# **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.

- Press the VOL (+ or -) button to adjust the volume.
- 2 If you want to switch the sound off, press the MUTE button.
- You can cancel the Mute function by pressing the MUTE or VOL (+ or -) button.

## **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. It 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 Use". We recommend setting the TV to "Home Use" mode for the best picture in your home environment.
- "Store Demo" 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 instore mode after 5 minutes.
- "Store Demo" Mode is an optimal setting for displaying at stores. "Store Demo" mode initializes the TV to set the image quality:
- You can also adjust Initial Setting in the OPTION menu.

#### Step1. Selecting Language





Select Menu Language.

## Step2. Mode setting







Select Home Use.

#### Step3. Time setting





Select Auto or Manual.







Select desired time option.

## Step4. Auto Tuning

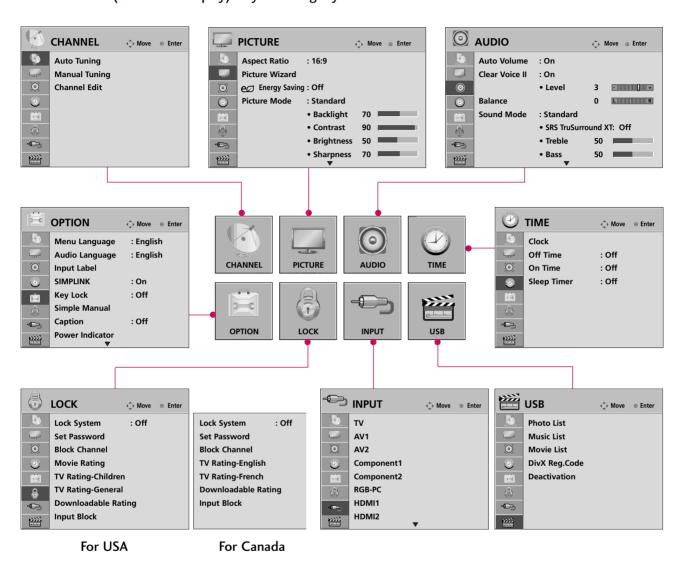




Check your antenna connection and start **Auto Tuning**.

## **ON-SCREEN MENUS SELECTION**

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



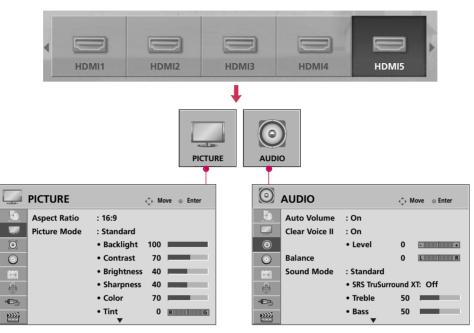
Display each menu.

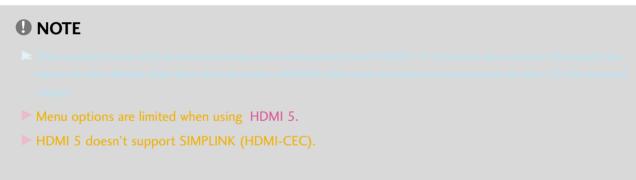


Accept the current selection.



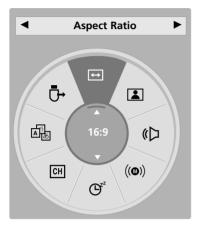
# Restricted menu when using the HDMI 5 connection





# **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 the desired picture format.
- **Picture Mode**: Selects the desired preset picture setting.
- ( Sound Mode: Selects the desired preset sound setting.
- ((10)) Multi Audio: Changes the audio language (Digital signal).
- ((10)) SAP: Selects MTS sound (Analog signal).
- Sleep Timer: Select the amount of time before your TV turns off automatically.
- CH Del/Add/Fav: Select channel you want to add/delete or add the channel to the Favorite List.
- Caption: Select on or off.
- USB Device: Select "Eject" in order to eject a USB device.



Display each menu.



Make appropriate adjustments.



Return to TV viewing.

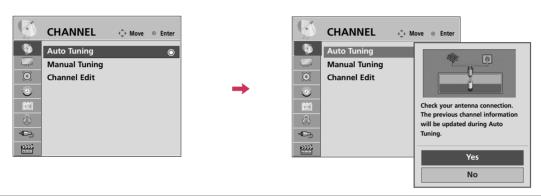
## **CHANNEL SETUP**

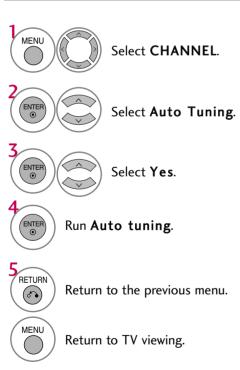
## **Auto Scan (Auto Tuning)**

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

Run this function if you change your residence or move the TV. Also, make sure to run this function with the antenna connected during TV broadcasting hours.

Auto Tuning memorizes only the channels available at the time.





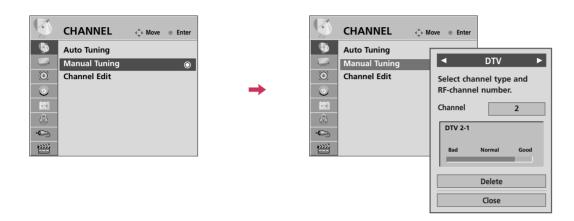
- The TV will ask for a password if parental control has been activated (LOCK Menu). Use the password you set up in the LOCK Menu to allow a channel search.
   When setting the Auto tuning or Manual tuning, the number of maximum channels
  - It is subject to change depending on the broadcasting signal environment.

you can store is 1000.

Memorizes all the available channels in the order of DTV, TV, CADTV and CATV.

## Add/Delete Channel (Manual Tuning)

When selecting DTV or CADTV input signal in the Manual Tuning menu, you can view the on-screen signal strength monitor to see the quality of the signal being received.





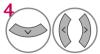
Select CHANNEL.



Select Manual Tuning.



Select DTV, TV, CADTV, or CATV.



Select channel you want to add or delete.



Select Add or Delete.



Return to the previous menu.



Return to TV viewing.

- The TV will ask for a password if parental control has been activated (LOCK Menu). Use the password you set up in the LOCK Menu to allow a channel search.
- When setting the Auto tuning or Manual tuning, the number of maximum channels you can store is 1000.

It is subject to change depending on the broadcasting signal environment.

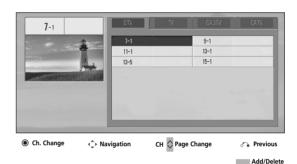
## **Channel Editing**

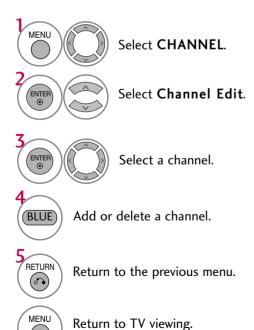
The channels in the Channel Edit List are displayed in black and the channels deleted from the Channel Edit List are displayed in blue.

When a channel number is deleted, it means that you will be unable to select it using  $CH \land \lor$  button during TV viewing.

If you wish to select the deleted channel, directly enter the channel number with the NUMBER buttons or select it in the **Channel Edit** menu.



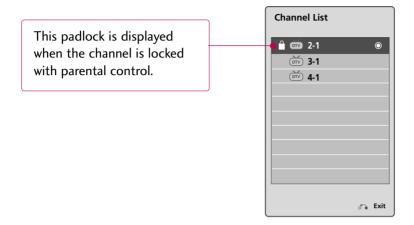




- Keep pressing the ^ button and use the
   or > buttons to move between DTV,
   TV, CADTV and CATV.
- If the channel list is too long, use the CH ∧ or ∨ button to move between pages.

# **CHANNEL LIST**

You can check which channels are stored in the memory by displaying the channel list.



## **Displaying Channel List**



Display the Channel List.

# Selecting a channel in the channel list



Select a channel.



Switch to the chosen channel number.

# Paging through a channel list



Turn the pages.



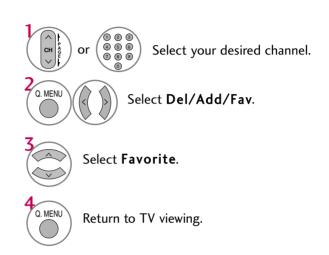
Return to TV viewing.

## **FAVORITE CHANNEL SETUP**

Favorite Channels are a convenient feature that lets you quickly select channels of your choice without waiting for the TV to select all the in-between channels.

To tune to a favorite channel, press the FAV (Favorite) button repeatedly.





### **FAVORITE CHANNEL LIST**



## Displaying the favorite channel list



Display the Favorite channel list.

## Selecting a channel in the favorite channel list



Select a channel.



Switch to the chosen channel number.

# Paging through a favorite channel list



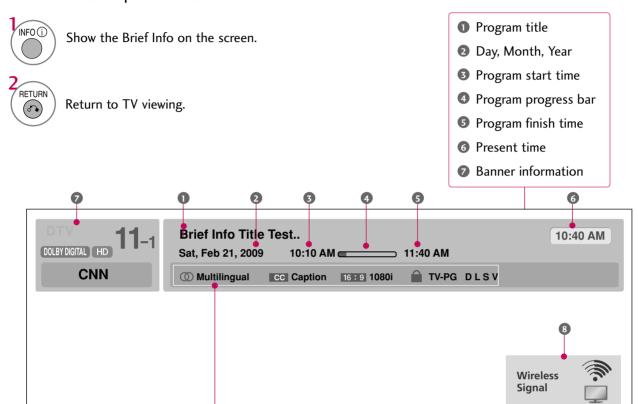
Turn the pages.

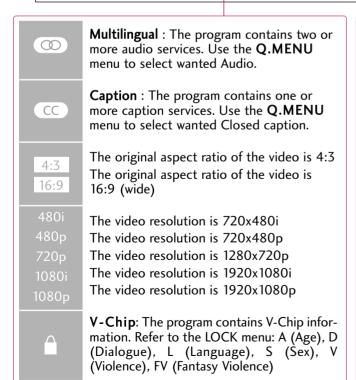


Return to TV viewing.

#### **BRIEF INFORMATION**

Brief Info shows the present screen information.



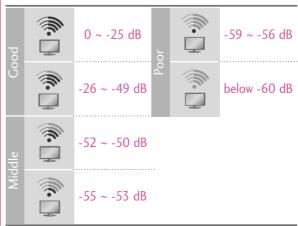


Received wireless signal strengh indicator.
The signal strength meter changes continuously due to external influences.
The performance of wireless signal may differ depending on whom the TV and Media Percentage.

depending on where the TV and Media Box are located. Make sure to install the Media Box where the sensitivity of radio-signal reception is "GOOD".

If the TV and Media Box are connected with a wired connection, this wireless signal strength is not displayed.

#### Signal Strength Meter levels:



#### **INPUT LIST**

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

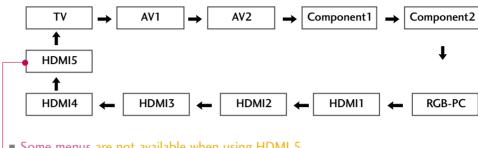




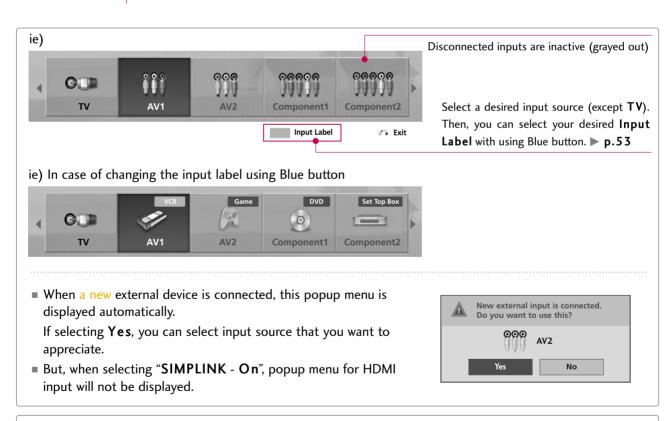


Select the desired input source.

■ You can also select the desired input source in the INPUT menu.



- Some menus are not available when using HDMI 5.
- You cannot select HDMI5 input source when you use a wired connection between the Media Box and TV.

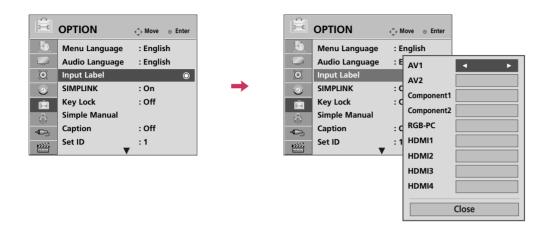


- TV: Select it to watch over-the-air, cable and digital cable broadcasts.
- AV: Select them to watch a VCR or other external equipment.
- Component: Select them to watch DVD or a Digital set-top box.
- RGB-PC: Select it to view PC input.
- HDMI: Select them to watch high definition devices.

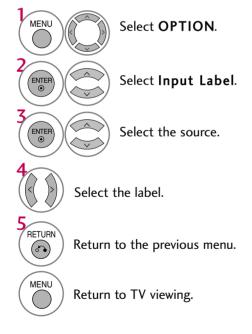
# **INPUT LABEL**

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

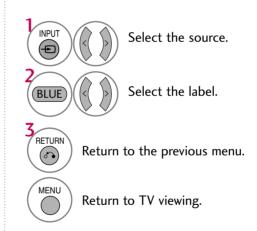
This indicates which device is connected to which input port.



## With using OPTION menu

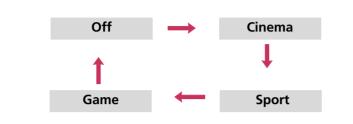


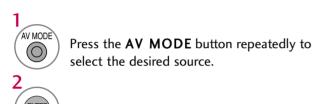
# With using INPUT button



#### **AV MODE**

AV Mode toggles through preset Video and Audio settings.





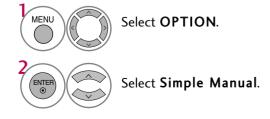
- If you select "Cinema" in AV mode, Cinema will be selected both for "PIC-TURE menu - Picture Mode" and "AUDIO menu - Sound Mode" respectively.
- If you select "Off" in AV mode, the "Picture Mode" and "Sound Mode" return to previous selected value.
- Off: Disables the AV MODE.
- Cinema: Optimizes video and audio for watching movies.
- **Sport**: Optimizes video and audio for watching sports events.
- Game: Optimizes video and audio for playing games.

### SIMPLE MANUAL

You can easily and effectively access the TV information by viewing a simple manual on the TV. During the Simple Manual operation, audio will be muted.





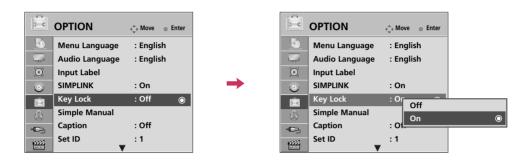


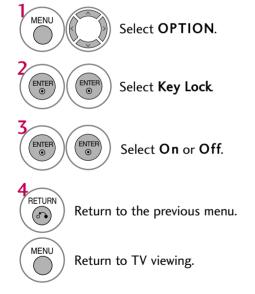


## **KEY LOCK**

This feature can be used to prevent unauthorized viewing by locking out the front panel controls, so that it can only be used with the remote control.

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





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

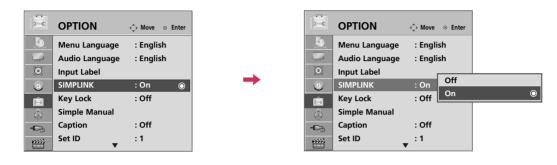
while viewing the TV.

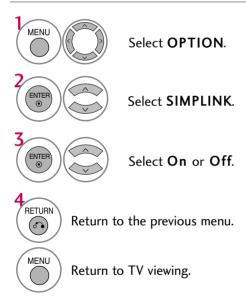
# SIMPLINK

SIMPLINK allows you to control and play other AV devices connected with HDMI cable without additional cables and settings. This TV may work with devices with HDMI-CEC support, but only devices with the supported.

SIMPLINK can be turned on and off in the user menus.

SIMPLINK is not supported by the HDMI IN 5 input.





#### NOTE

- ➤ Connect the HDMI/DVI IN or HDMI IN terminal of the Media Box to the rear terminal (HDMI terminal) of the SIMPLINK device with an 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 and the TV speakers are turned off.
- ▶ 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 Media Box to the DIGITAL AUDIO IN terminal on the back of the SIMPLINK device with an OPTICAL cable.

#### **SIMPLINK Functions**

- **Direct Play:** After connecting AV devices to the Media Box, 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 the Media Box.
- Disc playback: Control connected AV devices by pressing the \( \bigvee \leq \rightarrow \leq \rightarrow \right
- 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.

Note: To operate SIMPLINK, an HDMI cable over Version 1.3 with \*CEC function should be used (\*CEC: Consumer Electronics Control).

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

#### SIMPLINK Menu



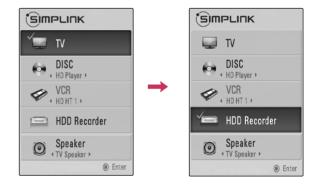
Display SIMPLINK menu.



Select the desired device.



Control connected AV devices.



- TV viewing: Switch to the previous TV channel regardless of the current mode.
- DISC playback: Select and play discs. When multiple discs are available, the titles of discs are conveniently displayed at the bottom of the screen.
- **VCR playback**: Control the connected VCR.
- **4 HDD Recordings playback:** Control recordings stored in HDD.
- S 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)

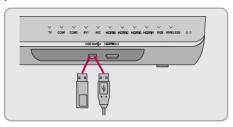
## **USB**

#### **ENTRY MODES**

When you connect a USB device, this pop up menu is displayed automatically.

When the Pop Up menu does not appear, you can select Photo List, Music List or Movie List in the USB menu. On a USB device, you can not add a new folder or delete an existing folder.

1 Connect the USB device to the USB IN jacks on the Media Box.













■ This TV supports JPG, MP3 files, and HD Divx.

#### When removing the USB device

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



Select **USB Device**.



Select **Eject**.

#### Precautions when using the USB device

- ▶ Only a USB storage device is recognizable.
- Connecting a USB storage device through a USB hub is not supported
- A USB storage device which uses its own driver may not be recognized.
- ▶ The recognition speed of a USB storage device may depend on each device.
- In case of several paritions or a card reader, up to four memory cards are concurrently recognizable.
- 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.
- Only use a USB storage device which has normal music files, image files, or movie files.
- ▶ Please use only a USB storage device which was formatted as a FAT 32 or NTFS file system provided with the Windows operating system. Others may not be recognized.
- ➤ Some USB storage devices require a power adapter. The power adapter must be connected in order to be seen by the TV.
- ▶ If a device is not recognized by the TV, try a different cable. Excessively long cables are not supported.
- Some USB storage devices may not be supported or operate properly.

- ▶ Please backup important files because data on the USB device could be damaged. Data management is the consumer's responsibility and as a result, the manufacturer does not cover data damage.
- A USB storage device with several partitions may not work properly.
- ▶ If the USB memory device does not work properly, disconnect and reconnect it.
- Connect an external power source to a USB storage device if required.
- When using a USB extension cable, a USB hard disk without an external power source is not supported.
- File alignment method of USB storage device is similar to Window XP and file names can be up to 100 English characters.
- ▶ The recommended capacity is 1TB or less for a USB external hard disk and 32 GB or less for USB memory.
- ▶ If a USB external hard disk with a "Energy Saving" function doesn't work, turn the hard disk off and on again to make it work properly. Refer to the user manual of the application USB external hard disk.
- ▶ USB storage devices below USB 2.0 are supported as well. But they may not work properly in the movie list.

## **PHOTO LIST**

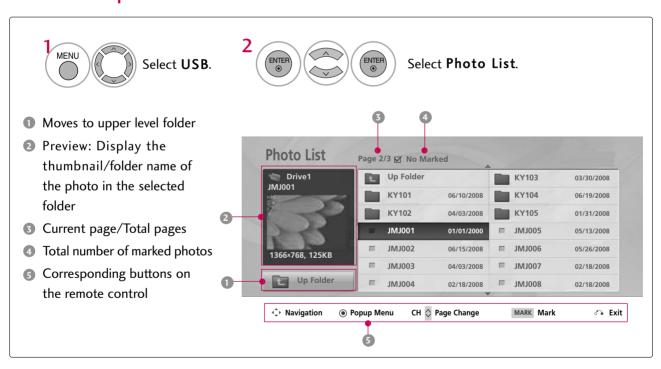
You can view .JPG files from USB storage devices.

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

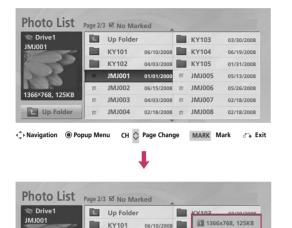
#### Supported photo file: \*.JPG

- You can play JPG files only.
- Only baseline scan is supported among JPG (not progressive).
- Available JPG size: 64 pixel (width) x 64 pixel (height) to 15360 pixel (width) x 8640 pixel (height)

## **Screen Components**



## Photo Selection and Popup Menu



View

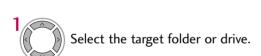
Delete

KY101

JMJ004

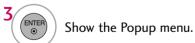
When you select a file (not folder), this PopUp menu is displayed.

- ▶ 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.
- ► Close: Close the pop-up menu.





Select the desired photos.

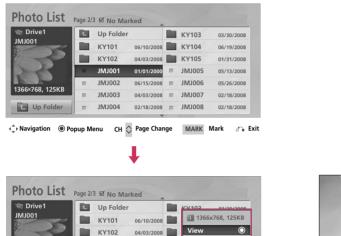




- Use the **CH** ∧ ∨ button to navigation in the photo page.
- Use the MARK button to mark or unmark a photo. When one or more photos are marked, you can view individual photos or a slide show of the marked photos. If no photos are marked, you can view all photos individually or all photos in the folder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

#### **Full Screen Menu**

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







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



Select the target folder or drive.





Select the desired photos.



Show the Popup menu.



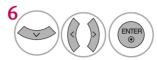
Select View.



The selected photo is displayed in full size.

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





Select the Slideshow, BGM, U (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.

- ➤ **Slideshow**: 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**.
- **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.
  - Photo cannot be rotated if its width is greater than the available supported resolution height.
- ▶ **Delete**: Delete photos.
- ▶ Option: Set values for Slide Speed and Music Album
  - Use ∧ ∨ < > button and ENTER button to set values. Then go to Enter and press ENTER to save the settings.
  - You cannot change Music Album 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.



#### NOTE

➤ This TV will not be able to decode most JPG 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.

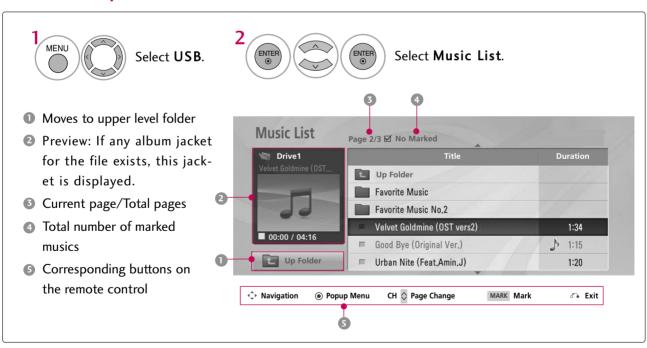
#### Supported music file: \*.MP3

Bit rate range 32 Kbps - 320 Kbps

• Sampling rate (Sampling Frequency)

MPEG1 layer 3: 32 kHz, 44.1 kHz, 48 kHz MPEG2 layer 3: 16 kHz, 22.05 kHz, 24 kHz MPEG2.5 layer 3: 8 kHz, 11.025 kHz, 12 kHz

## **Screen Components**



## Music Selection and Popup Menu







- ▶ Play (During stop): Play the selected song. Once a song finishes playing, the next selected one will be played. When there are no selected songs 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 songs in playback will stop.
- ▶ Play Marked: Play the selected songs. Once a song finishes playing, the next selected one will be played automatically.
- Stop Play (During playback): Stop the playing the song.
- ▶ Play with Photo: Start playing the selected songs and then move to the Photo List.
- ► Mark All: Mark all songs in the folder.
- ► Unmark All: Deselect all marked song.
- ▶ **Delete** (USB file only): Delete the selected song.
- ► Close: Close the pop-up menu.



Select the target folder or drive.



Select the desired musics.



Show the Popup menu.





Select the desired Popup menu.



Return to TV viewing.

- Use the **CH** ^ button to navigation in the music page.
- Use MARK 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.



#### NOTE

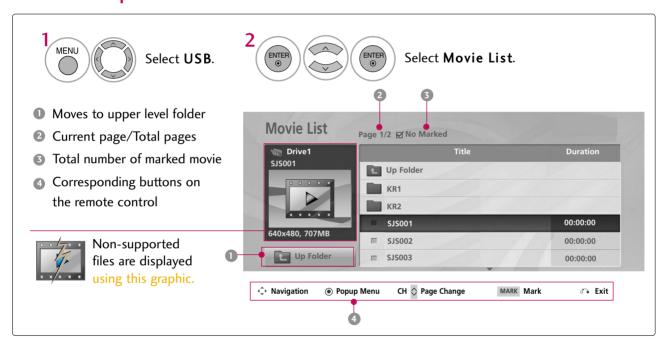
- ▶ When music is playing, ♪ is displayed in front of the music play time.
- ▶ A damaged or corrupted music file that does not play displays 00:00 as the play time.
- ▶ Music files with copy-protection will not play.
- ▶ Press ENTER, , or RETURN button to stop the screen saver.

# **MOVIE LIST**

The movie list is activated once a USB drive is detected. It is used when playing movie files on the TV. It displays all of the video files it recognizes.

Allows playback of all movies in the folder but you can not delete the movies. Editing such as delete and add is not allowed.

# **Screen Components**



## Supported Divx fle

(\*.avi/\*.dat/\*.divx/\*.mkv/\*.mp4/\*.mpeg/\*.mpg/\*.trp/\*.ts/\*.vob)

File Extension	Video Decoder	Audio Codec	Resolution
mpg, mpeg, vob	MPEG1, MPEG2	AC3, MPEG, MP3, PCM	
dat	MPEG1	AC3, MPEG, MP3, PCM	
ts, trp, tp	MPEG2, H.264	AC3, AAC, MPEG	
mp4	MPEG4 SP, MPEG4 ASP, DivX 3.11, DivX 4.12, DivX 5.x, DivX 6, Xvid 1.00, Xvid 1.01, Xvid 1.02, Xvid 1.03, Xvid 1.10-beta, Xvid 1.10-beta 2, H.264	AC3, HEAAC, AAC, MPEG, MP3, PCM	1920x1080P
avi	MPEG 2, MPEG 4 SP, MPEG4 ASP, Divx 3.11, DivX 4, DivX 5, DivX 6, Xvid 1.00, Xvid 1.01, Xvid 1.02, Xvid 1.03, Xvid 1.10-beta 1, Xvid 1.10-beta 2, H.264	AC3, HEAAC, AAC, MPEG, MP3, PCM	@25/30P 1280x720P @50/60P
mkv	H.264, MPEG 1, MPEG 2, MPEG 4 SP, MPEG4 ASP, AVC	AC3, HEAAC, AAC, MPEG, MP3, PCM	
divx	MPEG 2, MPEG 4 SP, MPEG4 ASP, Divx 3.11, DivX 4, DivX 5, DivX 6, Xvid 1.00, Xvid 1.01, Xvid 1.02, Xvid 1.03, Xvid 1.10-beta 1, Xvid 1.10-beta 2, H.264	AC3, HEAAC, AAC, MPEG, MP3, PCM	

- Max bitrate of playable movie file: 20Mbps (Mega bit per second)
- Bit rate of audio format: within 32 ~ 320kbps(MP3)
- Supported subtitle format: \*.smi, \*.srt, \*.sub (MicroDVD, SubViewer1.0/2.0), \*.ass, \*.ssa, \*.txt (TMPlayer), \*.psb(PowerDivx)

## Precautions when playing the video files

- A DivX movie file and its subtitle file must be located in the same folder.
  - At this time, a movie file name and its subtitle file name must be identical for it to be displayed.
- ► Some user-created subtitles may not work properly.
- Some special characters are not supported in subtitles.
- ► HTML tags are not supported in subtitles.
- ➤ Subtitles in languages other than the supported languages are not available.
- ➤ The screen may suffer temporary interruptions (image stoppage, faster playback, etc.) when the audio language is changed.
- ➤ A damaged movie file may not be played correctly, or some player functions may not be usable.
- ▶ Movie files produced with some encoders may not be played correctly.

- ▶ If the video and audio structure of recorded file is not interleaved, either video or audio is outputted.
- ➤ Video with resolution higher than maximum resolution supported for each frame, cannot be guaranteed for smooth playback.
- Movie files other than the specified types and formats may not work properly.
- ▶ We do not guarantee smooth playback of profiles encoded level 4.1 or higher in H.264.
- ▶ DTS Audio codec is not supported.
- A movie file more than 30GB in file size is not supported for playback.
- ▶ Playing a video via a USB connection that doesn't support high speed may not work properly.
- ► Time information in an external subtitle file should be arranged in ascending order to be played.

## Movie Selection and Popup Menu







▶ Play (During stop): Play the selected movie titles.

Once a movie finishes playing, the next selected one will be played. When there are no selected movies 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 movie in playback will stop.

Divx Play is executed while the screen changes.

- ➤ Play Marked: Play the selected movie titles. Once a movie finishes playing, the next selected one will be played automatically.
- ➤ **Stop Play** (During playback): Stop the playing movies.
- ► Mark All: Mark all movies in the folder.
- ► Unmark All: Deselect all marked movies.
- ▶ Delete or Delete marked (FAT32 file system only): Delete the selected movie.
- ► Close: Close the pop-up menu.



Select the target folder or drive.



Select the desired movies.



Show the Popup menu.



Select the desired Popup menu.



Return to the previous menu.

- Use the **CH** ∧ ∨ button to navigation in the movie page.
- Use the MARK button to mark or unmark a movie file. When one or more movie files are marked, the marked movie files will be played in sequence. If you want to see only one movie repeatedly, just mark that one file and play.

# Playing the Movie

You can adjust various method during the movie play.









Select the target folder or drive.



Select the desired movies.



Show the Popup menu.



Select Play.



Display the current movie status progress bar in the bottom of the screen.

#### Using the remote control

4	Press it to rewind.
<b>••</b>	Press it to forward fast.
II	Displayed the still screen.
	Stopped the screen.
	Move to a specific frame forward or backward while playing a movie. A cursor indicating the position can be viewed on the screen. It may not work properly for some files while playing a movie.)
<b>II &gt;&gt;</b>	Displays a slow motion.
ENERGY SAVING	Increases the brightness of the screen (> p.82).
AV MODE	Select the desired option (▶ p.54).

## **Option Menu Selection**

During the movie play, the following options are available.



- ▶ **Picture Size**: Select the Full screen or Original size.
- ► Audio Language: Select the language.

  But, the file with only one audio can not be selected.
- ➤ **Subtitle Language**: The subtitles can be turned on or off.

  If there are two or more subtitles, you can select one of them.

Close

Off

Subtitle Language Group	Supported Language
Latin1	English, Spanish, French
Korean	English, Korean

- •Sync: When the video is not synchronized with the captions, it can be adjusted by 0.5 second.
- .Position: Move the location of the subtitle.



Select **Option**.



Select Picture Size, Audio Language, Subtitle Language, Sync or Position.



Select the desired option.



Return to the previous menu.



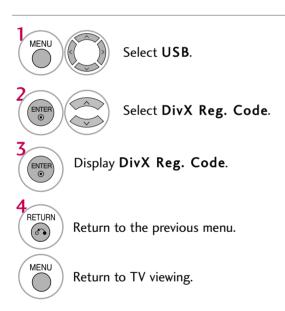
Return to TV viewing.

## **DIVX REGISTRATION CODE**

Confirm the DivX registration code number of the TV. Using the registration number, movies can be rented or purchased at www.divx.com/vod.

With a DivX registration code from another TV, playback of rented or purchased DivX file is not allowed. (Only DivX files matched with the registration code of the purchased TV are playable).



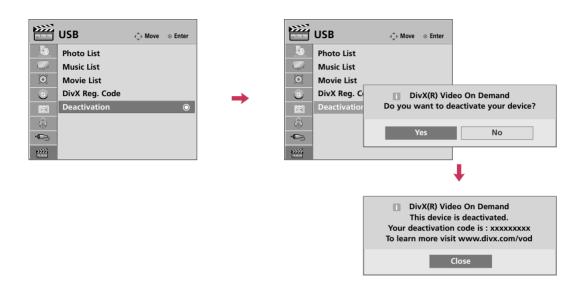


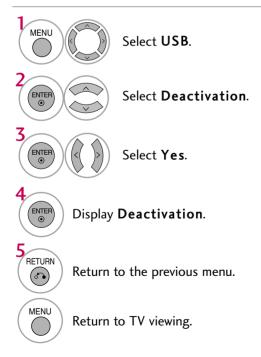
#### NOTE

- ▶ With a DivX registration code from other TV, playback of rented or purchased DivX file is not allowed. (Only DivX files matched with the registration code of the purchased TV are playable.)
- ► The video or audio of a file converted based on a standard other than the DivX codec standard may be corrupted or unable to be played.

## **DEACTIVATION**

The purpose of deactivation is to allow deactivation of devices for users who have activated all the available devices through the web\_server and are blocked from activating more devices. DivX VOD allows the consumer to activate up to 6 devices under one account.



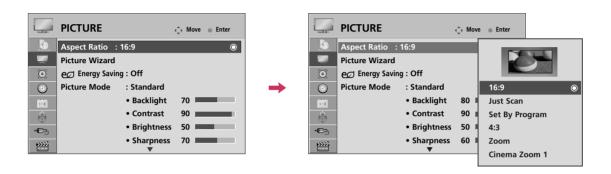


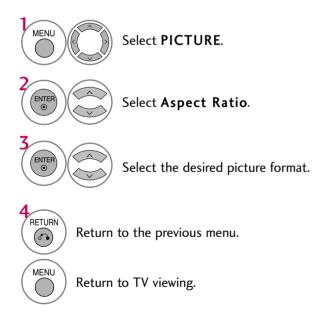
# PICTURE CONTROL

# 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. HDMI/RGB-PC input only support 4:3 or 16:9 aspect ratio. But you can select all aspect ratios in HDMI-PC 1920X1080 input.

You can select a different aspect ratio depending on input source (analog broadcasting, digital broadcasting, aux).





You can also adjust Aspect Ratio in the Q.MENU.

#### 16:9

Adjust the picture horizontally, in a linear proportion to fill the entire screen.



#### **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.



#### **Set By Program**

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

 $(4:3 \to 4:3)$ 



 $(16:9 \rightarrow 16:9)$ 



#### 4:3

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



#### Zoom

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

- When adjusting in Q.MENU menu,
  - a. < or > button: Adjust proportion of Zoom.
  - b. ∧ or ∨ button: Move the image on the screen.



#### Cinema Zoom

Choose Cinema Zoom when you want to enlarge the picture in correct proportion.

This enlarges an image with cinemascope aspect ratio (2.35:1) without distortion.

Note: When enlarging or reducing the picture, the image may become distorted.

- or > button: Adjust proportion of Cinema Zoom. The adjustment range is 1-16.
- ∧ or ∨ button: Move the image on the screen.



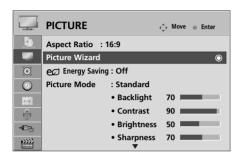
## PICTURE CONTROL

### **PICTURE WIZARD**

This feature lets you adjust the picture quality of the original image.

Use this to calibrate the screen quality by adjusting the Black and White Level etc. You can calibrate the screen quality by easily following each step.

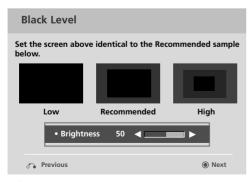
When you adjust the image to Low, Recommended or High, you can see the example of the changes you made.



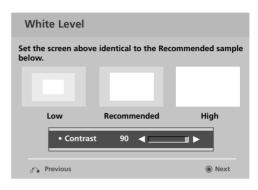




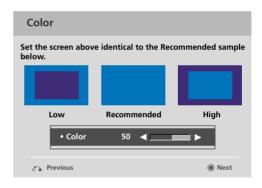




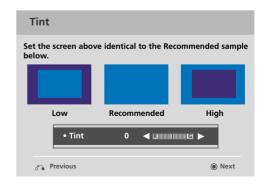




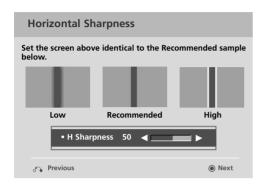




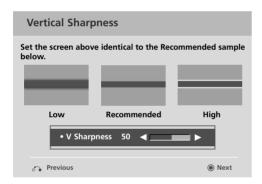








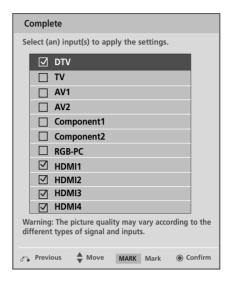








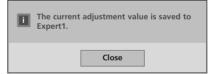






Select input source to apply the settings.







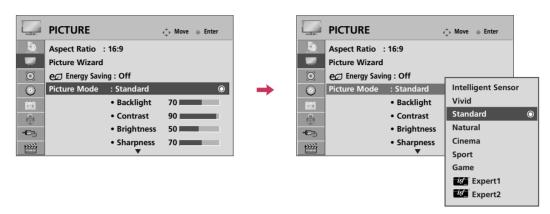
Finish the Picture Wizard.

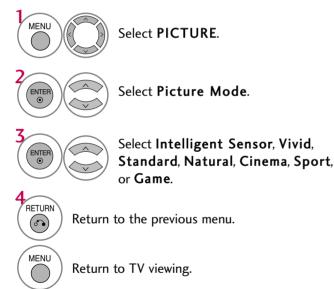
- If you stop the setting before the final step, the changes will not be saved to the TV.
- Once the Picture Wizard sets the picture quality, Energy Saving is changed to Off automatically.
- **Picture Wizard** setup value is not applied for the HDMI5 input source.

### PICTURE CONTROL

# PRESET PICTURE SETTINGS (PICTURE MODE)

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.

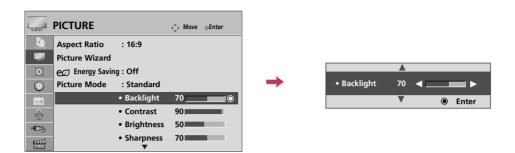




- Intelligent Sensor: The most suitable picture is automatically adjusted according to the surrounding conditions.
- When selecting Intelligent Sensor, it is changed contrast, brightness, sharpness, color and tint automatically.
- When selecting Intelligent Sensor, Energy Saving is changed to Auto automatically.
- Vivid, Standard, Natural, Cinema, Sport, and Game Settings are preset for the optimum picture quality at the factory.
- **Vivid**: This is the mode to maximize the effect of the video in the retail store. Strengthen the contrast, brightness, color and sharpness for vivid picture.
- Standard: This is the mode to realize optimum viewing condition for the general user.
- Natural: This is the mode to display the most natural screen status.
- Cinema: This mode optimizes video for watching movies.
- Sport: This is the video mode to emphasize dynamic video and primary color (e.g, white, uniform, grass, sky blue etc.) by realizing the optimal screen for sports.
- **Game**: This is the mode to realize fast response speed in a fast gaming screen.
- Expert: This is the mode to adjust the video in detail for video quality expert and general user.
- You can also adjust Picture Mode in the Q.MENU.

# MANUAL PICTURE ADJUSTMENT - USER MODE

Adjust the picture appearance to suit your preference and viewing situations.





Select PICTURE.



Select Picture Mode.



Select Vivid, Standard, Natural, Cinema, Sport, or Game.



Select Backlight, Contrast, Brightness, Sharpness, Color, or Tint.



Make appropriate adjustments.



Return to the previous menu.



Return to TV viewing.

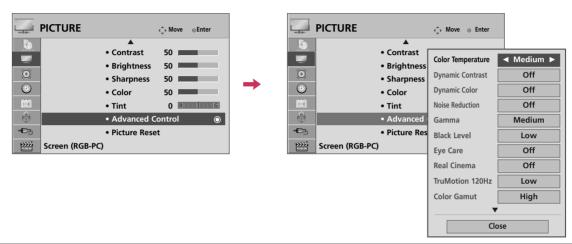
- When adjusting Energy Saving, Backlight function is disabled.
- Backlight: This function adjusts the brightness of LCD panel, to control the brightness of the screen. Adjusting the backlight is recommended when setting the brightness of the set. When decreasing the backlight, the brightness of the black becomes darker without any loss in video signal and the power consumption is reduced.
- Contrast: Increase or decrease the gradient of the video signal. You may use
   Contrast when the bright part of the picture is saturated.
- Brightness: Adjusts the base level of the signal in the picture. You may use Brightness when the dark part of the picture is saturated.
- **Sharpness**: Adjusts the level of crispness in the edges between the light and dark areas of the picture. The lower the level, the softer the image.
- Color: Adjusts intensity of all colors.
- **Tint**: Adjusts the balance between red and green levels.

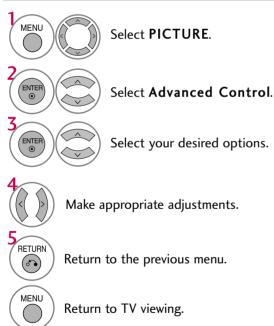
## PICTURE CONTROL

# PICTURE IMPROVEMENT TECHNOLOGY

You can calibrate the screen for each Picture Mode or set the video value according to the special video screen. You can set the video seeing differently for each input.

To reset to the factory default after making adjustments to each input source, execute the **Picture Reset** function for each Picture Mode.

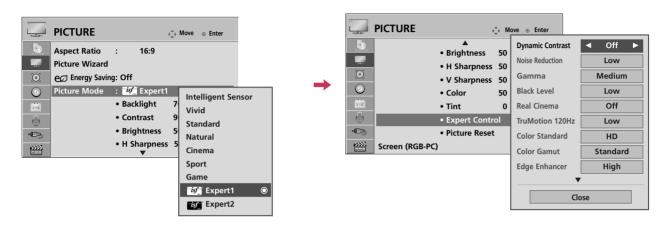


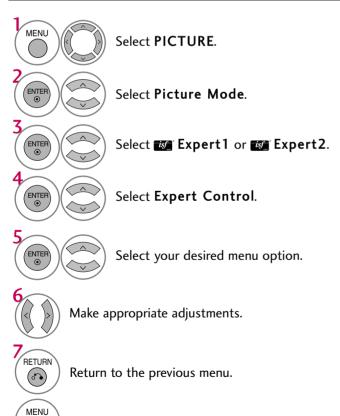


## **EXPERT PICTURE CONTROL**

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

This may also be used by a professional to help optimize the TV performance in the environment the TV is in.





Return to TV viewing.

# PICTURE CONTROL

Color Temperature	Set to warm to enhance hotter colors such as red, or set to cool to enhance cooler colors such as blue.
Dynamic Contrast	Adjusts the contrast to keep it at the best level according to the brightness of the screen. The picture is improved by making bright parts brighter and dark parts darker.
Dynamic Color	Adjusts screen colors so that they look livelier, richer and clearer. This feature enhances hue, saturation and luminance so that red, blue, green and white look more vivid.
Noise Reduction	■ Reduces screen noise without compromising video quality.
Gamma	Low: Make dark and middle gray level area of the picture brighter.  Medium: Express original picture levels.  High: Make dark and middle gray level area of the picture darker.  You can adjust brightness of dark area and middle gray level area of the picture.
Black Level	Low: The reflection of the screen gets darker.  High: The reflection of the screen gets brighter.  Auto: Realizing the black level of the video and set it to High or Low automatically.  ■ Set black level of the screen to proper level.  ■ This function is available in the following modes: AV (NTSC-M), HDMI or Component. Otherwise, 'Black level' is set to 'Auto'.
Eye Care	<ul> <li>Adjust the brightness of the screen to prevent the screen from being too bright. Dims extremely bright pictures.</li> <li>This feature is disabled in "Picture Mode-Vivid, Cinema, Intelligent Sensor".</li> </ul>
Real Cinema	<ul> <li>Makes video clips recorded in film look more natural by eliminating judder effect.</li> <li>DVD and Blu-ray movies are filmed at 24 frames per second (fps). With LG Real Cinema, every frame is consistently processed 5 times in 1/24 of a second producing 120 fps with TruMotion or 2 times in 1/24 of a second producing 48 fps without TruMotion, thus totally eliminating the judder effect.</li> <li>This function can work when TruMotion is off.</li> </ul>
TruMotion 120Hz	High: Provides smoother picture movement.  Low: Provides smooth picture movement. Use this setting for standard use.  Off: Use this setting when "High" and "Low" settings result in noise.  TruMotion 120Hz works with all inputs except PC mode.  If you enable "TruMotion", noise may appear on the screen.  If this occurs, set "TruMotion" to "Off".