

Blank Function

Using the Blank Function

This function may be effective when you need to draw attention during a meeting or training.

- 1 Press the **BLANK** button, and the screen is covered by the background color.

You can change the background color by referring to "Selecting a Blank Image".

- 2 Press any button to clear the blank function.

To cover the screen temporarily, press the **BLANK** button on the remote control.

Do not block the lens with any object while the projector is running.

It may become overheated and deformed or even cause a fire.

Selecting a Blank Image

- 1 Press the **SETTINGS** button.
- 2 Press the $\langle, \rangle$, $\langle$ or $\rangle$ button to select **OPTION** and press the **OK** button.
- 3 Press the $\langle, \rangle$, $\langle$ or $\rangle$ button to select **Blank Image** and press the **OK** button.
- 4 Use the $\langle, \rangle$ button to move to the setting or option you want and press the **OK** button.

Using the Quick Menu

You can customize frequently used menus.

- 1 Press **Q.MENU** to access the quick menus.
- 2 Press the $\langle$ or $\rangle$ button to scroll through the following menus and press **OK**.

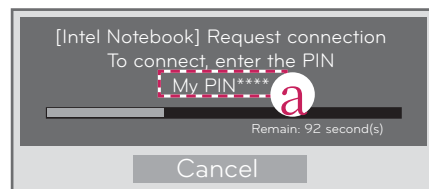
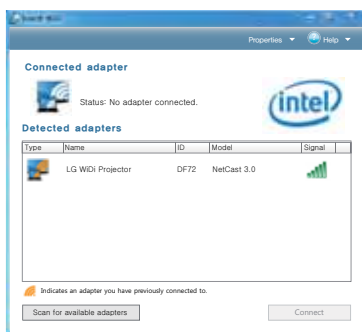
Menu	Description
Aspect Ratio	Resizes an image.
PJT Mode	Turns the projected image upside down or flips it horizontally.
Picture Mode	Changes the picture mode.
Multi Audio	Changes the audio language (Digital signal)
SAP	Changes the MTS sound (Analog signal)
Sleep Timer	The projector is turned off at the preset time.
Clear Voice II	Makes the voice from the projector crisp and clear.
Del/Add	Edits the channels to add or delete the channel.
USB Device	Eject a USB device. The menu is displayed only when the USB device is connected.

- 3 Press the $\langle, \rangle$, $\langle$ or $\rangle$ button to scroll through the following menus.

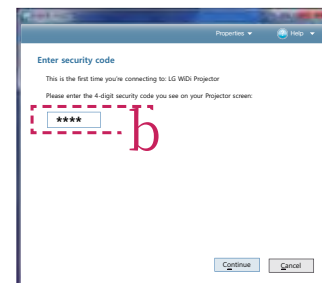
ENTERTAINMENT

WiDi (Wireless Display) Setup

- 1 Set the external input of the projector to WiDi.
- 2 Run the WiDi() program on your notebook.
- 3 After running the WiDi program on your notebook, a list will show all available devices that were detected. In the list, select the Projector you want and click Connect. Enter the 4 - digit number shown(**a**) on the screen (**b**) and then click Continue.



Projector Screen



Notebook Screen

- 4 The Notebook screen will appear on the projector screen soon. Note that the wireless connection speed will affect the quality of the video displayed on the notebook. If the connection is poor, the intel WiDi connection may be lost or quality of the video may be poor.

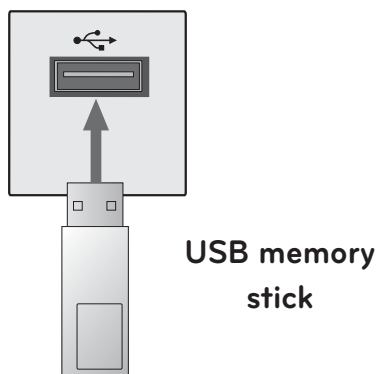
* For more information on Intel WiDi, visit <http://intel.com/go/widi>

MY MEDIA

Connecting USB Storage Devices

Connect a USB memory stick as shown below.

When a USB storage device is connected, the USB adjustment screen appears. You cannot write or delete data on the USB storage device.



To disconnect the USB storage device,

- 1** Press the **Q.MENU** button.
- 2** Use the **< or >** button to move to **USB Device** and press the **OK** button.
- 3** Remove the **USB device**.



NOTE

- After the USB storage device is disconnected, it cannot be read. Remove the USB storage device and connect it again.

Tips for Using USB Devices

- Only a USB storage device is recognizable.
- USB hubs are not supported.
- A USB storage device which uses its own driver may not be recognized.
- The recognition speed of a USB storage device will depend on each device.
- If a normal USB device does not work, disconnect and reconnect it. Please do not turn off the projector or unplug the USB device when the connected USB device is working. The USB device or stored files may be damaged.
- Please do not connect the USB storage device that has been manipulated on the PC. The projector may not operate properly or fail to play files. Use a USB storage device which contains normal music, photo, video, or document files.
- Please only use a USB storage device formatted as a FAT16, FAT32, or NTFS file system provided by Windows. In case a storage device formatted as a different utility program 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 a cable provided by the USB manufacturer. When you use a cable that is not provided by a USB manufacturer or an excessively long cable, the device may not be recognized.
- Some USB devices may not be supported or will not work properly.
- If the length of a folder or file is too long, the folder or file may not be recognized properly.
- The files in a USB storage device are sorted in the same way as Windows XP. Up to 100 English characters for a file name are allowed.
- The data of a USB device may be damaged, so it is recommended to backup any important files. Because a user is responsible for data management, the manufacturer is not responsible.
- It is recommended to use a USB memory stick which is 32 GB or less and a USB hard disk which is 1 TB or less. Any device with more than the recommended capacity may not work properly.
- If a USB storage device is not working properly, disconnect it and connect it again.
- If a USB external hard disk with the power saving function does not work, turn the hard disk off and on again to make it work properly.
- USB storage devices below USB 2.0 are supported as well. However, they may not work properly in the movie list.

MOVIE LIST

In the Movie List, you can watch movies stored on the connected USB device.

Tips for Playing Video Files

- Some subtitles created by a user may not work.
- Some special characters are not supported in subtitles.
- HTML tags are not supported in subtitles.
- Time information in a subtitle file should be arranged in ascending order to play the subtitle properly.
- Changing font and color in subtitles is not supported.
- A language which is not specified in the subtitle languages is not supported.
- Subtitle files of 1 MB or larger are not supported.
- The screen may suffer temporary interruptions (image stoppage, faster playback, etc.) when the audio language is changed.
- A damaged video file may not be played properly, or some functions may not be available.
- Video files created with some encoders may not be played properly.
- Either audio or video may only be supported depending on the video or audio packet structure of a video file.
- Video files with higher resolution than the maximum supported for each frame may not be played properly.
- Video files in formats other than the ones specified above may not be played properly.
- Streaming files which include GMC (Global Motion Compensation) or Qpel (Quarterpel Motion Estimation) is not supported.
- Up to 10,000 sync blocks are supported in the subtitle file.
- Seamless playback is not guaranteed for files encoded level 4.1 or higher in H.264/AVC.
- DTS audio codec is not supported.
- Video files larger than 30 GB (Giga-bytes) are not supported.
- Playing a video via a USB connection that does not support high speed may not work properly.
- A video file and its subtitle file must be located in the same folder. A video file name and its subtitle file name must be identical in order to display the subtitle properly.
- While watching a video using the movie list function, you cannot adjust the picture mode.
- Trick Mode does not support other functions than ►► if video files do not have index information.
- When playing a video file using network, the Trick mode is limited to 2X speed.
- Video file names that contain special characters may not be playable.

Supported Video Formats

File Extensions	Audio/Video	Codec	Profile/Level Support
.asf .wmv	Video	VC-1 Advanced Profile	Advanced Profile @ Level 3 (e.g.720p60, 1080i60, 1080p30) Only streams compliant to SMPTE 421M VC-1 standard are supported.
		VC-1 Simple and Main Profiles	Simple Profile @ Medium Level (e.g.CIF,QVGA) Main Profile @ High Level (e.g.1080p30) Only streams compliant to SMPTE 421M VC-1 standard are supported.
	Audio	WMA Standard	
		WMA 9 Professional	
.divx .avi	Video	Divx3.11	
		Divx4 Divx5 Divx6	Advanced Simple Profile(720p/ 1080i)
		XViD	Advanced Simple Profile(720p/ 1080i)
	Audio	MPEG-1 Layer I,II	
		MPEG-1 Layer III (MP3)	
		Dolby Digital	
		WMA Standard	
		WMA 9 Professional	
.mp4 .m4v	Video	H.264 /AVC	Main Profile @Level 4.1 High Profile @Level 4.1 (e.g.720p60, 1080i60, 1080p30)
		MPEG-4 Part 2	Advanced Simple Profile(720p/ 1080i)
	Audio	HE-AAC	HE-AAC-LC and HE-AAC
		DTS	Korea only
.mkv	Video	H.264 /AVC	Main Profile @Level 4.1 High Profile @Level 4.1 (e.g.720p60, 1080i60, 1080p30)
		HE-AAC	HE-AAC-LC and HE-AAC
	Audio	Dolby Digital	
		DTS	Korea only
.ts .trp .tp	Video	H.264 /AVC	Main Profile @Level 4.1 High Profile @Level 4.1 (e.g.720p60, 1080i60, 1080p30)
		MPEG-2	Main Profile @High Level (e.g.720p60, 1080i60)
	Audio	MPEG-1 Layer I,II	
		MPEG-1 Layer III (MP3)	
		Dolby Digital	
.vob	Video	HE-AAC	HE-AAC-LC and HE-AAC
		MPEG-1	
	Audio	MPEG-2	Main Profile @High Level (e.g.720p60, 1080i60)
		Dolby Digital	
		LPCM	
.mpg .mpeg .mpe	Video	MPEG-1 Layer I,II	
	Audio	MPEG-1	
		MPEG-1 Layer I,II	Only streams compliant configured properly for TS, PS or ES

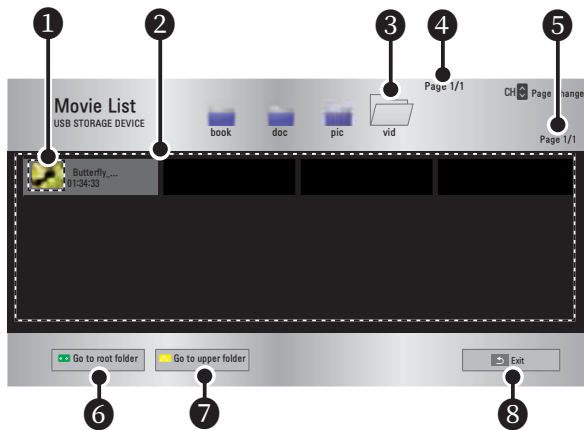
Supported Audio Files

No	Audio Codec	Bit rate	Sampling rate	Remark
1	MP3	32 kbps - 320 kbps	32 kHz - 48 kHz	DTS Audio codec is Korea only.
2	AC3	32 kbps - 640 kbps	32 kHz, 44.1 kHz, 48 kHz	
3	MPEG	32 kbps - 448 kbps	32 kHz - 48 kHz	
4	AAC,HEAAC	24 kbps - 3844 kbps	8 kHz - 96 kHz	
5	CDDA	1.44 kbps	44.1 kHz	
6	LPCM	1.41 Mbps - 9.6 Mbps	Multi-channel : 44.1 kHz, 88.2 kHz/ 48 kHz, 96 kHz Stereo : 176.4 kHz, 192 kHz	

Browsing Movie List

Play a video file stored from a connected device.

- 1 Connect a USB storage device.
- 2 Press the **SETTINGS** button.
- 3 Accesses the **MY MEDIA**.
- 4 Use the $\langle, \rangle$, $\langle$ or $\rangle$ button to select **Movie List** and press the **OK** button.
- 5 Use the $\langle, \rangle$, $\langle$ or $\rangle$ button to select the file you want and press the **OK** button.



	Description
1	Thumbnails
	Abnormal file
	File not supported
2	File List
3	Moves to the upper level folder.
4	Current page/Total no. of folder pages
5	Current page/Total no. of file pages
6	Moves to the top level folder.
7	Moves to the upper level folder.
8	Exit Movie List.

- 6 Control playback by using the following buttons.



Setting	Description
$\triangleleft \triangleright$	Shows the current playing position. Use $\triangleleft$, $\triangleright$ buttons to move forward or backward.
■	Stops playing and returns to Movie List.
$\blacktriangleright$	Returns to normal playback.
	Pauses the media player. If no button is pressed on the remote control for 10 minutes after pausing, the playback is restarted.
$\blacktriangleright$	Displays in slow motion.
$\ll \gg$	Whenever this button is pressed, the playback speed is changed. : x2, x4, x8, x16, x32
⏻	You can use the Energy Saving mode.
Option	A pop-up window will appear.
Hide	Hides the playback bar. Press the OK button to make it appear.
Exit	Returns to the Movie List screen.

Options for Movie List

- 1 Press the **Q.MENU** button.
- 2 Use the < or > button to move to a desired option and press the **OK** button.
- 3 Use <, >, < or > button to set up each item.

Set Video Play.

Setting	Description
Picture Size	Selects the size of a playback screen. • Full: Files are played in full screen mode according to the aspect ratio of video. • 16:9: Displays the video with the aspect ratio of 16:9. • Original: Displays the video in the original aspect ratio.
Audio Language	Allows you to select the language you want for the file with multiple audio tracks. This option is not available if the file has only one audio track.
Subtitle Language	The subtitle can be turned on or off. • Language: One of any of the available languages can be selected. • Code Page: A character set used for a subtitle can be selected. By default, the subtitle is displayed in a language configured in OPTION → Menu Language.

Setting	Description
Subtitle Language	• Speed: If a subtitle is not synchronized with its video, you can adjust its speed at 0.5 sec unit. • Position: Moves the location of a subtitle. • Size: Changes the subtitle font size.
Repeat	Turns the repeat function on or off. When it is set to off, the next file can be played sequentially if the file name is similar.

• Subtitle Language

Subtitle Language	Language
Latin1	English, Spanish, French, German, Italian, Swedish, Finnish, Dutch, Portuguese, Danish, Romanian, Norwegian, Albanian, Gaelic, Welsh, Irish, Catalan, Valencian
Korean	Korean

PICTURE Settings

You can change video settings.

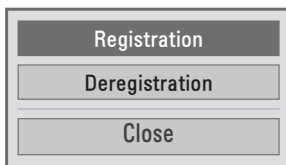
AUDIO Settings

You can change audio settings.

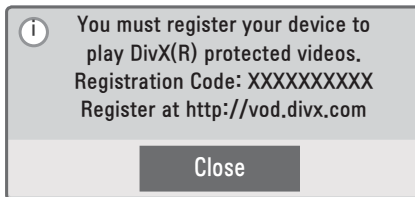
Registering the DivX code

Please check your DivX code. For more information on the registration process, visit www.divx.com/vod. After registration, you can enjoy DivX VOD content protected by the DivX DRM code.

- 1 Press **SETTINGS** button to enter Setup menu.
- 2 Move to **OPTION** and press **DivX(R) VOD**.



- 3 Press the < or > button to move to **Registration** and press the **OK** button.



- 4 Check the **DivX registration code**.



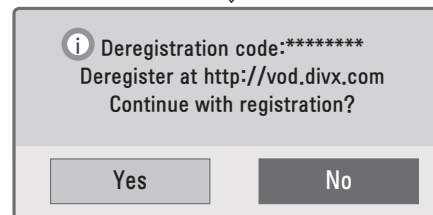
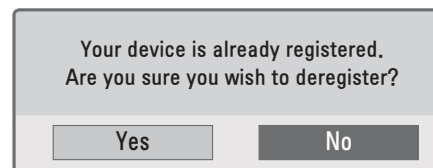
NOTE

- You cannot use DivX registration codes assigned to other devices. Make sure to use the DivX registration code assigned to your device.
- The video or audio files that are not converted by the standard DivX codec may be corrupted or not be played.

To deregister the DivX code

Use the DivX deregistration code to deactivate the DivX DRM function.

- 1 Press **SETTINGS** button to enter Setup menu.
- 2 Move to **OPTION** and press **DivX(R) VOD**.
- 3 Use the < or > button to go to **Deregistration** and press the **OK** button.



- 4 Select **Yes**.



NOTE

- What is DRM [Digital Rights Management]? This is a technology and service that prevents the illegal use of digital media to protect the benefits and rights of the copyright owner. Files can be played after the license is verified through an online method, etc.

PHOTO LIST

You can see the photos stored on a connected device.

Supported Photo Files

PHOTO (*.JPEG)

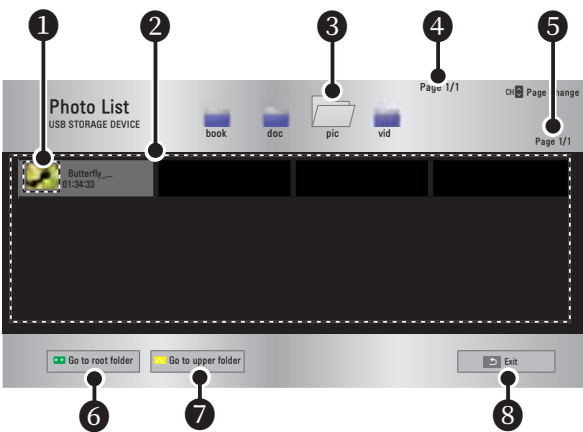
Baseline: 64-pixel (width) x 64-pixel (height) - 15360-pixel (width) x 8640-pixel (height)

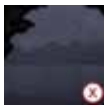
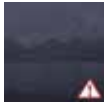
Progressive: 64-pixel (width) x 64-pixel (height) - 1920-pixel (width) x 1440-pixel (height)

- Only JPEG files are supported.
- Non-supported files are displayed in the form of an icon.
- An error message is displayed for corrupted files or file formats that cannot be played.
- Corrupted files may not be displayed properly.
- It may take some time to view high-resolution images in full screen.

Browsing Photo List

- 1 Connect a **USB storage device**.
- 2 Press the **SETTINGS** button.
- 3 Accesses the **MY MEDIA**.
- 4 Use the <, >, < or > button to select **Photo List** and press the **OK** button.
- 5 Use the <, >, < or > button to select the file you want and press the **OK** button.



	Description
1	Thumbnails
	Abnormal file 
	File not supported 
2	File List
3	Moves to the upper level folder.
4	Current page/Total no. of folder pages
5	Current page/Total no. of file pages
6	Moves to the top level folder.
7	Moves to the upper level folder.
8	Exit

- 6 Control playback by using the following buttons.



Setting	Description
	Selects the previous or next photo.
Slide-show	All photos are displayed during slide show. Set the time interval of the slide show in Option → Set Photo View menu.
BGM	You can listen to music while viewing photos in full size. Set the BGM in Option → Set Photo View menu.
	Rotates photos. - Rotates a photo 90°, 180°, 270°, 360° clockwise. - Photos cannot be rotated if their width is greater than the height of the max. supported resolution.
	You can move between screens using the navigation buttons. Press the blue button to enlarge the image.
	You can use the Energy Saving mode.
Option	A pop-up window will appear.

Setting	Description
Hide	Hides the menu on the full size screen. To see the menu, press the OK button on the remote control.
Exit	Exit from full screen photo view.

Options for Photo List

- 1 Press the **Q.MENU** button.
- 2 Use the < or > button to move to a desired option and press the **OK** button.
- 3 Use <, > , < or > button to set up each item.

Set Photo View.

Setting	Description
Slide speed	Selects a slideshow speed.
BGM (Back-ground Music)	Selects a music folder for the background music. - You cannot change the music folder while the background music is playing. - For background music, only the folder from the same device can be selected.

PICTURE Settings

You can change video settings.

AUDIO Settings

You can change audio settings.

MUSIC LIST

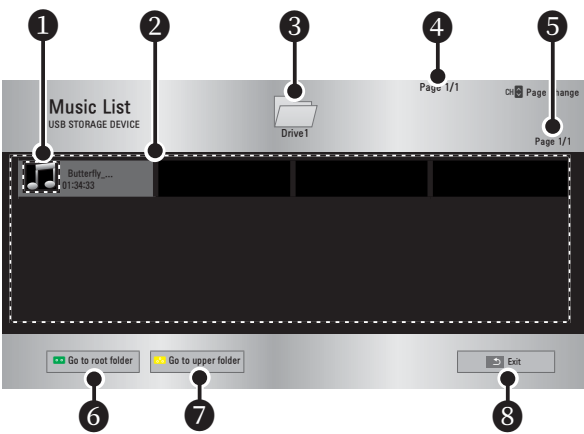
You can play audio files stored on the connected device.

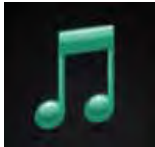
Supported Music Files

- *.MP3
- Bit rate range 32 Kbps - 320 Kbps
- Sampling rate MPEG 1 Layer 3: 32 kHz, 44.1 kHz, 48 kHz
 - Sampling rate MPEG 2 Layer 3: 16 kHz, 22.05 kHz, 24 kHz

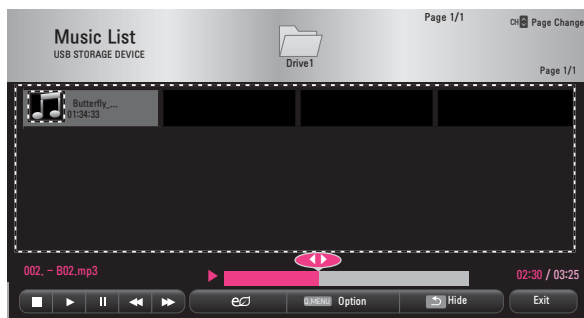
Browsing Music List

- 1 Connect a **USB storage device**.
- 2 Press the **SETTINGS** button.
- 3 Accesses the **MY MEDIA**.
- 4 Use the <, > , <, > button to select **Music List** and press the **OK** button.
- 5 Use the <, > , < or > button to select the file you want and press the **OK** button.



	Description
①	Thumbnails
	Abnormal file 
	File not supported 
②	File List
③	Moves to the upper level folder.
④	Current page/Total no. of folder pages
⑤	Current page/Total no. of file pages
⑥	Moves to the top level folder.
⑦	Moves to the upper level folder.
⑧	Exit

6 Control playback by using the following buttons.



Setting	Description
	Changes the playing position.
	Stops playing.
	Returns to normal playback.
	Pauses the media player.
	Plays the previous/next file.
	You can use the Energy Saving mode.
Option	Sets up the options of Music List.

Setting	Description
Hide	Hides the playback bar. • Press the OK button to make the playback bar appear.
Exit	Returns to the Music List screen.

Options for Music List

- 1 Press the **Q.MENU** button.
- 2 Use the **<** or **>** button to move to a desired option and press the **OK** button.
- 3 Use **<**, **>**, **<** or **>** button to set up each item.

Set Audio Play.

Setting	Description
Repeat	Selects repeat play.
Random	Selects random play.

AUDIO Settings

You can change audio settings.

FILE LIST

You can see document files stored on a connected device.

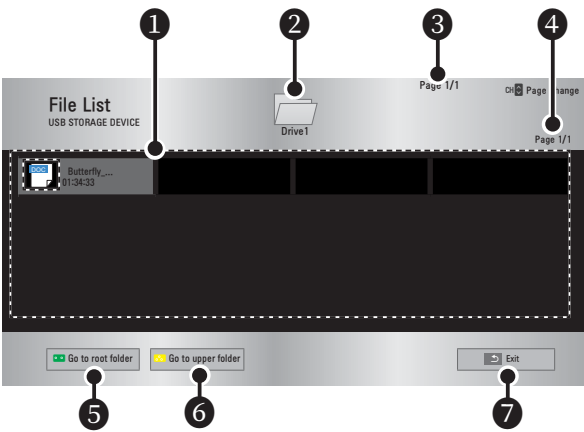
Supported File Formats

XLS, DOC, PPT, TXT, XLSX, PPTX, DOCX, PDF, Microsoft Office 97/ 2000/ 2002/ 2003/ 2007 Adobe PDF 1.0/ 1.1/ 1.2/ 1.3/ 1.4

- File Viewer realigns a document, so it may look different from what is displayed on a PC.
- For documents that include images, the resolution may look lower during the realigning process.
- If the document volume is big or it has many pages, it may take longer to load the document.
- Unsupported fonts may be replaced by other fonts.

Browsing File List

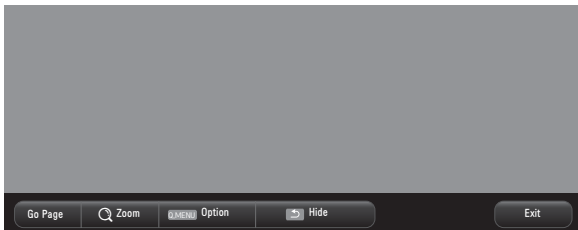
- 1 Connect a **USB storage device**.
- 2 Press the **SETTINGS** button.
- 3 Accesses the **MY MEDIA**.
- 4 Use the <, > , < or > button to select **File List** and press the **OK** button.
- 5 Use the <, > , < or > button to select the file you want and press the **OK** button.



	Description
1	File List
2	Moves to the upper level folder.
3	Current page/Total no. of folder pages
4	Current page/Total no. of file pages
5	Moves to the top level folder.
6	Moves to the upper level folder.
7	Exit

6 Control playback by using the following buttons.

- Click **Go Page** then the pop-up window for selecting the number of page appears.
- Input the page to move to the page you want.
- Press the volume button to zoom in or zoom out.
 1. Press **OK**.
 2. Press the **Up/Down/Left/Right** buttons to move to Go Page or Zoom.



Setting	Description
Go Page	Moves to the page you want. Use the Up/Down/Left/Right buttons to select a page and press the OK button.
Zoom	Views the photo in full mode or original mode.
Option	Sets up the options of File Viewer.
Hide	Hides the menu. • Press the SETTINGS button to make it appear.
Exit	Returns to the File Viewer screen.

Set FileViewer Option

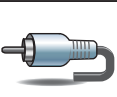
Setting	Description	
Single Page Loading	On	Loads and displays pages one by one. The initial loading time is short but a content-heavy page may be displayed slowly.
	Off	Loads all pages of a file to memory before it starts to display them. The initial loading time is long but you can navigate pages quickly after loading is complete. If a file is too large, it may fail to load all the pages.
Image Quality	You can set the quality of the image included in the document. The following three options are available for the image quality: High, Medium, Low. Higher the image quality, lower the display time.	
Document Align	Selects initial document align method.	

File View settings are default, so close the currently opened document to apply changes to the new document, if any.

CUSTOMIZING SETTINGS

SETUP Menu

- 1 Press the **SETTINGS** button.
- 2 Use the <, >, < or > button to select a desired item and press the **OK** button.
- 3 Use the <, >, < or > button to set up a desired item and press the **OK** button.
- 4 When you finished, press **SETTINGS**.

Menu		Description
	PICTURE	Adjusts the image quality for optimal viewing.
	AUDIO	Adjusts the sound quality and volume level.
	CHANNEL	Sets up and edit channels.
	TIME	Sets the time and time-related features.
	LOCK	Locks or unlocks channels and programs.
	OPTION	Customizes the general settings.
	INPUT	Selects the desired input source.
	MY MEDIA	Accesses photo, music, movie, and document files.

PICTURE Settings

- 1 Press the **SETTINGS** button.
- 2 Use the **<**, **>**, **<** or **>** button to select **PICTURE** and press the **OK** button.
- 3 Use the **<**, **>**, **<** or **>** button to set up a desired item and press the **OK** button.
 - To return to the previous menu, press the **↶** button.



The available picture settings are described as follows.

Setting	Description
Energy Saving	Reduces the power consumption by adjusting the screen brightness.
Picture Mode	Selects one of the preset images or customizes options in each mode for the best screen performance. You are also able to customize advanced options of each mode.
Mode	
Vivid	Maximizes the visual effect of video. Displays a crystal clear picture by enhancing contrast, brightness, and sharpness.
Standard	Has the contrast, brightness and sharpness at normal levels.
Eco	The Energy Saver feature changes settings on the TV to reduce power consumption.
Cinema	Optimizes the image for movie.
GAME	Optimizes the image for playing games on fast-moving screens.
Expert 1/2	Adjusts the detailed image settings.
CON-TRAST	Increases or decreases the gradient of the video signal.
BRIGHT-NESS	Adjusts the base level of the video signal to make the image brighter or darker.
Sharpness	Adjusts the level of sharpness in the edge between the light and dark areas of the picture. The lower the level is, the softer the image looks.
Color	Adjusts the intensity of all colors.
Tint	Adjusts the balance between red and green levels.
Advanced Control	Customizes the advanced settings.
Picture Option	Sets optional settings.

Setting	Description	
Picture Reset	Restores the options of each mode to the factory default.	
Aspect Ratio	Resizes the picture.	
Screen (RGB-PC)	Adjusts the picture quality of RGB-PC input.	
	Option	
	Resolution	Available resolutions is 768 (1024 x 768/ 1280 x 768/ 1360 x 768, 60 Hz).
	Auto Con-fig.	Provides optimized picture quality by automatically calibrating the mismatch of horizontal width and picture shake caused by clashes between the internal settings of the projector and various PC graphic signals. You can also use the AUTO button on the remote control.
	Position	Moves the image up/down/left/right.
	Size	Changes the screen size.
	Phase	Makes the picture look clear by removing horizontal noise.
	Reset	Restores all the settings to the factory default.

Advanced Control

Setting	Description	
Dynamic Contrast	Adjusts the contrast to keep it at the best level according to the brightness of the screen.	
Dynamic Color	Adjusts screen colors so that they look natural.	
Preferred Color	Skin Color	Adjusts the skin color in the picture to your preference.
	Grass Color	Adjusts only the natural color area of e.g., field and mountain.
	Sky Color	Adjusts only the color of the sky.
Gamma	Sets a gradation curve between video input and output signal.	

Picture Option

Setting	Description
Noise Reduction	Removes noises in the picture.
MPEG Noise Reduction	Reduces the noise produced while creating digital video signals.
Black Level	Compensates the brightness and contrast of a screen to balance with the black level of the video input.
Real Cinema	Provides optimal picture quality for watching a movie.
Color Temperature	Adjusts the overall color of the screen to suit your preference. You can select Warm, Cool, Medium or Natural.

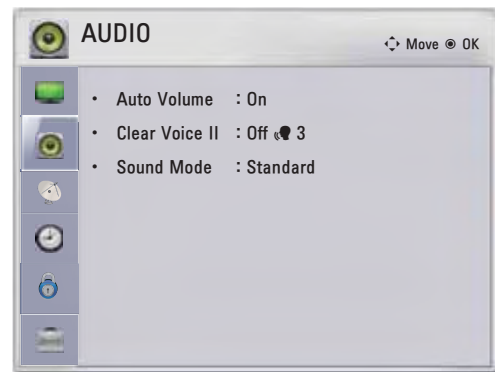
Expert Control

Setting	Description
Dynamic Contrast	Adjusts the contrast to keep it at the best level for the brightness of the screen.
Color Gamut	Selects the range of colors to display. Standard: Displays the original colors of an input signal regardless of the display features. Wide: Sets to use the rich colors of the display.
Edge Enhancer	Provides much sharper and clearer edges to the picture.
Expert Pattern	Patterns used for expert adjustment.
Color Filter	Accurately adjusts color and tint by filtering a specific color area of RGB space.
Gamma	Sets a gradation curve between video input and output signal.
White Balance	Adjusts white balance. Detailed adjustment is possible as shown below. Color Temperature: Select Warm, Cool, Medium or Natural. a. Method: 2 points Pattern: Inner, Outer Contrast Red/Green/Blue, Brightness Red/Green/Blue: Adjustable range -50 - +50. b. Method: 20 point IRE Pattern: Inner, Outer Institute of Radio Engineers (IRE) is the unit indicating the size of a video signal and can be set to 5, 10, 15, ... 100. You can fine-tune for each setting as shown below. Luminance: If you set up luminance for 100 IRE, a luminance value satisfying each gamma is automatically calculated for each step from 10 IRE to 90 IRE. Red/Green/Blue: The adjustment range is -50 - +50.
Color Management system	Adjusts Red/Green/Blue/Cyan/Magenta/Yellow colors. Allows an expert to adjust the tint using a test pattern. Six colors (Red/Green/Blue/Cyan/Magenta/Yellow) can be selectively adjusted without affecting other colors. You may not see colors change on a normal picture even after adjustment. Chroma Red/Green/Blue/Yellow/Cyan/Magenta, Tone Red/Green/Blue/Yellow/Cyan, Magenta: The adjustment range is -30 - +30 each.

Available options may differ depending on the input signal or video mode, etc.

AUDIO Settings

- 1 Press the **SETTINGS** button.
- 2 Use the **<**, **>**, **<**, **>** buttons to select **AUDIO** and press the **OK** button.
- 3 Use the **<**, **>**, **<** or **>** button to set up a desired item and press the **OK** button.
 - To return to the previous menu, press the **↶** button.



The available audio settings are described as follows.

Setting	Description	
Auto Volume	Automatically adjusts the volume level.	
Clear Voice II	Makes the voice from the projector crisp and clear.	
Sound Mode	Adjusts sound.	
	Option	
	Standard	Select when you want standard-quality sound.
	Music	Select when you listen to music.
	Cinema	Select when you watch movies.
	Sport	Select when you watch sports events.
	Game	Select when you play games.
	User setting	Adjusts the volume to the desired level using the User EQ.

CHANNEL Settings

- 1 Press the **SETTINGS** button.
- 2 Use the **<**, **>**, **<or>** button to select **CHANNEL** and press the **OK** button.
- 3 Use the **<**, **>**, **<or>** button to set up a desired item and press the **OK** button.
 - To return to the previous menu, press the **↶** button.



The available channel settings are described in the following.

Setting	Description
Auto Tuning	Tunes and stores all available channels through antennas or cable inputs.
Manual Tuning	Tunes and stores the channels you want manually.
Channel Edit	Adds or deletes channels.

TIME Settings

- 1 Press the **SETTINGS** button.
- 2 Use the **<, >** , **< or >** button to select **TIME** and press the **OK** button.
- 3 Use the **<, >** , **< or >** button to set up a desired item and press the **OK** button.
 - To return to the previous menu, press the **↶** button.

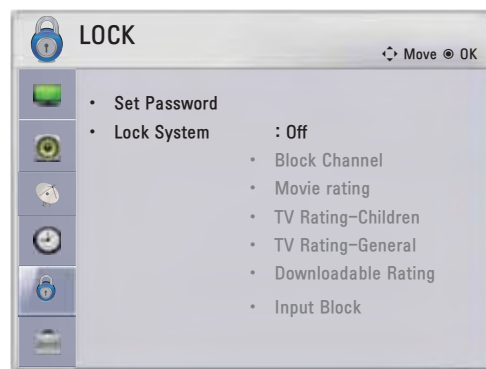


The available time settings are described as follows.

Setting	Description
Clock	Sets the time, date, or Timer feature.
Off Time /On Time	Sets the time to turn on or off the projector automatically. To use this function, you should set the current time and date in advance. NOTE • If you set both Off time and On time features to the same time, the Off time feature overrides the On time feature. • If you do not press any button within 2 hours after the projector turns on by the On Time feature, the projector enters the Standby mode automatically.
Sleep Timer	Sets the length of time until the projector turns off.
Auto Off	If there is no signal, the projector automatically turns off after the preset time has elapsed.
Automatic Standby	If there is no press any button when Automatic Standby function is on, the Projector automatically switches to the standby mode.

LOCK Settings

- 1 Press **MENU** to access the menu.
- 2 Press the Navigation buttons to scroll to **LOCK** and press **OK**.
- 3 Press the Navigation buttons to scroll to the setting or option you want and press **OK**.
 - To return to the previous menu, press the **↶** button.



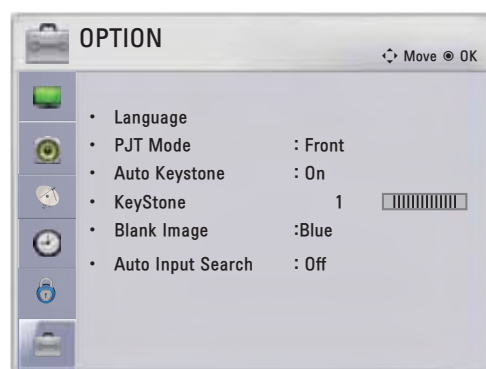
The available lock settings are described in the following.

Setting	Description	
Set Password	Changes the 4-digit password. The default PIN is "0 0 0 0". If you forget your password, press "0-3-2-5" on the remote control.	
Lock System	Activates or deactivates the lock system.	
	Option	
	Off	Locks the selected channel. When you enter the password for a locked channel, the channel is unlocked temporarily.
	On	Locks the selected input.
Block Channel	Blocks the channels that contain inappropriate contents for children. The channels can be selected but the screen blank and the audio is muted. To watch a locked channel, enter the password.	
Movie rating	Blocks the movies that are only broadcasted on the projector and contain inappropriate contents, based on the Motion Picture Association of America (MPAA) rating.	
	Rating	
	G	General audiences – All ages admitted
	PG	Parental guidance suggested – Some material may not be suitable for children
	PG-13	Patents strongly cautioned – Some material may be inappropriate for children under 13
	R	Restricted – Under 17 requires accompanying parent or adult guardian
	NC-17	No one 17 and under admitted.
	X	Adults only
	Blocking Off	Permits all programs

Setting	Description
TV Rating-Children	Blocks the children's TV programs that parents do not want their children to watch. To block other TV programs, you should set the TV Rating-General feature.
	Rating
	Age Applies to TV-Y, TV-Y7
	Fantasy Violence Applies to TV-Y7
TV Rating-General	Blocks the TV programs that you want based on the ratings by using the Parental Control Function (V-Chip).
	 NOTE The V-Chip electronically reads TV program ratings and allows parents to block program that are unsuitable for children.
	Rating
	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
Downloadable Rating	This function operates only when projector has received Region5 Rating data. The name of the rating option may differ.
	 NOTE This feature is available only for digital channels.
Input Block	Block the input sources.
Key Lock	This feature can be used to prevent unauthorized viewing by locking out the panel controls, so that it can only be used with the remote control.
	In Key Lock 'On', if the projector is turned off, press the Power button. With the Key Lock 'On', the display 'Key Lock' appears on the screen if any button on the panel is pressed while viewing the projector.

OPTION Settings

- 1 Press the **SETTINGS** button.
- 2 Use the <, >, < or > button to select **OPTION** and press the **OK** button.
- 3 Use the <, >, < or > button to set up a desired item and press the **OK** button.
 - To return to the previous menu, press the ↶ button.



The available option settings are described as follows.

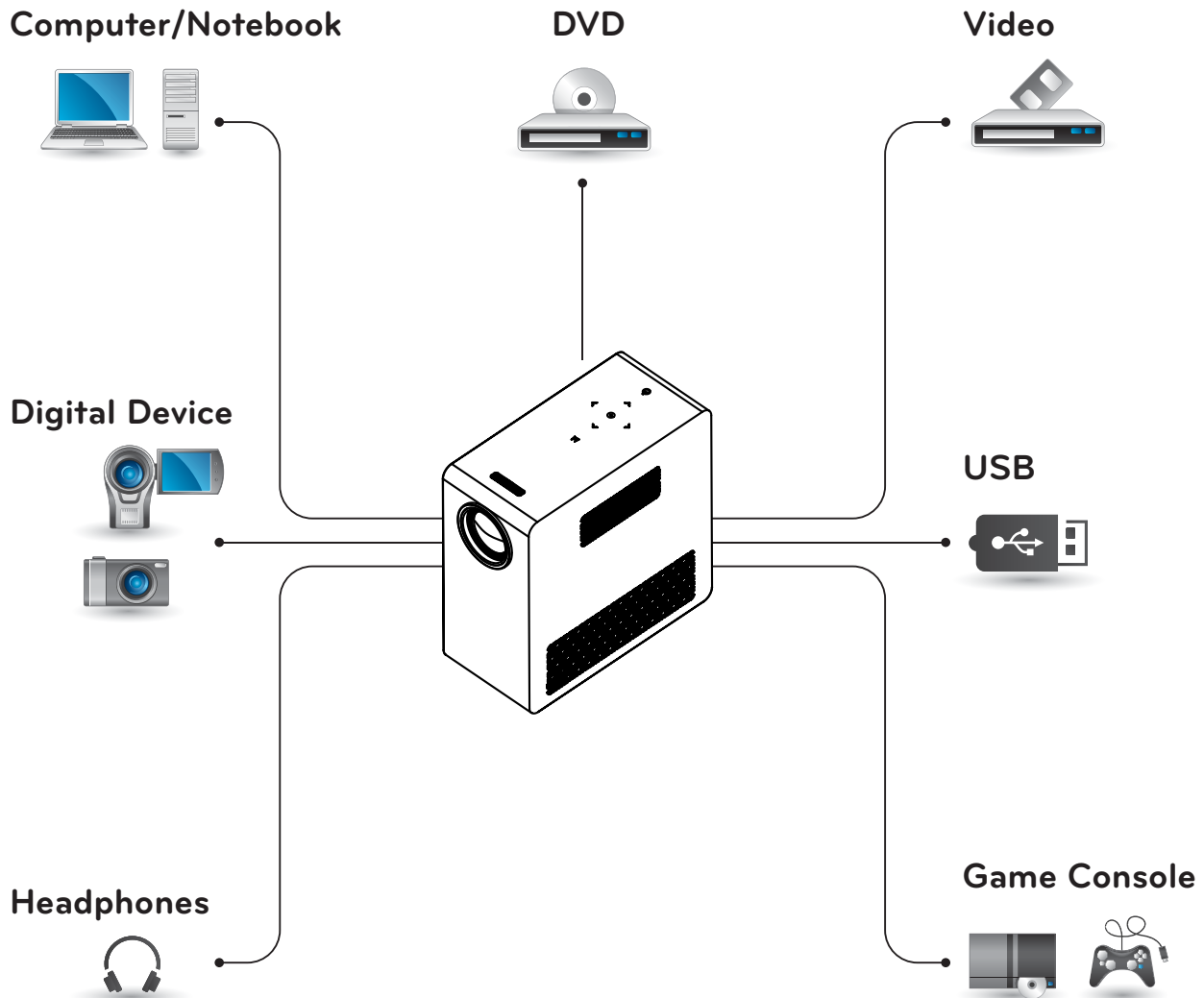
Setting	Description	
Language	Selects a desired Menu Language.	
PJT Mode	This function turns the projected image upside down or flips horizontal. • Select Rear when projecting from the back of the transparent screen purchased separately. • Select Ceiling when installing the product on the ceiling. • When PJT Mode is Front/Front Ceiling/Rear/Rear Ceiling, the left/right of the speaker changes automatically.	
Auto Keystone	Auto Keystone provides a rectangular screen image by automatically adjusting the Keystone number when there is a trapezoidal screen image caused by tilting of the projector.	
	Option	
	ON	Automatically adjusts the Keystone number.
	Off	Manually adjusts the Keystone number.
Keystone	To prevent the screen image from becoming trapezoidal, Keystone adjusts the top and bottom width of the image if the projector is not set at a right angle to the screen.	
Blank Image	Selects a background for blank Image.	
Auto Input Search	Automatically searches and displays an input signal type when it is received.	

Setting	Description	
Auto Power	Makes the projector turn on automatically when the adaptor plug is inserted.	
	Option	
	On	When the DC plug is connected to the projector, it turns on automatically.
	Off	When the DC plug is connected to the projector, it goes into standby mode.
High Altitude	If the projector is used at an altitude higher than 1200 meters, turn this on. Otherwise, the projector may overheat or its protection function may be activated. If this happens, turn the projector off and then on again after waiting for several minutes.	
Caption	Sets whether to display captions and customize your option in each mode.	
	Mode	
	CC 1-4 (Closed Captioning)	Displays the audio portion of a TV program as text on the screen. CC1 is the most common mode in use. - Field 1 data channels: two Captions (CC1, CC2) and two Text (T1, T2). - Field 2 data channels: two Captions (CC3, CC4) and two Text (T3, T4).
	Text 1-4	
	Service 1-6	This is only available for the digital broadcasting system.
	Option (For Digital Broadcasting)	
	Size	Selects the wordsize.
	Font	Selects a typeface for the text.
	Text Color	Selects a color for the text.
	Text Opacity	Adjusts the opacity for the text color.
	Bg Color	Adjusts the opacity for the text color.
	Bg Opacity	Adjusts the opacity for the background color.
	Edge Type	Selects an edge type.
	Edge Color	Selects a color for the edges.

Setting	Description	
Standby Light	Adjusts the LED button indicator.	
	Option	
	On	When the buttons are touched, their indicators are all turned on at maximum brightness. In standby mode, all LED indicators are turned on at 20 % of the maximum brightness.
	Off	When the buttons are touched, their indicators are all turned on at maximum brightness. In standby mode, all LED indicators are turned off.
DivX(R) VOD	sets DivX related settings.	
Initial Setting	Resets all the projector settings to the factory default.	

MAKING CONNECTIONS

You can connect various external devices to the ports on the projector.

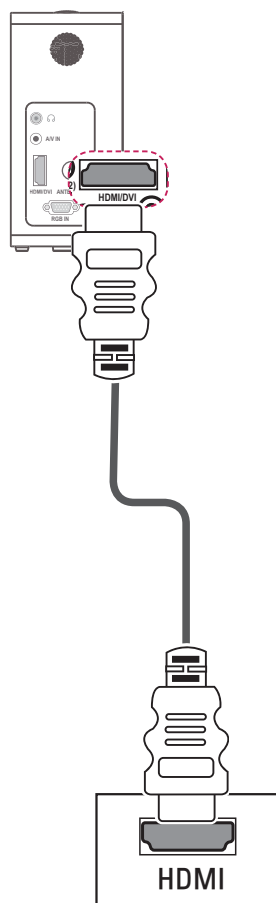


Connecting to an HD Receiver, DVD Player, or VCR

Connect an HD receiver, DVD Player, or VCR to the projector and select an appropriate input mode.

HDMI Connection

With an HDMI cable, you can enjoy high quality picture and sound. Press the **INPUT** button on the remote control to select **HDMI**.



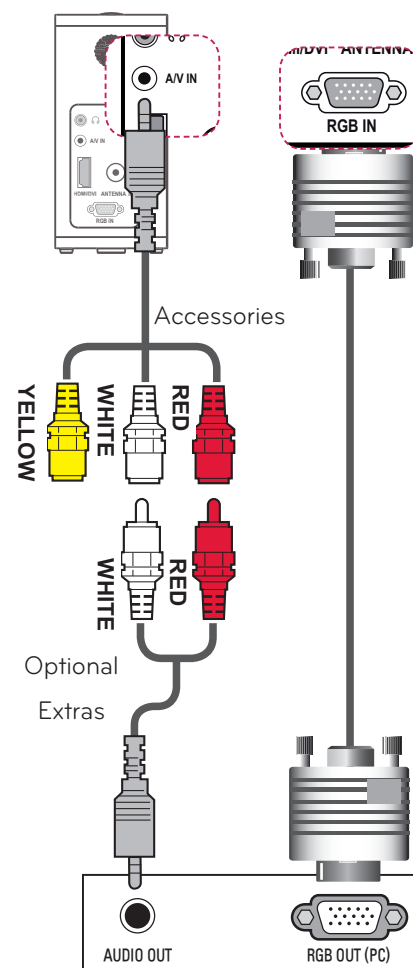
Connecting to a PC

The projector supports Plug & Play. A PC will automatically recognize the projector and requires no driver to be installed.

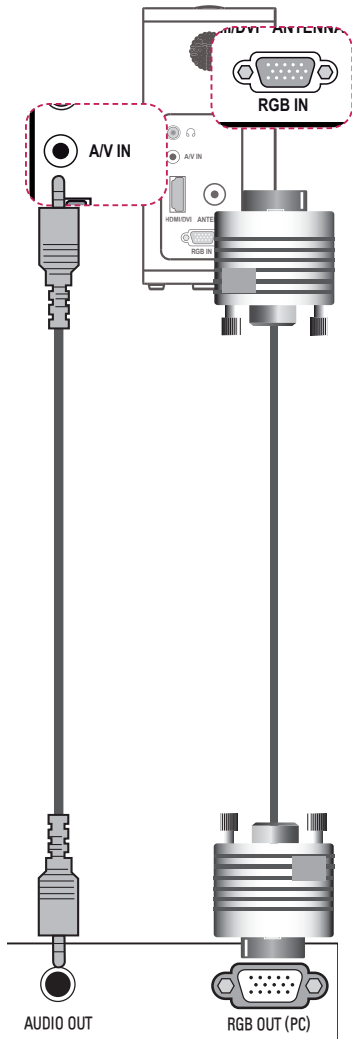
RGB Connection

Connect the PC output and the PC video input port of the projector with the RGB cable.

For audio signal, connect the PC and the projector with an optional audio cable.



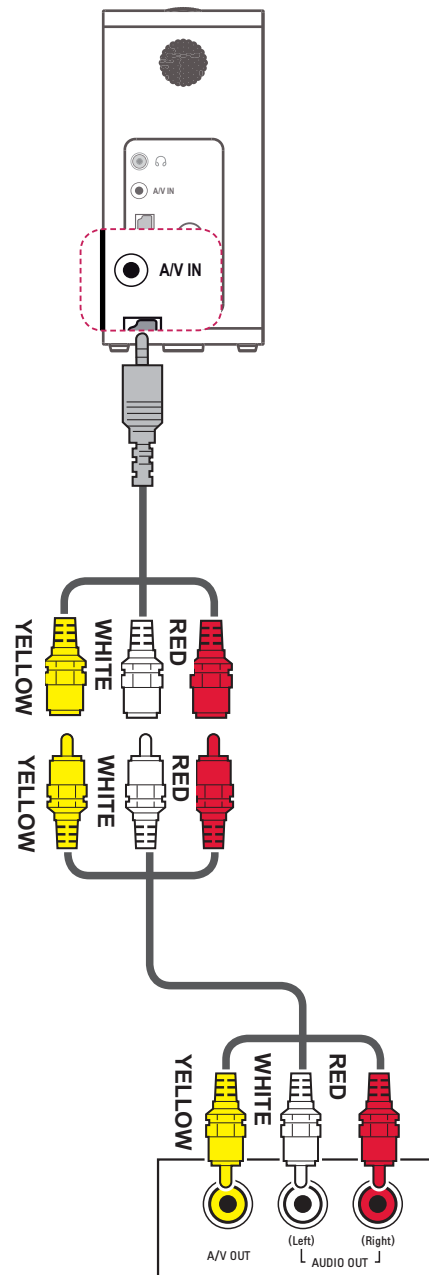
RGB Connection



You can connect the audio cable without using a gender as shown in the illustration above.

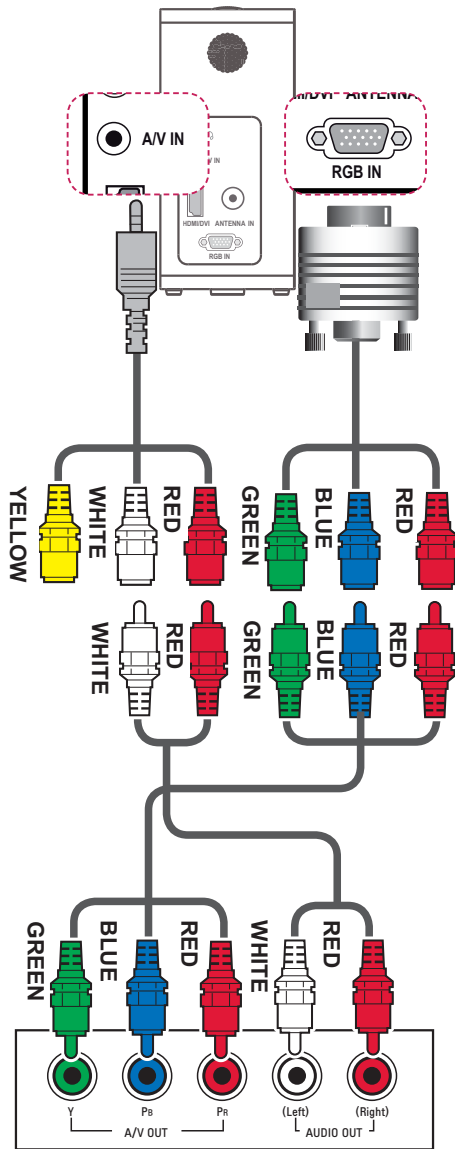
Connecting to the AV INPUT

Connect the output ports of an external device and the AV INPUT port of the projector. Press the **INPUT** button to select **AV**.



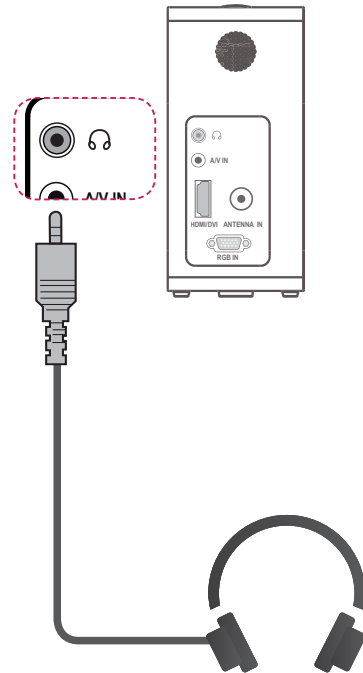
Component Connection

You can enjoy vivid images when you connect an external device with a **RGB IN** port to the component port of the projector. Press the **INPUT** button on the remote control to select **Component**.



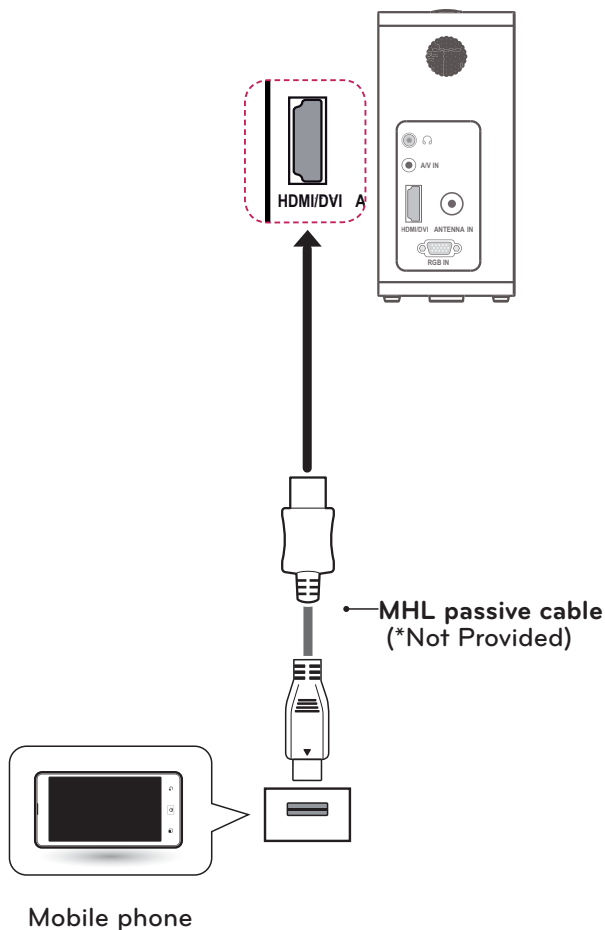
Connecting to Headphones

You can listen to the audio through a headphone.



MHL Connection

Mobile High-definition Link (MHL) is an interface for transmitting digital audiovisual signals from mobile phones to television sets.



NOTE

- Connect the mobile phone to the HDMI IN port to view the phone screen on the Projector.
- The MHL passive cable is needed to connect the Projector and a mobile phone.
- This only works for the MHL-enabled phone.

MAINTENANCE

Clean your projector to keep it in optimum condition.

Cleaning the Projector

Cleaning the Lens

If there is any dust or staining on the lens surface, you must clean the lens. Use an air spray or a cleaning cloth to clean the lens.

To remove dust or stains, use an air spray or apply a small amount of cleaning agent onto a swab or soft cloth to lightly rub the lens.

Please be aware that liquid may flow onto the lens if the product is sprayed directly onto the lens.

Cleaning the Projector Case

To clean the projector case, first unplug the power cord.

To remove dust or stains, use only a dry, lint-free, nonabrasive cloth to polish the lens.

Do not use alcohol, benzene, thinners or other chemicals, which may damage the case.

SPECIFICATIONS

MODELS	PG65U (PG65U-JE)
Resolution (Pixel)	1280 (Horizontal) × 800 (Vertical)
Aspect ratio	16:10 (Horizontal:Vertical)
Panel size (mm)	11.623
Projection distance (Video size)	0.80 m - 3.25 m (63.5 cm - 254.0 cm)
Ratio of upward projection	100 %
Working range of the remote control	3 m
Video input	NTSC M / PAL-B, D, G, H, I / PAL M / PAL N / PAL 60 / SECAM
AC-DC Adaptor	19.5 V  , 4.62 A (Adaptor Input 100 ~ 240 @ 50 Hz/60 Hz)
Audio Output	3W MONO
Television System	DTV-ATSC / TV-NTSC
Program Coverage	VHF 2 - 13, UHF 14 - 69, CATV 01 - 135, DTV 2 - 69, DTV 1 - 135
External Antenna Impedance	75 Ω (VHF/ UHF)
Height (mm)	125 (without foot) 127.5 (with foot)
Width (mm)	60
Depth (mm)	125 (without foot) 131 (with foot)
Weight (kg)	0.68
USB Device	5 V, 0.5 A (Max.)
Operation environ- ment	Temperature
	Operation 0 °C - 40 °C
	Storage -20 °C - 60 °C
	Relative Humidity
	Operation 0 % - 80 %
	Storage 0 % - 85 %

Supported Monitor Display

Resolution	Horizontal Frequency (kHz)	Vertical Frequency (Hz)
640 x 350	31.468	70.09
720 x 400	31.469	70.08
640 x 480	31.469	59.94
800 x 600	37.879	60.31
1024 x 768	48.363	60.00 119.99
1152 x 864	54.348	60.053
1280 x 800	49.68	60
1360 x 768	47.712	60.015
1280 x 1024	63.981	60.020
1400 x 1050	65.317	59.979
1680 x 1050	65.3	60

- If an invalid signal is input into the projector, it will not be displayed properly on the screen or a message such as "No Signal" or "Invalid Mode" will be displayed.
- The projector supports the DDC1/2B type as the Plug & Play function (Auto-recognition of PC monitor).
- PC synchronization signal types supported: Separate type synchronization.
- In PC mode, 1280 x 800 is recommended for the best picture quality.

HDMI/DVI-DTV/WiDi

supported mode

Resolution	Horizontal Frequency (kHz)	Vertical Frequency (Hz)
720 x 480	31.469 31.5	59.94 60
720 x 576	31.25	50
1280 x 720	37.5 44.96 45	50 59.94 60
1920 x 1080	33.72 33.75 28.125 26.97 27 33.716 33.75 56.25 67.43 67.5	59.94 60 50 23.97 24 29.976 30.00 50 59.94 60

Component port connecting

information

Signal	Component
480i / 576i	o
480p / 576p	o
720p / 1080i	o
1080p	o (50 Hz / 60 Hz only)

Open Source Software Information

To obtain the source code under GPL, LGPL, MPL and other open source licenses, that is contained in this product, please visit <http://opensource.lge.com>. In addition to the source code, all referred license terms, warranty disclaimers and copyright notices are available for download.

LG Electronics will also provide open source code to you on CD-ROM for a charge covering the cost of performing such distribution

(such as the cost of media, shipping and handling) upon email request to opensource@lge.com. This offer is valid for three (3) years from the date on which you purchased the product.

Wireless Specifications

(WN8122E1)

Standard	IEEE802.11a/b/g/n
Frequency Range	2400 to 2483.5 MHz 5150 to 5250 MHz 5725 to 5850 MHz
Output Power (Max.)	802.11a: 16.5 dBm 802.11b: 16 dBm 802.11g: 15.5 dBm 802.11n - 2.4GHz: 15.5 dBm 802.11n - 5GHz: 16.5 dBm

- Because band channel used by the country could be different, the user can not change or adjust the operating frequency and this product is set for the regional frequency table.
- Contains FCC ID: BEJWN8122E1 / Contains IC: 2703H-WN8122E1



The model and serial number of the projector are located on the back or on the side of the projector. Record them below should you ever need service.

MODEL _____

SERIAL _____