

User's Guide Specification

| | |
|--------------------|--------------------|
| 담당 | 관리자 |
| BAK GH 09.02.10 | KIM JO 09.02.10 |

1. Model Description

| | | | | | |
|--------|-------------------|--------------|------------------------------|----------|-----------------------------|
| MODEL | 32/37/42LG350H-TA | BRAND | LG | Part No. | MFL34441677 (0906-REV02) |
| SUFFIX | ME | Product Name | 32LG35**, 37LG35**, 42LG35** | | |

2. Printing Specification

1. Trim Size (Format) : 185 mm x 260 mm
2. Printing Colors : 1 Color (BLACK)
3. Stock (Paper)
 - Cover : Coated paper, S/W 150 g/m²
 - Inside : Uncoated paper, 백상지 60 g/m²
4. Printing Method : Off-set
5. Bindery : Perfect bind
6. Language : EN(1)
7. Number of pages : 100 pages

NOTES

“This part contain Eco-hazardous substances (Pb, Cd, Hg, Cr6+, PBB, PBDE, etc.) within LG standard level, Details should be followed Eco-SCM management standard[LG(56)-A-2524]. Especially, Part should be followed and controlled the following specification.
 (1)Eco-hazardous substances test report should be submitted when Part certification test and First Mass Production.
 (2) Especially, Don't use or contain lead(Pb) and cadmium(Cd) in ink.

3. Special Instructions

(1) Origin Notification

- * LGEIN : Printed in Indonesia
- * LGEWA : Printed in U.K.
- * LGEMA : Printed in Poland
- * LGESP : Printed in Brazil
- * LGEMX : Printed in Mexico
- * LGEND : Printed in China
- * LGEIL : Printed in India
- * Other Oversea Factories : NON

3. Changes

| | | | | |
|----------|----------|-----------|------------|--|
| 10 | | | | |
| 9 | | | | |
| 8 | | | | |
| 7 | | | | |
| 6 | | | | |
| 5 | | | | |
| 4 | | | | |
| 3 | | | | |
| 2 | 06/22/09 | BAK GH | S9-56085 | Corrected the supported display resolution. (Request of DQA & Circuit GR) |
| 1 | 05/07/09 | BAK GH | S9-51770 | Updated the contents after testing 32/37/42LG350H-TA.(Request of DQA & Circuit Engineering GR) |
| REV. NO. | MM/DD/YY | SIGNATURE | CHANGE NO. | CHANGE CONTENTS |

Pagination sheet

P/NO. [MFL34441677](#)

Total pages : 100 pages

| | | | | | |
|---------------------------------|----------------------------|-----|-----|-----|-----|
| Front Cover (EN) P/NO. | Blank Page 1 | ... | ... | ... | ... |
| | ... | ... | ... | 98 | |

LCD TV OWNER'S MANUAL

LCD TV MODELS

32LG35**

37LG35**

42LG35**

Please read this manual carefully before operating your TV.

Retain it for future reference.

Record model number and serial number of the TV. Refer to the label on the back cover and quote this information.

To your dealer when requiring service.

Model :

Serial No. :

DVB
Digital Video
Broadcasting

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

ID Number(s): 6605 : 32LG350H-TA
6606 : 37LG350H-TA
6607 : 42LG350H-TA

P/NO: MFL34441677 (0906-REV02)
Printed in Korea



HDMI, the HDMI logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC.



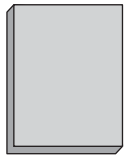
Manufactured under license from Dolby Laboratories. "Dolby" and the double-D symbol are trademarks of Dolby Laboratories.

- There is a possibility that when HDMI mode, some DVD players do not make SPDIF sound. At that time, set the output of the digital audio of the DVD player to PCM. (In HDMI, DOLBY DIGITAL PLUS is not supported.)

ACCESSORIES

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

The accessories included may differ from the images below.



Owner's Manual



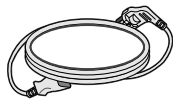
Batteries



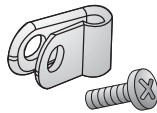
Remote Control



Dual Lock™
(This item is not included for all models.)
(Refer to P.9)



Power Cord



Protective Bracket and Bolt for Power Cord
(This item is not included for all models.)
(Refer to P.8)

This item is not included for all models.

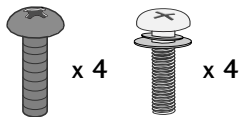


Polishing Cloth

Polishing cloth for use on the screen.

Lightly wipe any stains or fingerprints on the surface of the TV with the polishing cloth.

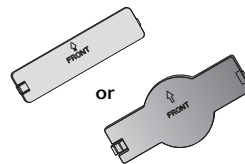
Do not use excessive force. This may cause scratching or discolouration.



Bolts for stand assembly
(Refer to P.6)

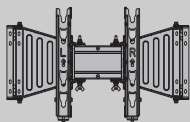


Screw for stand fixing
(Refer to P.6)



Protection Cover
(Refer to P.9)

Wall Mounting Bracket (Separate purchase)



AW-47LG30M

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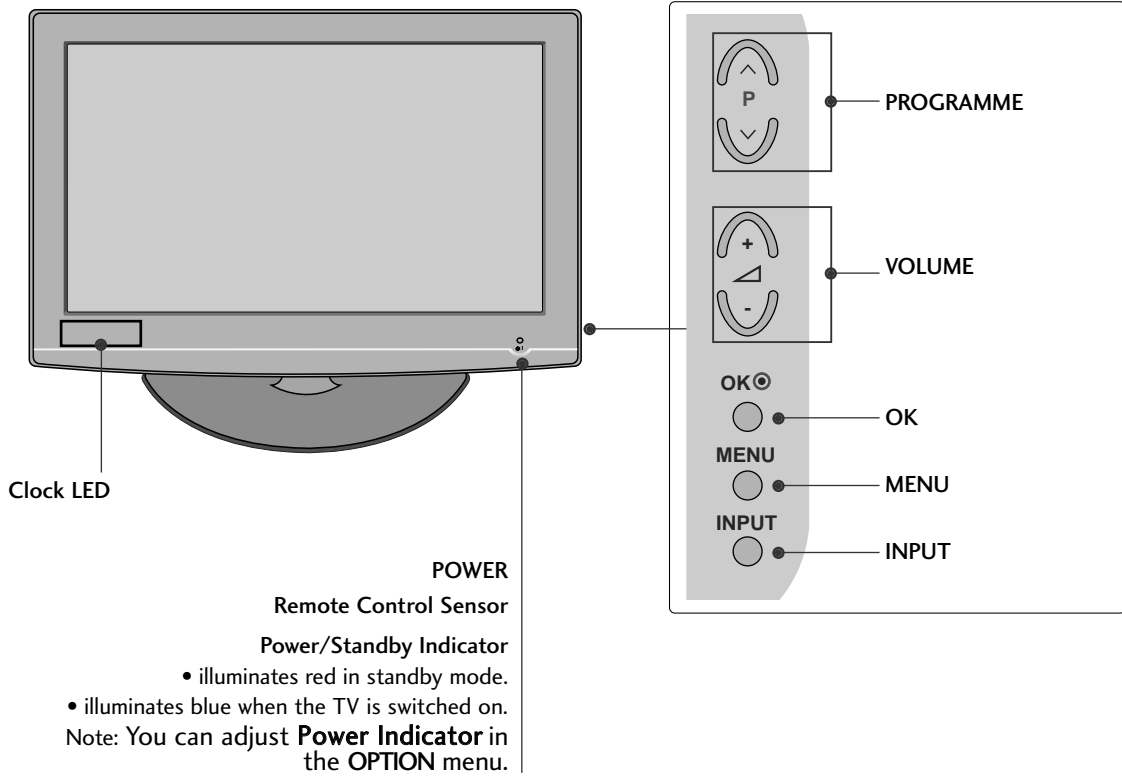
PREPARATION

FRONT PANEL CONTROLS

▪ Image shown may differ from your TV.

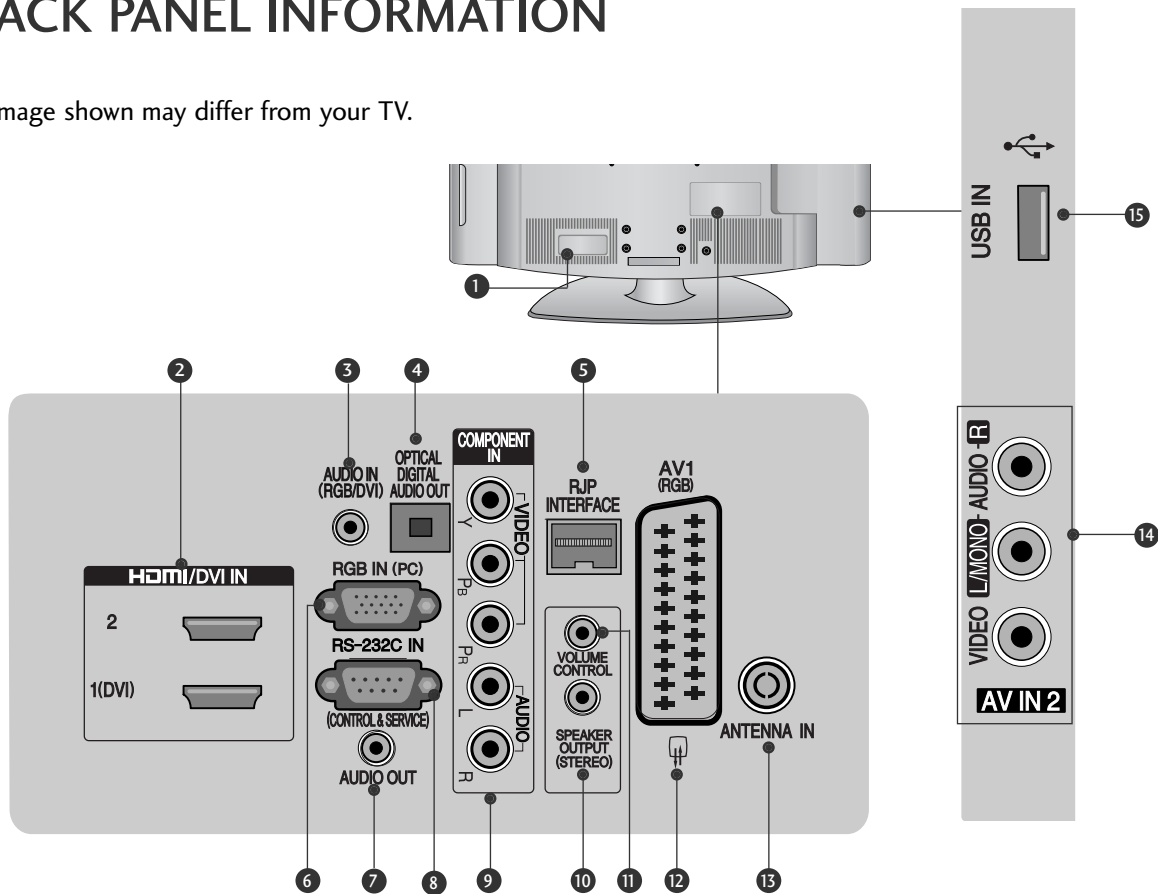
32/37/42LG35**

PREPARATION



BACK PANEL INFORMATION

■ Image shown may differ from your TV.



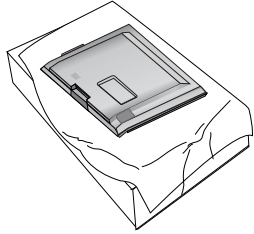
- 1 Power Cord Socket**
This TV operates on an AC power. The voltage is indicated on the Specifications page. Never attempt to operate the TV on DC power.
- 2 HDMI/DVI IN Input**
Connect an HDMI signal to HDMI IN.
Or DVI(VIDEO)signal to HDMI/DVI port with DVI to HDMI cable.
- 3 RGB/DVI Audio Input**
Connect the audio from a PC or DTV.
- 4 OPTICAL DIGITAL AUDIO OUT**
Connect digital audio to various types of equipment.
Connect to a Digital Audio Component.
Use an Optical audio cable.
- 5 RJP INTERFACE**
Connect control line (RJ45) for RJP(Remote Jack pack)
- 6 RGB IN Input**
Connect the output from a PC.
- 7 Audio Output**
Connect to the Home Theater.(or amp)
- 8 RS-232C IN (CONTROL & SERVICE) PORT**
Connect to the RS-232C port on a PC.
This port is used for Service or Hotel mode.
- 9 Component Input**
Connect a component video/audio device to these jacks.
- 10 SPEAKER OUTPUT(STEREO)**
The phone socket for external speaker is on this jack.
- 11 VOLUME CONTROL**
Use the VOLUME CONTROL to adjust sound from the SPEAKER OUTPUT.
- 12 Euro Scart Socket (AV1 (RGB))**
Connect scart socket from an external device to this jack.
- 13 Antenna Input**
Connect antenna or cable to this jack.
- 14 Audio/Video Input(AV IN 2)**
Connect audio/video output from an external device to these jacks.
- 15 USB Input**
Connect USB storage device to this jack.

PREPARATION

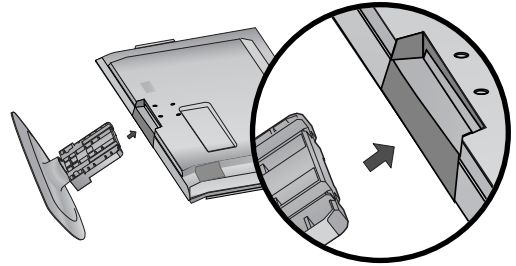
STAND INSTALLATION

- Image shown may differ from your TV.
- When assembling the desk type stand, check whether the bolt is fully tightened. (If not tightened fully, the product can tilt forward after the product installation.) If you tighten the bolt with excessive force, the bolt can deviate from abrasion of the tightening part of the bolt.

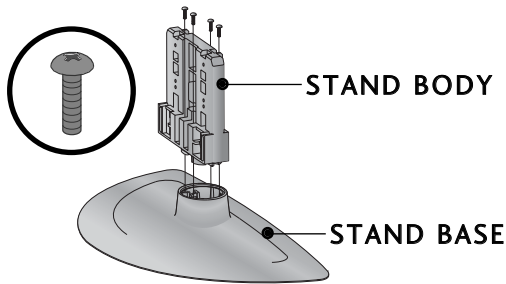
- 1** Carefully place the TV screen side down on a cushioned surface to protect the screen from damage.



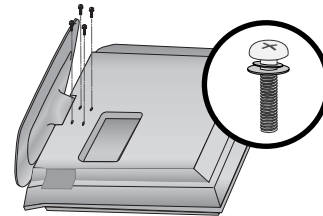
- 3** Assemble the TV as shown.



- 2** Assemble the parts of the **STAND BODY** with **STAND BASE** of the TV.

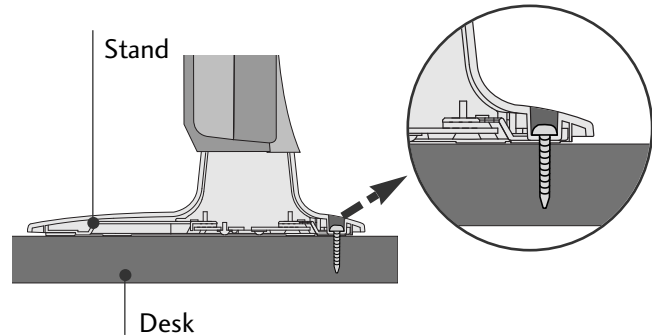
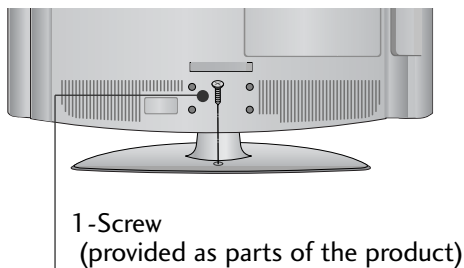


- 4** Fix the 4 bolts securely using the holes in the back of the TV.



ATTACHING THE TV TO A DESK

The TV must be attached to desk so it cannot be pulled in a forward/backward direction, potentially causing injury or damaging the product. Use only an attached screw.

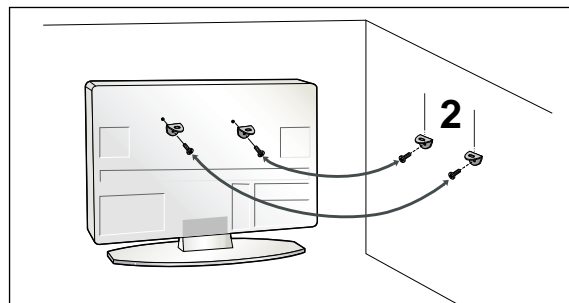
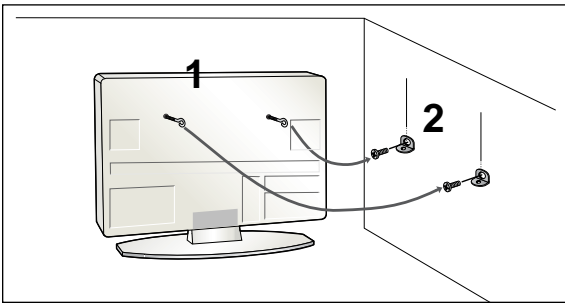


! WARNING

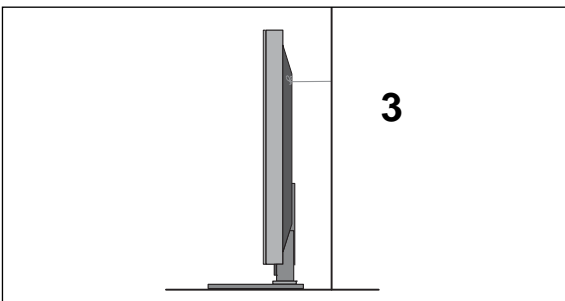
- ▶ To prevent TV from falling over, the TV should be securely attached to the floor/wall per installation instructions. Tipping, shaking, or rocking the machine may cause injury.

CAREFUL INSTALLATION ADVICE

- You should purchase necessary components to fix the TV to the wall on the market.
- Position the TV close to the wall to avoid the possibility of it falling when pushed.
- The instructions shown below are a safer way to set up the TV, which is to fix it to the wall, avoiding the possibility of it falling forwards if pulled. This will prevent the TV from falling forward and causing injury. This will also prevent the TV from damage. Ensure that children do not climb or hang from the TV.



- 1** Use the eye-bolts or TV brackets/bolts to fix the TV to the wall as shown in the picture.
(If your TV has bolts in the eyebolts, loosen these 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 on the wall. Match the height of the bracket that is mounted on the wall.



- 3** Use a sturdy rope to tie the TV. It is safer to tie the rope so it becomes horizontal between the wall and the TV.

! NOTE

- ▶ When moving the TV undo the cords first.
- ▶ Use a platform or cabinet strong and large enough to support the size and weight of the TV.
- ▶ To use the TV safely make sure that the height of the bracket on the wall and on the TV is the same.

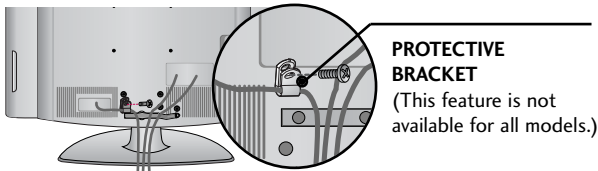
PREPARATION

BACK COVER FOR WIRE ARRANGEMENT

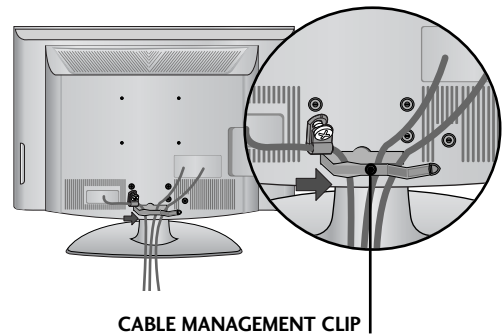
■ Image shown may differ from your TV.

- 1 Connect the cables as necessary.
To connect additional equipment, see the **EXTERNAL EQUIPMENT SETUP** section.

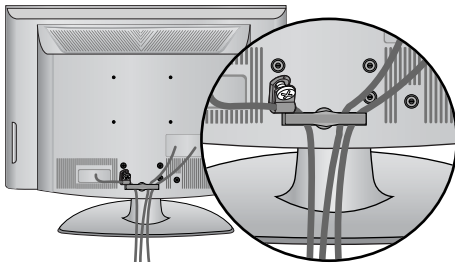
Secure the power cable with the **PROTECTIVE BRACKET** and the screw as shown. It will help prevent the power cable from being removed by accident.



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



- 3 Put the cables inside the **CABLE MANAGEMENT CLIP** and snap it closed.

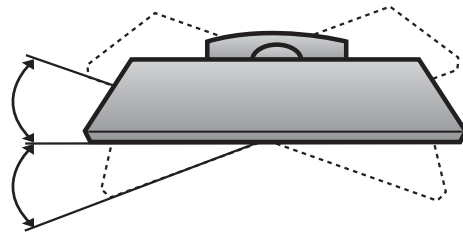


! NOTE

- ▶ Do not hold the **CABLE MANAGEMENT CLIP** when moving the TV.
- If the TV is dropped, you may be injured or the product may be broken.

SWIVEL STAND

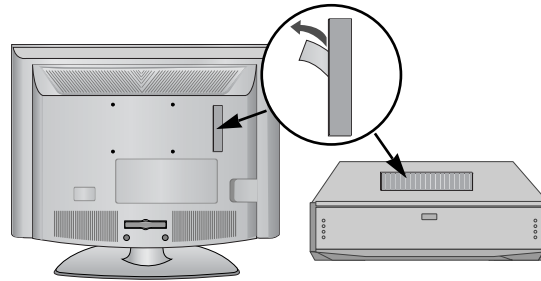
After installing the TV, you can adjust the TV manually to the left or right direction by 20 degrees to suit your viewing position.



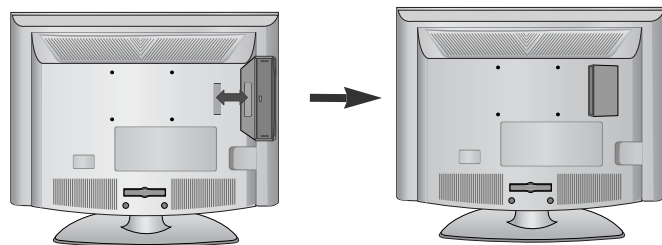
HOW TO USE DUAL LOCK™ (This feature is not available for all models.)

Fix the set-top box to the TV and use it when you want to.

- 1 After removing the protection paper from the Dual Lock, stick it to the TV and the set-top box as shown.



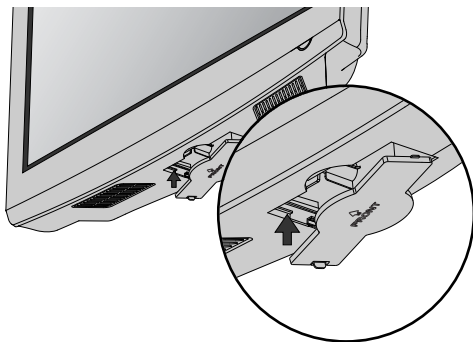
- 2 Attach the set-top box to the TV by pressing the Velcro strips together.



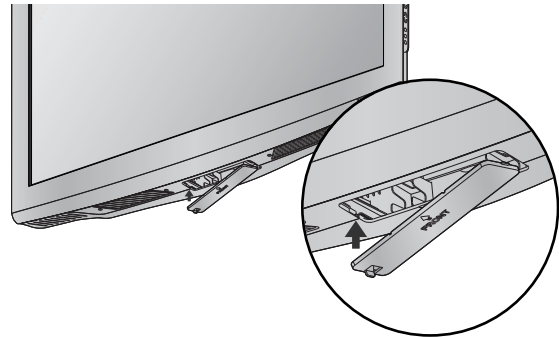
PROTECTION COVER

▪ Image shown may differ from your TV.

When installing the wall-mounted unit, use the protection cover for desk-type stand installation. Insert the **PROTECTION COVER** into the TV until clicking sound.



or



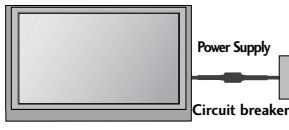
PREPARATION

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

EARTHING

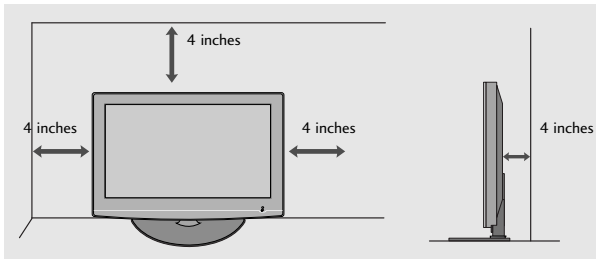
Ensure that you connect the earth wire to prevent possible electric shock. If grounding methods are not possible, have a qualified electrician install a separate circuit breaker.

Do not try to earth the TV by connecting it to telephone wires, lightning rods or gas pipes.



DESKTOP PEDESTAL INSTALLATION

For adequate ventilation allow a clearance of 4" (10cm) all around the TV.

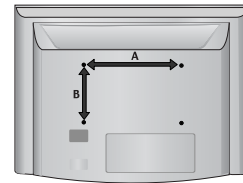
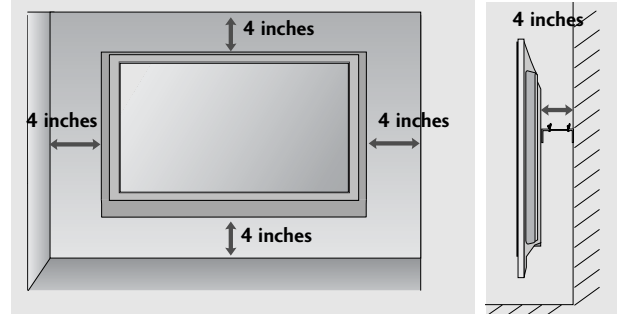


WALL MOUNT: HORIZONTAL INSTALLATION

- We recommend the use of a LG Brand wall mounting bracket when mounting the TV to a wall.
- We recommend that you purchase a wall mounting bracket which supports VESA standard.
- LG recommends that wall mounting be performed by a qualified professional installer.

NOTE

- ▶ Should Install wall mount on a solid wall perpendicular to the floor.
- ▶ Should use a special wall mount, if you want to install it to ceiling or slanted wall.
- ▶ The surface that wall mount is to be mounted on should be of sufficient strength to support the weight of TV set; e.g. concrete, natural rock, brick and hollow block.
- ▶ Installing screw type and length depends on the wall mount used. Further information, refer to the instructions included with the mount.
- ▶ LG is not liable for any accidents or damage to property or TV due to incorrect installation:
 - Where a non-compliant VESA wall mount is used.
 - Incorrect fastening of screws to surface which may cause TV to fall and cause personal injury.
 - Not following the recommended Installation method.

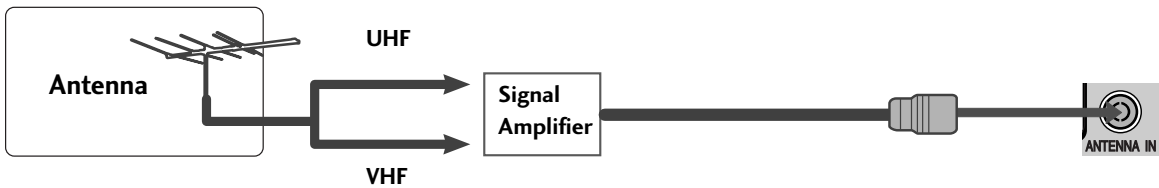
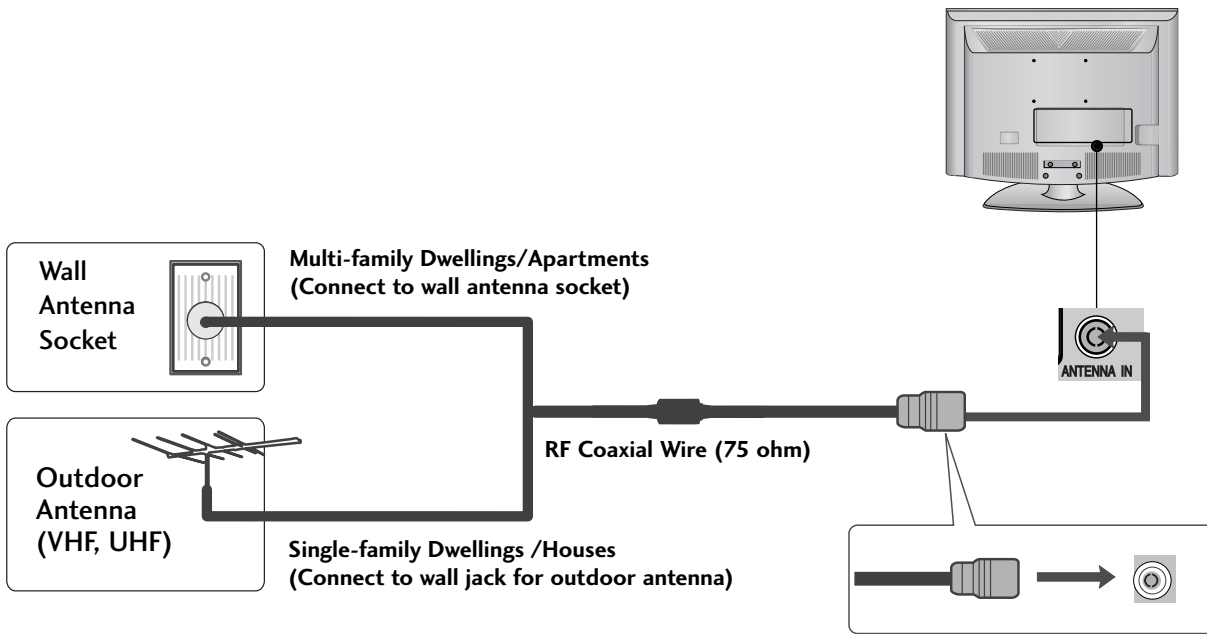


| Model | VESA (A * B) | Standard Screw | Quantity |
|----------|--------------|----------------|----------|
| 32LG35** | 200 * 100 | M4 | 4 |
| 37LG35** | 200 * 200 | M6 | 4 |
| 42LG35** | 200 * 200 | M6 | 4 |

- To prevent damage do not connect to the mains outlet until all connections are made between the devices.

ANTENNA CONNECTION

- For optimum picture quality, adjust antenna direction.
- An antenna cable and converter are not supplied.



- In poor signal areas, to achieve better picture quality it may be necessary to install a signal amplifier to the antenna as shown above.
- If signal needs to be split for two TVs, use an antenna signal splitter for connection.

EXTERNAL EQUIPMENT SETUP

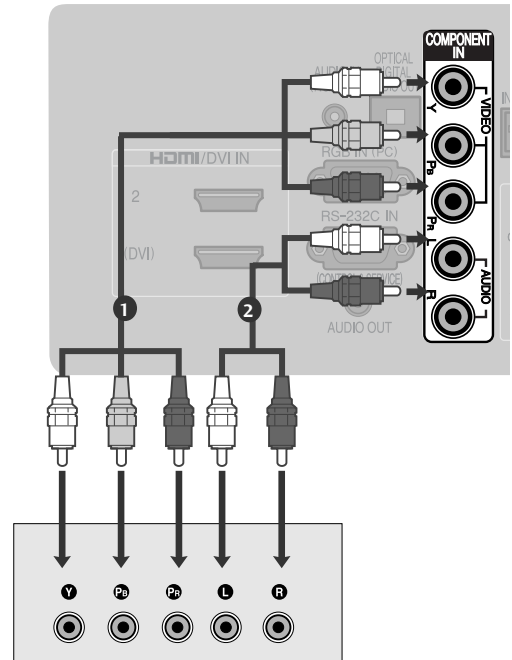
- To avoid damaging any equipment, never plug in any power cords until you have finished connecting all equipment.
- This section on EXTERNAL EQUIPMENT SETUP mainly uses diagrams for the 42LG35** models.
- Image shown may differ from your TV.

HD RECEIVER SETUP

- This TV can receive Digital RF/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 diagram as shown below.

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 TV.
- 2 Connect the audio output of the digital set-top box to the **COMPONENT IN AUDIO** jacks on the TV.
- 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 using the **INPUT** button on the remote control.



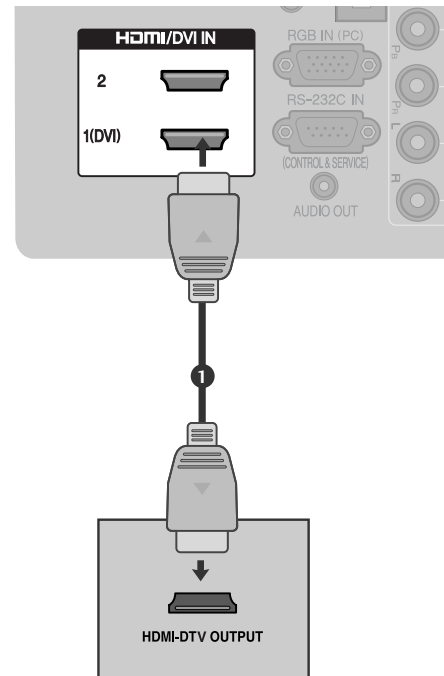
| Signal | Component | HDMI |
|------------|---------------------|----------------------------|
| 480i/576i | ○ | X |
| 480p/576p | ○ | ○ |
| 720p/1080i | ○ | ○ |
| 1080p | ○ (50/60Hz only) | ○ (24Hz/30Hz/50Hz/60Hz) |

Connecting a set-top box with an HDMI cable

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

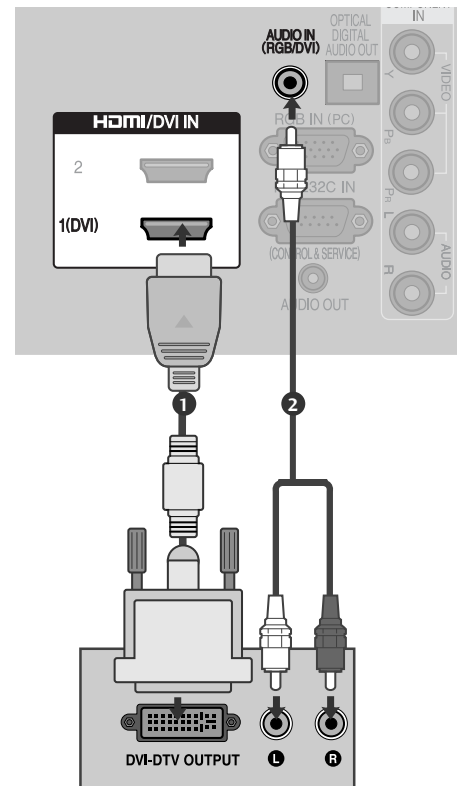
! NOTE

- ▶ Check that your HDMI cable is version 1.3 or higher.
If the HDMI cables don't support HDMI version 1.3, flickering or no screen display can result. Please use the latest cables that support at least HDMI version 1.3.



Connecting with a HDMI to DVI cable

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

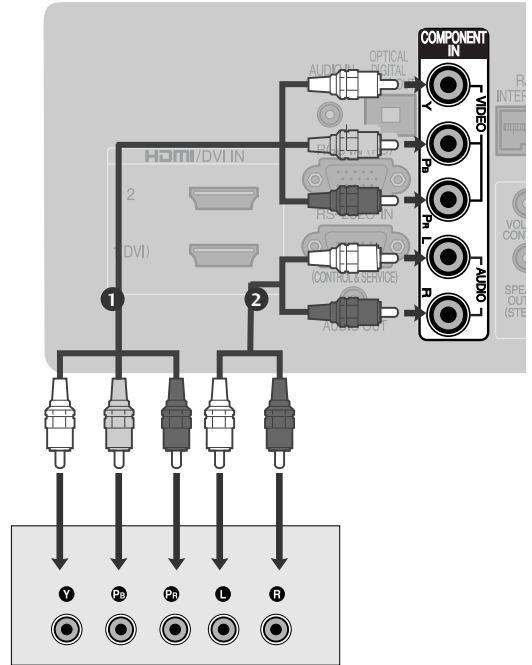


EXTERNAL EQUIPMENT SETUP

DVD SETUP

When connecting with a component cable

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



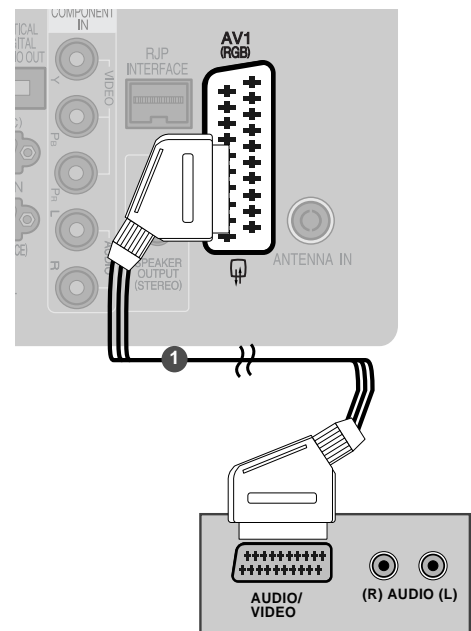
Component Input ports

To achieve 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 | C _b | C _r |
| | Y | P _b | P _r |

Connecting with a Euro Scart cable

- 1 Connect the Euro scart socket of the DVD to the **AV1 (RGB)** Euro scart socket on the TV.
- 2 Turn on the DVD player, insert a DVD.
- 3 Select **AV1** input source using the **INPUT** button on the remote control.
- 4 Refer to the DVD player's manual for operating instructions.



! NOTE

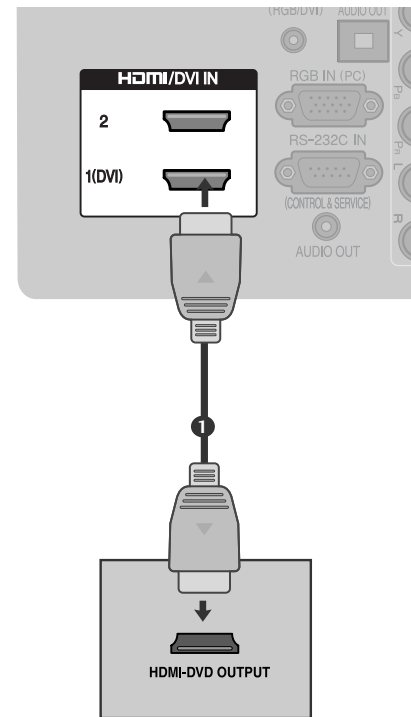
▶ Any Euro scart cable used must be signal shielded.

Connecting the HDMI cable

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

! NOTE

- ▶ The TV can receive video and audio signals simultaneously when using an HDMI cable.
- ▶ If the DVD does not support Auto HDMI, you must set the output resolution appropriately.
- ▶ Check that your HDMI cable is version 1.3 or higher.
If the HDMI cables don't support HDMI version 1.3, flickering or no screen display can result. Please use the latest cables that support at least HDMI version 1.3.

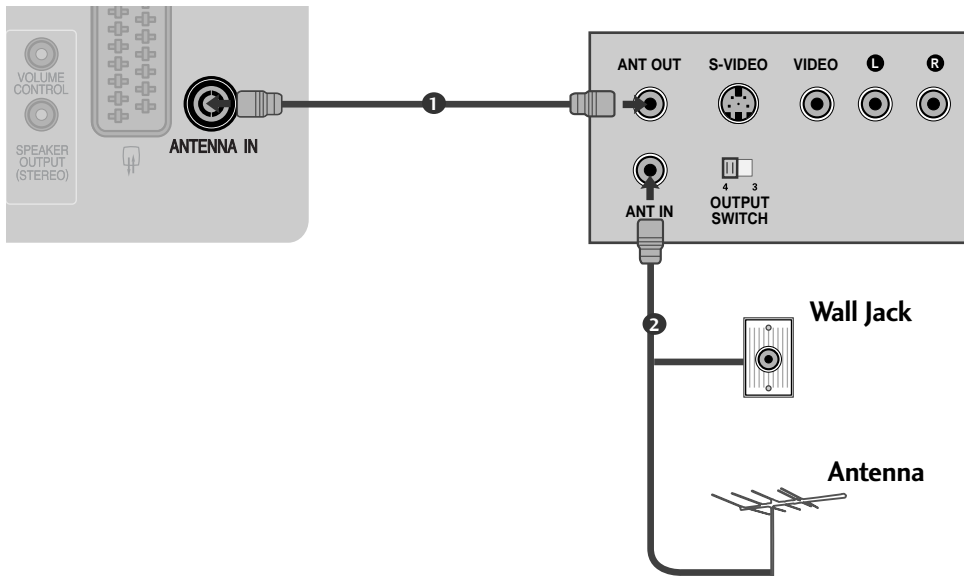


EXTERNAL EQUIPMENT SETUP

VCR SETUP

- To avoid picture noise (interference), allow adequate distance between the VCR and TV.

When connecting with a RF Cable



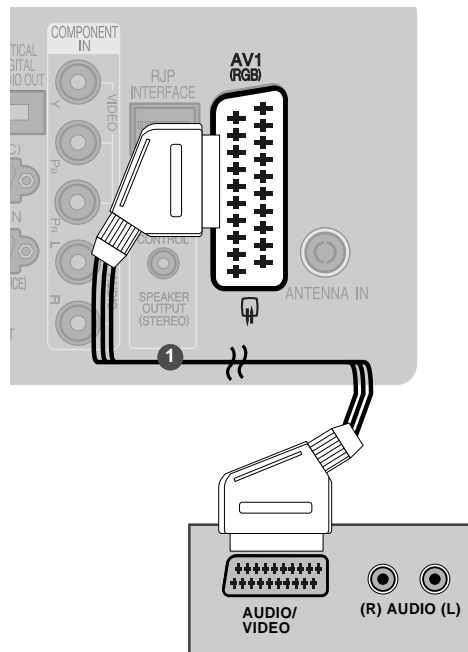
- 1 Connect the **ANT OUT** socket of the VCR to the **ANTENNA IN** socket on the TV.
- 2 Connect the antenna cable to the **ANT IN** socket of the VCR.
- 3 Press the **PLAY** button on the VCR and match the appropriate channel between the TV and VCR for viewing.

Connecting with a Euro Scart cable

- 1 Connect the Euro scart socket of the VCR to the **AV1 (RGB)** Euro scart socket on the TV.
- 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 using the **INPUT** button on the remote control.

! NOTE

- ▶ Any Euro scart cable used must be signal shielded.

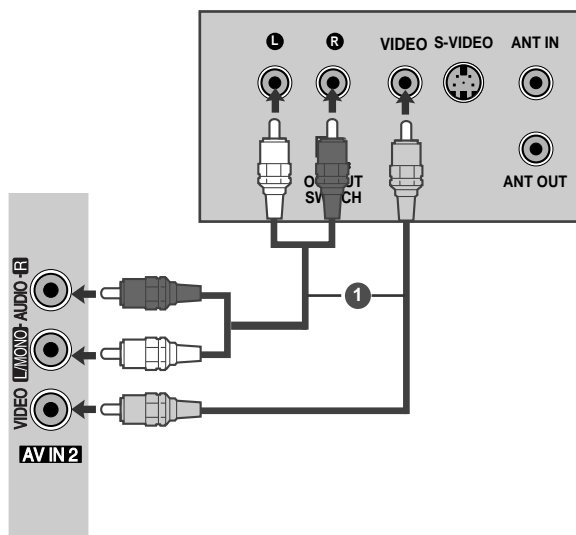


Connecting with a RCA cable

- 1 Connect the **AUDIO/VIDEO** jacks between TV and VCR. Match the jack colours (Video = yellow, Audio Left = white, and Audio Right = red)
- 2 Insert a video tape into the VCR and press **PLAY** on the VCR. (Refer to the VCR owner's manual.)
- 3 Select **AV2** input source using the **INPUT** button on the remote control.

! NOTE

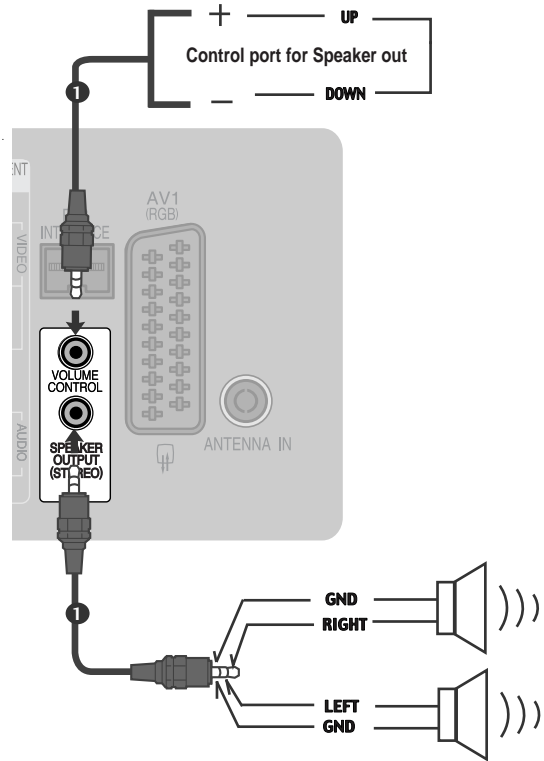
- ▶ If you have a mono VCR, connect the audio cable from the VCR to the **AUDIO L/MONO** jack of the TV.



EXTERNAL EQUIPMENT SETUP

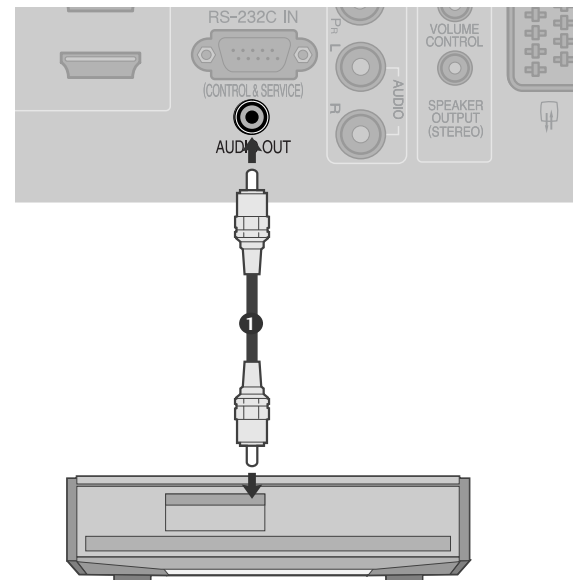
SPEAKER OUTPUT SETUP

- 1 Connect the external speaker to the **SPEAKER OUTPUT(STEREO)** jack on the TV.
- 2 Refer to the "Installation Menu".



AUDIO OUT SETUP

- 1 Connect to the Home Theater.(or amp)



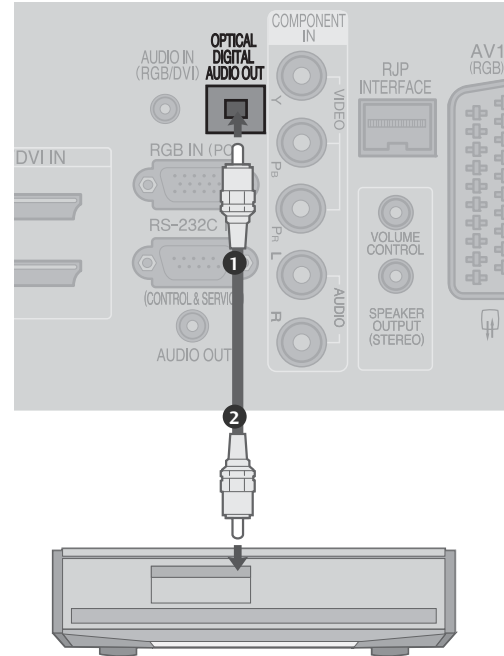
DIGITAL AUDIO OUT SETUP

Sending the TV's audio signal to external audio equipment via the Digital Audio Output (Optical) port. If you want to enjoy digital broadcasting through 5.1-channel speakers, connect the OPTICAL DIGITAL AUDIO OUT terminal on the back of TV to a Home Theater (or amp).

- 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 Refer to the external audio equipment instruction manual for operation.

⚠ CAUTION

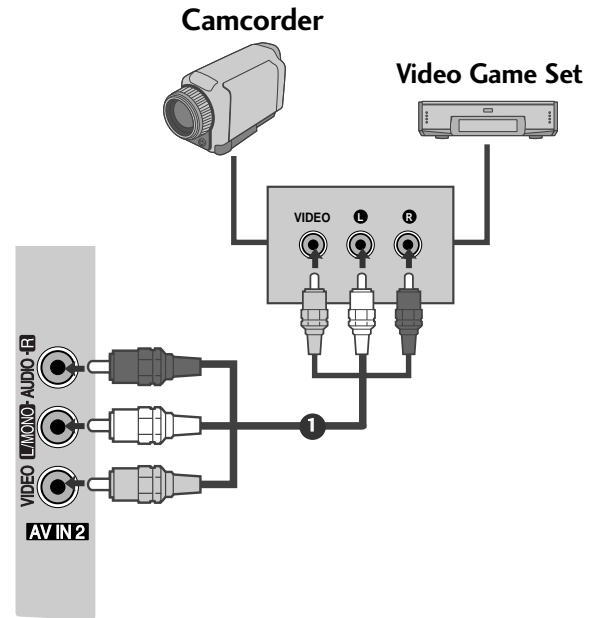
- ▶ Do not look into the optical output port. Looking at the laser beam may damage your vision.



EXTERNAL EQUIPMENT SETUP

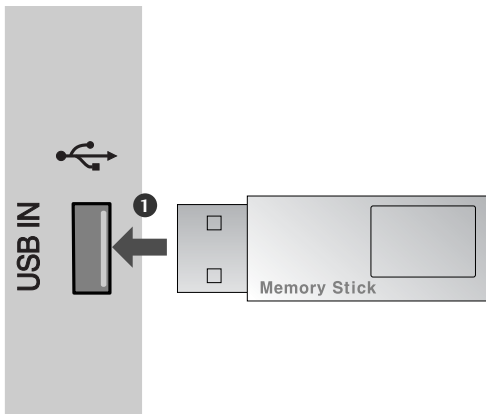
OTHER A/V SOURCE SETUP

- 1 Connect the **AUDIO/VIDEO** jacks between TV and external equipment. Match the jack colours. (Video = yellow, Audio Left = white, and Audio Right = red)
- 2 Select **AV2** input source using the **INPUT** button on the remote control.
- 3 Operate the corresponding external equipment. Refer to external equipment operating guide.



USB IN SETUP

- Here shown may differ from your TV.



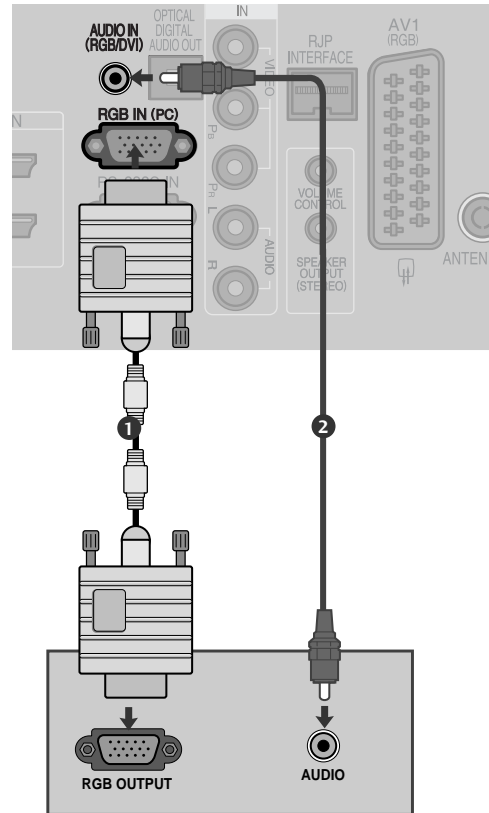
- 1 Connect the USB device to the **USB IN** jack on the TV.
- 2 After connecting the **USB IN** jacks, you use the **USB** function. (► p.45)

PC SETUP

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

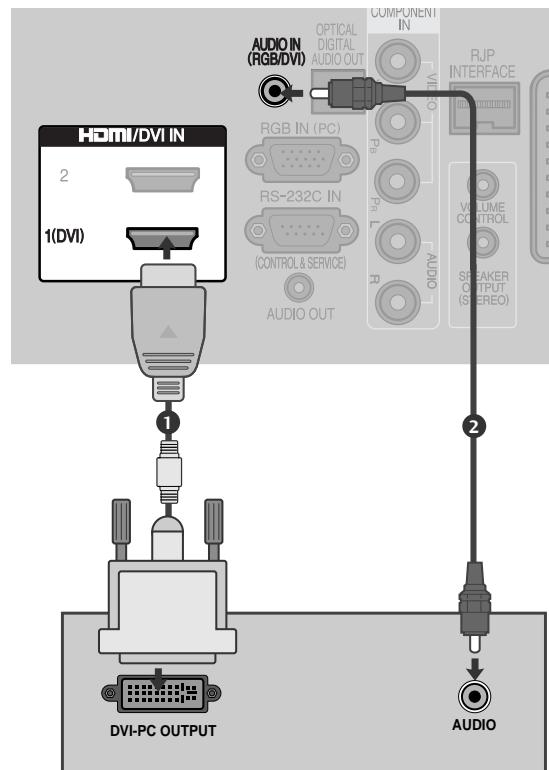
Connecting with a D-sub 15 pin cable

- 1 Connect the RGB output of the PC to the **RGB IN (PC)** jack on the TV.
- 2 Connect the PC audio output to the **AUDIO IN (RGB/DVI)** jack on the TV.
- 3 Turn on the PC and the TV
- 4 Select **RGB** input source using the **INPUT** button on the remote control.



Connecting with a HDMI to DVI cable

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



EXTERNAL EQUIPMENT SETUP

Supported Display Resolution

RGB[PC], HDMI[PC] mode

| Resolution | Horizontal Frequency(kHz) | Vertical Frequency(Hz) |
|------------|---------------------------|------------------------|
| 720x400 | 31.469 | 70.08 |
| 640x480 | 31.469 | 59.94 |
| | 37.684 | 75.00 |
| 800x600 | 37.879 | 60.31 |
| | 46.875 | 75.00 |
| 832x624 | 49.725 | 74.55 |
| | 48.363 | 60.00 |
| 1024x768 | 56.470 | 70.00 |
| | 60.123 | 75.029 |
| 1280x768 | 47.78 | 59.87 |
| 1360x768 | 47.72 | 59.8 |
| 1366x768 | 47.56 | 59.6 |
| 1400x1050 | 64.744 | 59.948 |
| 1680x1050 | 62.290 | 59.94 |
| 1280x1024 | 63.595 | 60.0 |
| 1920x1080 | 66.647 | 59.988 |

HDMI[DTV] mode

| Resolution | Horizontal Frequency(kHz) | Vertical Frequency(Hz) |
|------------|---------------------------|------------------------|
| 720x480 | 31.47 | 59.94 |
| | 31.50 | 60 |
| 640x480 | 31.469 | 59.94 |
| | | 60.00 |
| 720x480 | 31.47 | 59.94 |
| | 31.50 | 60.00 |
| 720x576 | 31.25 | 50.00 |
| 1280x720 | 37.500 | 50 |
| | 44.96 | 59.94 |
| 1920x1080 | 45.00 | 60.00 |
| | 33.72 | 59.94 |
| | 33.75 | 60.00 |
| | 28.12 | 50.00 |
| | 27.000 | 24.00 |
| | 26.97 | 23.97 |
| | 33.75 | 30.00 |
| | 33.716 | 29.976 |
| | 56.25 | 50.00 |
| | 67.43 | 59.94 |
| 67.5 | 60.00 | |

! NOTE

- ▶ Avoid keeping a fixed image on the set's screen for prolonged periods of time. The fixed image may become permanently imprinted on the screen; use a screen saver when possible.
- ▶ There may be interference relating to resolution, vertical pattern, contrast or brightness in PC mode. Change the PC mode to another resolution or change the refresh rate to another rate or adjust the brightness and contrast on the menu until the picture is clear. If the refresh rate of the PC graphic card can not be changed, change the PC graphic card or consult the manufacturer of the PC graphic card.
- ▶ The synchronization input waveform for Horizontal and Vertical frequencies are separate.
- ▶ We recommend using 1920x1080, 60Hz for the PC mode, this should provide the best picture quality.
- ▶ Connect the signal cable from the monitor output port of the PC to the RGB (PC) port of the TV or the signal cable from the HDMI output port of the PC to the HDMI IN (or HDMI/DVI IN) port on the TV.
- ▶ Connect the audio cable from the PC to the Audio input on the TV. (Audio cables are not included with the TV).
- ▶ If using a sound card, adjust PC sound as required.
- ▶ If required, adjust the settings for Plug and Play functionality
- ▶ If the graphic card on the PC does not output analogue and digital RGB simultaneously, connect only one of either RGB or HDMI IN (or HDMI/DVI IN) to display the PC output on the TV.
- ▶ If the graphic card on the PC does output analog and digital RGB simultaneously, set the TV to either RGB or HDMI; (the other mode is set to Plug and Play automatically by the TV.)
- ▶ DOS mode may not work depending on the video card if you use an HDMI to DVI cable.
- ▶ If you use too long an RGB-PC cable that is too long, there may be interference on the screen. We recommend using under 5m of cable. This provides the best picture quality.

EXTERNAL EQUIPMENT SETUP

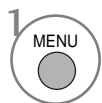


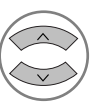
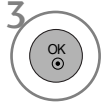
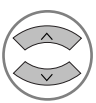
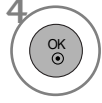
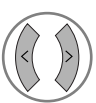

Screen Setup for PC mode

Screen Reset

Returns to the default settings Position, Size and Phase at the factory.

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



- 1   Select **PICTURE**.
- 2   Select **Screen**.
- 3   Select **Reset**.
- 4   Select **Yes**.
- 5  Run **Reset**.

- Press the **MENU** button to return to normal TV viewing.
- Press the **RETURN** button to move to the previous menu screen.










Auto Configure (RGB [PC] mode only)

Automatically adjusts the picture position and minimizes image instability. After adjustment, if the image is still not correct, your TV is functioning properly but needs further adjustment.

Auto configure

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



- 1   Select **PICTURE**.
- 2   Select **Screen**.
- 3   Select **Auto Config..**
- 4   Select **Yes**.
- 5  Run **Auto Config..**

- If the position of the image is still not correct, try Auto adjustment again.
- If picture needs to be adjusted again after Auto adjustment in RGB (PC), you can adjust the **Position, Size or Phase**.

- Press the **MENU** button to return to normal TV viewing.
- Press the **RETURN** button to move to the previous menu screen.









EXTERNAL EQUIPMENT SETUP

Selecting Resolution

To view a normal picture, match the resolution of RGB mode and selection of PC mode.

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



- 1   Select **PICTURE**.
- 2   Select **Screen**.
- 3   Select **Resolution**.
- 4   Select the desired resolution.










- Press the **MENU** button to return to normal TV viewing.
- Press the **RETURN** button to move to the previous menu screen.

Adjustment for screen Position, Size, Phase

If the picture is not clear after auto adjustment and especially if characters are still trembling, adjust the picture phase manually.

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



- 1   Select **PICTURE**.
- 2   Select **Screen**.
- 3   Select **Position, Size or Phase**.
- 4    Make appropriate adjustments.

- Press the **MENU** button to return to normal TV viewing.
- Press the **RETURN** button to move to the previous menu screen.

WATCHING TV / PROGRAMME CONTROL

REMOTE CONTROL KEY FUNCTIONS

When using the remote control, aim it at the remote control sensor on the TV.



1 **MODE** Selects the remote operating modes.

POWER Switches the TV on from standby or off to standby.

INPUT External input mode rotate in regular sequence. Switches the TV on from standby.

ALARM Sets the alarm function.

I/II Selects the sound output.

MENU Selects a menu. Clears all on-screen displays and returns to TV viewing from any menu.(▶ p.31)

GUIDE Shows programme schedule.(▶ p.53)

THUMBSTICK Allows you to navigate the on-screen menus and adjust (Up/Down/Left Right) the system settings to your preference.

OK Accepts your selection or displays the current mode.

RETURN(EXIT) Allows the user to move return one step in an interactive application, EPG or other user interaction function.

INFO ⓘ Shows the present screen information.

RATIO Selects your desired picture format.(▶ p.55)

Coloured buttons These buttons are used for teletext (on **TELETEXT** models only) or **Programme edit**.

2 **TELETEXT BUTTONS** These buttons are used for teletext. For further details, see the 'Teletext' section.(▶ p.82)

USB Enter to the USB mode.

SUBTITLE Recalls your preferred subtitle in digital mode.

SLEEP Sets the sleep timer.



VOLUME UP /DOWN Adjusts the volume.

MARK Check and un-check programmes in the USB menu.

FAV Displays the selected favourite programme.

MUTE Switches the sound on or off.

Programme UP/DOWN Selects a programme.

PAGE UP/DOWN Move from one full set of screen information to the next one.

0~9 number button Selects a programme.
Selects numbered items in a menu.

LIST Displays the programme table.(▶ p.43)

Q.VIEW Returns to the previously viewed programme.

USB Menu control buttons Controls USB menu(Photo List and Music List).

Installing Batteries

- Open the battery compartment cover on the back and install the batteries matching correct polarity (+with +,-with -).
- Install two 1.5V AAA batteries. Do not mix old or used batteries with new ones.
- Close cover.


WATCHING TV / PROGRAMME CONTROL

TURNING ON THE TV

- When your TV is turned on, you will be able to use its features.

- 1 Firstly, connect the power cord correctly.
At this stage, the TV switches to standby mode.
- 2 In standby mode to turn TV on, press the \odot / I, INPUT or P \wedge \vee button on the TV or press the POWER, INPUT, P \wedge \vee or NUMBER button on the remote control and the TV will switch on.

'Splash Image' Function.

When turn on the TV, 'Splash Image' is display. (Default image is )
If you want to change an image, please refer to the 'Installation Guide'.

INITIALIZING SETUP

- 1 If the OSD (On Screen Display) is displayed on the screen after turning on the TV, you can adjust the **Language, Country, Time Zone, Auto Tuning**.


Note:

- a. If you close without completing the initial setting, the Initial Setting menu can be displayed again.
- b. It will automatically disappear after approx. 40 seconds unless a button is pressed.
- c. Press the RETURN button to change the current OSD to the previous OSD.
- d. For those countries without confirmed DTV broadcasting standards, some DTV features might not work, depending on the DTV broadcasting environment.


PROGRAMME SELECTION

- 1 Press the P \wedge \vee or NUMBER buttons to select a programme number.

VOLUME ADJUSTMENT

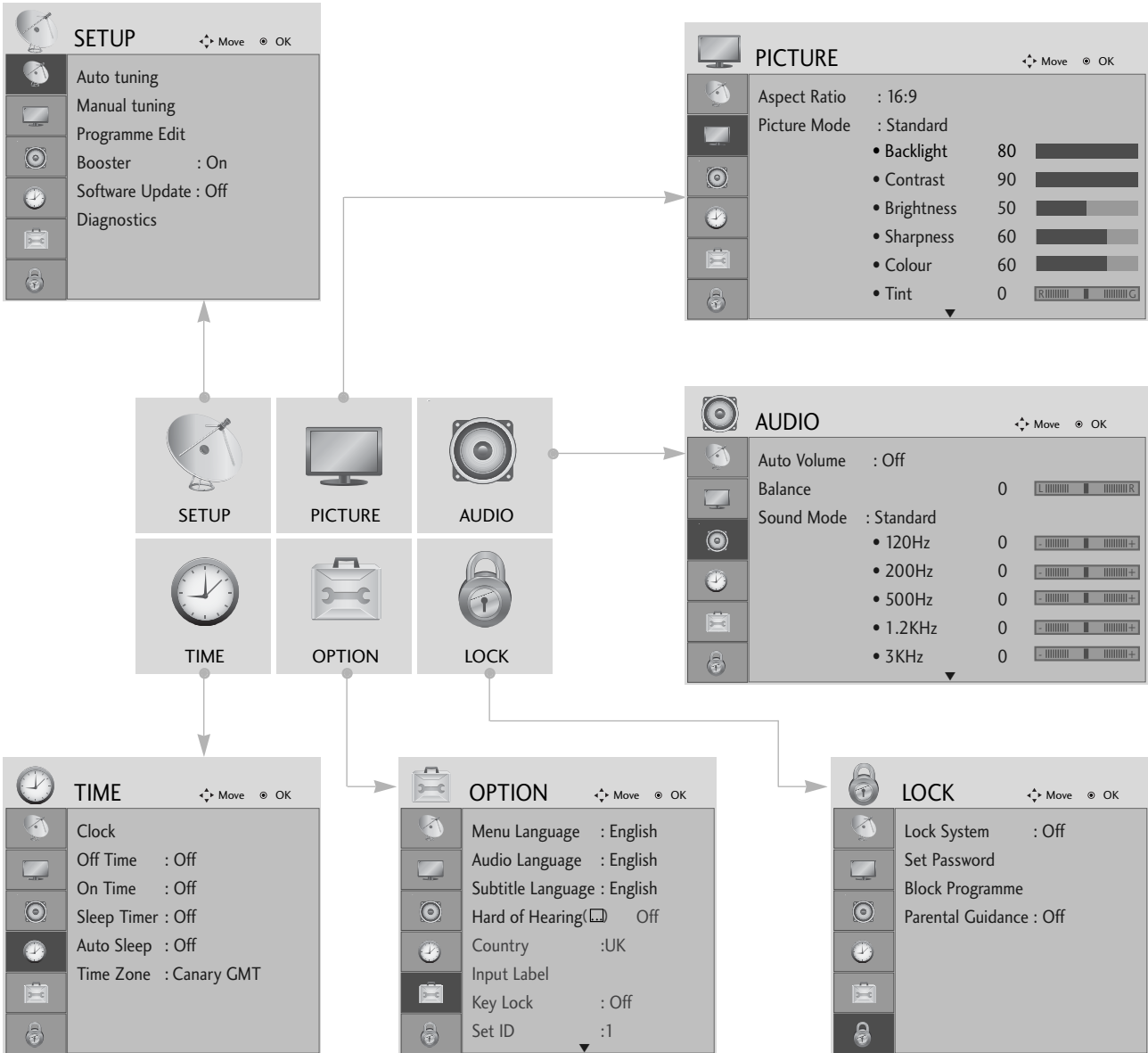
- 1 Press the  + - button to adjust the volume.


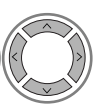

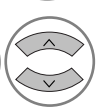
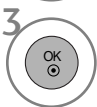
If you wish to switch the sound off, press the MUTE button.

You can cancel this function by pressing the MUTE,  + -, or I/II button.

ON SCREEN MENUS SELECTION AND ADJUSTMENT

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



- 1   Display each menu.
- 2   Select a menu item.
- 3  Move to the pop up menu.

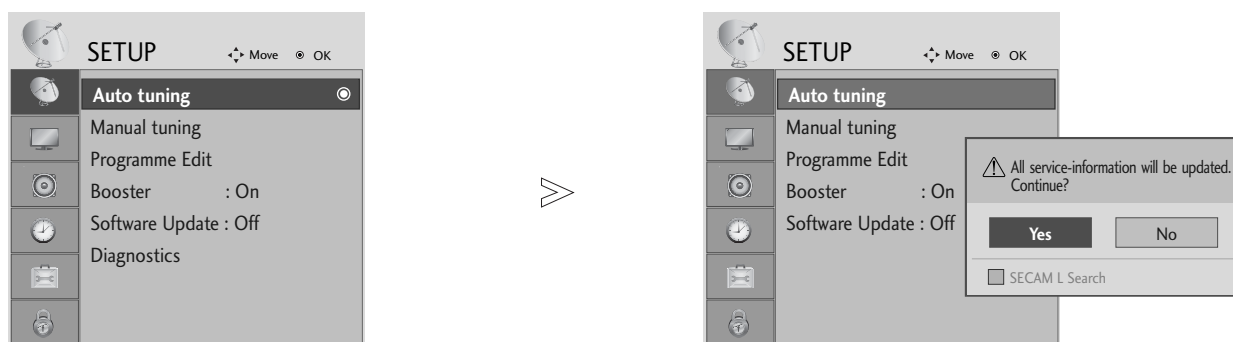
- Press the **MENU** button to return to normal TV viewing.
- Press the **RETURN** button to move to the previous menu screen.








WATCHING TV / PROGRAMME CONTROL

AUTO PROGRAMME TUNING

Use this to automatically find and store all available programmes.

When you start auto programming in digital mode, all previously stored service information will be deleted.



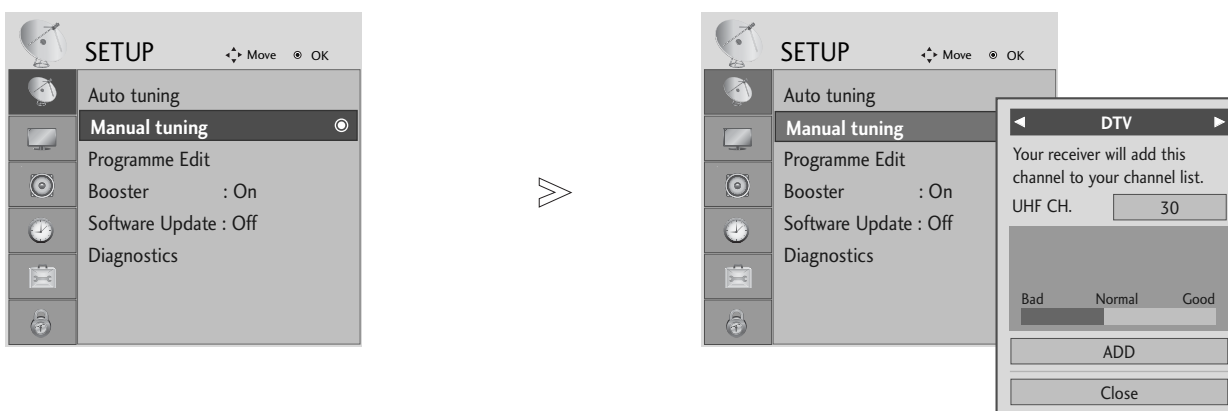
- 1   Select **SETUP**.
- 2   Select **Auto Tuning**.
- 3   Select **Yes**.
- 4  Run **Auto tuning**.

- Use **NUMBER** buttons to input a 4-digit password in **Lock System 'On'**.
- If you wish to keep on auto tuning select **YES** using the < > button. Then, press the **OK** button. Otherwise select **NO**.

- Press the **MENU** button to return to normal TV viewing.
- Press the **RETURN** button to move to the previous menu screen.

MANUAL PROGRAMME TUNING (IN DIGITAL MODE)


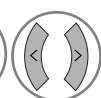
Manual Tuning lets you manually add a programme to your programme list.



1   Select **SETUP**.

2   Select **Manual Tuning**.

3   Select **DTV**.

4   Select the desired channel number.

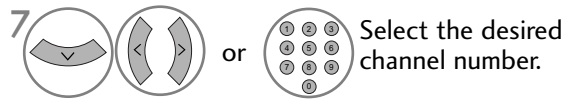
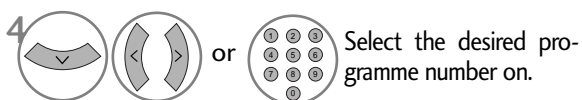
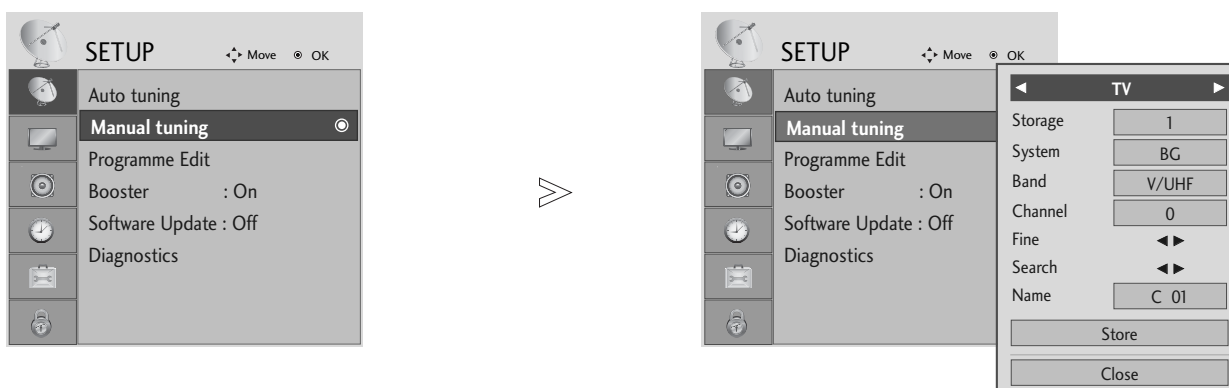
• Use **NUMBER** buttons to input a 4-digit password in **Lock System 'On'**.

- Press the **MENU** button to return to normal TV viewing.
- Press the **RETURN** button to move to the previous menu screen.

WATCHING TV / PROGRAMME CONTROL

MANUAL PROGRAMME TUNING (IN ANALOGUE MODE)

Manual Tuning lets you manually tune and arrange the stations in whatever order you desire.

















- Press the **MENU** button to return to normal TV viewing.
- Press the **RETURN** button to move to the previous menu screen.

- Use **NUMBER** buttons to input a 4-digit password in Lock System 'On'.
- **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)
- To store another channel, repeat steps 4 to 9.













■ Assigning a station name

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

- 1   Select **SETUP**.
- 2   Select **Manual Tuning**.
- 3   Select **TV**.
- 4   Select **Name**.
- 5   Select the position and make your choice of the second character, and so on. You can use an the alphabet **A** to **Z**, the number **0** to **9**, +/ -, and blank.
- 6   Select **Close**.
- 7   Select **Store**.

■ Fine Tuning

Normally fine tuning is only necessary if reception is poor.

- 1   Select **SETUP**.
- 2   Select **Manual Tuning**.
- 3   Select **TV**.
- 4   Select **Fine**.
- 5   Fine tune for the best picture and sound.
- 6   Select **Store**.

- Press the **MENU** button to return to normal TV viewing.
- Press the **RETURN** button to move to the previous menu screen.

WATCHING TV / PROGRAMME CONTROL

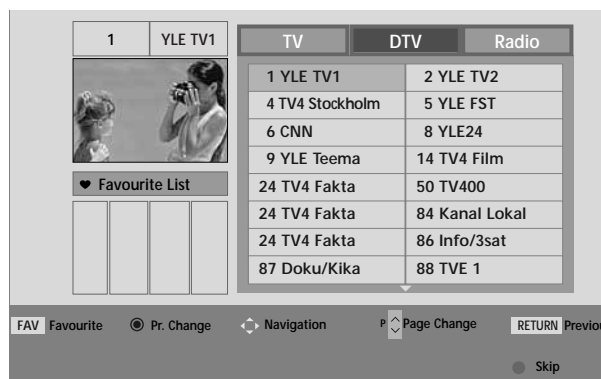
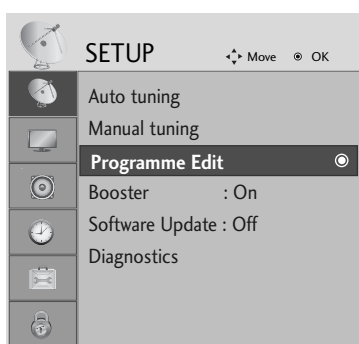
PROGRAMME EDIT

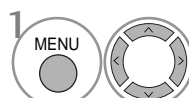
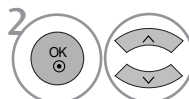


When a programme number is skipped, it means that you will be unable to select it using **P** ^ ∨ button during TV viewing.

If you wish 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.

In some countries it is possible to move a programme number by using the **YELLOW** button only.



-  Select **SETUP**.
-  Select **Programme Edit**.
-  Enter the **Programme Edit**.
-  Select a programme to be stored or skipped.

• Use **NUMBER** buttons to input a 4-digit password in **Lock System 'On'**.

- Press the **MENU** button to return to normal TV viewing.
- Press the **RETURN** button to move to the previous menu screen.

(IN DTV/RADIO MODE)

■ Skipping a programme number



1 Select a programme number to be skipped.



2 Turn the skipped programme number to blue.



3 Release the skipped programme.

- When programmes are to be skipped, skipped programme shows in blue and these programmes will not be selected by the **P** ^ v buttons during TV viewing.
- If you wish to select a skipped programme, directly enter the programme number with the NUMBER buttons or select it in the programme edit or EPG.

■ Selecting favourite programme



1 Select your favourite programme number.

- This will automatically include the selected programme into your favourite programme list.

WATCHING TV / PROGRAMME CONTROL

IN TV MODE




This function enables you to delete or skip the stored programmes.
You can also move some channels and use other programme numbers.

■ Auto Sort

- 1  Start Auto Sort.





- After activating Auto Sort once, you can no longer edit programmes.

■ Deleting a programme




- 1  Select a programme number to be deleted.
- 2  Turn the deleted programme number to red.
- 3  Release the deleted programme.

- The selected programme is deleted, all the following programmes are shifted up one

■ Moving a programme



- 1  Select a programme number to be moved.
- 2   Turn the moved programme number to YELLOW.
- 3  Release the moved programme.

■ Skipping a programme number

- 1  Select a programme number to be skipped.
- 2  Turn the skipped programme number to blue.
- 3  Release the skipped programme.

- When a programme number is skipped it means that you will be unable to select it using the P ^ v button during normal TV viewing.
- If you wish to select a skipped programme, directly enter the programme number with the NUMBER buttons or select it in the programme edit or EPG.

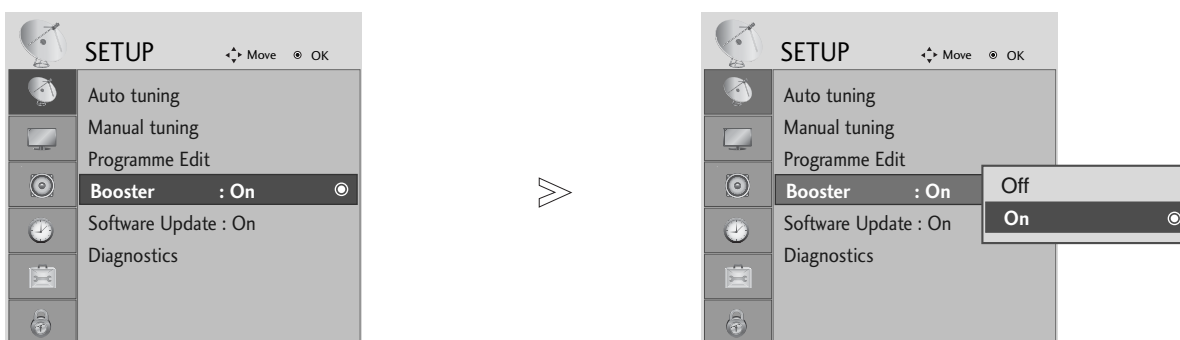
■ Selecting a Favourite Programme

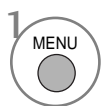


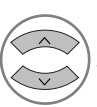
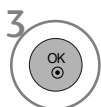

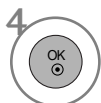
- 1   Select your favourite programme number.

- The selected programme will be added to the favourite programme list.

BOOSTER (IN DIGITAL MODE ONLY)

If reception is poor, select **Booster** to **On**.
When the signal is strong, select "Off".



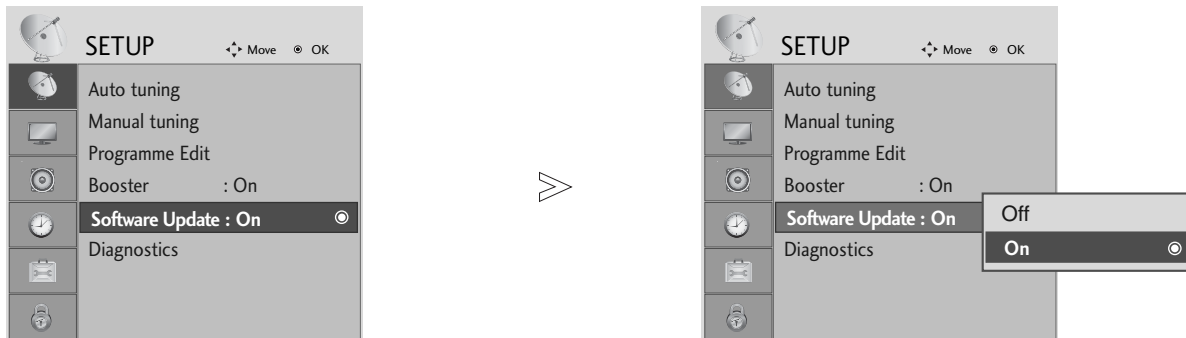
- 1   Select **SETUP**.
- 2   Select **Booster**.
- 3   Select **On** or **Off**.
- 4  Save.








- Press the **MENU** button to return to normal TV viewing.
- Press the **RETURN** button to move to the previous menu screen.

WATCHING TV / PROGRAMME CONTROL

SOFTWARE UPDATE

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



-   Select **SETUP**.
-   Select **Software Update**.
-   Select **On** or **Off**.
 - If you select **On**, a user confirm message box will be displayed to notify that new software is found.
-  Save.

* 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 < > button and when you see the following picture.



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



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

- Power to the TV must not be interrupted.
- The TV must not be switched off.
- The antenna must not be disconnected.
- After Software Update, you can confirm the updated software version in Diagnostics menu.

WATCHING TV / PROGRAMME CONTROL

DIAGNOSTICS (IN DIGITAL MODE ONLY)


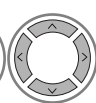

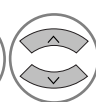


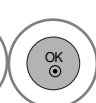
This function enables you to view information on the Manufacturer, Model/Type, Serial Number and Software Version.

This displays the information and signal strength of the tuned MUX.

This displays the signal information and service name of the selected MUX.

(*MUX: A higher directory of channels in digital broadcasting (a single MUX contains multiple channels.))




-   Select **SETUP**.
-   Select **Diagnostics**.
-  Display Manufacturer, Model/Type, Serial Number and Software Version.
-   Display the information of Channel.


- Press the **MENU** button to return to normal TV viewing.
- Press the **RETURN** button to move to the previous menu screen.

SELECTING THE PROGRAMME TABLE

You can check which programmes are stored in the memory by displaying the programme table.


 Displayed when the Locked Programme.


■ Displaying programme LIST

1  Display the Programme List.


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


■ Selecting a programme in the programme list

1  Select a programme.


2  Switch to the chosen programme number.

■ Paging through a programme list

1  Turn the pages.

2  Return to normal TV viewing.

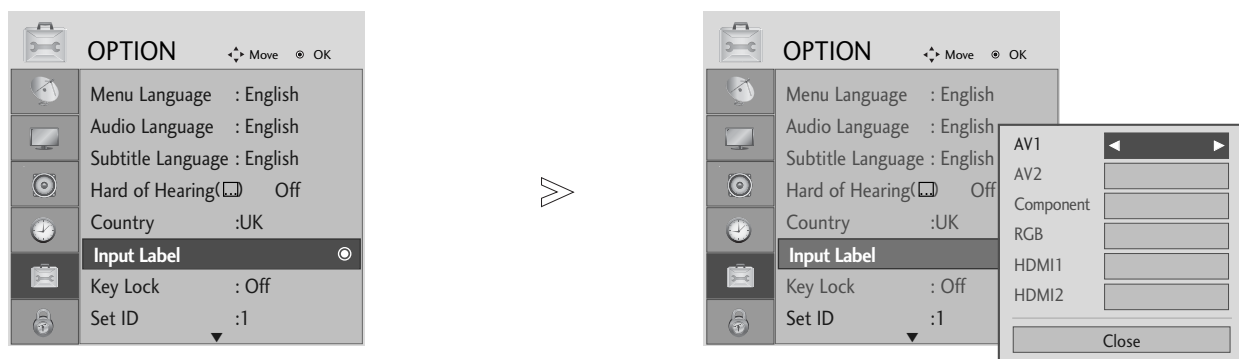
■ Displaying the favourite programme table




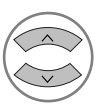

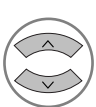

1  Display the Favourite Programme table.

WATCHING TV / PROGRAMME CONTROL

INPUT LABEL

Selects a label for each input source.



- 1   Select **OPTION**.
- 2   Select **Input Label**.
- 3   Select the source.
- 4  Select the label.

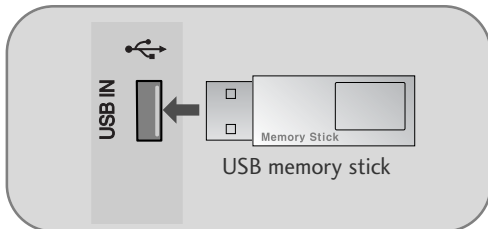
- Press the **MENU** button to return to normal TV viewing.
- Press the **RETURN** button to move to the previous menu screen.

TO USE THE USB DEVICE

When connecting the USB device

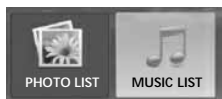
When you connect a USB device or press the USB button, this screen is displayed, automatically. In USB device, you can not add a new folder or delete the existing folder.

- 1 Connect the USB device to the **USB IN** jacks on the side of TV.



- It doesn't support USB HDD
- This TV Supports on JPEG and MP3.

- 2  Select **PHOTO LIST** or **MUSIC LIST**



- 3 

Precautions when using the USB device

- ▶ Only a USB memory stick is recognizable.
- ▶ It does not support Card Reader device.
- ▶ If the USB storage device is connected through a USB hub, the device is not recognizable.
- ▶ A USB storage device using an automatic recognition programme may not be recognized.
- ▶ A USB storage device which uses its own driver may not be recognized.
- ▶ If an unsupported USB device is connected, the device may cause the product to malfunction or down.
- ▶ The recognition speed of a USB storage device may depend on each device.
- ▶ Please do not turn off the TV or unplug the USB device when the connected USB storage device is working. When such device is suddenly separated or unplugged, the stored files or the USB storage device may be damaged.
- ▶ Please do not connect the USB storage device which was artificially maneuvered on the PC. The device may cause the product to malfunction or fail to be played. Never forget to use only a USB storage device which has normal music files or image files.
- ▶ Please use only a USB storage device which was formatted as a FAT32 (32GB) file system provided with the Windows operating system. In case of a storage device formatted as a different utility programme which is not supported by Windows, it may not be recognized.
- ▶ Please connect power to a USB storage device which requires an external power supply. If not, the device may not be recognized.
- ▶ Please connect a USB storage device with cable is offered by USB maker. If connected with cable is not offered by USB maker or an excessively long cable, the device may not be recognized.
- ▶ Some USB storage devices may not be supported or operated smoothly.
- ▶ File alignment method of USB storage device is similar to Window XP and filename can recognize up to 100 English characters.
- ▶ Please back up the important file because a data of USB device may be damaged. Data management is consumer's responsibility and in consequence the manufactures does not cover the product bearing data damage.
- ▶ The recommended capacity is 32GB or less for USB memory.
- ▶ Any device with more than the recommended capacity may not work properly.

TO USE THE USB DEVICE

PHOTO LIST

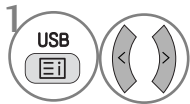
The On Screen Display may be different from your TV. Images are an example to assist with the TV operation.

PHOTO(*.JPEG) supporting file

Baseline: 64 x 64 ~ 7680 x 4320

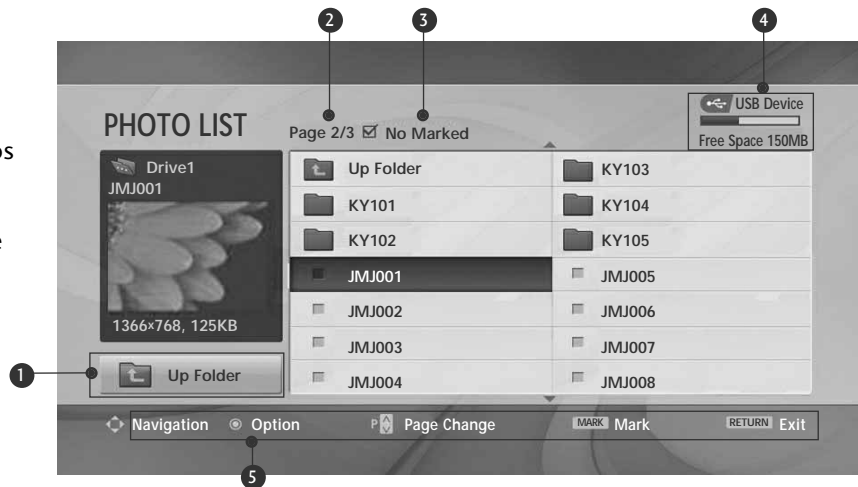
- Not support to progressive Jpeg
- You can play JPEG files only.
- Only baseline scan is supported among JPEG (SOF0, SOF1 only).
- Non-supported files are displayed in the form of bitmap.

Screen Components



Select **Photo List**

- 1 Moves to upper level folder
- 2 Current page/Total pages
- 3 Total number of marked photos
- 4 Usable USB memory
- 5 Corresponding buttons on the remote control



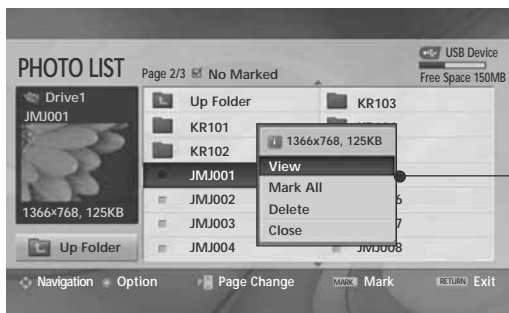
- Non-supported files are displayed in the form of bitmap.




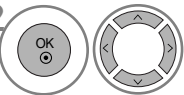

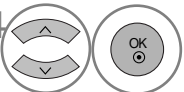
- Some files may be displayed the preview image by icon only.



Photo Selection and PopUp Menu



- ▶ **View** : Display the selected item.
- ▶ **Mark All** : Mark all photos on the screen.
- ▶ **Unmark All** : Deselect all marked photos.
- ▶ **Delete** : Delete the selected photo item.
- ▶ **Close** : Close the pop-up menu.

- 1  Select the target folder.
- 2  Select the desired photos.
- 3  Show the PopUp menu.
- 4  Select the desired PopUp menu.

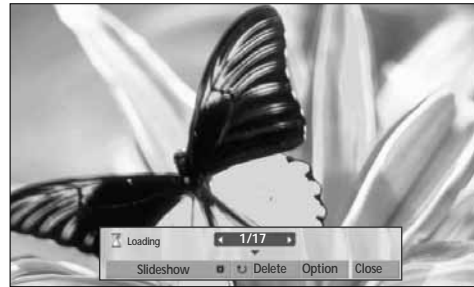
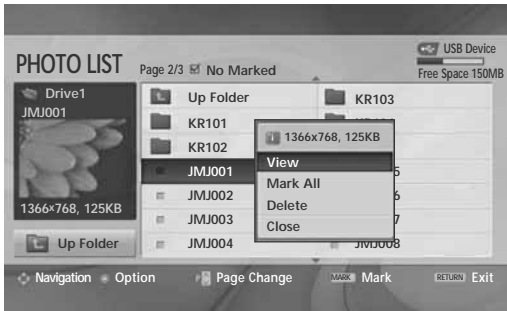
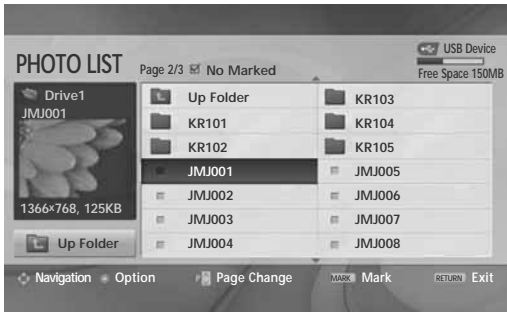
- Use the **P** ^ v button to navigation in the photo page.
- Use the **MARK** button to mark or unmark a photo. When one or more photos are marked, you can view individual photos or a slide show of the marked photos. If no photos are marked, you can view all photos individually or all photos in the folder in a slide show.

- Press the **RETURN** button to return to normal TV viewing.


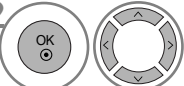



TO USE THE USB DEVICE

Set up the menu in Full-Sized Screen

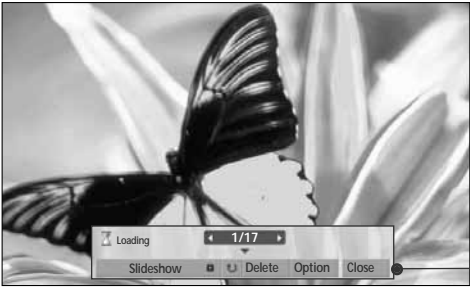
You can change the settings to display photos stored on a USB device, on a full-sized screen. Detailed operations are available on full-sized photo view screen.



The aspect ratio of a photo may change the size of the photo displayed on the screen in full size. Press the **RETURN** button to move to the previous menu screen.

-  Select the target folder.
-  Select the desired photos.
-  Show the PopUp menu.
-  Select **View**
-  The selected photo is displayed in full size.

- Use the **P** ^ v button to navigation in the photo page.



6



Select the **Slideshow**, **Rotate**, **Delete**, **Option** or **Close**

- Use < > button to select the previous or next photo.
- Use < > button to select and control the menu on the full-sized screen.

- ▶ **Slideshow** : When no picture is selected, all photos in the current folder are displayed during slide show. When selected, the selected photos are displayed during slide show.
 - Set the time interval of the slide show in **Option**.
- ▶ **Rotate** : Rotate photos.
 - Rotates the photo 90°, 180°, 270°, 360° clockwise.
- ▶ **Delete** : Delete photos.
- ▶ **Option** : Set values for **Slide Speed**.
 - Use ^ v < > button and **OK** button to set values. Then go to **OK** and press **OK** to save the settings.
- ▶ **Close** : Hide the menu on the full-sized screen.
 - To see the menu again on the full-sized screen, press **OK** button to display.



TO USE THE USB DEVICE

MUSIC LIST

Purchased music files(*.MP3) may contain copyright restrictions. Playback of these files may not be supported by this model.

Music file on your USB device can be played by this unit.

The On Screen Display may be different from your TV. Images are an example to assist with the TV operation.

MUSIC (*.MP3) supporting file

Bit rate 32 ~ 320

- Sampling rate MPEG1 layer 3: 32 kHz, 44.1 kHz, 48 kHz.
- It plays under 100Mb.

Screen Components

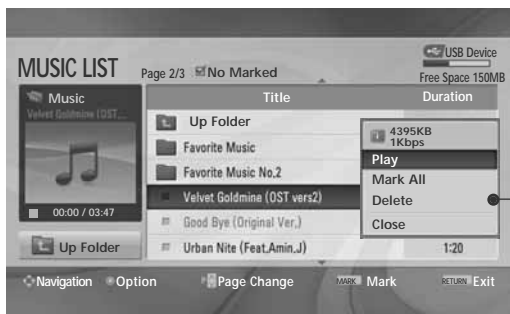
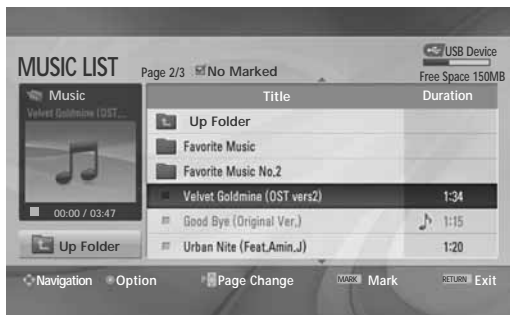


- 1 Moves to upper level folder
- 2 Current page/Total pages
- 3 Total number of marked music titles
- 4 Usable USB memory
- 5 Corresponding buttons on the remote control


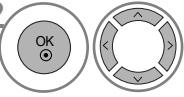

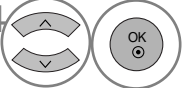


Music Selection and PopUp Menu

As shown , up to 6 music titles are listed per page.



- ▶ **Play (During stop)** : Play the selected music titles.
Once a music finishes playing, the next selected one will be played. When there are no selected music titles to play, the next one in the current folder will be played. If you go to a different folder and press the **OK** button, the current music in playback will stop.
- ▶ **Play Marked** : Play the selected music titles.
Once a music finishes playing, the next selected one will be played automatically.
- ▶ **Stop Play (During playback)** : Stop the playing music titles.
- ▶ **Mark All** : Mark all music titles in the folder.
- ▶ **Unmark All** : Deselect all marked music titles.
- ▶ **Delete** : Delete the selected music titles.
- ▶ **Close** : Close the pop-up menu.

- 1  Select the target folder.
- 2  Select the desired music title.
- 3  Show the PopUp menu.
- 4  Select the desired PopUp menu.

- Use the **P** ^ v button to navigation in the music page.
- Use **MARK** button to mark or unmark a music. When one or more music files are marked, the marked music title will be played in sequence. For example, if you want to listen to only one music repeatedly, just mark the music only and play it. If no music is marked, all the music in the folder will be played in sequence.

- Press the **RETURN** button to return to normal TV viewing.

TO USE THE USB DEVICE

- If you don't press any button for a while during the playing, the play information box (as shown in the below) will float as a screen saver.
- The 'Screen Saver'?
Screen saver is to prevent screen pixel damage due to a fixed image remaining on the screen for an extended period of time.



! NOTE

- ▶ When music is playing, 🎵 is displayed in back of the music title.
- ▶ A damaged or corrupted music does not play but displays 00:00 in playtime.
- ▶ A music downloaded from a paid service with copyright protection does not start but displays inappropriate information in playtime.
- ▶ If you press **OK**, **■** buttons, screen saver is stopped.
- ▶ The **PLAY(▶)**, **Pause(II)**, **■**, **▶▶**, **◀◀** buttons on the remote control are also available in this mode.
- ▶ You can use the **▶▶** button to select the next music and the **◀◀** button to select the previous music.

EPG (ELECTRONIC PROGRAMME GUIDE) (IN DIGITAL MODE)

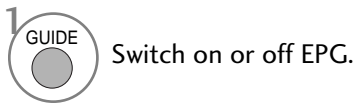
This system has an Electronic Programme Guide (EPG) to help your navigation through all the possible viewing options.

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).

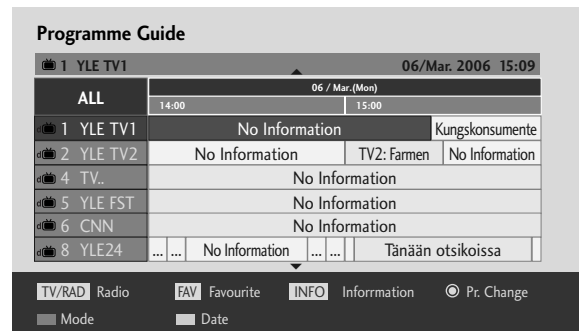
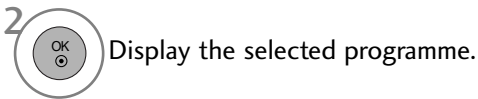
This function can be used only when the EPG information is broadcasted by broadcasting companies.

The EPG displays the programme description for next 8 days.

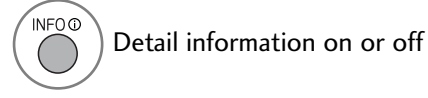
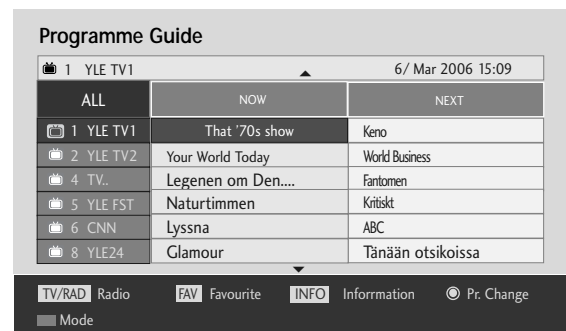
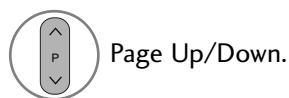
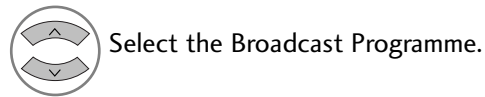
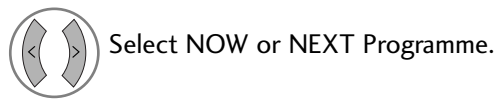
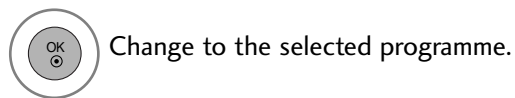
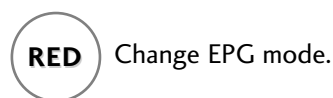
Switch on/off EPG



Select a programme









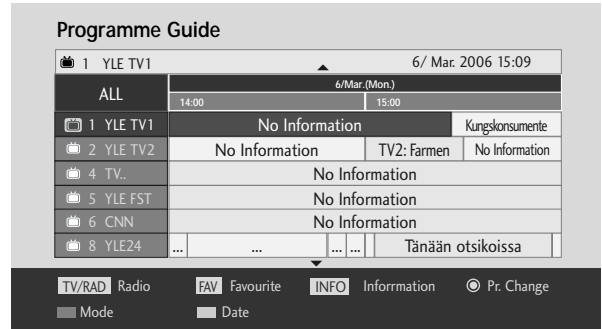
Button Function in NOW/NEXT Guide Mode






EPG (ELECTRONIC PROGRAMME GUIDE) (IN DIGITAL MODE)





Button Function in 8 Day Guide Mode

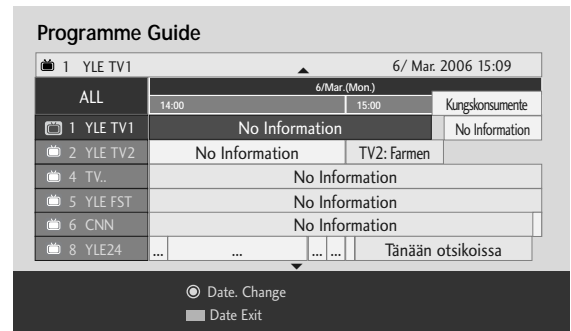
-  **RED** Change EPG mode.
-  **GREEN** Enter Date setting mode.
-  **OK** Change to the selected programme.
-  Select NOW or NEXT Programme.
-  Select the Broadcast Programme.
-  **P** Page Up/Down.



-  or  **Switch off EPG.**
-  **The detail information on or off.**

Button Function in Date Change Mode

-  **GREEN** Switch off Date setting mode.
-  **OK** Change to the selected date.
-  Select a date.
-  **Up/Down** Switch off Date setting mode.



-  or  **Switch off EPG.**

PICTURE CONTROL

PICTURE SIZE (ASPECT RATIO) CONTROL

You can watch the screen in various picture formats; 16:9, Just Scan, Original, 4:3, 14:9 and Zoom1/2.

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.

You can adjust the enlarge proportion using \wedge \vee button.

This function works in the following signal.

- 1 Press the **RATIO** button repeatedly to select the desired picture format.
You can also adjust **Aspect Ratio** in the **PICTURE** menu.

- **16:9**

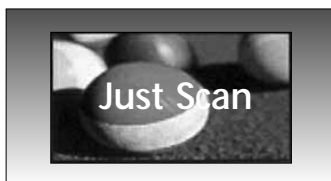
The following selection will allow you to adjust the picture horizontally, in linear proportion, to fill the entire screen (useful for viewing 4:3 formatted DVDs).



- **Just Scan**

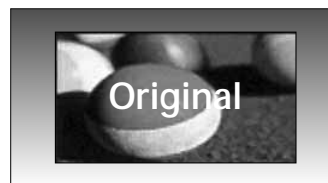
Following Selection will lead to you view the picture of best quality without loss of original picture in high resolution image.

Note: If there are interference in original picture, you can view interference at the edge.



- **Original**

When your TV receives a wide screen signal it will automatically change to the picture format broadcast.



- **4:3**

The following selection will allow you to view a picture with an original 4:3 aspect ratio, grey bars will appear on both the left and right of the screen.



PICTURE CONTROL

• 14:9

You can view a picture format of 14:9 or a general TV programme in the 14:9 mode. The 14:9 screen is viewed in the same way as in 4:3, but is magnified to the left and right.



• Zoom 1

The following selection will allow you to view the picture without any alteration, while filling the entire screen. However, the top and bottom of the picture will be cropped.



• Zoom 2

Choose Zoom 2 when you wish the picture to be altered, both horizontally extended and vertically cropped. The picture adopting a compromise between alteration and screen coverage.



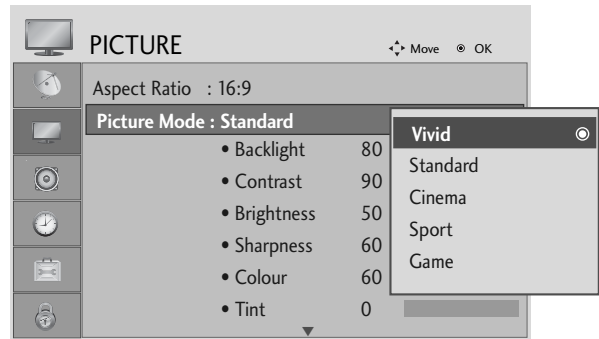
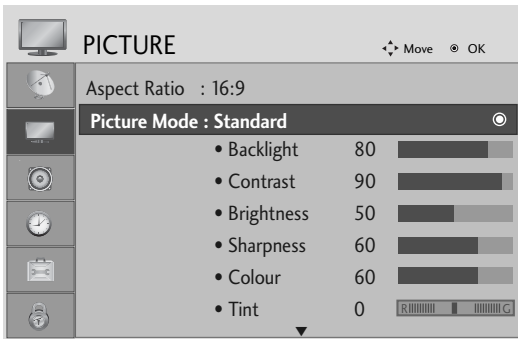
! NOTE

- ▶ You can only select 16:9 (Wide), Original, 4:3, 14:9, Zoom 1/2 in Component (under 720p) mode.
- ▶ You can only select 4:3, 16:9 (Wide) in RGB/HDMI[PC] mode only.
- ▶ In HDMI/Component (over 720p) mode, Just Scan is available.

PRESET PICTURE SETTINGS

Picture Mode-Preset

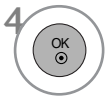
- Vivid** Enhances contrast, colour and resolution.
- Standard** Displays the standard-quality screen.
- Cinema** Optimizes video for watching movies.
- Sport** Optimizes video for watching sports events.
- Game** Optimizes video for playing games.



1   Select **PICTURE**.

2   Select **Picture Mode**.

3   Select **Vivid, Standard, Cinema, Sport** or **Game**.

4 

• **Picture Mode** adjusts the TV for the best picture appearance. Select the preset value in the **Picture Mode** menu based on the programme category.

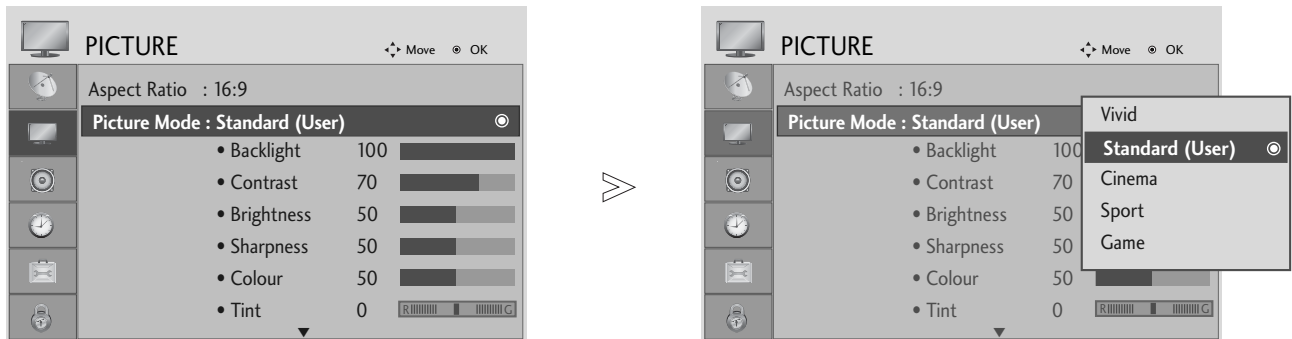
- Press the **MENU** button to return to normal TV viewing.
- Press the **RETURN** button to move to the previous menu screen.

PICTURE CONTROL

MANUAL PICTURE ADJUSTMENT

Picture Mode-User option

- **Contrast**
Adjusts the difference between light and dark levels in the picture.
- **Brightness**
Increases or decreases the amount of white in the picture.
- **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.
- **Colour**
Adjusts intensity of all colours.
- **Tint**
Adjusts the balance between red and green levels.



- 1   Select **PICTURE**.
- 2   Select **Picture Mode**.
- 3   Select **Vivid, Standard, Cinema, Sport or Game**
- 4   Select **Backlight, Contrast, Brightness, Sharpness, Colour or Tint**.
- 5   Make appropriate adjustments.

- Press the **MENU** button to return to normal TV viewing.
- Press the **RETURN** button to move to the previous menu screen.

! NOTE

- ▶ You cannot adjust colour, sharpness and tint in the RGB-PC mode.

PICTURE IMPROVEMENT TECHNOLOGY

Colour Temperature(Cool/Medium/Warm)

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.

Fresh Contrast(Off/Low/High)

Optimizes the contrast automatically according to the brightness of the reflection.

Fresh Colour(Off/Low/High)

Adjusts the colour of the reflection automatically to reproduce as close as possible natural colours.

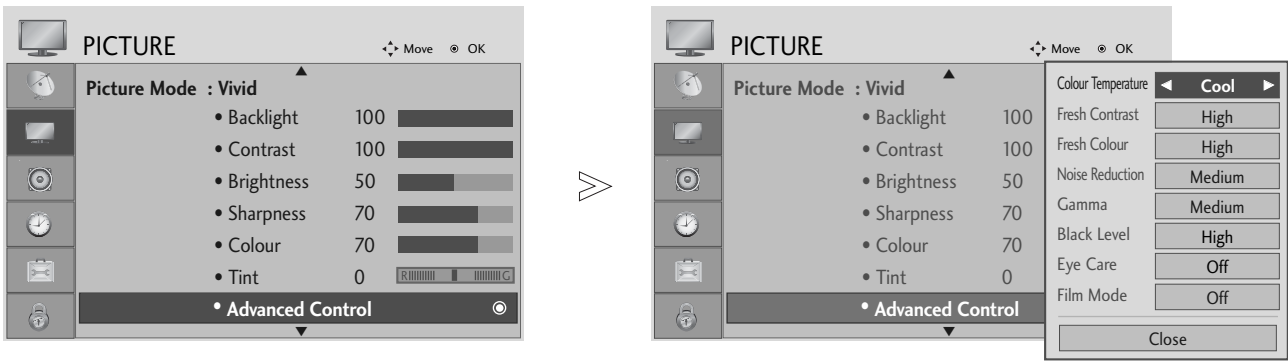
Noise Reduction(Off/Low/Medium/High)

Removes interference up to the point where it does not damage the original picture.

Gamma(Low/Medium/High)

High gamma values display whitish images and low gamma values display high contrast images.

- Low : Make dark and middle gray level area of the picture brighten.
- Medium: Express original picture gradation.
- High: Make dark and middle gray level area of the picture darken.



1 Select **PICTURE**.

2 Select **Advanced Control**.

3 Select your desired Source. : **Colour Temperature, Fresh Contrast, Fresh Colour, Noise Reduction or Gamma**.

4 Make appropriate adjustments.

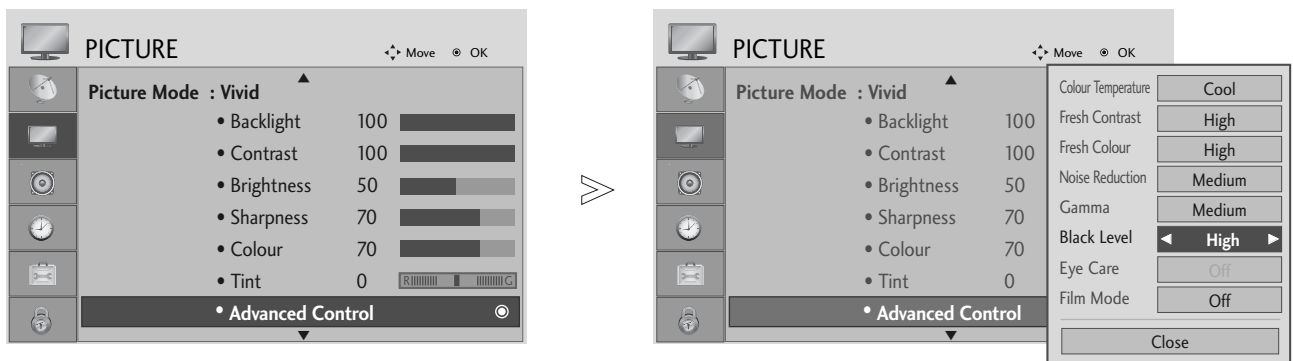
- Press the **MENU** button to return to normal TV viewing.
- Press the **RETURN** button to move to the previous menu screen.





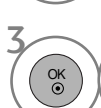



PICTURE CONTROL

ADVANCED - BLACK(DARKNESS) LEVEL

When you view a film this function adjusts the TV to best picture quality.

This function works in the following mode: AV (NTSC-M), HDMI or Component.



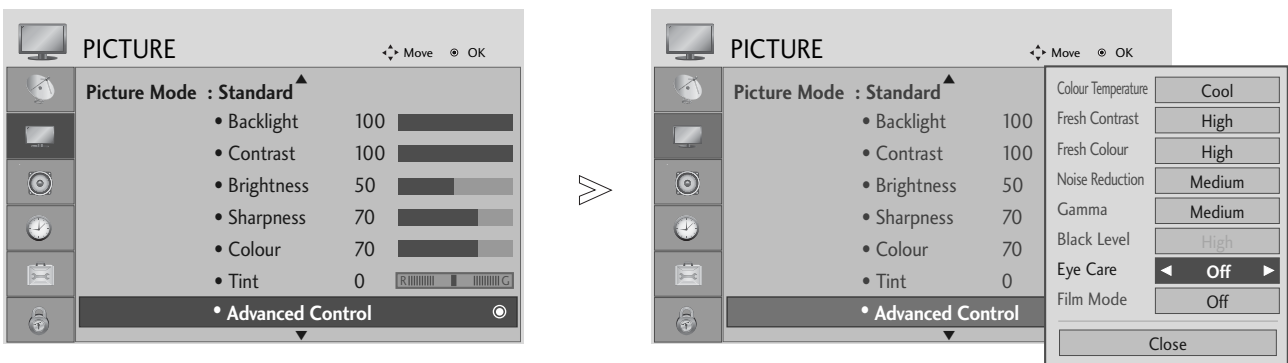
- 1   Select **PICTURE**.
- 2   Select **Advanced Control**.
- 3   Select **Black Level**.
- 4   Select **Low** or **High**.









- **Low** : The picture of the screen gets darker.
- **High** : The picture of the screen gets brighter.
- **Auto** : Realizing the black level of the screen and set it to High or Low automatically.

- Press the **MENU** button to return to normal TV viewing.
- Press the **RETURN** button to move to the previous menu screen.

EYE CARE

It helps you adjust brightness to prevent dazzling when the screen is too bright.



- 1   Select **PICTURE**.
- 2   Select **Advanced Control**.
- 3   Select **Eye Care**.
- 4   Select **On** or **Off**.

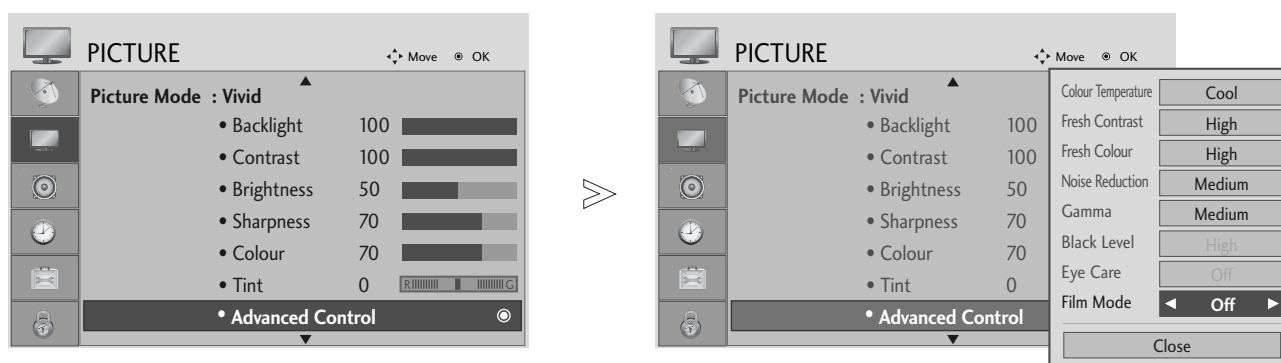
- Press the **MENU** button to return to normal TV viewing.
- Press the **RETURN** button to move to the previous menu screen.

PICTURE CONTROL








ADVANCED - FILM MODE

To set the TV up for the best picture quality for viewing films.

This feature operates only in TV, AV and Component 480i/576i/1080i mode.



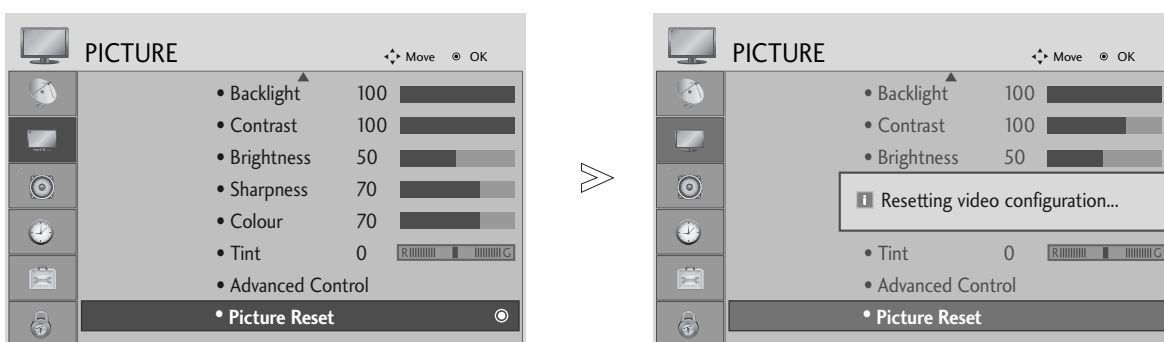
PICTURE CONTROL






- 1   Select PICTURE.
- 2   Select Advanced Control.
- 3   Select Film Mode.
- 4  Select On or Off.

- Press the **MENU** button to return to normal TV viewing.
- Press the **RETURN** button to move to the previous menu screen.

PICTURE RESET

Settings of the selected picture modes return to the default factory settings.

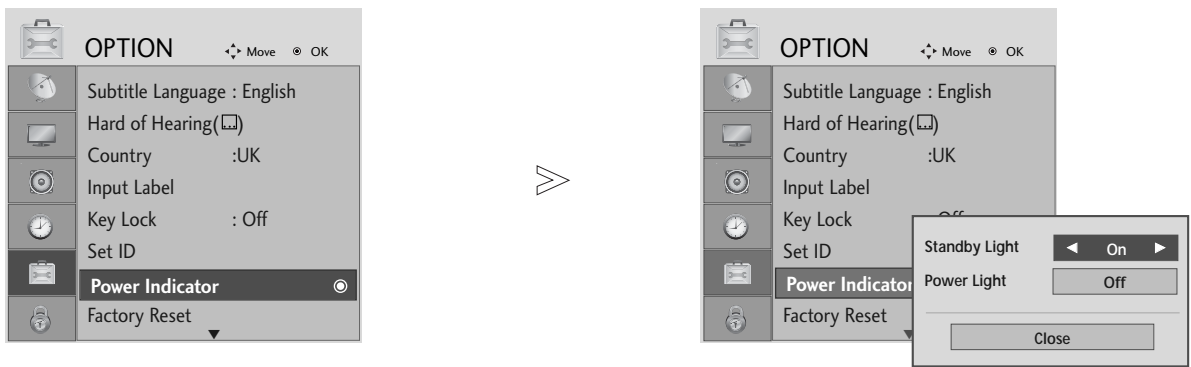









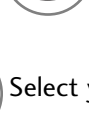
- 1   Select PICTURE.
- 2   Select Picture Reset.
- 3  Initialize the adjusted value.

PICTURE CONTROL

POWER INDICATOR

It helps you adjust the brightness of moving LED and sound when power is turned on.



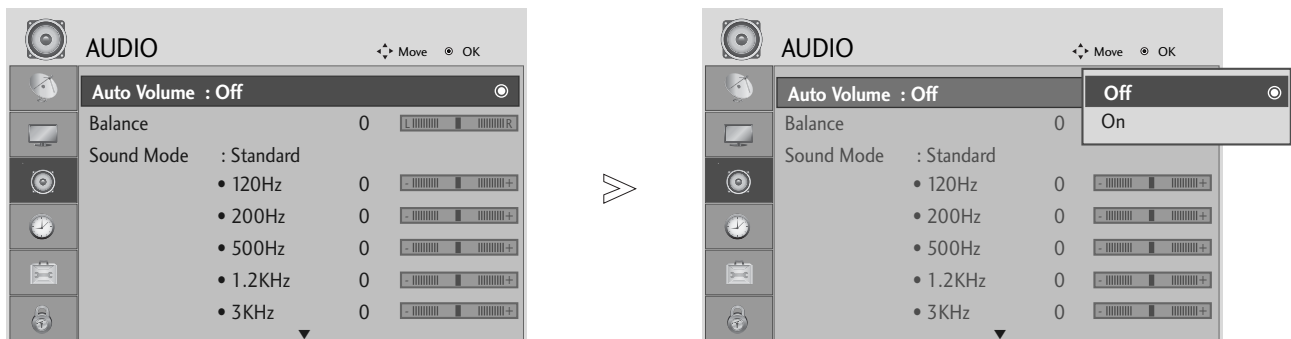
- 1   Select **OPTION**.
- 2   Select **Power Indicator**.
- 3   Select **Standby or Light, Power Light**.
- 4   Select your desired Source.







- Press the **MENU** button to return to normal TV viewing.
- Press the **RETURN** button to move to the previous menu screen.

SOUND & LANGUAGE CONTROL

AUTO VOLUME LEVELER

AVL automatically remains on the same level of volume if you change programmes.



- 1   Select **AUDIO**.
- 2   Select **Auto Volume**.
- 3   Select **On** or **Off**.

- Press the **MENU** button to return to normal TV viewing.
- Press the **RETURN** button to move to the previous menu screen.

SOUND & LANGUAGE CONTROL

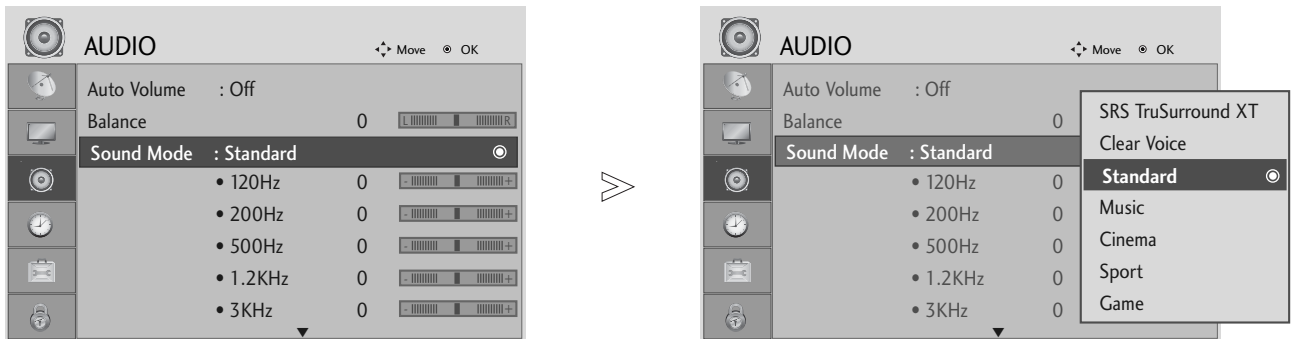
PRESET SOUND SETTINGS-SOUND MODE



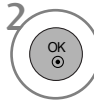
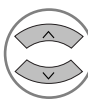


You can select your preferred sound setting; **SRS TruSurround XT** or **Clear Voice**, **Standard**, **Music**, **Cinema**, **Sport** or **Game** and you can also adjust the frequency of the equalizer.

Sound Mode lets you enjoy the best sound without any Special adjustment as the TV sets the appropriate sound options based on the programme content.

SRS TruSurround XT or **Clear Voice**, **Standard**, **Music**, **Cinema**, **Sport** and **Game** are preset for optimum sound quality at the factory.


- Standard** Offers standard-quality sound.
- Music** Optimizes sound for listening to music.
- Cinema** Optimizes sound for watching movies.
- Sport** Optimizes sound for watching sports events.
- Game** Optimizes sound for playing games.



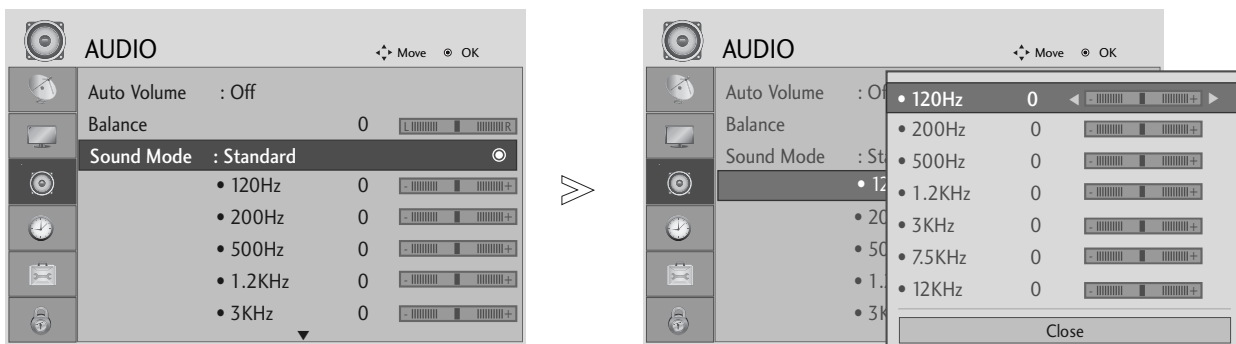
- 1   Select **AUDIO**.
- 2   Select **Sound Mode**.
- 3   Select **SRS TruSurround XT** or **Clear Voice**, **Standard**, **Music**, **Cinema**, **Sport** or **Game**.











• If you select **Clear Voice**, **SRS TruSurround XT** feature will not work.

- Press the **MENU** button to return to normal TV viewing.
- Press the **RETURN** button to move to the previous menu screen.

▶  are a trademark of SRS Labs, Inc.
 ▶ TruSurround XT and TruSurround HD technology is incorporated under license from SRS Labs, Inc.

SOUND SETTING ADJUSTMENT -USER MODE



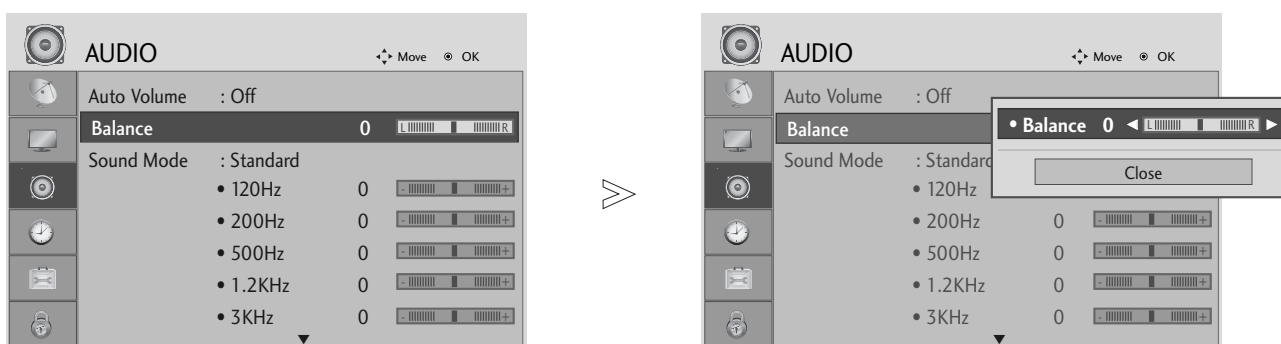
- 1   Select **AUDIO**.
- 2   Select **Sound Mode**.
- 3   Select **SRS TruSurround XT or Clear Voice, Standard, Music, Cinema, Sport or Game**.
- 4   Select a frequency band.
- 5   Set the desired sound level.




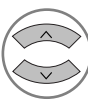
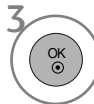
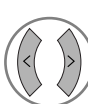
- Press the **MENU** button to return to normal TV viewing.
- Press the **RETURN** button to move to the previous menu screen.

SOUND & LANGUAGE CONTROL

BALANCE

You can adjust the sound balance of the speakers to preferred levels.

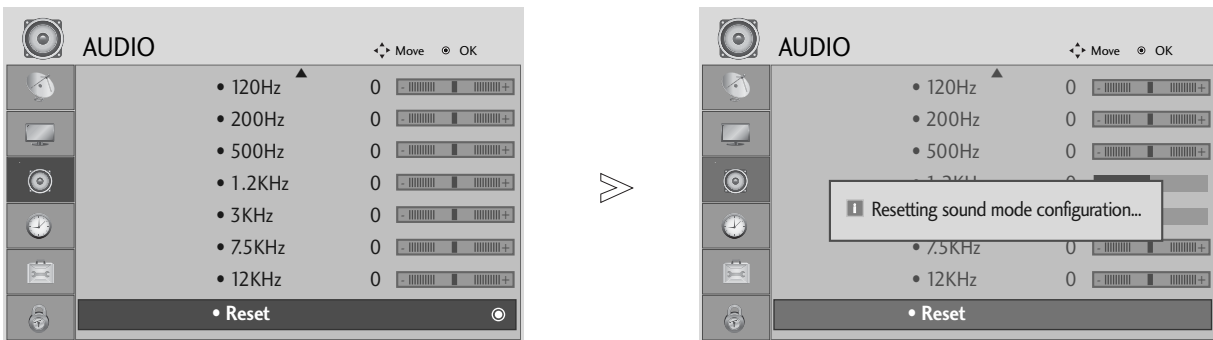







- 1   Select **AUDIO**.
- 2   Select **Balance**.
- 3   Make desired adjustment.

- Press the **MENU** button to return to normal TV viewing.
- Press the **RETURN** button to move to the previous menu screen.

AUDIO RESET

Settings of the selected Sound Mode return to the default factory settings.



- 1   Select **AUDIO**.
- 2   Select **Reset**.
- 3  Initialize the adjusted value.

- Press the **MENU** button to return to normal TV viewing.
- Press the **RETURN** button to move to the previous menu screen.

SOUND & LANGUAGE CONTROL

I/II

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, DUAL II, DUAL I+II |

■ 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 can be received in 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 TV is equipped with a receiver for NICAM reception, high quality NICAM (Near Instantaneous Companding Audio Multiplex) digital sound can be received.

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

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

Speaker Sound Output Selection

In AV, Component, RGB and HDMI mode, you can select output sound for the left and right loudspeakers.

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

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

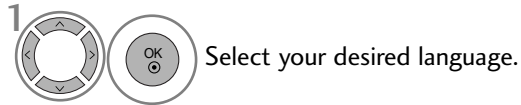
L+L: Audio signal from audio L input is sent to left and right loudspeakers.

R+R: Audio signal from audio R input is sent to left and right loudspeakers.

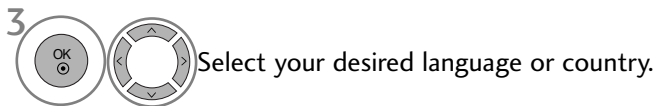
SOUND & LANGUAGE CONTROL

ON-SCREEN MENU LANGUAGE / COUNTRY SELECTION

The installation guide menu appears on the TV screen when it is switched on for the first time.



* If you want to change Language/ Country selection



- Press the **MENU** button to return to normal TV viewing.
- Press the **RETURN** button to move to the previous menu screen.

! NOTE

- ▶ If you do not finish the set-up **Installation Guide** by pressing **RETURN** or if you time out on the OSD (On Screen Display) the installation menu will continuously appear until the set up is completed whenever the TV is switched on
- ▶ If you select the wrong local country, teletext may not appear correctly on the screen and some problems may occur during teletext operation.
- ▶ The CI (Common Interface) function may not be applied based on country broadcasting circumstances.
- ▶ DTV mode control buttons may not function based on country broadcasting circumstances.
- ▶ In country that Digital broadcasting regulation isn't fixed, some DTV function may not work depending on digital broadcasting circumstances.

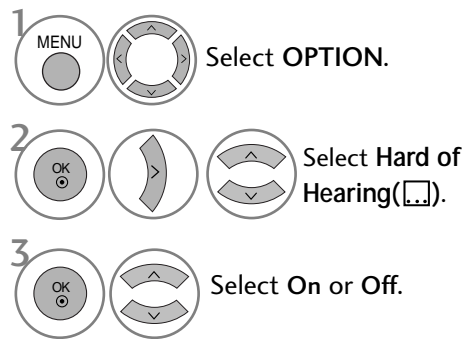
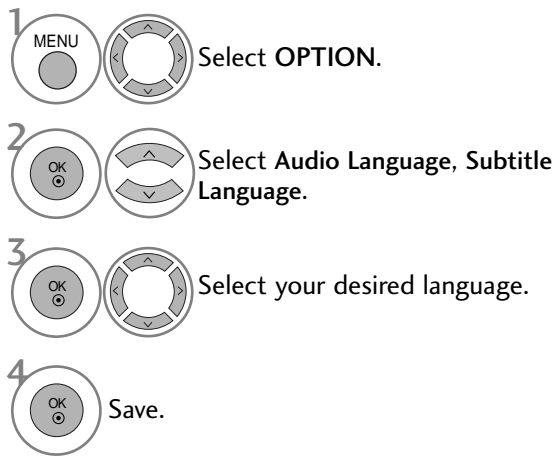
LANGUAGE SELECTION (IN DIGITAL MODE ONLY)

The Audio function allows selection of a preferred language.

If audio data in a selected language is not broadcast, the default language audio will be played.

Use the Subtitle function when two or more subtitle languages are broadcast. If subtitle data in a selected language is not broadcast, the default language subtitle will be displayed.

When the languages you selected as the primary for Audio Language and Subtitle Language are not supported, you can select language in secondary category.



- Press the **RETURN** button to move to the previous menu screen.

< Audio Language Selection >

- ▶ When two or more audio languages are broadcast, you can select the audio language.

< Subtitle Language Selection >

- ▶ When two or more subtitle languages are broadcast, you can select the subtitle language with the **SUBTITLE** button on the remote control.
- ▶ Press the **^ v < >** button to select a subtitle language.

- The audio/subtitles can be displayed in a simpler form with 1 to 3 characters broadcast by the service provider.
- When you select supplementary Audio (Audio for “Visual/Hearing Impaired”) the TV may output a part of the Main audio.

Audio Language OSD Information

| Display | Status |
|---------|------------------------------|
| N.A | Not Available |
| | MPEG Audio |
| | Dolby Digital Audio |
| | Audio for “Visual Impaired” |
| | Audio for “Hearing Impaired” |

Subtitle Language OSD Information

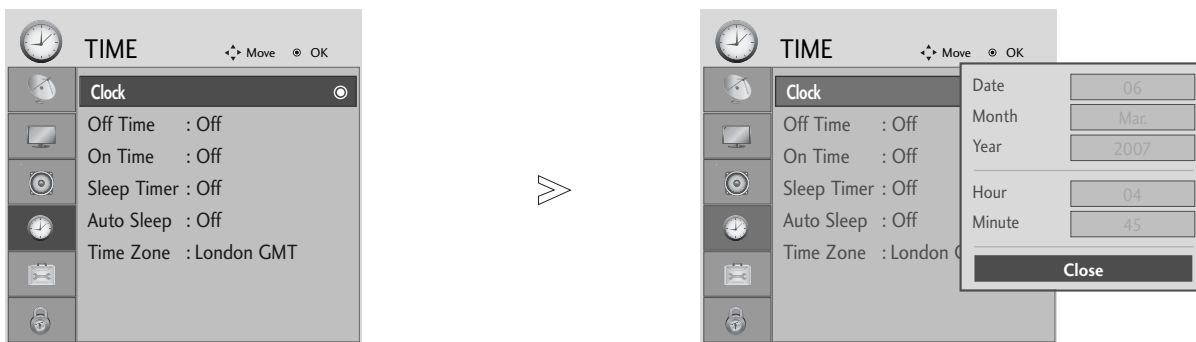
| Display | Status |
|---------|--------------------------------|
| N.A | Not Available |
| | Teletext Subtitle |
| | Subtitle for “Hard of Hearing” |




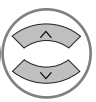

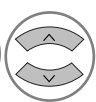
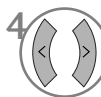
TIME SETTING

CLOCK SETUP

When you enter '1105' as password while the Clock Setup OSD is displayed, the OSD is enabled to set manually. If it is not manually set as shown above, the clock is set automatically when receiving a digital signal. This auto set-time function is not available anymore after you set time manually once. You have to do 'Factory Reset' if you want to use this function again. However, when the TV operates connected to the Interactive system, it is preemptively set with the time information sent from the system, and the manual setting and the automatic DTV setting cannot be done.

You must set the time correctly before using on/off timer function.



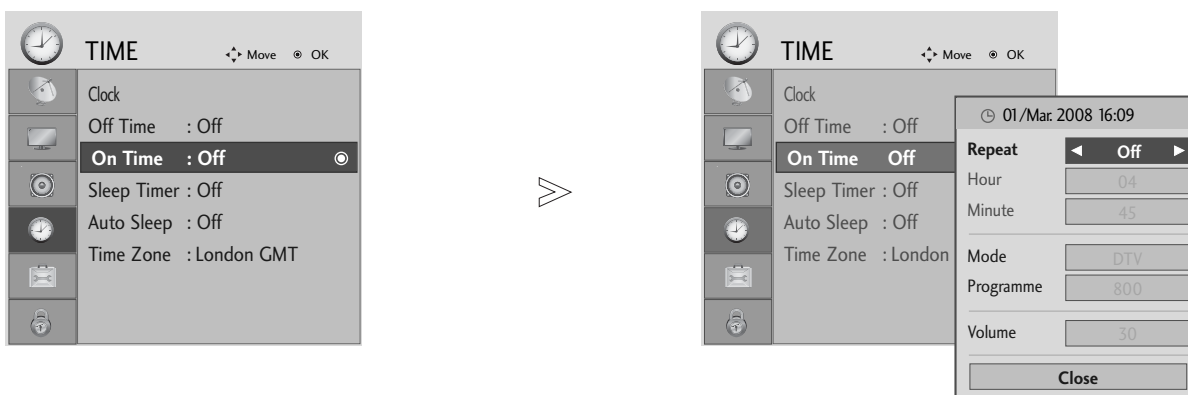
-   Select **TIME**.
-   Select **Clock**.
-   Select either the year, date, or time option.
-  Set the year, date, and time options.

- Press the **MENU** button to return to normal TV viewing.
- Press the **RETURN** button to move to the previous menu screen.

AUTO ON/OFF TIMER SETTING

The Off time function automatically switches the TV to standby at a preset time. Two hours after the TV is switched on by the on time function it will automatically switch back to standby mode unless a button has been pressed.

The Off time function overrides the On timer function if both are set to the same time. The TV must be in standby mode for the On timer to work.



- 1 Select TIME.
- 2 Select Off time or On time.
- 3 Select Repeat.
- 4 Select Off, Once, Daily, Mon ~ Fri, Mon ~ Sat, Sat ~ Sun or Sun.
- 5 Set the hour.
- 6 Set the minutes.

- To cancel On/Off Time function, select Off.
- For On Time function only

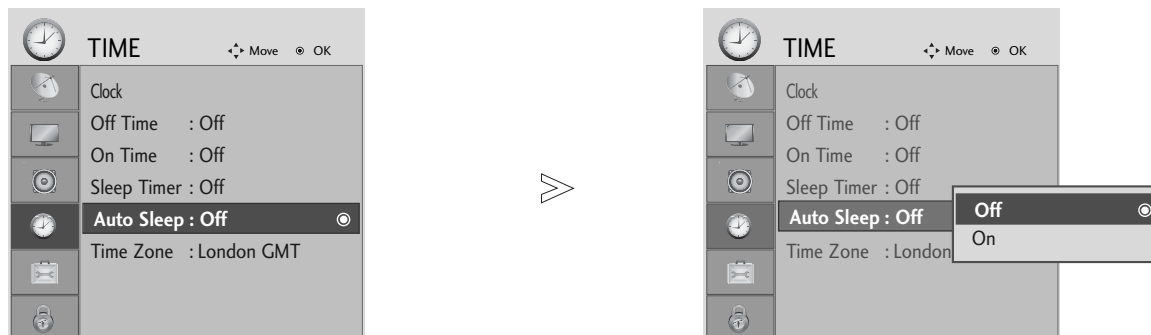
- 1 Select Mode.
- 2 Select TV, DTV or Radio.
- 3 Set the programme.
- 4 Adjust volume level at switch-on.

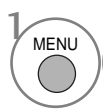





- Press the **MENU** button to return to normal TV viewing.
- Press the **RETURN** button to move to the previous menu screen.

TIME SETTING

AUTO SHUT-OFF SETTING

If the TV is switched on and there is no input signal, it will switch off automatically after 10 minutes.

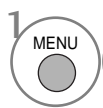

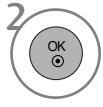
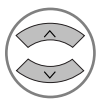
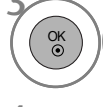




- 1   Select **TIME**.
- 2   Select **Auto Sleep**.
- 3   Select **Off** or **On**.

- Press the **MENU** button to return to normal TV viewing.
- Press the **RETURN** button to move to the previous menu screen.

TIME ZONE SETUP

When you select a Time Zone city, the TV time is set by the time offset information based on Time Zone and GMT (Greenwich Mean Time) which is received with the broadcast signal and the time is set automatically by a digital signal.

- 1   Select **TIME**.
- 2   Select **Time Zone**.
- 3   Select your viewing area time zone.
- 4  Confirm it.

SLEEP TIMER SETTING

You do not have to remember to switch the TV off before you go to sleep. The sleep timer automatically switches the TV to standby after the preset time has elapsed. You can also adjust Sleep Timer in the TIME menu.

- 1 Press the **SLEEP** button repeatedly to select the number of minutes. The display 'Sleep Timer : Off' will appear on the screen, followed by 10, 20, 30, 60, 90, 120, 180 and 240.
- 2 When the number of minutes you want is displayed on the screen, the timer begins to count down from the number of minutes selected.

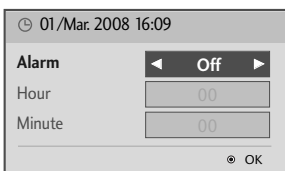
! NOTE

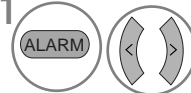
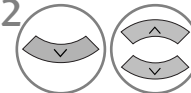
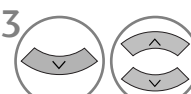
- ▶ To view the remaining sleep time, press the **SLEEP** button once.
- ▶ To cancel the sleep time, repeatedly press the **SLEEP** button until the display 'Sleep Timer : Off' appears.
- ▶ When you switch the set off, the set releases the preset sleep time.

ALARM SETTING

The alarm sound will go off when the designated time passes. When 60 seconds pass, the alarm sound will stop.

If you do not want Alarm Function, select "Off".



- 1  Select On.
- 2  Set the hour.
- 3  Set the minutes.

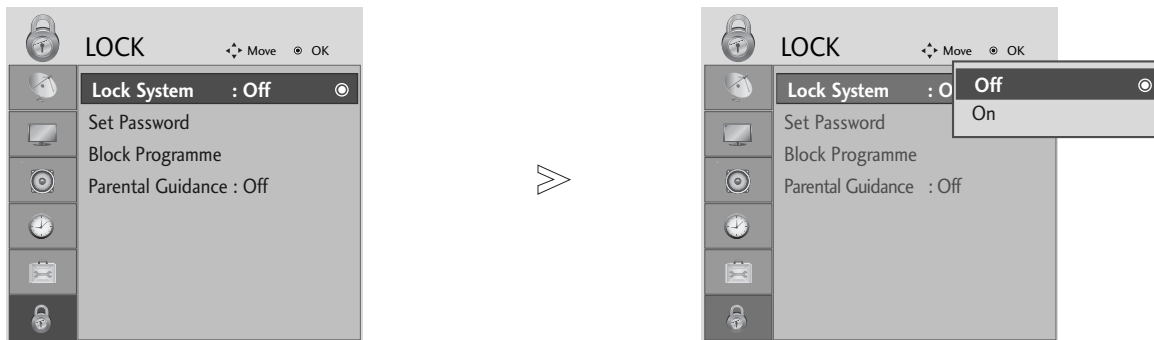
- Press the **MENU** button to return to normal TV viewing.











- When the alarm is set to "On" with the power on, alarm icon will be displayed on the clock LED on the front of the TV.
- When the time reaches the alarm time when the power is turned on, the screen to notify the alarm time will be displayed on the TV and the TV volume will be muted for 60 seconds to generate the alarm sound. When you press the OK button, the alarm will be dismissed.
- When the time reaches the alarm time in standby mode, the alarm will go off for 60 seconds keeping the standby mode. When you press any button on the remote controller, the alarm will stop.

PARENTAL CONTROL / RATINGS

SET PASSWORD & LOCK SYSTEM

Enter the password, press '0', '0', '0', '0' on the remote control handset.



-   Select **LOCK**.
-   Select **Lock System**.
-   Select **On**.
-    Set the password.
-  Input a 4-digit password.
Be sure to remember this number!
Re-enter new password for confirm.

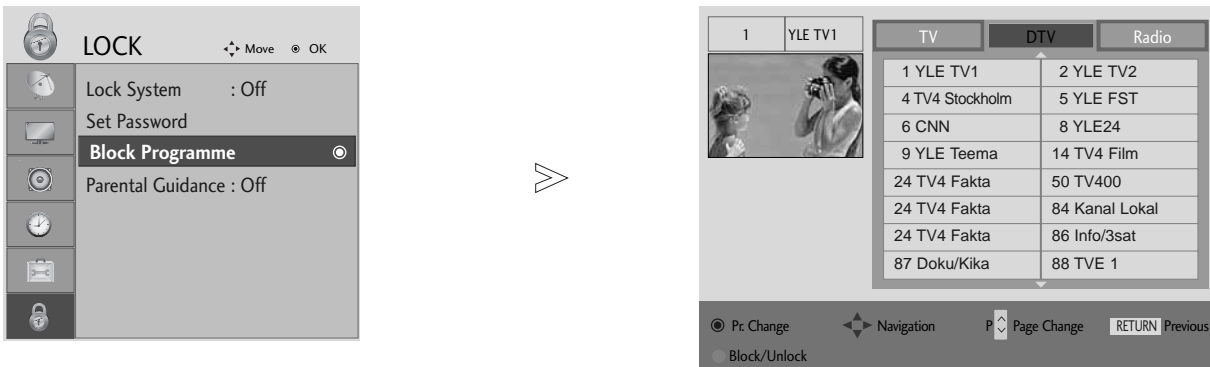
- If you forget your password, press '7', '7', '7', '7' on the remote control handset.








- Press the **MENU** button to return to normal TV viewing.
- Press the **RETURN** button to move to the previous menu screen.

BLOCK PROGRAMME

Blocks any programmes that you do not want to watch or that you do not want your children to watch.

It is available to use this function in Lock System “On”.



- 1   Select **LOCK**.
- 2   Select **Block Programme**.
- 3  Enter the **Block Programme**.
- 4   Select a programme to be locked.

- Press the **MENU** button to return to normal TV viewing.
- Press the **RETURN** button to move to the previous menu screen.

PARENTAL CONTROL / RATINGS

PARENTAL CONTROL (IN DIGITAL MODE ONLY)

This function operates according to information from the broadcasting station. Therefore if the signal has incorrect information, this function does not operate.





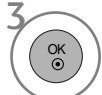

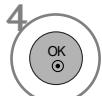
A password is required to gain access to this menu.

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

Prevents children from watching certain adult's TV programmes, according to the ratings limit set.

Enter a password to watch a rated programme.

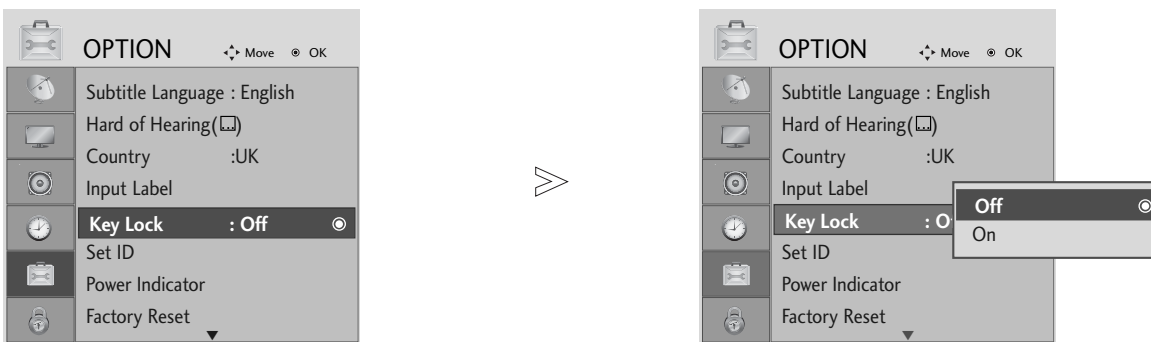









-   Select **LOCK**.
-   Select **Parental Guidance**.
-   Make appropriate adjustments.
-  Save.

- Press the **MENU** button to return to normal TV viewing.
- Press the **RETURN** button to move to the previous menu screen.

KEY LOCK

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



- 1   Select **OPTION**.
- 2   Select **Key Lock**.
- 3   Select **On** or **Off**.
- 4  Save.

- In **Key Lock 'On'**, if the TV is turned off, press the **Power / I**, **INPUT**, **P ▲ ▼** button on the TV or **POWER**, **INPUT**, **P ▲ ▼** or **NUMBER** buttons on the remote control.
- With the **Key Lock On**, the display '**Key Lock On**' appears on the screen if any button on the front panel is pressed while viewing the TV.

- Press the **MENU** button to return to normal TV viewing.
- Press the **RETURN** button to move to the previous menu screen.

TELETEXT

This feature is not available in all countries.

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

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

SWITCH ON/OFF

Press the **TEXT** button to switch to teletext. The initial page or last page viewed appears on the screen.

Two page numbers, TV station name, date and time are displayed on the screen headline. The first page number indicates your selection, while the second shows the current page displayed.

Press the **TEXT** or **EXIT** button to switch off teletext. The previous mode reappears.

SIMPLE TEXT

■ Page selection

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

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 **P** \wedge button can be used.
- 4 The red button returns to the previous selection. Alternatively the \vee button can be used.




■ Direct page selection

As with 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 menu.
- ② You can select the pages which are colour coded along the bottom line with corresponding coloured buttons.
- ③ AS with SIMPLE teletext mode, you can select a page by entering its three digit page number with the NUMBER buttons in FASTEXT mode.
- ④ The P   button can be used to select the preceding or following page.

SPECIAL TELETEXT FUNCTIONS



■ REVEAL

Select this menu to display concealed information, such as solutions to riddles or puzzles.





■ UPDATE

Displays the TV picture on the screen while waiting for a 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. Select this menu again to view the updated teletext page.



■ TIME

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



■ HOLD

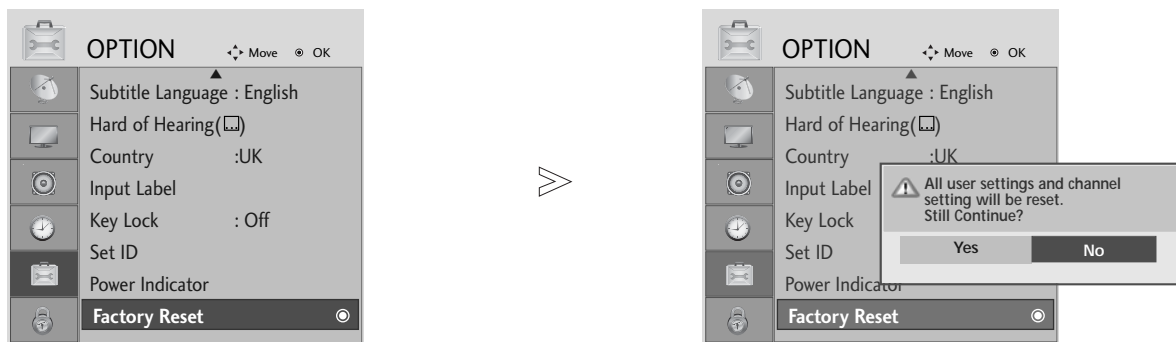
Stops the automatic page change which will occur if a teletext page consists of 2 or more sub pages. The number of sub pages and the sub page displayed is, usually, shown on the screen below the time. When this menu is selected the stop symbol is displayed at the top left-hand corner of the screen and the automatic page change is inactive.


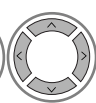

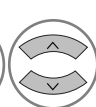

APPENDIX

Initializing (Reset to original factory settings)

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

When the **Lock System** menu is “On”, the message to enter the password appears.



- 1   Select **OPTION**.
- 2   Select **Factory Reset**.
- 3 

- In **Lock System “On”**, if you forget your password, press ‘7’, ‘7’, ‘7’, ‘7’ on the remote control handset.

- Press the **MENU** button to return to normal TV viewing.
- Press the **RETURN** button to move to the previous menu screen.

TROUBLESHOOTING

| The TV does not operate properly. | |
|-----------------------------------|--|
| The remote control does not work | <ul style="list-style-type: none"> ■ Check to see if there is any object between the TV and the remote control causing an 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, DVD etc. ■ Install new batteries. |
| Power is suddenly turned off | <ul style="list-style-type: none"> ■ Is the sleep timer set? ■ Check the power control settings. Has the Power supply been interrupted. ■ Is Auto sleep activated on this station? |

| The video function does not work. | |
|---|--|
| No picture & No sound | <ul style="list-style-type: none"> ■ Check whether the TV is switched on. ■ Try another channel. The problem may be with the broadcast. ■ Is the power cord inserted correctly into the mains? ■ Check your antenna direction and/or location. ■ Test the mains outlet by plugging another TV into the same outlet. |
| Picture appears slowly after switching on | <ul style="list-style-type: none"> ■ This is normal, the image is muted during the TV startup process. Please contact your service centre, if the picture has not appeared after five minutes. |
| No or poor colour or poor picture | <ul style="list-style-type: none"> ■ Adjust Colour in menu option. ■ Allow a sufficient distance between the TV 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 | <ul style="list-style-type: none"> ■ Check for local interference such as an electrical appliance or power tool. |
| Poor reception on some channels | <ul style="list-style-type: none"> ■ Station or cable channel experiencing problems, tune to another station. ■ Station signal is weak, reposition the antenna to receive weaker stations. ■ Check for sources of possible interference. |
| Lines or streaks in pictures | <ul style="list-style-type: none"> ■ Check antenna (Change the position of the antenna). |

APPENDIX

The audio function does not work.

| | |
|------------------------------------|---|
| Picture OK & No sound | <ul style="list-style-type: none">■ Press the VOLUME button.■ Sound muted? Press MUTE button.■ Try another channel. The problem may be with the broadcast.■ Are the audio cables installed properly? |
| No output from one of the speakers | <ul style="list-style-type: none">■ Adjust Balance in menu option. |
| Unusual sound from inside the TV | <ul style="list-style-type: none">■ A change in ambient humidity or temperature may result in an unusual noise when the TV is switched on or off and does not indicate a fault with the TV. |

There is a problem in PC mode. (Only PC mode applied)

| | |
|--|---|
| The signal is out of range (Invalid format) | <ul style="list-style-type: none">■ Adjust resolution, horizontal frequency, or vertical frequency.■ Check the input source. |
| Vertical bar or stripe on background & Horizontal Noise & Incorrect position | <ul style="list-style-type: none">■ Use Auto configure or adjust clock, phase, or H/V position. (Option) |
| Screen colour is unstable or single colour | <ul style="list-style-type: none">■ Check the signal cable.■ Reinstall the PC video card. |

MAINTENANCE

Early malfunctions can be prevented. Careful and regular cleaning can prolong the life of your new TV.

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

Cleaning the Screen

- 1 A good way to keep the dust off your screen for a while is to wet a soft cloth in a mixture of lukewarm water and a little fabric softener or dish washing detergent. Wring the cloth until it is almost dry, and then use it to wipe the screen.
- 2 Ensure there is no excess water on the screen. Allow any water or dampness to evaporate before switching on.

Cleaning the Cabinet

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

Extended Absence

CAUTION

- ▶ If you expect to leave your TV dormant for prolonged periods (such as a holiday), unplug the power cord to protect against possible damage from lightning or power surges.

APPENDIX

PRODUCT SPECIFICATIONS

| MODELS | | 32LG35** | 37LG35** | 42LG35** |
|--|-----------------------|---|---|--|
| | | 32LG350H-TA | 37LG350H-TA | 42LG350H-TA |
| Dimensions (Width x Height x Depth) | with stand | 801.8 x 604.2 x 227.3 mm 31.6 x 23.8 x 9.0 inches | 919.6 x 682.3 x 293.8 mm 36.2 x 26.9 x 11.6 inches | 1032.8 x 742.3 x 293.8 mm 40.7 x 29.3 x 11.6 inches |
| | without stand | 801.8 x 544.1 x 79.0 mm 31.6 x 21.5 x 3.2 inches | 919.6 x 610.3 x 89.0 mm 36.2 x 24.0 x 3.5 inches | 1032.8 x 670.1 x 92.0 mm 40.7 x 26.4 x 3.7 inches |
| Weight | with stand | 13.4 kg / 29.6 lbs | 18.8 kg / 41.5 lbs | 23.6 kg / 52.1 lbs |
| | without stand | 11.9 kg / 26.3 lbs | 16.2 kg / 35.7 lbs | 21.0 kg / 46.3 lbs |
| Power requirement | | AC100-240V~ 50/60Hz | AC100-240V~ 50/60Hz | AC100-240V~ 50/60Hz |
| Power Consumption | | 150W | 180W | 230W |
| Television System | | PAL/SECAM B/G/D/K, PAL I/II, SECAM L/L' | | |
| Programme Coverage | | VHF: E2 ~ E12, UHF: E21 ~ E69, CATV: S1 ~ S20, HYPER: S21 ~ S47 | | |
| External Antenna Impedance | | 75 Ω | | |
| Environment condition | Operating Temperature | 0 ~ 40°C / 32 ~ 104°F | | |
| | Operating Humidity | Less than 80% | | |
| | Storage Temperature | -20 ~ 60°C / -4 ~ 140°F | | |
| | Storage Humidity | Less than 85% | | |

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

PROGRAMMING THE REMOTE CONTROL

The remote control is a multi brand or universal remote. It can be programmed. to operate most remote controlled devices from other manufacturers.

Note that the remote control may not control all models from other brands.

Programming a code into a remote mode

- 1 Testing your remote control.
To find out whether your remote control can operate other components without programming, turn on a component such as a DVD and press the corresponding mode button (such as a **DVD**) on the remote control, while pointing at the component. Test the POWER and P ^ ∨ buttons to see if the component responds correctly. If the component does not operate correctly, the remote control requires programming to operate the device.
- 2 Switch on the component to be programmed, then press the corresponding mode button (such as **DVD**) on the remote control. The remote control button of the desired device is illuminated.
- 3 Press the **MENU** and **MUTE** buttons simultaneously, the remote control is ready to be programmed with the code.
- 4 Enter a code number using the number buttons on the remote control. Programming code numbers for the corresponding component can be found on the following pages. If the code is correct, the device will turn off.
- 5 Press the **MENU** button to store the code.
- 6 Test the remote control functions to see if the component responds correctly. If not, repeat from step 2.

PROGRAMMING CODE

DVD

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

APPENDIX

IR CODES

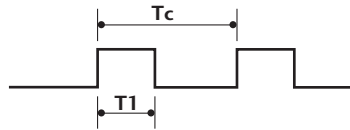
1. How to Connect

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

2. Remote Control IR Codes

■ Output waveform

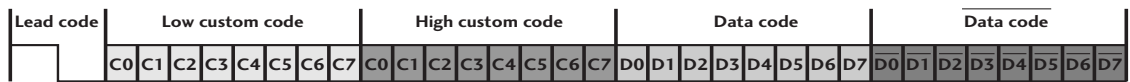
Single pulse, modulated with 37.917KHz signal at 455KHz



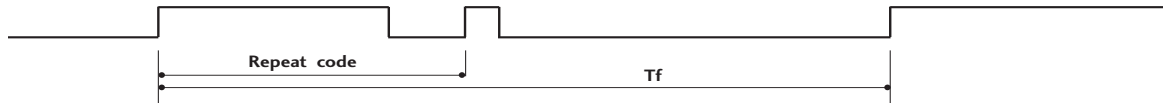
Carrier frequency
 $FCAR = 1/TC = fOSC/12$
 Duty ratio = $T1/TC = 1/3$

■ Configuration of frame

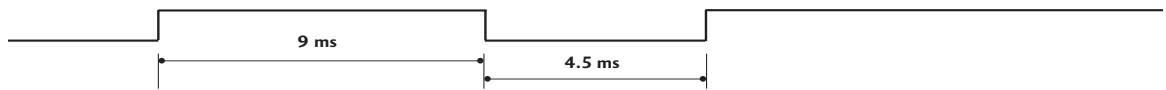
1st frame



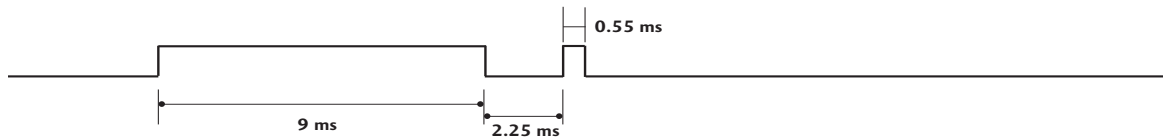
Repeat frame



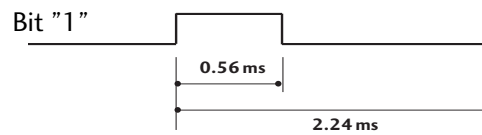
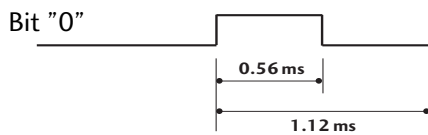
■ Lead code



■ Repeat code



■ Bit description



■ Frame interval: Tf

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



| Code (Hexa) | Function | Note |
|-------------|----------------|---------------------------|
| 08 | POWER | R/C BUTTON (POWER ON/OFF) |
| 0B | INPUT | R/C BUTTON |
| E8 | ALARM | R/C BUTTON |
| 0A | I/II | R/C BUTTON |
| 43 | MENU | R/C BUTTON |
| AB | GUIDE | R/C BUTTON |
| 07 | Left (<) | R/C BUTTON |
| 06 | Right (>) | R/C BUTTON |
| 40 | Up (^) | R/C BUTTON |
| 41 | Down (v) | R/C BUTTON |
| 44 | OK(⊙) | R/C BUTTON |
| 28 | RETURN/EXIT | R/C BUTTON |
| AA | INFO ⓘ | R/C BUTTON |
| 79 | RATIO | R/C BUTTON |
| 02 | ⏏ + | R/C BUTTON |
| 03 | ⏏ - | R/C BUTTON |
| 00 | P (^) | R/C BUTTON |
| 01 | P (v) | R/C BUTTON |
| 1E | MARK(FAV) | R/C BUTTON |
| 09 | MUTE | R/C BUTTON |
| 10 ~19 | Number Key 0~9 | R/C BUTTON |
| 53 | LIST | R/C BUTTON |
| 1A | Q.VIEW | R/C BUTTON |
| 72 | RED Key | R/C BUTTON |
| 71 | GREEN Key | R/C BUTTON |
| 63 | YELLOW Key | R/C BUTTON |
| 61 | BLUE Key | R/C BUTTON |
| 20 | TEXT | R/C BUTTON |
| 26 | TIME(■) | R/C BUTTON |
| 62 | UPDATE(▶) | R/C BUTTON |
| 2A | REVEAL(II) | R/C BUTTON |
| 70 | USB | R/C BUTTON |
| 65 | HOLD(◀◀) | R/C BUTTON |
| 39 | SUBTITLE(▶▶) | R/C BUTTON |
| 0E | SLEEP | R/C BUTTON |

APPENDIX

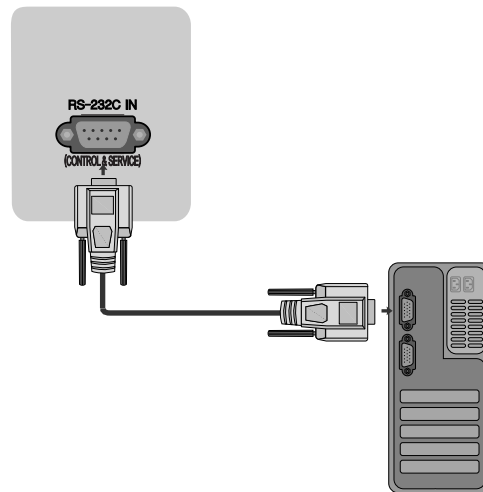
EXTERNAL CONTROL DEVICE SETUP

RS-232C Setup

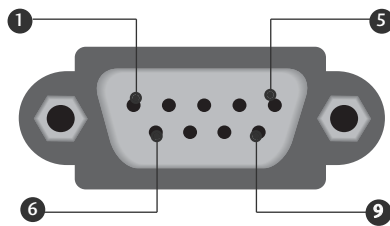
Connect the RS-232C (serial port) input jack to an external control device (such as a computer or an A/V control system) to control the TV's functions externally.

Connect the serial port of the control device to the RS-232C jack on the TV back panel.

Note: RS-232C connection cables are not supplied with the TV.



Type of Connector: D-Sub 9-Pin Male



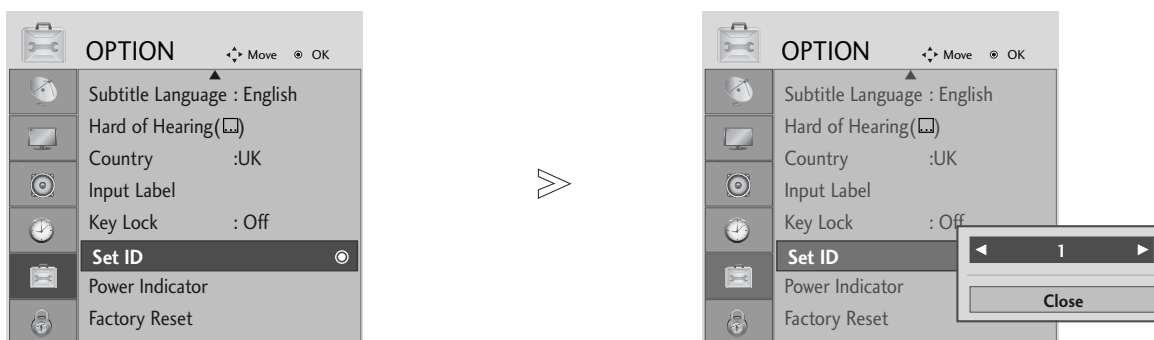
Male connector on box, viewed towards connector.

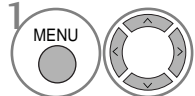
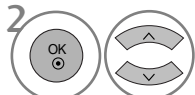
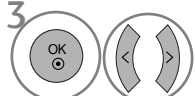
| No. | Signal | Signal requirements |
|------|---------------|--|
| 1 | VCC | |
| 2 | RX RS232 | Standard RS232 specification |
| 3 | TX RS232 | Standard RS232 specification |
| 4 | IR from TV | |
| 5 | GND | Power ground |
| 6, 8 | Not connected | |
| 7 | +5V | 1A 5VDC 10%, max 100mV ripple, (note A) |
| 9 | +12V | 1A 12VDC 10%, max 100mV ripple, (note A) |

Set ID

Use this function to specify a set ID number.

Refer to 'Real Data Mapping' ► p.97



-  Select **OPTION**.
-  Select **Set ID**.
-  adjust **Set ID** to choose the desired TV ID number.
The adjustment range of SET ID is 1~99.

- Press **RETURN** to move to the previous menu screen.

APPENDIX

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 | 00 ~ 01 |
| 02. Aspect Ratio | k | c | Refer to p. 95 |
| 03. Screen Mute | k | d | 00 ~ 01 |
| 04. Volume Mute | k | e | 00 ~ 01 |
| 05. Volume Control | k | f | 00 ~ 64 |
| 06. Contrast | k | g | 00 ~ 64 |
| 07. Brightness | k | h | 00 ~ 64 |
| 08. Colour | k | i | 00 ~ 64 |
| 09. Tint | k | j | 00 ~ 64 |
| 10. Sharpness | k | k | 00 ~ 64 |
| 11. OSD Select | k | l | 00 ~ 01 |
| 12. Remote control lock mode | k | m | 00 ~ 01 |
| 13. Balance | k | t | 00 ~ 64 |
| 14. Colour Temperature | k | u | 00 ~ 02 |
| 15. Abnormal Status | k | z | FF |
| 16. Auto Configure | j | u | 01 |
| 17. Equalize | j | v | Refer to p. 97 |
| 18. Tune Command | m | a | Refer to p. 97 |
| 19. Channel Memory/Skip | m | b | 00 ~ 01 |
| 20. Key | m | c | Key Code |
| 21. Control Back Light | m | g | 00 ~ 64 |
| 22. Input select (Main) | x | b | Refer to p. 98 |

* When setting the 15 ~ 22, a menu does not appear on screen.

Transmission / Receiving Protocol

Transmission

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

- * [Command 1] : First command to control the TV.
(j, k, m or x)
- * [Command 2] : Second command to control the TV.
- * [Set ID] : You can adjust the set ID to choose desired monitor ID number in option menu. Adjustment range is 1 ~ 99. When selecting Set ID '0', every connected 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 TV 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 TV transmits ACK (acknowledgement) based on this format when receiving abnormal data from nonviable functions or communication errors.

01. Power (Command: k a)

► To control Power On/Off of the TV.

Transmission

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

Data 00 : Power Off 01 : Power On

Ack

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

► To show Power On/Off.

Transmission

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

Ack

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

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

* OK Ack, Error Ack, and other message maybe display on the screen when TV is power On.

02. Aspect Ratio (Command: k c) (Main Picture Size)

► To adjust the screen format. (Main picture format)

You can also adjust the screen format using the **Aspect Ratio** in the PICTURE menu.

Transmission

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

Data 01 : Normal screen (4:3) 06 : Original
02 : Wide screen (16:9) 07 : 14:9
04 : Zoom1 09 : Just Scan
05 : Zoom2

Ack

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

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

* In HDMI/Component (over 720p) mode, Just Scan is available.

* You can only select Original in UK digital teletext (MHEG-5).

03. Screen Mute (Command: k d)

► To select screen mute on/off.

Transmission

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

Data 00 : screen mute off(picture on)
01 : screen mute on (picture off)

| 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | Function |
|---|---|---|---|---|---|---|---|-----------------------------|
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Screen Mute Off(picture on) |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | Screen Mute On(picture off) |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Video-Out Mute Off |
| 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | Video-Out Mute On |

* In case of Video-Out mute on only, TV will display On Screen Display(OSD).

But, In case of Screen Mute On, TV will not display OSD.

Ack

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

04. Volume Mute (Command: k 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 00 : Volume mute on (Volume off)
01 : Volume mute off (Volume on)

Ack

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

05. Volume Control (Command: k 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 : 00 ~ Max : 64

* Refer to 'Real data mapping 1'. See page 97.

Ack

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

06. Contrast (Command: k g)

► To adjust screen contrast.

You can also adjust contrast in the PICTURE menu.

Transmission

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

Data Min : 00 ~ Max : 64

* Refer to 'Real data mapping 1'. See page 97.

Ack

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

07. Brightness (Command: k h)

► To adjust screen brightness.

You can also adjust brightness in the PICTURE menu.

Transmission

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

Data Min : 00 ~ Max : 64

* Refer to 'Real data mapping 1'. See page 97.

Ack

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

08. Colour (Command: k i)

► To adjust the screen colour.

You can also adjust colour in the PICTURE menu.

Transmission

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

Data Min : 00 ~ Max : 64

* Refer to 'Real data mapping 1'. See page 97.

Ack

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

APPENDIX

09. Tint (Command: k j)

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

Transmission

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

Data Red : 00 ~ Green : 64
* Refer to 'Real data mapping 1'. See page 97.

Ack

```
[j][ ][Set ID][ ][OK/NG][Data][x]
```

10. Sharpness (Command: k k)

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

Transmission

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

Data Min : 00 ~ Max : 64
* Refer to 'Real data mapping 1'. See page 97.

Ack

```
[k][ ][Set ID][ ][OK/NG][Data][x]
```

11. OSD Select (Command: k l)

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

Transmission

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

Data 00 : OSD off 01 : OSD on

Ack

```
[l][ ][Set ID][ ][OK/NG][Data][x]
```

12. Remote control lock mode (Command: k m)

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

Transmission

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

Data 00 : Lock off 01 : Lock on

Ack

```
[m][ ][Set ID][ ][OK/NG][Data][x]
```

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

13. Balance (Command: k t)

- ▶ To adjust balance.
You can also adjust balance in the AUDIO menu.

Transmission

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

Data Min : 00 ~ Max : 64
* Refer to 'Real data mapping 1'. See page 97.

Ack

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

14. Colour Temperature (Command: k u)

- ▶ To adjust colour temperature. You can also adjust Colour Temperature in the PICTURE menu.

Transmission

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

Data 00: Medium 01: Cool 02: Warm

Ack

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

15. Abnormal State (Command: k z)

- ▶ To recognize an abnormal state.

Transmission

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

Data FF : Read

Ack

```
[z][ ][Set ID][ ][OK/NG][Data][x]
```

Data 00: Normal (Power on and signal exist)
01: No signal (Power on)
02: Turn the monitor off by remote control
03: Turn the monitor off by sleep time function
04: Turn the monitor off by RS-232C function
05: 5V down
06: AC down
07: Turn the monitor off by Fan Alarm function
08: Turn the monitor off by Off time function
09: Turn the monitor off by Auto sleep function
a: Turn the monitor off by AV Board detect

- * This function is "read only".

16. Auto Configure (Command: j 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 01: To set

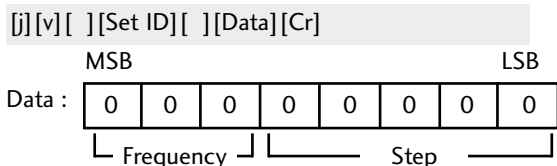
Ack

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

17. Equalize (Command : j v)

► To adjust equalize.

Transmission



| | | |
|-------------|---|--------|
| Frequency : | 0 | 120Hz |
| | 1 | 200Hz |
| | 2 | 500Hz |
| | 3 | 1.2kHz |
| | 4 | 3kHz |
| | 5 | 7.5kHz |
| | 6 | 12kHz |

Step (Frequency data):
Refer to 'Real data mapping 3'. See page 97.

Ack

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

* Equalize command expression

| 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | Frequency |
|---|---|---|---|---|---|---|---|-----------|
| 0 | 0 | 0 | | | | | | 120Hz |
| 0 | 0 | 1 | | | | | | 200Hz |
| 0 | 1 | 0 | | | | | | 500Hz |
| 0 | 1 | 1 | | | | | | 1.2KHz |
| 1 | 0 | 0 | | | | | | 3KHz |
| 1 | 0 | 1 | | | | | | 7.5KHz |
| 1 | 1 | 0 | | | | | | 12KHz |

| 7 | 6 | 5 | Step | | | | | OSD Value |
|---|---|---|------|----|----|----|----|-----------|
| | | | 4 | 3 | 2 | 1 | 0 | |
| | | | 0 | 0 | 0 | 0 | 0 | -24 |
| | | | .. | .. | .. | .. | .. | .. |
| | | | 0 | 1 | 1 | 1 | 1 | 0 |
| | | | .. | .. | .. | .. | .. | .. |
| | | | 1 | 1 | 1 | 1 | 1 | 24 |

Ex) If you wish to set frequency 500Hz and -20 value on menu OSD, refer to 'Real data mapping 3' and then find Step value for -20.

010 (500Hz) 00011 (Step 3) => 01000011 => 43
(Hexadecimal) : [j][v][][Set ID][][43][Cr]

* 3 bits of Frequency and 5 bits of Step makes 8 bits (1 byte). Change 8 bits to Hexadecimal code.

18. Tune Command (Command: m a)

► Select channel to following physical number.

Transmission

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

Data 00 : High channel data
Data 01 : Low channel data
ex. No. 47 -> 00 2F (2FH)
No. 394 -> 01 88 (188H),
DTV No. 0 -> Don't care
Data 02 : 0x00 : ATV, 0x10 : DTV, 0x20 : Radio

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

Ack

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

Data Min: 00 ~ Max: 7DH

19. Channel Memory/Skip (Command: m b)

► To set skip status for the current Programme.

Transmission

[m][b][][Set ID][][Data][Cr]

Data 00 : Skip
01 : No Skip

Ack

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

* Real data mapping 1

00 : 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

00 :-40
01 :-39
02 :-38
⋮
28 : 0
⋮
4E : +38
4F : +39
50 : +40

* Real data mapping 3 (Equalize)

| Step: | OSD | Step: | OSD |
|-------|------|-------|------|
| 00 | :-24 | 16 | : 1 |
| 01 | :-23 | 17 | : 3 |
| 02 | :-21 | 18 | : 4 |
| 03 | :-20 | 19 | : 6 |
| 04 | :-18 | 20 | : 7 |
| 05 | :-16 | 21 | : 9 |
| 06 | :-15 | 22 | : 10 |
| 07 | :-13 | 23 | : 12 |
| 08 | :-12 | 24 | : 13 |
| 09 | :-10 | 25 | : 15 |
| 10 | :-8 | 26 | : 16 |
| 11 | :-7 | 27 | : 18 |
| 12 | :-5 | 28 | : 19 |
| 13 | :-4 | 29 | : 21 |
| 14 | :-2 | 30 | : 22 |
| 15 | : 0 | 31 | : 24 |

APPENDIX

20. Key (Command : m c)

► To send IR remote key code.

Transmission

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

Data Key code - Refer to page 91.

Ack

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

21. Control Back Light (Command: m g)

► To Control the back light.

Transmission

[m][g][][Set ID][][Data][Cr]

Data : Min: 00 ~ Max: 64 (*transmit by hexadecimal code)

Ack

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

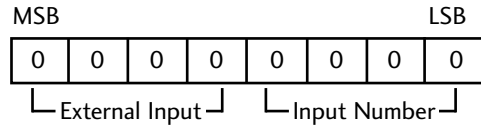
22. Input select (Command: x b) (Main Picture Input)

► To select input source for main picture.

Transmission

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

Data Structure



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

| Input Number | | | | Data |
|--------------|---|---|---|--------|
| 0 | 0 | 0 | 0 | Input1 |
| 0 | 0 | 0 | 1 | Input2 |
| 0 | 0 | 1 | 0 | Input3 |

Ack

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