TIME Settings

1 Press the **SETTINGS** button.

2 Use the $\wedge$, $\vee$, $<$, or $>$ button to select **TIME** and press the **OK** button.

3 Use the $\wedge$, $\vee$, $<$, or $>$ button to set up the desired item and press the **OK** button.
- To return to the previous menu, press the � button.
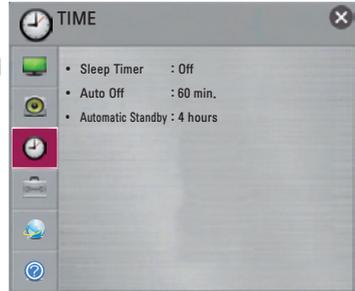
The available time settings are described as follows.

Item	Description
Sleep Timer	Turns off the Projector after a preset number of minutes.
	To cancel the **Sleep Timer**, select **Off**.
Auto Off	If there is no signal, the projector automatically turns off after the preset time has elapsed.
Automatic Standby	If you do not press any button on the projector or remote control for a certain period, the projector will automatically switch to standby mode.

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 the desired item and press the **OK** button.
- To return to the previous menu, press the ㄅ button.

OPTION ✕

- Language
- Standby Light : On
- PJT Mode : Front
- Auto Keystone : On
- Keystone 0
- Blank Image : Blue
- Auto Power : On

The available option settings are described as follows.

Item	Description	
Language	Selects a screen menu language.	
Standby Light	Adjusts the LED button indicator.	
	Item	
	On	When the buttons are touched, their indicators are all turned on at maximum brightness. In standby mode, 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.
PJT Mode	This function turns the projected image upside down or flips horizontal.	
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.	
	Item	
	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.	

Item	Description	
Auto Power	Makes the projector turn on automatically When the power code is connected to the projector.	
	Item	
	On	When the power code is connected to the projector, it turns on automatically.
	Off	When the power code 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.	
Auto Input Search	Automatically searches for and displays the input signal type when it is received. It is available only with external inputs (RGB, HDMI, AV, and Component).	
Balloon Help	Enables/disables the balloon help.	
Grid Pattern	Shows 20 grids built into projector to align and compose images and designs. The grids can be used alone as a template or overlaid on any photo or image from any source.	
Grayscale	Changes color to black and white.	
Initial Setting	Deletes all optional settings and returns to initial default mode. Once initialization is complete, the projector will turn off and on by itself. • Do not turn off the power during initialization.	

NETWORK Settings

1 Press the **SETTINGS** button.

2 Use the $\wedge$, $\vee$, $<$, or $>$ button to select **NETWORK** and press the **OK** button.

3 Use the $\wedge$, $\vee$, $<$, or $>$ button to set up the desired item and press the **OK** button.
- To return to the previous menu, press the ⏎ button.

NETWORK

- Network Connection
- Network Status
- Soft AP
- Wi-Fi Direct
- Miracast™ / Intel's WiDi
- My Projector Name : PF80A-JE

The available network settings are described as follows.

Item	Description	
Network Connection	Connects a network.	
Network Status	Displays the connection status of the network.	
Soft AP	This function allows you to change a wired Internet connection to your projector to Wi-Fi, allowing you to connect various external devices or to use wireless Internet.	
	Soft AP	Sets to **On/Off**.
	Security Key	Sets the Wi-Fi security number. • You can set the security key with a combination of English letters and numbers between 8 and 64 characters long. • The default setting is "AR123456".
	• To enable the **Soft AP** function, your projector must be turned on and have a wired Internet connection. • Up to four external devices can be connected. • If the **Soft AP** function is enabled, the **Wi-Fi Direct** and **Miracast™** functions become unavailable. You must set the **Soft AP** function to **Off** to use the **Wi-Fi Direct** and **Miracast™** functions.	
Wi-Fi Direct	Wi-Fi Direct is a function that allows your projector to connect with a Wi-Fi Direct device without Internet connection.	
Miracast™ / Intel's WiDi	The **Miracast™** allows you to enjoy video and audio from a portable device through the projector wirelessly. **Intel's WiDi** allows you to view a laptop screen through the projector without a cable.	
My Projector Name	Changes the name that appears when searching for the projector from other devices.	

SUPPORT

1 Press the **SETTINGS** button.

2 Use the $\wedge$, $\vee$, $<$, or $>$ button to select **SUPPORT** and press the **OK** button.

3 Use the $\wedge$, $\vee$, $<$, or $>$ button to set up the desired item and press the **OK** button.
   - To return to the previous menu, press the ⅓ button.

The available support settings are described as follows.

Item	Description
Software Update	Updates to the latest software.
Product/Service Info.	Shows the product/service information.
Self Diagnosis	Troubleshoots functional problems that can arise while using the product.

CONNECTING DEVICES

You can connect various external devices to the projector.

Computer/Notebook　　　**USB**　　　**Video/DVD**

Digital Device

LG Audio Device

Headphones

Mobile Phone

Game Console
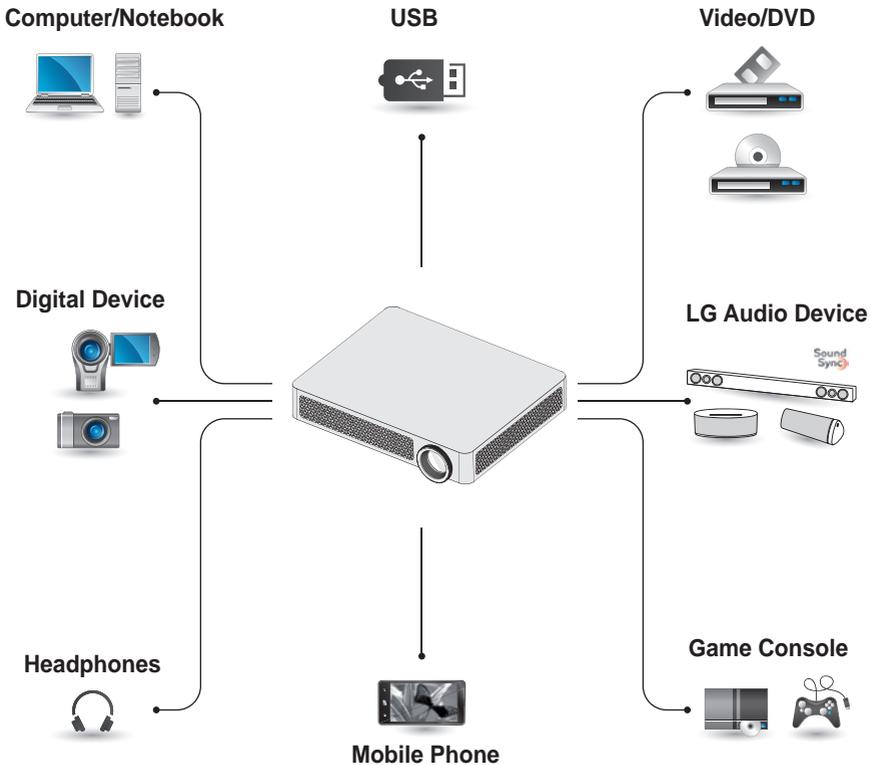
HDMI - page 66
Composite (AV) - page 67
Component - page 67
USB Devices - page 35
Headphones - page 68
Digital Amp - page 69
Mobile Phone - page 71

# Connecting to HD Receiver, DVD, or VCR Player, External Devices

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

HDMI Connection

With an HDMI cable, you can enjoy high quality picture and sound.
Using a HDMI cable, connect the **HDMI IN 1 (ARC)** port of the projector to the HDMI output port of the device to connect. Both video and audio is output at the same time. You can also use the **HDMI IN 2 (MHL)**.
Press the **INPUT** button on the remote control to select **HDMI**. You can connect with any HDMI input port.


* Optional
   Extras
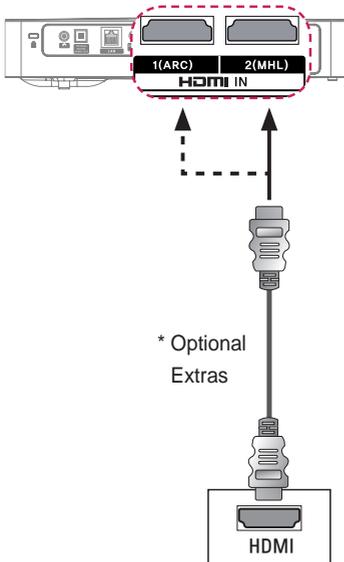
NOTE

ARC(Audio Return Channel)
- External audio devices that support SIMPLINK and ARC must be connected using **HDMI IN 1(ARC)** port.
- When connected with a high-speed HDMI® cable, external audio devices that support ARC output or SPDIF work with the SIMPLINK function without the need for an additional optical audio cable.

AV Connection

Connect the output ports of an external device and the **AV IN** ports of the projector using an AV cable. Press the **INPUT** button on the remote control to select **AV**.
Check whether cables of the same color are connected properly.
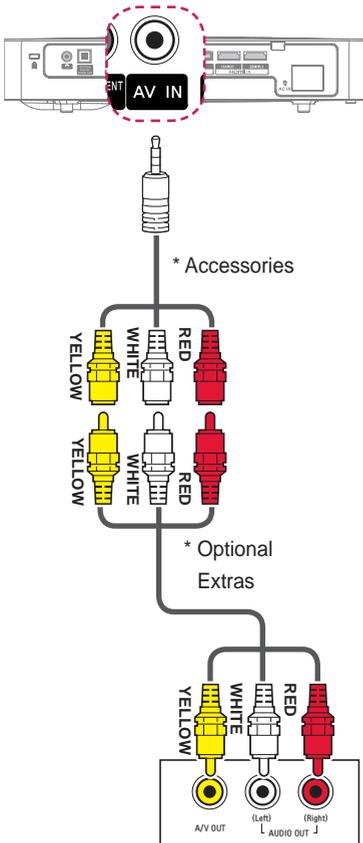
Component Connection

You can enjoy a video by connecting the Component port of an external device to the **COMPONENT IN** port of the projector. Press the **INPUT** button on the remote control to select **Component**.
Check whether cables of the same color are connected properly.
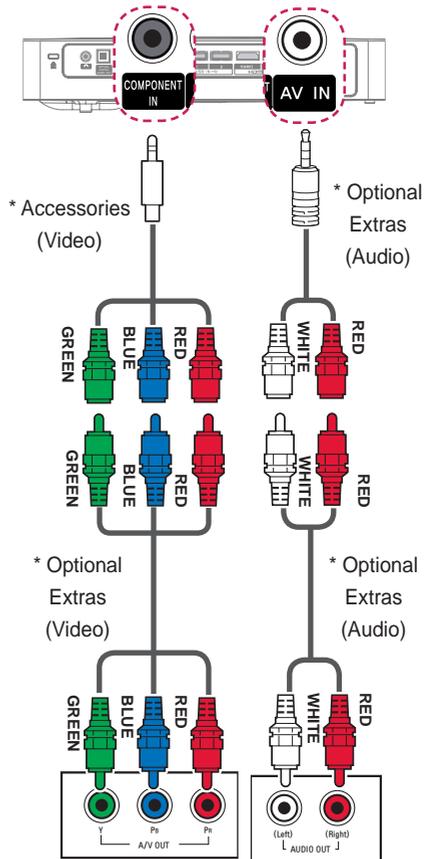
Connecting to Headphones

You can listen to the audio through a headphone.

* Optional
  Extras
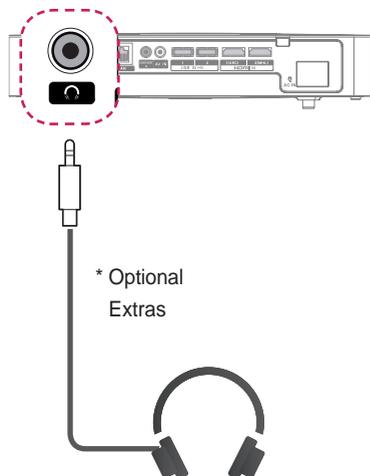
Connecting a digital amp

Using an optical cable, connect the digital audio input port of a digital amp to the **OPTICAL DIGITAL AUDIO OUT** port of the projector. The output of an amp with a digital converter must be set to the desired audio format. When using a HDMI cable to connect a home theater or when connecting an optical output to an external audio device, set **Sound Out** to **External Speaker (Optical/HDMI ARC)** as shown below. If a projector, home theater, or the speaker of an external audio device is operating at the same time, there will be an echo.

OPTICAL DIGITAL AUDIO OUT

* Optional
  Extras

Digital Audio Input
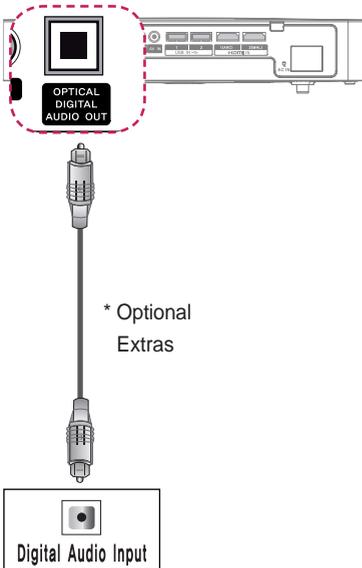
🛈 NOTE

- Also, refer to the user manual of the audio device to connect.
- When connecting this product to other devices, make sure to turn off and unplug all the devices.
- The audio output of this product has wide-ranging audio bandwidth, so the receiver volume must be adjusted properly.
  Speakers can be damaged by unexpected high frequencies.
- Connecting the **OPTICAL DIGITAL AUDIO OUT** port of the projector to the digital audio input port of a digital amp and the audio input port of the projector to the analog audio output port of the digital amp can cause sound oscillation due to the closed loop. Remove one of the two connections to prevent this. (This also applies to home theater devices.)

Connecting to PC and Laptop

The projector supports Plug & Play. Your PC will automatically detect the projector and requires no driver installation.
You can connect the projector to a laptop to use various functions.

HDMI Connection

Using an HDMI cable, connect the **HDMI IN 1 (ARC)** port of the projector to the HDMI output port of your PC. Both video and audio is output at the same time. You can also use the **HDMI IN 2 (MHL)**.

* Optional
Extras

HDMI
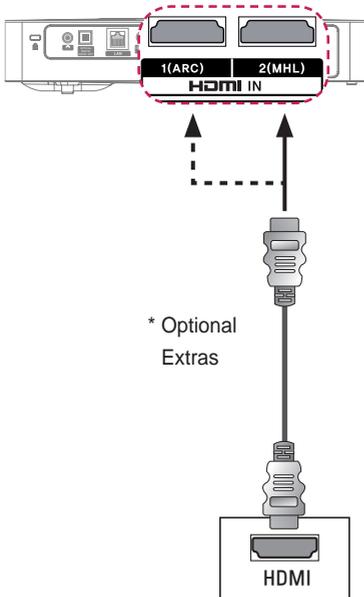
The table below shows examples of switching the output. For more information, refer to the **External Output**, **Connecting to an External Monitor**, or similar sections of the owner's manual of your computer.

Brand	Switching Output
NEC	[Fn]+[F3]
Panasonic	[Fn]+[F3]
Toshiba	[Fn]+[F5]
IBM	[Fn]+[F7]
Sony	[Fn]+[F7]
Fujitsu	[Fn]+[F10]
LG	[Fn]+[F7]
Samsung	[Fn]+[F4]
Macintosh	Adjust the control panel to enable mirroring after start-up.

Using the mirroring function of a mobile phone

MHL Connection

The Mobile High-definition Link (MHL) is an interface that can connect a mobile phone to the projector and play video and audio from the mobile phone through the projector.
This only applies to products with a HDMI input that supports MHL.
(To find out whether your device is MHL-certified, please contact your device manufacturer.)
For MHL support, check the **HDMI IN 2 (MHL)** port.
Use a dedicated cable for MHL.

* Optional Extras
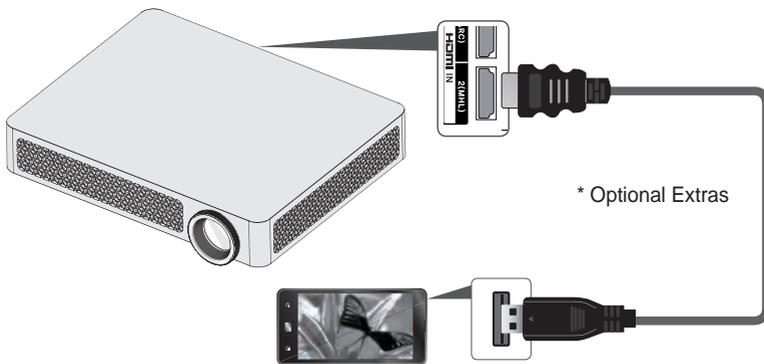
> **NOTE**
> • When you connect a mobile phone to the **HDMI IN 2 (MHL)** port, you can see the mobile phone screen through a projector.
>   - This only applies to mobile phones that support MHL.
>   - You can use the remote control for some applications.
> • Disconnect the MHL cable from the projector when:
>   - The MHL function is disabled.
>   - Your mobile device is fully charged in standby mode.

MAINTENANCE

Clean your Projector to keep it in optimal condition.

Cleaning

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 into 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.

INFORMATION

To update projector software

Uses Software Update to check and obtain the latest version.
It is also possible to check manually for available updates.

1 Press the **SETTINGS** button.
2 Select **SUPPORT** and go to **Software Update**.

Item	Description
Software Update	Set it to **On**. If an update is available, a prompt will appear to perform the update.
Automatic update mode	If an update is available, the update automatically starts without prompting.
Check Update Version	Checks the latest update version installed. When a new update is available, the download process can be performed manually.

• When the update starts, the update progress window appears for a short time and disappears.
• The update service to get the latest version is provided through an Internet connection.
• If software is not updated, certain functions may not work properly.

SPECIFICATIONS

Model	PF80A(PF80A-JE)	
Resolution (Pixel)	1920 (Horizontal) × 1080 (Vertical)	
Aspect ratio	16:9 (Horizontal:Vertical)	
Panel size (mm)	16.654	
Projection distance (Video size)	0.63 m - 3.72 m (50.8 cm - 304.8 cm)	
Ratio of upward projection	100 %	
Working range of the remote control	6 m	
POWER	AC 100 ~ 240 V, 50 Hz/ 60 Hz	
Audio output	5 W + 5 W	
Height (mm)	Min. 45.9(without foot), Max. 55.3(without foot), 56.9(with foot)	
Width (mm)	275.0	
Depth (mm)	219.0(without lens), 226.0(with lens)	
Weight (kg)	2.2	
USB Device	5 V, 0.5 A (Max.)	
Operation environment	**Temperature**	
	Operation	0 °C to 40 °C
	Storage	-20 °C to 60 °C
	Relative humidity	
	Operation	0 % - 80 %
	Storage	0 % - 85 %

* Contents in this manual may be changed without prior notice due to upgrade of product functions.

HDMI (DTV) supported mode

Resolution	Horizontal Frequency (kHz)	Vertical Frequency (Hz)
720 x 480	31.469	59.94
	31.50	60.00
720 x 576	31.25	50
1280 x 720	37.5	50
	44.96	59.94
	45.00	60.00
1920 x 1080	28.125	50
	33.72	59.94
	33.75	60.00
	26.97	23.97
	27.000	24.000
	28.125	25
	33.716	29.976
	33.75	30.00
	56.25	50
	67.43	59.94
	67.500	60

HDMI (PC) supported mode

Resolution	Horizontal Frequency (kHz)	Vertical Frequency (Hz)
640 x 480	31.469	59.94
800 x 600	37.879	60.31
1024 x 768	48.363	60.00
1152 x 864	54.348	60.053
1360 x 768	47.712	60.015
1280 x 1024	63.981	60.020
1920 x 1080	67.5	60.00

- 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).
- The 1920 x 1080 resolution may not be supported depending on the PC type.

Component supported mode

Resolution	Horizontal Frequency (kHz)	Vertical Frequency (Hz)
720 x 480i	15.73	59.94
	15.75	60.00
720 x 480p	31.47	59.94
	31.5	60
720 x 576i	15.625	50
720 x 576p	31.25	50
1280 x 720p	37.5	50
	44.96	59.94
	45.00	60.00
1920 x 1080i	28.125	50
	33.72	59.94
	33.75	60.00
1920 x 1080p	26.97	23.976
	27.00	24.00
	28.125	25.00
	33.71	29.97
	33.75	30.00
	56.25	50.00
	67.432	59.94
	67.500	60.00

Component Port Connecting information

Component ports on the Projector	Y	PB	PR
Video output ports on DVD player	Y	PB	PR
	Y	B-Y	R-Y
	Y	Cb	Cr
	Y	Pb	Pr

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.

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 _____