For 42/50PG25, 50/60PG60, 50/60PG70

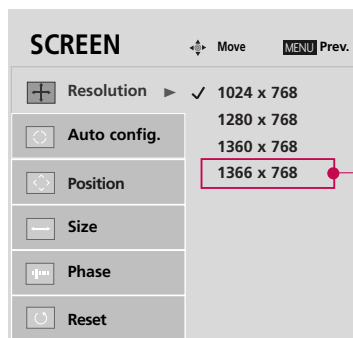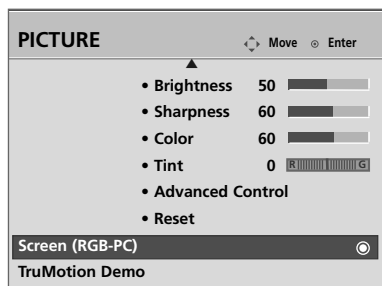| Resolution	Horizontal Frequency(KHz)	Vertical Frequency(Hz)
640x350	31.468	70.09
720x400	31.469	70.08
640x480	31.469	59.94
	37.500	75.00
	37.861	72.80
800x600	35.156	56.25
	37.879	60.31
	46.875	75.00
	48.077	72.18
1024x768	48.363	60.00
	56.476	70.06
	60.023	75.02
1280x768	47.776	59.87
	60.289	74.893
1280x1024	63.981	60.02
	79.976	75.025
1360x768	47.712	60.015
1600x1200	75.00	60.00
1920x1080	66.587	59.934

* Only RGB-PC mode

EXTERNAL EQUIPMENT SETUP

Screen Setup for PC mode
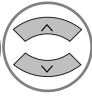
Selecting Resolution

You can choose the resolution in RGB-PC mode.
The Position, Phase, and Size can also be adjusted.

PICTURE   Move   Enter

• Brightness   50
• Sharpness   60
• Color   60
• Tint   0   [R|||||||||||||||G]
• Advanced Control
• Reset
Screen (RGB-PC)   ◎
TruMotion Demo

SCREEN   Move   MENU Prev.

⊞ Resolution ▶ ✓ 1024 x 768
                      1280 x 768
   Auto config.   1360 x 768
                      1366 x 768   Only for
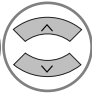   Position   32/37/42LG30
   Size
   Phase
   Reset

1 MENU

Select **PICTURE**.

2 ENTER

Select **Screen (RGB-PC)**.

3 ENTER

Select **Resolution**.

4 ENTER

Select the desired resolution.

5 ENTER

Auto Configure

Automatically adjusts picture position and minimizes image instability. After adjustment, if the image is still not correct, try using the manual settings or a different resolution or refresh rate on the PC.

PICTURE	◆ Move ⊙ Enter
▲	
• Brightness	50 ▬▬▬
• Sharpness	60 ▬▬▬
• Color	60 ▬▬▬
• Tint	0 R ⫼⫼⫼⫼⫼ G
• Advanced Control	
• Reset	
Screen (RGB-PC)	◉
TruMotion Demo	

➡

SCREEN	◆ Move	MENU Prev.
⊞ Resolution		
◇ Auto config. ▶		
▨ Position	**To Set**	
▭ Size	**Yes**	No
▥ Phase		
○ Reset		
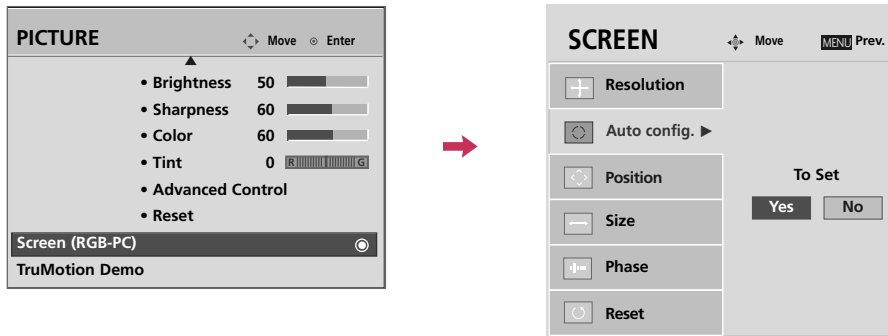
1 MENU / ⌄⌃⌃⌄ — Select **PICTURE**.

2 ENTER ◉ / ⌄⌃⌄ — Select **Screen (RGB-PC)**.

3 ENTER ◉ / ⌄⌃⌄ — Select **Auto config.**.

4 ENTER ◉ / ‹ › — Select **Yes**.

5 ENTER ◉ — Start Auto Configuration.

- 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**.
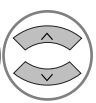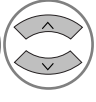
EXTERNAL EQUIPMENT SETUP

Adjustment for screen Position, Size, and Phase

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

This feature operates only in RGB-PC mode.

PICTURE	◇ Move ⊙ Enter
▲	
• Brightness 50 ▬▬	
• Sharpness 60 ▬▬	
• Color 60 ▬▬	
• Tint 0 R▬▬▬▬G	
• Advanced Control	
• Reset	
Screen (RGB-PC) ◉	
TruMotion Demo	

➡

SCREEN	⇳ Move MENU Prev.
⊞ Resolution	
◇ Auto config.	
◇ Position ►	
▭ Size	
▥ Phase	
↺ Reset	

1 MENU ⟨ ∧∨ ⟩   Select **PICTURE**.
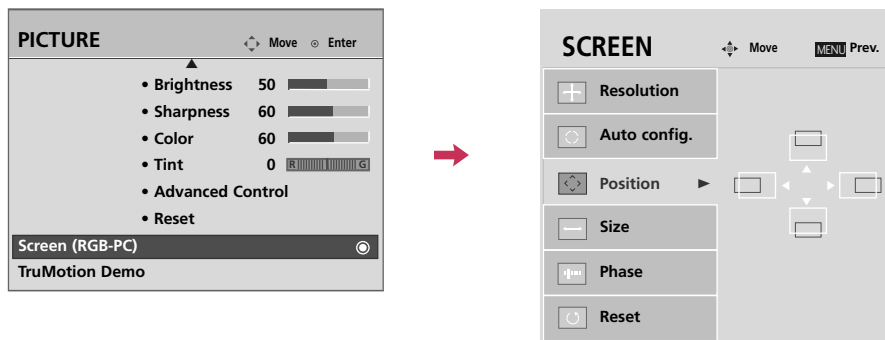
2 ENTER ⊙ ∧∨   Select **Screen (RGB-PC)**.

3 ENTER ⊙ ∧∨   Select **Position**, **Size**, or **Phase**.

4 ENTER ⊙ ⟨ ∧∨ ⟩   Make appropriate adjustments.

5 ENTER ⊙

■ **Position**: This function is to adjust picture to left/right and up/down as you prefer.
■ **Size**: This function is to minimize any vertical bars or stripes visible on the screen background. And the horizontal screen size will also change.
■ **Phase**: This function allows you to remove any horizontal noise and clear or sharpen the image of characters.

Screen Reset (Reset to original factory values)

Returns **Position**, **Size**, and **Phase** to the default factory settings.
This feature operates only in RGB-PC mode.
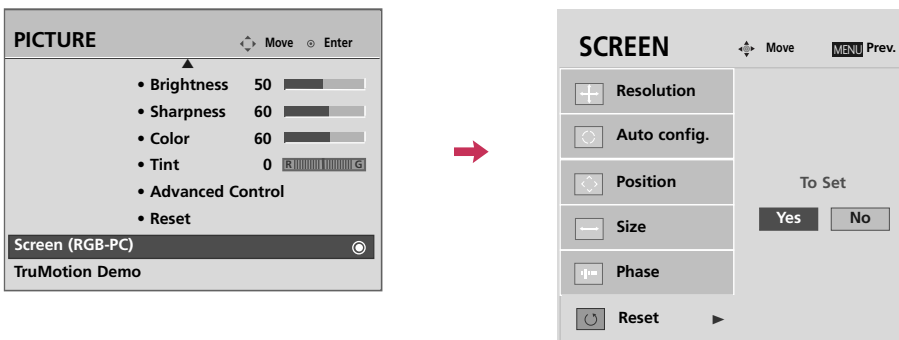
PICTURE			◇ Move ⊙ Enter
	▲		
• Brightness		50	▬▬▬▬
• Sharpness		60	▬▬▬▬
• Color		60	▬▬▬▬
• Tint		0	R ⫼⫼⫼⫼⫼⫼ G
• Advanced Control			
• Reset			
Screen (RGB-PC)			◎
TruMotion Demo			

➡

SCREEN		⬦ Move	MENU Prev.
⊞	Resolution		
◇	Auto config.		
◇	Position		**To Set**
⊟	Size		Yes No
ᆙ	Phase		
○	Reset	►	

1 MENU ⌃⌄‹›   Select **PICTURE**.

2 ENTER ⌃⌄   Select **Screen (RGB-PC)**.

3 ENTER ⌃⌄   Select **Reset**.

4 ENTER ‹ ›   Select **Yes**.

5 ENTER

EXTERNAL EQUIPMENT SETUP

USB CONNECTION (Except 32/37/42LG30)

i.e)
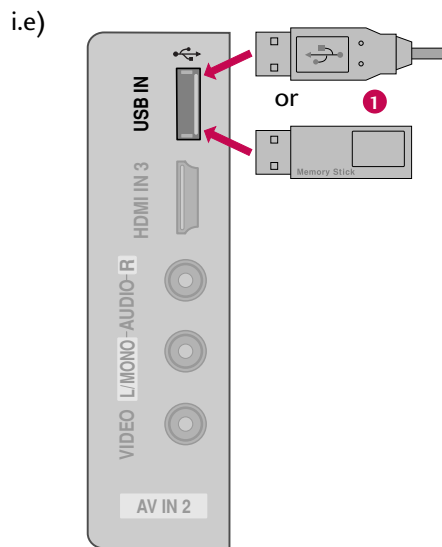
1. How to connect

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

2. How to use

■ After connecting the **USB IN** jack, you use the USB function. (► **p.64**)

46

AUDIO OUT CONNECTION

Send the TV's audio to external audio equipment via the Audio Output port.

Analog (Except 32/37/42/47/52LG60, 42LGX)

1. How to connect

1 Connect audio outputs to the TV's **AUDIO OUT** jacks.

2 Set the "TV Speaker option - Off" in the AUDIO menu. (▶ **p.93**). See the external audio equipment instruction manual for operation.

Digital

1. How to connect

1 Connect one end of the optical or coaxial cable to the TV's **OPTICAL** or **COAXIAL** (Except 32/37/42LG30) port of **DIGITAL AUDIO OUT**.

2 Connect the other end of the optical or coaxial cable to the digital audio input on the audio equipment.

3 Set the "TV Speaker option - Off" in the AUDIO menu. (▶ **p.93**). See the external audio equipment instruction manual for operation.

ⓘ NOTE

▶ When connecting with external audio equipments, such as amplifiers or speakers, you can turn the TV speakers off in the menu. (▶ **p.93**)

⚠ CAUTION

▶ Do not look into the optical output port. Looking at the laser beam may damage your vision.
▶ Block the SPDIF out (optical/coaxial) about the contents with ACP(Audio Copy Protection) function.

47
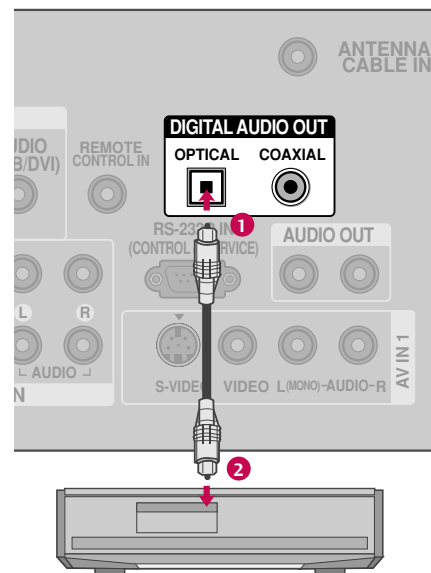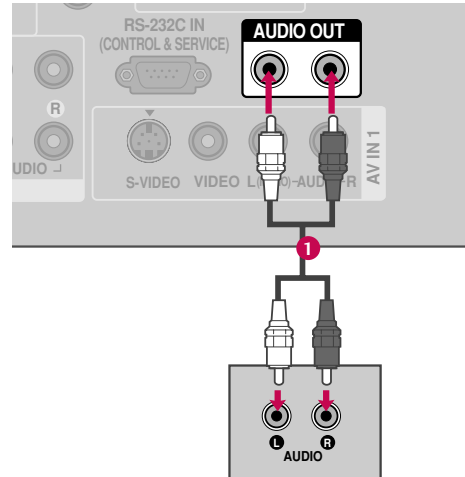
WATCHING TV / CHANNEL CONTROL

REMOTE CONTROL FUNCTIONS

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

TV/STB/DVD/VCR Select the remote operating mode: TV, STB, DVD, or VCR.

POWER Turns your TV or any other programmed equipment on or off, depending on the mode.

Q.MENU Select the desired quick menu source. ▶ **p.51**

MENU Displays the main menu.
Clear all on-screen displays and return to TV viewing from any menu.

INPUT External input modes rotate in regular sequence.

VOLUME UP /DOWN Increase/decrease the sound level.

FAV Scroll through the programmed Favorite channels. ▶ **p.51**

MUTE Switch the sound on or off. ▶ **p.50**

CHANNEL UP/DOWN Select available channels.

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

NUMBER button

— (DASH) Used to enter a program number for multiple program channels such as 2-1, 2-2, etc.

FLASHBK Tune to the last channel viewed.

VCR/DVD, USB, SIMPLINK Control buttons
- Control video cassette recorders or DVD players.
- Control USB menu (PHOTO LIST and MUSIC LIST.)
- Control the SIMPLINK compatible devices.

48
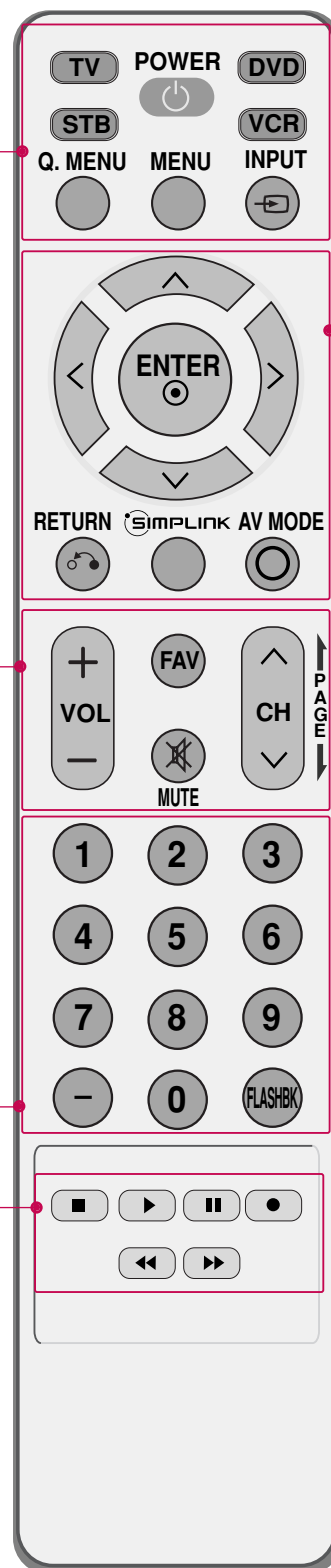
THUMBSTICK (Up/Down/Left Right/ENTER) Navigate the on-screen menus and adjust the system settings to your preference.

RETURN Allows the user to move return one step in an interactive application or other user interaction function.

SIMPLINK See a list of AV devices connected to TV.
When you toggle this button, the SIMPLINK menu appears at the screen. ▶ **p.62-63**

AV MODE It helps you select and set images and sounds. ▶ **p.61**

Installing Batteries
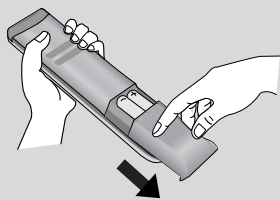
■ Open the battery compartment cover on the back side and install the batteries matching correct polarity (+with +,-with -).

■ Install two 1.5V AAA batteries. Don't mix old or used batteries with new ones.

■ Close cover.

TURNING ON THE TV

1 First, connect power cord correctly.
At this moment, the TV switches to standby mode.
- In standby mode to turn TV on, press the ⏻/ɪ , **INPUT**, **CH (▲▼** or ∧ ∨ **)** button on the TV or press the **POWER**, **INPUT**, **CH(** ∧ or ∨ **)**, **Number (0~9)** button on the remote control.

2 Select the viewing source by using the **INPUT** button on the remote control.
- This TV is programmed to remember which power state it was last set to, even if the power cord is out.

3 When finished using the TV, press the **POWER** button on the remote control.
The TV reverts to standby mode.

❗ NOTE

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

CHANNEL SELECTION

1 Press the **CH (** ∧ or ∨ **)** or **NUMBER** buttons to select a channel number.

VOLUME ADJUSTMENT

Adjust the volume to suit your personal preference.

1 Press the **VOL (+** or **-)** button to adjust the volume.

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

3 You can cancel the Mute function by pressing the **MUTE** or **VOL (+** or **-)** button.

QUICK MENU

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

Q.Menu (Quick Menu) is a menu of features which users might use frequently.

- ■ **Aspect Ratio**: Selects your desired picture format.
- ■ **Power Saving** (Plasma TV Only): Adjusts screen brightness to reduce the power consumption of the TV.
- ■ **Backlight** (LCD TV Only): Adjust the brightness of LCD panel to control the brightness of the screen.
- ■ **Clear Voice**: By differentiating the human sound range from others, it helps make human voices sound better.
- ■ **Picture Mode**: Selects the factory preset picture depend on the viewing environment.

- ■ **Sound Mode**: Selects the factory preset sound for type of program.
- ■ **Caption**: Select on or off.
- ■ **Multi Audio**: Changes the audio language (Digital signal).
  SAP: Selects MTS sound (Analog signal).
- ■ **Sleep Timer**: Select the amount of time before your TV turns off automatically.
- ■ **Del/Add/Fav**: Select channel you want to add/delete or add the channel to the Favorite List.
- ■ **USB Eject**: Select "USB Eject" in order to eject USB device.

Plasma TV

Q.Menu	
Aspect Ratio	◄ 16:9 ►
Power Saving	3
Clear Voice	Off
Picture Mode	Vivid
Sound Mode	Standard
Caption	Off
Multi Audio	English
Sleep Timer	Off
Del/Add/Fav	Add
USB Eject	Eject
Close	

LCD TV

Q.Menu	
Aspect Ratio	◄ 16:9 ►
Backlight	3
Clear Voice	Off
Picture Mode	Vivid
Sound Mode	Standard
Caption	Off
Multi Audio	English
Sleep Timer	Off
Del/Add/Fav	Add
USB Eject	Eject
Close	

Except 32/37/42LG30

1 Q. MENU   Display each menu.

2   Make appropriate adjustments.

3 Q. MENU   Return to TV viewing.

INITIAL SETTING

This Function guides the user to easily set the essential items for viewing the TV for the first time when purchasing the TV. If will be displayed on the screen when turning the TV on for the first time. It can also be activated from the user menus.

- Default selection is "**Home**". We recommend setting the TV to "**Home**" mode for the best picture in your home environment.
- "**In-store**" Mode is only intended for use in retail environments. Customers can adjust the "**Picture** menu - **Picture mode**" manually while inspecting the TV, but the TV will automatically return to preset in-store mode after 5 minutes.

Step1. Mode setting

Step1. Mode Setting

⚠ Selecting the environment.
Choose the setting mode you want.

| In Store | Home |

◉ Enter   RETURN   Exit

1 Select **Home** Mode.

2 ENTER

Step2. Time setting

Step2. Time Setting

Current Time Setting	◄ Auto ►
Year	2007
Month	11
Date	15
Hour	5 PM
Minute	52
Time Zone	Eastern
Daylight Saving	Off

◉ Enter   RETURN   Exit
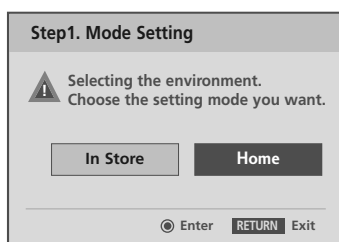
1 Select **Auto** or **Manual**.

2 Select desired time option.

3 ENTER

Step3. Option setting

Step3. Option Setting	
1. OSD Language Setting	◄ **English** ►
2. Audio Language Setting	**French**
◉ Enter	**RETURN** Exit
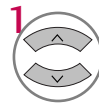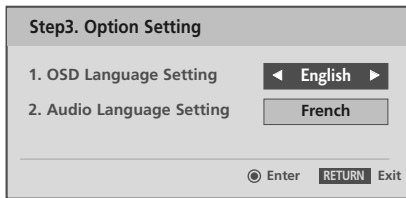
1 Select **OSD Language Setting** or **Audio Language Setting**.

2 Select your desired language.

3 ENTER ◉

Step4. Auto Tuning

Step4. Auto Tuning
Auto Tuning can change channel map. Do you want to start Auto Tuning?
Enter
◉ Enter **RETURN** Exit
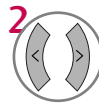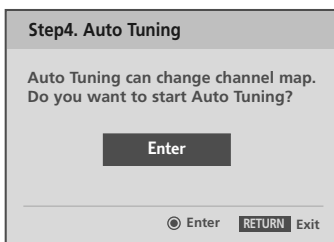
1 ENTER ◉ Start **Auto Tuning**.

ⓘ NOTE

■ You can also adjust **Initial Setting** in the **OPTION** menu.

ON-SCREEN MENUS SELECTION

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

All models (Except 32/37/42LG30)

CHANNEL	◇ Move ⊙ Enter
Auto Tuning	
Manual Tuning	
Channel Edit	

PICTURE	◇ Move ⊙ Enter
Aspect Ratio : 16:9	
Picture Mode : Standard	
• Backlight	80
• Contrast	90
• Brightness	50
• Sharpness	60
• Color	60
• Tint	0

AUDIO	◇ Move ⊙ Enter
Auto Volume : Off	
Clear Voice : On	
Balance	0 L R
Sound Mode : Standard	
• SRS TruSurround XT: Off	
• Treble	50
• Bass	50
• Reset	

OPTION	◇ Move ⊙ Enter
Language	: English
Input Label	
SIMPLINK	: On
Key Lock	: Off
Caption	: Off
ISM Method	: Normal
Power Saving	: Level 0
Set ID	: 1

CHANNEL   PICTURE   AUDIO   TIME

OPTION   LOCK   INPUT   USB

TIME	◇ Move ⊙ Enter
Clock	: Feb/21/2008 2:10 AM
Off Time	: Off
On Time	: Off
Sleep Timer	: Off
Auto Sleep	: Off

LOCK	◇ Move ⊙ Enter
Lock System	: Off
Set Password	
Block Channel	
Movie Rating	
TV Rating-Children	
TV Rating-General	
Downloadable Rating	
Input Block	

Lock System	: Off
Set Password	
Block Channel	
TV Rating-English	
TV Rating-French	
Downloadable Rating	
Input Block	

INPUT	◇ Move ⊙ Enter
Antenna	
Cable	
AV1	
AV2	
Component1	
Component2	
RGB-PC	
HDMI1	

USB	◇ Move ⊙ Enter
PHOTO LIST	
MUSIC LIST	

For USA   For Canada

1 MENU   Display each menu.

2 ENTER   Select a menu item.

3 ENTER   Enter to the pop up menu.

4 MENU   Return to TV viewing.

! NOTE

▶ **ISM Method**, **Power Saving**: Only **Plasma TV**.
▶ **Backlight, Power Indicator, TruMotion Demo**: Only **LCD TV**. (But, **TruMotion Demo**: Only for **32/37/42/47/52LG60**, **32/42/47/52LG70**, **42LGX**, **47LG90**)
▶ **Set ID**: Except **32/37/42/47/52LG60**, **42LGX**.
▶ **Local Dimming, Local Dimming Demo**: Only **47LG90**

CHANNEL	Move ⊙ Enter
Auto Tuning	
Manual Tuning	
Channel Edit	

PICTURE	Move ⊙ Enter
Aspect Ratio	: 16:9
Picture Mode	: Standard
• Backlight	80
• Contrast	90
• Brightness	50
• Sharpness	60
• Color	60
• Tint	0 R ⬛⬛⬛⬛⬛ G

AUDIO	Move ⊙ Enter
Auto Volume	: Off
Clear Voice	: On
Balance	0 L ⬛⬛⬛⬛⬛ R
Sound Mode	: Standard
• SRS TruSurround XT:	Off
• Treble	50
• Bass	50
• Reset	

TIME	Move ⊙ Enter
Clock	: Feb/21/2008 2:10 AM
Off Time	: Off
On Time	: Off
Sleep Timer	: Off
Auto Sleep	: Off

CHANNEL   PICTURE   AUDIO

TIME   OPTION   LOCK

OPTION	Move ⊙ Enter
Language	: English
Input Label	
SIMPLINK	: On
Key Lock	: Off
Caption	: Off
Set ID	: 1
Power Indicator	
Initial Setting	: Home

LOCK	Move ⊙ Enter
Lock System	: Off
Set Password	
Block Channel	
Movie Rating	
TV Rating-Children	
TV Rating-General	
Downloadable Rating	
Input Block	

Lock System	: Off
Set Password	
Block Channel	
TV Rating-English	
TV Rating-French	
Downloadable Rating	
Input Block	

For USA   **For Canada**

1 MENU ∧∨<> Display each menu.

2 ENTER ⊙ ∧∨ Select a menu item.

3 ENTER ⊙ Enter to the pop up menu.

4 MENU Return to TV viewing.

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CHANNEL SETUP

Auto Scan (Auto Tuning)

Automatically finds all channels available through antenna or cable inputs, and stores them in memory on the channel list.
Run Auto Tuning again after any Antenna/Cable connection changes.
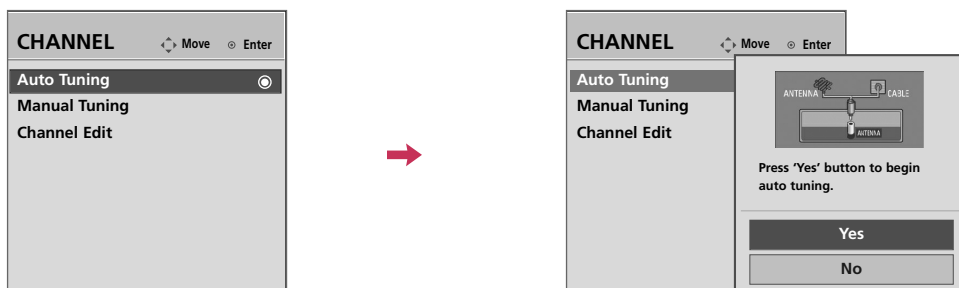
CHANNEL	‹› Move	⊙ Enter
Auto Tuning		◉
Manual Tuning		
Channel Edit		

➡

CHANNEL	‹› Move	⊙ Enter
Auto Tuning		
Manual Tuning		
Channel Edit		

ANTENNA · CABLE

ANTENNA

Press 'Yes' button to begin auto tuning.

Yes

No

1 MENU — Select **CHANNEL**.

2 ENTER — Select **Auto Tuning**.

3 ENTER — Select **Yes**.

4 ENTER — Run **Auto tuning**.

5 RETURN — Return to the previous menu.

MENU — Return to TV viewing.

■ A password is required to gain access to Auto Tuning menu if the Lock System is turned on.

Add/Delete Channel (Manual Tuning)

If selecting DTV or CADTV input signal, you can view the on-screen signal strength monitor to see the quality of the signal being received.

CHANNEL	◇ Move	◉ Enter
Auto Tuning		
Manual Tuning		◉
Channel Edit		

➡

CHANNEL	◇ Move	◉ Enter
Auto Tuning		
Manual Tuning		
Channel Edit		

◄   DTV   ►

Select channel type and
RF-channel number.

Channel   2

DTV 2-1

Bad   Normal   Good

Delete

Close
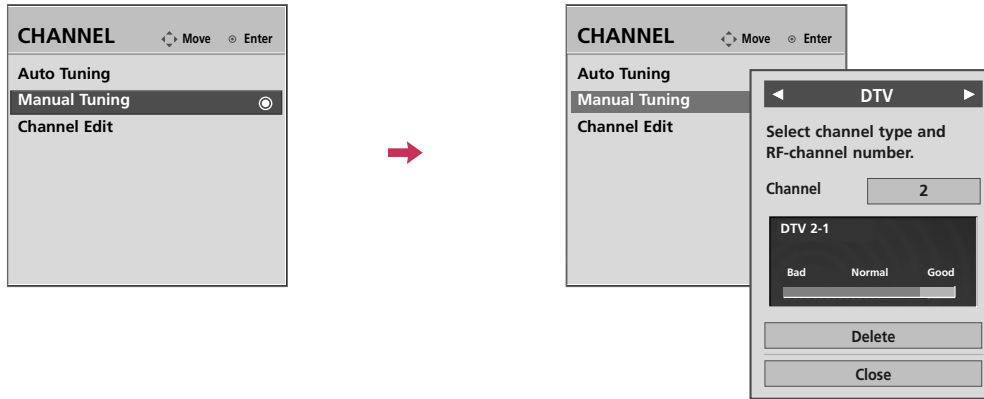
1 MENU   Select **CHANNEL**.

2 ENTER   Select **Manual Tuning**.

3 ENTER   Select **DTV**, **TV**, **CADTV**, or **CATV**.

4   Select channel you want to add or delete.

5 ENTER   Select **Add** or **Delete**.

6 RETURN   Return to the previous menu.

   MENU   Return to TV viewing.

■ A password is required to gain access to Manual Tuning menu if the Lock System is turned on.
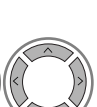
CHANNEL SETUP

Channel Editing

A custom list can be created by toggling each channel on or off with **ENTER** button. The channels in the Custom List are displayed in black and the channels deleted from the Custom List are displayed in gray.

Once a channel is highlighted you can add or delete the channel by referring to the small window at the top-right corner of the screen.
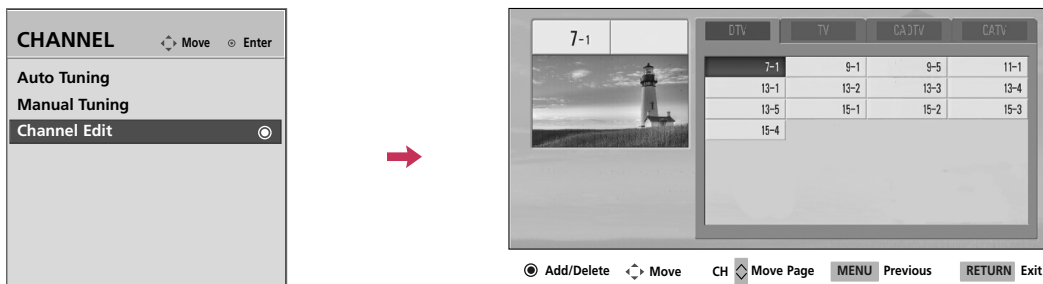
CHANNEL	◁‹›▷ Move	⊙ Enter
Auto Tuning		
Manual Tuning		
Channel Edit		◉

7-1		DTV	TV	CADTV	CATV
		7-1	9-1	9-5	11-1
		13-1	13-2	13-3	13-4
		13-5	15-1	15-2	15-3
		15-4			

◉ Add/Delete ◁‹›▷ Move CH ◇ Move Page MENU Previous RETURN Exit

1 MENU ⌃⌄ — Select **CHANNEL**.

2 ENTER ⌃⌄ — Select **Channel Edit**.

3 ENTER ⌃⌄ — Select a channel.

4 ENTER — Select channel you want to add or delete.

5 MENU — Return to the previous menu.

RETURN — Return to TV viewing.

INPUT LIST

Only these input signals which are connected to a TV can be activated and selected.

Antenna	Cable	AV1	AV2	Component1

1

INPUT ⊟   ‹ › ›   ENTER ⊙
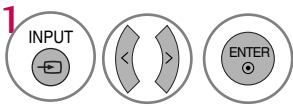
Select the desired input source.
- You can also select the desired input source in the **INPUT** menu (Except 32/37/42LG30).

32/37/42LG30, 37/42/47/52LG50

Antenna → Cable → AV1 → AV2 → Component1 → Component2

HDMI3 ← HDMI2 ← HDMI1 ← RGB-PC

Plasma TV, 32/42/47/52LG70, 47LG90

Antenna → Cable → AV1 → AV2 → Component1 → Component2

HDMI4 ← HDMI3 ← HDMI2 ← HDMI1 ← RGB-PC

32/37/42/47/52LG60, 42LGX

Antenna → Cable → AV → Component1 → Component2

HDMI4 ← HDMI3 ← HDMI2 ← HDMI1 ← RGB-PC

ie)

Disconnected inputs are inactive (grayed out)

Antenna	Cable	AV1	AV2	Component1

Q.MENU Input Label   RETURN Exit

Select a desired input source (except **Antenna** or **Cable**). Then, you can select your desired Input Label with using Q. MENU button. ▶ **p.60**

- **Antenna**: Select it to watch over-the-air broadcasts.
- **Cable**: Select it to watch cable and digital cable.
- **AV**: Select them to watch a VCR or other external equipment.
- **Component**: Select them to watch DVD or a Digital set-top box.
- **RGB-PC**: Select it to view PC input.
- **HDMI**: Select them to watch high definition devices.

INPUT LABEL

You can set a label for each input source when it's not in use.

32/37/42LG30,
37/42/47/52LG50

Plasma TV, 32/42/47/52LG70,
47LG90

32/37/42/47/52LG60,
42LGX

OPTION	◊ Move ⊙ Enter
Language	: English
Input Label	◉
SIMPLINK	: On
Key Lock	: Off
Caption	: Off
ISM Method	: Normal
Power Saving	: Level 0
Set ID	: 1

AV1	◄ ►
AV2	
Component1	
Component2	
RGB-PC	
HDMI1	
HDMI2	
HDMI3	
Close	

AV1	◄ ►
AV2	
Component1	
Component2	
RGB-PC	
HDMI1	
HDMI2	
HDMI3	
HDMI4	
Close	

AV	◄ ►
Component1	
Component2	
RGB-PC	
HDMI1	
HDMI2	
HDMI3	
HDMI4	
Close	

With using OPTION menu

1 MENU — Select **OPTION**.

2 ENTER — Select **Input Label**.

3 ENTER — Select the source.

4 — Select the label.

5 RETURN — Return to the previous menu.

MENU — Return to TV viewing.

With using INPUT button

1 INPUT — Select the source.

2 Q. MENU — Select the label.

3 RETURN — Return to the previous menu.

MENU — Return to TV viewing.

■ When new external device is connected, this popup menu is displayed automatically.
   If selecting **Yes**, you can select input source that you want to appreciate.
■ But, when selecting "**SIMPLINK - On**", popup menu for HDMI input will not be displayed.

⚠ **New external device is connected.
Do you want to enjoy this?**

Yes   No

⚠ Select input source that you want to appreciate.

AV1
AV2
Component1
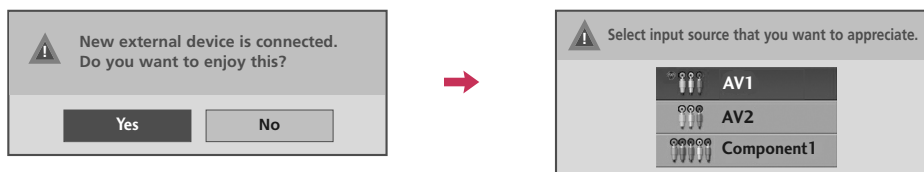
AV MODE

You can select the optimal images and sounds.

All models (Except 50/60PG60, 50/60PG70)

| Off | → | Cinema |

Game ← Sport

Only for 50/60PG60, 50/60PG70

Off → ⅢⅨ Cinema

Game ← Sport
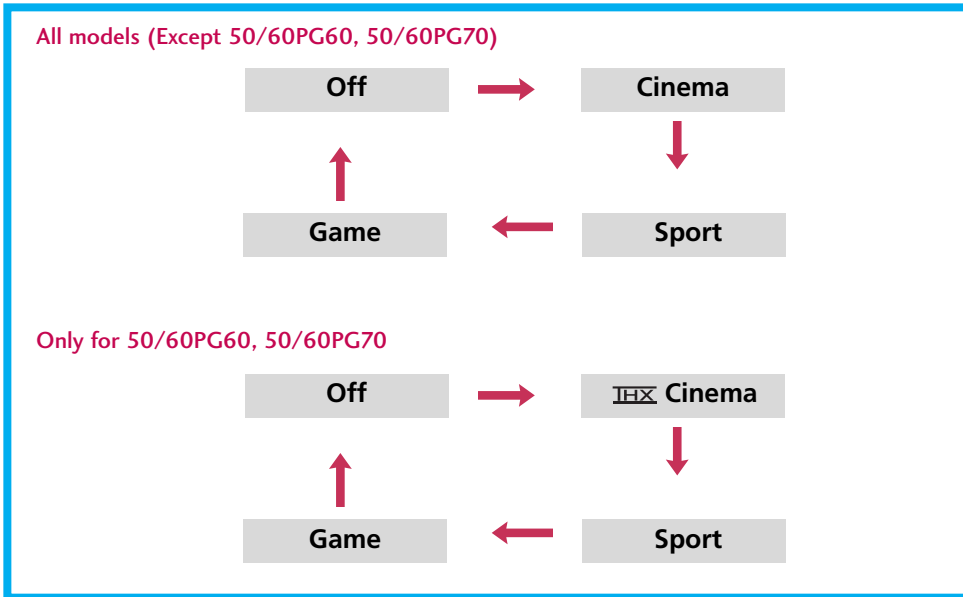
1 AV MODE

Press the **AV MODE** button repeatedly to select the desired source.

2 ENTER

- If you select "**Cinema / ⅢⅨ Cinema**" in AV mode, **Cinema** will be selected both for "PICTURE menu - Picture Mode" and "AUDIO menu - Sound Mode" respectively.
- If you select "**Off**" in AV mode, the "**Picture Mode**" and "**Sound Mode**" return to previous selected value.

SIMPLINK

This function operates only with devices with the ⑤IMPLINK logo.

The TV might not function properly when using it with other products with HDMI-CEC function.

This allows you to control and play other AV devices connected with HDMI cable without additional cables and settings.

To start using SIMPLINK, turn it on in the user menus.
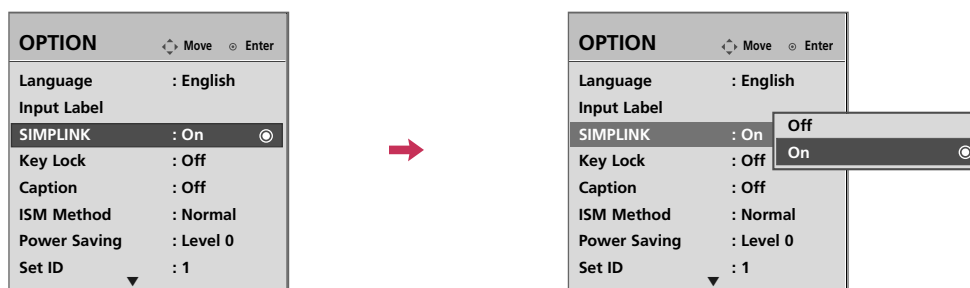
OPTION	◆ Move ◉ Enter
Language	: English
Input Label	
SIMPLINK	: On ◉
Key Lock	: Off
Caption	: Off
ISM Method	: Normal
Power Saving	: Level 0
Set ID ▼	: 1

➡

OPTION	◆ Move ◉ Enter
Language	: English
Input Label	
SIMPLINK	: On Off
Key Lock	: Off On ◉
Caption	: Off
ISM Method	: Normal
Power Saving	: Level 0
Set ID ▼	: 1

1 MENU   Select **OPTION**.

2 ENTER   Select **SIMPLINK**.

3 ENTER   Select **On** or **Off**.

4 RETURN   Return to the previous menu.

MENU   Return to TV viewing.

! NOTE

► Connect the HDMI/DVI IN or HDMI IN terminal of the TV to the rear terminal (HDMI terminal) of the SIMPLINK device with the HDMI cable.

► When you switch the Input source with the INPUT button on the remote control, the SIMPLINK device will stop.

► When you select a device with home theater functionality, the sound output automatically switches to the home theater speakers.

► If a connected SIMPLINK home theater system doesn't play the audio from the TV, connect the DIGITAL AUDIO OUT terminal on the back of the TV to the DIGITAL AUDIO IN terminal on the back of the SIM-PLINK device with an OPTICAL cable.

SIMPLINK Functions

■ **Direct Play:** After connecting AV devices to the TV, you can directly control the devices and play media without additional settings.

■ **Select AV device:** Enables you to select one of the AV devices connected to TV.

■ **Disc playback:** Control connected AV devices by pressing the ∧ ∨ < > , **ENTER, ▶, ■, ΙΙ,** ◀◀ and ▶▶ buttons.

■ **Power off all devices:** When you power off the TV, all connected devices are turned off.

■ **Switch audio-out:** Offers an easy way to switch audio-out.

■ **Sync Power on:** When you play the connected AV device, TV will automatically turn on.

(A device, which is connected to the TV through a HDMI cable but does not support SIMPLINK, does not provide this function)

Note: To operate SIMPLINK, an HDMI cable over Version 1.2 with *CEC function should be used. (*CEC: Consumer Electronics Control).

1 [TV] [SIMPLINK]   Display **SIMPLINK** menu.

2 [⌃⌄⟨⟩] [ENTER]   Select the desired device.

3 [■▶ΙΙ⟨⟩] [⌃⟨ENTER⟩⟨⌄⟩]   Control connected AV devices.
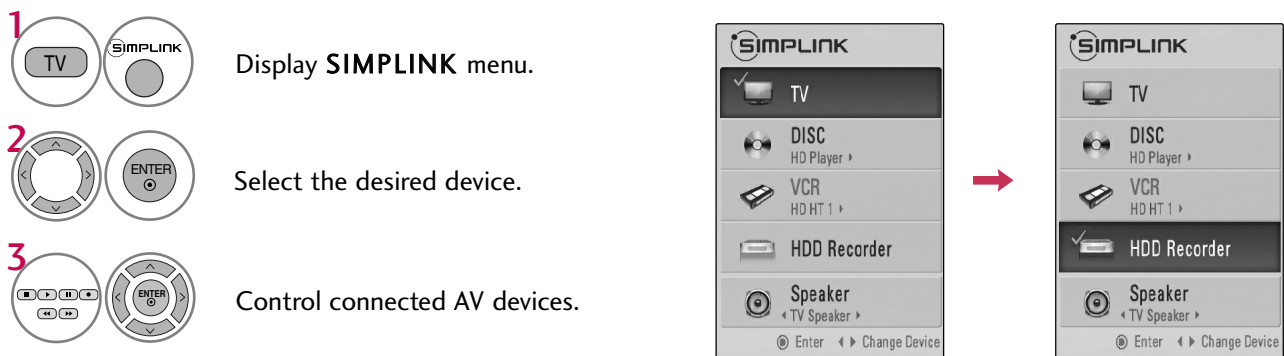
SIMPLINK Menu

❶ **TV viewing**: Switch to the previous TV channel regardless of the current mode.

❷ **DISC playback**: Select and play discs. When multiple discs are available, the titles of discs are conveniently displayed at the bottom of the screen.

❸ **VCR playback**: Control the connected VCR.

❹ **HDD Recordings playback**: Control recordings stored in HDD.

❺ **Audio Out to Home Theater speaker/Audio Out to TV**: Select Home Theater speaker or TV speaker for Audio Out.

▶ When no device is connected (displayed in gray)

▶ Selected Device

▶ When a device is connected (displayed in bright color)

USB

* Except 32/37/45LG30

ENTRY MODES

When you connect a USB device, 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.

USB IN

IN 3

Memory Stick

- It doesn't support USB HDD
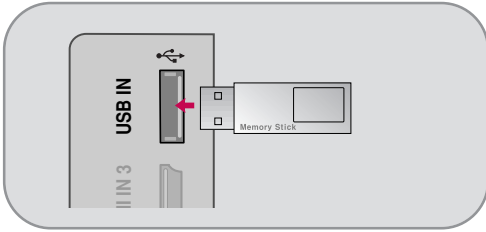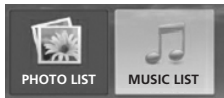- This TV supports JPG and MP3.

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

PHOTO LIST   MUSIC LIST

3 ENTER

When removing the USB device

Select the **USB Eject** menu before removing the USB device.

1 Q. MENU   Select **USB Eject**.

2 ENTER
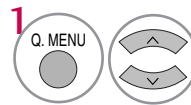
Precautions when using the USB device

▶ Only a USB storage device is recognizable.

▶ If the USB storage device is connected through a USB hub, the device is not recognizable.

▶ A USB storage device using an automatic recognition program may not be recognized.

▶ A USB storage device which uses its own driver may not be recognized.

▶ In case of a card reader, up to four memory cards are concurrently recognizable.

▶ 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 FAT or NTFS file system provided with the Windows operating system. In case of a storage device formatted as a different utility program 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 backup important files because data on USB device may be damaged. Data management is consumer's responsibility and as a result, the manufacturer does not cover data damage.

PHOTO LIST

You can view .JPG files from USB storage devices.
The On Screen Display on your model may be slightly different.

Supported photo file: ∗.JPG

- You can play JPG files only.
- Only baseline scan is supported among JPG.

Screen Components

1 MENU ⌄⌃⌃⌄ Select **USB**.

2 ENTER ⌃⌄ ENTER Select **PHOTO LIST**.

① Moves to upper level file
② Preview: Display the thumbnail/folder name of the photo in the selected folder
③ Current page/Total pages
④ Total number of marked photos
⑤ Usable USB memory
⑥ Corresponding buttons on the remote control

PHOTO LIST

③ Page 1/1   ④ ☑ No Marked

⑤ USB Device
Free Space 150MB

TOP FOLDER
Drive1

②

2Folders, 4Files

Drive1

①

① Upper

⟨⟩ Navigate   ⊚ PopUp Menu   CH ◇ Move Page   FAV Mark   RETURN Exit

⑥

Photo Selection and Popup Menu

PHOTO LIST

TOP FOLDER Drive1	**Drive1**	

Page 1/1 ☑ No Marked

☁ USB Device
Free Space 150MB

2Folders, 4Files

⬆ Upper

◀▶ Navigate ◉ PopUp Menu CH ◇ Move Page | FAV | Mark | RETURN | Exit

⬇

PHOTO LIST

Drive1 Butterfly

1366×768 125KB

⬆ Upper

Page 1/1 ☑ No Marked

☁ USB Device
Free Space 150MB

⬆ Upper Photo X.Box

1366x768
125KB
View ◉
Mark All
Delete
Cancel

◀▶ Navigate ◉ PopUp Menu CH ◇ Move Page | FAV | Mark | RETURN | Exit
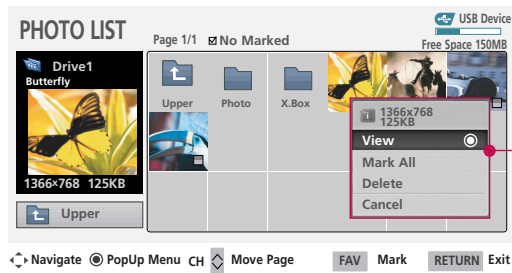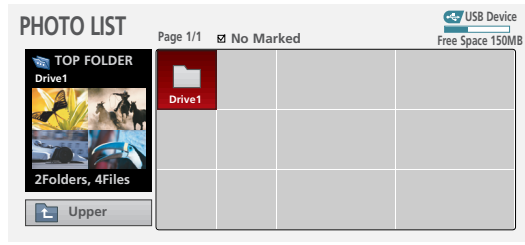
When you select a file (not folder), this PopUp menu is displayed.
▶ **View**: Display the selected item.
▶ **Mark All**: Mark all photos on the screen.
▶ **Unmark All**: Deselect all marked photos.
▶ **Delete**: Delete the selected photo item.
▶ **Cancel**: Close the pop-up menu.

1 Select the target folder or drive.

2 ENTER Select the desired photos.

3 ENTER Show the Popup menu.

4 ENTER Select the desired Popup menu.

■ Use the **CH** ∧ ∨ button to navigation in the photo page.
■ Use the **FAV** 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.

Full Screen Menu

You can change the Photo List view so that it fills the screen. More operations are available in full screen mode.

PHOTO LIST

Page 1/1 ☑ No Marked

USB Device
Free Space 150MB

TOP FOLDER
Drive1

Drive1

2Folders, 4Files

Upper

Navigate ◉ PopUp Menu CH ◇ Move Page   FAV Mark   RETURN Exit

PHOTO LIST

Page 1/1 ☑ No Marked

USB Device
Free Space 150MB

Drive1
Butterfly

Upper Photo X.Box

1366×768 125KB

1366x768
125KB

View
Mark All
Delete
Cancel

Upper

Navigate ◉ PopUp Menu CH ◇ Move Page   FAV Mark   RETURN Exit

◀ 1/17 ▶   ◀» 45

Sideshow ☐ BGM ☐ ↻ Delete Option Hide

The aspect ratio of a photo may change the size of the photo displayed on the screen in full size.

1 Select the target folder or drive.

2 ENTER Select the desired photos.

3 ENTER Show the Popup menu.

4 Select **View**.

5 ENTER The selected photo is displayed in full size.

■ Use the **CH** ∧ ∨ button to navigation in the photo page.

6
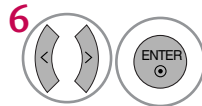
Select the **Sideshow**, **BGM**, ↺**(Rotate)**, **Delete**, **Option**, or **Hide.**

■ Use ‹ › button to select the previous or next photo.
■ Use ⌃ ⌄ ‹ › button to select and control the menu on the full-sized screen.

◀ 1/17 ▶   ◀» 45

Sideshow ▯ BGM ▯ ↺ Delete Option Hide

▶**Sideshow**: Selected photos are displayed during the slide show. If no photo is selected, all photos in the current folder are displayed during slide show.
  ■ Set the time interval of the slide show in **Option**.
  ■ A slide show continues for a maximum of 4 hours. After 4 hours, the slide show will end and go to TV mode or external input mode.
▶**BGM**: Listen to music while viewing photos in full size.
  ■ Set the BGM device and album in **Option**.
▶↺**(Rotate)**: Rotate photos.
  ■ Rotates the photo 90°, 180°, 270°, 360° clockwise.
▶**Delete**: Delete photos.
▶**Option**: Set values for **Slide Speed** and **Music Folder**.
  ■ Use ‹ › button and **ENTER** button to set values. Then go to ⎸Enter⎹ and press **ENTER** to save the settings.
  ■ You cannot change **Music Folder** while BGM is playing.
▶**Hide** : Hide the menu on the full-sized screen.
  ■ To see the menu again on the full-sized screen, press **ENTER** button to display.

ℹ Press ◀ ▶ to set the time interval between slides.

Slide Speed   ◀   **Fast**   ▶
Music Folder   ...

ENTER   Cancel
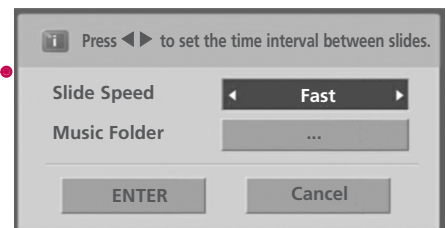
! NOTE
▶ This TV will not be able to decode most JPEG images saved using the Progressive option.

MUSIC LIST

You can use the Music List menu to play MP3 files form a USB storage device.

This TV cannot play back copy-protected files.

The On Screen Display on your model may be slightly different.

Supported music file: *.MP3
Bit rate range 40Kbps ~ 320Kbps
• Sampling rate (Sampling Frequency)
 MPEG1 : 32000, 44100, 48000Hz
 MPEG2 : 16000, 24000, 22050Hz
 MPEG2.5 : 16 ~ 48KHz
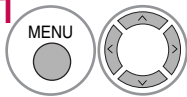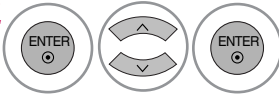
Screen Components

1 MENU Select **USB**.

2 ENTER ENTER Select **MUSIC LIST**.
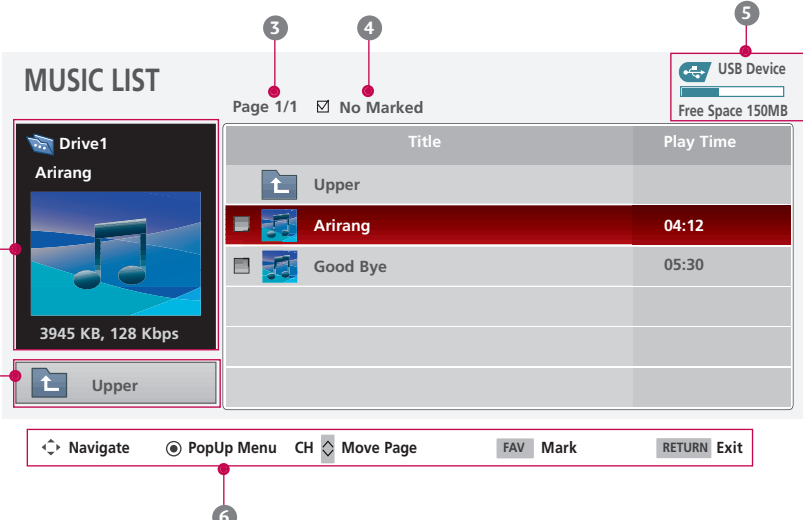
❶ Moves to upper level file
❷ Preview: If any album jacket for the file exists, this jacket is displayed.
❸ Current page/Total pages
❹ Total number of marked musics
❺ Usable USB memory
❻ Corresponding buttons on the remote control

MUSIC LIST

Page 1/1 ☑ No Marked		USB Device Free Space 150MB

Drive1
Arirang

3945 KB, 128 Kbps

❷

❶ Upper

Title		Play Time
⬆ Upper		
■ Arirang		04:12
■ Good Bye		05:30

Navigate ◉ PopUp Menu CH ↕ Move Page FAV Mark RETURN Exit

❻

Music Selection and Popup Menu

Up to 6 music titles are listed per page.

| | MUSIC LIST | | USB Device Free Space 150MB |
| | Page 1/1 ☑ No Marked | | |

Drive1
Arirang
3945 KB, 128 Kbps
Upper

Title	Play Time
Upper	
Arirang	04:12
Good Bye	05:30

Navigate ◉ PopUp Menu CH ⌃⌄ Move Page FAV Mark RETURN Exit

3945 KB 128 Kbps
Play ◉
Play with Photo
Mark All
Delete
Cancel
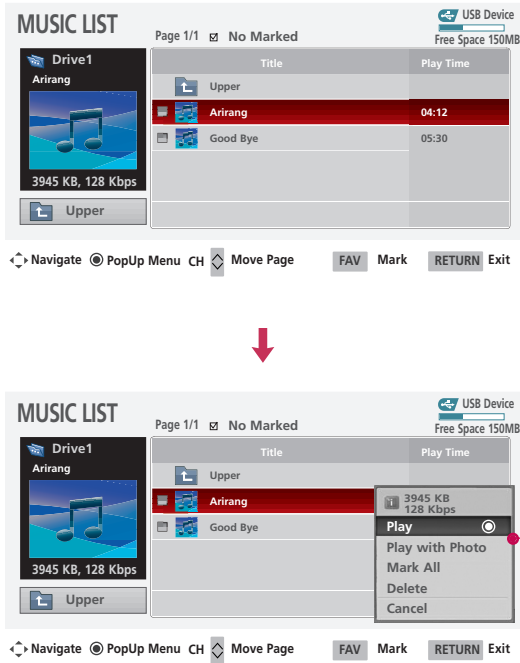
▶ **Play** (During stop): Play the selected music. Once a song finishes playing, the next selected one will be played. When there are no selected musics to play, the next one in the current folder will be played. If you go to a different folder and press the **ENTER** button, the current music in playback will stop.

▶ **Play Marked**: Play the selected musics. Once a music finishes playing, the next selected one will be played automatically.

▶ **Stop Play** (During playback): Stop the playing musics.

▶ **Play with Photo**: Start playing the selected musics and then move to the Photo List.

▶ **Mark All**: Mark all musics in the folder.

▶ **Unmark All**: Deselect all marked music.

▶ **Delete**: Delete the selected music.

▶ **Cancel**: Close the pop-up menu.

1 Select the target folder or drive.

2 ENTER Select the desired musics.

3 ENTER Show the Popup menu.

4 ENTER Select the desired Popup menu.

5 RETURN Return to TV viewing

■ Use the **CH** ⌃ ⌄ button to navigation in the music page.

■ Use **FAV** button to mark or unmark a music file. If no music is marked, all the music in the folder will be played in sequence. When one or more music files are marked, the marked music files will be played in sequence. If you want to listen to only one song repeatedly, just mark that one file and play.

■ The play information box (as shown below) will automatically move across the screen when there is no user input to prevent a fixed image remaining on the screen for a extended period of time.

❶ NOTE

▶ When music is playing, ♪ is displayed in front of the music play time.

▶ A damaged or corrupted music file that does not play displays 00:00 as the play time.

▶ Music files with copy-protection will not play.

▶ Press **ENTER**, ■ , or **RETURN** button to stop the screen saver.

▶ This TV can not play music files less than 16 Kbytes.

PICTURE CONTROL

PICTURE SIZE (ASPECT RATIO) CONTROL

This feature lets you choose the way an analog picture with a 4:3 aspect ratio is displayed on your TV.
■ RGB-PC input source use 4:3 or 16:9 aspect ratio.

❶ NOTE

▶ If a fixed image is displayed on the screen for a long time, the image could become imprinted on the screen and remain visible.

This phenomenon is common to all manufacturers and is not covered by warranty. Although, after watching video that did not fill the screen, any after-image from the black bars will normally dissipate after a few minutes.

PICTURE	↔ Move ◉ Enter
Aspect Ratio : 16:9	◉
Picture Mode : Standard	
• **Backlight** 80	
• **Contrast** 90	
• **Brightness** 50	
• **Sharpness** 60	
• **Color** 60	
• **Tint** 0	R⎮⎮⎮⎮⎮⎮⎮⎮⎮G

➡

PICTURE	↔ Move ◉ Enter	
Aspect Ratio : 16:9		
Picture Mode : Standard		
• **Backlight** 80	**Set By Program**	
• **Contrast** 90		
• **Brightness** 50	**4:3**	
• **Sharpness** 60	**16:9** ◉	
• **Color** 60	**Zoom1**	
• **Tint** 0	**Zoom2**	
	Just Scan	

1

MENU ⌃⌄⟨⟩   Select **PICTURE**.

2
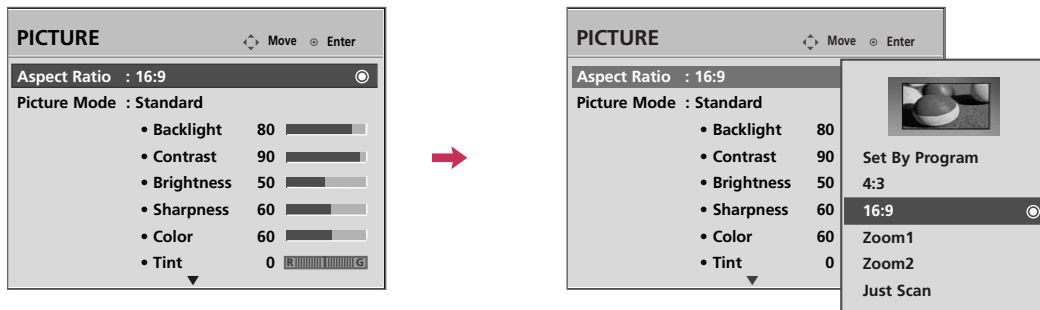
ENTER ◉ ⌃⌄   Select **Aspect Ratio**.

3

ENTER ◉ ⌃⌄   Select the desired picture format.

4

RETURN   Return to the previous menu.

MENU   Return to TV viewing.

■ You can also adjust **Aspect Ratio** in the **Q-Menu**.

Set by program

Selects the proper picture proportion to match the source's image.

(4:3 ➝ 4:3)

(16:9 ➝ 16:9)

4:3

Choose 4:3 when you want to view a picture with an original 4:3 aspect ratio.

16:9

Adjust the picture horizontally, in a linear pro-portion to fill the entire screen.

Zoom 1

Choose Zoom 1 when you want to view the pic-ture without any alteration. However, the top and bottom portions of the picture will be cropped.
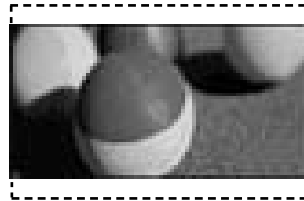
Zoom 2

Choose Zoom 2 when you want the picture to be altered, both vertically extended and cropped. The picture taking a halfway trade off between alteration and screen coverage.
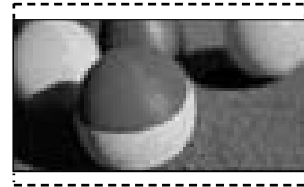
Just Scan

Normally the edges of video signals are cropped 1-2%. Just Scan turns off this cropping and shows the complete video.

Notes: If there is noise on the edges of the original signal, it will be visible when Just Scan is activated.

Just Scan operates only in DTV/CADTV/Component/HDMI-DTV/DVI-DTV (720p/1080i/1080p) input source.

PICTURE CONTROL

73

PRESET PICTURE SETTINGS

Picture Mode - Preset

There are factory presets for picture settings available in the user menus. You can use a preset, change each setting manually, or use the Intelligent Sensor.

```
PICTURE                    ◈ Move  ⊙ Enter
Aspect Ratio  : 16:9
Picture Mode  : Standard                    ◉
            • Backlight     80  ▭▭▭▭
            • Contrast      90  ▭▭▭▭▭
            • Brightness    50  ▭▭▭
            • Sharpness     60  ▭▭▭▭
            • Color         60  ▭▭▭▭
            • Tint           0  R▭▭▭▭▭▭G
                        ▼
```

```
Intelligent Sensor
Vivid
Standard                    ◉
Cinema
Sport
Game
Expert1
Expert2
```
37/42/47/52LG50,
32/37/42/47/52LG60,
32/42/47/52LG70,
42LGX, 47LG90

```
Vivid
Standard                    ◉
Cinema
Sport
Game
Expert1
Expert2
```
32/37/42LG30,
42/50PG25

```
Vivid
Standard                    ◉
THX Cinema
Sport
Game
Expert1
Expert2
```
50/60PG60,
50/60PG70

1 MENU Select **PICTURE**.

2 ENTER Select **Picture Mode**.

3 ENTER Select **Intelligent Sensor** (Except 32/37/42LG30, Plasma TV), **Vivid**, **Standard**, **Cinema/ THX Cinema** (Only for 50/60PG60, 50/60PG70) , **Sport**, or **Game**.

4 RETURN Return to the previous menu.

   MENU Return to TV viewing.

■ When selecting **Intelligent Sensor** (Except 32/37/42LG30, Plasma TV), the most suitable picture is automatically adjusted according to the surrounding conditions.

■ **Vivid**, **Standard**, **Cinema/ THX Cinema**, **Sport**, and **Game** Settings are preset for the optimum picture quality at the factory and are not adjustable.

■ You can also adjust **Picture Mode** in the Q. Menu.

■ THX Cinema (Only for 50/60PG60, 50/60PG70): This is cinema quality mode to provide you the experience of watching a movie at home. The user will be able enjoy the best level of satisfactory screen quality in any movie without any separate adjustments. THX Cinema expresses the optimal screen quality when it is darkest.

■ When selecting THX **Cinema**, Aspect ratio changes to Just scan.

THX (Thomlinson Holman's Experiment) is the audio and video certification standard of THX established by George Lucas, who directed the movie Star Wars, and Thomlinson.
This is the product to be certified in THX display area and guarantees screen quality that exceeds the display standard specification in both hardware and software.

Color Tone - Preset

Choose one of three automatic color adjustments. Set to warm to enhance hotter colors such as red, or set to cool to see less intense colors with more blue.

PICTURE	◇ Move ⊙ Enter
▲	
• Brightness	50 ▬▬
• Sharpness	60 ▬▬
• Color	60 ▬▬
• Tint	0 R �IIIIIIII IIIIIIII G
• Advanced Control	◉
• Reset	
Screen (RGB-PC)	
TruMotion Demo	

➡

PICTURE	◇ Move ⊙ Enter
▲	
• Brightness	50 ▬▬
• Sharpness	60 ▬▬
• Color	60 ▬▬
• Tint	0 R �iiiiiii iiiiiii G
• Advanced Control	◉
• Reset	
Screen (RGB-PC)	
TruMotion Demo	

Color Temperature	◄ Medium ►
Fresh Contrast	Off
Fresh Color	Off
Noise Reduction	Off
Gamma	Medium
Black Level	Low

1 MENU — Select **PICTURE**.
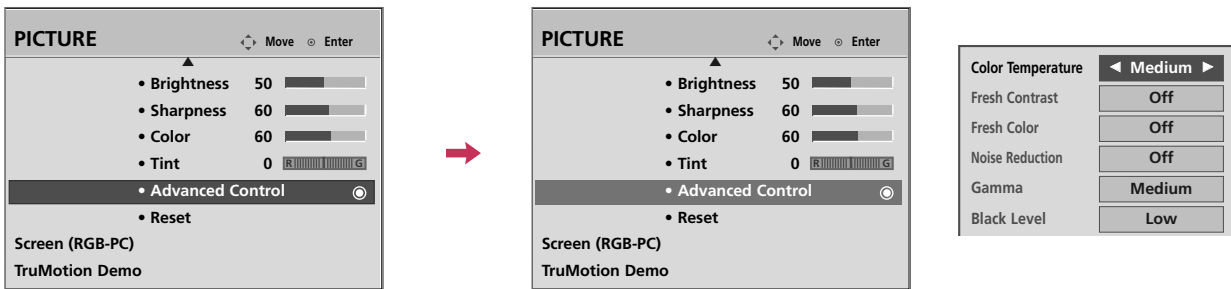
2 ENTER — Select **Advanced Control**.

3 ENTER — Select **Color Temperature**.

4 — Select **Cool**, **Medium**, or **Warm**.

5 RETURN — Return to the previous menu.

MENU — Return to TV viewing.

MANUAL PICTURE ADJUSTMENT
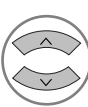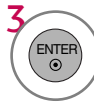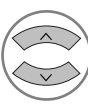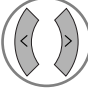
Picture Mode - User Mode

PICTURE		Move	Enter
Aspect Ratio	: 16:9		
Picture Mode	: Standard		
• Backlight	80		
• Contrast	90		
• Brightness	50		
• Sharpness	60		
• Color	60		
• Tint	0	R	G

• Backlight 80 ◄ ► ▼ Enter

1 MENU Select **PICTURE**.
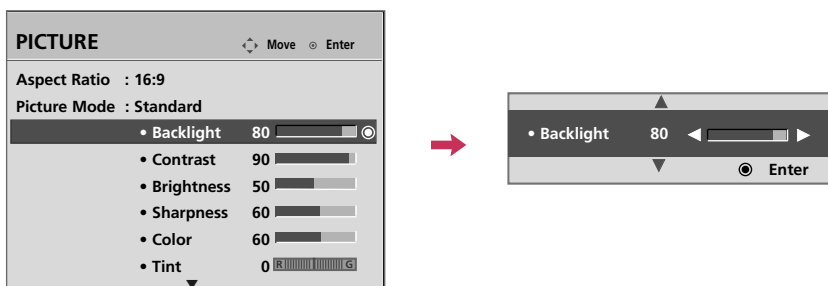
2 ENTER Select **Picture Mode**.

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

4 ENTER Select **Backlight** (Only LCD TV), **Contrast**, **Brightness**, **Sharpness**, **Color**, or **Tint**.

5 ENTER Make appropriate adjustments.

6 RETURN Return to the previous menu.

MENU Return to TV viewing.

Picture Mode - Expert Control

By segmenting categories, **Expert1** and **Expert2** provide more categories which users can set as they see fit, offering the optimal picture quality for users.

PICTURE	◇ Move ⊙ Enter
Aspect Ratio : 16:9	
Picture Mode : Standard	◎
• Backlight	80 ▬
• Contrast	90 ▬
• Brightness	50 ▬
• Sharpness	60 ▬
• Color	60 ▬
• Tint	0 R◼◼◼◼◼◼◼◼◼G
▼	

Sport
Game
Expert1 ◎
Expert2

➡

PICTURE	◇ Move ⊙ Enter
▲	
• Brightness	50
• Sharpness	60
• Color	60
• Tint	0
• Expert Control	
• Reset	
Screen (RGB-PC)	
TruMotion Demo	

Fresh Contrast	◀ Off ▶
Noise Reduction	Off
Gamma	Medium
Black Level	Off
Real Cinema	Off
Color Standard	SD
White Balance	Normal
• Method	2 Points
• Red Contrast	50
• Green Contrast	50
• Blue Contrast	50
▼	

1 MENU / ᐱᐯ — Select **PICTURE**.

2 ENTER / ᐱᐯ — Select **Picture Mode**.

3 ENTER / ᐱᐯ — Select **Expert1** or **Expert2**.

4 ENTER / ᐱᐯ — Select **Expert Control**.

5 ENTER / ᐱᐯ — Select your desired menu option.

6 ‹ › — Make appropriate adjustments.

7 RETURN — Return to the previous menu.

MENU — Return to TV viewing.

PICTURE IMPROVEMENT TECHNOLOGY

Fresh Contrast: Optimizes the contrast automatically according to the brightness of the reflection.
Fresh Color: Adjusts the color of the reflection automatically to reproduce as close as possible natural colors.
Noise Reduction: Removes interference up to the point where it does not damage the original picture.
Gamma: High gamma values display whitish images and low gamma values display high contrast images.
Color Gamut (Only for 47LG90): Select the range of colors that can be expressed.
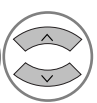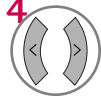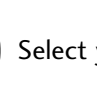
PICTURE	Move ⊙ Enter
▲	
• Brightness	50 ▬▬
• Sharpness	60 ▬▬
• Color	60 ▬▬
• Tint	0 R▥▥▥▥G
• Advanced Control	◎
• Reset	
Screen (RGB-PC)	
TruMotion Demo	

➡

PICTURE	Move ⊙ Enter
▲	
• Brightness	50 ▬▬
• Sharpness	60 ▬▬
• Color	60 ▬▬
• Tint	0 R▥▥▥▥G
• Advanced Control	◎
• Reset	
Screen (RGB-PC)	
TruMotion Demo	

Color Temperature	**Medium**
Fresh Contrast	◄ **Off** ►
Fresh Color	**Off**
Noise Reduction	**Off**
Gamma	**Medium**
Black Level	**Low**

1 MENU   Select **PICTURE**.
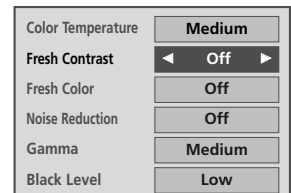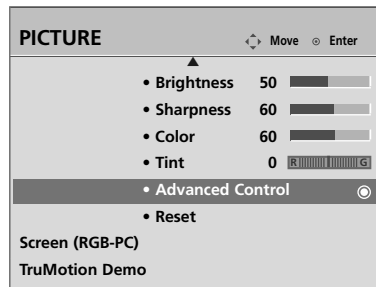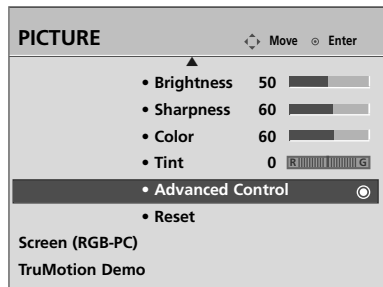
2 ENTER   Select **Advanced Control**.

3 ENTER   Select **Fresh Contrast, Fresh Color, Noise Reduction, Gamma,** or **Color Gamut.**

4   Select your desired options.

5 RETURN   Return to the previous menu.

MENU   Return to TV viewing.

ADVANCED CONTROL - BLACK (DARKNESS) LEVEL

Adjusting the contrast and the brightness of the screen using the black level of the screen.
This feature is disabled in DTV and RGB-PC mode.

PICTURE	◇ Move ⊙ Enter
▲	
• Brightness	50 ▬
• Sharpness	60 ▬
• Color	60 ▬
• Tint	0 R▥▥▥▥▥G
• Advanced Control	◎
• Reset	
Screen (RGB-PC)	
TruMotion Demo	

➡

PICTURE	◇ Move ⊙ Enter
▲	
• Brightness	50 ▬
• Sharpness	60 ▬
• Color	60 ▬
• Tint	0 R▥▥▥▥▥G
• Advanced Control	◎
• Reset	
Screen (RGB-PC)	
TruMotion Demo	

Color Temperature	**Medium**
Fresh Contrast	**Off**
Fresh Color	**Off**
Noise Reduction	**Auto**
Gamma	**Medium**
Black Level	◀ **Low** ▶
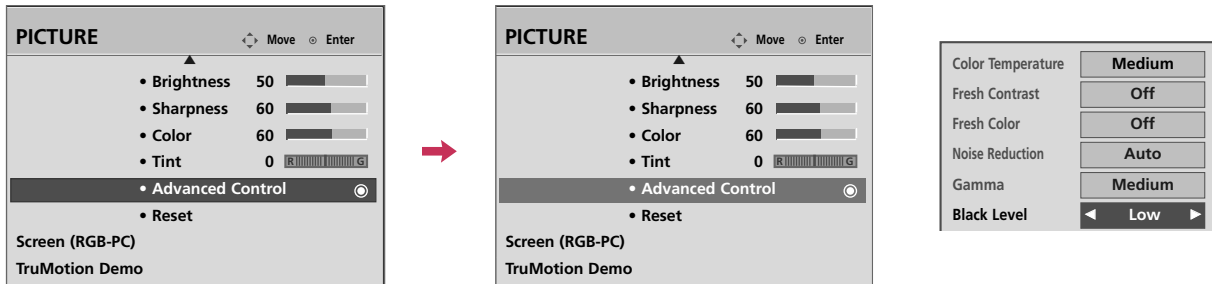
1   MENU   Select **PICTURE**.

2   ENTER   Select **Advanced Control**.

3   ENTER   Select **Black Level**.

4   Select **Low** or **High**.

5   RETURN   Return to the previous menu.

MENU   Return to TV viewing.

- **Low**: The reflection of the screen gets darker.
- **High**: The reflection of the screen gets brighter.
- **Auto**: Realizing the black level of the screen and set it to High or Low automatically.
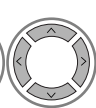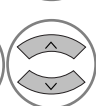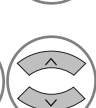
ADVANCED CONTROL - EYE CARE *- LCD TV Only*

Dims extremely bright pictures.
This feature is disabled in "Picture Mode-Vivid, Cinema".
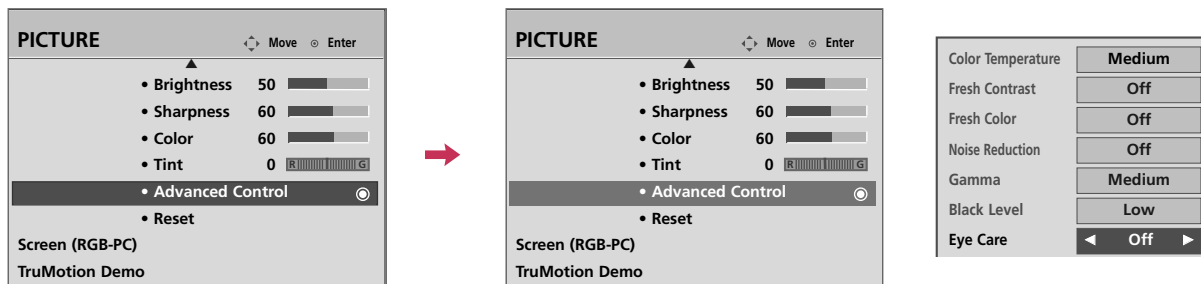
PICTURE   Move   Enter

- Brightness   50
- Sharpness   60
- Color   60
- Tint   0   R G
- Advanced Control
- Reset

Screen (RGB-PC)
TruMotion Demo

PICTURE   Move   Enter

- Brightness   50
- Sharpness   60
- Color   60
- Tint   0   R G
- Advanced Control
- Reset

Screen (RGB-PC)
TruMotion Demo

Color Temperature	Medium
Fresh Contrast	Off
Fresh Color	Off
Noise Reduction	Off
Gamma	Medium
Black Level	Low
Eye Care	◄ Off ►

1	MENU	Select **PICTURE**.
2	ENTER	Select **Advanced Control**.
3	ENTER	Select **Eye Care**.
4		Select **On** or **Off**.
5	RETURN	Return to the previous menu.
	MENU	Return to TV viewing.

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ADVANCED CONTROL - REAL CINEMA / FILM MODE

Set up the TV for the best picture appearance for viewing movies.

When you operate Real Cinema/Film Mode (3:2 Pull-Down Mode or Cinema Correction Mode), the TV will adjust 24 fps video from movies to 30 fps video for display.

■ Plasma TV, 32/37/42LG30

This feature operates only in TV (Analog TV/CATV, Digital DTV/CADTV), AV1, AV2, Component 480i/1080i, and HDMI 1080i mode.

■ 37/42/47/52LG50

This feature operates only in TV (Analog TV/CATV, Digital DTV/CADTV), AV1, AV2, Component 480i/1080i, and HDMI 1080i mode.

This TV ouputs 48Hz in DTV, Component, and HDMI 1080p (24Hz).

■ 32/37/42/47/52LG60, 32/42/47/52LG70, 42LGX, 47LG90

This function works with all inputs except PC mode.

Screen	TruMotion	Real Cinema
5:5 Pull-Down	Off	On
3:2 Pull-Down	On	On

PICTURE ⬦ Move ⊙ Enter

▲
- Brightness   50
- Sharpness   60
- Color   60
- Tint   0   R|||||||||||||||||G
- Advanced Control   ◉
- Reset

Screen (RGB-PC)
TruMotion Demo

➡

PICTURE ⬦ Move ⊙ Enter

▲
- Brightness   50
- Sharpness   60
- Color   60
- Tint   0
- Advanced Contro
- Reset

Screen (RGB-PC)
TruMotion Demo

Color Temperature	Medium
Fresh Contrast	Off
Fresh Color	Off
Noise Reduction	Off
Gamma	Medium
Black Level	Low
Film Mode	◄ Off ►

Close

For Plasma TV

Color Temperature	Medium
Fresh Contrast	Off
Fresh Color	Off
Noise Reduction	Off
Gamma	Medium
Black Level	Low
Eye Care	Off
Real Cinema	◄ Off ►
TruMotion	High

Close

For LCD TV

1 MENU / ∧∨<> Select **PICTURE**.

2 ENTER / ∧∨ Select **Advanced Control**.

3 ENTER / ∧∨ Select **Real Cinema** or **Film Mode**.

4 <> Select **On** or **Off**.

5 RETURN Return to the previous menu.

MENU Return to TV viewing.

ADVANCED CONTROL - TRUMOTION
- Only 37/42/47/52LG60, 42/47/52LG70, 42LGX, 47LG90

TruMotion provides even better quality for movies than 3:2 Pull-Down conversions.

TruMotion means the panel supports faster frame rates that normal panels which makes for smoother motion in video. TruMotion LCD models support 120Hz instead of 60Hz. This means twice the information on the screen in the same amount of time and easier film conversions (120 is equally divisible by 24, so no interpretations or double frames are needed).

TruMotion works with all inputs except PC mode.

PICTURE	Move ⊙ Enter
▲	
• Brightness	50
• Sharpness	60
• Color	60
• Tint	0 R|||||||||||G
• Advanced Control	⊙
• Reset	
Screen (RGB-PC)	
TruMotion Demo	

PICTURE	Move ⊙ Enter
▲	
• Brightness	50
• Sharpness	60
• Color	60
• Tint	0 R|||||||||||G
• Advanced Control	⊙
• Reset	
Screen (RGB-PC)	
TruMotion Demo	

Real Cinema	Off
TruMotion	◄ High ►
	Close
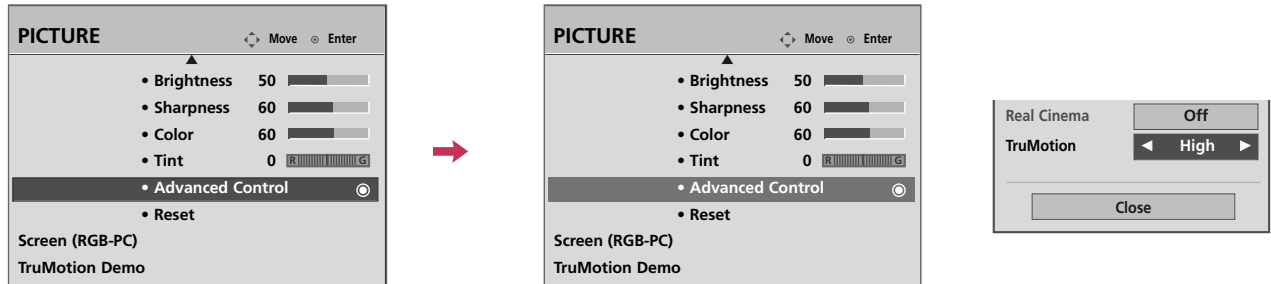
1 MENU — Select **PICTURE**.

2 ENTER — Select **Advanced Control**.

3 ENTER — Select **TruMotion**.

4 — Select **Off**, **Low**, or **High**.

5 RETURN — Return to the previous menu.

MENU — Return to TV viewing.

- ■ **High**: Provides smoother picture movement.
- ■ **Low**: Provides smooth picture movement. Use this setting for standard use.
- ■ **Off**: Use this setting when "High"and "Low" setting result in noise.
- ■ If you enable "TruMotion", noise may appear on the screen. If this occurs, set "TruMotion" to "Off".

TRUMOTION DEMO - Only 37/42/47/52LG60, 42/47/52LG70, 42LGX, 47LG90

Use this feature to see the difference TruMotion makes.

TruMotion works with all inputs except PC mode.

PICTURE	Move ⊙ Enter
▲	
• Brightness	50
• Sharpness	60
• Color	60
• Tint	0 R|||||||||||G
• Advanced Control	
• Reset	
Screen (RGB-PC)	
TruMotion Demo	⊙

TruMotion On   TruMotion Off   RETURN Exit

LG's Advanced TruMotion 120Hz technology provides images whi
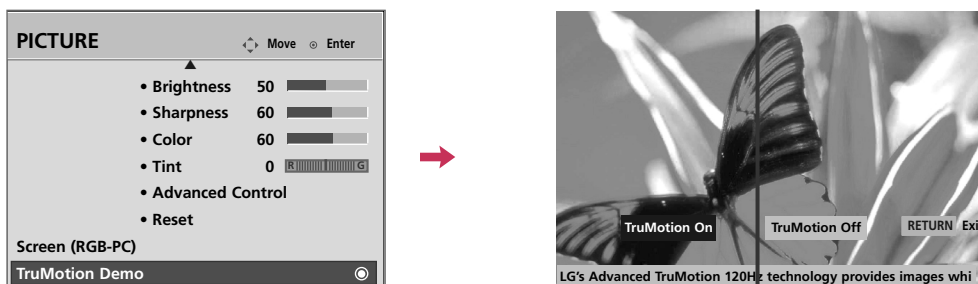
1 MENU — Select **PICTURE**.

2 ENTER — Select **TruMotion Demo**.

3 ENTER — Begin **TruMotion Demo**.

4 MENU — Stop **TruMotion Demo**.

LOCAL DIMMING *- Only 47LG90*

After analyzing the signla of the input video by areas of the screen, it adjusts the brightness to improve the contrast ratio.

PICTURE	⟨⟩ Move ⊙ Enter
▲	
• Color	60 ▬▬▬
• Tint	0 R||||||||| G
• Advanced Control	
• Reset	
Local Dimming : On	⊚
Screen (RGB-PC)	
TruMotion Demo	
Local Dimming Demo	

PICTURE	⟨⟩ Move ⊙ Enter
▲	
• Color	60 ▬▬▬
• Tint	0 R||||||||| G
• Advanced Control	
• Reset	
Local Dimming : On	Off
Screen (RGB-PC)	**On** ⊚
TruMotion Demo	
Local Dimming Demo	

1 MENU ⌃⌄⟨⟩   Select **PICTURE**.

2 ENTER ⌃⌄   Select **Local Dimming**.

3 ENTER ⌃⌄   Select **On** or **Off**.

4 RETURN   Return to the previous menu.

MENU   Return to TV viewing.

LOCAL DIMMING DEMO *- Only 47LG90*

Use this feature to see the difference Local Dimming makes.

PICTURE	⟨⟩ Move ⊙ Enter
▲	
• Color	60 ▬▬▬
• Tint	0 R||||||||| G
• Advanced Control	
• Reset	
Local Dimming : On	
Screen (RGB-PC)	
TruMotion Demo	
Local Dimming Demo	⊚

Local Dimming Demo   RETURN Exit

1 MENU ⌃⌄⟨⟩   Select **PICTURE**.

2 ENTER ⌃⌄   Select **Local Dimming Demo**.

3 ENTER   Begin **Local Dimming Demo**.

4 MENU   Stop **Local Dimming Demo**.

PICTURE CONTROL

PICTURE RESET

Settings of the selected picture modes return to the default factory settings.
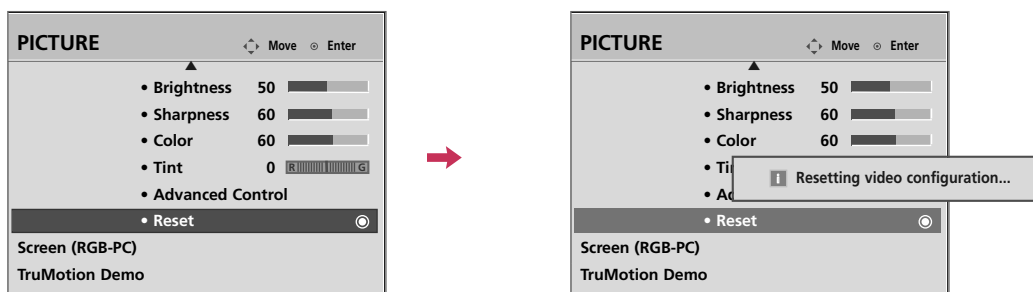
PICTURE	Move ⊙ Enter
▲	
• Brightness	50 ▮▮▮▮▮
• Sharpness	60 ▮▮▮▮▮▮
• Color	60 ▮▮▮▮▮▮
• Tint	0 R ▮▮▮▮▮▮▮▮▮▮▮ G
• Advanced Control	
• **Reset**	◎
Screen (RGB-PC)	
TruMotion Demo	

➡

PICTURE	Move ⊙ Enter
▲	
• Brightness	50 ▮▮▮▮
• Sharpness	60 ▮▮▮▮▮
• Color	60 ▮▮▮▮▮
• Ti	
• Ac	ⓘ Resetting video configuration...
• **Reset**	◎
Screen (RGB-PC)	
TruMotion Demo	

1 MENU ⌄⌃⌄⌃ Select **PICTURE**.

2 ENTER ⌃⌄ Select **Reset**.

3 ENTER Initialize the adjusted value.

4 MENU Return to TV viewing.

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POWER INDICATOR - *LCD TV Only*

OPTION	⬦ Move ⊙ Enter
Language	: English
Input Label	
SIMPLINK	: On
Key Lock	: Off
Caption	: Off
Set ID	: 1
Power Indicator	◉
Initial Setting	: Home

➡

OPTION	⬦ Move ⊙ Enter
Language	: English
Input Label	
SIMPLINK	: On
Key Lock	: Off
Caption	
Set ID	
Power Indicator	
Initial Setting	

Srartup Sound	◄ Low ►
Standby Light	Off
Power Light	On
Demo Mode	Off

Close

Only for
32/37/42/47/52LG60,
42LGX
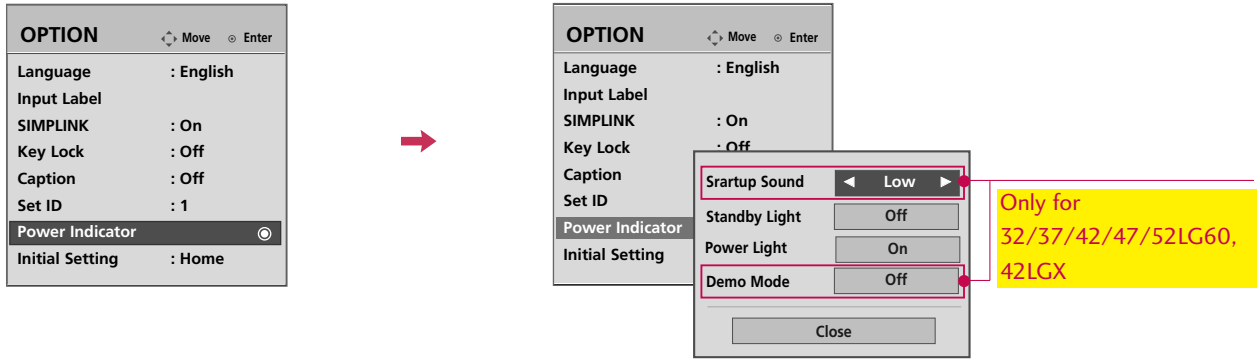
1 MENU Select **OPTION**.

2 ENTER Select **Power Indicator**.

3 ENTER Select **Srartup Sound**, **Standby Light**, **Power Light** or **Demo Mode**.

4 Select your desired options.

5 RETURN Return to the previous menu.

MENU Return to TV viewing.

■ **Startup Sound**: You can turn off the starting sound of the TV or set the volume.

■ **Standby Light**: You can set the brightness of the LED on the front side of the TV during power standby.

■ **Power Light**: You can set the the LED on the front side of the TV to be turned on or off while watching the TV.

■ **Demo Mode**: You can set the LED on the front side of the TV to flash.

IMAGE STICKING MINIMIZATION (ISM) METHOD - *Plasma TV Only*

A frozen still picture from a PC/video game displayed on the screen for prolonged periods can result in a ghost image. You can use Orbiter to help prevent image sticking. The other two functions are for removing a ghost image.

OPTION	◊ Move ⊙ Enter
Language	: English
Input Label	
SIMPLINK	: On
Key Lock	: Off
Caption	: Off
ISM Method	**: Normal ⊙**
Power Saving	: Level 0
Set ID	: 1

➡

OPTION	◊ Move ⊙ Enter
Language	: English
Input Label	
SIMPLINK	: On
Key Lock	: Off
Caption	: Off
ISM Method	: Nor
Power Saving	: Lev
Set ID	: 1

- **Normal** ⊚
- Orbiter
- Inversion
- White Wash
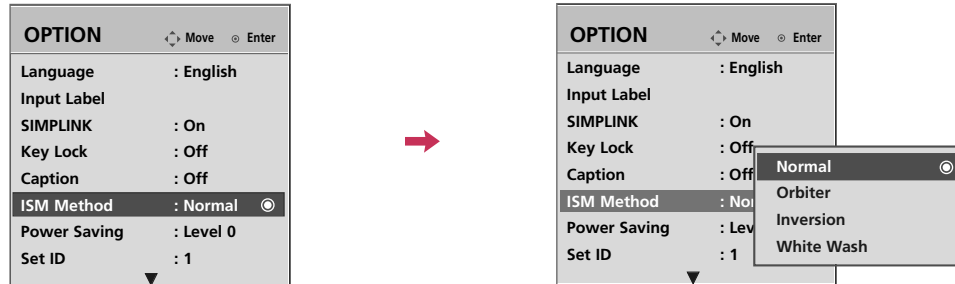
1 MENU — Select **OPTION**.

2 ENTER — Select **ISM Method**.

3 ENTER — Select **Normal, Orbiter, Inversion** or **White Wash**.

4 RETURN — Return to the previous menu.

MENU — Return to TV viewing.

- **Normal**: If image sticking is never a problem, ISM is not necessary - set to Normal.
- **Orbiter**: Orbiter may help prevent ghost images. However, it is best not to allow any fixed image to remain on the screen. To avoid a ghost image on the screen, the image will move every 2 minutes.
- **Inversion**: Inversion will automatically invert the plasma display panel color every 30 minutes.
- **White Wash**: White Wash removes ghost images from the screen. Use sparingly. Watch the TV normally for a while before using this feature to see if the ghost image disappears on its own.
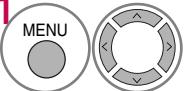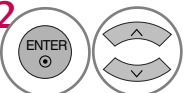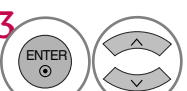
❶ NOTE

► An excessive ghosted image may be impossible to clear entirely with White Wash. To return to normal viewing, press the any button.

POWER SAVING PICTURE MODE - *Plasma TV Only*

It reduces the plasma display's power consumption.

OPTION	⬍ Move ⊙ Enter
Language	: English
Input Label	
SIMPLINK	: On
Key Lock	: Off
Caption	: Off
ISM Method	: Normal
Power Saving	**: Level 0** ◉
Set ID	: 1 ▼

➡

OPTION	⬍ Move ⊙ Enter
Language	: English
Input Label	
SIMPLINK	: On
Key Lock	: Off
Caption	: Off
ISM Method	: Nor
Power Saving	**: Lev**
Set ID	: 1 ▼

Level 0	◉
Level 1	
Level 2	
Level 3	
Level 4	
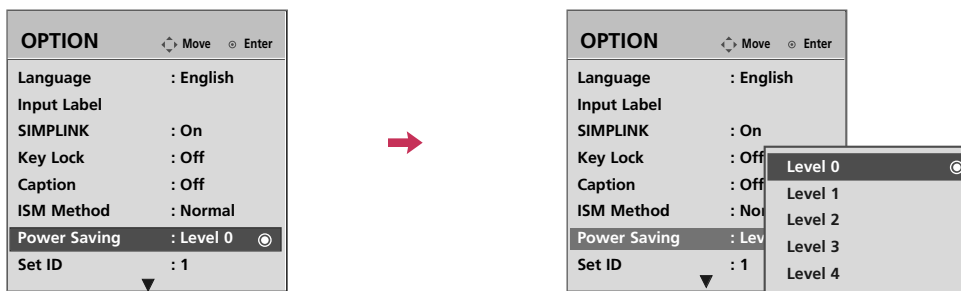
1 MENU / Select **OPTION**.

2 ENTER ⊙ / Select **Power Saving**.

3 ENTER ⊙ / Select **Level 0**, **Level 1**, **Level 2**, **Level 3**, or **Level 4**.

4 RETURN / Return to the previous menu.

MENU / Return to TV viewing.

- Level 0 is the brightest.
- Level 0 > Level 1 > Level 2 > Level 3 > Level 4
- You can also adjust **Power Saving** in the **Q. Menu**.

SOUND & LANGUAGE CONTROL

AUTO VOLUME LEVELER (AUTO VOLUME)

Auto Volume makes sure that the volume level remains consistent whether you are watching a commercial or a regular TV program.

AUDIO	⟷ Move ⊙ Enter
Auto Volume	**: Off** ◉
Clear Voice	: On
Balance	0 L||||||||R
Sound Mode	: Standard
	• SRS TruSurround XT: Off
	• Treble 50
	• Bass 50
	• Reset

➡

AUDIO	⟷ Move ⊙ Enter
Auto Volume	**: On**	Off
Clear Voice	: On	On ◉
Balance	0 L||||||||R
Sound Mode	: Standard
	• SRS TruSurround XT: Off
	• Treble 50
	• Bass 50
	• Reset
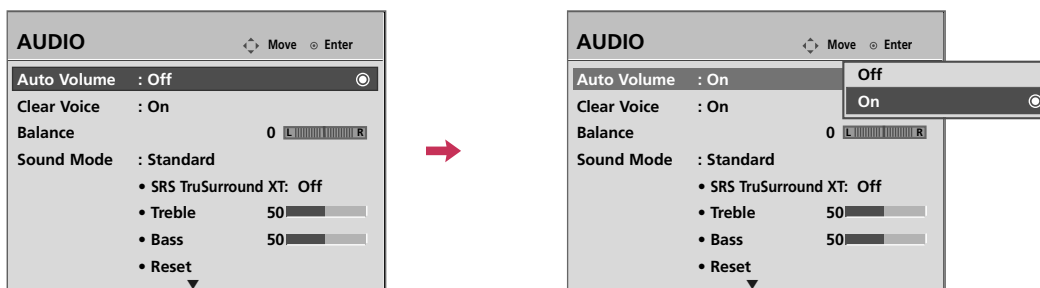
1 MENU Select **AUDIO**.

2 ENTER Select **Auto Volume**.

3 ENTER Select **On** or **Off**.

4 RETURN Return to the previous menu.

MENU Return to TV viewing.

PRESET SOUND SETTINGS (SOUND MODE)

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

Standard, **Music**, **Cinema**, **Sport**, and **Game** are preset for optimum sound quality at the factory and are not adjustable.
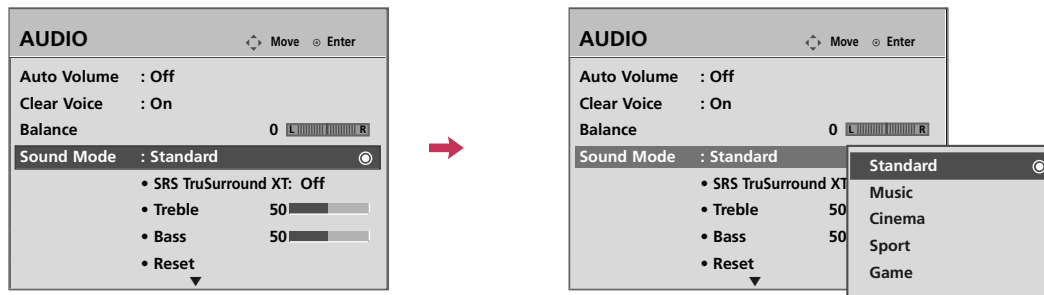
AUDIO	◇ Move ◉ Enter
Auto Volume	: Off
Clear Voice	: On
Balance	0
Sound Mode	: Standard ◎
• SRS TruSurround XT: Off	
• Treble	50
• Bass	50
• Reset	

➡

AUDIO	◇ Move ◉ Enter
Auto Volume	: Off
Clear Voice	: On
Balance	0
Sound Mode	: Standard
• SRS TruSurround XT	**Standard** ◎
• Treble	50 **Music**
• Bass	50 **Cinema**
• Reset	**Sport**
	Game

---

1 MENU

Select **AUDIO**.

2 ENTER

Select **Sound Mode**.

3 ENTER

Select **Standard**, **Music**, **Cinema**, **Sport**, or **Game**.

4 RETURN

Return to the previous menu.

MENU

Return to TV viewing.
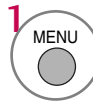
■ You can also adjust **Sound Mode** in the **Q. Menu**.
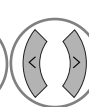
SOUND SETTING ADJUSTMENT - USER MODE
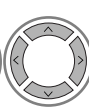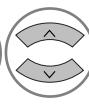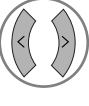
Adjust the sound to suit your taste and room situations.
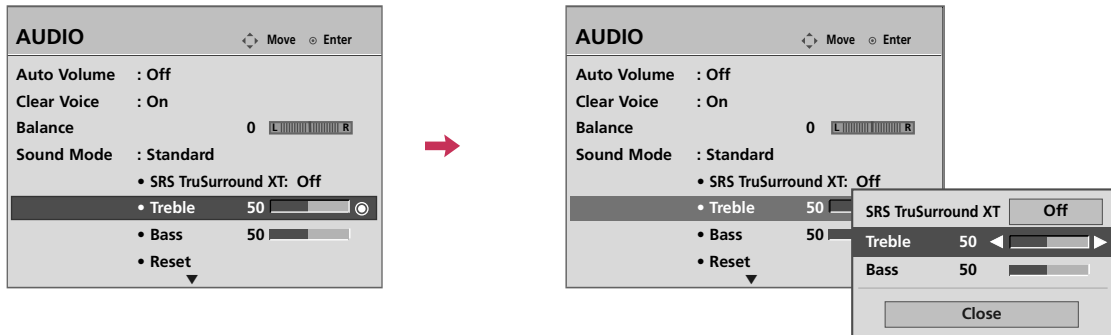
AUDIO   ◇ Move   ⊙ Enter

Auto Volume   : Off
Clear Voice   : On
Balance   0   L||||||||||||||R
Sound Mode   : Standard
       • SRS TruSurround XT: Off
       • Treble   50
       • Bass   50
       • Reset

→

AUDIO   ◇ Move   ⊙ Enter

Auto Volume   : Off
Clear Voice   : On
Balance   0   L||||||||||||||R
Sound Mode   : Standard
       • SRS TruSurround XT: Off
       • Treble   50
       • Bass   50
       • Reset

SRS TruSurround XT	Off
Treble	50 ◄ ►
Bass	50
Close	

1   MENU   Select **AUDIO**.

2   ENTER   Select **Sound Mode**.

3   ENTER   Select **Standard**, **Music**, **Cinema**, **Sport**, or **Game**.

4   ENTER   Select **Treble** or **Bass**.

5   ENTER   Make appropriate adjustments.

6   RETURN   Return to the previous menu.

     MENU   Return to TV viewing.

SRS TRUSURROUND XT

1   MENU   Select **AUDIO**.

2   ENTER   Select **SRS TruSurround XT**

3   ENTER   Select **On** or **Off**.

4   RETURN   Return to the previous menu.

     MENU   Return to TV viewing.

■ **SRS TruSurround XT**: Takes advantage of any multi-channel format without needing to add extra speakers or equipment. Dialog clarity, bass enrichment, and the addition of stereo audio enhancement produces an immersive sound experience from standard stereo material.

CLEAR VOICE

By differentiating the human sound range from others, it improves the sound quality of voices.

AUDIO　　　　　　　◇ Move　◉ Enter

Auto Volume　: Off
Clear Voice　: On　　　　　　　◎
Balance　　　　　　0　L‖‖‖‖‖‖‖‖R
Sound Mode　: Standard
　　　　• SRS TruSurround XT: Off
　　　　• Treble　　50‖
　　　　• Bass　　　50‖
　　　　• Reset
　　　　　▼

➡

AUDIO　　　　　　　◇ Move　◉ Enter

Auto Volume　: Off
Clear Voice　: On　　　　| **Off**
Balance　　　　　　0　| **On**　　　◎
Sound Mode　: Standard
　　　　• SRS TruSurround XT: Off
　　　　• Treble　　50‖
　　　　• Bass　　　50‖
　　　　• Reset
　　　　　▼
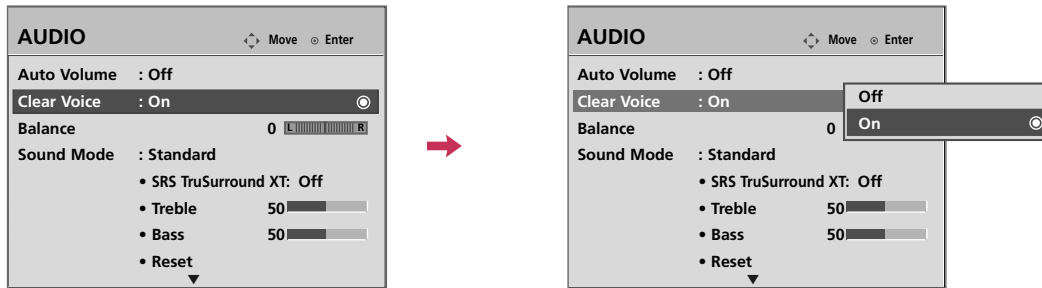
1 MENU　⌄⌃ Select **AUDIO**.

2 ENTER　⌃⌄ Select **Clear Voice**.

3 ENTER　⌃⌄ Select **On** or **Off**.

4 RETURN　Return to the previous menu.

MENU　Return to TV viewing.

■ If you select "**Clear Voice-On**", **SRS TruSurround XT** feature will not work.
■ You can also adjust **Clear Voice** in the **Q-Menu**.

BALANCE

Adjust the left/right sound of speaker to suit your taste and room situations.
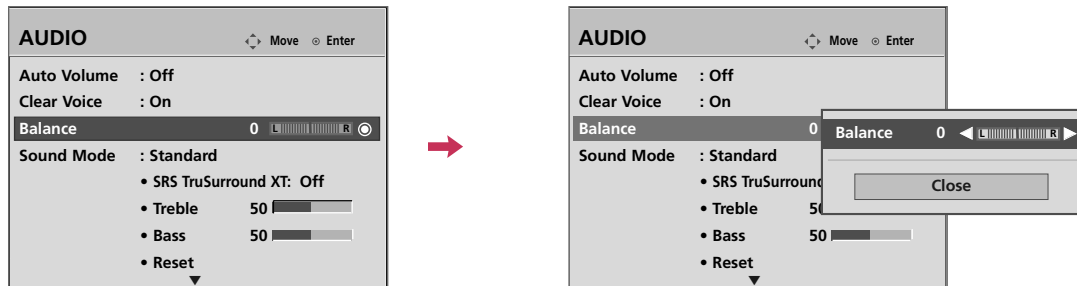
AUDIO	⬩ Move ⊙ Enter
Auto Volume	: Off
Clear Voice	: On
Balance	0 L‖‖‖‖‖‖‖‖‖R ◉
Sound Mode	: Standard
	• SRS TruSurround XT: Off
	• Treble 50 ▮▮▮▮▮
	• Bass 50 ▮▮▮▮▮
	• Reset

➡

AUDIO	⬩ Move ⊙ Enter
Auto Volume	: Off
Clear Voice	: On
Balance	0
Sound Mode	: Standard
	• SRS TruSurround
	• Treble 5
	• Bass 50 ▮
	• Reset

Balance	0 ◀ L‖‖‖‖‖‖‖‖R ▶
Close	

1 MENU ⌃⌄‹› Select **AUDIO**.

2 ENTER ⌃⌄ Select **Balance**.

3 ENTER ‹› Make appropriate adjustments.

4 RETURN Return to the previous menu.

MENU Return to TV viewing.

SOUND & LANGUAGE CONTROL

TV SPEAKERS ON/OFF SETUP

Turn the TV speakers off if using external audio equipment.
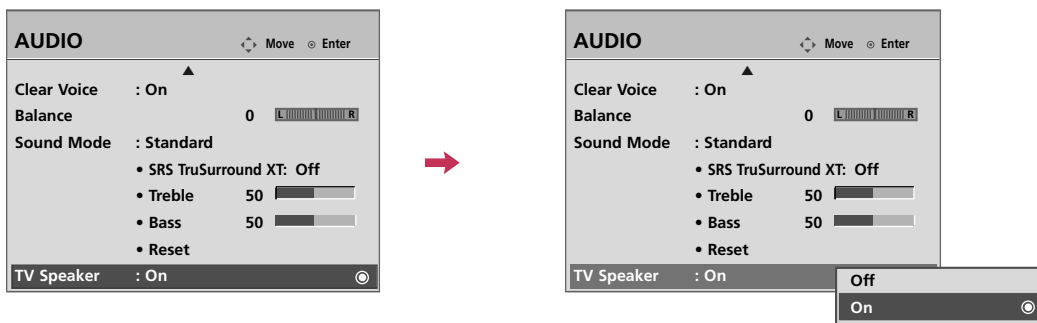
AUDIO	◄ ► Move ⊙ Enter
Clear Voice	: On
Balance	0 L ▯▯▯▯▯▯▯▯▯ R
Sound Mode	: Standard
	• SRS TruSurround XT: Off
	• Treble 50
	• Bass 50
	• Reset
TV Speaker	**: On** ◉

➡

AUDIO	◄ ► Move ⊙ Enter
Clear Voice	: On
Balance	0 L ▯▯▯▯▯▯▯▯▯ R
Sound Mode	: Standard
	• SRS TruSurround XT: Off
	• Treble 50
	• Bass 50
	• Reset
TV Speaker	**: On**

Off
On   ◉

1 MENU ⌃⌄‹› Select **AUDIO**.

2 ENTER ⌃⌄ Select **TV Speaker**.

3 ENTER ⌃⌄ Select **On** or **Off**.

4 RETURN Return to the previous menu.

MENU Return to TV viewing.

SOUND & LANGUAGE CONTROL

AUDIO RESET

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

AUDIO	⬭ Move ⊙ Enter
Auto Volume	: Off
Clear Voice	: On
Balance	0 L‖‖‖‖‖‖‖‖‖R
Sound Mode	: Standard
	• SRS TruSurround XT: Off
	• Treble 50
	• Bass 50
	• Reset ◉

➡

AUDIO	⬭ Move ⊙ Enter
Auto Volume	: Off
Clear Voice	: On
Balance	0 L‖‖‖‖‖‖‖‖‖R
Sound Mode	⬚ Resetting audio configuration...
	• Treble 50
	• Bass 50
	• Reset ◉

1 MENU ⌄⌃ Select **AUDIO**.

2 ENTER ⌃⌄ Select **Reset**.
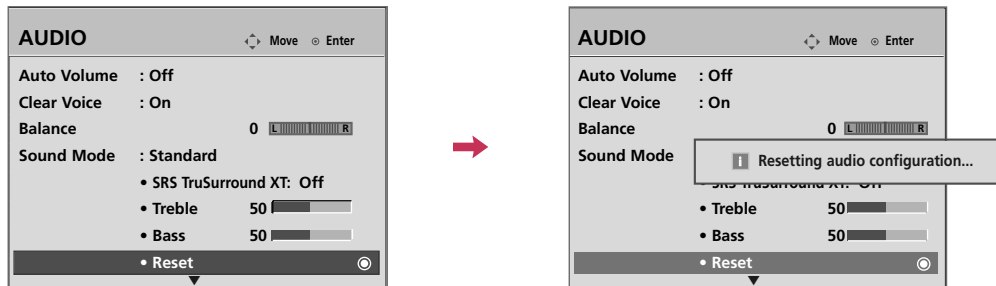
3 ENTER Initialize the adjusted value.

4 MENU Return to TV viewing.

STEREO/SAP BROADCAST SETUP

For Analog only: This TV can receive MTS stereo programs and any SAP (Secondary Audio Program) that accompanies the stereo program if the station transmits an additional sound signal. Mono sound is automatically used if the broadcast is only in Mono.

Plasma TV

Q.Menu

⬌ Aspect Ratio	16:9
☼ Power Saving	3
▯ Clear Voice	Off
👁 Picture Mode	Vivid
♫ Sound Mode	Standard
▭ Caption	Off
((◉)) Multi Audio	◄ English ►
⏱ Sleep Timer	Off
CH Del/Add/Fav	Add
⎁ USB Eject	Eject

Close

LCD TV

Q.Menu

⬌ Aspect Ratio	16:9
☼ Backlight	3
▯ Clear Voice	Off
👁 Picture Mode	Vivid
♫ Sound Mode	Standard
▭ Caption	Off
((◉)) Multi Audio	◄ English ►
⏱ Sleep Timer	Off
CH Del/Add/Fav	Add
⎁ USB Eject	Eject

Close
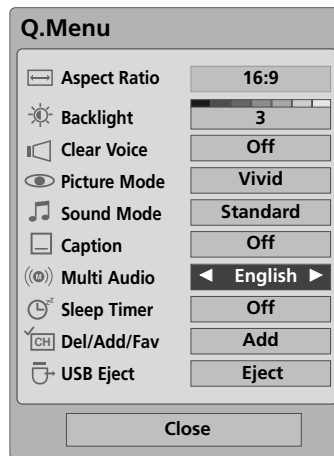
Analog TV

1 Q. MENU Select **SAP**.

2 Select **Mono**, **Stereo**, or **SAP**.

3 Q. MENU Return to TV viewing.

Digital TV

1 Q. MENU Select **Multi Audio**.

2 Select other languages.

3 Q. MENU Return to TV viewing.

AUDIO LANGUAGE

Other languages may be available if a digital signal is provided by the broadcasting station.
This feature operates only in DTV/CADTV mode.

OPTION	⬩ Move ⊙ Enter
Language	**: English** ◉
Input Label	
SIMPLINK	: On
Key Lock	: Off
Caption	: Off
ISM Method	: Normal
Power Saving	: Level 0
Set ID ▼	: 1

➡

OPTION	⬩ Move ⊙ Enter
Language	**: English**
Input Label	
SIMPLINK	: On
Key Lock	: Off
Caption	: Off
ISM Method	: Normal
Power Saving	: Level 0
Set ID ▼	: 1

Menu	English
Audio	◄ English ►
	Close
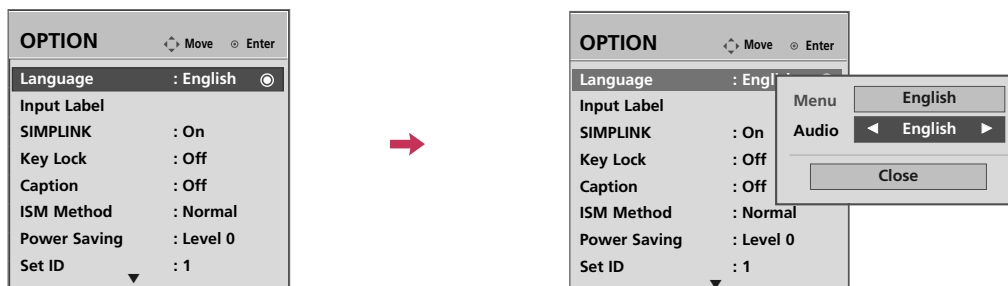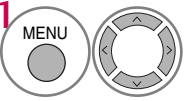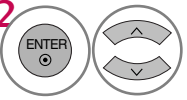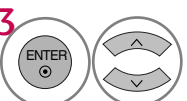
1	MENU ⌄⌃	Select **OPTION**.
2	ENTER ⊙ ⌃⌄	Select **Language**.
3	ENTER ⊙ ⌃⌄	Select **Audio**.
4	‹ ›	Select your desired language: **English**, **Spanish**, or **French**
5	RETURN	Return to the previous menu.
	MENU	Return to TV viewing.

ON-SCREEN MENUS LANGUAGE SELECTION

The menus can be shown on the screen in the selected language.

OPTION	◊ Move ⊙ Enter
Language	**: English** ◉
Input Label	
SIMPLINK	**: On**
Key Lock	**: Off**
Caption	**: Off**
ISM Method	**: Normal**
Power Saving	**: Level 0**
Set ID ▼	**: 1**

➡

OPTION	◊ Move ⊙ Enter	
Language	**: E**	**Menu** ◄ **English** ►
Input Label		**Audio** **English**
SIMPLINK	**: O**	
Key Lock	**: O**	**Close**
Caption	**: O**	
ISM Method	**: Normal**	
Power Saving	**: Level 0**	
Set ID ▼	**: 1**	

1 MENU / Select **OPTION**.

2 ENTER / Select **Language**.

3 ENTER / Select **Menu**.
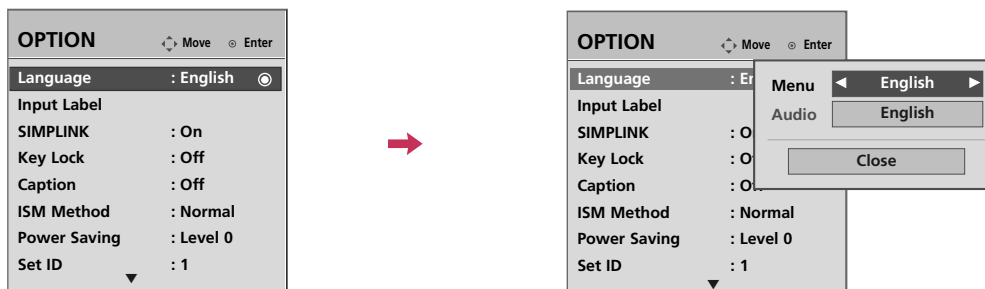
4 Select your desired language.
From this point on, the on-screen menus will be shown in the selected language.

5 RETURN / Return to the previous menu.

MENU / Return to TV viewing.

CAPTION MODE

Analog Broadcasting System Captions

Caption must be provided to help people with hearing loss watch TV. Select a caption mode for displaying captioning information if provided on a program. Analog caption displays information at any position on the screen and is usually the program's dialog. Caption/Text, if provided by the broadcaster, would be available for both digital and analog channels on the Antenna/Cable. This TV is programmed to memorize the caption/text mode which was last set when you turned the power off. This function is only available when **Caption** Mode is set **On**.

OPTION	◁▷ Move ⊙ Enter
Language	: English
Input Label	
SIMPLINK	: On
Key Lock	: Off
Caption	**: Off** ◎
ISM Method	: Normal
Power Saving	: Level 0
Set ID	: 1
▼	

➡

OPTION	◁▷ Move ⊙ Enter
Language	: English
Input Label	
SIMPLINK	: On
Key Lock	: Off
Caption	**: CC1**
ISM Method	: Normal
Power Saving	: Level 0
Set ID	: 1
▼	

◀	On	▶
Mode	CC1	
	Digital Option	
	Close	

1 MENU		Select **OPTION**.
2 ENTER		Select **Caption**.
3 ENTER		Select **On**.
4		Select **CC1-4** or **Text1-4**.
5 RETURN		Return to the previous menu.
MENU		Return to TV viewing.

- When selecting **Off**, Sub-menus for Analog, DTV, and Digital Option become disabled.

- **CAPTION**

  The term for the words that scroll across the bottom of the TV screen; usually the audio portion of the program provided for the hearing impaired.

- **TEXT**

  The term for the words that appear in a large black frame and almost cover the entire screen; usually messages provided by the broadcaster.

Digital Broadcasting System Captions

Choose the language you want the DTV/CADTV Captions to appear in.
Other Languages can be chosen for digital sources only if they are included on the program.
This function in only available when **Caption** Mode is set **On.**

OPTION	⟨ ⟩ Move ⊙ Enter
Language	: English
Input Label	
SIMPLINK	: On
Key Lock	: Off
Caption	: Off ◎
ISM Method	: Normal
Power Saving	: Level 0
Set ID	: 1
▼	

➡

OPTION	⟨ ⟩ Move ⊙ Enter
Language	: English
Input Label	
SIMPLINK	: On
Key Lock	: Of
Caption	: C
ISM Method	: N
Power Saving	: Le
Set ID	: 1
▼	

◄   On   ►

Mode   CC1

Digital Option

Close

1   MENU   Select **OPTION.**

2   ENTER   Select **Caption.**

3   ENTER   Select **On.**

4   Select **CC1-4**, **Text1-4**, or **Service1 - 6**.

5   RETURN   Return to the previous menu.

MENU   Return to TV viewing.

Caption Option

**Customize the DTV/CADTV captions that appear on your screen.
This function in only available when Caption Mode is set On.**

OPTION	◇ Move ⊙ Enter
Language	: English
Input Label	
SIMPLINK	: On
Key Lock	: Off
Caption	**: Off** ◉
ISM Method	: Normal
Power Saving	: Level 0
Set ID	: 1
▼	

➡

OPTION	◇ Move ⊙ Enter
Language	: English
Input Label	
SIMPLINK	: On
Key Lock	:
Caption	:
ISM Method	:
Power Saving	:
Set ID	:
▼	

◄ On ►
Mode   Service1
Digital Option
Close

➡

◄ Custom ►	
Size	Ⓐ Standard
Font	Font 1
Text Color	☐ White
Text Opacity	Solid
Bg Color	■ Black
Bg Opacity	Solid
Edge Type	None
Edge Color	■ Black
Close	

1 MENU — Select **OPTION**.

2 ENTER — Select **Caption**

3 ENTER — Select **On**.

4 — Select **Digital Option**.

5 ENTER — Select **Custom**.

6 — Customize the **Style**, **Font**, etc., to your preference. A preview icon is provided at the bottom of the screen, use it to see the caption language.

7 RETURN — Return to the previous menu.

MENU — Return to TV viewing.

- **Size**: Set the word size.
- **Font**: Select a typeface for the text.
- **Text Color**: Choose a color for the text.
- **Text Opacity**: Specify the opacity for the text color.
- **Bg (Background) Color**: Select a background color.
- **Bg (Background) Opacity**: Select the opacity for the background color.
- **Edge Type**: Select an edge type.
- **Edge Color**: Select a color for the edges.

TIME SETTING

CLOCK SETTING

Auto Clock Setup

The time is set automatically from a digital channel signal.
The digital channel signal includes information for the current time provided by the broadcasting station.
Set the clock manually if the current time is set incorrectly by the auto clock function.

TIME	◄↕► Move ◎ Enter
Clock	**: Feb/21/2008 2:10 AM ◉**
Off Time	: Off
On Time	: Off
Sleep Timer	: Off
Auto Sleep	: Off

➡

TIME	◄↕► Move ◎ Enter
Clock	**: Feb/21/2008 2:10**
Off Time	: Off
On Time	: Off
Sleep Timer	: Off
Auto Sleep	: Off

◄	Auto	►
Year		2008
Month		2
Date		21
Hour		2 AM
Minute		10
Time Zone		Eastern
Daylight Saving		Auto
	Close	

1 MENU — Select **TIME**.

2 ENTER — Select **Clock**.

3 ENTER — Select **Auto**.
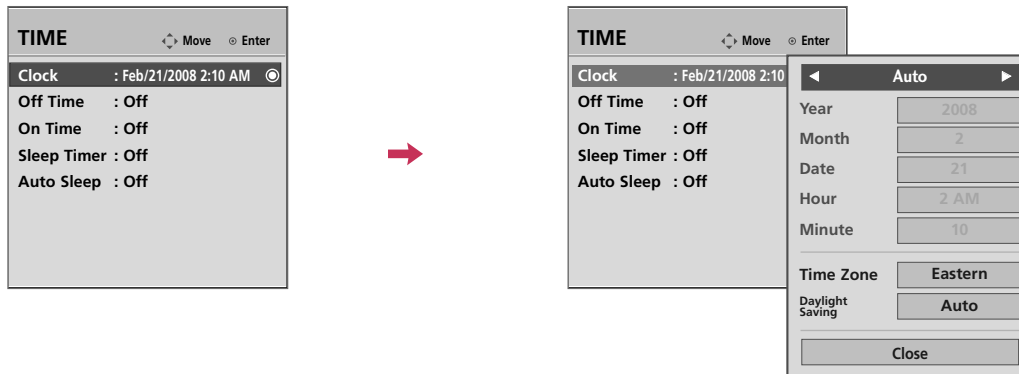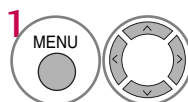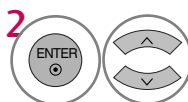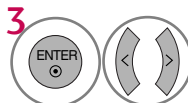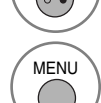
4 Select your viewing area time zone.
- U.S.A: **Eastern**, **Central**, **Mountain**, **Pacific**, **Alaska**, or **Hawaii**.
- Canada: **Eastern**, **Central**, **Mountain**, **Pacific**, **New F.land**, or **Atlantic**.

5 Select **Auto**, **Off**, or **On** (depending on whether or not your viewing area observes Daylight Saving time).

6 RETURN — Return to the previous menu.

MENU — Return to TV viewing.

Manual Clock Setup

If the current time setting is wrong, set the clock manually.

TIME	⟨⟩ Move ⊙ Enter
Clock	**: Feb/21/2008 2:10 AM** ⦿
Off Time	: Off
On Time	: Off
Sleep Timer	: Off
Auto Sleep	: Off

➡

TIME	⟨⟩ Move ⊙ Enter
Clock	**: Feb/21/2008 2:10**
Off Time	: Off
On Time	: Off
Sleep Timer	: Off
Auto Sleep	: Off

◄ Manual ►	
Year	2008
Month	2
Date	21
Hour	2 AM
Minute	10
Time Zone	Eastern
Daylight Saving	Auto
Close	

1 | MENU | Select **TIME**.

2 | ENTER | Select **Clock**.
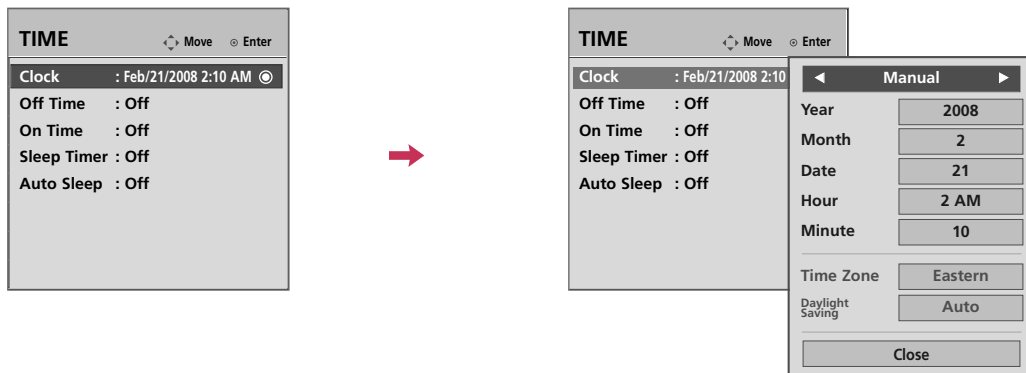
3 | ENTER | Select **Manual**.

4 | Select the Year, Month, Date, Hour, or Minutes option.

5 | Set the Year, Month, Date, Hour, or Minutes option.

6 | RETURN | Return to the previous menu.

MENU | Return to TV viewing.

TIME SETTING

AUTO ON/OFF TIME SETTING

This function operates only if the current time has been set.

The **Off Time** function overrides the **On Time** function if they are both set to the same time.

The TV must be in standby mode for the **On Time** to work.

If you do not press any button within 2 hours after the TV turns on with the **On Time** function, the TV will automatically revert to standby mode.

TIME	◇ Move ⊙ Enter
Clock	: Feb/21/2008 2:10 AM
Off Time	: Off
On Time	: Off ◉
Sleep Timer	: Off
Auto Sleep	: Off

➡

TIME	◇ Move ⊙ Enter
Clock	: Feb/21/2008 2:10 AM
Off Time	: Off
On Time	: 6:
Sleep Timer	: O
Auto Sleep	: O

Repeat	◄ Once ►
Hour	6 AM
Minute	30
Input	TV
Channel	TV 2-0
Volume	30
Close	
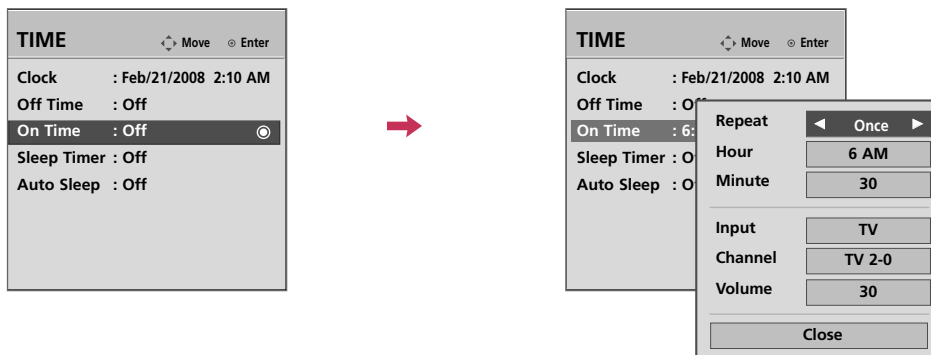
1 MENU Select **TIME**.

2 ENTER Select **Off time** or **On time**.

3 ENTER Select **Repeat**.

4 Select **Off**, **Once**, **Everyday**, **Mon~Fri**, **Mon~Sat**, **Weekend**, or **Sunday**.

5 Select and set **Hour** or **Minute**.

6 RETURN Return to the previous menu.

MENU Return to TV viewing.
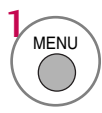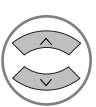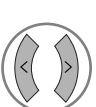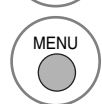
■ To cancel **On/Off Time** function, select **Off**.
■ Only for On Time function

1 ENTER Select **Input**.

2 Select **TV**, **AV/AV1-2**, **Component1-2**, **RGB-PC**, or **HDMI1-4**.

3 When Selecting **TV**: set the channel at turn-on.

4 Adjust to sound level at turn-on.

SLEEP TIMER SETTING

The Sleep Timer turns the TV off at the preset time.
Note that this setting is cleared when the TV is turned off.

TIME	◁▷ Move ⊙ Enter
Clock	**: Feb/21/2008 2:10 AM**
Off Time	**: Off**
On Time	**: Off**
Sleep Timer : Off	◉
Auto Sleep : Off	

➡

TIME	◁▷ Move ⊙ Enter
Clock	**: Feb/21/2008 2:10 AM**
Off Time	**: Off**
On Time	**: Off**
Sleep Timer : Off	◀ **Off** ▶
Auto Sleep : Off	**Close**

1 MENU

Select **TIME**.

2 ENTER
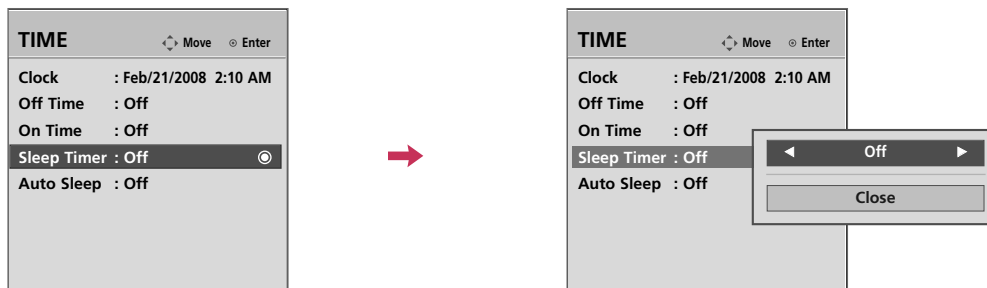
Select **Sleep Timer**.

3 ENTER

Select **Off**, **10**, **20**, **30**, **60**, **90**, **120**, **180**, or **240** minutes.

■ You can also adjust **Sleep Timer** in the **Q-Menu**.

4 RETURN

Return to the previous menu.

MENU

Return to TV viewing.

TIME SETTING

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AUTO SHUT-OFF SETTING

TV will be automatically turned off, in case of no signal for 10 minutes.
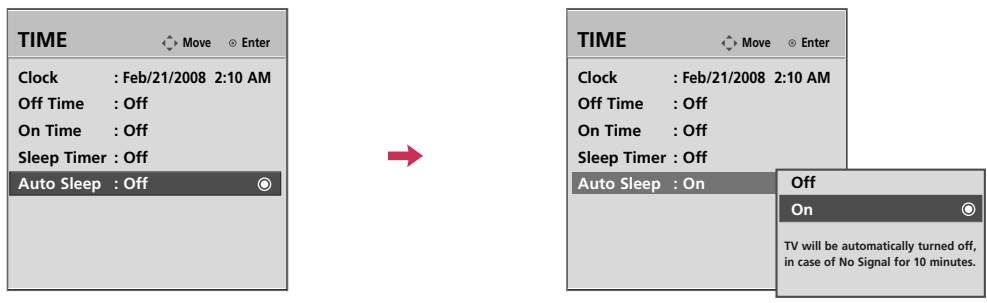
TIME	◁∘▷ **Move** ⊙ **Enter**
Clock	**: Feb/21/2008 2:10 AM**
Off Time	**: Off**
On Time	**: Off**
Sleep Timer	**: Off**
Auto Sleep	**: Off** ◎

➡

TIME	◁∘▷ **Move** ⊙ **Enter**
Clock	**: Feb/21/2008 2:10 AM**
Off Time	**: Off**
On Time	**: Off**
Sleep Timer	**: Off**
Auto Sleep	**: On**

Off

On   ◎

TV will be automatically turned off, in case of No Signal for 10 minutes.

1 MENU

Select **TIME**.

2 ENTER

Select **Auto Sleep**.

3 ENTER

Select **On** or **Off**.

4 RETURN

Return to the previous menu.

MENU

Return to TV viewing.

PARENTAL CONTROL / RATINGS

Parental Control can be used to block specific channels, ratings and other viewing sources.

The Parental Control Function (V-Chip) is used to block program viewing based on the ratings sent by the broadcasting station. The default setting is to allow all programs to be viewed. Viewing can be blocked by choosing the type of the program and the categories. It is also possible to block all program viewing for a time period. To use this function, the following must be done :

1. Set ratings and categories to be blocked.
2. Specify a password
3. Enable the lock

V-Chip rating and categories

Rating guidelines are provided by broadcasting stations. Most television programs and television movies can be blocked by TV Rating and/or Individual Categories. Movies that have been shown at the theaters or direct-to-video movies use the Movie Rating System (MPAA) only.

Ratings for Television programs including made-for-TV movies :

- TV-G (General audience)
- TV-PG (Parental guidance suggested)
- TV-14 (Parents strongly cautioned)

- TV-MA (Mature audience only)
- TV-Y   (All children)
- TV-Y7 (Children 7 years older)

SET PASSWORD & LOCK SYSTEM

Setting up Your Password

Set up blocking schemes to block specific channels, ratings, and external viewing sources.
A password is required to gain access to this menu.

For USA	For Canada

LOCK   ◄► Move   ⊙ Enter

Lock System   : Off
Set Password
Block Channel
Movie Rating
TV Rating-Children
TV Rating-General
Downloadable Rating
Input Block

LOCK   ◄► Move   ⊙ Enter

Lock System   : Off
Set Password
Block Channel
TV Rating-English
TV Rating-French
Downloadable Rating
Input Block

Enter Password

| * | * | * | * |

Close

1 MENU ⌄⌃ ENTER   Select **LOCK**.

2   Input the password.
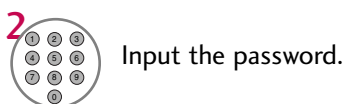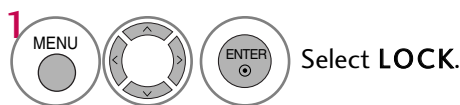
- Enter the password as requested.
- The TV is set up with the initial password "0-0-0-0".

Lock System

Enables or disables the blocking scheme you set up previously.

LOCK	⬩ Move ⊙ Enter
Lock System	**: Off** ⊙
Set Password	
Block Channel	
Movie Rating	
TV Rating-Children	
TV Rating-General	
Downloadable Rating	
Input Block	

➡

LOCK	⬩ Move ⊙ Enter
Lock System	**: On**	Off
Set Password		On ⊙
Block Channel	
Movie Rating	
TV Rating-Children	
TV Rating-General	
Downloadable Rating	
Input Block	

1 MENU / ENTER Select **LOCK**.
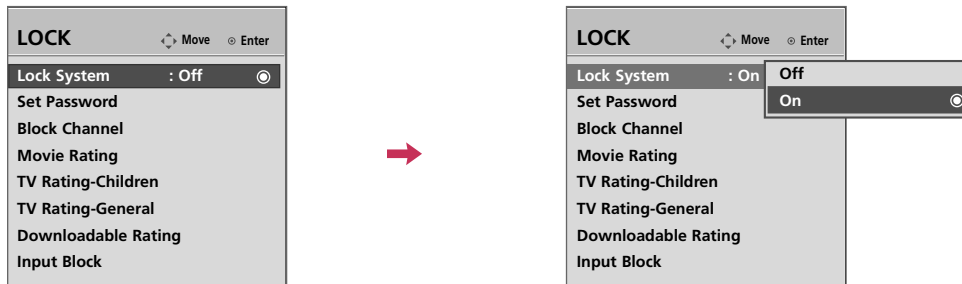
2 Input the password.

3 Select **Lock System**.

4 ENTER Select **On** or **Off**.

■ When you select **On**, the Lock System is enable.

5 RETURN Return to the previous menu.

MENU Return to TV viewing.

PARENTAL CONTROL / RATINGS

Set Password
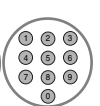
Change the password by inputting a new password twice.

LOCK	◇ Move ⊙ Enter
Lock System	: Off
Set Password	◉
Block Channel	
Movie Rating	
TV Rating-Children	
TV Rating-General	
Downloadable Rating	
Input Block	

➡

LOCK	◇ Move ⊙ Enter
Lock System	: Off
Set Password	
Block Channel	
Movie Rating	
TV Rating-Children	
TV Rating-General	
Downloadable Rating	
Input Block	

New   * * * *
Confirm * * * *

Close

1 MENU   ENTER   Select **LOCK**.
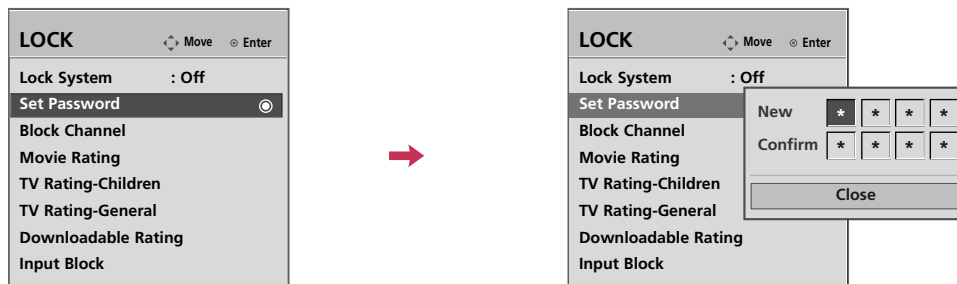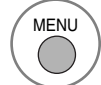
2   Input the password.

3   Select **Set password**.

4 ENTER   Choose any 4 digits for your new password.
As soon as the 4 digits are entered, re-enter the same 4 digits on the **Confirm**.

5 RETURN   Return to the previous menu.

MENU   Return to TV viewing.

PARENTAL CONTROL / RATING

CHANNEL BLOCKING

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

LOCK	◀▶ Move ⊙ Enter
Lock System	**: Off**
Set Password	
Block Channel	⊙
Movie Rating	
TV Rating-Children	
TV Rating-General	
Downloadable Rating	
Input Block	

7-1		DTV	TV	CADTV	CATV
		7-1	9-1	9-5	11-1
		13-1	13-2	13-3	13-4
		13-5	15-1	15-2	15-3
		15-4			
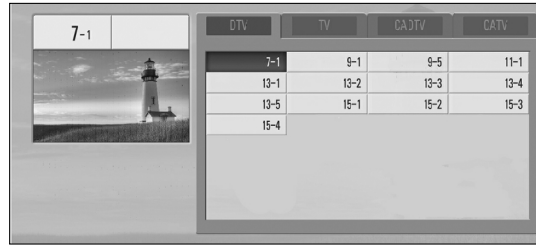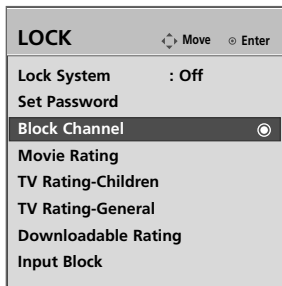
⊙ Block/Unblock   ◀▶ Move   CH ⌃⌄ Move Page   **MENU** Previous   **RETURN** Exit

1 MENU / ENTER   Select **LOCK**.

2 Input the password.

3 Select **Block Channel**.

4 ENTER   Select a channel to block or unblock.

5 ENTER   Block or unblock a channel.

6 MENU   Return to the previous menu.

RETURN   Return to TV viewing.

MOVIE & TV RATING

Movie Rating (MPAA) *- For USA only*

Blocks movies according to the movie ratings limits specified, so children cannot view certain movies. You can set the ratings limit by blocking out all the movies with the ratings above a specified level. Keep in mind that the movie ratings limit only applies to movies shown on TV, not TV programs, such as soap operas.

LOCK	⟷ Move ⊙ Enter
Lock System	: Off
Set Password	
Block Channel	
Movie Rating	◉
TV Rating-Children	
TV Rating-General	
Downloadable Rating	
Input Block	

➡

LOCK	⟷ Move ⊙ Enter
Lock System	: Off
Set Password	
Block Channel	
Movie Rating	◉
TV Rating-Children	
TV Rating-General	
Downloadable Rating	
Input Block	

Blocking off : Permits all programs

G
PG
PG-13
R
NC-17
X
Blocking Off 🔓

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1 MENU ⟨⟩ ENTER   Select **LOCK**.
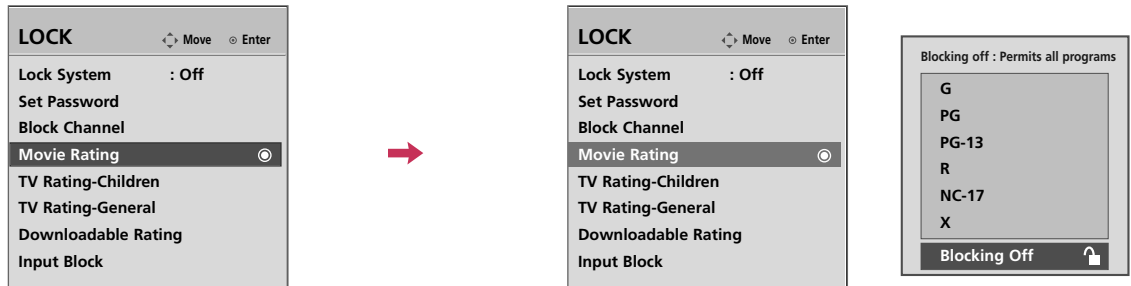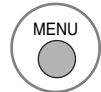
2 🔢   Input the password.

3 ⌄⌃   Select **Movie Rating**.

4 ENTER ⌄⌃   Select **G**, **PG**, **PG-13**, **R**, **NC-17**, **X**, or **Blocking Off**.

5 RETURN   Return to the previous menu.

MENU   Return to TV viewing.

- G (General audience)
- PG (Parental guidance suggested)
- PG-13 (Parents strongly cautioned)
- R (Restricted)
- NC-17 (No one 17 and under admitted)
- X (Adult only)
- Blocking Off (Permits all programs)
- ▶ If you set PG-13: G and PG movies will be available, PG-13, R, NC-17 and X will be blocked.

TV Rating Children - *For USA only*

Prevents children from watching certain children's TV programs, according to the ratings limit set. The children rating does not apply to other TV programs. Unless you block certain TV programs intended for mature audiences in the TV Rating - sub menu, your children can view those programs.

LOCK	◇ Move ⊙ Enter
Lock System	**: Off**
Set Password	
Block Channel	
Movie Rating	
TV Rating-Children	◎
TV Rating-General	
Downloadable Rating	
Input Block	

➡

LOCK	◇ Move ⊙ Enter
Lock System	**: Off**
Set Password	
Block Channel	
Movie Rating	
TV Rating-Children	**Age**
TV Rating-General	**Fantasy Violence**
Downloadable Rating	
Input Block	**Close**

1 MENU / ENTER — Select **LOCK**.
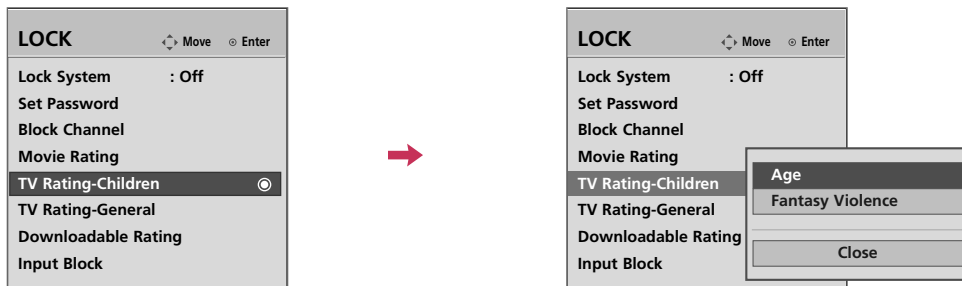
2 Input the password.

3 Select **TV Rating-Children**.

4 ENTER — Select **Age** or **Fantasy Violence**.

■ Age (applies to TV-Y, TV-Y7)
■ Fantasy Violence (applies to TV-Y7)

5 ENTER — Select block options.

6 RETURN — Return to the previous menu.

MENU — Return to TV viewing.

PARENTAL CONTROL / RATING

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PARENTAL CONTROL / RATINGS

TV Rating General - *For USA only*

Based on the ratings, blocks certain TV programs that you and your family do not want to view.

LOCK	◁⬦▷ Move ⊚ Enter
Lock System	: Off
Set Password	
Block Channel	
Movie Rating	
TV Rating-Children	
TV Rating-General	◉
Downloadable Rating	
Input Block	

➡

LOCK	◁⬦▷ Move ⊚ Enter
Lock System	: Off
Set Password	
Block Channel	
Movie Rating	**Age**
TV Rating-Children	Dialogue
TV Rating-General	Language
Downloadable Ratin	Sex
Input Block	Violence
	Close

1 MENU / ENTER   Select **LOCK**.
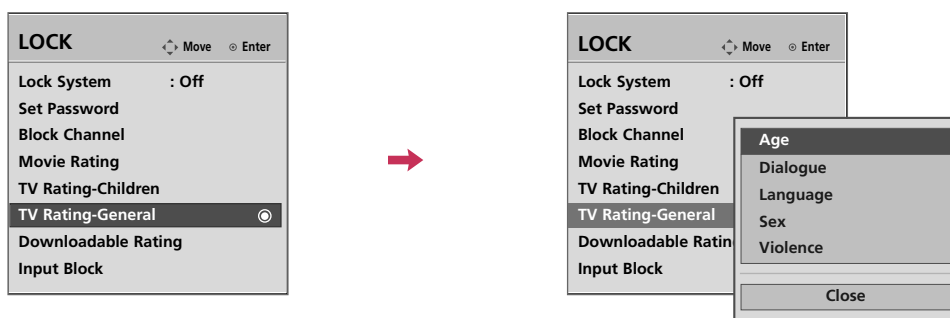
2 Input the password.

3 Select **TV Rating-General**.

4 ENTER   Select **Age**, **Dialogue**, **Language**, **Sex** or **Violence**.

5 ENTER   Select block options.

6 RETURN   Return to the previous menu.

MENU   Return to TV viewing.

- Age (applies to TV-G,TV-PG,TV-14,TV-MA).
- Dialogue-sexual dialogue (applies to TV-PG,TV-14).
- Language-adult language (applies to TV-PG, TV-14, TV-MA).
- Sex-sexual situations (applies to TV-PG, TV-14, TV-MA).
- Violence (applies to TV-PG, TV-14, TV-MA).

TV Rating English - *For CANADA only*

Selecting canadian english language rating system.

LOCK	◇ Move ⊙ Enter
Lock System	**: Off**
Set Password	
Block Channel	
TV Rating-English	◉
TV Rating-French	
Downloadable Rating	
Input Block	

➡

LOCK	◇ Move ⊙ Enter
Lock System	**: Off**
Set Password	
Block Channel	
TV Rating-English	◉
TV Rating-French	
Downloadable Rating	
Input Block	

Blocking off : Permits all programs

- E
- C
- C8+
- G
- PG
- 14+
- 18+

Blocking Off 🔓

1

MENU / ENTER Select **LOCK**.

2
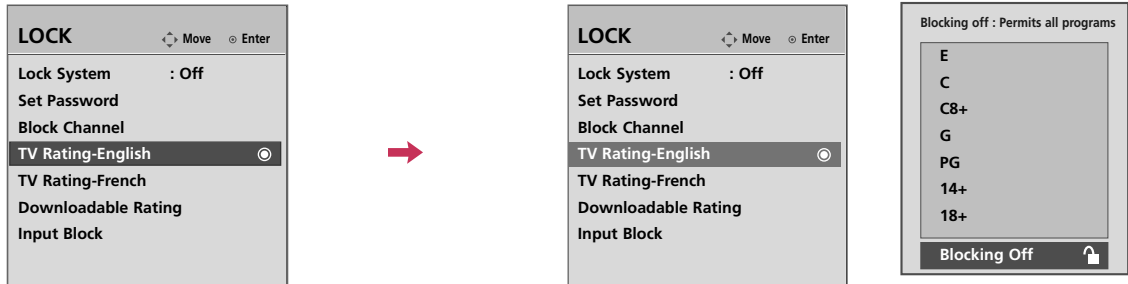
Input the password.

3

Select **TV Rating-English**.

4

ENTER Select **E**, **C**, **C8+**, **G**, **PG**, **14+**, **18+**, or **Blocking Off**.

5

RETURN Return to the previous menu.

MENU Return to TV viewing.

- ■ E (Exempt)
- ■ C (Children)
- ■ C8+ (Children eight years and older)
- ■ G (General programming, suitable for all audiences)
- ■ PG (Parental Guidance)
- ■ 14+ (Viewers 14 years and older)
- ■ 18+ (Adult programming)
- ■ Blocking Off (Permits all programs)

PARENTAL CONTROL / RATING

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PARENTAL CONTROL / RATINGS

TV Rating French - *For CANADA only*

Selecting canadian french language rating system.

LOCK	⬍ Move ⊙ Enter
Lock System	**: Off**
Set Password	
Block Channel	
TV Rating-English	
TV Rating-French	◉
Downloadable Rating	
Input Block	

➡

LOCK	⬍ Move ⊙ Enter
Lock System	**: Off**
Set Password	
Block Channel	
TV Rating-English	
TV Rating-French	◉
Downloadable Rating	
Input Block	

Blocking off : Permits all programs

E
G
8ans+
13ans+
16ans+
18ans+

Blocking Off 🔒

1
MENU | ⌃⌄ | ENTER ⊙   Select **LOCK**.

2
① ② ③
④ ⑤ ⑥
⑦ ⑧ ⑨
    ⓪   Input the password.

3
⌃⌄   Select **TV Rating-French**.

4
ENTER ⊙ | ⌃⌄   Select **E**, **G**, **8ans+**, **13ans+**, **16ans+**, **18ans+**, or **Blocking off**.

5
RETURN ⟲   Return to the previous menu.

MENU   Return to TV viewing.

- E (Exempt)
- G (General)
- 8ans+ (General-Not convenient for little children)
- 13ans+ (Not convenient for children of 13 years and younger)
- 16ans+ (Not convenient for children of 16 years and younger)
- 18ans+ (This programs is only for adults)
- Blocking off (Permits all programs)

PARENTAL CONTROL / RATING

DOWNLOADABLE RATING

This function may become available in the future and will be available only for digital channels.
This function operates only when TV has received Region5 Rating data.

LOCK	⟨‡⟩ Move ⊙ Enter
Lock System	: Off
Set Password	
Block Channel	
Movie Rating	
TV Rating-Children	
TV Rating-General	
Downloadable Rating	◎
Input Block	

➡

LOCK	⟨‡⟩ Move ⊙ Enter
Lock System	: Off
Set Password	▲
Block Channel	Humor
Movie Rating	Sport
TV Rating-Children	Cruelty
TV Rating-General	Language
Downloadable Rating	Sadness
Input Block	Genre
	Age
	▼
	Close
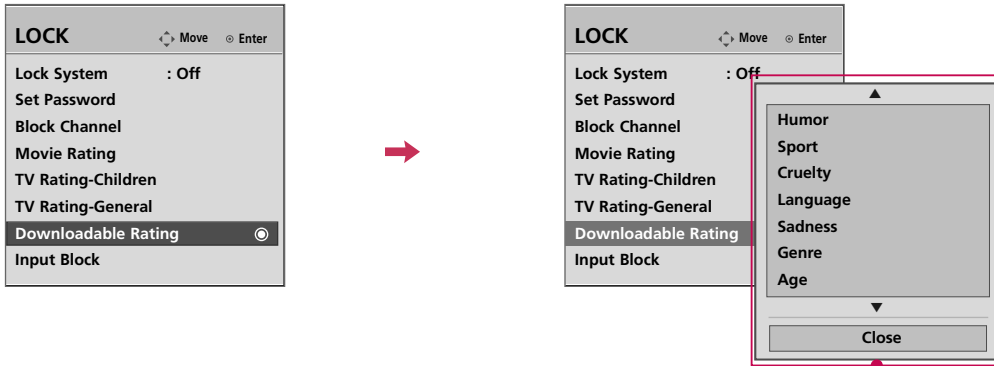
■ Based on rating table, your TV's OSD (On Screen Display) may differ slightly from what is shown in this manual.

1
MENU   ⟨∧⟩   ENTER   Select **LOCK**.

2
(keypad)   Input the password.

3
(∧∨)   Select **Downloadable Rating**.

4
ENTER (∧∨)   Select desired **Downloadable Rating** option.

5
ENTER (∧∨)   Select desired option and block it.

6
RETURN   Return to the previous menu.

MENU   Return to TV viewing.

EXTERNAL INPUT BLOCKING

Enables you to block an input.

LOCK	⬩ Move ⊙ Enter
Lock System	**: Off**
Set Password	
Block Channel	
Movie Rating	
TV Rating-Children	
TV Rating-General	
Downloadable Rating	
Input Block	◉

AV1	◄ Off ►
AV2	Off
Component1	Off
Component2	Off
RGB-PC	Off
HDMI1	Off
HDMI2	Off
HDMI3	Off
Close	

32/37/42LG30,
37/42/47/52LG50

AV1	◄ Off ►
AV2	Off
Component1	Off
Component2	Off
RGB-PC	Off
HDMI1	Off
HDMI2	Off
HDMI3	Off
HDMI4	Off
Close	

Plasma TV, 32/42/47/52LG70,
47LG90

AV	◄ Off ►
Component1	Off
Component2	Off
RGB-PC	Off
HDMI1	Off
HDMI2	Off
HDMI3	Off
HDMI4	Off
Close	

32/37/42/47/52LG60,
42LGX

1 MENU | ENTER   Select **LOCK**.

2   Input the password.

3   Select **Input Block**.

4 ENTER   Select input source.

5   Select **On** or **Off**.

6 RETURN   Return to the previous menu.

MENU   Return to TV viewing.

KEY LOCK

The TV can be set up so that it can only be used with the remote control.
This feature can be used to prevent unauthorized viewing by locking out the front panel controls.
This TV is programmed to remember which option it was last set to even if you turn the TV off.
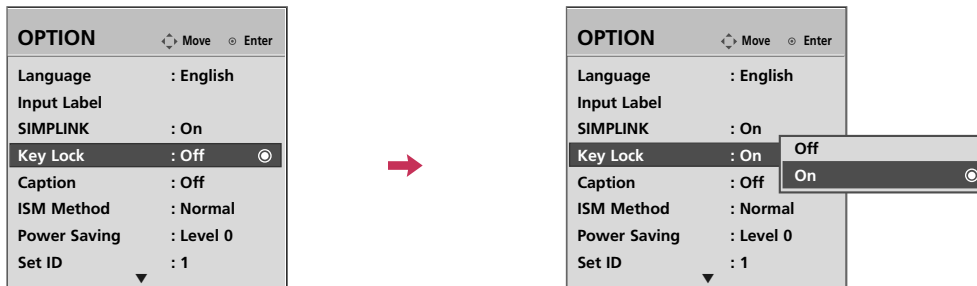
OPTION	◁ Move ◉ Enter
Language	: English
Input Label	
SIMPLINK	: On
Key Lock	**: Off** ◎
Caption	: Off
ISM Method	: Normal
Power Saving	: Level 0
Set ID ▼	: 1

➡

OPTION	◁ Move ◉ Enter
Language	: English
Input Label	
SIMPLINK	: On
Key Lock	**: On**
Caption	: Off
ISM Method	: Normal
Power Saving	: Level 0
Set ID ▼	: 1

Off
On ◎

1 MENU Select **OPTION**.

2 ENTER Select **Key Lock**.

3 ENTER Select **On** or **Off**.

4 RETURN Return to the previous menu.

MENU Return to TV viewing.

■ In **Key Lock** '**On**', if the TV is turned off, press the ⏻ / I, **INPUT**, **CH** (▲▼ or ⌃ ⌄) button on the TV or **POWER**, **INPUT**, **CH** ⌃ ⌄ or NUMBER buttons on the remote control.
■ With the **Key Lock On**, the display '⚠ **Key Lock**' appears on the screen if any button on the front panel is pressed while viewing the TV.

APPENDIX

TROUBLESHOOTING

The operation does not work normally.	
The remote control doesn't work	■ Check to see if there is any object between the product and the remote control causing obstruction. Ensure you are pointing the remote control directly at the TV. ■ Ensure that the batteries are installed with correct polarity (+ to +, - to -). ■ Ensure that the correct remote operating mode is set: TV, VCR etc. ■ Install new batteries.
Power is suddenly turned off	■ Is the sleep timer set? ■ Check the power control settings. Power interrupted.

The video function does not work.	
No picture &No sound	■ Check whether the product is turned on. ■ Try another channel. The problem may be with the broadcast. ■ Is the power cord inserted into wall power outlet? ■ Check your antenna direction and/or location. ■ Test the wall power outlet, plug another product's power cord into the outlet where the product's power cord was plugged in.
Picture appears slowly after switching on	■ This is normal, the image is muted during the product startup process. Please contact your service center, if the picture has not appeared after five minutes.
No or poor color or poor picture	■ Adjust Color in menu option. ■ Keep a sufficient distance between the product and the VCR. ■ Try another channel. The problem may be with the broadcast. ■ Are the video cables installed properly? ■ Activate any function to restore the brightness of the picture.
Horizontal/vertical bars or picture shaking	■ Check for local interference such as an electrical appliance or power tool.
Poor reception on some channels	■ Station or cable product experiencing problems, tune to another station. ■ Station signal is weak, reorient antenna to receive weaker station. ■ Check for sources of possible interference.
Lines or streaks in pictures	■ Check antenna (Change the direction of the antenna).
No picture when connecting HDMI	■ Check HDMI cable over version 1.3. The HDMI cables don't support HDMI version 1.3, it cause flickers or no screen display. In this case use the latest cables that support HDMI version 1.3.

The audio function does not work.	
Picture OK & No sound	▪ Press the VOL or VOLUME button. ▪ Sound muted? Press MUTE button. ▪ Try another channel. The problem may be with the broadcast. ▪ Are the audio cables installed properly?
No output from one of the speakers	▪ Adjust Balance in menu option.
Unusual sound from inside the product	▪ A change in ambient humidity or temperature may result in an unusual noise when the product is turned on or off and does not indicate a fault with the product.
No sound when connecting HDMI/USB	▪ Check HDMI cable over version 1.3. ▪ Check USB cable over version 2.0. ▪ Use normal MP3 file.

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

APPENDIX

MAINTENANCE

Early malfunctions can be prevented. Careful and regular cleaning can extend the amount of time you can enjoy your new TV.
Caution: Be sure to turn the power off and unplug the power cord before you begin any cleaning.

Cleaning the Screen

1 Here's a great way to keep the dust off your screen for a while. Wet a soft cloth in a mixture of lukewarm water and a little fabric softener or dish washing detergent. Wring the cloth until it's almost dry, and then use it to wipe the screen.

2 Make sure the excess water is off the screen, and then let it air-dry before you turn on your TV.

Cleaning the Cabinet

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

Extended Absence

⚠ CAUTION

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

PRODUCT SPECIFICATIONS

	MODELS	32LG30 (32LG30-UA) (32LG30-UD)	37LG30 (37LG30-UA) (37LG30-UD)	42LG30 (42LG30-UA) (42LG30-UD)
Dimensions (Width x Height x Depth)	With stand	31.5 x 23.7 x 8.9 inches 801.8 x 604.2 x 227.3 mm	36.2 x 26.8 x 11.5 inches 919.6 x 682.3 x 293.8 mm	40.6 x 29.2 x 11.5 inches 1032.8 x 742.3 x 293.8 mm
	Without stand	31.5 x 21.4 x 3.1 inches 801.8 x 544.1 x 79.0 mm	36.2 x 24.0 x 3.5 inches 919.6 x 610.3 x 89.0 mm	40.6 x 26.3 x 3.6 inches 1032.8 x 670.1 x 92.0 mm
Weight	With stand Without stand	29.5 pounds / 13.4 kg 26.2 pounds / 11.9 kg	41.4 pounds / 18.8 kg 35.7 pounds / 16.2 kg	52.0 pounds / 23.6 kg 46.2 pounds / 21.0 kg

	MODELS	37LG50 (37LG50-UA) (37LG50-UG)	42LG50 (42LG50-UA) (42LG50-UG)
Dimensions (Width x Height x Depth)	With stand	36.8 x 26.9 x 11.5 inches 936.4 x 685.4 x 293.4 mm	40.7 x 28.9 x 11.5 inches 1034.0 x 735.0 x 294.0 mm
	Without stand	36.8 x 24.1 x 3.4 inches 936.4 x 612.8 x 88.0 mm	40.7 x 26.1 x 3.5 inches 1034.0 x 663.0 x 91.0 mm
Weight	With stand Without stand	40.3 pounds / 18.3 kg 34.3 pounds / 15.6 kg	54.0 pounds / 24.5 kg 48.5 pounds / 22.0 kg

	MODELS	47LG50 (47LG50-UA) (47LG50-UG)	52LG50 (52LG50-UA) (52LG50-UG)
Dimensions (Width x Height x Depth)	With stand	45.5 x 32.0 x 13.5 inches 1156.2 x 813.1 x 342.9 mm	50.8 x 35.1 x 13.5 inches 1291.7 x 892.2 x 342.9 mm
	Without stand	45.5 x 29.1 x 4.0 inches 1156.2 x 739.2 x 103.0 mm	50.8 x 32.1 x 4.5 inches 1291.7 x 817.0 x 115.3 mm
Weight	With stand Without stand	64.3 pounds / 29.2 kg 54.2 pounds / 24.6 kg	87.0 pounds / 39.5 kg 76.9 pounds / 34.9 kg

Power requirement Television System Program Coverage External Antenna Impedance		AC100-240V ~ 50/60Hz NTSC-M, ATSC, 64 & 256 QAM VHF 2-13, UHF 14-69, CATV 1-135, DTV 2-69, CADTV 1-135 75 ohm
Environment condition	Operating Temperature Operating Humidity	32 ~ 104°F (0 ~ 40°C) Less than 80%
	Storage Temperature Storage Humidity	-4 ~ 140°F (-20 ~ 60°C) Less than 85%

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

APPENDIX

MODELS		32LG60 (32LG60-UA)	37LG60 (37LG60-UA)	42LG60 (42LG60-UA)
Dimensions (Width x Height x Depth)	With stand	31.7 x 24.6 x 13.1 inches 805.6 x 626.0 x 333.0mm	36.5 x 27.8 x 14.7 inches 929.0 x 706.9 x 374.7 mm	40.8 x 31.3 x 14.9 inches 1037.8 x 796.4 x 379.5 mm
	Without stand	31.7 x 23.1 x 3.7 inches 805.6 x 587.4 x 96.2 mm	36.5 x26.1 x 3.8 inches 929.0 x 665.0 x 98.7 mm	40.8 x 29.4 x 3.1 inches 1037.8 x 747.0 x 80.8 mm
Weight	With stand Without stand	31.7 pounds / 14.4 kg 26.8 pounds / 12.2 kg	46.7 pounds / 21.2 kg 39.9 pounds / 18.1 kg	53.1 pounds / 24.1 kg 44.9 pounds / 20.4 kg
MODELS		42LGX (42LG61-UA)	47LG60 (47LG60-UA)	52LG60 (52LG60-UA)
Dimensions (Width x Height x Depth)	With stand	40.8 x 31.4 x 14.8 inches 1037.8 x 798.0 x 378.0 mm	45.3 x 34.1 x 17.1 inches 1152.8 x 868.6 x 434.5 mm	50.3 x 37.1 x 16.9 inches 1280.1 x 944.7 x 430.0 mm
	Without stand	40.8 x 29.3 x 1.7 inches 1037.8 x 746.2 x 45.0 mm	45.3 x 32.3 x 3.1 inches 1152.8 x 820.8 x 79.0 mm	50.3 x 35.2 x 3.5 inches 1280.1 x 896.0 x 89.0 mm
Weight	With stand Without stand	46.9 pounds / 21.3 kg 39.6 pounds / 18.0 kg	71.8 pounds / 32.6 kg 59.3 pounds / 26.9 kg	99.2 pounds / 45.0 kg 83.9 pounds / 38.1 kg
MODELS		32LG70 (32LG70-UA)		42LG70 (42LG70-UA)
Dimensions (Width x Height x Depth)	With stand	31.3 x 23.5 x 8.9 inches 797.0 x 597.0 x 227.3 mm		40.4 x 28.8 x 11.5 inches 1026.2 x 734.0 x 293.4 mm
	Without stand	31.3 x 21.9 x 3.9 inches 797.0 x 558.6 x 100.5 mm		40.4 x 27.0 x 4.4 inches 1026.2 x 687.9 x 111.8 mm
Weight	With stand Without stand	28.4 pounds / 12.9 kg 25.1 pounds / 11.4 kg		49.3 pounds / 22.4 kg 43.4 pounds / 19.7 kg
MODELS		47LG70 (47LG70-UA)	52LG70 (52LG70-UA)	47LG90 (47LG90-UA)
Dimensions (Width x Height x Depth)	With stand	44.8 x 32.2 x 13.5 inches 1140.4 x 820.1 x 342.9 mm	50.5 x 35.3 x 13.5 inches 1284.4 x 898.6 x 342.9 mm	44.8 x 32.2 x 13.5 inches 1140.4 x 820.1 x 342.9 mm
	Without stand	44.8 x 30.1 x 5.0 inches 1140.4 x 764.8 x 129.0 mm	50.5 x 33.2 x 5.0 inches 1284.4 x 844.6 x 129.5 mm	44.8 x 30.1 x 5.0 inches 1140.4 x 764.8 x 129.0 mm
Weight	With stand Without stand	66.3 pounds / 30.1 kg 55.9 pounds / 25.4 kg	87.9 pounds / 39.9 kg 77.6 pounds / 35.2 kg	66.5 pounds / 30.2 kg 56.2 pounds / 25.5 kg
Power requirement Television System Program Coverage External Antenna Impedance		AC100-240V ~ 50/60Hz NTSC-M, ATSC, 64 & 256 QAM VHF 2-13, UHF 14-69, CATV 1-135, DTV 2-69, CADTV 1-135 75 ohm		
Environment condition	Operating Temperature Operating Humidity	32 ~ 104°F (0 ~ 40°C) Less than 80%		
	Storage Temperature Storage Humidity	-4 ~ 140°F (-20 ~ 60°C) Less than 85%		

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

MODELS		42PG25 (42PG60-UA)	50PG25 (50PG60-UA)
Dimensions (Width x Height x Depth)	With stand	41.1 x 28.9 x 12.1 inches 1044.4 x 735.4 x 308.0 mm	48.6 x 33.4 x 14.3 inches 1235.6 x 849.3 x 364.1 mm
	Without stand	41.1 x 26.7 x 3.1 inches 1044.4 x 680.6 x 79.6 mm	48.6 x 31.2 x 3.1 inches 1235.6 x 792.8 x 79.6 mm
Weight	With stand Without stand	61.7 pounds / 28.0 kg 55.1 pounds / 25.0 kg	96.3 pounds / 43.7 kg 87.5 pounds / 39.7 kg
MODELS		**50PG60** (50PG60F-UA) **50PG70** (50PG70F-UB)	**60PG60** (60PG60F-UA) **60PG70** (60PG70F-UB)
Dimensions (Width x Height x Depth)	With stand	48.6 x 33.4 x 14.3 inches 1235.6 x 849.3 x 364.1 mm	57.3 x 38.8 x 16.3 inches 1455.0 x 985.0 x 414.0 mm
	Without stand	48.6 x 31.2 x 3.1 inches 1235.6 x 792.8 x 79.6 mm	57.3 x 36.4 x 3.3 inches 1455.0 x 924.8 x 84.1 mm
Weight	With stand Without stand	100.7 pounds / 45.7 kg 91.9 pounds / 41.7 kg	137.5 pounds / 62.4 kg 121.0 pounds / 54.9 kg
Power requirement Television System Program Coverage External Antenna Impedance		AC100-240V ~ 50/60Hz NTSC-M, ATSC, 64 & 256 QAM VHF 2-13, UHF 14-69, CATV 1-135, DTV 2-69, CADTV 1-135 75 ohm	
Environment condition	Operating Temperature Operating Humidity	32 ~ 104˚F (0 ~ 40˚C) Less than 80%	
	Storage Temperature Storage Humidity	-4 ~ 140˚F (-20 ~ 60˚C) Less than 85%	

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

APPENDIX

APPENDIX

PROGRAMMING THE REMOTE CONTROL

The provided universal remote control can be programmed to operate most remote-controllable devices.
Note that the remote may not control all models of 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 STB and press the corresponding mode button (such as a **STB**) on the remote control, while pointing at the component. Test the **POWER** and **CH** ∧ ∨ 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 Turn on the component to be programmed, then press the corresponding mode button (such as **STB**) on the remote control. The remote control button of the desired device is illuminated.

3 Press the **MENU** and **MUTE** buttons simultaneously, and 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.

Remote Control Code

VCR

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

APPENDIX

HDSTB

Brand	Codes				Brand	Codes				Brand	Codes			
ALPHASTAR DSR	123				HOUSTON TRACKER	033	037	039	051	PROSAT	072			
AMPLICA	050					057	104			RCA	066	106		
BIRDVIEW	051	126	129		HUGHES	068				REALISTIC	043	074		
CHANNEL MASTER	013	014	015	018	JANIEL	060	147			SAMSUNG	123			
	036	055			JERROLD	061				SATELLITE SERVICE CO	028	035	047	057
CHAPARRAL	008	009	012	077	KATHREIN	108					085			
CITOH	054				LEGEND	057				SCIENTIFIC ATLANTA	032	138		
CURTIS MATHES	050	145			LG	001				SONY	103			
DRAKE	005	006	007	010	LUTRON	132				STARCAST	041			
	011	052	112	116	LUXOR	062	144			SUPER GUIDE	020	124	125	
	141				MACOM	010	059	063	064	TEECOM	023	026	075	087
DX ANTENNA	024	046	056	076		065					088	090	107	130
ECHOSTAR	038	040	057	058	MEMOREX	057					137			
	093	094	095	096	NEXTWAVE	028	124	125		TOSHIBA	002	127		
	097	098	099	100	NORSAT	069	070			UNIDEN	016	025	042	043
	122				PACE SKY SATELLITE	143					044	045	048	049
ELECTRO HOME	089				PANASONIC	060	142				078	079	080	086
EUROPLUS	114				PANSAT	121					101	135	136	
FUJITSU	017	021	022	027	PERSONAL CABLE	117				VIEWSTAR	115			
	133	134			PHILIPS	071				WINEGARD	128	146		
GENERAL INSTRUMENT	003	004	016	029	PICO	105				ZENITH	081	082	083	084
	031	059	101		PRESIDENT	019	102				091	120		
HITACHI	139	140			PRIMESTAR	030	110	111						

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			

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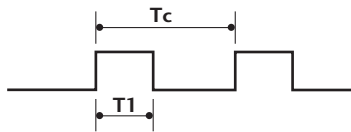
Carrier frequency
FCAR = 1/TC = fOSC/12
Duty ratio = T1/TC = 1/3

■ **Configuration of frame**

1st frame

Lead code	Low custom code	High custom code	Data code	Data code
	C0 C1 C2 C3 C4 C5 C6 C7	C0 C1 C2 C3 C4 C5 C6 C7	D0 D1 D2 D3 D4 D5 D6 D7	D0 D1 D2 D3 D4 D5 D6 D7

Repeat frame

Repeat code

Tf

■ **Lead code**

9 ms

4.5 ms

■ **Repeat code**

0.55 ms

9 ms

2.25 ms
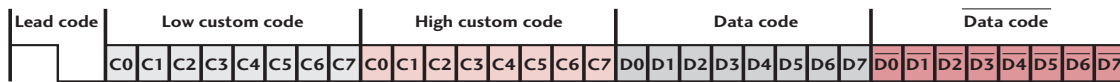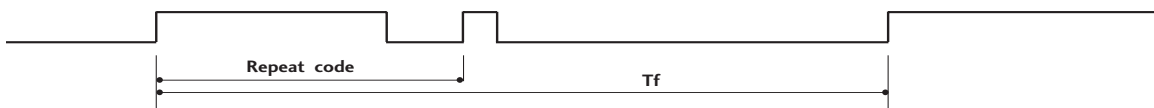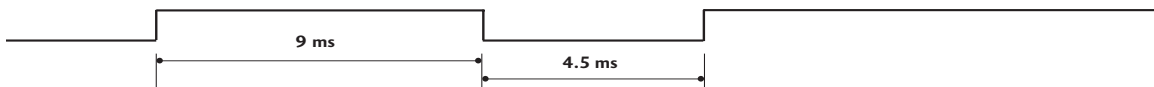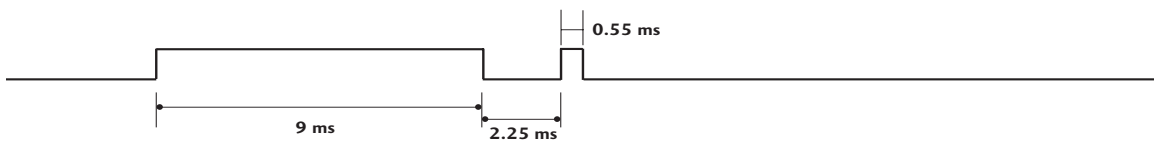
■ **Bit description**

Bit "0"

0.56 ms

1.12 ms

Bit "1"

0.56 ms

2.24 ms
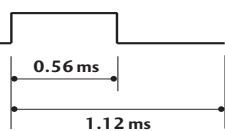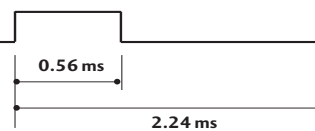
■ **Frame interval: Tf**

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

Tf

Tf

Tf=108ms @455KHz
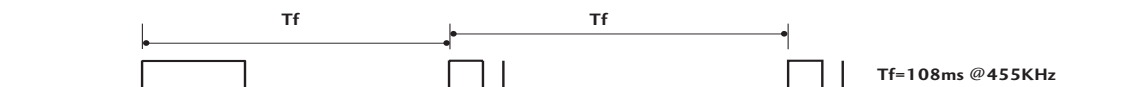
Code (Hexa)	Function	Note	Code (Hexa)	Function	Note
08	POWER	Remote control Button (Power On/Off)	D6	TV	Discrete IR Code (TV Input Selection)
45	Q.MENU	Remote control Button			
43	MENU	Remote control Button	C4	POWER ON	Discrete IR Code (Only Power On)
0B	INPUT	Remote control Button			
10-19	Number Key 0-9	Remote control Button	C5	POWER OFF	Discrete IR Code (Only Power Off)
4C	- (Dash)	Remote control Button			
1A	FLASHBK	Remote control Button	5A	AV or AV1	Discrete IR Code (AV or AV1 Input Selection)
09	MUTE	Remote control Button			
02	VOL +	Remote control Button	D0	AV2	Discrete IR Code (AV2 Input Selection)
03	VOL -	Remote control Button			
00	CH ∧	Remote control Button	BF	COMPONENT1	Discrete IR Code (Component1 Input Selection)
01	CH ∨	Remote control Button			
1E	FAV	Remote control Button	D4	COMPONENT2	Discrete IR Code (Component2 Input Selection)
40	∧	Remote control Button			
41	∨	Remote control Button	D5	RGB-PC	Discrete IR Code (RGB-PC Input Selection)
07	<	Remote control Button			
06	>	Remote control Button	CE	HDMI1	Discrete IR Code (HDMI1 Input Selection)
44	ENTER	Remote control Button			
5B	RETURN	Remote control Button	CC	HDMI2	Discrete IR Code (HDMI2 Input Selection)
7E	SIMPLINK	Remote control Button			
30	AV MODE	Remote control Button	E9	HDMI3	Discrete IR Code (HDMI3 Input Selection)
B0	PLAY	Remote control Button			
BA	PAUSE	Remote control Button	DA	HDMI4	Discrete IR Code (HDMI4 Input Selection)
B1	STOP	Remote control Button			
BD	REC	Remote control Button	76	Ratio 4:3	Discrete IR Code (Only 4:3 Mode)
8F	REW	Remote control Button			
8E	FF	Remote control Button	77	Ratio 16:9	Discrete IR Code (Only 16:9 Mode)
			AF	Ratio Zoom	Discrete IR Code (Only Zoom1 Mode)

* Use this feature depending on your model.

APPENDIX

EXTERNAL CONTROL THROUGH RS-232C
- Except 32/37/42/47/52LG60, 42LGX

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

■ Note: RS-232C on this unit is intended to be used with third party RS-232C control hardware and software. The instructions below are provided to help with programming software or to test functionality using telenet software.

RS-232C Setup

i.e)

PC
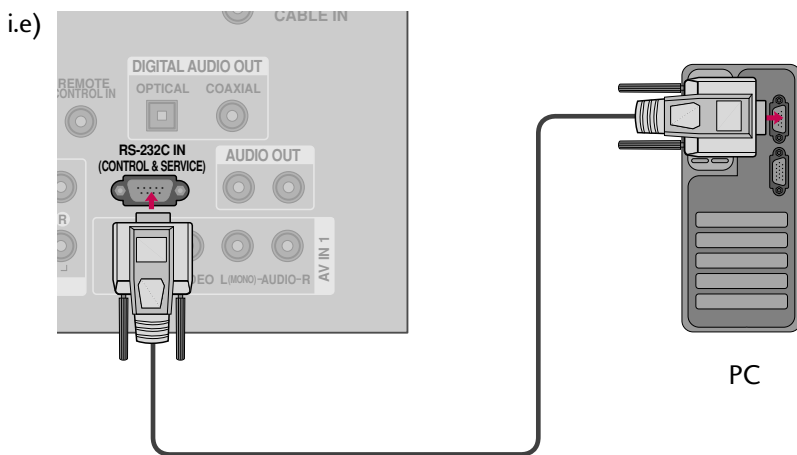
Type of Connector; D-Sub 9-Pin Male

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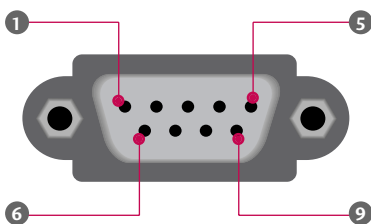
Communication Parameters

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

❶ NOTE

▶ This product has command echo back in the RS-232C Command.

RS-232C Configurations

Either cable below can be used.

7-Wire Configuration (Serial female-female NULL modem cable)			
	PC	TV	
RXD	2	3	TXD
TXD	3	2	RXD
GND	5	5	GND
DTR	4	6	DSR
DSR	6	4	DTR
RTS	7	8	CTS
CTS	8	7	RTS
	D-Sub 9	D-Sub 9	

3-Wire Configurations (Not standard)			
	PC	TV	
RXD	2	3	TXD
TXD	3	2	RXD
GND	5	5	GND
DTR	4	6	DTR
DSR	6	4	DSR
RTS	7	7	RTS
CTS	8	8	CTS
	D-Sub 9	D-Sub 9	
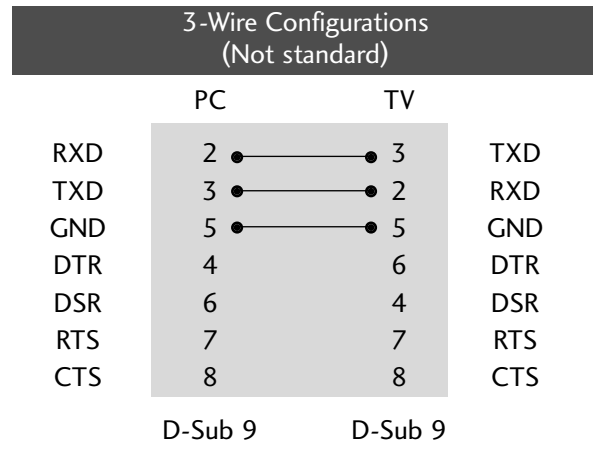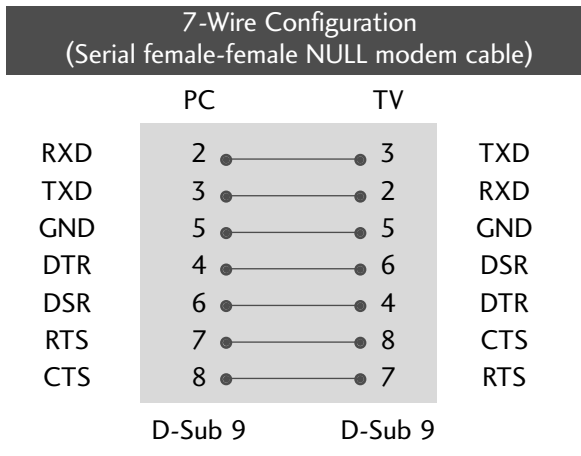
Set ID

Use this function to specify a TV ID number.
Refer to 'Real Data Mapping1'. ▶ p.133.

OPTION	◇ Move ⊙ Enter
Language	: English
Input Label	
SIMPLINK	: On
Key Lock	: Off
Caption	: Off
ISM Method	
Power Saving	: Level 0
Set ID	**: 1** ◎

➡

OPTION	◇ Move ⊙ Enter
Language	: English
Input Label	
SIMPLINK	: On
Key Lock	: Off
Caption	: Off
ISM Method	
Power Saving	: Level 0
Set ID	**: 1** ◄ 1 ►
	Close

1 MENU / ◇ Select **OPTION**.

2 ENTER ⊙ / ◇ Select **Set ID**.
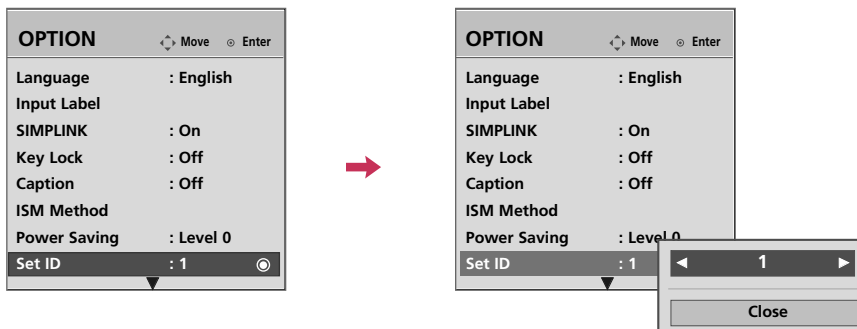
3 ENTER ⊙ / ‹ › Choose the desired TV ID number. The adjustment range of Set ID is 1~99.

4 RETURN Return to the previous menu.

MENU Return to TV viewing.

Command Reference List

	COMMAND1	COMMAND2	DATA (Hexadecimal)		COMMAND1	COMMAND2	DATA (Hexadecimal)
01. Power	k	a	00 ~ 01	14. Treble	k	r	00 ~ 64
02. Input Select	x	b	(▶ p.132)	15. Bass	k	s	00 ~ 64
03. Aspect Ratio	k	c	(▶ p.132)	16. Balance	k	t	00 ~ 64
04. Screen Mute	k	d	00 ~ 01	17. Color Temperature	k	u	00 ~ 02
05. Volume Mute	k	e	00 ~ 01	18. ISM Method	j	p	(▶ p.134)
06. Volume Control	k	f	00 ~ 64	19. Power Saving	j	q	00 ~ 01
07. Contrast	k	g	00 ~ 64	20. Auto Configuration	j	u	(▶ p.134)
08. Brightness	k	h	00 ~ 64	22. Channel Add/Del	m	b	00 ~ 01
09. Color	k	i	00 ~ 64	23. Key	m	c	(▶ p.135)
10. Tint	k	j	00 ~ 64	24. Backlight	m	g	00 ~ 64
11. Sharpness	k	k	00 ~ 64				
12. OSD Select	k	l	00 ~ 01				
13. Remote Control Lock Mode	k	m	00 ~ 01				

Only Plasma TV Model

Only LCD TV Model

	COMMAND1	COMMAND2	DATA00 (Hexadecimal)	DATA01 (Hexadecimal)	DATA02 (Hexadecimal)	DATA03 (Hexadecimal)	DATA04 (Hexadecimal)	DATA05 (Hexadecimal)
21. Channel Tuning	m	a	physical program high	major program low	major low	minor high	minor low	attribute

Transmission / Receiving Protocol

Transmission

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

[Command 1] : First command to control the set.(j, k, m or x)

[Command 2] : Second command to control the set.

[Set ID] : You can adjust the set ID to choose desired TV ID number in Setup menu. Adjustment range is 1~ 99. When selecting Set ID '0', every connected the TV 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 the command data.
Transmit the 'FF' data to read status of command.

[Cr] : Carriage Return
ASCII code '0x0D'

[ ] : ASCII code 'space (0x20)'

* In this model, TV will not send the status during the standby mode.

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.

* In this model, TV will not send the status during the standby mode.
* Data Format

[Command 2] : Use as command.

[Set ID] : Use the small character, if set ID is 10, it will send the '0', 'a'.

[DATA] : Use the small character, if data is 0 x ab, it will send the 'a', 'b'.

[OK] : Use the large character.

Error Acknowledgement

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

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

Data1: Illegal Code

Data2: Not supported function

Data3: Wait more time

* In this model, TV will not send the status during the standby mode.
* Data Format

[Command 2] : Use as command.

[Set ID] : Use the small character, if set ID is 10, it will send the '0', 'a'.

[DATA] : Use the small character, if data is 0 x ab, it will send the 'a', 'b'.

[NG] : Use the large character

APPENDIX

01. Power (Command: k a)

To control Power On/Off of the TV.

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

Data 00: Power Off   Data 01: Power On

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

* In a like manner, if other functions transmit 'FF' data based on this format, Acknowledgement data feedback presents status about each function.

* Note: In this model, TV will send the Acknowledge after power on processing completion.

There might be a time delay between command and acknowledge.

02. Input Select (Command: x b)

To select input source for TV.

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

Data 00: DTV (Antenna)   Data 01: DTV (Cable)
Data 10: Analog (Antenna)   Data 11: Analog (Cable)
Data 20: AV1   Data 21: AV2
Data 40: Component 1   Data 41: Component 2
Data 60: RGB-PC   Data 90: HDMI1
Data 91: HDMI2   Data 92: HDMI3
Data 93: HDMI4

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

* Use the feature depending on your model.

03. Aspect Ratio (Command: k c)

To adjust the screen format.

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

Data 01: 4:3   05: Zoom 2
     02: 16:9   06: Set by program
     04: Zoom 1   09: Just scan
                          ⋮
                          Reserved

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

04. 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)
Data 01: Screen mute on (Picture off)

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

05. 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)
Data 01: Volume mute off (Volume on)

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

06. 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 (*transmit by Hexadecimal code)
*Refer to 'Real data mapping'. See page 133.

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

07. 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 (*transmit by Hexadecimal code)
*Refer to 'Real data mapping'. See page 133.

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

08. 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 (*transmit by Hexadecimal code)
*Refer to 'Real data mapping'. See page 133.

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

09. Color (Command: k i)

To adjust screen color.

You can also adjust color in the PICTURE menu.

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

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

*Refer to 'Real data mapping' as shown below.

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

10. Tint (Command: k j)

To adjust screen tint.

You can also adjust tint in the PICTURE menu.

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

Data Red: 00 ~ Green: 64 (*transmit by Hexadecimal code)

*Refer to 'Real data mapping' as shown below.

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

11. Sharpness (Command: k k)

To adjust screen sharpness.

You can also adjust sharpness in the PICTURE menu.

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

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

*Refer to 'Real data mapping' as shown below.

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

12. OSD Select (Command: k l)

To select OSD (On Screen Display) on/off.

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

Data 00: OSD off   Data 01: OSD on

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

13. Remote Control Lock Mode (Command: k m)

To lock the remote control and the front panel controls on the set.

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

Data 00: Lock off   Data 01: Lock on

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

If you're not using the remote control and front panel controls on the TV, use this mode. When main power is on/off, remote control lock is released.

14. Treble (Command: k r)

To adjust treble.

You can also adjust treble in the AUDIO menu.

Transmission [k][r][ ][Set ID][ ][Data][Cr]

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

*Refer to 'Real data mapping' as shown.

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

15. Bass (Command: k s)

To adjust bass.

You can also adjust bass in the AUDIO menu.

Transmission [k][s][ ][Set ID][ ][Data][Cr]

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

*Refer to 'Real data mapping' as shown below.

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

16. 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 (*transmit by Hexadecimal code)

*Refer to 'Real data mapping' as shown below.

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

17. Color Temperature (Command: k u)

To adjust color temperature.

You can also adjust color temperature in the PICTURE menu.

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

Data 00: Medium   01: Cool   02: Warm

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

*Real data mapping

 0 : Step 0
 ⋮
 A : Step 10 (SET ID 10)
 ⋮
 F : Step 15 (SET ID 15)
10 : Step 16 (SET ID 16)
 ⋮
63 : Step 99 (SET ID 99)
64 : Step 100

18. ISM Method (Command: j p)

(Only Plasma TV model)

To avoid having a fixed image remain on screen.

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

Data 01: Inversion   02: Orbiter

    04: White Wash   08: Normal

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

19. Power saving (Command: j q)

(Only Plasma TV model)

To control the power saving function on/off.

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

Data 00: Power saving off (Power Saving Level 0)

    01: Power saving on (Power Saving Level 4)

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

20. Auto Configuration (Command: j u)

To adjust picture position and minimize image shaking automatically. Auto configuration only works in RGB-PC mode.

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

Data 1: To set

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

21. Channel Tuning (Command: m a)

To tune channel to following physical/major/minor number.

Transmission [m] [a] [ ] [Set ID] [ ] [Data00] [ ] [Data01] [ ] [Data02] [ ] [Data03] [ ] [Data04] [ ] [Data05] [Cr]

Digital channels have a Physical, Major, and Minor channel number. The Physical number is the actual digital channel number, the Major is the number that the channel should be mapped to, and the Minor is the sub-channel. Since the ATSC tuner automatically maps the channel to the Major number, the Physical number is not required when sending a command.

Data 00: Physical Channel Number

    NTSC air: 02~45, NTSC cable: 01, 0E~7D

    ATSC air: 01~45, ATSC cable: 01~87

Data 01 & 02: Major Channel Number

  Data 01: High byte   Data 02: Low byte

  Two bytes are available for the Major and Minor, normally only the second byte is used.

Data 03 & 04: Minor Channel Number

  Not needed for NTSC.

Data05:

7 Main/Sub Picture	6 Two/One Part Channel	5 Using Physical Channel	4 Reserved	3	2	1	0	Step
0 Main	0 Two	0 Use	x	0	0	0	0	NTSC Air
1 Sub	1 One	1 No Use	x	0	0	0	1	NTSC Cable
			x	0	0	1	0	ATSC Air
			x	0	0	1	1	ATSC Cable_std
			x	0	1	0	0	ATSC Cable_hrc
			x	0	1	0	1	ATSC Cable_irc
			x	0	1	1	0	ATSC cable_auto
			x	0	1	1	1	Reserved
			x	x	x	x	x	...
			x	1	1	1	1	Reserved

The table above lists the binary code which must be converted to Hexadecimal before sending. For example: The binary code to tune the sub source to an NTSC cable channel is "1000 0001", which translates to "81" in Hex.

* 7th bit : For which source do you want to change the channel.

* 6th bit: Use a two part or one part channel. Most cases just use 0 since it's ignored when using NTSC.

* 5th bit: Use 0 with NTSC since it can only use the physical channel number. Normally use 1 for ATSC since most times it doesn't matter what the physical number is.

* 4th bit: Set to 0.

* 3-0 bits: Choose signal type.

* Tune Command Examples:
  1. Tune to the analog (NTSC) cable channel 35.
     Data 00 = Physical of 35 = 23
     Data 01 & 02 = No Major = 00 00
     Data 03 & 04 = No Minor = 00 00
     Data 05 = 0000 0001 in binary = 01
     Total = ma 00 23 00 00 00 00 01
  2. Tune to the digital (ATSC) local channel 30-3.
     Data 00 = Don't know Physical = 00
     Data 01 & 02 = Major is 30 = 00 1E
     Data 03 & 04 = Minor is 3 = 00 03
     Data 05 = 0010 0010 in binary = 22
     Total = ma 00 00 00 1E 00 03 22

Acknowledgement [a] [ ] [Set ID] [ ] [OK] [Data00] [Data01] [Data02] [Data03] [Data04] [x] [a] [ ] [Set ID] [ ] [NG] [Data00] [x]

22. Channel Add/Del (Command: m b)

To add and delete the channels

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

Data 00: Channel Delete   Data 01: Channel Add

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

23. Key (Command: m c)

To send IR remote key code.

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

Data Key code: Refer to page 128.

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

24. Backlight (Command: m g)

(Only LCD TV model)

To adjust screen backlight.

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

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

*Refer to 'Real data mapping 1'. See page 133.

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

APPENDIX

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When a program is linked with a library, whether statically or using a shared library, the combination of the two is legally speaking a combined work, a derivative of the original library. The ordinary General Public License therefore permits such linking only if the entire combination fits its criteria of freedom. The Lesser General Public License permits more lax criteria for linking other code with the library.

We call this license the "Lesser" General Public License because it does Less to protect the user's freedom than the ordinary General Public License. It also provides other free software developers Less of an advantage over competing non-free programs. These disadvantages are the reason we use the ordinary General Public License for many libraries. However, the Lesser license provides advantages in certain special circumstances.

For example, on rare occasions, there may be a special need to encourage the widest possible use of a certain library, so that it becomes a de-facto standard. To achieve this, non-free programs must be allowed to use the library. A more frequent case is that a free library does the same job as widely used non-free libraries. In this case, there is little to gain by limiting the free library to free software only, so we use the Lesser General Public License.

In other cases, permission to use a particular library in non-free programs enables a greater number of people to use a large body of free software. For example, permission to use the GNU C Library in non-free programs enables many more people to use the whole GNU operating system, as well as its variant, the GNU/Linux operating system.

Although the Lesser General Public License is Less protective of the users' freedom, it does ensure that the user of a program that is linked with the Library has the freedom and the wherewithal to run that program using a modified version of the Library.

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(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

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In addition, mere aggregation of another work not based on the library with the library (or with a work based on the library) on a volume of a storage or distribution medium does not bring the other work under the scope of this license.

APPENDIX

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If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

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However, linking a "work that uses the library" with the Library creates an executable that is a derivative of the Library (because it contains portions of the library), rather than a "work that uses the library". The executable is therefore covered by this license. Section 6 states terms for distribution of such executable.

When a "work that uses the library" uses material from a header file that is part of the library, the object code for the work may be a derivative work of the library even though the source code is not.
Whether this is true is especially significant if the work can be linked without the library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessories, and small macros and small inline functions (ten lines or less in length), then the use of

the object file is unrestricted, regardless of whether it is legally a derivative work. (Executable containing this object code plus portions of the library will still fall under Section 6.)

Otherwise, if the work is a derivative of the library, you may distribute the object code for the work under the terms of Section 6. Any executable containing that work also fall under Section 6, whether or not they are linked directly with the library itself.

6. As an exception to the sections above, you may also combine or link a "work that uses the library" with the library to produce a work containing portions of the library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

You must give prominent notice with each copy of the work that the library is used in it and that the Library and its use are covered by this license. You must supply a copy of this license. If the work during execution displays copyright notices, you must include the copyright notice for the library among them, as well as a reference directing the user to the copy of this license. Also, you must do one of these things:

a) Accompany the work with the complete corresponding machine-readable source code for the library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modify the library and then relink to produce a modified executable containing the modified library. (It is understood that the user who changes the contents of definitions files in the library will not necessarily be able to recompile the application to use the modified definitions.)
b) Use a suitable shared library mechanism for linking with the library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2) will operate properly with a modified version of the library, if the user installs one, as long as the modified version is interface-compatible with the version that the work was made with.
c) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6, above, for a charge no more than the cost of performing this distribution.
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APPENDIX

LG Electronics Inc.