U0524B_cover 11/27/06 8:52 AM Page 1

LG Electronics Inc.

LCD TV | PLASMA TV | OWNER'S MANUAL

Life's Good

LCD TV | PLASMA TV
OWNER'S MANUAL

LCD TV MODELS	PLASMA TV MODELS
32LC2D	42PC1D
32LC2DB	42PC1DA
37LC2D	42PC1DV
37LC2DB	42PC3D
42LC2D	50PC1D
42LC2DB	50PC1DA

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.

LG Electronics Inc.

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

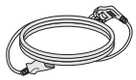
ID Number(s): 3834: 32LC2D, 3836: 37LC2D, 3837: 42LC2D, 3849: 50PC1D, 3950: 42PC1D, 3917: 42PC1DV, 4120: 42PC1DA, 4228: 50PC1DA, 4005: 32LC2DB, 3915: 42PC3D, 4007: 42LC2DB, 4006: 37LC2DB

P/NO: 38289U0524B (0611-REV03)
Printed in Korea

U0524B_01 11/27/06 8:39 AM Page 2

ACCESSORIES

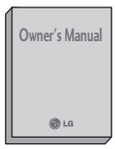
Ensure that the following accessories are included with your set. If any accessory is missing, please contact the dealer from where you purchased the set.



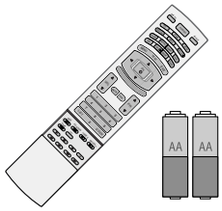
Power Cord



75Ω RF Coaxial



Owner's Manual



Remote Control / Batteries



Polishing Cloth
(except 32LC2D*)
Polish the screen with the cloth.

Slightly wipe stained spot on the exterior only with the cleansing cloths for the product exterior if there is stain or fingerprint on surface of the exterior.

Do not wipe roughly when removing stain. Please be cautious of that excessive power may cause scratch or discoloration.

For 42PC1D*, 42PC3D*, 50PC1D*



2-Wall brackets



2-eye-bolts



2-bolts
(42PC1D*,
42PC3D* only)

For 32LC2D*, 37LC2D*, 42LC2D*



2-TV brackets
2-Wall brackets



Cable Management



2-bolts

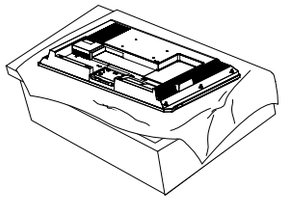


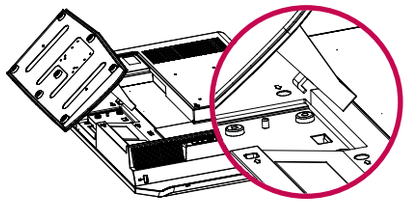
Twister Holder
Arrange the wires
with the twister holder.

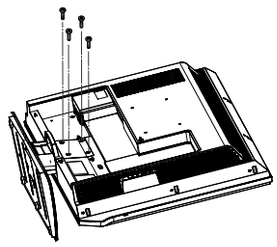


4-bolts (32LC2D* only)
See below for detail information.

Stand Installation for 32LC2D*







1. Carefully place the set screen side down on a cushioned surface that will protect set and screen from damage.

2. Place the hook of the stand in the back of the set as shown.

3. Install the 4 bolts provided securely, in the back of the set.

U0524B_01 11/27/06 8:39 AM Page 4

CONTENTS

ACCESSORIES 3

INTRODUCTION

Controls (Model Name: 32/37/42LC2D series) 6
Connection Options 7
Controls (Model Name: 42PC1D/50PC1D series) 8
Controls (Model Name: 42PC3D series) 9
Connection Options (Model Name: 42PC1D/42PC3D/50PC1D series) 10
Remote Control Key Functions 11-13

INSTALLATION

Unfolding The Base Stand 14
Basic connection 15-16
Desktop Pedestal Installation 17
Wall Mount: Horizontal installation 17
How to join the set assembly to the wall to protect the set tumbling 18

CONNECTIONS & SETUP

Antenna Connection 19
Picture Out Setup 19
VCR Setup 20-21
External AV Source Setup 22
Insertion of CI Module 22
DVD Setup 23-24
HDSTB Setup 25-26
Digital Audio Output 27
PC Setup 28-30

BASIC OPERATION

Turning on the set 31
Programme Selection 32
Volume Adjustment 32

SPECIAL FUNCTIONS

PIP/POP/Twin Picture (Multiple Screen)

Watching PIP/Double Window/POP 33
Programme Selection for Sub Picture 33
Input Source Selection for Sub Picture 34
Sub Picture Size Adjustment 34
Moving the Sub Picture (PIP mode only) 34
Adjusting PIP Transparency (PIP mode only) 35
Swapping between main and sub pictures 35
POP (Picture-out-of-Picture: Programme Scan) ... 35

TELETEXT (In Digital mode)

Teletext within Digital Service 36
Teletext in Digital Service 36

TELETEXT (In Analogue mode)

Switch on/off 37
SIMPLE Text 37
TOP Text 38
FASTEXT 38
Special Teletext Functions 39

EPG (Electronic Programme Guide) (In Digital mode)

Switch on/off EPG 40
Select a programme 40
Button Function in NOW/NEXT Guide Mode 41
Button Function in 8 Days Guide Mode 41
Button Function in Date Change Mode 41
Button Function in Extended Description Box 42
Button Function in Record/Remind Setting Mode 42
Button Function in Timer List Mode 42

TV MENU

On Screen Menus Selection and Adjustment 43

STATION

Auto programme (In Digital Mode) 44
Manual Programme Tuning (In Digital Mode) 45
Programme Edit (In Digital Mode) 46-47
CI [Common Interface] Information (In Digital Mode only) 48
5V Antenna Power (In Digital Mode only) 49
Booster (In Digital Mode only) 50
Diagnostics (In Digital Mode only) 51
Auto Programme Tuning (In Analogue Mode) 52
Manual Programme Tuning (In Analogue Mode) 53
Fine Tuning (In Analogue Mode) 54
Assigning a Station Name (In Analogue Mode) 54
Programme Edit (In Analogue Mode) 55-56
Favourite Programme (In Analogue Mode) 57
Calling the Programme Table 58

PICTURE

PSM (Picture Status Memory) 59
Picture Adjustment (PSM-User option) 60
CSM (Colour Status Memory) 61
Manual Colour Temperature Control (CSM - User option) 61
XD Function 62
XD - User Option 62
NR (Noise Reduction) 63
Advanced 63

SOUND

SSM (Sound Status Memory) 64
Sound Frequency Adjustment (SSM - User option) 64
AVL (Auto Volume Leveler) 65
Balance Adjustment 65
TV Speaker 66
Audio Language (In Digital mode only) 67
Stereo/Dual Reception (In Analogue mode only) 68
NICAM Reception (In Analogue mode only) 68
Speaker Sound Output Selection (In Analogue mode only) 68

TIME

Clock Setup 69
On/Off Time 70
Auto Sleep 71
Sleep Timer 71

SPECIAL

System Lock Setting 72
Child Lock 73
ISM Method (Image Sticking Minimization) 74
Low Power 75
Factory Reset 75
Software Update (In Digital mode only) 76
Subtitle Language (In Digital mode only) 77

SCREEN

Auto config. (RGB [PC] mode only) 78
Manual Configure 79
Setting the Picture Format 80
Selecting Wide VGA/XGA mode 81
XD demo 81
Initializing (Reset to original factory settings) 82

APPENDIX

External Control Device Setup 83-90
IR Codes 91-92
Programming the Remote 93
Programming Codes 94
Troubleshooting Checklist 95-96
Maintenance 97
Product Specifications 98-99

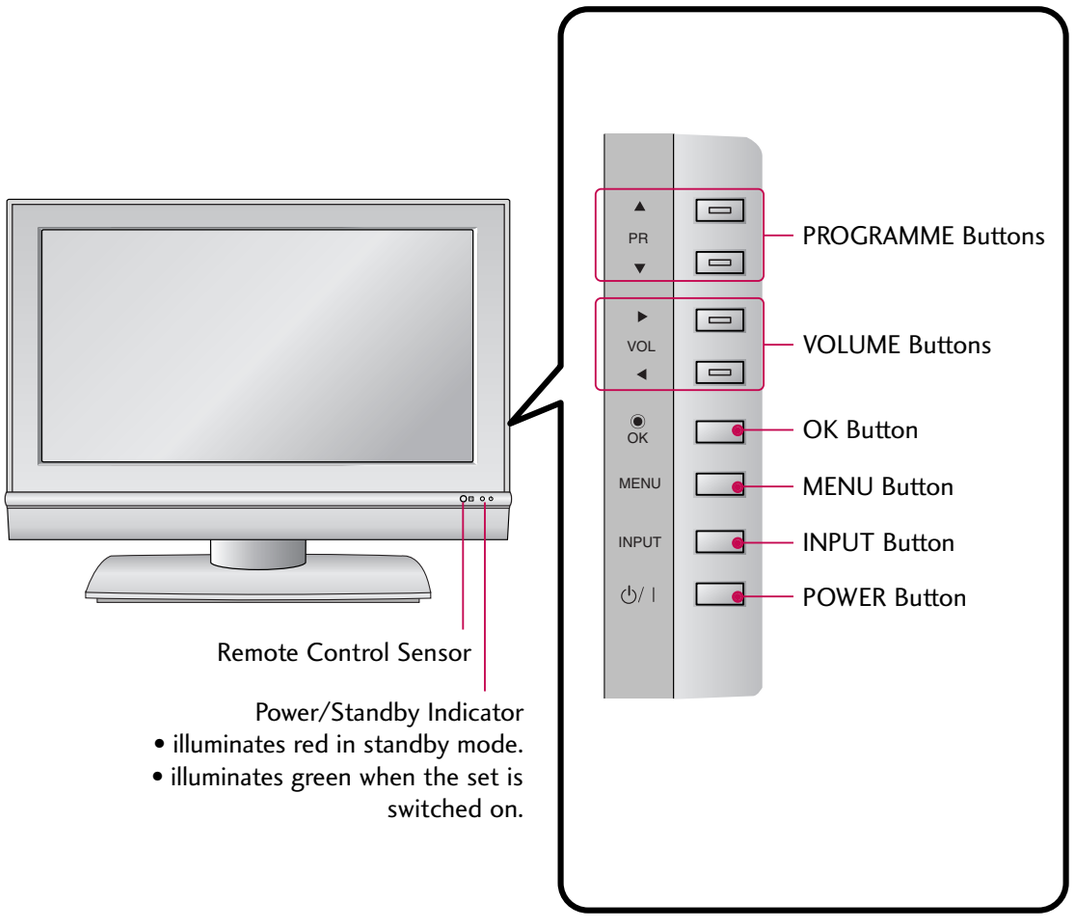
INTRODUCTION

CONTROLS (MODEL NAME: 32/37/42LC2D SERIES)

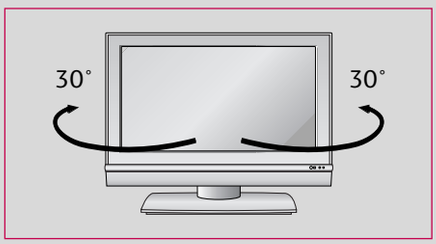
This is the front panel of 32/37/42LC2D series.

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

Front Panel Controls



Swivel Stand (42LC2D series only)

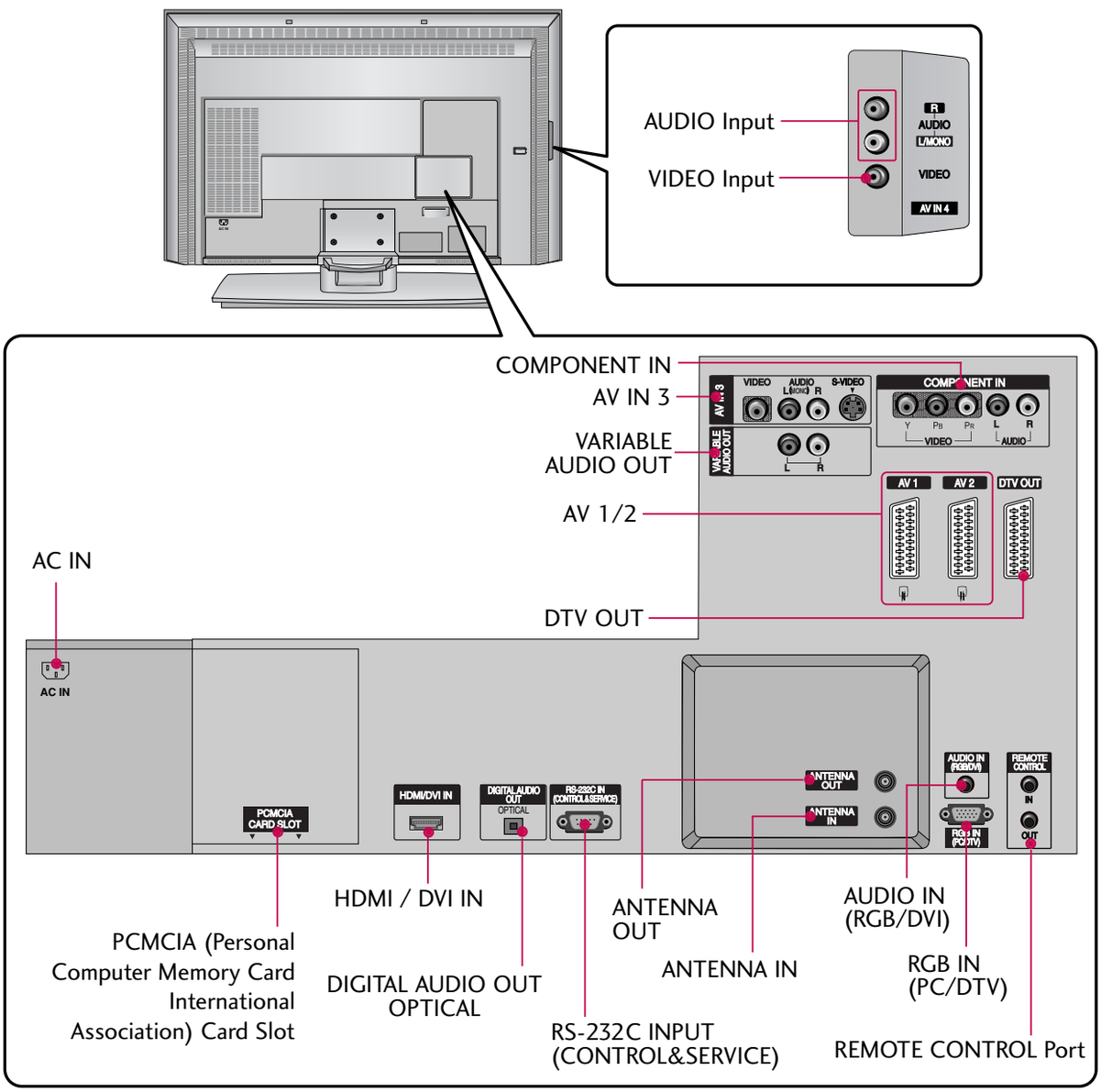


- The set can be conveniently swivelled on its stand 30° to the left or right to provide the optimum viewing angle.

CONNECTION OPTIONS

- **Here shown may be somewhat different from your set.**
- This manual explains the features available on the 32LC2D series.

Back Connection Panel

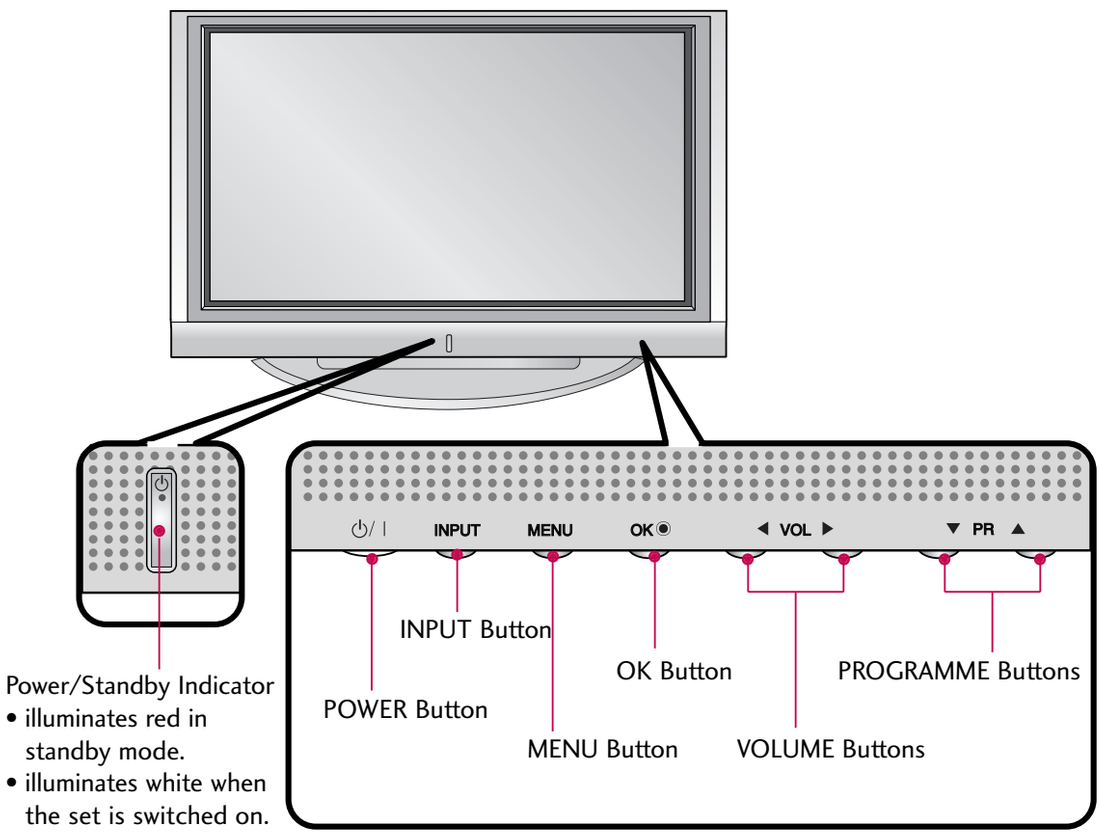


U0524B_01 11/27/06 8:39 AM Page 8

CONTROLS (MODEL NAME: 42PC1D/50PC1D SERIES)

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

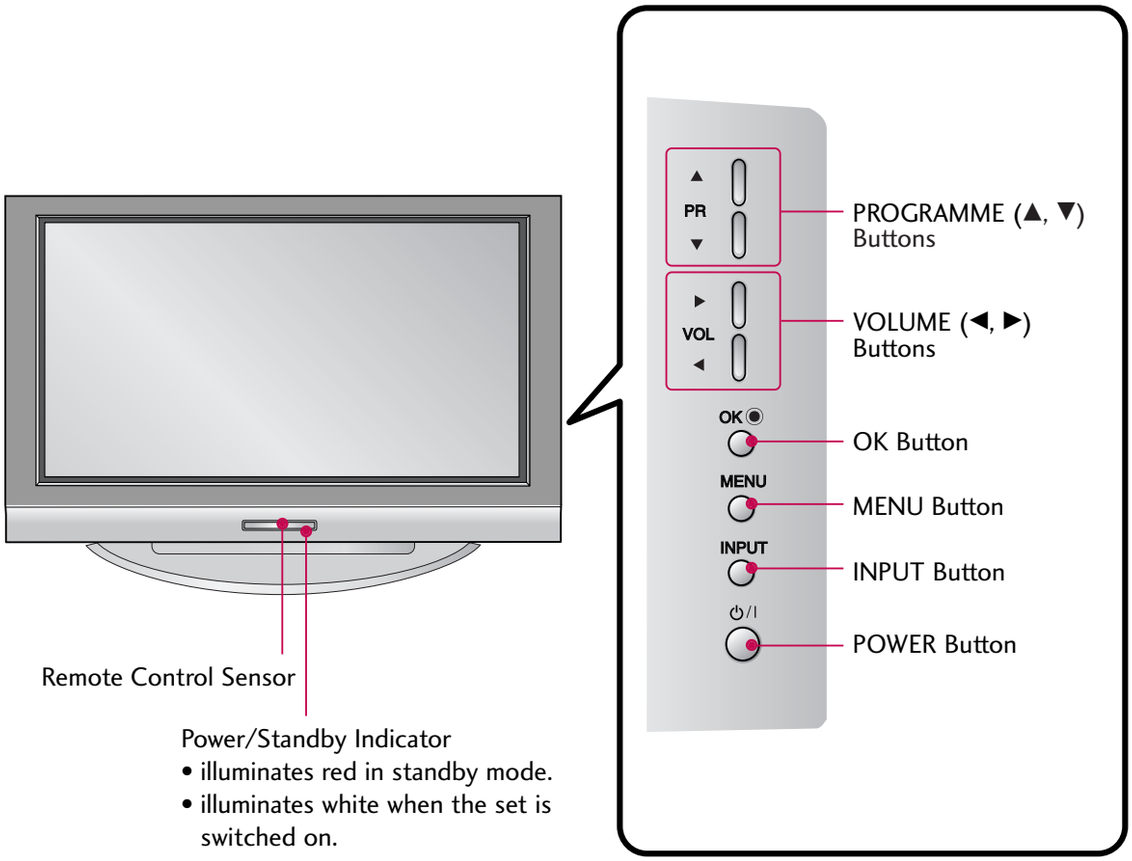
Front Panel Controls



CONTROLS (MODEL NAME: 42PC3D SERIES)

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

Front Panel Controls

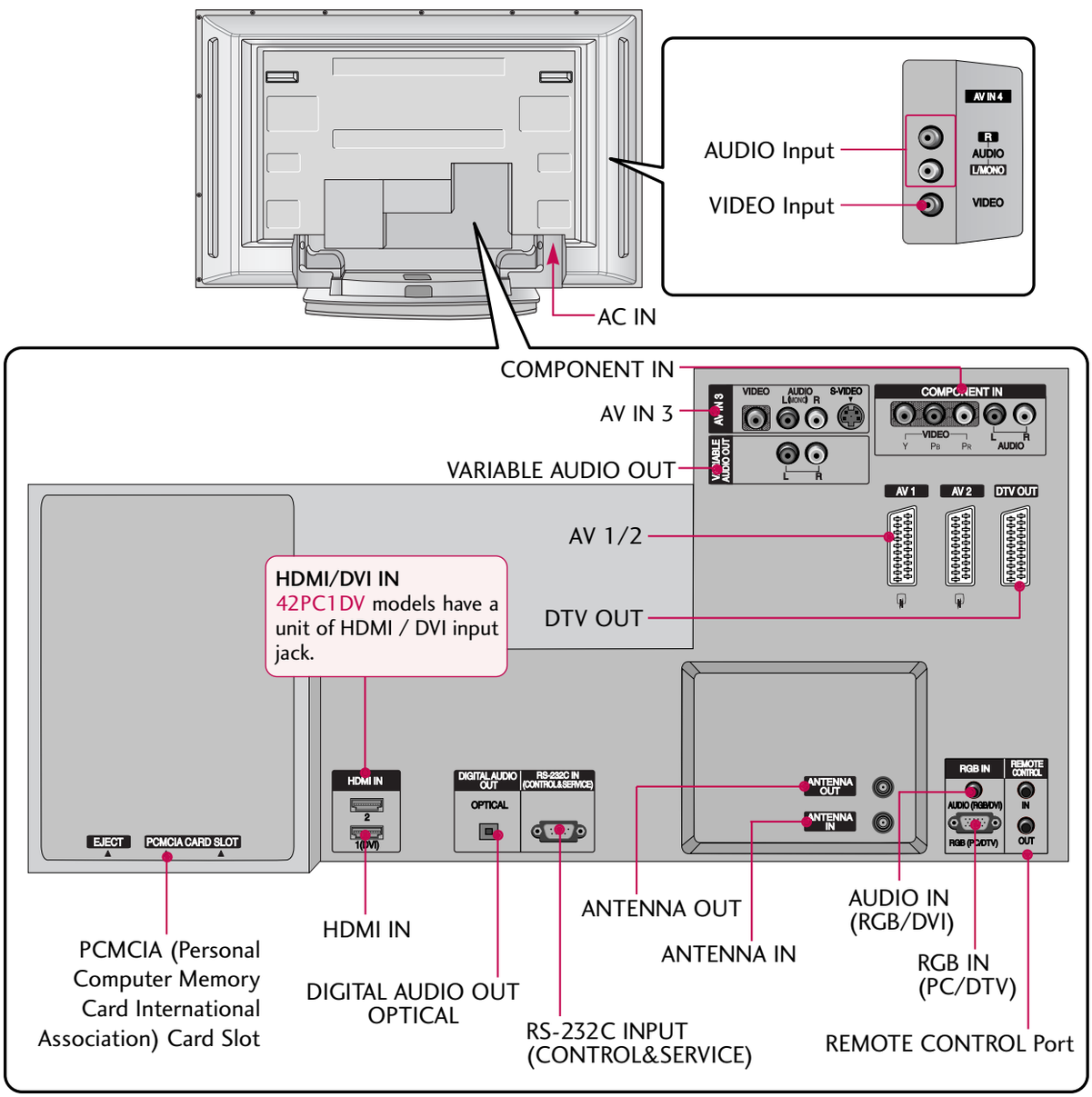


U0524B_01 11/27/06 8:39 AM Page 10

CONNECTION OPTIONS (MODEL NAME: 42PC1D/42PC3D/50PC1D SERIES)

- Here shown may be somewhat different from your set.
- This manual explains the features available on the 42/50PC1D series.

Back Connection Panel



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
Selects the DTV, TV, AV, Component, RGB or HDMI/DVI modes. switches the set on from standby.

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.40~42)
Shows programme schedule.

ARC (Aspect Ratio Control) (Refer to p.80)
Selects your desired picture format.

SUBTITLE/* (Refer to p.77)
Recalls your preferred subtitle in digital mode.

PIP (Refer to p.33)
Switches the sub picture on or off,select PIP, DW1/2 or POP modes.

SIZE (Refer to p.34)
Adjusts the sub picture size.

POSITION (Refer to p.34)
Moves the sub picture position.

PIP PR +/- (Refer to p.33)
Selects a programme for the sub picture.

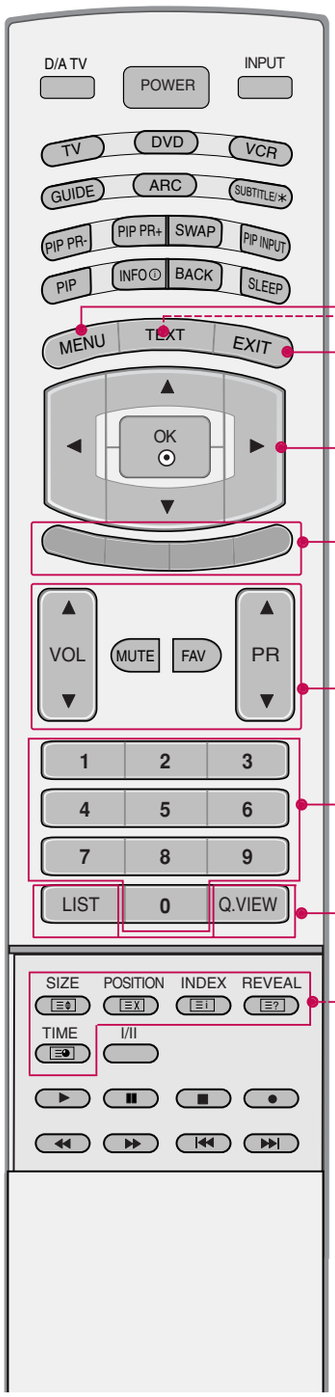
SWAP (Refer to p.35)
Alternates between main and sub picture.

PIP INPUT (Refer to p.34)
Selects the input mode for the sub picture.

BACK
Allow the user to move back one step in an interactive application, EPG or other user interaction function.

SLEEP (Refer to p.71)
Sets the sleep timer.

INTRODUCTION



MENU
Displays on screen menus one by one.
Exits the current menu.
Memorizes menu changes.

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.36~39)

EXIT
Clears all on-screen displays and 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.

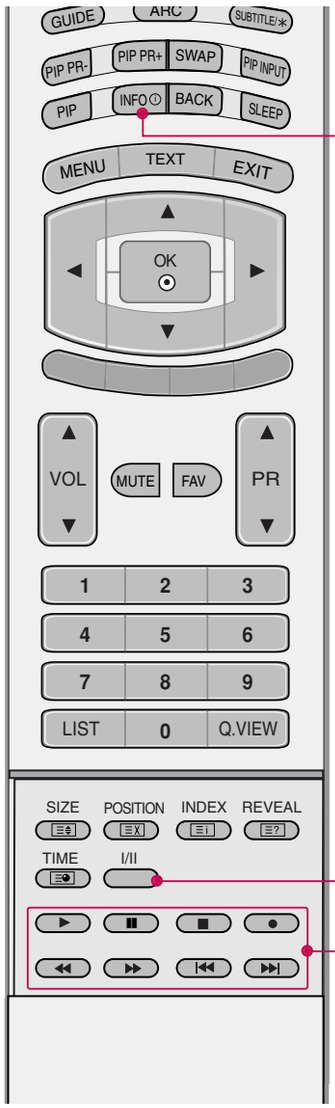
MUTE
Switches the sound on or off.

FAV (FAVOURITE)
Displays the selected favourite programmes.

NUMBER BUTTONS

LIST (Refer to p.58)
Displays the programme table.

Q.VIEW
Returns to the previously viewed programme.



Brief Info.

What is Brief Info?

: Brief Info shows the present screen information.
: On Watching with the upper Input signal, press the **INFO** button.

How to use?

1. Press the **INFO** ⓘ button to show the Brief Info on the screen.
2. Press the **INFO** ⓘ button or **EXIT** button to exit.

Icon Function in Info. description Box	
MHEG	MHEG Programme
	Subtitle Programme
	Scramble Programme
	Dolby Programme

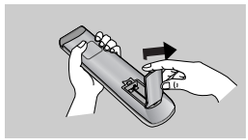
Remote Control Buttons	Function
◄ / ►	Change to Now/Next
▲ / ▼	The detail information on or off

I/II
Selects the audio language during dual language broadcast. (Refer to p.68)
Selects the sound output. (Refer to p.67)

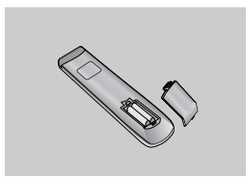
VCR/DVD BUTTONS
Controls a LG video cassette recorder.
Controls a LG DVD player.

Installing Batteries

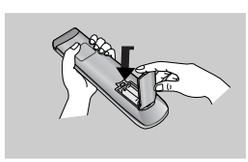
1. Open the battery compartment cover on the back side.

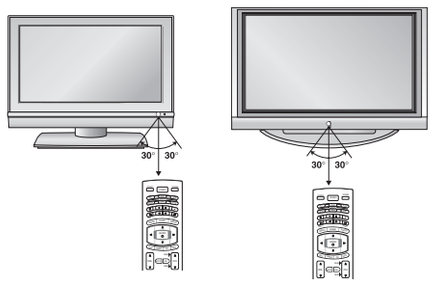


2. Insert two batteries in correct polarity (+ with +, - with -). Don't mix old or used batteries with new ones.



3. Close the cover.





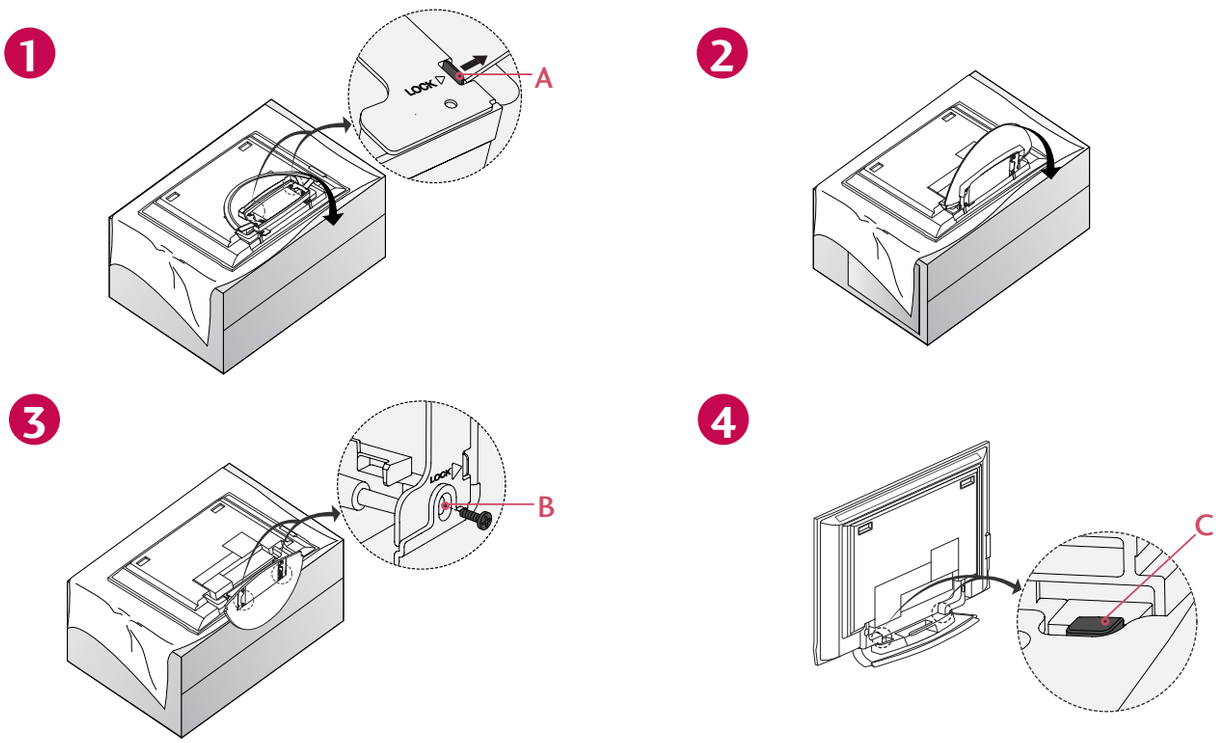
* Use a remote control 7 meter distance and 30 degree (left/right) within the receiving unit scope.

* Dispose of used batteries in a recycle bin to prevent environment.

INSTALLATION

UNFOLDING THE BASE STAND

■ **This feature is not available for all models (42PC1D/3D series)**



- Place the set with the screen facing down on a cushion or soft cloth as shown in Figures 1.
  Before unfolding the stand, please make sure two locks (A) on the bottom of the stand push outward.
- Pull the stand out as shown above in Figures 2 ~ 3.
  After unfolding the stand, please insert and tighten the screws in the holes (B) on the bottom of the stand.
- When connecting cables to the set, Do not disengage the lock (C).
  This may cause the set to fall, causing serious bodily injury and serious damage to the set.

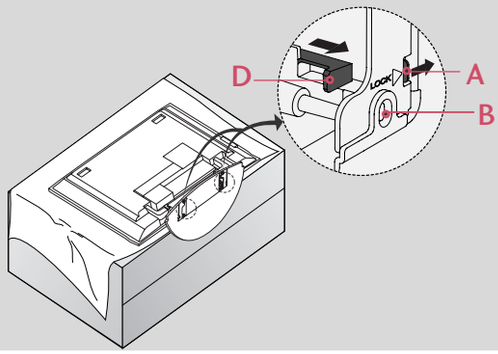
NOTE

Figures shown here may be slightly different from your set.

When closing the stand for storage

First remove the screws in the holes (B) on the bottom of the stand. And then pull two Hooks (D) of the stand bottom and fold the stand into the back of the set.

After folding, push two Locks (A) of the stand bottom outward.

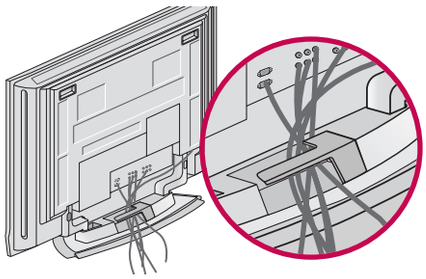


BASIC CONNECTION (Only 42PC1D, 42PC3D, 50PC1D series)

■ These models have two cable arrangement methods according to the stand type.

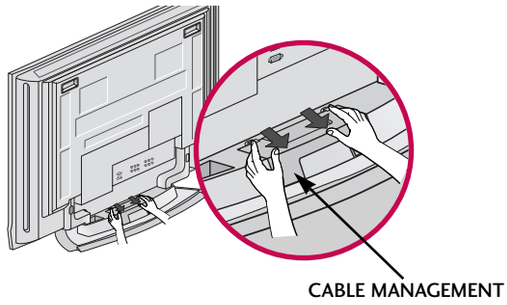
Stand type 1

Arrange the cables as shown picture.



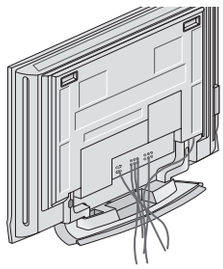
Stand type 2

1 Hold the **CABLE MANAGEMENT** with both hands and pull it as shown.

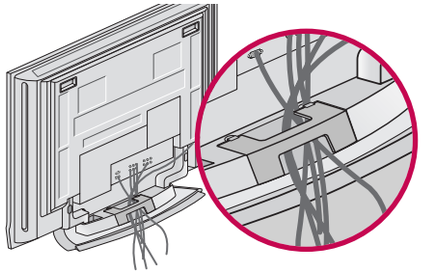


2 Connect the cables as necessary.

To connect an additional equipment, see the **External equipment Connections** section.



3 Reinstall the **CABLE MANAGEMENT** as shown.

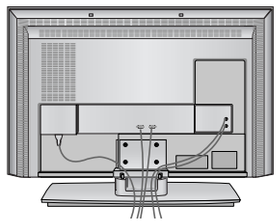


INSTALLATION

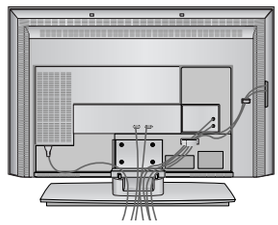
BASIC CONNECTION (Only 32/37/42LC2D series)

1 Connect the cables as necessary.
After connecting the cables neatly, arrange the cables to the Cable Holder.

To connect an additional equipment, see the **External equipment Connections** section.

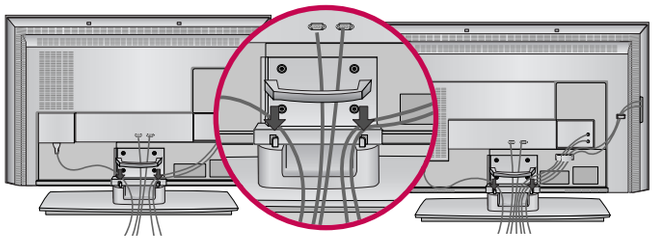


32LC2D series



37/42LC2D series

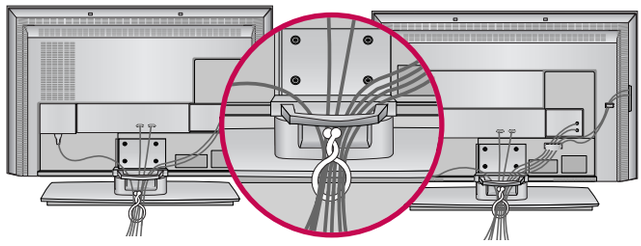
2 Install the **CABLE MANAGEMENT** as shown.



32LC2D series

37/42LC2D series

3 Bundle the cables using the supplied twister holder.

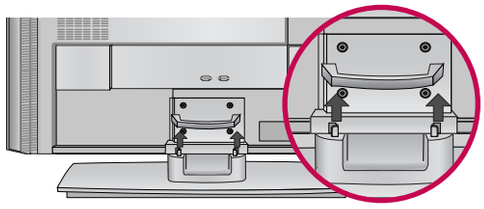


32LC2D series

37/42LC2D series

HOW TO REMOVE THE CABLE MANAGEMENT

Hold the **CABLE MANAGEMENT** with both hands and pull it upward.



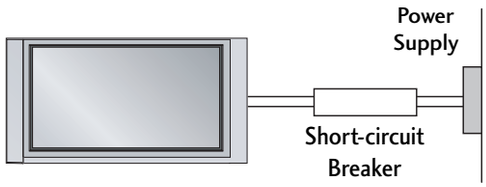
NOTE

► Do not hold the **CABLE MANAGEMENT** when moving the set.
- If the set is dropped, you may be injured or the set may be broken.

- The set can be installed in various ways such as on a wall, or on a desktop etc.
- The set is designed to be mounted horizontally.

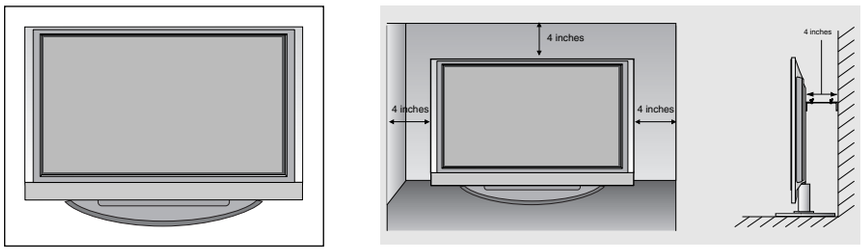
GROUNDING

Ensure that you connect the earth ground wire to prevent possible electric shock. If grounding methods are not possible, have a qualified electrician install a separate circuit breaker. Do not try to ground the unit by connecting it to telephone wires, lightening rods, or gas pipes.



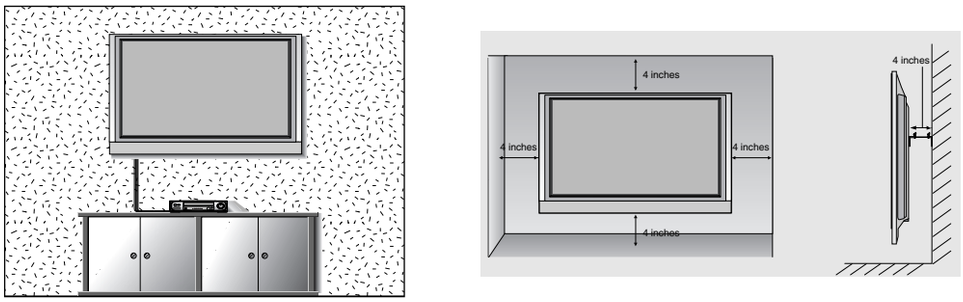
Desktop Pedestal Installation

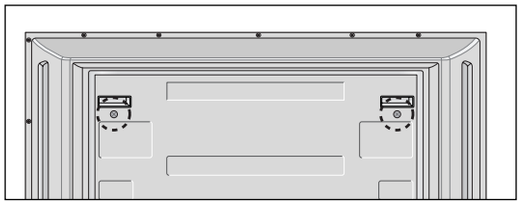
For proper ventilation, allow a clearance of 4" on each side and from the wall.



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.



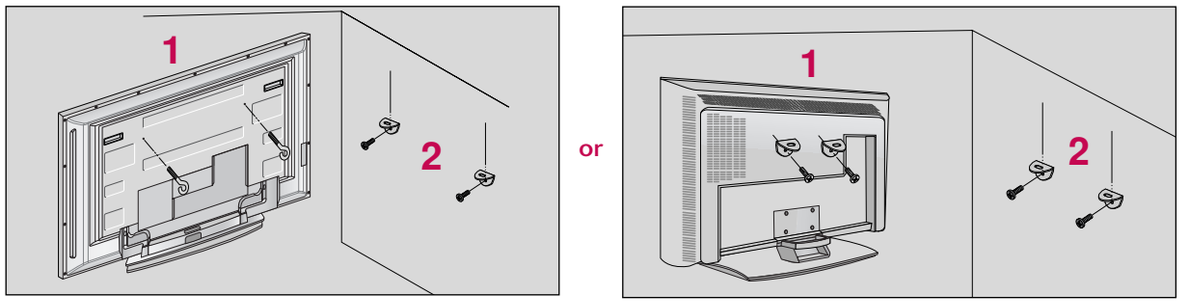


<Only 42PC1D/42PC3D series>
Remove two screws of the backside of the set before installing the wall mounting bracket.

INSTALLATION

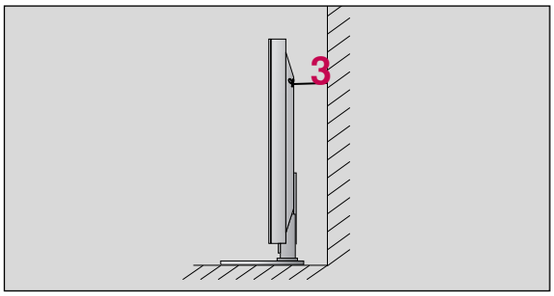
HOW TO JOIN THE SET ASSEMBLY TO THE WALL TO PROTECT THE SET TUMBLING

- Set it up close to the wall so the set doesn't fall over when it is pushed backwards.
- The instructions shown below is a safer way to set up the set, which is to fix it on the wall so the set doesn't fall over when it is pulled in the forward direction. It will prevent the set from falling for-ward and hurting people. It will also prevent the set from damage caused by fall. Please make sure that children don't climb on or hang from the set.



1 Use the eye-bolts or TV brackets/bolts to fix the set to the wall as shown in the picture.
(If your set has the bolts in the eye-bolts position before inserting the eye-bolts, loosen the bolts.)
* Insert the eye-bolts or TV brackets/bolts and tighten them securely in the upper holes.

2 Secure the wall brackets with the bolts (not provided as parts of the set, must purchase separately) on the wall. Match the height of the bracket that is mounted on the wall.



3 Use a sturdy rope (not provided as parts of the set, must purchase separately) to tie the set. It is safer to tie the rope so it becomes horizontal between the wall and the set.

NOTE

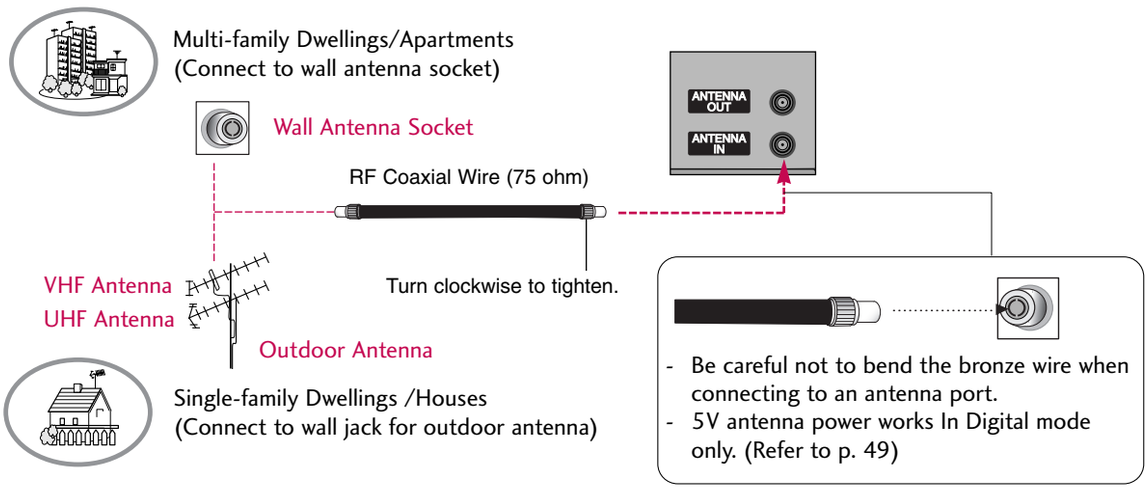
- ▶ When moving the set to another place undo the ropes first.
- ▶ Use a set holder or a cabinet that is big and strong enough for the size and weight of the set.
- ▶ To use the set safely make sure that the height of the bracket that is mounted on the wall is same as that of the set.

CONNECTIONS & SETUP

- *All cables shown are not included with the TV*
- *This part of CONNECTION & SETUP mainly use picture for the 42PC1D model.*

ANTENNA CONNECTION

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



NOTE

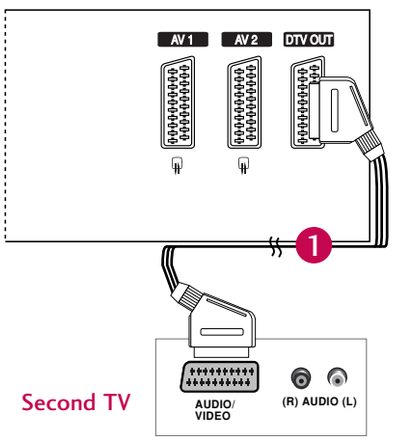


- In a poor signal area to improve picture quality, purchase and install a signal amplifier.
- If the antenna needs to be split for two TV's, install a "2-Way Signal Splitter" in the connections.
- If the antenna is not installed properly, contact your dealer for assistance.

PICTURE OUT SETUP

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

Back panel of the set

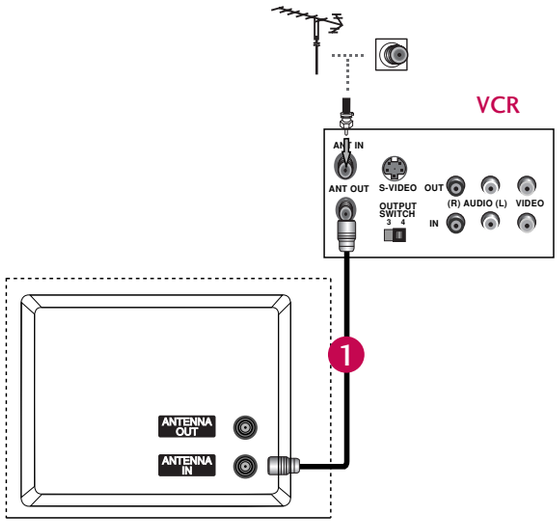


1. Connect the second TV or monitor to the TV's DTV OUT jacks.
2. See the Operating Manual of the second TV or monitor for further details regarding that device's input settings.

VCR SETUP

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

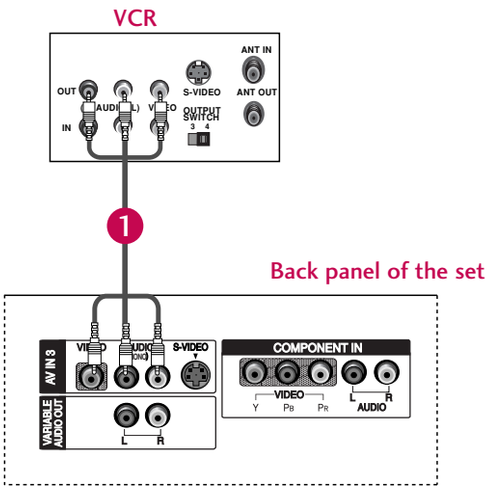
1. When connecting with an antenna



Back panel of the set

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.

2. When connecting with a RCA cable

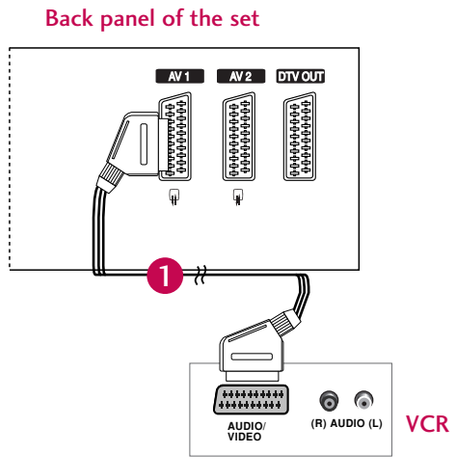


1. Connect the AUDIO/VIDEO jacks between TV and VCR. Match the jack colors (Video = yellow, Audio Left = white, and Audio Right = red)
2. Insert a video tape into the VCR and press PLAY on the VCR. (Refer to the VCR owner's manual.)
3. Select AV3 input source using the INPUT button on the remote control.
   - If connected to AV IN4, select AV4 input source.

NOTE

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

3. When connecting with a Euro Scart

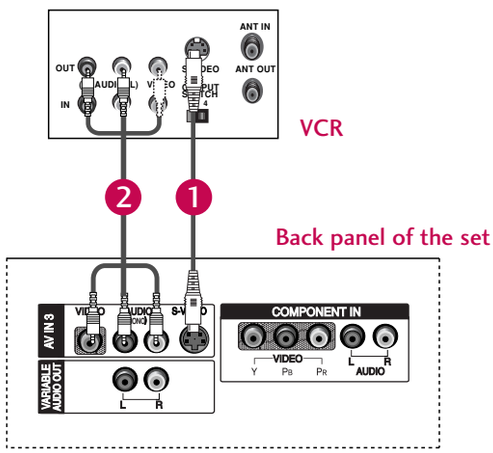


1. Connect the Euro scart socket of the VCR to the AV1 Euro scart socket on the set.
2. Insert a video tape into the VCR and press PLAY on the VCR. (Refer to the VCR owner's manual.)
3. Select AV1 input source with using the INPUT button on the remote control.
   - If connected to AV2 Euro scart socket,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

NOTE

▶ If the S-VIDEO(Y/C) signal is received through the Euro scart socket 2 (AV2), you must change to the SAV2 mode.
▶ If you want to use the EURO scart cable, you have to use the signal shielded Euro scart cable.

4. When connecting with an S-Video cable

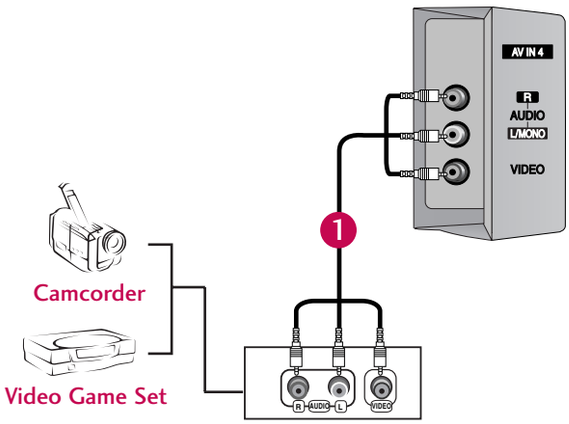


1. Connect the S-VIDEO output of the VCR to the S-VIDEO input on the set. The picture quality is improved; compared to normal composite (RCA cable) input.
2. Connect the audio outputs of the VCR to the AUDIO input jacks on the set.
3. Insert a video tape into the VCR and press PLAY on the VCR. (Refer to the VCR owner's manual.)
4. Select AV3 input source with using the INPUT button on the remote control.

NOTE

▶ If both S-VIDEO and VIDEO sockets have been connected to the S-VHS VCR simultaneously, only the **S-VIDEO** can be received.

EXTERNAL AV SOURCE SETUP

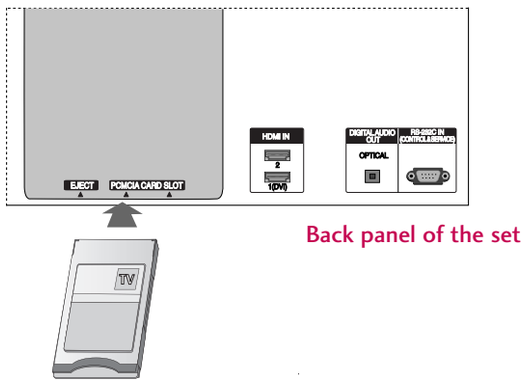


1. Connect the AUDIO/VIDEO jacks between TV and external equipment. Match the jack colors (Video = yellow, Audio Left = white, and Audio Right = red).

2. Select AV4 input source with using the INPUT button on the remote control.
If connected to AV IN3 input, select AV3 input source.

3. Operate the corresponding external equipment. Refer to external equipment operating guide.

INSERTION OF CI MODULE



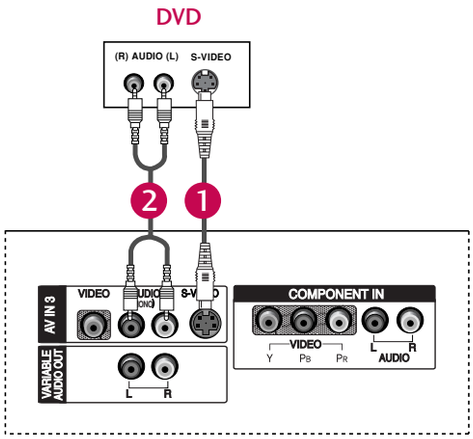
Back panel of the set

- 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.48.

DVD SETUP

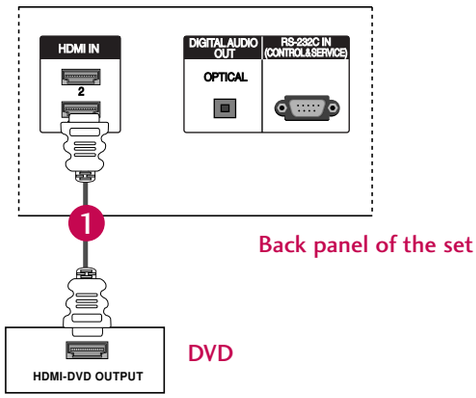
1. When connecting with a S-Video cable



Back panel of the set

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 AV3 input source with using the INPUT button on the remote control.
5. Refer to the DVD player's manual for operating instructions.

2. When connecting with a HDMI cable



Back panel of the set

DVD

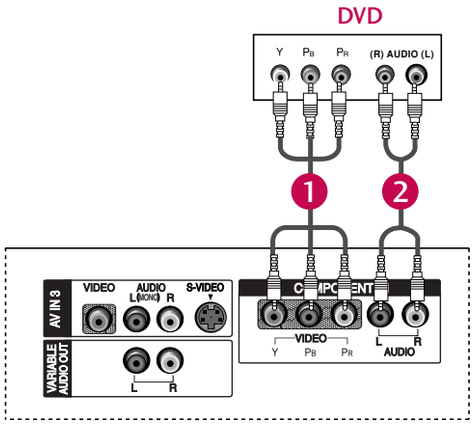
1. Connect the HDMI output of the DVD to the HDMI IN (or HDMI/DVI IN) jack on the set.
2. Select HDMI/DVI (or HDMI1/DVI or HDMI2) input source with using the INPUT button on the remote control.
3. Refer to the DVD player's manual for operating instructions.

NOTE

- ▶ TV can receive the video and audio signal simultaneously with using a HDMI cable.
- ▶ If the DVD supports Auto HDMI function, the DVD output resolution will be automatically set to 1280x720p.
- ▶ If the DVD does not support Auto HDMI, you need to set the output resolution appropriately. To get the best picture quality, adjust the output resolution of the DVD to 1280x720p.

CONNECTIONS & SETUP

3. When connecting with a component cable



Back panel of the set

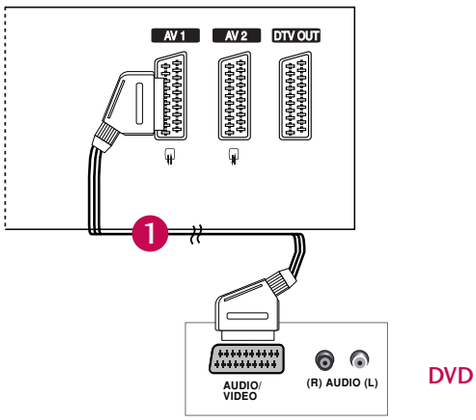
1. Connect the video outputs (Y, PB, PR) of the DVD to the COMPONENT IN VIDEO jacks on the set.
2. Connect the audio outputs of the DVD to the COMPONENT IN AUDIO jacks on the set.
3. Turn on the DVD player, insert a DVD.
4. Select Component input source with using the INPUT button on the remote control.
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	P_B	P_R
Video output ports on DVD player	Y	P_B	P_R
	Y	B-Y	R-Y
	Y	Cb	Cr
	Y	Pb	Pr

4. When connecting with a Euro scart

Back panel of the set



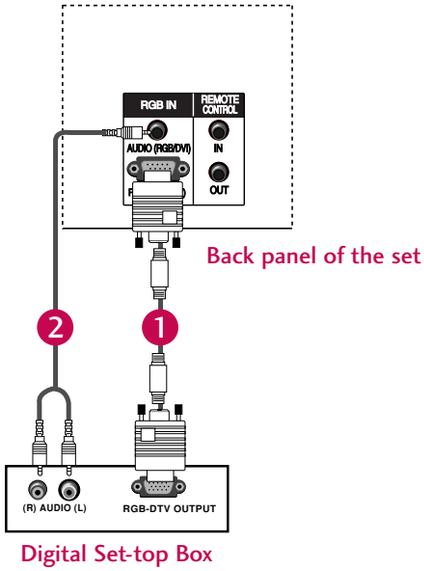
1. Connect the Euro scart socket of the DVD to the AV1 Euro scart socket on the set.
2. Turn on the DVD player, insert a DVD.
3. Select AV1 input source with using the INPUT button on the remote control.
   - If connected to AV2 Euro scart socket, select AV2 input source.

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

HDSTB SETUP

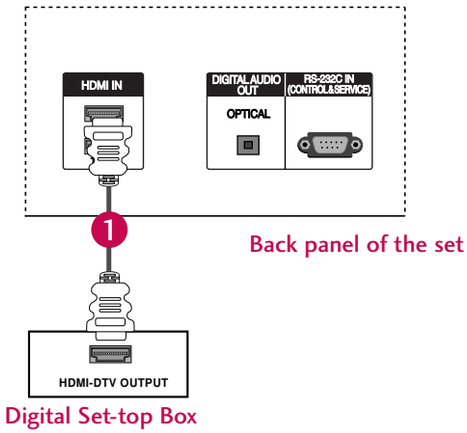
- This TV can receive Digital Over-the-air/Cable signals without an external digital set-top box. However, if you do receive Digital signals from a digital set-top box or other digital external device, refer to the figure as shown below.

1. When connecting with a D-sub 15 pin cable



1. Connect the RGB output of the digital set-top box to the RGB (PC/DTV) jack on the set.
2. Connect the audio outputs of the set-top box to the AUDIO (RGB/DVI) 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 RGB input source with using the INPUT button on the remote control.

2. When connecting with a HDMI cable



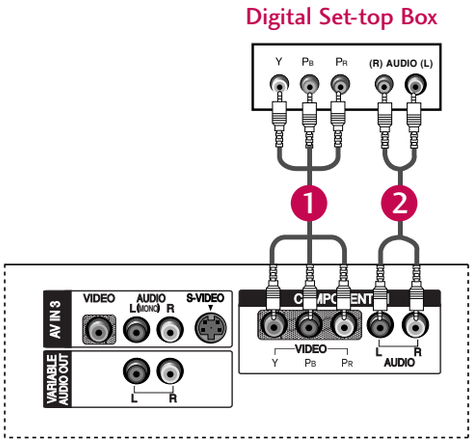
1. Connect the HDMI output of the digital set-top box to the HDMI IN (or HDMI/DVI IN) jack on the set.
2. Select HDMI/DVI (or HDMI1/DVI or HDMI2) input source with using the INPUT button on the remote control.
3. Turn on the digital set-top box. (Refer to the owner's manual for the digital set-top box.)

NOTE

- ▶ TV can receive the video and audio signal simultaneously with using a HDMI cable.
- ▶ If the digital set-top box supports Auto HDMI function, output resolution of the digital set-top box will be automatically set to 1280x720p.
- ▶ If the digital set-top box does not support Auto HDMI, you need to set the output resolution appropriately. To get the best picture quality, adjust the output resolution of the digital set-top box to 1280x720p.

CONNECTIONS & SETUP

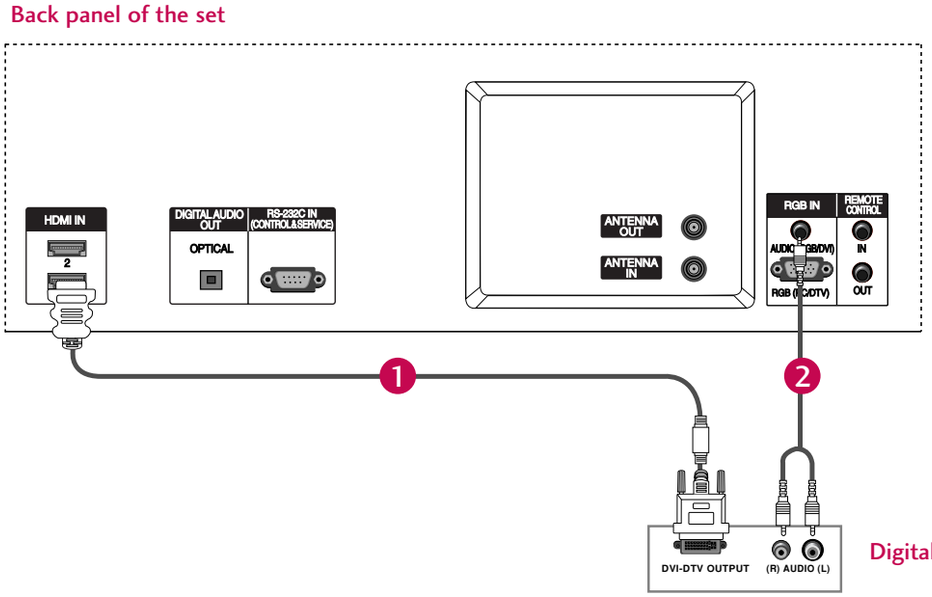
3. When connecting with a Component cable



1. Connect the video outputs (Y, PB, PR) of the digital set-top box to the COMPONENT IN VIDEO jacks on the set.
2. Connect the audio output of the digital set-top box to the COMPONENT IN 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	RGB-DTV, HDMI/DVI
480i/576i	Yes	No
480p/576p/720p/1080i	Yes	Yes

4. When connecting with a HDMI to DVI cable



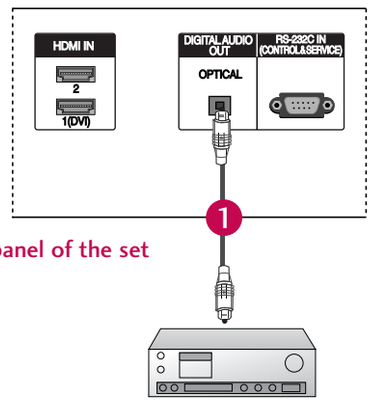
1. Connect the DVI output of the digital set-top box to the HDMI1 (DVI) IN (or HDMI/DVI IN) jack on the set.
2. Connect the audio outputs of the set-top box to the AUDIO (RGB/DVI) jack on the set.
3. Turn on the digital set-top box. (Refer to the owner's manual for the digital set-top box.)
4. Select HDMI1/DVI (or HDMI/DVI) input source with using the INPUT button on the remote control.

NOTE

- If the digital set-top box has a DVI output and no HDMI output, a separated audio connection is necessary.
- If the digital set-top box supports Auto DVI function, the output resolution of the digital set-top box will be automatically set to 1280x720p.
- If the digital set-top box does not support Auto DVI, you need to set the output resolution appropriately. To get the best picture quality, adjust the output resolution of the digital set-top box to 1280x720p.

DIGITAL AUDIO OUTPUT

- Send the TV's audio to external audio equipment (stereo system) via the Digital Audio Output Optical port.



Back panel of the set

1. Connect one end of an optical cable to the TV Digital Audio Optical Output port.
2. Connect the other end of the optical cable to the digital audio optical input on the audio equipment.
3. See the external audio equipment instruction manual for operation.
   When connecting with external audio equipments, such as amplifiers or speakers, please turn the TV speakers off. (Refer to p.66)

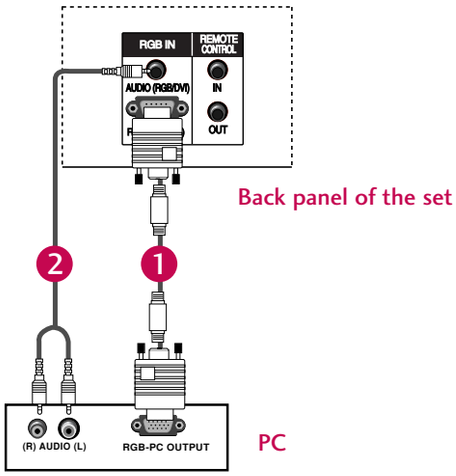
CAUTION
Do not look into the optical output port. Looking at the laser beam may damage your vision.

CONNECTIONS & SETUP

PC SETUP

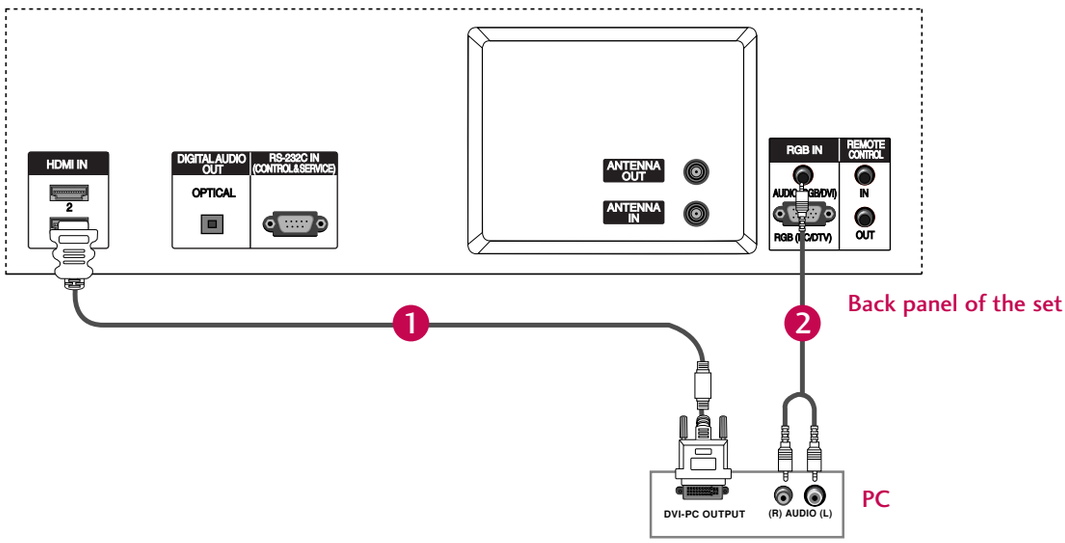
- This TV provides Plug and Play capability, meaning that the PC adjusts automatically to the TV's settings.

1. When connecting with a D-sub 15 pin cable



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

2. When connecting with a HDMI to DVI cable



1. Connect the DVI output of the PC to the HDMI1 (DVI) IN (or HDMI/DVI IN) jack on the set.
2. Connect the audio outputs of the PC to the AUDIO (RGB/DVI) jack on the set.
3. Turn on the PC and the set.
4. Select HDMI1/DVI (or HDMI/DVI) input source with using the INPUT button on the remote control.

NOTE

- ► To enjoy vivid picture and sound, connect a PC to the set.
- ► Avoid keeping a fixed image on the set's screen for a long period of time. The fixed image may become permanently imprinted on the screen; use a screen saver when possible.
- ► Connect PC to the RGB (PC/DTV) or HDMI IN (or HDMI/DVI IN port of the set; change the resolution output of PC accordingly.
- ► There might be noise according to some resolution, vertical pattern, contrast or brightness in PC mode. Change the PC mode into another resolution or change the refresh rate into another rate or adjust the brightness and contrast on the menu until the picture is clean. If the refresh rate of the PC graphic card can not be changed, change the PC graphic card or consult it to the manufacturer of the PC graphic card.
- ► The synchronization input waveform for Horizontal and Vertical frequencies are separate.
- ► In 42PC1D/42PC3D/50PC1D/50PC1DA models, we recommend using 1024x768, 60Hz for the PC mode, they provide the best picture quality.
  In 42PC1DV series, we recommend using 640x480, 60Hz for the PC mode, they provide the best picture quality.
- ► If the resolution of PC is over UXGA, there will be no picture on the set.
- ► Connect the signal cable from the monitor output port of the PC to the RGB (PC/DTV) port of the set or the signal cable from the HDMI output port of the PC to the HDMI IN (or HDMI/DVI IN port on the set.
- ► Connect the audio cable from the PC to the Audio input on the set. (Audio cables are not included with the set).
- ► If using a sound card, adjust PC sound as required.
- ► This set uses a VESA Plug and Play Solution. The set provides EDID data to the PC system with a DDC protocol. The PC adjusts automatically when using this set.
- ► DDC protocol is preset for RGB (Analog RGB), HDMI (Digital RGB) mode.
- ► If required, adjust the settings for Plug and Play functionally.
- ► If graphic card on the PC does not output analog and digital RGB simultaneously, connect only one of either RGB (PC/DTV) or HDMI IN (or HDMI/DVI IN to display the PC on the set.
- ► If graphic card on the PC does output analog and digital RGB simultaneously, set the set to either RGB or HDMI; (the other mode is set to Plug and Play automatically by the set.)
- ► DOS mode may not work depending on video card if you use a HDMI to DVI cable.
- ► When you use too long RGB-PC cable, there might be a noise on the screen. We recommend using under 5m of the cable. It provides the best picture quality.

Supported Display Resolution
(for 32LC2D / 37LC2D / 42LC2D series)

RGB[PC] / HDMI[PC] mode

Resolution	Horizontal Frequency(KHz)	Vertical Frequency(Hz)
720x400	31.468	70.8
640x480	37.684	75.00
	31.469	59.94
800x600	46.875	75
	37.879	60.31
832x624	49.725	74.55
1024x768	48.363	60
	56.47	70
	60.123	75.029
1280x768	47.776	59.870
1360x768	47.720	59.799
1366x768	47.720	59.799

RGB[DTV] / HDMI[DTV] mode

Resolution	Horizontal Frequency(KHz)	Vertical Frequency(Hz)
720x576	31.25	50.00
640x480	31.5	59.94/60
720x480	31.47	59.94/60
1280x720	45.00	50.00
	44.96	59.94/60
1920x1080	28.13	50.00
	33.72	59.94/60

NOTE

- ► The set is supported to 640x480 in HDMI[DTV] mode.

CONNECTIONS & SETUP

Supported Display Resolution (for 42PC1D series, 42PC3D series, 50PC1D series)

RGB[PC] / HDMI[PC] mode

Resolution	Horizontal Frequency(KHz)	Vertical Frequency(Hz)
720x400	31.469	70.08
640x480	31.469	59.94
	35.000	66.66
	37.861	72.80
	37.500	75.00
	43.269	85.00
720x480	31.47	59.94
1280x768	47.78	59.87
800x600	35.156	56.25
	37.879	60.31
	48.077	72.18
	46.875	75.00
	53.674	85.06
832x624	49.725	74.55
1024x768	48.363	60.00
	56.476	70.06
	60.023	75.02
	68.677	85.00
1152x864	54.348	60.05
	63.995	70.01
	67.500	75.00
1280x720	44.77	59.85
1280x960	60.023	60.02
1280x1024	63.981	60.02
1360x768	47.72	59.8
1366x768	47.56	59.6
848x480	31.25	59.52
852x480	29.72	59.43

RGB[DTV] / HDMI[DTV] mode

Resolution	Horizontal Frequency(KHz)	Vertical Frequency(Hz)
640x480	31.469	59.94
	31.469	60.00
720x480	31.47	59.94
	31.50	60.00
720x576	31.25	50.00
1280x720	44.96	59.94
	45.00	60.00
	37.50	50.00
1920x1080	33.72	59.94
	33.75	60.00
	28.125	50.00

NOTE

- ▶ The set is supported to 640x480 [85Hz] and 720x480 in HDMI[PC] mode only.
- ▶ The set is supported to 800x600 [85.06Hz], 852x480 [59.43Hz], 1280x768, 1360x768 and 1366x768 in RGB[PC] mode only.
- ▶ The set is supported to 848x480 and 852x480 in 42PC1DV series.
- ▶ The set isn't supported to 1280x720 in HDMI[PC/DTV] mode of 42PC1DV series.
- ▶ The set is supported to 640x480 in HDMI[DTV] mode only.
- ▶ The set is supported to 1280x768, 1360x768 and 1366x768 in 42PC1D/42PC3D/50PC1D models.

BASIC OPERATION

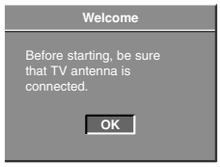
TURNING ON THE SET

- When using the remote control, aim it at its sensor on the set.

1. Connect power cord correctly, the set is switched to standby mode.

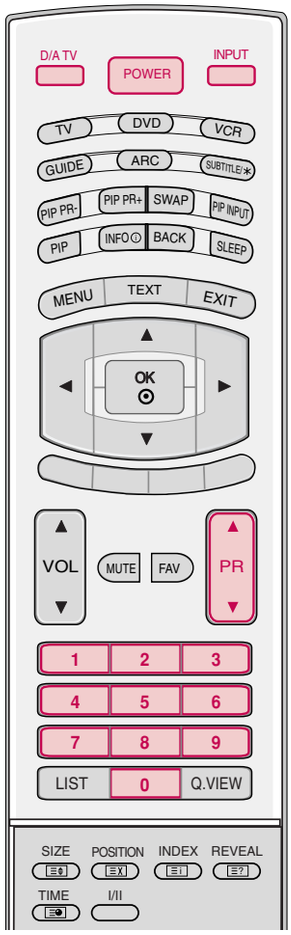
2. Press the ⏻ / I, INPUT or PR ▲ or ▼ button on the set or press the POWER, INPUT, D/A TV, PR ▲ or ▼ or NUMBER buttons on the remote control and then the set will switch on.

Initializing setup



If the OSD (On Screen Display) is displayed on the screen as figure after turning on the set, you can adjust the Auto Programme tuning.

Note: *It will automatically disappear after approx. 40 seconds unless a button is pressed.*



BASIC OPERATION

PROGRAMME SELECTION

Automatically finds all channels available through antenna or cable inputs, and stores them in memory on the channel list.



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

VOLUME ADJUSTMENT

Adjust the volume to suit your personal preference.



1. Press the VOL ▲ or ▼ button to adjust the volume.

   If you want to switch the sound off, press the MUTE button.

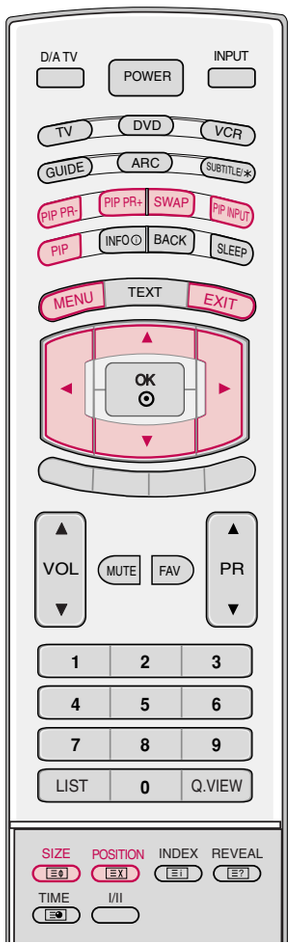
   You can cancel this function by pressing the MUTE, VOL ▲ or ▼, or I/II button.

SPECIAL FUNCTIONS

PIP / POP / TWIN PICTURE

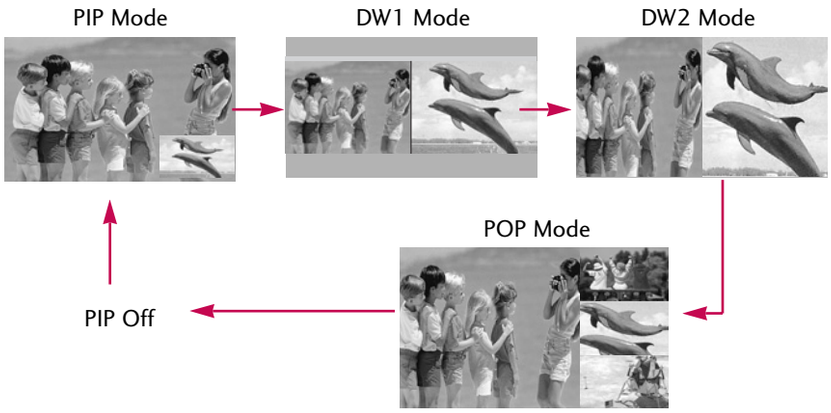
PIP lets you view 2 different inputs (sources) on the screen at the same time. One source will be large, and the other source will show a smaller inset image.

Double window mode splits the screen into 2, allowing 2 picture sources to be shown on the 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.



Programme Selection for Sub Picture

1. Press the PIP button.
2. Press the PIP PR +/- button to select a programme for the sub picture.
   (You can't select DTV for main and sub picture simultaneously).

PIP / POP / TWIN PICTURE

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.
In some models, when the sub picture quality get poor for sub picture, select Auto, PAL, SECAM or NTSC in PIP System menu.

NOTE

- ▶ You can't select the same modes for main picture and sub picture simultaneously.
- ▶ When the main picture is DTV or HDMI mode, the sub picture isn't available to select DTV and HDMI modes.
- ▶ When the main picture is RGB mode, the sub picture isn't available to select HDMI modes.
- ▶ When the main picture is HDMI mode, the sub picture isn't available to select RGB modes.
- ▶ It's not available to use this function in Vertical Frequency 85Hz for sub picture.
- ▶ It's not available to use 1280x720, 60Hz in HDMI[PC] for sub picture.

Sub Picture Size Adjustment

1. Press the SIZE button and then ◄ or ► button to adjust the sub picture size.

   With SIZE button in DW1 modes, main and sub picture is adjusted simultaneously. With SIZE button in PIP mode, sub picture is adjusted.



Moving the Sub Picture (PIP mode only)

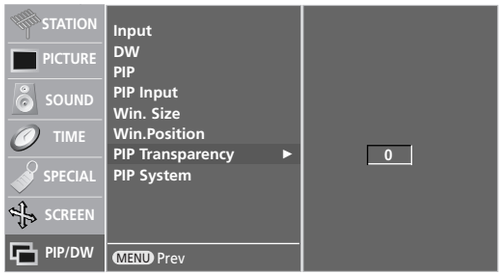
1. Press the POSITION button.
2. Repeatedly press the ▲ or ▼ or ◄ or ► button until desired position is achieved.

   The sub picture moves up/down or left/right.



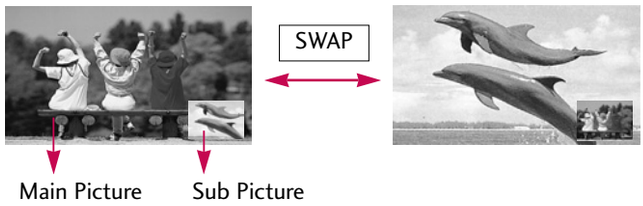
Adjusting PIP Transparency (PIP mode only)

1. Press the MENU button and then ▲ or ▼ button to select the PIP/DW menu.
2. Press the ► button and then ▲ or ▼ button to select **PIP Transparency**.
3. Press the ► button and then ◄ or ► button to adjust PIP transparency.
4. Press the EXIT button to return to normal TV viewing.



Swapping between main and sub pictures

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



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

Use POP to search the programmes of all the memorized channels one-by-one on the 3 PIP screen display, (while the main picture source remains the current channel). The pictures of all the programmed channels are searched with the 3 POP screen.



U0524B_02 11/27/06 8:45 AM Page 36

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 button.

Teletext within Digital Service



1. Press the numeric or PR ▲ or ▼ button to select a digital service which broadcasts digital teletext.
   To know which are digital teletext services, refer to the EPG service list.
2. Follow the indications on digital teletext and move onto the next step by pressing TEXT, OK, ▲ or ▼, ◄ or ►, RED, GREEN, YELLOW, BLUE or NUMBER buttons and so on.
3. To change digital teletext service, just select a different service by the numeric or PR ▲ or ▼ button.

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

Teletext in Digital Service



1. Press the numeric or PR ▲ or ▼ button to select a certain service which broadcasts digital teletext.
2. Press the TEXT or colour button to switch on teletext.
3. Follow the indications on digital teletext and move onto the next step by pressing OK, ▲ or ▼, ◄ or ►, RED, GREEN, YELLOW, BLUE or NUMBER buttons and so on.
4. 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, GUIDE or INFO button, the teletext service disappear temporarily. When pressing these buttons again, the teletext service is appeared.

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 set 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

1. 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.

2. 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 PR ▲ or ▼ button can be used to select the preceding or following page.

U0524B_02 11/27/06 8:45 AM Page 38

TELETEXT (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 PR ▲ button can be used.
4. The RED button permits to return to previous selection. Alternatively the PR ▼ button can be used.

■ **Direct page selection**

1. 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 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 PR ▲ or ▼ 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 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.

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 ► or NUMBER buttons.
Press again to exit this function.

U0524B_02 11/27/06 8:45 AM Page 40

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

1. Press the ▲ or ▼, ◄ or ►, PR ▲ or ▼ 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	Change EPG mode
YELLOW	Enter Timer Record/Remind setting mode
BLUE	Enter Timer Record/Remind list mode
◉	Change to the selected channel
◄ or ►	Select NOW or NEXT Programme
▲ or ▼	Select the Broadcasting Programme
PR ▲ or ▼	Page Up/Down
GUIDE/EXIT	Switch off EPG
FAV	Displayed when the Favourite Programme.
ⓘ	The detail information on or off



Button Function in 8 Days Guide Mode

Remote Control Buttons	Function
RED	Change EPG mode
GREEN	Enter Date setting mode
YELLOW	Enter Timer Record/Remind setting mode
BLUE	Enter Timer Record/Remind list mode
◉	Change to the selected channel
◄ or ►	Select NOW or NEXT Programme
▲ or ▼	Select the Broadcasting Programme
PR ▲ or ▼	Page Up/Down
GUIDE/EXIT	Switch off EPG
FAV	Displayed when the Favourite Programme.
ⓘ	The detail information on or off



Button Function in Date Change Mode

Remote Control Buttons	Function
GREEN	Switch off Date setting mode
◉	Change to the selected date
◄ or ►	Select a date
▼	Switch off Date setting mode
GUIDE/EXIT	Switch off EPG



U0524B_02 11/27/06 8:45 AM Page 42

EPG (ELECTRONIC PROGRAMME GUIDE) (IN DIGITAL MODE)

Button Function in Extended Description Box

Remote Control Buttons	Function
▲ or ▼	Text Up/Down
ⓘ	The detail information on or off
GUIDE/EXIT	Switch off EPG



Button Function in Record/Remind Setting Mode

- **This function is available only when recording equipment that use pin8 recording signalling has been connected to the DTV-OUT terminal, using a SCART cable.**

Remote Control Buttons	Function
RED	Change to Guide or Timer list mode
◉	Save Timer Record/Remind
◄ or ►	Select Type, Service, Date or Start/End time
▲ or ▼	Function setting



Button Function in Timer List Mode

Remote Control Buttons	Function
RED	Add new Manual Timer setting mode
GREEN	Enter Timer list editing mode
YELLOW	Delete the selected item
BLUE	Change to Guide mode
▲ or ▼	Select Timer list

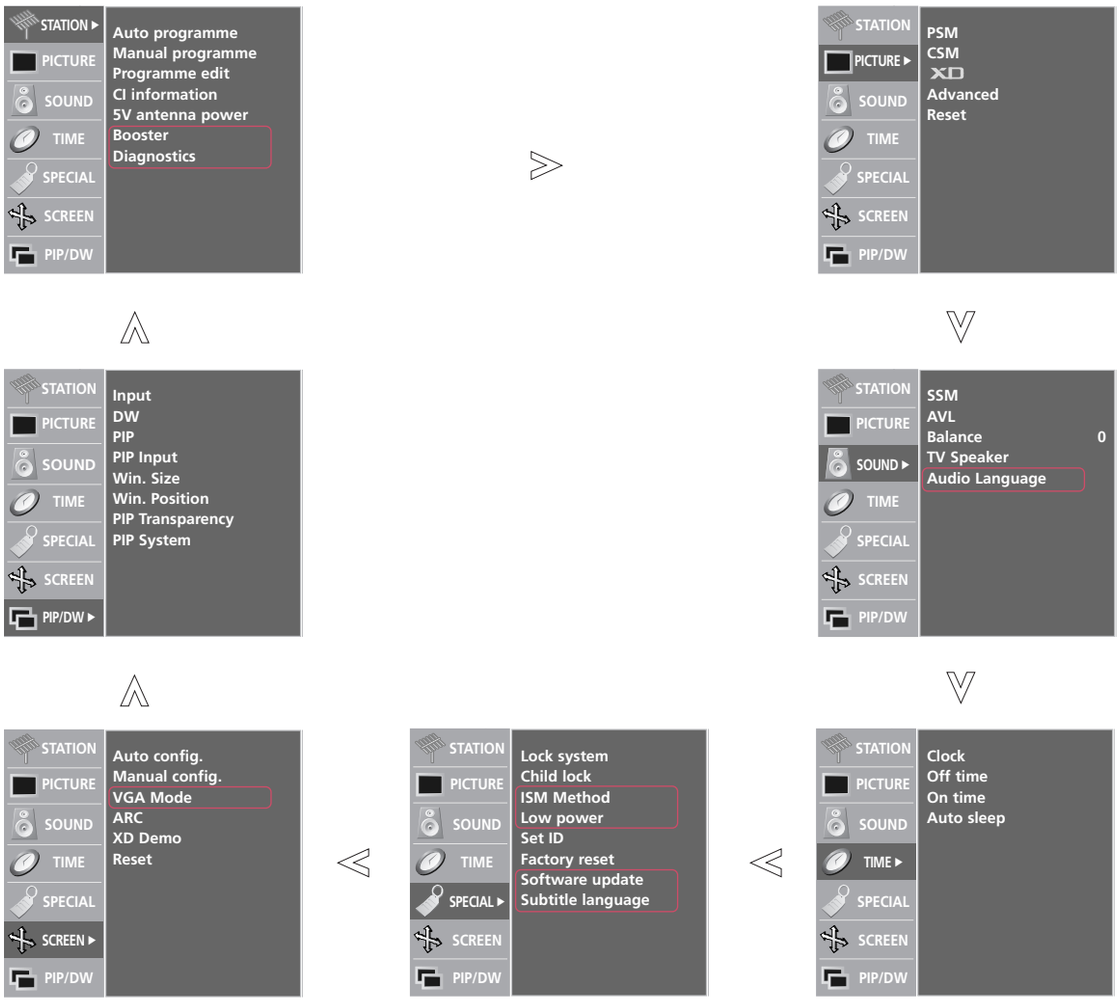


TV MENU

ON SCREEN MENUS SELECTION AND ADJUSTMENT

Your TV's OSD (On Screen Display) may differ slightly from what is shown in this manual.

1. Press the **MENU** button and then use ▲ or ▼ button to select each menu.
2. Press the ▶ button and then use ▲ or ▼ or ◀ or ▶ button to display the available menus.

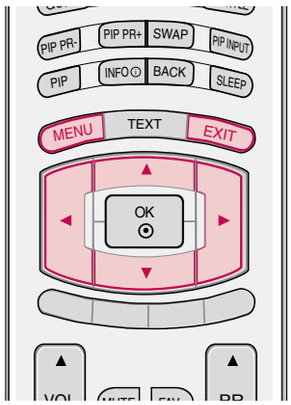


NOTE

- ▶ It's not available to use **ISM Method** and **Low power** in 32/37/42LC2D series.
- ▶ In Analogue mode, **5V antenna power**, **CI information**, **Booster**, **Diagnostics**, **Audio Language**, **Software update** and **Subtitle language** will not display.
- ▶ In some models, **XGA** will display on the SCREEN menu.
- ▶ In Digital mode, **Favourite programme** will not display on the STATION menu.

TV MENU / STATION MENU OPTIONS

AUTO PROGRAMME (IN DIGITAL MODE)



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 ▲ or ▼ button to select the **STATION** menu.

2 Press the ► button and then ▲ or ▼ button to select **Auto programme**.

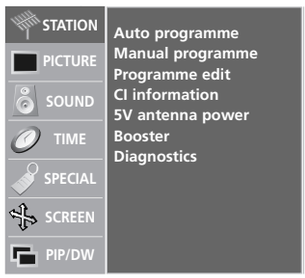
3 Press the ► button to begin auto programming.

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 ◄ or ► 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.



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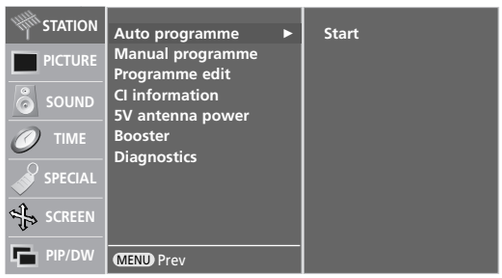

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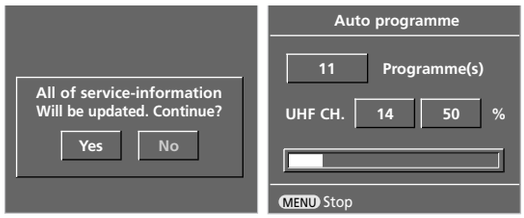

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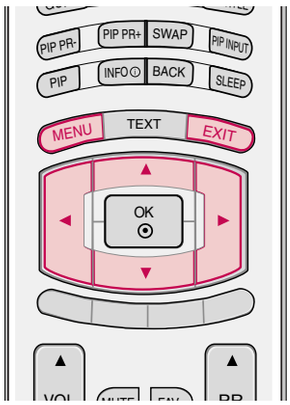
MANUAL PROGRAMME TUNING (IN DIGITAL MODE)

Manual programme lets you manually add a programme to your programme list.



1 Press the MENU button and then ▲ or ▼ button to select the **STATION** menu.

2 Press the ▶ button and then ▲ or ▼ button to select **Manual programme**.

3 Press the ▶ button and then ▲ or ▼ button or NUMBER buttons to select the desired channel number.

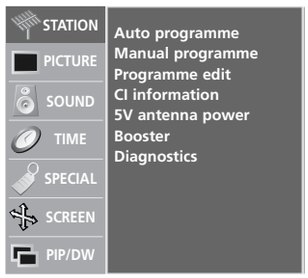
4 Press the OK button to save.

When the channel number you want to add is already added in programme list, the massage "**Service-information of the channel will be updated. Continue?**" will appear.

If you want to keep on manual programming, select **YES** with using the ◀ or ▶ button.

Then, press the OK button. Otherwise select **NO**.

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



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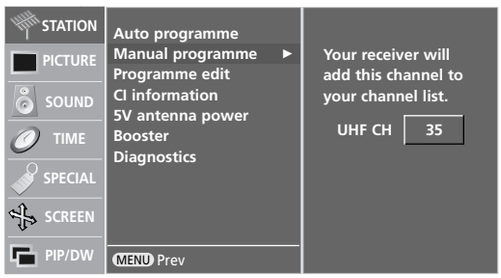

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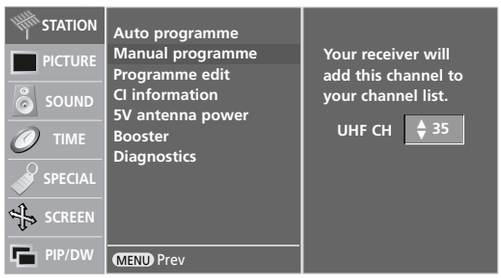


3 4

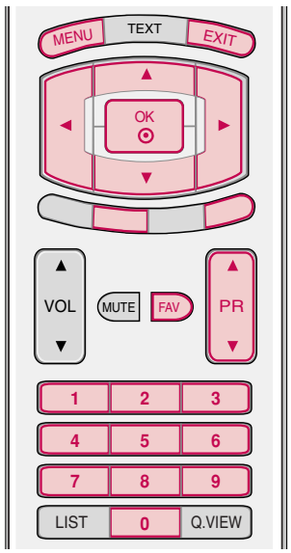
TV MENU / STATION MENU OPTIONS

PROGRAMME EDIT (IN DIGITAL MODE)

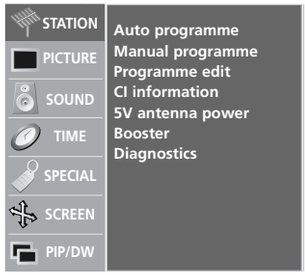
When a programme number is skipped, it means that you will be unable to select it using PR ▲ or ▼ button during TV viewing.

If you want to select the skipped programme, directly enter the programme number with the NUMBER buttons or select it in the Programme edit menu.

This function enables you to skip the stored programmes.



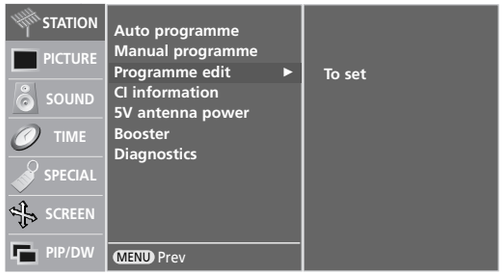
1. Press the MENU button and then ▲ or ▼ button to select the **STATION** menu.



1

2. Press the ► button and then ▲ or ▼ button to select **Programme edit** menu.

3. Press the ► button to enter the **Programme edit** menu.



2 3

4. Select a programme to be stored or skipped with the ▲ or ▼ or ◄ or ► button.

5. Press the BLUE button repeatedly to have the programme skipped or stored.

In case of programmes to be skipped, skipped programme shows in blue colour and these programmes will not be selected by the PR ▲ or ▼ buttons during TV viewing.



4 5

6. 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 Favourite Programme.
- Displayed when the Locked Programme.
- Displayed when the Radio Programme.
- Displayed when the Teletext Programme.

■ Skipping a programme number

1. Select a programme number to be skipped with the ▲ or ▼ or ◄ or ► button.
2. Press the BLUE button. The skipped programme number turns to blue.
3. Press the BLUE button again to release the skipped programme.

   When a programme number is skipped it means that you will be unable to select it using the PR ▲ or ▼ 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 EPG.
4. Press the EXIT button to return to TV viewing or press the MENU button to return to the previous menu.

■ Locking a programme (In Lock System On mode only)

1. Select a programme to be locked with the ▲ or ▼ or ◄ or ► button.
2. Press the GREEN button. The lock mark will appear in front of that programme number.
3. Press the GREEN button again to release this function.

Note :
- ► To watch a locked programme, input a 4-digit password in Lock system. Be sure to remember this number!
- ► If you forgot your password, press '7', '7', '7', '7' on the remote control handset.
- ► If you select other programme after releasing a locked programme and then return to the locked programme within 1 minute, you needn't input a password to select the locked programme.

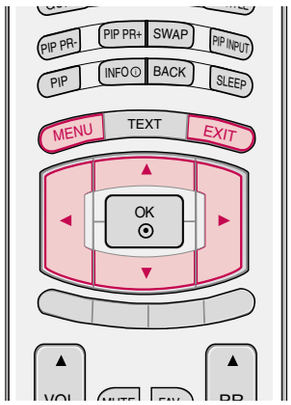
■ Selecting favourite programme

1. Select your favourite programme number by pressing ▲ or ▼ or ◄ or ► button and then press the FAV button on your remote control handset.

   It will automatically include the selected programme into your favourite programme list and heart-mark will appear in front of that programme number.

TV MENU / STATION MENU OPTIONS

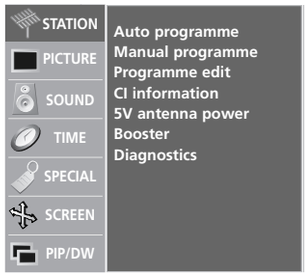
CI [COMMON INTERFACE] INFORMATION (IN DIGITAL MODE ONLY)



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.

There might be unnatural picture according to CI module and smart card.

1. Press the MENU button and then ▲ or ▼ button to select the **STATION** menu.
2. Press the ► button and then ▲ or ▼ button to select **CI Information**.
3. Press the ► button and then OK button.
4. Press the ▲ or ▼ 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.



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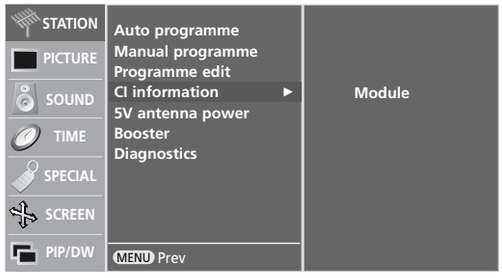

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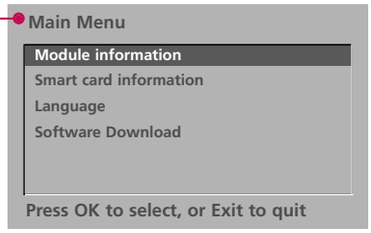
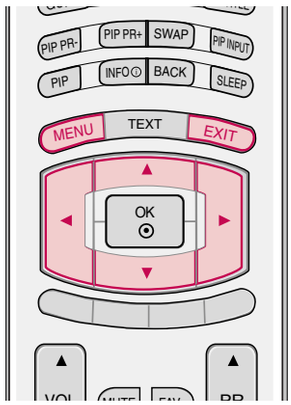
- This OSD is only for illustration and the menu options and screen format will vary according to the Digital pay services provider.
- It's possible for you to change CI (Common Interface) menu screen and service by your dealer.



4 5

5V ANTENNA POWER (IN DIGITAL MODE ONLY)

Even if there isn't a special 5V adapter power in the external antenna, this function can output 5V in the set.



1. Press the MENU button and then ▲ or ▼ button to select the **STATION** menu.

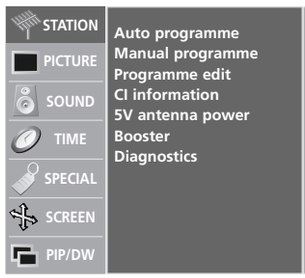
2. Press the ► button and then use ▲ or ▼ button to select **5V antenna power**.

3. Press the ► button and then use ▲ or ▼ button to select **On** or **Off**.

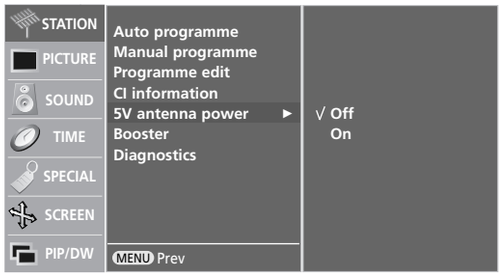
   In **5V antenna power On**, if the set is short-circuit, it will automatically return to **Off**.

   The message "**Antenna feed overloaded. Automatically switched off.**" will appear.

4. Press the EXIT button to return to normal TV viewing.



1



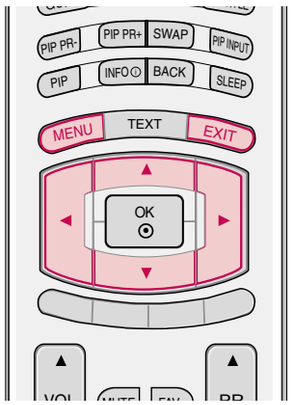
2 3

TV MENU / STATION MENU OPTIONS

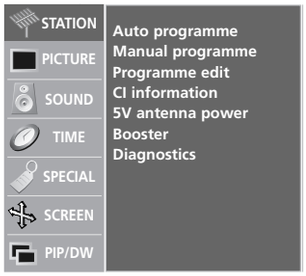
Booster (In Digital Mode only)

In some models, **Booster** is an optional function. Only a set with Booster can perform this function.

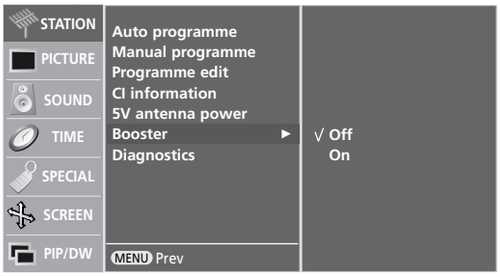
If the reception is poor at the fringe area of TV signal, select **Booster** to **On**.



1. Press the **MENU** button and then ▲ or ▼ button to select the **STATION** menu.
2. Press the ► button and then use ▲ or ▼ button to select **Booster**.
3. Press the ► button and then use ▲ or ▼ button to select **On** or **Off**.
4. Press the **EXIT** button to return to normal TV viewing.



1

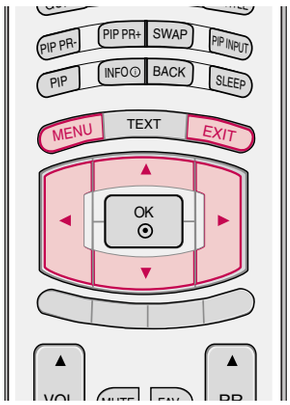


2 3

DIAGNOSTICS (IN DIGITAL MODE ONLY)

This function enables you to watch Manufacturer, Model/Type, Serial Number and Software Version.

It's displayed the information and signal strength of the turned MUX.
It's displayed the signal information and service name of the selected MUX.

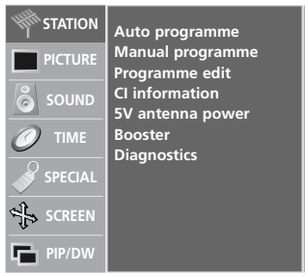


1. Press the **MENU** button and then ▲ or ▼ button to select the **STATION** menu.

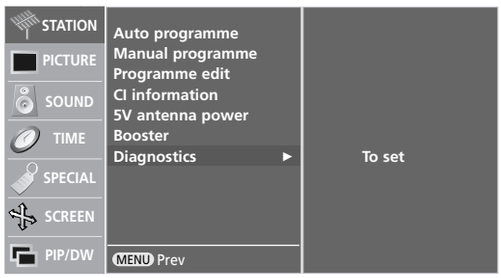
2. Press the ► button and then use ▲ or ▼ button to select **Diagnostics**.

3. Press the ► button to display Manufacturer, Model/Type, Serial Number and Software Version.

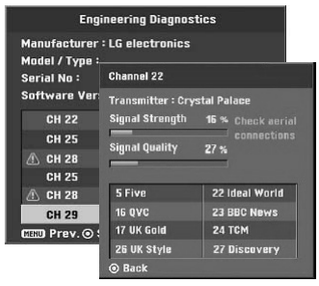
4. Press the **EXIT** button to return to normal TV viewing.



1



2

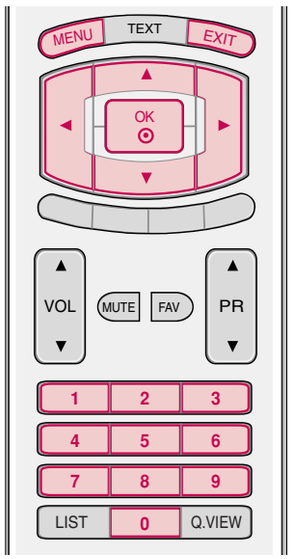


3

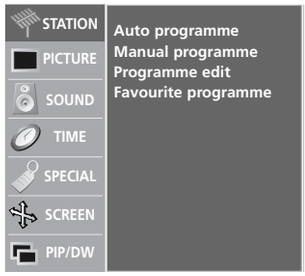
TV MENU / STATION MENU OPTIONS

AUTO PROGRAMME TUNING (IN ANALOGUE MODE)

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 ▲ or ▼ button to select the **STATION** menu.



1

2. Press the ► button and then ▲ or ▼ button to select **Auto programme**.

3. Press the ► button to select **System**. Select a TV system with the ◄ or ► button;

   L : SECAM L/L' (France)
   BG : PAL B/G, SECAM B/G (Europe / East Europe / Asia / New Zealand / M.East / Africa / Australia)
   I : PAL I/II (U.K. / Ireland / Hong Kong / South Africa)
   DK : PAL D/K, SECAM D/K (East Europe / China / Africa / CIS)

4. Press the ▼ button to select **Storage from**.

   Select the beginning programme number with the ◄ or ► button or NUMBER buttons on the **Storage from** menu.

5. Press the ▼ button to select **Start**.

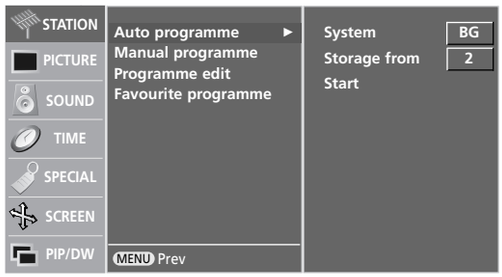
   The station name is stored for stations which broadcast VPS (Video Programme Service), PDC (Programme Delivery Control) or TELETEXT data.

   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.

   To stop auto programming, press the **MENU** button.

   When auto programming is completed, the **Programme edit** menu appears on the screen.

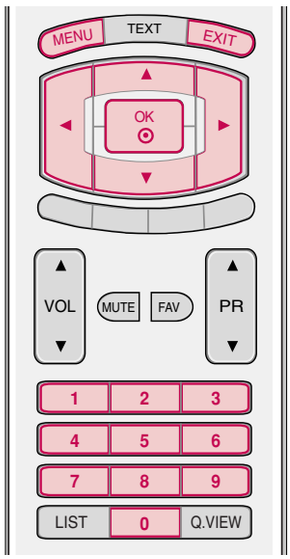
   See the '**Programme edit**' section to edit the stored programme.

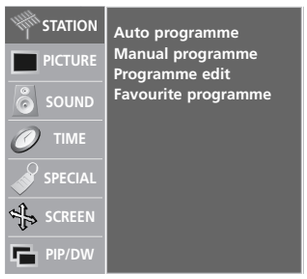


2 ~ 5

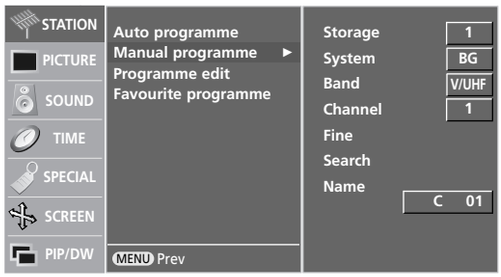
MANUAL PROGRAMME TUNING (IN ANALOGUE MODE)

Manual programme lets you manually tune and arrange the stations in whatever order you desire. Also you can assign a station name with five characters to each programme number.





1



2 ~ 10

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

   Select the desired programme number with the ◀ or ▶ button or NUMBER buttons on the **Storage** menu.
4. Press the ▼ button to select **System**. Select a TV system with the ◀ or ▶ button;

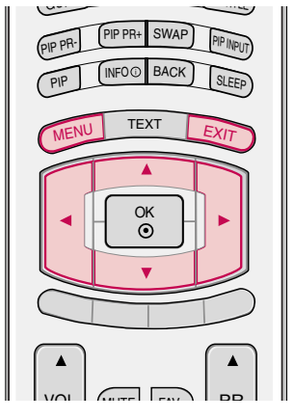
   L : SECAM L/L' (France)
   BG : PAL B/G, SECAM B/G (Europe / East Europe / Asia / New Zealand / M.East / Africa / Australia)
   I : PAL I/II (U.K. / Ireland / Hong Kong / South Africa)
   DK : PAL D/K, SECAM D/K (East Europe / China / Africa / CIS)
5. Press the ▼ button to select **Band**. Press the ◀ or ▶ button to select **V/UHF** or **Cable** as required.
6. Press the ▼ button to select **Channel**. You can select the desired channel number with the ◀ or ▶ button or NUMBER buttons.

   If possible, select the channel number directly with the NUMBER buttons.
7. Press the ▼ button to select **Search**. Press the ◀ or ▶ button to commence searching. If a station is found the search will stop.
8. Press the OK button to store it.
9. To store another station, repeat steps 3 to 8.
10. Press the EXIT button to return to TV viewing or press the MENU button to return to the previous menu.

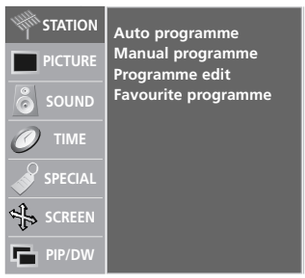
TV MENU / STATION MENU OPTIONS

FINE TUNING (IN ANALOGUE MODE)

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 ▲ or ▼ button to select the **STATION** menu.
2. Press the ▶ button and then ▲ or ▼ button to select **Manual programme**.
3. Press the ▶ button and then ▲ or ▼ button to select **Fine**.
4. Press the ▶ button and then ◀ or ▶ 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.



1

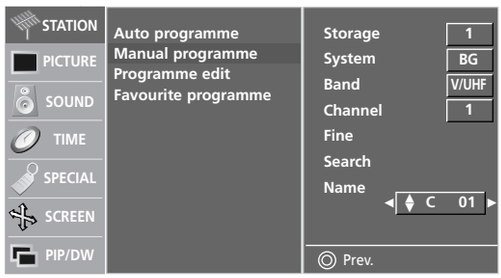
ASSIGNING A STATION NAME (IN ANALOGUE MODE)

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



2 ~ 6

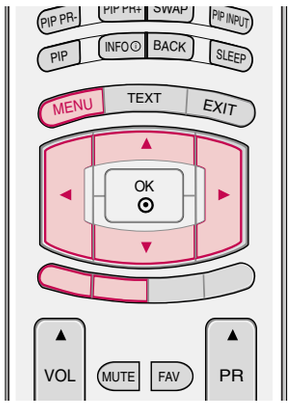
1. Press the MENU button and then ▲ or ▼ button to select the **STATION** menu.
2. Press the ▶ button and then ▲ or ▼ button to select **Manual programme**.
3. Press the ▶ button and then ▲ or ▼ button to select **Name**.
4. Press the ▶ button and then ▲ or ▼ button. You can use a the alphabet **A** to **Z**, the number **0** to **9**, +/ -, and blank.
5. Press the ◀ or ▶ 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.



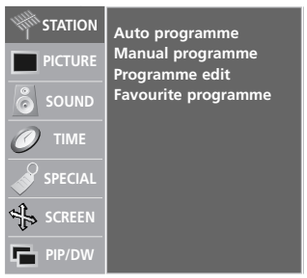
2 ~ 7

PROGRAMME EDIT (IN ANALOGUE MODE)

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

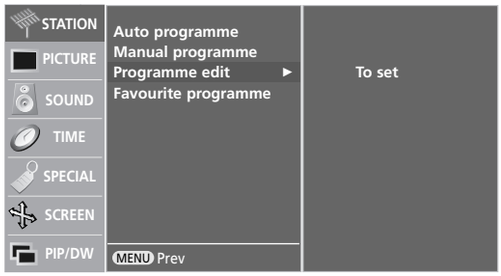


1

■ Deleting a programme

a. Select a programme to be deleted with the ▲ or ▼ or ◄ or ► button.

b. Press the RED button twice. The selected programme is deleted, all the following programmes are shifted up one position.

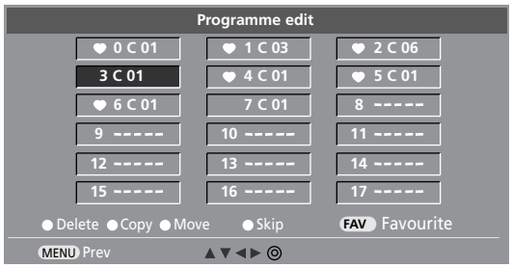


2

■ Copying a programme

a. Select a programme to be copied with the ▲ or ▼ or ◄ or ► button.

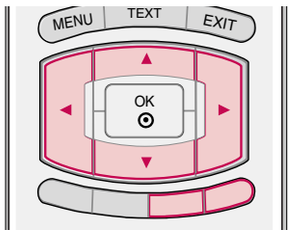
b. Press the GREEN button. All the following programmes are shifted down one position.

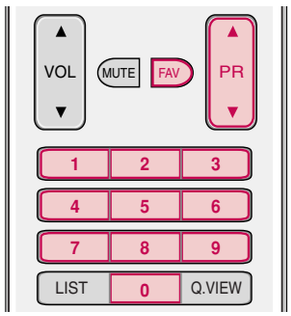


3

TV MENU / STATION MENU OPTIONS

PROGRAMME EDIT (IN ANALOGUE MODE)





■ Moving a programme

a Select a programme to be moved with ▲ or ▼ or ◄ or ► button.

b Press the YELLOW button.

c Move the programme to the desired programme number with the ▲ or ▼ or ◄ or ► button.

d Press the YELLOW button again to release this function.

■ Skipping a programme number

a Select a programme number to be skipped with ▲ or ▼ or ◄ or ► 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 ▲ or ▼ 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 ▲ or ▼ or ◄ or ► button.

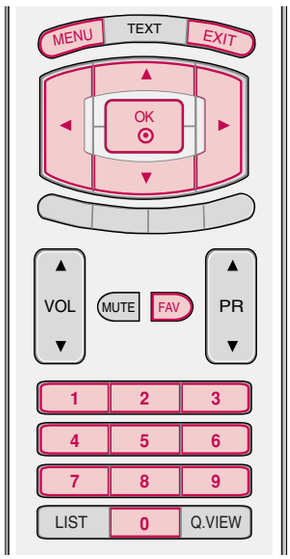
b Press the FAV button.

The selected programme will be added to the favourite programme list and heart-mark will appear in front of that programme number.

FAVOURITE PROGRAMME (IN ANALOGUE MODE)

This function lets you select your favourite programmes directly.

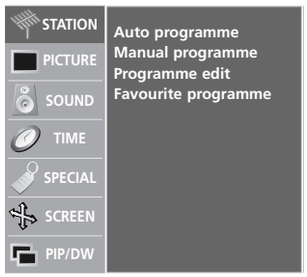
Repeatedly press the FAV button to select stored favourite programmes.



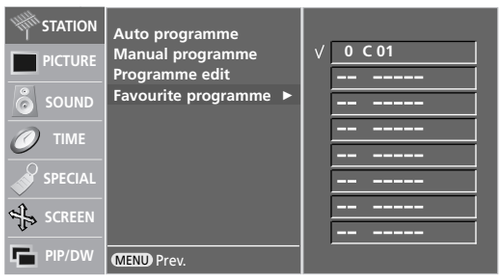
1. Press the MENU button and then ▲ or ▼ button to select the **STATION** menu.
2. Press the ▶ button and then ▲ or ▼ button to select **Favourite programme**.
3. Press the ▶ button and then ▲ or ▼ button to select - - - - - - -.
4. Select a desired programme with the ◀ or ▶ button or NUMBER buttons.

   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 18 programmes.
6. Press the EXIT button to return to TV viewing or press the MENU button to return to the previous menu.



1

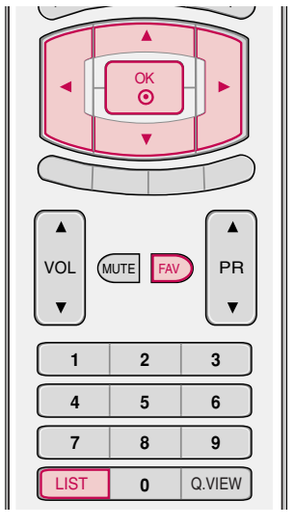


2 ~ 6

TV MENU / STATION MENU OPTIONS

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.

   The programme list appears on the screen.

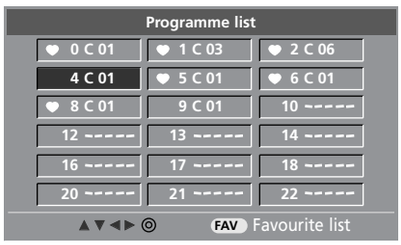
- You may find some blue programmes. They have been set up to be skipped by auto programming or in the programme edit mode.
- Some programmes with the channel number shown in the programme LIST indicate there is no station name assigned.



< In Digital Mode >

■ Selecting a programme in the programme list

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



< In Analogue Mode >

■ Paging through a programme list

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

1. Press the ▲ or ▼ or ◄ or ► button repeatedly to turns the pages.
2. Press the LIST button to return to TV viewing.

■ Displaying favourite programme table

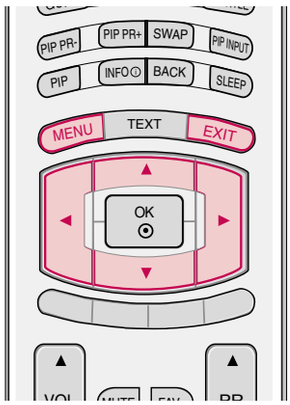
Press the FAV button to display the Favourite Programme table menu.

Mini Glossary

- Displayed when the Favourite Programme.
- Displayed when the Locked Programme.

TV MENU / PICTURE MENU OPTIONS

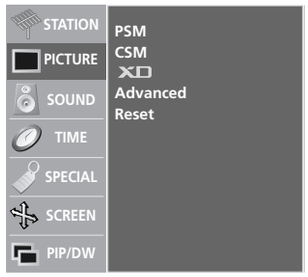
PSM (PICTURE STATUS MEMORY)



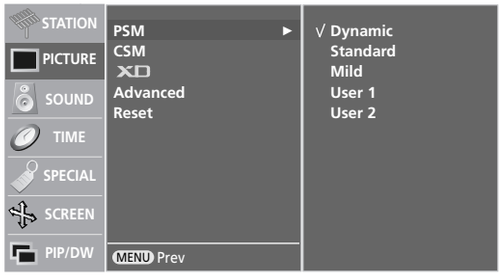
PSM adjusts the set for the best picture appearance. Select the preset value in the **PSM** menu based on the programme category.

When adjusting User options (**contrast**, **brightness**, **colour**, and **sharpness** or **tint**) manually, **PSM** automatically changes to **User 1/2**.

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



1



2 ~ 4

1. Press the MENU button and then ▲ or ▼ button to select the **PICTURE** menu.
2. Press the ▶ button and then ▲ or ▼ button to select **PSM**.
3. Press the ▶ button and then ▲ or ▼ button to select **Dynamic**, **Standard**, **Mild**, **User 1**, or **User 2**.

   Dynamic
   Select this option to display with a sharp image.

   Standard
   The most general and natural screen display status.

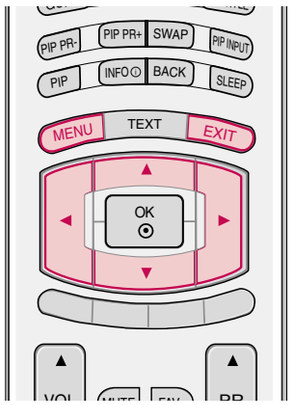
   Mild
   Select this option to display with a mild image.

   User 1/2
   Select this option to use the user-defined setting.
4. Press the EXIT button to return to TV viewing or press the MENU button to return to the previous menu.

TV MENU / PICTURE MENU OPTIONS

PICTURE ADJUSTMENT (PSM-USER OPTION)

You can adjust picture contrast, brightness, colour intensity, sharpness and tint to the levels you prefer.



1. Press the MENU button and then ▲ or ▼ button to select the **PICTURE** menu.
2. Press the ▶ button and then ▲ or ▼ button to select **PSM**.
3. Press the ▶ button and then ▲ or ▼ button to select **User 1**, or **User 2**.
4. Press the ▶ button and then ▲ or ▼ button to select the desired picture option (**Contrast**, **Brightness**, **Colour**, **Sharpness**, or **Tint**).

Contrast
Adjusts the difference between the light and dark levels in the picture.

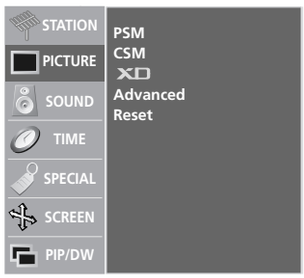
Brightness
Increases or decreases amount of white in the your picture.

Colour
Adjusts intensity of all colours.

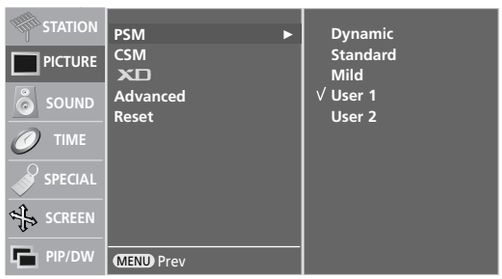
Sharpness
Adjusts the level of crispness in the edges between the light and dark areas of the picture. The lower the level, the softer the image.

Tint
Adjusts the balance between red and green levels.

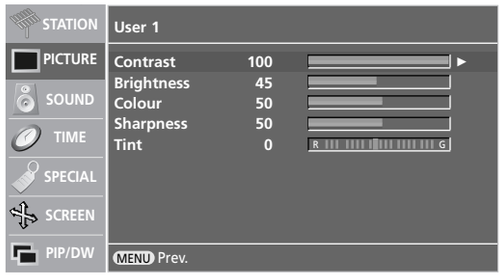
5. Press the ▶ button and then ◀ or ▶ button to make appropriate adjustments.
6. Press the EXIT button to return to TV viewing or press the MENU button to return to the previous menu.



1



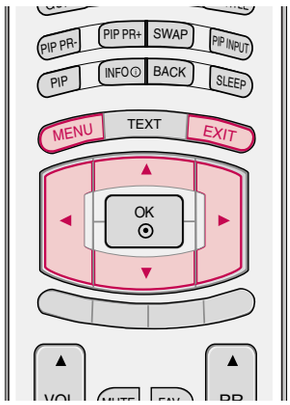
2 ~ 3



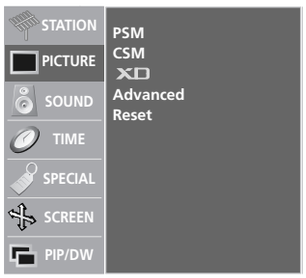
4 ~ 6

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 ▲ or ▼ button to select the **PICTURE** menu.
2. Press the ▶ button and then ▲ or ▼ button to select **CSM**.
3. Press the ▶ button and then ▲ or ▼ 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.

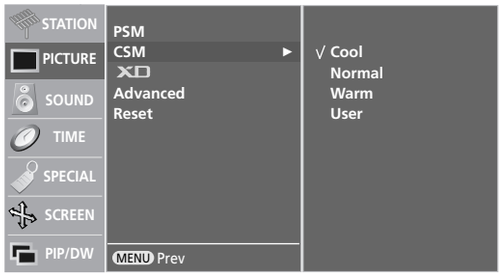


1

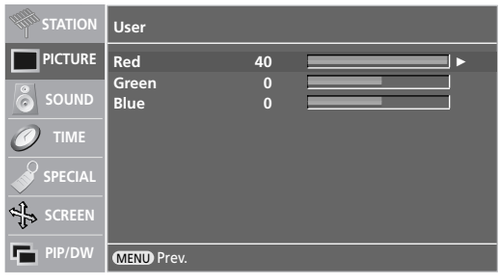
MANUAL COLOUR TEMPERATURE CONTROL (CSM - USER OPTION)

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

1. Press the MENU button and then ▲ or ▼ button to select the **PICTURE** menu.
2. Press the ▶ button and then ▲ or ▼ button to select **CSM**.
3. Press the ▶ button and then ▲ or ▼ button to select **User**.
4. Press the ▶ button and then ▲ or ▼ button to select **Red**, **Green**, or **Blue**.
5. Press the ▶ button and then ◀ or ▶ 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.



2 ~ 3

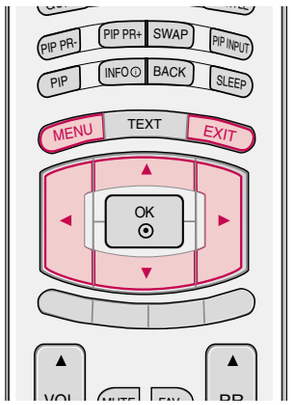


4 ~ 6

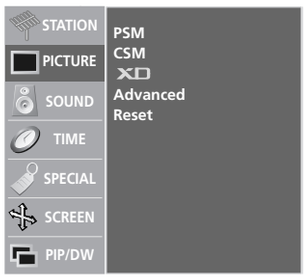
TV MENU / PICTURE MENU OPTIONS

XD FUNCTION

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



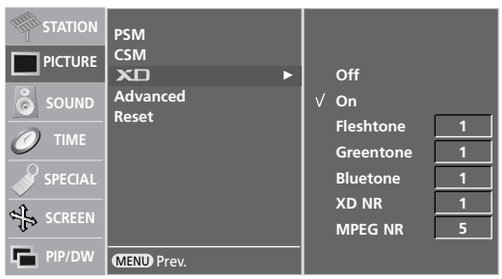
1. Press the MENU button and then ▲ or ▼ button to select the **PICTURE** menu.
2. Press the ▶ button and then ▲ or ▼ button to select **XD**.
3. Press the ▶ button and then ▲ or ▼ button to select **On** or **Off**.
4. Press the EXIT button to return to TV viewing or press the MENU button to return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



1

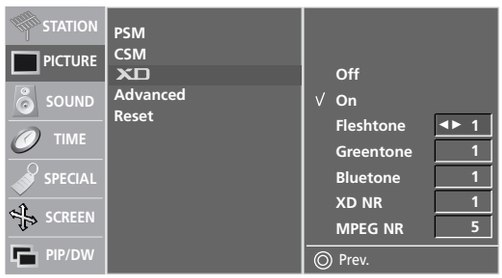
XD - USER OPTION

This function can adjust to select the desired skin colour option.
This function is not available for use in RGB[PC], HDMI[PC] mode.
It's not available to use this function in **XD Off** mode.



2 ~ 4

1. Press the MENU button and then ▲ or ▼ button to select the **PICTURE** menu.
2. Press the ▶ button and then ▲ or ▼ button to select **XD**.
3. Press the ▶ button and then ▲ or ▼ button to select **Fleshtone**, **Greentone** or **Bluetone**.
4. Press the ▶ button and then use ◀ or ▶ button to make appropriate adjustments.
5. Press the EXIT button to return to TV viewing or press the MENU button to return to the previous menu.



2 ~ 5

NR (NOISE REDUCTION)

You can select **XD NR** or **MPEG NR** to reduce the picture noise which may appear on the screen during watching the TV.
This function is not available for use in RGB[PC], HDMI[PC] mode.
It's not available to use this function in **XD Off** mode.

1. Press the MENU button and then ▲ or ▼ button to select the **PICTURE** menu.
2. Press the ▶ button and then ▲ or ▼ button to select **XD**.
3. Press the ▶ button and then ▲ or ▼ button to select **XD NR** or **MPEG NR**.
4. Press the ▶ button and then use ◀ or ▶ button to make appropriate adjustments.
5. Press the EXIT button to return to TV viewing or press the MENU button to return to the previous menu.

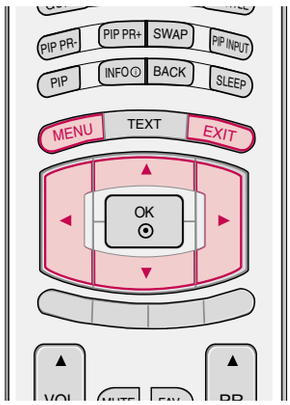
ADVANCED

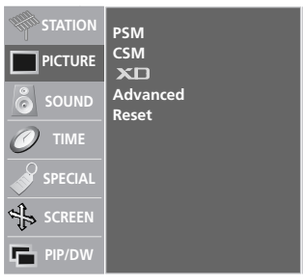
When you watch the movie, this function adjusts the set to the best picture appearance.
Cinema function works in the following mode: TV, AV1, AV2, AV3, AV4, SAV2 or COMPONENT 480i/576i.
Black level is available for use in HDMI mode.

1. Press the MENU button and then ▲ or ▼ button to select the **PICTURE** menu.
2. Press the ▶ button and then ▲ or ▼ button to select **Advanced**.
3. Press the ▶ button and then ▲ or ▼ button to select **Cinema** or **Black level**.
4. Press the ◀ or ▶ button to make appropriate adjustments.
5. Press the EXIT button to return to TV viewing or press the MENU button to return to the previous menu.

RESET

1. Press the MENU button and then ▲ or ▼ button to select the **PICTURE** menu.
2. Press the ▶ button and then ▲ or ▼ button to select **Reset**.
3. Press the ▶ button to initialize the adjusted value.
   - You can initialize **PSM**, **CSM**, **XD** and **Advanced**.





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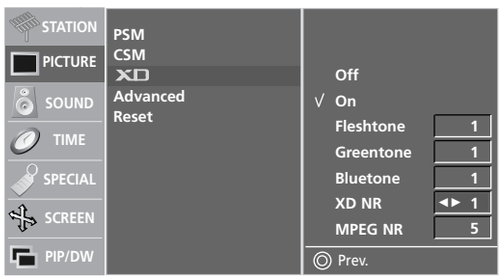
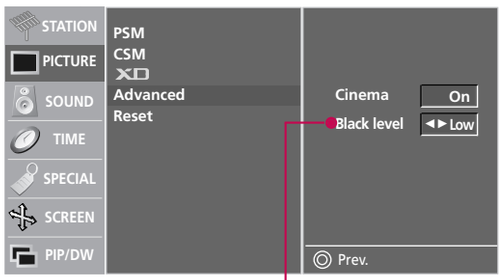


2 ~ 5



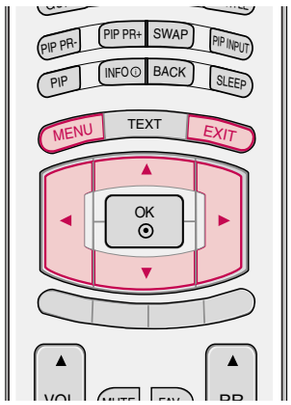
2 ~ 5

- **Low:** The reflection of the screen gets darker.
- **High:** The reflection of the screen gets brighter.

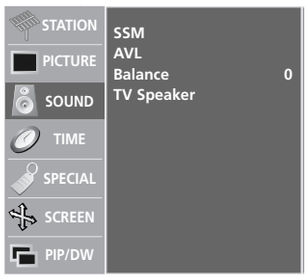
TV MENU / SOUND MENU OPTIONS

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 set 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 ▲ or ▼ button to select the **SOUND** menu.
2. Press the ▶ button and then ▲ or ▼ button to select **SSM**.
3. Press the ▶ button and then ▲ or ▼ button to select **SRS TSXT**, **Flat**, **Music**, **Movie**, **Sports**, or **User**.



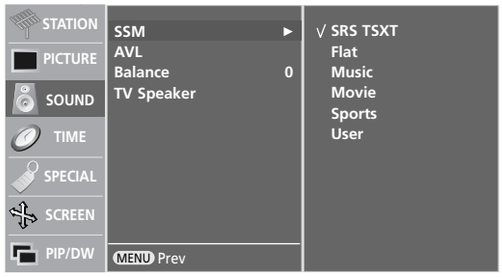
1

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.

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

SRS TruSurround XT DIGITAL is a trademark of SRS Labs, Inc.

TruSurround XT technology is incorporated under license from SRS Labs, Inc.

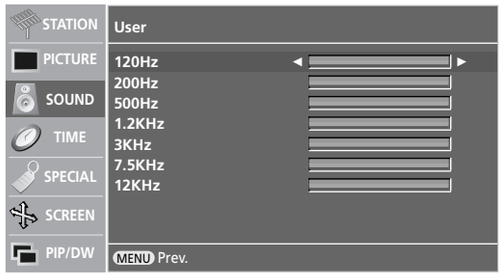


2 ~ 3

SOUND FREQUENCY ADJUSTMENT (SSM - USER OPTION)

Adjust the sound equalizer.

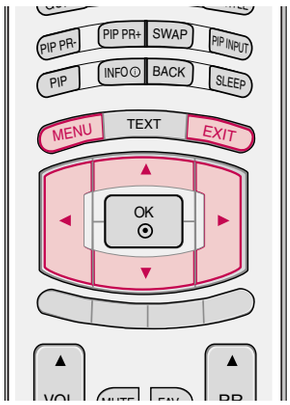
1. Press the MENU button and then ▲ or ▼ button to select the **SOUND** menu.
2. Press the ▶ button and then ▲ or ▼ button to select **SSM**.
3. Press the ▶ button and then ▲ or ▼ button to select **User**.
4. Press the ▶ button.
5. Make appropriate sound level with the ▲ or ▼ button. Select a sound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



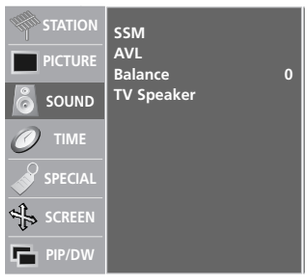
4 ~ 6

AVL (AUTO VOLUME LEVELER)

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



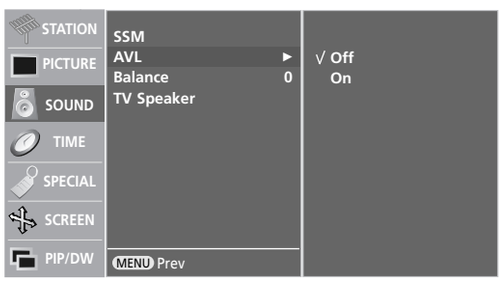
1. Press the MENU button and then ▲ or ▼ button to select the **SOUND** menu.
2. Press the ▶ button and then ▲ or ▼ button to select **AVL**.
3. Press the ▶ button and then ▲ or ▼ button to select **Off** or **On**.
4. Press the EXIT button to return to TV viewing or press the MENU button to return to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



1

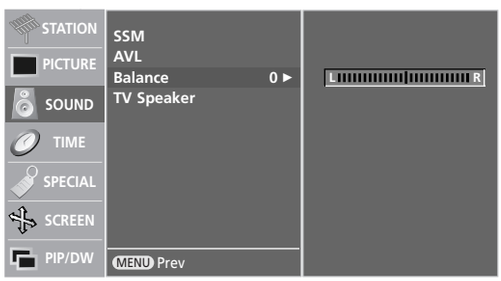
BALANCE ADJUSTMENT

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



2 ~ 4

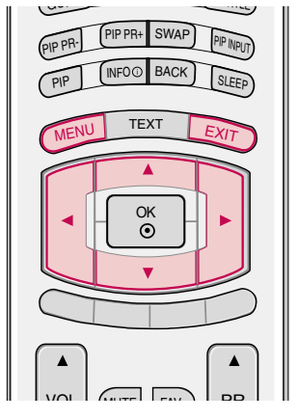
1. Press the MENU button and then ▲ or ▼ button to select the **SOUND** menu.
2. Press the ▶ button and then ▲ or ▼ button to select **Balance**.
3. Press the ▶ button and then ◀ or ▶ button to make desired adjustment.
4. Press the EXIT button to return to TV viewing or press the MENU button to return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



2 ~ 4

TV MENU / SOUND MENU OPTIONS

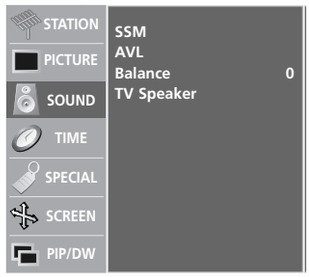
TV SPEAKER



You can adjust the internal speaker status.

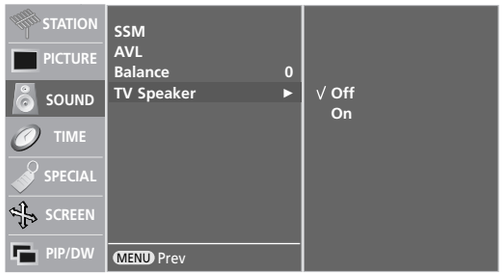
In **AV1**, **AV2**, **SAV2**, **AV3**, **AV4**, **COMPONENT**, **RGB** and **HDMI/DVI** (or **HDMI1/DVI**) with HDMI to DVI cable, TV speaker and/or variable audio can be outputted even though there is no video signal.

If you want to use your external hi-fi stereo system, turn off the internal speakers of the set.



1

1. Press the MENU button and then ▲ or ▼ button to select the **SOUND** menu.
2. Press the ▶ button and then ▲ or ▼ button to select **TV Speaker**.
3. Press the ▶ button and then ▲ or ▼ 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.

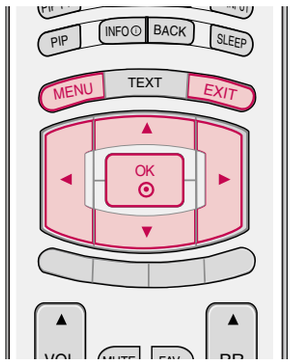


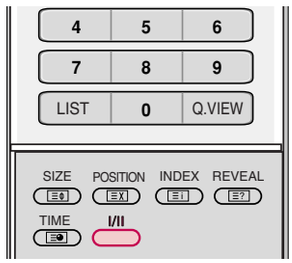
2 ~ 4

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.

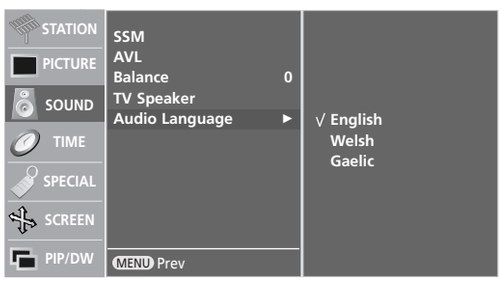




1. Press the MENU button and then ▲ or ▼ button to select the **SOUND** menu.
2. Press the ► button and then ▲ or ▼ button to select **Audio language**.
3. Press the ► button and then ▲ or ▼ button to select **English**, **Welsh**, or **Gaelic**.
4. Press the EXIT button to return to TV viewing or press the MENU button to return to the previous menu.



1



2 ~ 4

- When two or more audio languages are broadcasted, you can select audio language with the I/II button on the remote control.
- Press the ▲ or ▼ button to select an audio language.
- Press the ◄ or ► button to select L+R, L+L or R+R.

OSD (On-screen Display) Information

Display	Status
N.A	Not Available
Audio	Audio only service
	Audio for Visual Impaired
ABC	Audio for Hearing Impaired

Notes: The audio which it has not a language code will be displayed a 3 character.

TV MENU / SOUND MENU OPTIONS

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

■ **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.

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.

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 MONO.
2. When NICAM stereo is received, you can select **NICAM STEREO** or MONO. If the stereo signal is weak, switch to 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 **AV1**, **AV2**, **SAV2**, **AV3**, **AV4**, **Component**, **RGB** and **HDMI/DVI** (or **HDMI1/DVI** or **HDMI2**) mode, you can select output sound for the left and right loudspeakers.

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

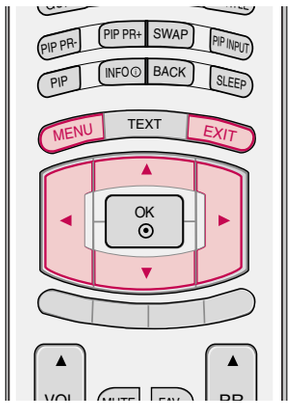
L+R: Audio signal from audio L input is sent to the left loud speaker and audio signal from audio R input is sent to the right loud speaker.

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.

TV MENU / TIME MENU OPTIONS

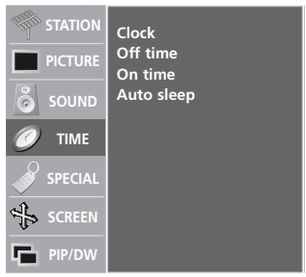
CLOCK SETUP



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 ▲ or ▼ button to select the **TIME** menu.
2. Press the ▶ button and then ▲ or ▼ button to select **Clock**.
3. Press the ▶ button and then ◀ or ▶ button to select either the year, date, or time option.

   Once selected, use the ▲ or ▼ 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.



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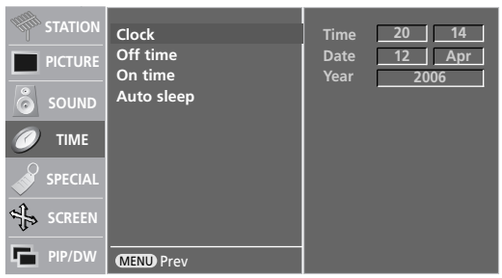
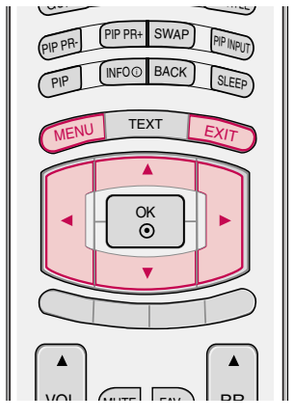


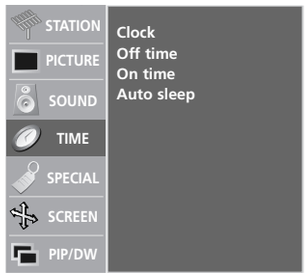
2 ~ 4

TV MENU / TIME MENU OPTIONS

ON/OFF TIME

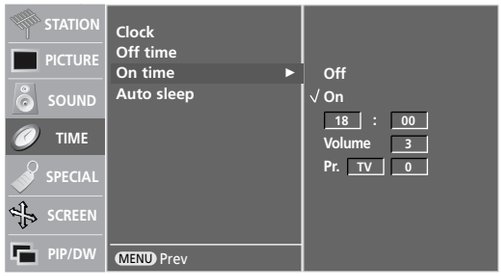


The Off time automatically switches the set to standby at the preset time.
Two hours after the set is switched on by the on time function it will automatically switch back to standby mode unless a button has been pressed.
Once the on time/off time is set, these functions operate daily at the preset time.
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

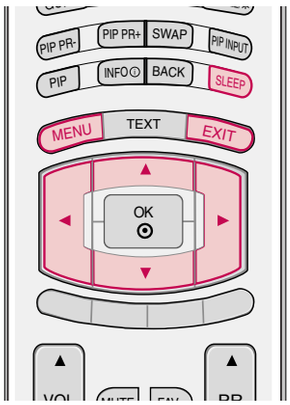
1. Press the MENU button and then ▲ or ▼ button to select the **TIME** menu.
2. Press the ▶ button and then ▲ or ▼ button to select **Off time/On time**.
3. Press the ▶ button and then ▲ or ▼ button to select **On**.
   - To cancel **On/Off timer** function, select **Off**.
4. Press the ▶ button and then ▲ or ▼ button to set the hour.
5. Press the ▶ button and then ▲ or ▼ button to set the minutes.
6. **For only On timer function**
   - **Programme:** Press the ▶ button and then ▲ or ▼ button to select **TV** or **DTV**. And then, Press the ▶ button and then ▲ or ▼ button to select the programme.
   - **Volume:** Press the ▶ button and then ▲ or ▼ 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.



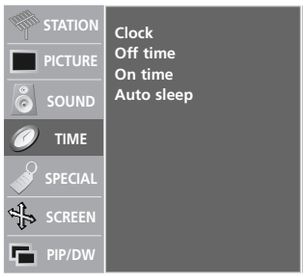
2 ~ 7

AUTO SLEEP

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



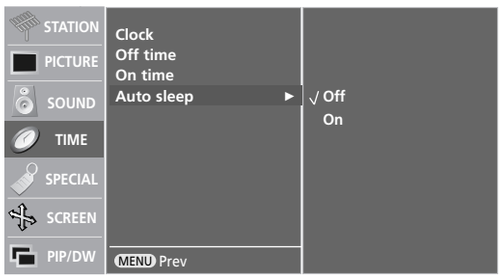
1. Press the MENU button and then ▲ or ▼ button to select the **TIME** menu.
2. Press the ▶ button and then ▲ or ▼ button to select **Auto sleep**.
3. Press the ▶ button and then ▲ or ▼ button to select **Off** or **On**.
4. Press the EXIT button to return to TV viewing or press the MENU button to return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



1

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.



2 ~ 4

a. Press the SLEEP button repeatedly to select the number of minutes.

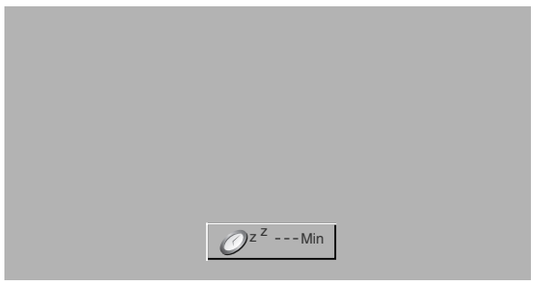
   The display ' - - - **Min** ' will appear on the screen, followed by **10**, **20**, **30**, **60**, **90**, **120**, **180** and **240**.

b. When the number of minutes you want is displayed on the screen, the timer begins to count down from the number of minutes selected.

c. To view the remaining sleep time, press the SLEEP button once.

d. To cancel the sleep time, repeatedly press the SLEEP button until the display ' - - - **Min** ' appears.

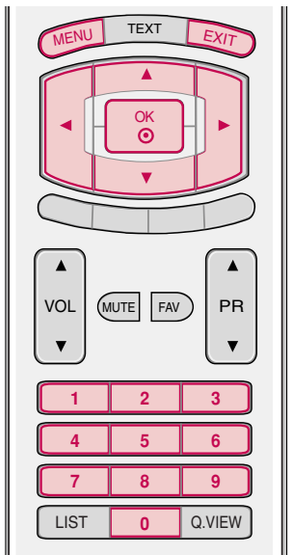
e. When you switch the set off, the set releases the preset sleep time.



TV MENU / SPECIAL MENU OPTIONS

SYSTEM LOCK SETTING

If you first enter the password, press '0', '0', '0', '0' on the remote control handset.



1. Press the MENU button and then ▲ or ▼ button to select the **SPECIAL** menu.
2. Press the ▶ button and then ▲ or ▼ button to select **Lock system**.
3. Press the ▶ button and then ▲ or ▼ button to select **On**.

To set the password

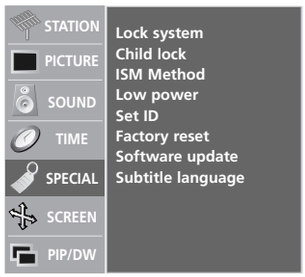
Press the ▶ button and then use NUMBER buttons to input a 4-digit password.

Be sure to remember this number!

Re-enter new password for confirm.

If you forgot your password, press '7', '7', '7', '7' on the remote control handset.

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



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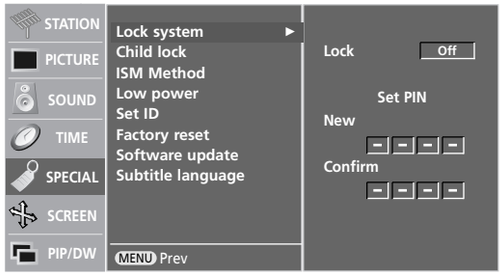


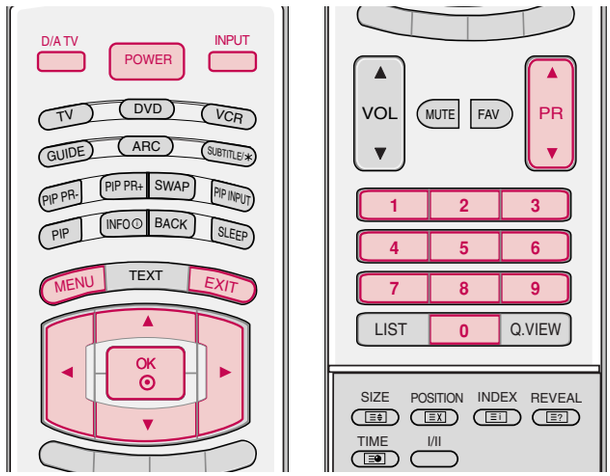
2 ~ 4

CHILD LOCK

The set can be set so that the remote control is needed to control it.

This feature can be used to prevent unauthorized viewing.

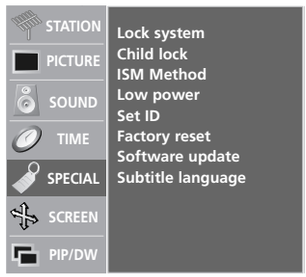
This set is programmed to remember which option it was last set to even if you turn the set off.



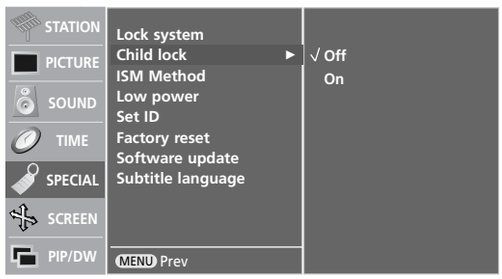
1. Press the MENU button and then ▲ or ▼ button to select the **SPECIAL** menu.
2. Press the ► button and then ▲ or ▼ button to select **Child lock**.
3. Press the ► button and then ▲ or ▼ button to select **Off** or **On**.

   In **Child lock** '**On**', if the set is turned off, press the ⏻ / I, INPUT, PR ▲ or ▼ button on the set or POWER, INPUT, D/A TV, PR ▲ or ▼ or NUMBER buttons on the remote control.

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



1



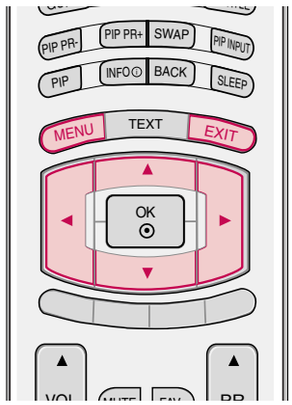
2 ~ 4

TV MENU / SPECIAL MENU OPTIONS

ISM METHOD (IMAGE STICKING MINIMIZATION)

A frozen of still picture from a PC/video game displayed on the screen for prolonged periods will result in a ghost image remaining even when you change the image. Avoid allowing a fixed image to remain on the screen for a long period of time.

It's not available to use this function in 32/37/42LC2D series.



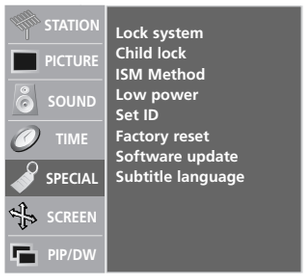
1. Press the MENU button and then ▲ or ▼ button to select the **SPECIAL** menu.
2. Press the ▶ button and then ▲ or ▼ button to select **ISM Method**.
3. Press the ▶ button and then ▲ or ▼ button to select either **Normal**, **White wash**, **Orbiter** or **Inversion**.

   If you unnecessary to set this function, set **Normal**.

   White wash
   White wash removes permanent images from the screen.
   Note: An excessive permanent image may be impossible to clear entirely with White Wash.

   Orbiter
   Orbiter may help prevent ghost images.
   However, it is best not to allow any fixed image to remain on the screen. To avoid a permanent image on the screen, the screen will move every 2 minutes.

   Inversion
   This is the function to invert the panel colour of the screen. The panel colour is automatically inverted every 30 minutes.
4. Press the EXIT button to return to TV viewing or press the MENU button to return to the previous menu.



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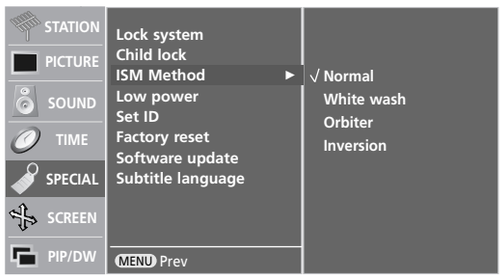
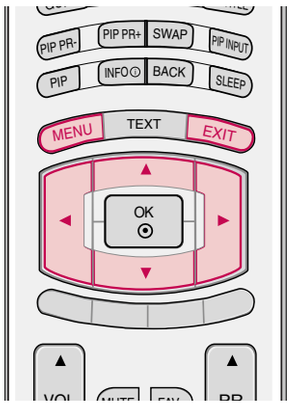


2 ~ 4

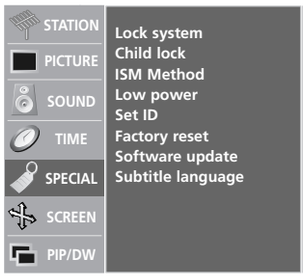
LOW POWER

This is the function to reduce the power consumption of the set.

It's not available to use this function in 32/37/42LC2D series.



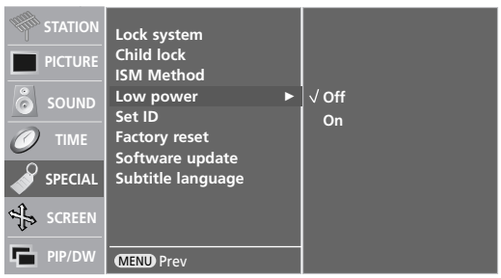
1. Press the MENU button and then ▲ or ▼ button to select the **SPECIAL** menu.
2. Press the ▶ button and then ▲ or ▼ button to select **Low power**.
3. Press the ▶ button and then ▲ or ▼ button to select **Off** or **On**.
4. Press the EXIT button to return to TV viewing or press the MENU button to return to the previous menu.



1

FACTORY RESET

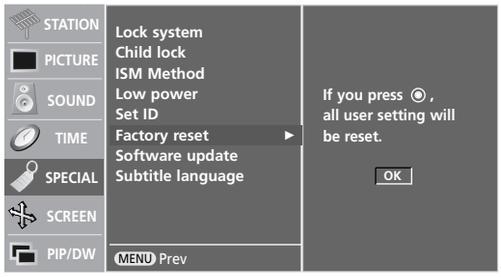
Use to quickly reset all the menu options to their original factory preset values.
This function deletes all TV programmes.
To begin Factory Reset, input a 4-digit password in Lock system. Be sure to remember this number!
If you forgot your password, press '7', '7', '7', '7' on the remote control handset.



2 ~ 4

1. Press the MENU button and then ▲ or ▼ button to select the **SPECIAL** menu.
2. Press the ▶ button and then ▲ or ▼ button to select **Factory reset**.
3. Press the ▶ button to reset the menu options to original values.

   After finishing Factory Reset, the set will reboot.

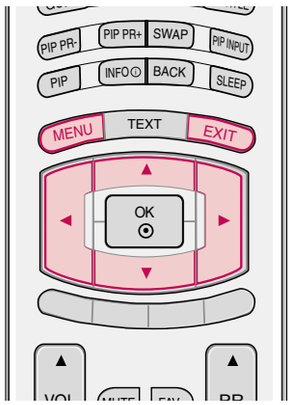


2 ~ 3

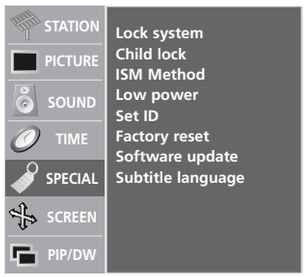
TV MENU / SPECIAL MENU OPTIONS

SOFTWARE UPDATE (IN DIGITAL MODE ONLY)

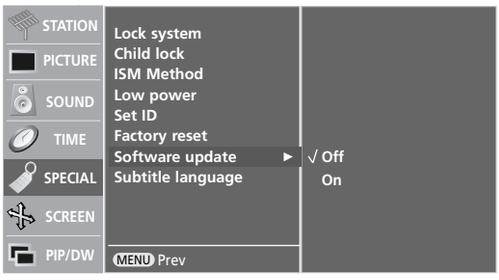
Software Update, means software can be downloaded through the digital terrestrial broadcasting system.



1. Press the MENU button and then ▲ or ▼ button to select the **SPECIAL** menu.
2. Press the ▶ button and then ▲ or ▼ button to select **Software update**.
3. Press the ▶ button and then ▲ or ▼ button to select **Off** or **On**.
   - If you select **On**, a user confirm message box will be displayed to notify that new software is found.
4. Press the EXIT button to return to TV viewing or press the MENU button to return to the previous menu.



1



2 ~ 4

* When setting "Software Update"



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



Select the **YES** using the ◀ or ▶ button and when you see the following picture.



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

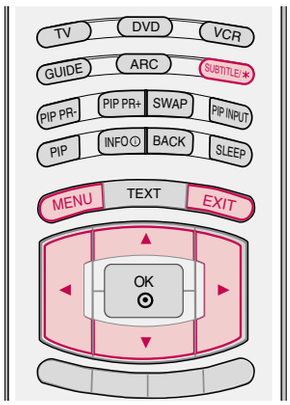
- During Progress of Software Update, please note the following:

- The power of the set 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 Diagnostics menu.

SUBTITLE LANGUAGE (IN DIGITAL MODE ONLY)

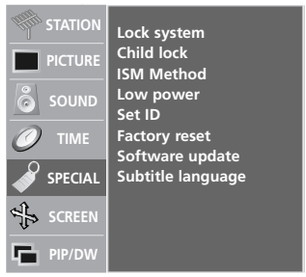
If the subtitle data in selected language is not broadcasted, English subtitle will be displayed.

Use this function when two or more subtitle languages are broadcasted.

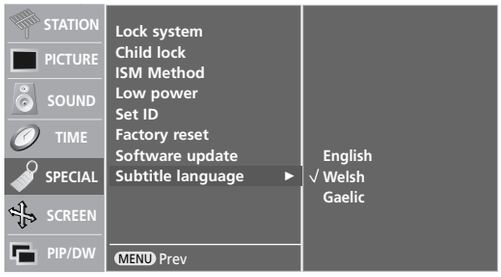


1. Press the MENU button and then ▲ or ▼ button to select the **SPECIAL** menu.
2. Press the ▶ button and then ▲ or ▼ button to select **Subtitle language**.
3. Press the ▶ button and then ▲ or ▼ button to select **English**, **Welsh**, or **Gaelic**.
4. Press the EXIT button to return to TV viewing or press the MENU button to return to the previous menu.

- You can select Subtitle language with the SUBTITLE/* on the remote control. When two or more subtitle languages are broadcasted.



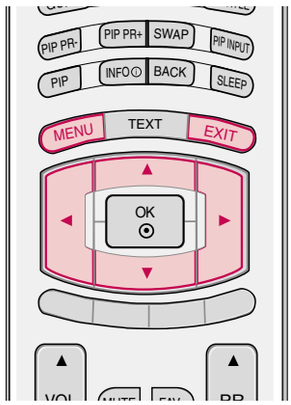
1



2 ~ 4

TV MENU / SCREEN MENU OPTIONS

AUTO CONFIG. (RGB [PC] MODE ONLY)



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.

Although the image is still not correct, your set is functioning properly but needs further adjustment.

The Auto config. functions don't need to be run for HDMI mode.

1. Press the MENU button and then use ▲ or ▼ button to select the **SCREEN** menu.
2. Press the ► button and then use ▲ or ▼ button to select **Auto config.**.
3. Press the ► button to start **Auto config.**.

   When **Auto config.** has finished, **OK** will be shown on screen.

   If the position of the image is still not correct, try Auto adjustment again.

   If picture needs to be adjusted more after Auto adjustment in RGB (PC), you can adjust the **Manual config.**.
4. Press the EXIT button to return to TV viewing or press the MENU button to return to the previous menu.



1

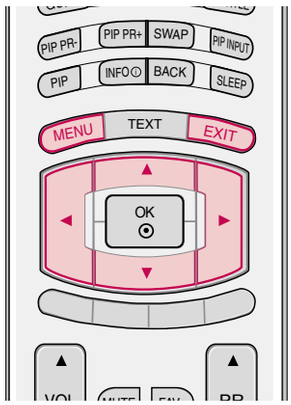


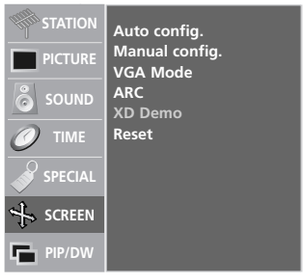
2 ~ 4

MANUAL CONFIGURE

If the picture isn't clear after auto adjustment and especially if characters are still trembling, adjust the picture phase manually.

To correct the screen size, adjust **Clock**.



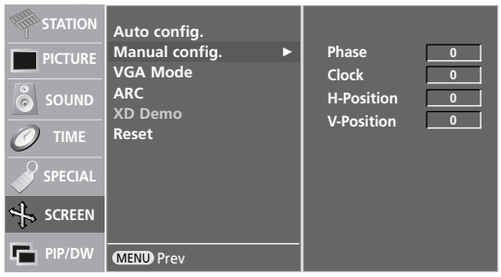


1

1. Press the MENU button and then use ▲ or ▼ button to select the **SCREEN** menu.
2. Press the ▶ button and then ▲ or ▼ button to select **Manual config.**.
3. Press the ▶ button and then ▲ or ▼ button to select **Phase**, **Clock**, **H-Position** or **V-Position**.

   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.
4. Press the ◀ or ▶ button to make appropriate adjustments.
5. Press the EXIT button to return to TV viewing or press the MENU button to return to the previous menu.



2 ~ 5

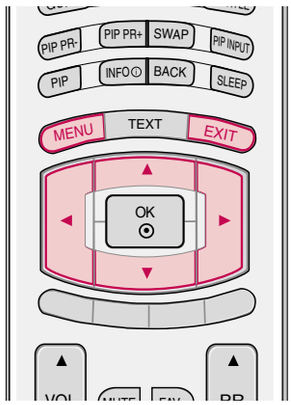
- This function works in the following mode : RGB[PC], RGB[DTV], COMPONENT (480p/576p/720p/1080i), HDMI (480p/576p/720p/1080i).
- It's not available to use Phase, Clock function in RGB[DTV], COMPONENT (480p/576p/720p/1080i), HDMI (480p/576p/720p/1080i) mode.

TV MENU / SCREEN MENU OPTIONS

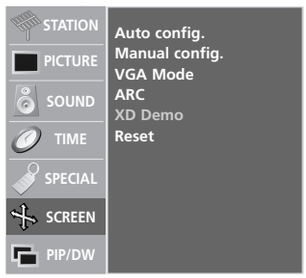
SETTING THE PICTURE FORMAT

You can watch the screen in various picture formats; **Spectacle**, **Full** (option), **Original**, **4:3**, **16:9** (Wide), **14:9** and **Zoom**.
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.

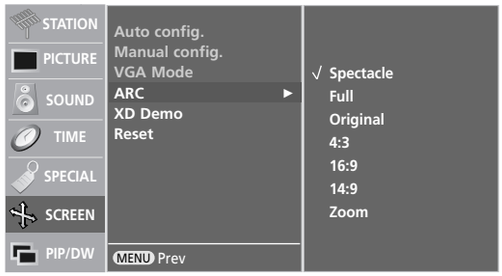
There might be uncomfortable in **Full** mode. Then change into other mode.
You can adjust the enlarge proportion of picture using ▲ or ▼ button.



1. Press the MENU button and then use ▲ or ▼ button to select the **SCREEN** menu.
2. Press the ► button and then use ▲ or ▼ button to select **ARC**.
3. Press the ► button and then use ▲ or ▼ button to select **Spectacle**, **Full** (option), **Original**, **4:3**, **16:9** (Wide), **14:9** or **Zoom**.



1



2 ~ 4

- **Spectacle**
  When your set receives the wide screen signal, when selected it will adjust the picture horizontally, in non-linear proportion, to fill the entire screen.
- **Full** (option)
  When your set receives the wide screen signal, when selected it will adjust the picture horizontally or vertically, in a linear proportion, to fill the entire screen fully.
- **Original**
  When your set receives the wide screen signal, it will be automatically changed to the picture format to be sent.
- **4:3**
  Following selection will lead you to view a picture with an original 4:3 aspect ratio, with gray bars appearing at both the left and right sides.
- **16:9** (Wide)
  Following selection will lead you to adjust the picture horizontally, in a linear proportion, to fill the entire screen (useful for viewing 4:3 formatted DVDs).
- **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 left / right.
- **Zoom**
  Following selection will lead you to view the picture without any alternation, while filling the entire screen. However, the top and bottom portions of the picture will be cropped.

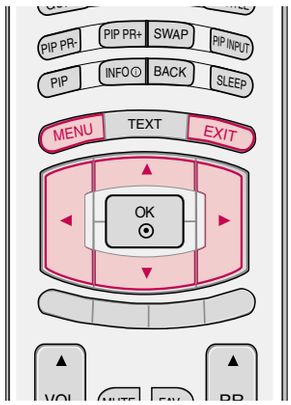
4. Press the EXIT button to return to TV viewing or press the MENU button to return to the previous menu.

- You can only select **4:3** and **16:9** (Wide) in RGB[PC], HDMI[PC] mode only.
- You can only select **4:3**, **16:9** (Wide) and **Zoom** in RGB[DTV], HDMI[DTV], Component [DTV] mode only.
- You can only select **Spectacle**, **Full**, **4:3**, **16:9** (Wide), **14:9** and **Zoom** in Component [480i/576i] mode only.

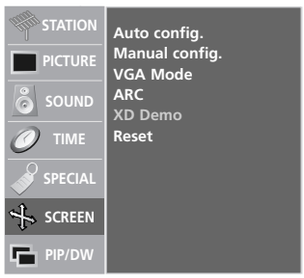
SELECTING WIDE VGA/XGA MODE

To see a normal picture, match the resolution of RGB mode and selection of VGA/XGA mode.

This function works in the following mode: RGB[PC], HDMI[PC] mode



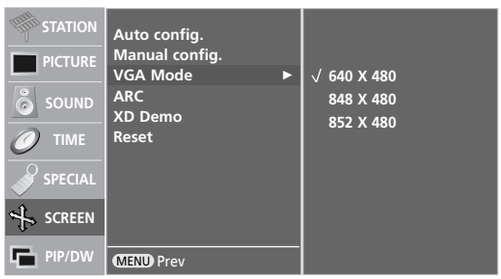
1. Press the MENU button and then use ▲ or ▼ button to select the **SCREEN** menu.
2. Press the ▶ button and then use ▲ or ▼ button to select **VGA Mode** (or **XGA Mode**).
3. Press the ▶ button and then use ▲ or ▼ button to select the desired VGA/XGA resolution.
4. Press the EXIT button to return to TV viewing or press the MENU button to return to the previous menu.



1

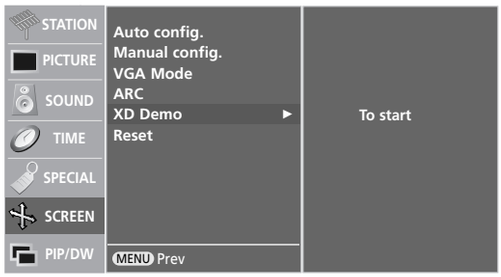
XD DEMO

- Use it to see the difference between XD Demo on and XD Demo off.
- It's not available to use this function in RGB[PC], HDMI[PC] mode.



2 ~ 5

1. Press the MENU button and then use ▲ or ▼ button to select the **SCREEN** menu.
2. Press the ▶ button and then use ▲ or ▼ button to select **XD Demo**.
3. Press the ▶ button to begin **XD Demo**.
4. To stop **XD Demo**, press the EXIT button.

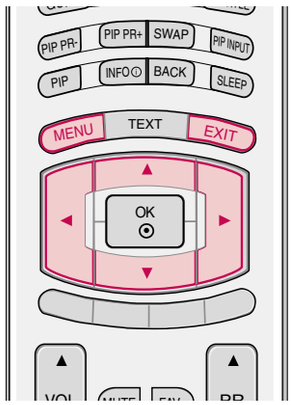


2 ~ 5

TV MENU / SCREEN MENU OPTIONS

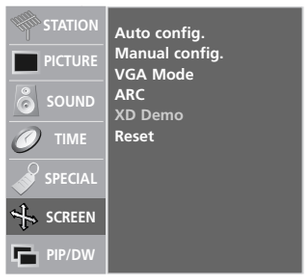
INITIALIZING (RESET TO ORIGINAL FACTORY SETTINGS)

This function operates in current mode.
To initialize the adjusted value

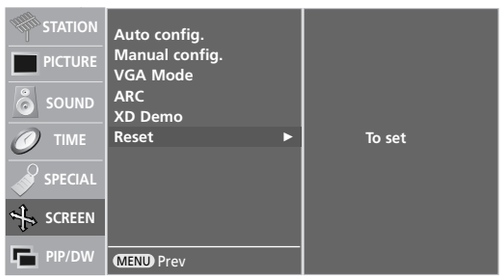


1. Press the MENU button and then ▲ or ▼ button to select the **SCREEN** menu.
2. Press the ▶ button and then ▲ or ▼ button to select **Reset**.
3. Press the ▶ button.

You can initialize **PIP size**, **PIP position**, **PIP Transparency** and sub picture size of twin picture.



1



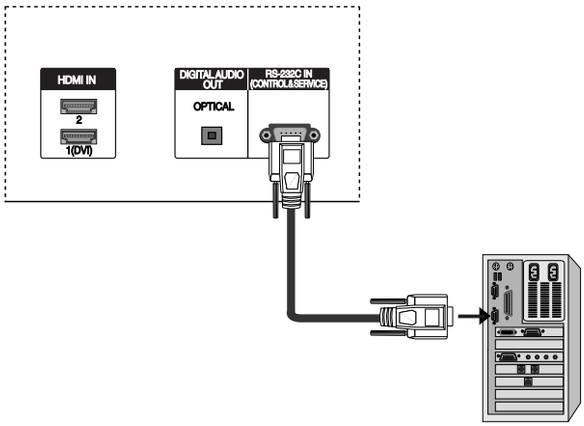
2 ~ 3

APPENDIX

EXTERNAL CONTROL DEVICE SETUP

Connect the RS-232C (serial port) input jack to an external control device (such as a computer or an A/V control system) to control the product's functions externally.
Connect the serial port of the control device to the RS-232C jack on the product back panel.
Note: RS-232C connection cables are not supplied with the product.

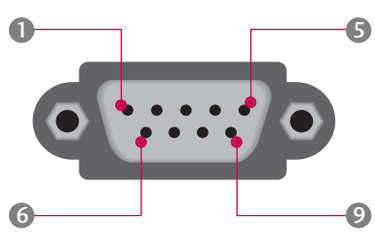
RS-232C Setup



PC

Type of Connector; D-Sub 9-Pin Male

No.	Pin Name
1	No connection
2	RXD (Receive data)
3	TXD (Transmit data)
4	DTR (DTE side ready)
5	GND
6	DSR (DCE side ready)
7	RTS (Ready to send)
8	CTS (Clear to send)
9	No Connection



APPENDIX

RS-232C Configurations

7-Wire Configurations (Standard RS-232C cable)

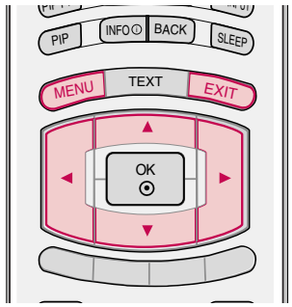
PC		TV	
RXD	2 ———	3	TXD
TXD	3 ———	2	RXD
GND	5 ———	5	GND
DTR	4 ———	6	DSR
DSR	6 ———	4	DTR
RTS	7 ———	8	CTS
CTS	8 ———	7	RTS
D-Sub 9		D-Sub 9	

3-Wire Configurations(Not standard)

PC		TV	
RXD	2 ———	3	TXD
TXD	3 ———	2	RXD
GND	5 ———	5	GND
DTR	4	6	DTR
DSR	6	4	DSR
RTS	7	7	RTS
CTS	8	8	CTS
D-Sub 9		D-Sub 9	

Set ID

Use this function to specify a set ID number.
Refer to 'Real Data Mapping'. ▶ p.90

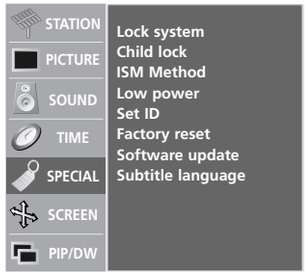


1. Press the **MENU** button and then use ▲ or ▼ button to select the **SPECIAL** menu.

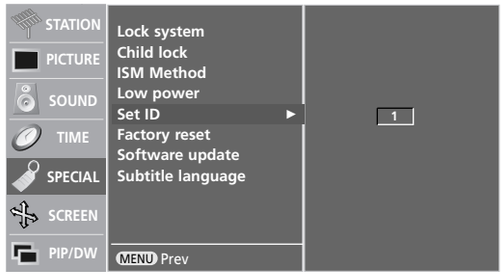
2. Press the ▶ button and then use ▲ or ▼ button to select **Set ID**.

3. Press the ▶ button and then use ◀ or ▶ button to adjust **Set ID** to choose the desired TV ID number. The adjustment range of SET ID is 1~99.

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



1



2 ~ 4

Communication Parameters

- Baud rate : 9600 bps (UART)
- Data length : 8 bits
- Parity : None
- Stop bit : 1 bit
- Communication code : ASCII code
- Use a crossed (reverse) cable.

Command Reference List

	COMMAND 1	COMMAND 2	DATA (Hexadecimal)
01. Power	k	a	0 ~ 1
02. Input Select	k	b	Refer to p. 86
03. Aspect Ratio	k	c	Refer to p. 86
04. Screen Mute	k	d	0 ~ 1
05. Volume Mute	k	e	0 ~ 1
06. Volume Control	k	f	0 ~ 64
07. Contrast	k	g	0 ~ 64
08. Brightness	k	h	0 ~ 64
09. Colour	k	i	0 ~ 64
10. Tint	k	j	0 ~ 64
11. Sharpness	k	k	0 ~ 64
12. OSD Select	k	l	0 ~ 1
13. Remote control lock mode	k	m	0 ~ 1
14. PIP/DW	k	n	0 ~ 3
15. PIP Position	k	q	0 ~ 3
16. Balance	k	t	0 ~ 64
17. Colour Temperature	k	u	0 ~ 3
18. Red Adjustment	k	v	0 ~ 50
19. Green Adjustment	k	w	0 ~ 50
20. Blue Adjustment	k	$	0 ~ 50
21. PIP input Source	k	y	Refer to p. 88
22. Abnormal Status	k	z	0 ~ a
23. ISM Method	j	p	Refer to p. 88
24. Low Power	j	q	0 ~ 1
25. Orbiter Time Setting	j	r	1 ~ FE
26. Orbiter Pixel Setting	j	s	1 ~ 3
27. Picture Size Setting for DW Mode	j	t	0 ~ 20
28. Auto Configure	j	u	1
29. Channel Select Command	m	a	Refer to p. 89
30. Send IR Code	m	c	Key Code
31. Input select (Main)	x	b	Refer to p. 90
32. Input select (PIP)	x	y	Refer to p. 90

* When setting the 22 ~ 32, a menu doesn't display on screen.

Transmission / Receiving Protocol

Transmission

[Command1][Command2][ ][Set ID][ ][Data][Cr]

* [Command 1] : First command to control the set. (j, k, m or x)
* [Command 2] : Second command to control the set.
* [Set ID] : You can adjust the set ID to choose desired monitor ID number in special menu. Adjustment range is 1 ~ 99. When selecting Set ID '0', every connected the set is controlled. Set ID is indicated as decimal (1~99) on menu and as Hexa decimal (0x0~0x63) on transmission/receiving protocol.
* [DATA] : To transmit command data. Transmit 'FF' data to read status of command.
* [Cr] : Carriage Return ASCII code '0x0D'
* [ ] : ASCII code 'space (0x20)'

OK Acknowledgement

[Command2][ ][Set ID][ ][OK][Data][x]

* The set transmits ACK (acknowledgement) based on this format when receiving normal data. At this time, if the data is data read mode, it indicates present status data. If the data is data write mode, it returns the data of the PC computer.

Error Acknowledgement

[Command2][ ][Set ID][ ][NG][Data][x]

* The set transmits ACK (acknowledgement) based on this format when receiving abnormal data from non-viable functions or communication errors.

Data 1: Illegal Code
2: not support function
3: Wait more time

APPENDIX

01. Power (Command 2 : a)

▶ To control Power On/Off of the set.

Transmission

[k][a][ ][Set ID][ ][Data][Cr]

Data 0 : Power Off 1 : Power On

Ack

[a][ ][Set ID][ ][OK][Data][x]

▶ To show Power On/Off.

Transmission

[k][a][ ][Set ID][ ][FF][Cr]

Ack

[a][ ][Set ID][ ][OK][Data][x]

* In like manner, if other functions transmit '0xFF' data based on this format, Acknowledgement data feed back presents status about each function.

02. Input Select (Command 2 : b)

▶ To select input source for the set.
You can also select an input source using the INPUT button on the set's remote control.

Transmission

[k][b][ ][Set ID][ ][Data][Cr]

Data 0 : DTV
1 : Analogue
2 : AV1
3 : AV2
4 : Component
6 : RGB-DTV
7 : RGB-PC

Ack

[b][ ][Set ID][ ][OK][Data][x]

03. Aspect Ratio (Command 2 : c) (Main Picture Size)

▶ To adjust the screen format. (Main picture format)
You can also adjust the screen format using the ARC (Aspect Ratio Control) button on remote control or in the SCREEN menu.

Transmission

[k][c][ ][Set ID][ ][Data][Cr]

Data 1 : Normal screen (4:3)
2 : Wide screen (16:9)
3 : Horizon (Spectacle)
4 : Zoom
6 : Original
7 : 14:9
8 : Full

Ack

[c][ ][Set ID][ ][OK][Data][x]

* Using the PC input, you select either 16:9 or 4:3 screen aspect ratio.

04. Screen Mute (Command 2 : d)

▶ To select screen mute on/off.

Transmission

[k][d][ ][Set ID][ ][Data][Cr]

Data 0 : Screen mute off (Picture on)
1 : Screen mute on (Picture off)

Ack

[d][ ][Set ID][ ][OK][Data][x]

05. Volume Mute (Command 2 : e)

▶ To control volume mute on/off.
You can also adjust mute using the MUTE button on remote control.

Transmission

[k][e][ ][Set ID][ ][Data][Cr]

Data 0 : Volume mute off (Volume on)
1 : Volume mute on (Volume off)

Ack

[e][ ][Set ID][ ][OK][Data][x]

06. Volume Control (Command 2 : f)

▶ To adjust volume.
You can also adjust volume with the VOLUME buttons on remote control.

Transmission

[k][f][ ][Set ID][ ][Data][Cr]

Data Min : 0 ~ Max : 64
* Refer to 'Real data mapping 1'. See page 90.

Ack

[f][ ][Set ID][ ][OK][Data][x]

07. Contrast (Command 2 : g)

▶ To adjust screen contrast.
You can also adjust contrast in the PICTURE menu.

Transmission

[k][g][ ][Set ID][ ][Data][Cr]

Data Min : 0 ~ Max : 64
* Refer to 'Real data mapping 1'. See page 90.

Ack

[g][ ][Set ID][ ][OK][Data][x]

08. Brightness (Command 2 : h)

▶ To adjust screen brightness.
You can also adjust brightness in the PICTURE menu.

Transmission

[k][h][ ][Set ID][ ][Data][Cr]

Data Min : 0 ~ Max : 64
* Refer to 'Real data mapping 1'. See page 90.

Ack

[h][ ][Set ID][ ][OK][Data][x]

09. Colour (Command 2 : i)

▶ To adjust the screen colour.
You can also adjust colour in the PICTURE menu.

Transmission

[k][i][ ][Set ID][ ][Data][Cr]

Data Min : 0 ~ Max : 64
* Refer to 'Real data mapping 1'. See page 90.

Ack

[i][ ][Set ID][ ][OK][Data][x]

10. Tint (Command 2 : j) (option)

▶ To adjust the screen tint.
You can also adjust tint in the PICTURE menu.

Transmission

[k][j][ ][Set ID][ ][Data][Cr]

Data Red : 0 ~ Green : 64
* Refer to 'Real data mapping 1'. See page 90.

Ack

[j][ ][Set ID][ ][OK][Data][x]

11. Sharpness (Command 2 : k)

▶ To adjust the screen sharpness.
You can also adjust sharpness in the PICTURE menu.

Transmission

[k][k][ ][Set ID][ ][Data][Cr]

Data Min : 0 ~ Max : 64
* Refer to 'Real data mapping 1'. See page 90.

Ack

[k][ ][Set ID][ ][OK][Data][x]

12. OSD Select (Command 2 : l)

▶ To select OSD (On Screen Display) on/off when controlling remotely.

Transmission

[k][l][ ][Set ID][ ][Data][Cr]

Data 0 : OSD off 1 : OSD on

Ack

[l][ ][Set ID][ ][OK][Data][x]

13. Remote control lock mode (Command 2 : m)

▶ To lock the front panel controls on the monitor and remote control.

Transmission

[k][m][ ][Set ID][ ][Data][Cr]

Data 0 : Lock off 1 : Lock on

Ack

[m][ ][Set ID][ ][OK][Data][x]

* If you're not using the remote control, use this mode. When main power is on/off, external control lock is released.

14. PIP / DW (Command 2 : n)

▶ To control the PIP (Picture In picture)/DW.
You can also control the PIP/DW using the PIP/DW button on the remote control or in the PIP/DW menu.

Transmission

[k][n][ ][Set ID][ ][Data][Cr]

Data 0: PIP/DW off 3: DW2
1: PIP 5: POP
2: DW1

Ack

[n][ ][Set ID][ ][OK][Data][x]

15. PIP Position (Command 2 : q)

▶ To select sub picture position for PIP. You can also adjust the sub picture position using POSITION button on the remote control or in the PIP/DW menu.

Transmission

[k][q][ ][Set ID][ ][Data][Cr]

Data 0 : Right down on screen
1 : Left down on screen
2 : Left up on screen
3 : Right up on screen

Ack

[q][ ][Set ID][ ][OK][Data][x]

16. Balance (Command 2 : t)

▶ To adjust balance.
You can also adjust balance in the SOUND menu.

Transmission

[k][t][ ][Set ID][ ][Data][Cr]

Data Min : 0 ~ Max : 64
* Refer to 'Real data mapping 1'. See page 90.

Ack

[t][ ][Set ID][ ][OK][Data][x]

17. Colour Temperature (Command 2 : u)

▶ To adjust colour temperature.
You can also adjust CSM in the PICTURE menu.

Transmission

[k][u][ ][Set ID][ ][Data][Cr]

Data 0: Cool 1: Normal 2: Warm 3: User

Ack

[u][ ][Set ID][ ][OK][Data][x]

APPENDIX

18. Red Adjustment (Command 2 : v)

▶ To adjust red in colour temperature.

Transmission

[k][v][ ][Set ID][ ][Data][Cr]

Data Min : 0 ~ Max : 50
* Refer to 'Real data mapping 2'. See page 90.

Ack

[v][ ][Set ID][ ][OK][Data][x]

19. Green Adjustment (Command 2 : w)

▶ To adjust green in colour temperature.

Transmission

[k][w][ ][Set ID][ ][Data][Cr]

Data Min : 0 ~ Max : 50
* Refer to 'Real data mapping 2'. See page 90.

Ack

[w][ ][Set ID][ ][OK][Data][x]

20. Blue Adjustment (Command 2 : $)

▶ To adjust blue in colour temperature.

Transmission

[k][$][ ][Set ID][ ][Data][Cr]

Data Min : 0 ~ Max : 50
* Refer to 'Real data mapping 2'. See page 90.

Ack

[$][ ][Set ID][ ][OK][Data][x]

21. PIP Input Select (Command 2 : y)

▶ To select input source for sub picture in PIP/Twin picture mode. You can also adjust input source for sub picture using PIP INPUT button on remote control.

Transmission

[k][y][ ][Set ID][ ][Data][Cr]

Data 0 : DTV
1 : Analogue
2 : AV1
3 : AV2
4 : Component
6 : RGB-DTV
7 : RGB-PC

Ack

[y][ ][Set ID][ ][OK][Data][x]

22. Abnormal State (Command 2 : z)

▶ To recognize an abnormal state.

Transmission

[k][z][ ][Set ID][ ][FF][ ][Cr]

Data FF : Read

Ack

[z][ ][Set ID][ ][OK][Data][x]

Data 0: Normal (Power on and signal exist)
1: No signal (Power on)
2: Turn the monitor off by remote control
3: Turn the monitor off by sleep time function
4: Turn the monitor off by RS-232C function
5: 5V down
6: AC down
7: Turn the monitor off by Fan Alarm function
8: Turn the monitor off by Off time function
9: Turn the monitor off by Auto sleep function
a: Turn the monitor off by AV board detect

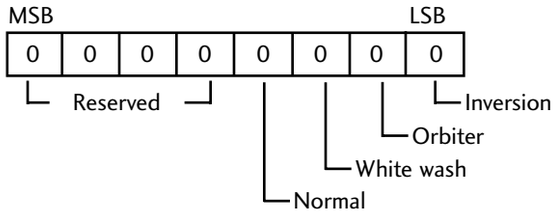
* This function is "read only".

23. ISM Method (Command 1 : j, Command 2 : p)

▶ To control the ISM method. You can also adjust ISM Method in SPECIAL menu.
It's not available to use this function in 32/37/42LC2D models.

Transmission

[j][p][ ][Set ID][ ][Data][Cr]



7	6	5	4	3	2	1	0	Function
							1	Inversion ON
						1		Orbiter On
					1			White wash On
				1				Normal On
x	x	x	x					Reserved

Ack

[p][ ][Set ID][ ][OK/NG][Data][x]

24. Low Power (Command 1 : j, Command 2 : q)

▶ To reduce the power consumption of the set. You can also adjust Low Power in SPECIAL menu.
It's not available to use this function in 32/37/42LC2D models.

Transmission

[j][q][ ][Set ID][ ][Data][ ][Cr]

Data 0 : Off
1 : On

Ack

[q][ ][Set ID][ ][OK/NG][Data][x]

25. Orbiter Time Setting (Command 1 : j, Command 2 : r)

▶ To adjust orbiter operation time term.
It's not available to use this function in 32/37/42LC2D models.

Transmission

[j][r][ ][Set ID][ ][Data][ ][Cr]

Data Min: 1 ~ Max: FE
* Refer to 'Real data mapping 1'.

Ack

[r][ ][Set ID][ ][OK/NG][Data][x]

26. Orbiter Pixel Setting (Command 1 : j, Command 2 : s)

▶ To adjust pixel number in orbiter function.
It's not available to use this function in 32/37/42LC2D models.

Transmission

[j][s][ ][Set ID][ ][Data][Cr]

Data Min: 1 ~ Max: 3
* Refer to 'Real data mapping 1'.

Ack

[s][ ][Set ID][ ][OK/NG][Data][x]

27. Picture Size Setting for DW Mode (Command 1 : j, Command 2 : t)

▶ To select the PIP picture format.
You can also select the PIP picture format using the SIZE on the remote control.

Transmission

[j][t][ ][Set ID][ ][Data][Cr]

Data Min: 0 ~ Max: 20
* Refer to 'Real data mapping 1'.

Ack

[t][ ][Set ID][ ][OK/NG][Data][x]

28. Auto Configure (Command 1 : j, Command 2 : u)

▶ To adjust picture position and minimize image shaking automatically. It works only in RGB (PC) mode.

Transmission

[j][u][ ][Set ID][ ][Data][Cr]

Data 1: To set

Ack

[u][ ][Set ID][ ][OK/NG][Data][x]

29. Channel Select Command (Command 1 : m, Command 2 : a)

▶ Select channel to following physical number.

Transmission

[m][a][ ][Set ID][ ][Data0][ ][Data1][ ][Data2][Cr]

Data0 :High channel data
Data1 :Low channel data
ex. No. 47 -> 00 2F (2FH)
No. 394 -> 01 88 (188H)
Data2 0x00 : ATV Main
0x01 : ATV Sub
0x10 : DTV Main
0x11 : DTV Sub

Channel data range
Analogue - Min: 00 ~ Max: 63 (0 99)
Digital - Min: 00 ~ Max: 3E7 (0 999)

ex) In ATV Main and DTV Sub mode
1. Auto Programme or Manual Programme
2. "ma 1 00 08 00" --> Select 8 channel (ATV Main)
3. "ma 1 00 0E 11" --> Select 14 channel (DTV Sub)

Ack

[a][ ][Set ID][ ][OK/NG][Data][x]

Data Min: 00 ~ Max: FF

30. Send IR Code (Command 1 : m, Command 2 : c)

▶ To send IR remote key code.

Transmission

[m][c][ ][Set ID][ ][Data][Cr]

Data Key code - Refer to page 92.

Ack

[c][ ][Set ID][ ][OK/NG][Data][x]

APPENDIX

31. Input select (Command 1 : x, Command 2 : b) (Main Picture Input)

▶ To select input source for main picture.

Transmission

[x][b][ ][Set ID][ ][Data][Cr]

Data Structure

MSB							LSB
0	0	0	0	0	0	0	0
External Input				Input Number			

External Input				Data
0	0	0	0	DTV
0	0	0	1	Analogue
0	0	1	0	AV
0	0	1	1	SAV
0	1	0	0	Component
0	1	0	1	RGB-DTV
0	1	1	0	RGB-PC
1	0	0	1	HDMI-DTV
1	0	1	0	HDMI-PC

Input Number				Data
0	0	0	0	Input1
0	0	0	1	Input2
0	0	1	0	Input3
0	0	1	1	Input4
0	1	0	0	Input5
0	1	0	1	Input6

Ack

[b][ ][Set ID][ ][OK/NG][Data][x]

32. Input select (Command 1 : x, Command 2 : y)

▶ To adjust input source for sub picture in PIP mode.

Transmission

[x][y][ ][Set ID][ ][Data][Cr]

Data Structure

MSB							LSB
0	0	0	0	0	0	0	0
External Input				Input Number			

External Input				Data
0	0	0	0	DTV
0	0	0	1	Analogue
0	0	1	0	AV
0	0	1	1	SAV
0	1	0	0	Component
0	1	0	1	RGB-DTV
0	1	1	0	RGB-PC
1	0	0	1	HDMI-DTV
1	0	1	0	HDMI-PC

Input Number				Data
0	0	0	0	Input1
0	0	0	1	Input2
0	0	1	0	Input3
0	0	1	1	Input4
0	1	0	0	Input5
0	1	0	1	Input6

Ack

[y][ ][Set ID][ ][OK/NG][Data][x]

*** Real data mapping 1**

0 : Step 0
⋮
A : Step 10 (Set ID 10)
⋮
F : Step 15 (Set ID 15)
10 : Step 16 (Set ID 16)
⋮
64 : Step 100
⋮
6E : Step 110
⋮
73 : Step 115
74 : Step 116
⋮
C7 : Step 199
⋮
FE : Step 254
FF : Step 255

*** Real data mapping 2**

0 : -40
1 : -39
2 : -38
⋮
28 :0
⋮
4E : +38
4F : +39
50 : +40

IR CODES

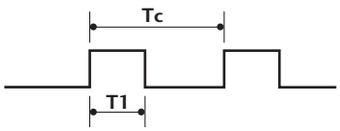
1. How to Connect

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

2. Remote Control IR Codes

■ **Output waveform**

Single pulse, modulated with 37.917KHz signal at 455KHz



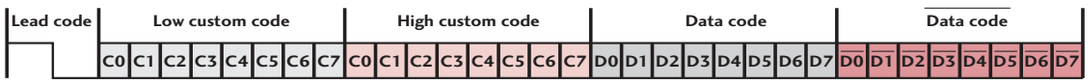
Carrier frequency

FCAR = 1/TC = fOSC/12

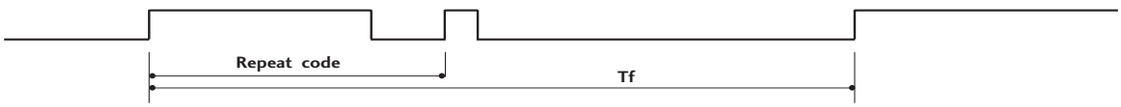
Duty ratio = T1/TC = 1/3

■ **Configuration of frame**

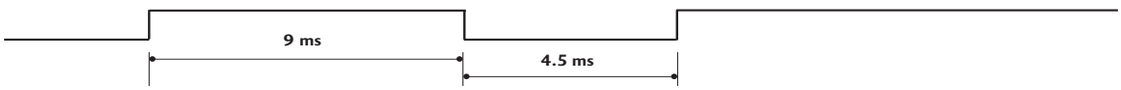
1st frame



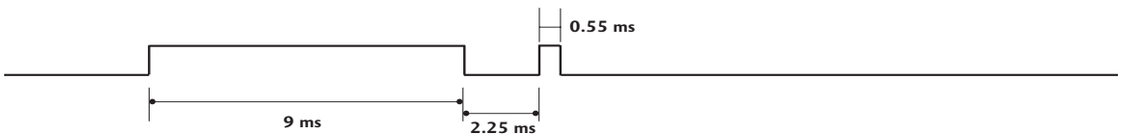
Repeat frame



■ **Lead code**

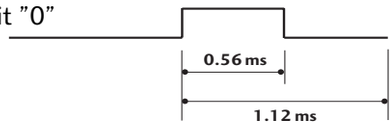


■ **Repeat code**

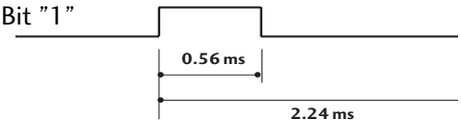


■ **Bit description**

Bit "0"

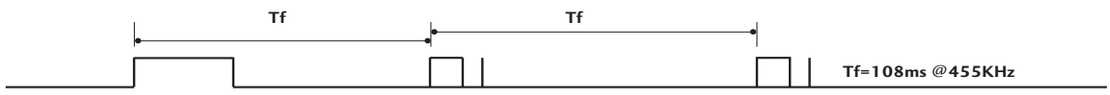


Bit "1"



■ **Frame interval: Tf**

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



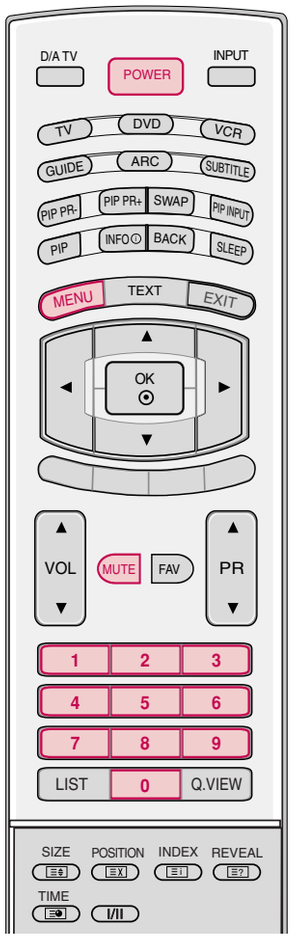
APPENDIX

Code (Hexa)	Function	Note
00	PR ▲	R/C BUTTON
01	PR ▼	R/C BUTTON
02	VOL ▲	R/C BUTTON
03	VOL ▼	R/C BUTTON
40	Up (▲)	R/C BUTTON
41	Down (▼)	R/C BUTTON
06	Right (►)	R/C BUTTON
07	Left (◄)	R/C BUTTON
08	POWER	R/C BUTTON (POWER ON/OFF)
C4	POWER ON	Discrete IR Code (Only Power On)
C5	POWER OFF	Discrete IR Code (Only Power Off)
09	MUTE	R/C BUTTON
10	Number Key 0	R/C BUTTON
11	Number Key 1	R/C BUTTON
12	Number Key 2	R/C BUTTON
13	Number Key 3	R/C BUTTON
14	Number Key 4	R/C BUTTON
15	Number Key 5	R/C BUTTON
16	Number Key 6	R/C BUTTON
17	Number Key 7	R/C BUTTON
18	Number Key 8	R/C BUTTON
19	Number Key 9	R/C BUTTON
0B	INPUT	R/C BUTTON
BF	COMPONENT	Discrete IR Code (Input COMPONENT Selection)
C6	HDMI	Discrete IR Code (Input HDMI Selection)
D5	RGB	Discrete IR Code (Input RGB Selection)
D6	TV	Discrete IR Code (Input TV Selection)
5A	AV1	Discrete IR Code (Input AV1 Selection)
D0	AV2	Discrete IR Code (Input AV2 Selection)
D1	AV3	Discrete IR Code (Input AV3 Selection)
D2	AV4	Discrete IR Code (Input AV4 Selection)
D3	SAV2	Discrete IR Code (Input SAV2 Selection)
AA	INFO ⓘ	R/C BUTTON
AB	GUIDE	R/C BUTTON
39	SUBTITLE	R/C BUTTON
5B	EXIT	R/C BUTTON
1E	FAV	R/C BUTTON
1A	Q.VIEW	R/C BUTTON
50	D/A TV	R/C BUTTON
0A	I/II	R/C BUTTON
0E	SLEEP	R/C BUTTON
43	MENU	R/C BUTTON
44	OK(◉)	R/C BUTTON
53	LIST	R/C BUTTON
20	TEXT	R/C BUTTON
2A	REVEAL	R/C BUTTON
26	TIME	R/C BUTTON
28	BACK	R/C BUTTON
62	UPDATE / POSITION	R/C BUTTON
64	SIZE	R/C BUTTON
70	INDEX	R/C BUTTON
60	PIP	R/C BUTTON
C3	PIP INPUT	R/C BUTTON
C2	SWAP	R/C BUTTON
C0	PIP PR+	R/C BUTTON
C1	PIP PR-	R/C BUTTON
61	BLUE Key	R/C BUTTON
63	YELLOW Key	R/C BUTTON
71	GREEN Key	R/C BUTTON
72	RED Key	R/C BUTTON
79	ARC	R/C BUTTON
76	ARC (4:3)	Discrete IR Code (Input 4:3 mode)
77	ARC (16:9)	Discrete IR Code (Input 16:9 mode)
AF	ARC (Zoom)	Discrete IR Code (Input Zoom mode)

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.



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.

APPENDIX

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. Ensure you are pointing the remote control directly at the TV. ■ Ensure that the batteries are installed with correct polarity (+ to +, - to -). ■ Ensure that the correct remote operating mode is 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 sleep** 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).

APPENDIX

TROUBLESHOOTING CHECKLIST

The audio function does not work.	
Picture OK & No sound	■ Press the VOL ▲ or ▼ 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 (Invalid format)	■ Adjust resolution, horizontal frequency, or vertical frequency. ■ Check the input source.
Vertical bar or stripe on background & Horizontal Noise & Incorrect position	■ Work the Auto configure or adjust clock, phase, or H/V position. (Option)
Screen colour is unstable or single colour	■ Check the signal cable. ■ Reinstall the PC video card.

MAINTENANCE

Early malfunctions can be prevented. Careful and regular cleaning can extend the amount of time you can enjoy your new TV.

Caution: Be sure to turn the power off and unplug the power cord before you begin any cleaning.

Cleaning the Screen

1. Here's a great way to keep the dust off your screen for a while. Wet a soft cloth in a mixture of lukewarm water and a little fabric softener or dish washing detergent. Wring the cloth until it's almost dry, and then use it to wipe the screen.
2. Make sure the excess water is off the screen, and then let it air-dry before you turn on your TV.

Cleaning the Cabinet

- To remove dirt or dust, wipe the cabinet with a soft, dry, lint-free cloth.
- Please be sure not to use a wet cloth.

Extended Absence

⚠ CAUTION

▶ If you expect to leave your TV dormant for a long time (such as a vacation), it's a good idea to unplug the power cord to protect against possible damage from lightning or power surges.

APPENDIX

PRODUCT SPECIFICATIONS

MODELS			32LC2D-EC/32LC2DB-EC 37LC2D-EC/37LC2DB-EC 42LC2D-EC/42LC2DB-EC
32LC2D 32LC2DB	Dimensions (Width x Height x Depth)	with stand	811.0 x 630.0 x 235.0 mm 31.9 x 24.8 x 9.3 inches
		without stand	811 x 566.8 x 123.5 mm 32.0 x 22.4 x 4.9 inches
	Weight	with stand without stand	21.9 kg / 48.2 lbs 18.5 kg / 40.8 lbs
37LC2D 37LC2DB	Dimensions (Width x Height x Depth)	with stand	944.0 x 729.5 x 286.0 mm 37.2 x 28.7 x 11.3 inches
		without stand	944 x 659.3 x 129.7 mm 37.2 x 26.0 x 5.2 inches
	Weight	with stand without stand	31.0 kg / 68.3 lbs 24.9 kg / 54.9 lbs
42LC2D 42LC2DB	Dimensions (Width x Height x Depth)	with stand	1054 x 813.5 x 302 mm 41.5 x 32.1 x 11.9 inches
		without stand	1054 x 746 x 136.8 mm 41.5 x 29.4 x 5.4 inches
	Weight	with stand without stand	37 kg / 81.6 lbs 30.4 kg / 67.1 lbs
Power requirement Television System Programme Coverage External Antenna Impedance			AC100-240V -50/60Hz PAL/SECAM B/G/D/K, PAL I/II, SECAM L/L' VHF: E2 ~ E12, UHF: E21 ~ E69, CATV: S1 ~ S20, HYPER: S21 ~ S47 75 ohm
Environment condition	Operating Temperature Operating Humidity		0 ~ 40°C / 32 ~ 104°F Less than 80%
	Storage Temperature Storage Humidity		-20 ~ 60°C / -4 ~ 140°F Less than 85%

■ The specifications shown above may be changed without prior notice for quality improvement.

MODELS			42PC1D-EC/42PC1DA-EC/42PC1DV-EC 42PC3D-EC 50PC1D-EC/50PC1DA-EC
42PC1D 42PC1DA 42PC1DV	Dimensions (Width x Height x Depth)	with stand	1129 x 748.5 x 380 mm 44.5 x 29.5 x 15 inches
		without stand	1129 x 695 x 103.7 mm 44.5 x 27.4 x 4.1 inches
	Weight	with stand without stand	29.3 kg / 64.6 lbs 25.4 kg / 56.0 lbs
42PC3D	Dimensions (Width x Height x Depth)	with stand	1129 x 748.5 x 380 mm 44.5 x 29.5 x 15.0 inches
		without stand	1129 x 695 x 103.7 mm 44.5 x 27.4 x 4.1 inches
	Weight	with stand without stand	31.0 kg / 68.4 lbs 24.2 kg / 53.4 lbs
50PC1D 50PC1DA	Dimensions (Width x Height x Depth)	with stand	1302.6 x 872 x 355.8 mm 51.3 x 34.4 x 14.0 inches
		without stand	1302.6 x 810 x 108.7 mm 51.3 x 31.9 x 4.3 inches
	Weight	with stand without stand	51.5 kg / 113.5 lbs 44.3 kg / 97.7 lbs
Power requirement Television System Programme Coverage External Antenna Impedance			AC100-240V -50/60Hz PAL/SECAM B/G/D/K, PAL I/II, SECAM L/L' VHF: E2 ~ E12, UHF: E21 ~ E69, CATV: S1 ~ S20, HYPER: S21 ~ S47 75 ohm
Environment condition	Operating Temperature Operating Humidity		0 ~ 40°C / 32 ~ 104°F Less than 80%
	Storage Temperature Storage Humidity		-20 ~ 60°C / -4 ~ 140°F Less than 85%

■ The specifications shown above may be changed without prior notice for quality improvement.