or Slot 2 with the hand softly and slowly.
2. Press the **XSTUDIO** button to enter the **XSTUDIO** mode.
   Press the **XSTUDIO** button again to exit the **XSTUDIO** mode.

■ Eject card

1. Press the **M/C EJECT** button on the remote control.
2. Press ▲ / ▼ button to select the **Memory 1 Eject** or **Memory 2 Eject** based on the inserted card location.
   If selecting **Cancel**, OSD is disappeared.
3. Press the **OK** button and then eject the card from the slot.

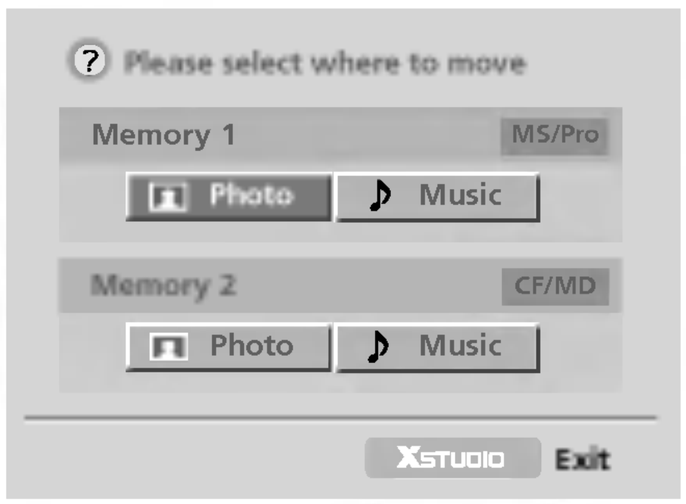


- Do not insert or eject a card in one slot while the card in the other slot (slot 1 or slot 2) is in use, the product may run abnormally.
- When entering the photo or music media at first, the **M/C EJECT** button will not work.
  It’s possible to use the **M/C EJECT** button during while using the photo or music media.
- Before you remove the memory card from the slot, don’t forget to press the **M/C EJECT** button on the remote control or the memory card may be damaged.

Basic Operation

- *The OSD of the ejected card slot is inactivated when ejecting the card with the hand.*

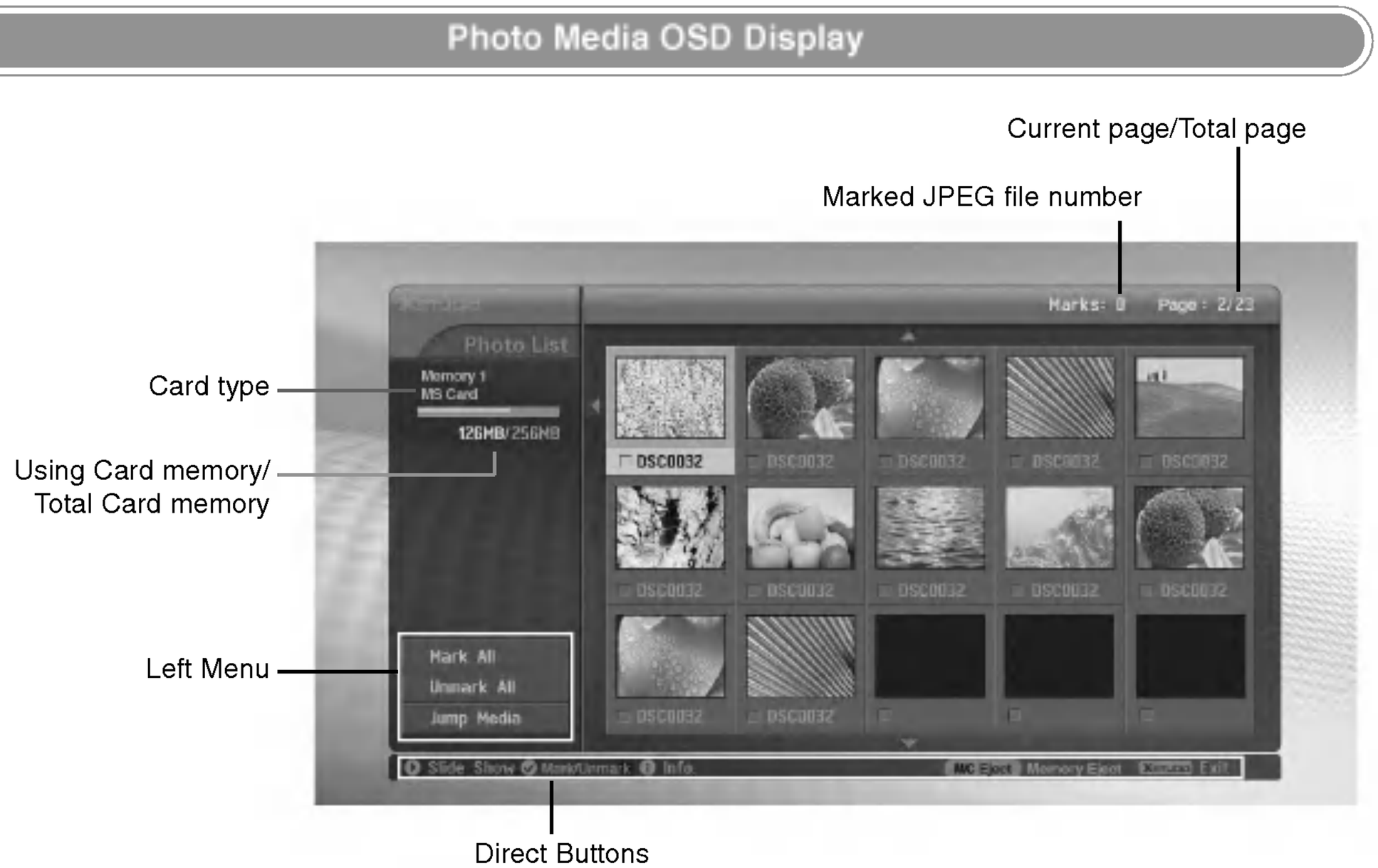
- *If there is any error in a memory card, it’s impossible to enter* **XSTUDIO** *mode.*



1. Insert the memory card to Slot 1 and/or Slot 2 on the TV.
2. Press the **XSTUDIO** button.
3. Press ▲ / ▼ / ◄ / ► button to select photo or music for slot1/2.
4. Press the **OK** button to enter the photo or music media.
5. Press the **XSTUDIO** button to exit the **XSTUDIO** mode.

JPEG File Viewing Options

Photo Media OSD Display



Picture Selection and Viewing

- *Select your desired image file.*

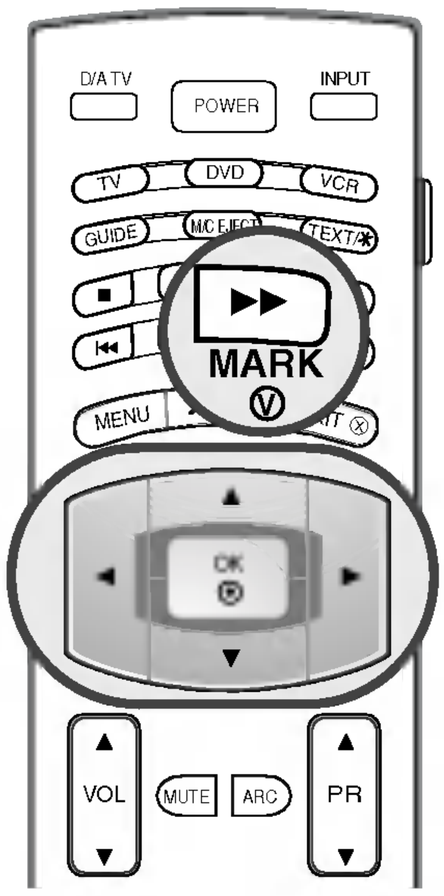


1. Insert the memory card to Slot 1 and/or Slot 2 on the TV.
2. Press the XSTUDIO button.
3. Use ▲ / ▼ / ◄ / ► button to select photo media for slot1 or slot 2.
4. Press the **OK** button to enter the photo media.
   Note: It's possible to display 15 JPEG files per page.
5. Press the ▲ / ▼ / ◄ / ► button to select JPEG file and then press the **OK** button.
6. Press the ▲ / ▼ button to select **View** and then press the **OK** button. The selected image will display on entire screen.

Mark/Unmark for JPEG file

- *You can mark/unmark the file to view the desired file or use slide show for desired file conveniently.*





■ Mark/Unmark for all files

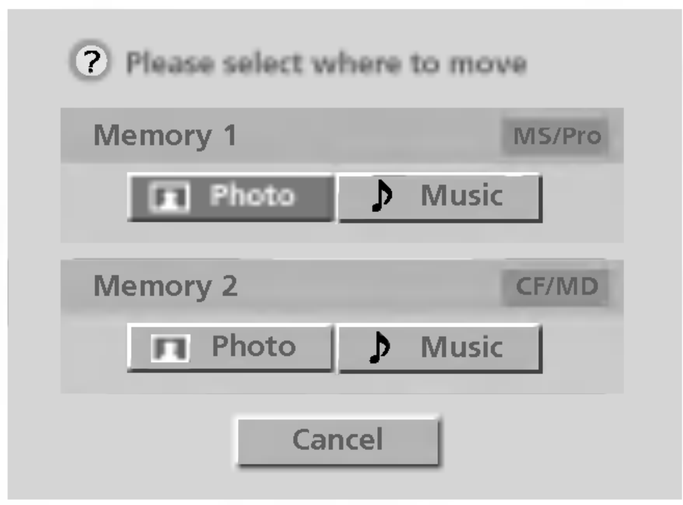
1. In photo media, Repeatedly press ◄ button to enter the left menu.
2. Press the ▲ / ▼ button to select **Mark All** or **Unmark All**.
   - If you select **Mark All**, every file is selected.
   - If you select **Unmark All**, the selection for every file is released.
3. Press the **OK** button and then ► button to return to the photo list.

■ Mark/Unmark for some file

Press the **MARK** button repeatedly to mark or unmark some JPEG file.

Jump Media





- *Use this funcion to jump to other media during using the photo media.*

1. In photo media, press ◄ button repeatedly to enter the left menu.
2. Press the ▲ / ▼ button to select **Jump Media** and then press the **OK** button.
3. Press the ▲ / ▼ / ◄ / ► button to select desired media and then press the **OK** button. The screen displays the selected media list.

JPEG File Viewing Options Continued

Image Adjustment

- *You can display the selected image on entire screen and do the various adjustment for the JPEG file.*



1. Press the ▲ / ▼ / ◄ / ► button to select a JPEG file and then press the **OK** button.
2. Press the ▲ / ▼ button to select **View** and then press the **OK** button. The selected image will display on entire screen.
3. Adjust the JPEG file.



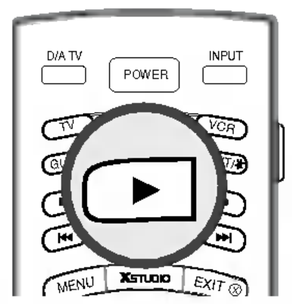
Image selection	• Press the ► button to select next image. • Press the ◄ button to select previous image. • If you marked files, you will only see the marked files.
Image Rotation	• Press the ▲ / ▼ button to rotate the image. • ▲: Rotate clockwise ▼: Rotate counterclockwise • You cannot rotate an enlarged image.
Image Zoom In/Out	• Press the **PR** ▲ / ▼ button to enlarge or reduce the image 2 or 4 times. • Press the ▲ / ▼ / ◄ / ► button to move the enlarged image.
Image Deletion	• Press the **MARK** button to delete the current image.
Go to the Menu	• Press the **EXIT** button to return to the photo list.
Shown/Hidden the menu	• Pressing the **OK** button will toggle the menu on and off. • The OSD menu is automatically disappear after a while.

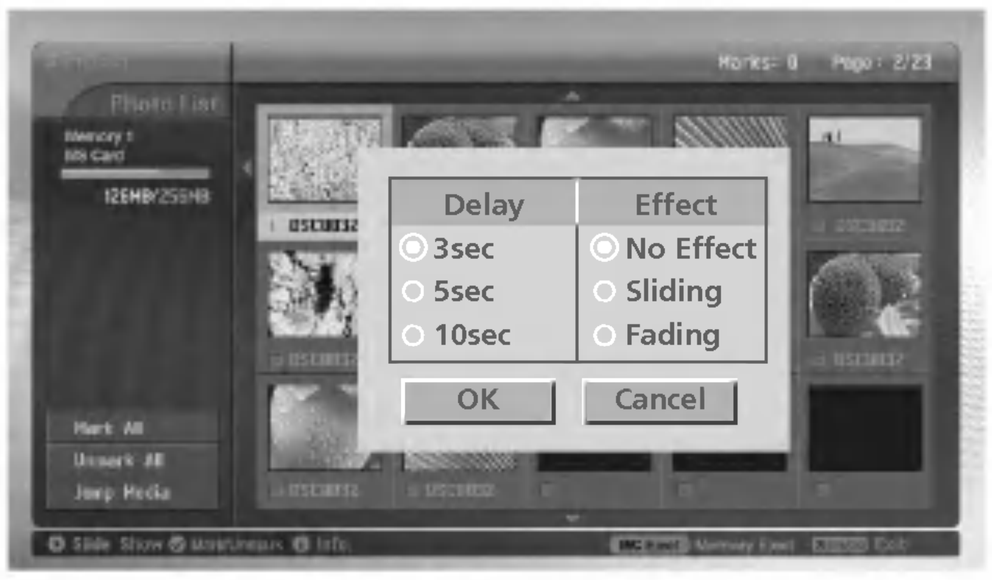
Slide Show



1. Press the ▲ / ▼ / ◄ / ► button to select the JPEG file and then press the **OK** button.
2. Press the ▲ / ▼ button to select **Slide Show** or **Show Marked** and then press the **OK** button. (If you mark the file with using **MARK** button, **Show Marked** is displayed on screen.)

• You can also operate the **Slide Show** or **Show Marked** with ▶ button directly as shown.





3. You can choose the slide show delayed time and effect.
   Press the ▲ / ▼ / ◄ / ► button to choose the slide show delayed time and effect.
4. Press the ▲ / ▼ / ◄ / ► button to select **OK**. Slide show start.

• If you mark for a file, slide show works only the marked image.



Next / previous Image Selection	• Press the ► button to select next image. • Press the ◄ button to select previous image.
Image Pause	• Press the **II** button to pause the current image. • Press the ▶ button to restart the slide show. • By pressing ◄ / ► button, you can also select the next or previous image during pausing the image.
Go to the menu	• Press the **EXIT** button to return to the photo list.
Shown/Hidden the menu	• Pressing the **OK** button will toggle the menu on and off. • The OSD menu is automatically disappear after a while.

JPEG File Viewing Options Continued

JPEG File Deletion and Cancel



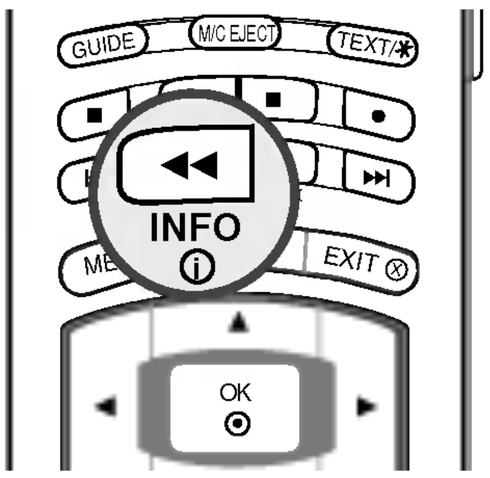
1. Use the ▲ / ▼ / ◀ / ▶ button to select the JPEG file and then press the **OK** button.
2. ■ **Delete**
   To delete the file, press the ▲ / ▼ button to select **Delete** and then press the **OK** button. Select **Yes** with ◀ / ▶ button. The file is deleted, all the following files are shifted up one position.

   • If you select **Delete** after marking some file, all of the marked file is deleted.
   • In case MS, SMC, SD memory card is setted the write protection, "Protection Mode. Please push the **OK** buton" message is displayed. When you select **OK**, the screen is returned to the photo list. (Release the write protection to delete a JPEG file.)

   ■ **Cancel**
   To return to the photo list, press the ▲ / ▼ button to select **Cancel** and then press the **OK** button.

File Information

- *Use it to check information for selected JPEG file.*





1. In photo media, select your desired JPEG file.
2. Press the **INFO** button. The file information for selected JPEG file is displayed. If JPEG file has no information, you can't check it.
3. Press the **OK**, **EXIT** or **INFO** button to return to the photo list.

Screen Saver

- *Screen saver operates to prevent fixed image.*

- If you don't press any button about 30 secondes while displaying the photo list, the screen saver is worked.

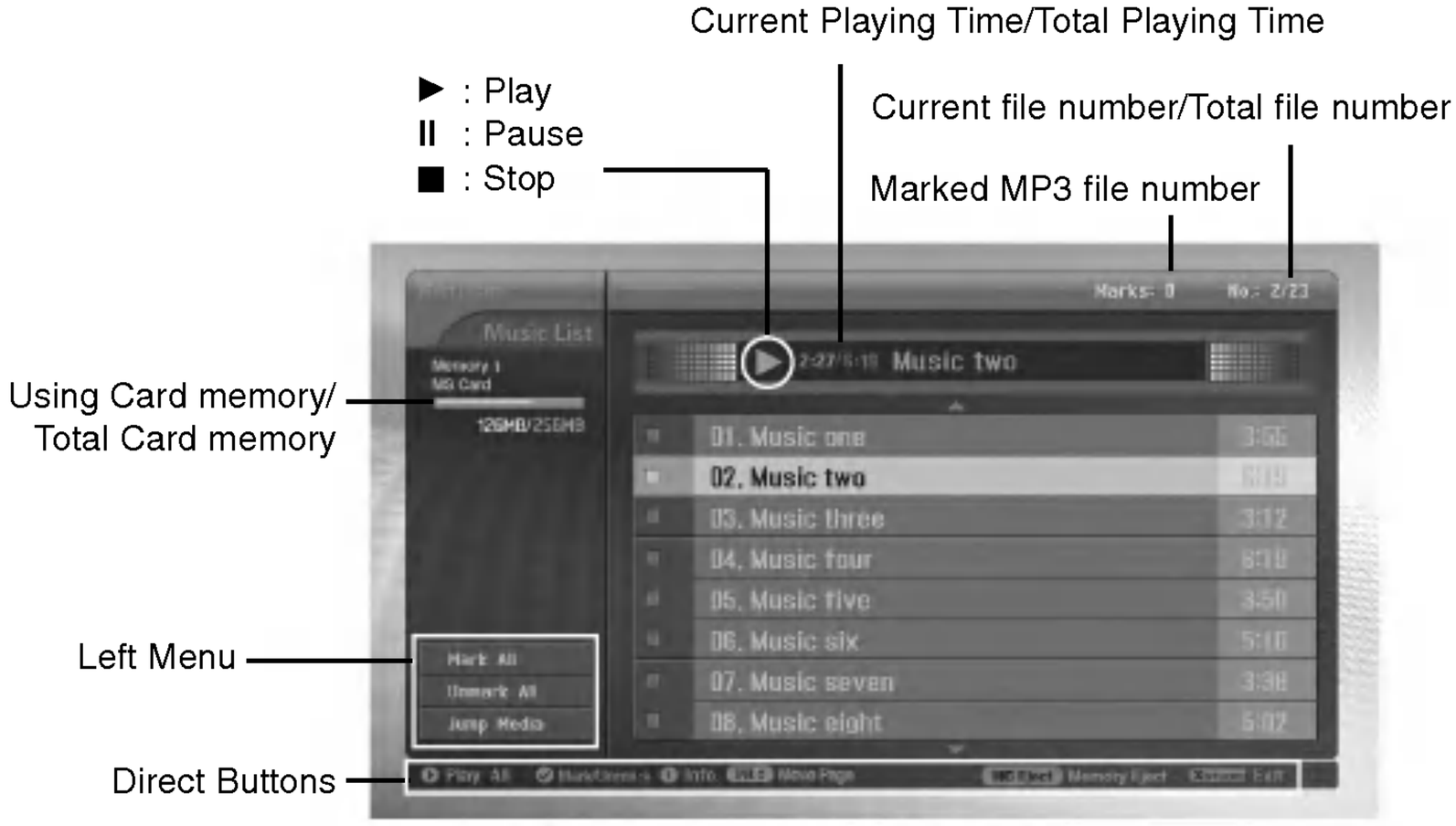
XSTUDIO

• Press the ▲ / ▼ / ◀ / ▶, **EXIT**, ▶ (play), **II**, ■, **I◀◀**, **▶▶I**, **INFO**, **MARK** button to release the screen saver.

MP3 Files Playing Operation

- ***Plays a MP3 file that made by user for personal purpose.***
- ***Use other MP3 Player if an MP3 file is protected by copyright.***

Music Media OSD Display

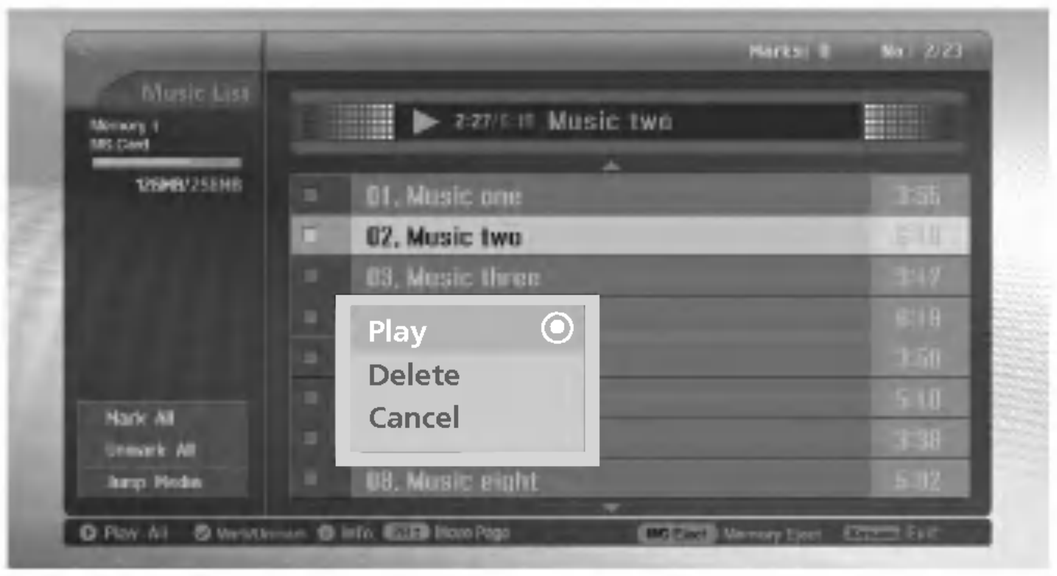


MP3 File Selection and Playback

- *MP3 file Selection and delete function don't work while playing music.*

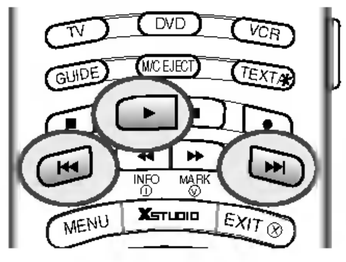
- *If pressing any button except , , button on the remote control while playing the music, the music playing is stopped.*

- *Moves from the current 8 files list to the next files list with PR ▲ / ▼ button.*



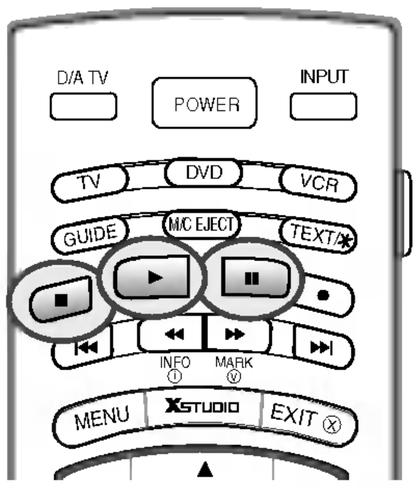
1. Insert the memory card to Slot 1 and/or Slot 2 on the TV.
2. Press the **XSTUDIO** button.
3. Use ▲ / ▼ / ◄ / ► button to select music media for slot1 or slot 2.
4. Press the **OK** button to enter the music media.
   Note: It's possible to display 8 MP3 files per page.
5. Press the ▲ / ▼ button to select desired MP3 file and then press the **OK** button.
6. Press the ▲ / ▼ button to select **Play** or **Play Marked** and then press the **OK** button.(If you mark the file with using **MARK** button, **Play Marked** is displayed on screen.)

- You can also play the music with button directly.
- The current playing MP3 file displays ♫ in front of the title.
- While playing music, press the I◄◄ or ►►I button to select the previous or next file.
- If you press the I◄◄ button while playing, the MP3 replays from the beginning.
  (If you press the I◄◄ button within 1~2 seconds after playing a file, it plays the previous file.)



MP3 Files Playing Operation Continued

Stop/Pause Playback



■ Stop Playback

Press the ■ button to stop playback.

- If you replay the MP3 file after stopping, the highlighted MP3 file on menu will play.

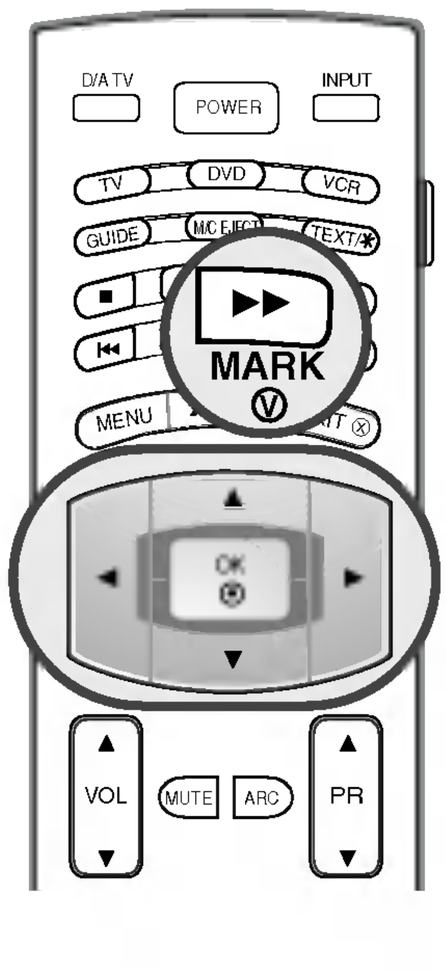
■ Pause Playback

1. Press the **II** button to pause playback.
2. Press the **II** or ▶ button to play from where the file was paused.

Mark/Unmark for MP3 File

- *You can mark/unmark the file to play the desired file only.*
- *It's available to use left menu while stopping the music.*





■ Mark/Unmark for all files

1. In music media, press the ◀ button.
2. Press the ▲ / ▼ button to select **Mark All** or **Unmark All**.
   - If you select **Mark All**, every file is selected.
   - If you select **Unmark All**, the selection for every file is released.
3. Press the **OK** button and then ▶ button to return to the music list.

■ Mark/Unmark for some file

Press the **MARK** button repeatedly to mark or unmark an MP3 file**.**

Jump Media



- *Use this funcion to jump to other media during using music media.*

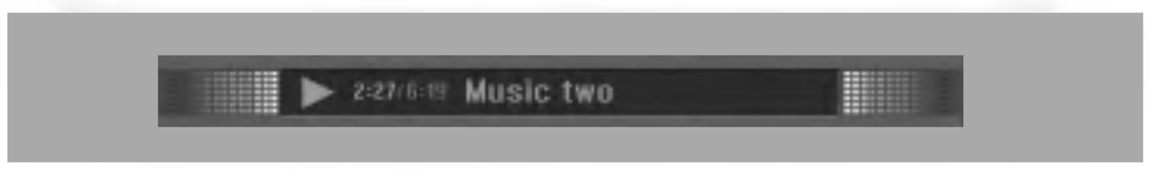
1. In music media, press the ◄ button.
2. Press the ▲ / ▼ button to select **Jump Media** and then press the **OK** button.
3. Press the ▲ / ▼ / ◄ / ► button to select desired media and then press the **OK** button. The screen displays the selected media list.

Screen Saver

- *Screen saver operates to prevent fixed image.*

- If you do not press a button within about 30 secondes, the screen saver is worked.

■ While playing music



• Press the , , buttons. The screen saver is release but the MP3 playback is restarted. If you press other button, the MP3 is stopped.

■ While stopping music



• Press the ▲ / ▼ / ◄ / ►, **EXIT**, ► (play), **II**, ■, **I◄◄**, **►►I**, **INFO**, **PR ▲ / ▼**, **MARK** button to release the screen saver.

MP3 Files Playing Operation Continued

MP3 File Deletion and Cancel



1. Use the ▲ / ▼ button to select the MP3 file and then press the **OK** button.
2. ■ **Delete**
   To delete the file, press the ▲ / ▼ button to select **Delete** and then press the **OK** button. Select **Yes** with ◄ / ► button. The file is deleted, all the following files are shifted up one position.



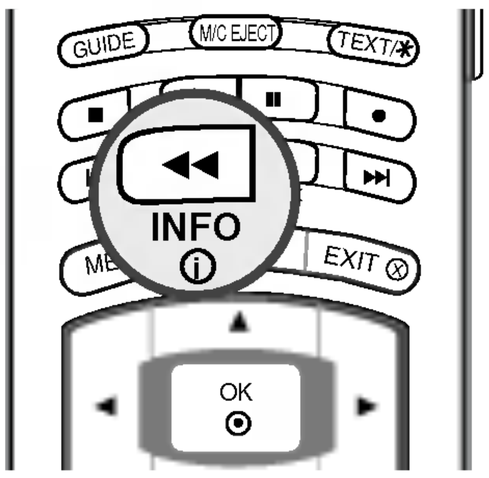
- If you select **Delete** after marking some file, all of the marked file is deleted.
- In case MS, SMC, SD memory card is set the write protection, “Protection Mode. Please push the **OK** button” message is displayed. When you select **OK**, the screen is returned to the music list. (Release the write protection to delete a MP3 file.)

■ **Cancel**
To return to the music list, press the ▲ / ▼ button to select **Cancel** and then press the **OK** button.

File Information

- *Use it to check information for selected MP3 file.*





1. In music media, select your desired MP3 file.
2. Press the **INFO** button. The file information for selected MP3 file is displayed.
   If MP3 file has no information, you can’t check it.
3. Press the **OK**, **EXIT** or **INFO** button to return to the photo list.

Reference

IR Code

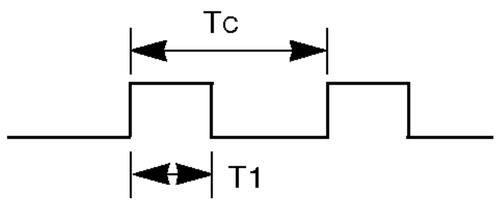
How to Connect

▶ Connect your wired remote control to the Remote Control port on the TV.

Remote Control IR Codes

▶ **Output waveform**

Single pulse, modulated with 37.917KHz signal at 455KHz

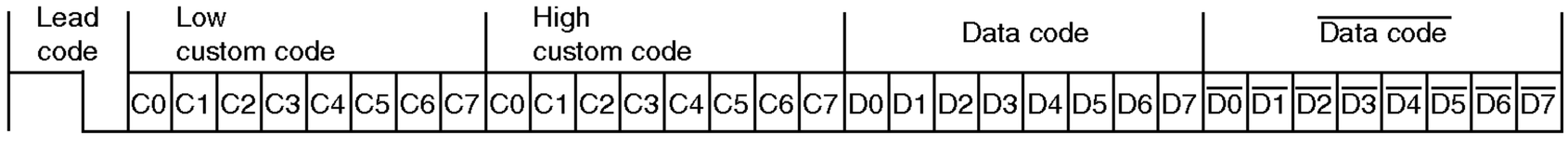


Carrier frequency

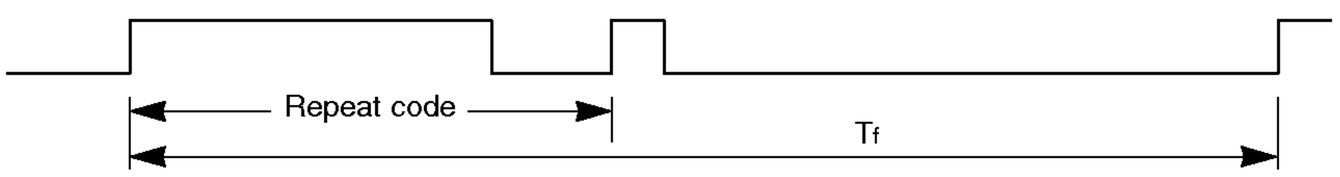
$F_{CAR} = 1/T_C = f_{OSC}/12$
Duty ratio = T1/Tc = 1/3

▶ **Configuration of frame**

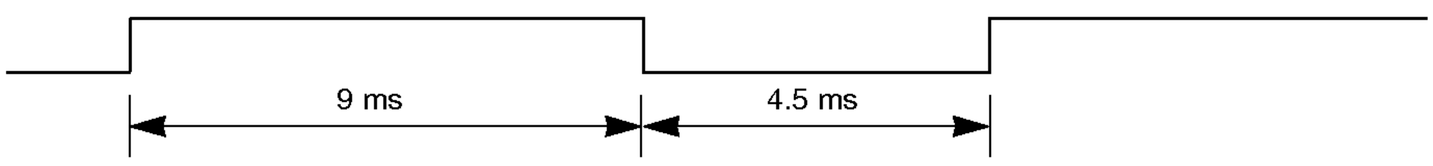
• 1st frame



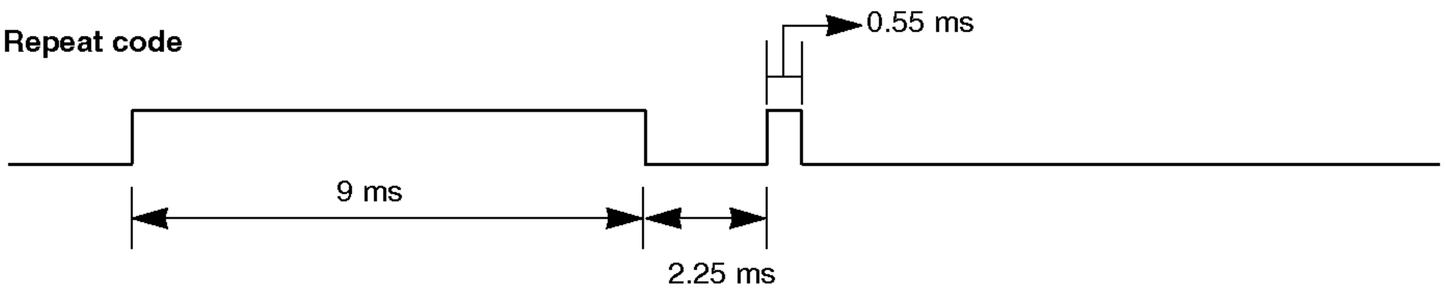
• Repeat frame



▶ **Lead code**

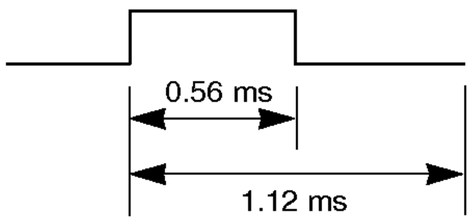


▶ **Repeat code**

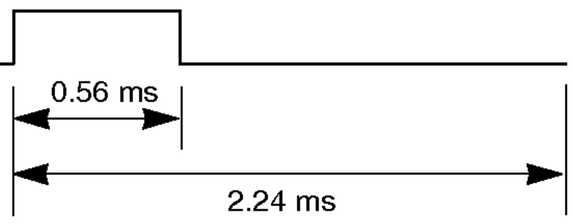


▶ **Bit description**

• Bit “0”

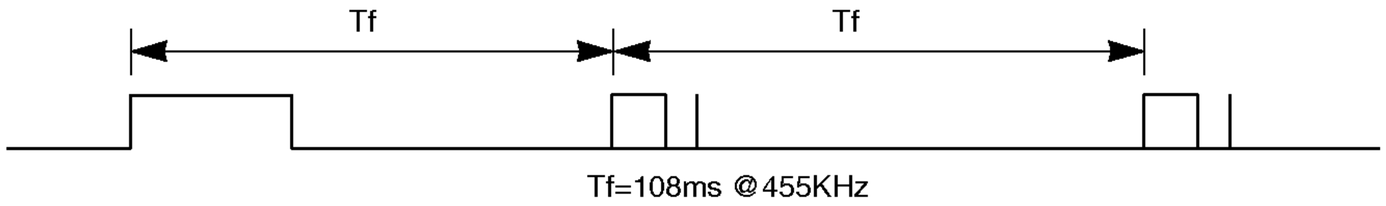


• Bit “1”



▶ **Frame interval : Tf**

The waveform is transmitted as long as a key is depressed.



Tf=108ms @455KHz

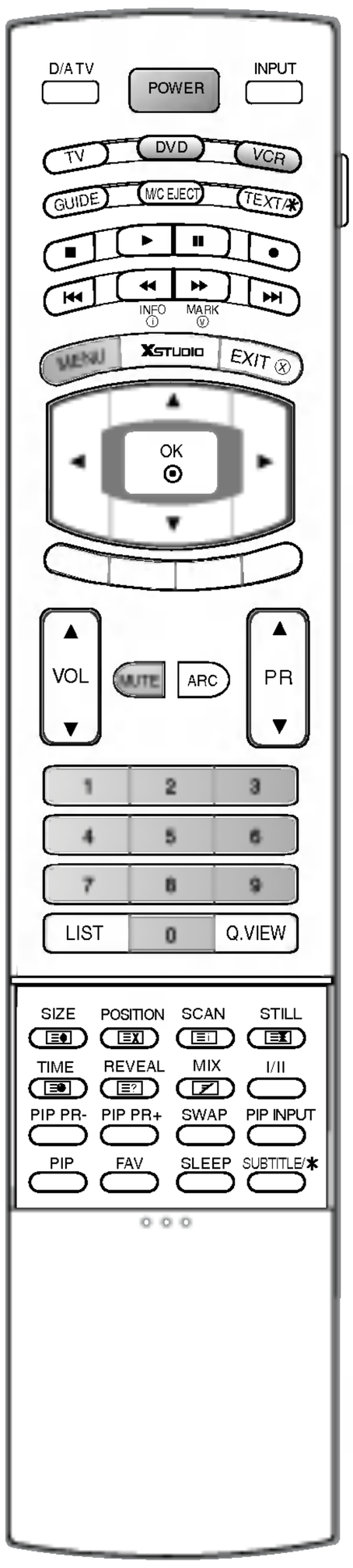
Code (Hexa)	Function	Note
0x0B	INPUT	
0x08	POWER	
0xCA	M/C EJECT	
0xAB	GUIDE	
0x50	D/A TV	
0xC8	XSTUDIO	
0xB1	■	
0xB0	▶	
0xBA	II	
0xB2	I◀◀	
0xAA	◀◀ (INFO ⓘ)	
0x7D	▶▶ (MARK Ⓥ)	
0xB3	▶▶I	
0x43	MENU	
0x20	TEXT/✱	
0x5B	EXIT	
0x07	◀	
0x40	▲	
0x41	▼	
0x44	OK	
0x06	▶	
0x72	RED	
0x71	GREEN	
0x63	YELLOW	
0x61	BLUE	
0x02	VOL▲	
0x03	VOL▼	
0x09	MUTE	
0x79	ARC	
0x00	PR▲	
0x01	PR▼	
0x10 ~ 0x19	Number Key 0~ 9	
0x53	LIST	
0x1A	Q.VIEW	
0x62	POSITION	
0x64	SIZE	
0x65	STILL	
0x70	SCAN	
0x26	TIME	
0x2A	REVEAL	
0x24	MIX	
0x0A	I/II	
0xC1	PIP RP-	
0xC0	PIP RP+	
0xC2	SWAP	
0xC3	PIP INPUT	
0x60	PIP	
0x1E	FAV	
0x0E	SLEEP	
0x39	SUBTITLE/✱	

Remote Control Button

Programming the Remote

► The remote is a multi-brand or a universal remote. It can be programmed to operate most remote-controllable devices of other manufacturers.
Note that the remote may not control all models of other brands.

Programming the remote



1. To find out whether your remote can operate the device without programming, turn on the device such as a VCR and press the corresponding mode button on the remote.
   After that, press the **POWER** button. If the device is turned off then it responds properly and the remote need not to be programmed. If not, the remote should be programmed to operate the device. The programming procedures are explained below.
2. Press the **MENU** and **MUTE** button continuously at the same time for 2 seconds, the current selected device button will be illuminated.
   If you don't press any button for 20 seconds, the light on the mode button will be turned off. In that case, you have to repeat from step 2.
3. Enter code numbers using the number button on the remote by referring the code table on the following pages. When pressing the button, the light blinks at a time. If the device turned off, the programming is successful.
4. Press the **MENU** button to store the code. After blinking twice, this code is stored.
5. Test the remote functions to see if the device responds properly. If not, repeat from step 2.

Programming Codes

■ VCRs

Brand	Codes				Brand	Codes				Brand	Codes				Brand	Codes			
AIWA	034				KENWOOD	014	034	039	043	PORTLAND	108				TATUNG	039	043		
AKAI	016	043	046	124		047	048			PULSAR	072				TEAC	034	039	043	
	125	146			LG (GOLDSTAR)	001	012	013	020	QUARTZ	011	014			TECHNICS	031	033	070	
AMPRO	072					101	106	114	123	QUASAR	033	066	075	145	TEKNIKA	019	031	033	034
ANAM	031	033	103		LLOYD	034				RCA	013	020	033	034		101			
AUDIO DYNAMICS	012	023	039	043	LXI	003	009	013	014		040	041	062	063	THOMAS	034			
BROKSONIC	035	037	129			017	034	101	106		107	109	140	144	TMK	006			
CANON	028	031	033		MAGIN	040					145	147			TOSHIBA	008	013	042	047
CAPEHART	108				MAGNAVOX	031	033	034	041	REALISTIC	003	008	010	014		059	082	112	131
CRAIG	003	040	135			067	068				031	033	034	040	TOTEVISION	040	101		
CURTIS MATHES	031	033	041		MARANTZ	012	031	033	067		053	054	101		UNITECH	040			
DAEWOO	005	007	010	064		069				RICO	058				VECTOR RESEARCH	012			
	065	108	110	111	MARTA	101				RUNCO	148				VICTOR	048			
	112	116	117	119	MATSUI	027	030			SALORA	014				VIDEO CONCEPTS	012	034	046	
DAYTRON	108				MEI	031	033			SAMSUNG	032	040	102	104	VIDEOSONIC	040			
DBX	012	023	039	043	MEMOREX	003	010	014	031		105	107	109	112	WARDS	003	013	017	024
DYNATECH	034	053				033	034	053	072		113	115	120	122		031	033	034	040
ELECTROHOME	059					101	102	134	139		125					053	054	131	
EMERSON	006	017	025	027	MGA	045	046	059		SANSUI	022	043	048	135	YAMAHA	012	034	039	043
	029	031	034	035	MINOLTA	013	020			SANYO	003	007	010	014	ZENITH	034	048	056	058
	036	037	046	101	MITSUBISHI	013	020	045	046		102	134				072	080	101	
	129	131	138	153		049	051	059	061	SCOTT	017	037	112	129					
FISHER	003	008	009	010		151					131								
FUNAI	034				MTC	034	040			SEARS	003	008	009	010					
GE	031	033	063	072	MULTITECH	024	034				013	014	017	020					
	107	109	144	147	NEC	012	023	039	043		031	042	073	081					
GO VIDEO	132	136				048					101								
HARMAN KARDON	012	045			NORDMENDE	043				SHARP	031	054	149						
HITACHI	004	018	026	034	OPTONICA	053	054			SHINTOM	024								
	043	063	137	150	PANASONIC	066	070	074	083	SONY	003	009	031	052					
INSTANTREPLAY	031	033				133	140	145			056	057	058	076					
JCL	031	033			PENTAX	013	020	031	033		077	078	149						
JCPENNY	012	013	015	033		063				SOUNDESIGN	034								
	040	066	101		PHILCO	031	034	067		STS	013								
JENSEN	043				PHILIPS	031	033	034	054	SYLVANIA	031	033	034	059					
JVC	012	031	033	043		067	071	101			067								
	048	050	055	060	PILOT	101				SYMPHONIC	034								
	130	150	152		PIONEER	013	021	048		TANDY	010	034							

■ DVD

Brand	Codes				Brand	Codes		Brand	Codes		Brand	Codes		
APEX DIGITAL	022				MAGNAVOX	013		PHILIPS	013		SONY	007		
DENON	020	014			MARANTZ	024		PIONEER	004	026	THOMPSON	005	006	
GE	005	006			MITSUBISHI	002		PROCEED	021		TOSHIBA	019	008	
HARMAN KARDON	027				NAD	023		PROSCAN	005	006	YAMAHA	009	018	
JVC	012				ONKYO	008	017	RCA	005	006	ZENITH	010	016	025
LG	001	010	016	025	PANASONIC	003	009	SAMSUNG	011	015				

Troubleshooting Checklist

The operation does not work normally.	
The remote control doesn't work	• Check to see if there is any object between the product and the remote control causing obstruction. • Are batteries installed with correct polarity (+ to +, - to -)? • Correct remote operating mode set: TV, VCR etc.? • Install new batteries.
Power is suddenly turned off	• Is the sleep timer set? • Check the power control settings. Power interrupted • No broadcast on station tuned with Auto off activated.

The video function does not work.	
No picture & No sound	• Check whether the product is turned on. • Try another channel. The problem may be with the broadcast. • Is the power cord inserted into wall power outlet? • Check your antenna direction and/or location. • Test the wall power outlet, plug another product's power cord into the outlet where the product's power cord was plugged in.
Picture appears slowly after switching on	• This is normal, the image is muted during the product startup process. Please contact your service centre, if the picture has not appeared after five minutes.
No or poor colour or poor picture	• Adjust Colour in menu option. • Keep a sufficient distance between the product and the VCR. • Try another channel. The problem may be with the broadcast. • Are the video cables installed properly? • Activate any function to restore the brightness of the picture.
Horizontal/vertical bars or picture shaking	• Check for local interference such as an electrical appliance or power tool.
Poor reception on some channels	• Station or cable product experiencing problems, tune to another station. • Station signal is weak, reorient antenna to receive weaker station. • Check for sources of possible interference.
Lines or streaks in pictures	• Check antenna (Change the direction of the antenna).

The audio function does not work.	
Picture OK & No sound	• Press the **VOL** or **VOLUME** button. • Sound muted? Press **MUTE** button. • Try another channel. The problem may be with the broadcast. • Are the audio cables installed properly?
No output from one of the speakers	• Adjust Balance in menu option.
Unusual sound from inside the product	• A change in ambient humidity or temperature may result in an unusual noise when the product is turned on or off and does not indicate a fault with the product.

There is a problem in PC mode. (Only PC mode applied)	
The signal is out of range.	• Adjust resolution, horizontal frequency, or vertical frequency. • Check it whether the signal cable is connected or loose. • Check the input source.
Vertical bar or stripe on back-ground & Horizontal Noise & Incorrect position	• Work the Auto configure or adjust clock, phase, or H/V position.
Screen colour is unstable or single colour	• Check the signal cable. • Reinstall the PC video card.

Notes

