



APPENDIX G
: USER'S MANUAL



Owner's Manual

LASER PROJECTOR

Please read the safety information carefully before using the product.

SA560
SA565

P/NO: SAC30666052 (1212-REV00)

www.lg.com
(Brazil : www.lge.com)

LICENSE



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ABOUT DIVX VIDEO-ON-DEMAND: This DivX Certified® device must be registered in order to play purchased DivX Video-on-Demand (VOD) movies. To obtain your registration code, locate the DivX VOD section in your device setup menu. Go to vod.divx.com for more information on how to complete your registration.

"DivX Certified® to play DivX® video up to HD 1080p, including premium content."

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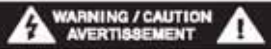
This device meets the EMC requirements for home appliances (Class B) and is intended for home usage. This device can be used in all regions.

NOTE

- The product images and On-Screen Display (OSD) in this manual are examples to help you understand how to operate the product, so they may be different from the actual projector.


SAFETY INSTRUCTIONS


Please take note of the safety instructions to prevent any potential accident or misuse of the projector.



WARNING / CAUTION
AVERTISSEMENT

RISK OF ELECTRIC SHOCK, DO NOT OPEN.
RISQUE DE CHOC ELECTRIQUE, NE PAS OUVRIE.

 The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

 The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING/CAUTION

- TO REDUCE THE RISK OF FIRE AND ELECTRIC SHOCK, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.

Warning!
Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

Note : The manufacturer is not responsible for any Radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

FCC NOTICE

Warning - Class B

(b) For a Class B Digital device or peripheral, the instructions furnished the user shall include the following or similar statement, placed in a prominent location in the text of the manual:

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Read these instructions.

Keep these instructions.

Heed all warnings.

Follow all instructions.

Indoor Installation

WARNING

- Do not place the projector in direct sunlight or near heat sources such as radiators, fires, stoves, etc.
 - This may result in fire.
 - Do not place flammable materials such as aerosols near the projector.
 - This may result in fire.
 - Do not allow children to cling to or climb up to the projector.
 - This may cause the projector to fall, causing injury or death.
 - Do not install the product in a place with no ventilation (e.g., on a bookshelf or in a closet) or on a carpet or cushion.
 - This may result in fire due to the increase in internal temperature.
 - Do not place the projector close to sources of steam or oil such as a humidifier or kitchen counter.
 - This may result in fire or electric shock.
 - Do not place the projector where it might be exposed to dust.
 - This may result in fire.
 - Do not use the projector in a damp place such as a bathroom where it is likely to get wet.
 - This may result in fire or electric shock.
 - Do not allow a tablecloth or curtain to block the air vent.
 - This may result in fire due to the increase in the internal temperature.
- Ensure good ventilation around the projector. The distance between the projector and the wall should be at least 30 cm.
 - This will prevent fire due to the increase in the internal temperature.
 - When installing the projector on a ceiling or wall, a professional technician should install the product using the authorized tools.
 - If installed improperly, the projector may fall, causing personal injury or property damage. To install the product, please contact the customer support center.
 - When installing or adjusting a mounting device, do not use oil or lubricant for the purpose to prevent loosening of screws. If you apply an adhesive oil or lubricant to the projector, this may cause the case to crack and the projector to fall. This may also cause serious personal injury and damage to the projector when there is a person under the mounting device.

⚠ CAUTION

- When placing the projector on a table or shelf, be careful not to put it near the edge.
 - The projector could fall due to balance problems, which may cause personal injury or damage to the product. Make sure to use the TV cabinet or stand that fits the TV.
- When moving the projector, make sure to switch it off and remove the power plug and cords.
 - The power cord may be damaged, resulting in fire or electric shock.
- Do not place the projector on an unstable or vibrating surface such as a wobbly shelf or a slope.
 - It may fall and cause injury.
- Be careful not to tip the projector over when connecting external devices to the projector.
 - This may cause personal injury or damage to the projector.

Power**⚠ WARNING**

- The grounding wire should be connected.
 - Ensure that you connect the grounding cable to avoid electric shock. If it is not possible to ground the unit, have a qualified electrician install a separate circuit breaker. Do not try to ground the projector by connecting it to telephone wires, lightning rods or gas pipes.
- The power plug should be inserted fully into the power outlet.
 - An unstable connection may cause a fire.

- Do not place heavy objects on the power cord.
 - This may result in fire or electric shock.
- Never touch the power plug with wet hands.
 - This may result in electric shock.
- Do not plug too many devices into one multi-power outlet.
 - This may result in fire due to the power outlet overheating.
- Prevent dust from collecting on the power plug pins or outlet.
 - This may result in fire.
- To turn off the main power, remove the power plug, which should be positioned so it is easy to access for operation.

⚠ CAUTION

- Hold the plug firmly when unplugging.
 - A damaged wire may create a fire hazard.
- Ensure the power cord and plug are not damaged, modified, severely bent, twisted, pulled, sandwiched or hot. Do not use the product if the power outlet is loose.
 - This may result in fire or electric shock.
- Keep the power cord away from heating devices.
 - The wire's sheath may melt, which may result in fire or electric shock.
- Place the projector where people will not trip over or tread on the power cord to protect the power cord and plug from any damage.
 - This may result in fire or electric shock.
- Do not turn the projector on or off by plugging in the power plug or unplugging it from the power outlet. (Do not use the power plug as a switch.)
 - This may result in electric shock or damage to the product.
- Do not insert a conductor into the other side of the wall outlet while the power plug is inserted into the wall outlet. In addition, do not touch the power plug immediately after it is disconnected from the wall outlet.
 - This may result in electric shock.
- Only use the official power cord provided by LG Electronics. Do not use other power cords.
 - This may result in fire or electric shock.
- Check the power cord specifications. Do not use an inappropriate power cable.
 - This may result in electric shock.

When in Use**⚠ WARNING**

- Do not place anything containing liquid on top of the projector such as a vase, flower pot, cup, cosmetics, or medicine; or ornaments, candles, etc.
 - This may result in fire or electric shock, or cause injury due to falling.
- In the event that there is a heavy impact or the cabinet is damaged, switch it off, unplug it from the power outlet and contact an authorized service center.
 - This may result in electric shock.
- Do not insert pieces of metal such as coins, hairpins or metal debris, nor flammable materials such as paper or matches into the projector.
 - This is to prevent electric shock or fire.
- In the event that liquid or a foreign object falls into the projector, switch it off and unplug it from the power outlet and contact our service center.
 - This may result in fire or electric shock.
- Make sure that a child does not swallow the batteries when you replace the old remote control batteries with new ones. Keep batteries out of reach of children.
 - If a child swallows a battery, consult a doctor immediately.
- Never open any cover on the projector.
 - There is a high risk of electric shock.
- Do not look directly into the lens when the projector is in use.
 - The bright light may damage your eyes.
- When the lamp is on or has just been turned off, avoid touching the air vent or lamp, because these will be very hot.

- If there is a gas leak in the room with the projector, do not touch the projector or power outlet. Open the windows for ventilation.
 - Sparks may cause fire or burns.
 - Unplug the power cord from the outlet during a lightning storm.
 - This will prevent shock or damage to the projector.
 - Do not use the projector near electronic devices that generate a strong magnetic field.
 - Do not put the plastic package used to pack the projector around your head.
 - This may cause suffocation.
 - Do not keep your hand on the projector for a long time when it is running.
 - When you play a game by connecting a game console to a projector, it is recommended that you maintain a distance of more than four times the diagonal length of the screen.
 - Make sure that the connecting cable is long enough.
 - Otherwise, the product may fall causing personal injury or damage to the product.
 - Do not place the projector or its remote control with battery in an extremely high temperature environment.
 - This may result in fire.
- ⚠ CAUTION**
- Do not place heavy objects on the projector.
 - It may fall down and cause personal injury.
 - Be careful not to allow any impact to the lens during transport.
 - Do not touch the lens of the projector.
 - The lens may be damaged.
 - Do not use any sharp tools on the projector such as a knife or hammer, because this may damage the casing.
 - In the event that no image appears on the screen or no sound is heard, stop using the projector. Switch off the projector, unplug it from the power outlet and contact our service center.
 - This may result in fire or electric shock.
 - Do not drop anything onto the projector or allow anything to bang into the projector.
 - This may cause damage to the projector or personal injury.
 - It is recommended that you maintain a distance of more than 5 - 7 times the diagonal length of the screen.
 - If you watch the screen at a close distance for a long time, your eye sight may become worse.
 - Do not block the light beam emitted from the projector using a book or other object
 - Lengthy exposure to the projector beam may result in fire. In addition, the lens may be overheated and damaged by the reflected heat. Disable the AV function to stop projection temporarily or turn off the power.
 - Do not start the projector with the volume turned up high.
 - High volume may damage hearing.

Cleaning

⚠ WARNING

- Do not spray the projector with water when cleaning. Make sure water does not flow into the projector.
 - This may result in fire or electric shock.
- When there is smoke or a strange smell coming out from the projector or a foreign object falls into the projector, please switch it off and unplug it from the power outlet and contact our service center.
 - Otherwise, this may result in fire or electric shock.
- Use air spray, a soft cloth or a cotton swab moistened with a lens cleaning chemical or alcohol to remove dust or stains on the front projection lens.

⚠ CAUTION

- Contact your seller or our service center once a year to clean the internal parts of the projector.
 - If you do not clean the projector for a long period of time, dust will accumulate, which may result in fire or damage to the projector.
- When cleaning plastic parts such as the projector case, unplug the power first and wipe with a soft cloth. Do not spray with water or wipe with a wet cloth. Never use glass cleaner, automobile or industrial shiner, abrasives, wax, benzene, or alcohol as these can damage the projector.
 - This can result in fire, electric shock or cause damage to the product (deformation and corrosion).

- Remove the plug from the outlet before cleaning the product.
 - Otherwise, this may result in electric shock.

Others

⚠ WARNING

- When you go out, place the projector out of reach of animals, and remove the power plug from the wall outlet.
 - Using a damaged power cord may result in short circuit or fire.
- Do not use the projector near high-precision electronic devices or those that transmit weak radio signal.
 - This may affect the operation of the product, causing an accident.
- Only a qualified technician can disassemble or modify the projector. For diagnosis, adjustment, or repair, contact your seller or our service center.
 - This may result in fire or electric shock.

⚠ CAUTION

- Do not use or store the projector outdoors for a long time.
- Do not mix new batteries with old ones.
 - Burst or leaking batteries may result in damage or injury.
- Be sure to unplug if the projector is not to be used for a long period.
 - Accumulated dust may result in fire or electric shock due to overheating, ignition, or poor insulation.
- Only use the specified type of battery.
 - Burst or leaking batteries may result in damage or injury.
- Do not charge the battery using any devices other than the one provided with the product.
 - This may result in damage to the battery or fire.
- Dispose of used batteries properly.
 - This may result in explosion or fire. The correct method of disposal may vary depending on your country or region. Dispose of the battery pack as instructed.
- Do not throw or disassemble the battery.
 - This may result in fire or explosion due to damage to the battery.
- Always use batteries approved and certified by LG Electronics.
 - This will prevent damage or fire.
- Store batteries away from metallic objects, such as keys and paper clips.
 - Excess current may cause a rapid increase in temperature, resulting in fire or burns.
- Do not store the batteries near any heat source, such as a heater.
 - This may result in fire or damage to the product.
- Do not store batteries at temperatures higher than 60 °C or in high humidity.
 - This may result in explosion or fire.
- Keep the batteries and remote out of reach of children.
 - This will prevent personal injury or damage to the product.
- Make sure that the battery is installed correctly.
 - This prevent explosion or fire.
- The battery contains lithium-ion, so it must be handled with care.
 - This may result in explosion or fire.
- Make sure you use the same type of batteries for replacement.
- Incorrect battery replacement may cause fire.

Laser**⚠ WARNING**

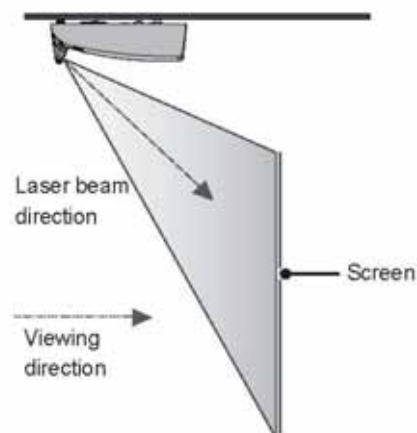
- This laser projector contains a laser module. Do not disassemble or modify the projector as this could be dangerous.
- You risk being exposed to laser radiation if you manipulate or alter the projector in a way not specified in the user manual.

⚠ CAUTION

- This laser projector is a class 2 laser device that meets safety standard IEC 60825-1.



Laser projector standard:
 class 2 laser product
 Wavelength: 435 nm - 455 nm
 Wave source: Approximately 0.2 mW
 Radiation angle: 66 °
 Built-in laser standard:
 Class 4 laser module
 Wavelength: 435 nm - 455 nm
 Power: Approximately 1.6 W



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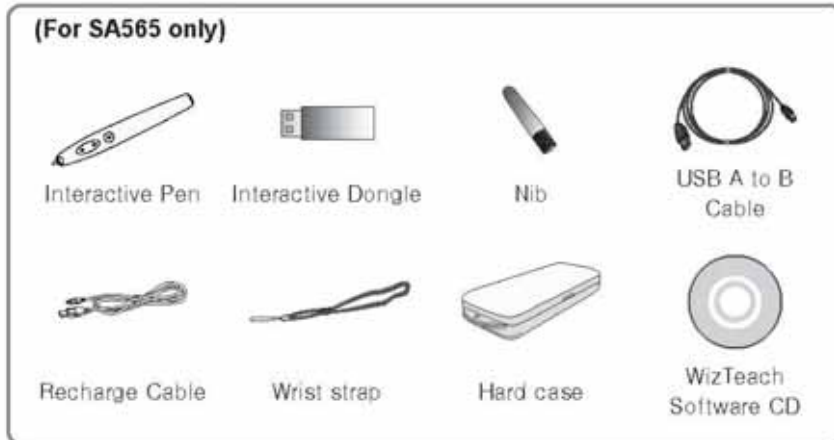
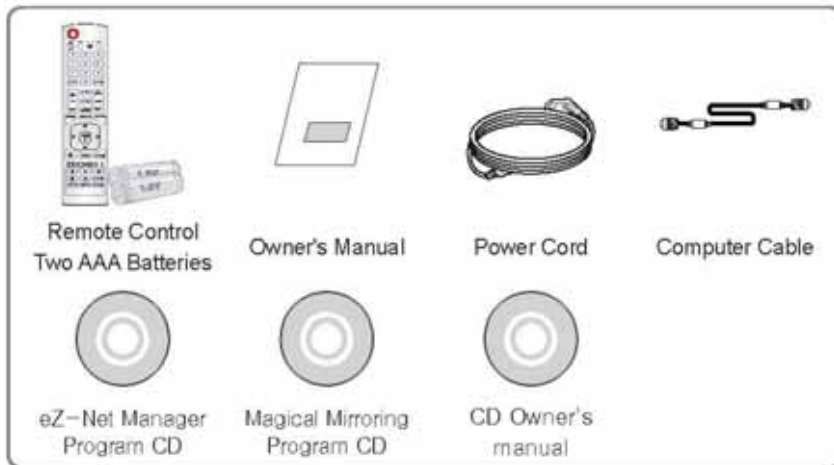
Charge the interactive pen. 90

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PREPARATION

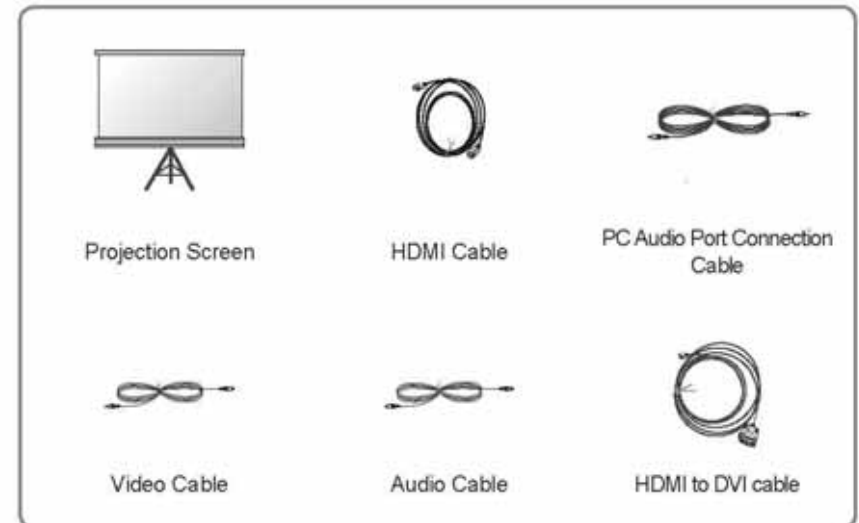
Accessories

Accessories included with the project are show below. The pictures may differ slightly from the actual product. Accessories are subject to change without prior notice. New accessories may be added or old ones removed.

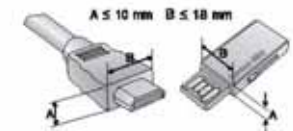


Optional Extras

To purchase optional accessories, visit an electronics store or online shopping site or contact the retail store where you purchased the product. Optional accessories are subject to change without prior notice.



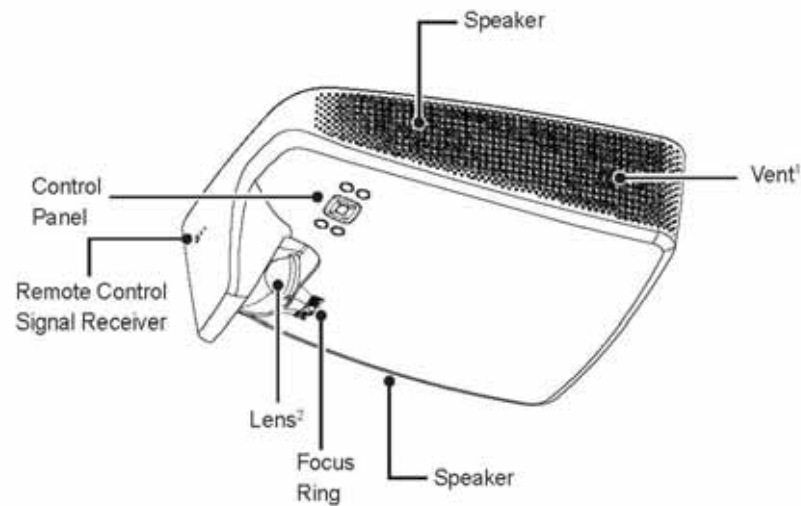
- When connecting a cable to an HDMI or USB port, make sure to use a standard sized jack.



Parts and Components

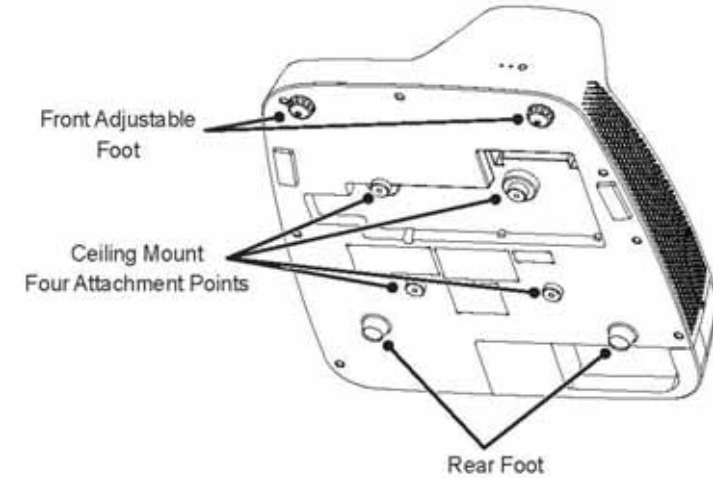
- The projector is manufactured using high-precision technology. You may, however, see tiny black dots and/or bright colored dots (red, blue or green) that continuously appear on the projector screen. This is a normal result of the manufacturing process and does not indicate a malfunction.

Front & Top



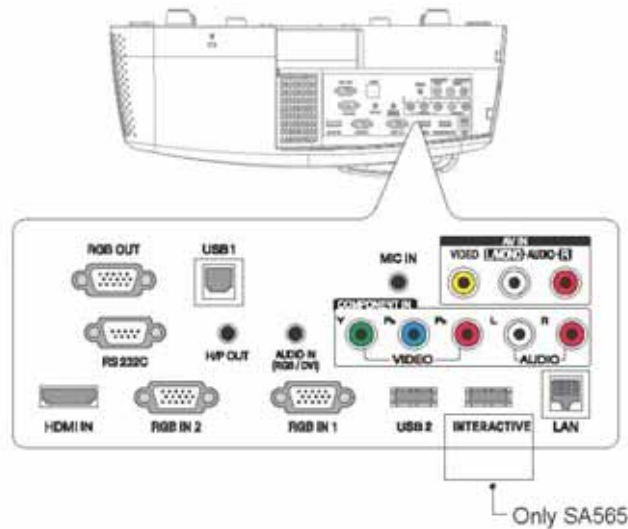
- 1 Due to the high temperature of vent area, do not get close to the vent area.
- 2 Do not touch the lens while using the projector. The lens may be damaged.

Bottom

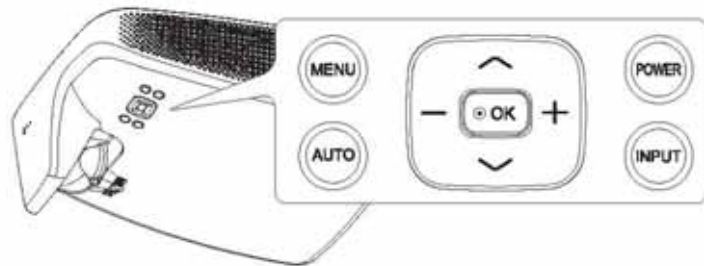


- When installing the projector on a ceiling or wall, a professional technician should install the product using the authorized tools. If installed improperly, the projector may fall.
 - This may cause personal injury or property damage. For installation of the product, please contact the customer support center.
- When installing or adjusting a mounting device, do not use oil or lubricant for the purpose to prevent loosening of screws. If you apply an adhesive, oil, or lubricant to the projector, this may cause cracks in the projector case or the projector may fall.
 - This may also cause serious personal injury and damage to the projector if there is a person under the mounding device.

Back

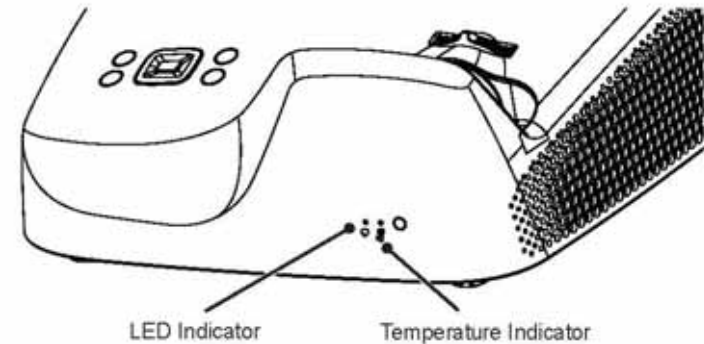


Control Panel



Button	Description
POWER	Turns the projector on or off.
MENU	Brings up the menu.
AUTO	Adjusts the picture position and minimizes image shaking.
INPUT	Selects the input signal (RGB, component, HDMI and external input).
-, +	Adjusts the volume level.
^, v	Switches between menu functions.
OK	Shows the current mode and saves changes to the settings.

Projector Status Indicators



LED Indicator 	Off		Power off state
	Red		Power standby state
	Green (blinking)		The projector is being turned on or off.
	Green		The projector is being operated.
	Orange (blinking)		The projector has been turned off due to a problem related to a projector color wheel. Please contact a local service center.
Temperature Indicator 	Red (blinking)		The projector has been turned off due to a problem related to an internal fan. Please contact a local service center.
	Off		Normal operation
	Orange		High temperature warning Turn off the power and check around the projector.
	Red (blinking)		The projector has been turned off due to high temperature inside or outside of the project.

Installation

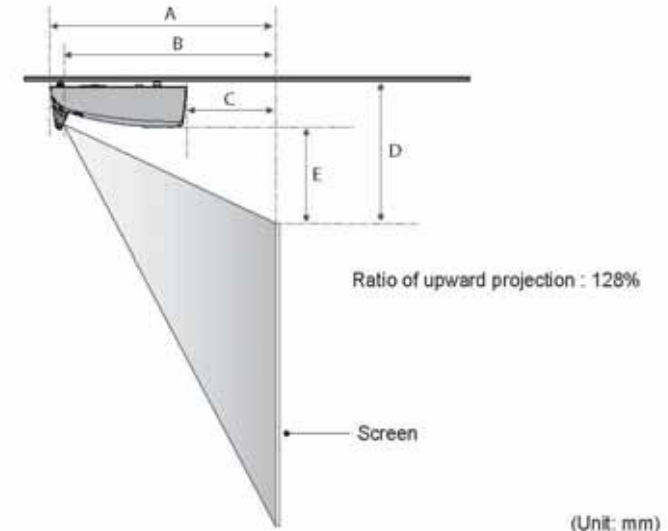
Installation Precautions

- Place the projector in a well-ventilated environment.
- To prevent internal heat build-up, install the projector in a well-ventilated place.
Do not place anything near the projector as this may block its air vents. If the air vents are blocked, the internal temperature will increase.
- Do not place the projector on a carpet or rug. If the vent is on the bottom, use the projector on a solid level surface and ensure the vent is not blocked.
- Be sure to prevent foreign objects such as paper debris from entering the projector.
- Leave enough distance (30 cm or more) around the projector.
- Do not place the projector in a hot or humid environment.
- Do not place the projector in a hot, cold, or humid environment.
- Do not place the projector in a place where it will easily attract dust.
- This may result in fire.
- Never open any cover on the projector.
There is a high risk of electric shock.
- The projector is manufactured using high-precision technology. You may, however, see tiny black dots and/or bright colored dots (red, blue or green) that continuously appear on the projector screen. This is a normal result of the manufacturing process and does not indicate a malfunction.
- The remote control may not work in an environment where a lamp equipped with electronic ballasts or a three-wavelength fluorescent lamp is installed. Replace the lamp with an international standard lamp for the remote control to work normally.



Projection Distance per Screen Size

- 1 Place the projector on a sturdy, level surface, together with the PC or audio/video source.
- 2 Place the projector an appropriate distance away from the screen. The distance between the projector and the screen determines the actual size of the image.
- 3 Position the projector so that the lens is at a right angle to the screen. If the projector is not at a right angle, the projected image will look distorted. To correct the distortion, use the **Keystone** function.
- 4 Connect the power cord of the projector and the connected device to the wall outlet.



16:10 Ratio					
ARC (Width x Height)	1778	2032	2286	2540	2794
		1580 x 1133	1723 x 1077	1939 x 1212	2154 x 1346
A	497	562	627	691	756
B	452	517	582	646	711
C	29	94	159	223	288
D	349	386	423	460	497
E	196	233	270	307	344

Assembling the Cover

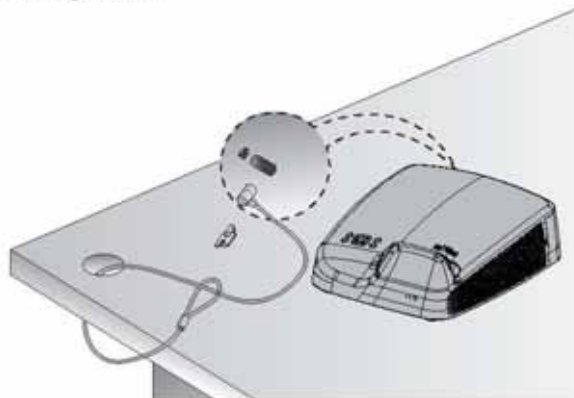


- ① Insert the upper edge of the cover into the groove.
- ② Slide the cover to the right until it latches into the groove.
- ③ Insert the screw into the hole and tighten it.
Check that the cover is securely fastened and cannot move.

* You can remove the cover in reverse order.

Kensington Security System

- This projector has a Kensington Security Standard connector. Connect a Kensington Security System cable as shown below.
- For more information on installation and use of the Kensington Security System, refer to the user's guide provided with the Kensington Security System.
- The Kensington Security System is an optional accessory.
- What is Kensington?
Kensington is a company that provides security systems for laptops and other electronic devices.
Website: <http://www.kensington.com>



REMOTE CONTROL

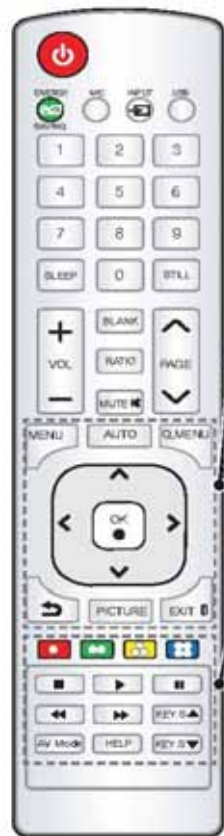
Open the lid at the back of the remote control and insert the batteries as described in the \oplus instructions.
Use new batteries of the same kind (1.5V AAA).



CAUTION

- Do not mix new batteries with old ones.



**MENU**

Brings up or closes the Settings menu.

AUTO

Optimizes the screen automatically in RGB-PC input mode.

Q.MENU

Allows you to change the settings easily.

Up/Down/Left/Right buttons

Selects or sets an option of the selected menu.

OK

Shows the current mode and saves changes to the settings.



Returns to the previous screen.

PICTURE

Changes the picture mode per press of the button.

EXIT

Closes the settings window.

Color buttons

Sets additional settings for each menu.

Playback control buttons

Controls the playback of the projector or my media.

KEY.S ▲, ▼

Adjusts the Keystone function.

AV MODE

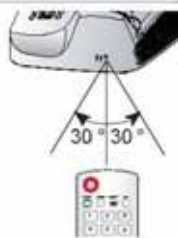
Selects AV mode for the genre of the program being watched.

HELP

Enables the self-diagnosis.

NOTE

- When using the remote control, the optimal operation range is 6 meters or less (left/right) and within a 30 degree arc of the remote control IR receiver.
- If a cable is connected to the back port, the optimal operating range is 3 meters or less (left/right) and within a 30 degree arc of the remote control IR receiver.
- For seamless operation, do not block the IR receiver.



Operating the Projector

Turning on the Projector

- 1 Connect the power cord correctly.
- 2 After waiting for a moment, press the **POWER** button on the remote control or the control panel.
- 3 On the Language Selection screen, select the language you want.
- 4 Connect the projector to a wireless network. (This step can be skipped because a wireless network connection is not required.)
- 5 Select the input signal you want using the **INPUT** button on the remote control.

Focus and Position of the Screen Image

When an image appears on the screen, check if it is in focus and fits the screen properly.



- To adjust the focus of the image, rotate the focus ring.

Watching with the Projector

- 1 In Standby mode, press the **POWER** button to turn the projector on.
- 2 Press the **INPUT** button and select the input signal you want.
- 3 Control the projector using the following buttons while watching projector.

Button	Description
VOL -, +	Adjusts the volume level.
MUTE	Mutes the sound of the projector.
Q.MENU	Enters the quick menu.
KEY.S ▲, ▼	Adjusts the Keystone function.

- 4 To turn the projector off, press the **POWER** button.

Additional Options

Adjusting Aspect Ratio

You can adjust the aspect ratio of the picture by pressing **RATIO** while watching with the projector.



NOTE

- Available options may vary depending on the input signal.
- You can also use the **Q.MENU** or **MENU** button.

- **Full:** Displays the picture in full screen regardless of the aspect ratio.



- **16:9:** Resizes the picture with a 16:9 ratio.



- **Just Scan:** Displays the picture in the original size without cutting off the edges.



NOTE

- For Just Scan, you may see image noises at the edges of the screen.

- **Set By Program:** Displays the picture in the same aspect ratio as the original image.



- **4:3:** Resizes the picture with a 4:3 ratio.



- **Zoom:** Enlarges an image to fit the screen width. The top and bottom of the image may be truncated.
- Press the **<** or **>** button to zoom in or out of the image.
- Press the **^** or **v** button to move the image.



- **Cinema Zoom 1:** Resizes the picture with a cinemascope ratio of 2.35:1. It ranges from 1 to 16.

- Press the **<** or **>** button to zoom in or out of the image.
- Press the **^** or **v** button to move the image.



NOTE

- If you enlarge or reduce the picture, it may be distorted.

Using the Keystone Function

To prevent the screen image from becoming trapezoidal, **Keystone** adjusts the top and bottom width of the image if the projector is not set up at a right angle to the screen.

Because the **Keystone** function may cause inferior screen image quality, use this function only when it is not possible to set up the projector at an optimal angle.



- 1 Press the **KEY.S ▲** or **KEY.S ▼** button to adjust the picture.
 - **Keystone** can be adjusted from **-40** to **40**.
- 2 Press the **OK** button when done.

Using the Input List

Using the Input List

- 1 Press the **INPUT** button to display the input selection screen.
 - The connected input mode appears first.



- 2 Select an input signal using the remote control's **INPUT** button to connect the projector to the desired input. You can use the **<** or **>** button to switch between all the input modes.

Adding Input Label

Displays which devices are connected to which input ports.



- 1 Press the **INPUT** button to display the input selection screen.
- 2 Press the **red** button.
- 3 Use the **<** or **>** button to scroll to one of the input sources.
- 4 Use the **^**, **v**, **<** or **>** button to select a device name.

Using the Quick Menu

You can customize frequently used menus.

- 1 Select the **Q.MENU** button.
- 2 Use the **<** or **>** button to select a desired item and press **OK**.

Menu	Description
Aspect Ratio	Resizes the picture.
Picture Mode	Changes the picture mode.
Sound Mode	Sets the sound mode.
Sleep Timer	Sets the projector to be turned off at the specified time.
Energy Saving	Adjusts the brightness.
AV Mode	Sets the genre.
USB Device	Allows you to remove a connected USB device in a safe manner. (Displayed only when a USB device is connected.)

- 3 Use the **^**, **v**, **<**, or **>** button to scroll through the menu items.

ENTERTAINMENT

Network Settings

To use the DLNA function, a wireless connection to the Internet is required.

One-Click Network Connection

You can make a wireless network connection easily.

- 1 Press the **MENU** button.
- 2 Use the **^** or **v** button to select **Network** and press the **OK** button.
- 3 Use the **^**, **v**, **<**, or **>** button to specify the **Network Connection** and press the **OK** button.
- 4 The network is connected automatically.
See the Help provided by the projector.

Expert Settings for Network Connection

When used in a specific environment such as office (where fixed IP, etc. is used).

- 1 Press the **MENU** button.
- 2 Use the **^** or **v** button to select **Network** and press the **OK** button.
- 3 Use the **^**, **v**, **<**, or **>** button to specify the **Network Connection** and press the **OK** button.
- 4 Select **Set Expert** in the network connection list.
- 5 Select one of the following network connection methods.

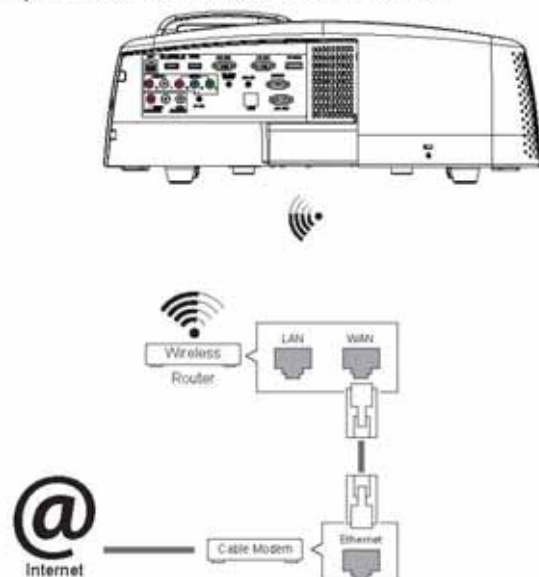
Item	Description
AP List	Select a network from a router list.
Enter the SSID	Directly enter the name of the wireless router to connect.
WPS-PBC	Press the WPS button on the wireless router (if supported) to connect to the router in a simple manner.
WPS-PIN	Enter the PIN number from the menu of the wireless router to connect to the router in a simple manner.
Ad-hoc	Use to connect directly to the projector with out using a router.

Wireless network connection

You can use a wireless network by using the built-in wireless network module as shown below.

A wireless router must be installed and operating at this time. Refer to the wireless router's user manual to see how to install it.

The network settings and connection may be different depending on the network environment. Set up the router as instructed in its user manual.



Wireless Network Settings

This function allows you to use the wireless connection with Wi-Fi direct and WiDi. You can share the screen of the device connected by Wi-Fi Screen Share on the SmartShare.

Enable the Wi-Fi Screen Share. A list of devices available for connection is displayed. Select a device to connect. A connection request message is displayed. Select Yes. Then, Wi-Fi Screen Share is connected.

- 1 Press the **MENU** button.
- 2 Use the \wedge or \vee button to select **NETWORK** and press the **OK** button.
- 3 Use the \wedge , \vee , \leftarrow , \rightarrow button to select the **Wi-Fi Screen Share** and then press **OK** button.

Tips for Network Settings

- Modem reconfiguration may cause network connection problems. If it does, turn off the modem and disconnect it from the projector; then turn on the modem again.
- LG Electronics is not responsible for any Internet connection problems, or any failure, error or malfunction due to your Internet connection.
- The network connection may not be working properly because of the Internet Service Provider (ISP).
- DSL service requires a DSL modem, and cable service requires a cable modem. Internet connections may be limited due to an agreement with an Internet service provider (ISP), and the projector might not connect to a network. (When only one device is allowed per line, if a PC is already connected, other devices are not available for use.)
- The wireless network may be affected by interference from a device that uses 2.4 GHz frequency, such as a wireless telephone, Bluetooth device or microwave. Interference may also be caused by a device that uses 5 GHz frequency such as Wi-Fi devices.
- The wireless network service may run slowly depending on surrounding wireless environment.
- Some devices may have network traffic jam if any of local home networks is turned on.
- To connect to a wireless router, a router that supports wireless connection is necessary; the wireless connection function of the corresponding router must also be activated. Ask the router manufacturer whether the router supports wireless connection.
- To connect to a wireless router, verify the SSID and security settings of the wireless router. Please refer to the user guide of the corresponding router regarding SSID and security settings of the wireless router.
- The projector may not work properly if network devices (wire/wireless router or hub, etc.) are incorrectly set up. Be sure to install the devices correctly by referring to their user guides before configuring network connection.
- When Ad-hoc is used, it may not be able to connect depending on the device (for example, laptop) that is connected.
- The connection method may vary according to the manufacturer of the wireless router.

To Use the Wi-Fi Screen Function

With this function, you can use a wireless connection such as Wi-Fi direct or WiDi, etc.

Using SmartShare, you can share a device's screen through Wi-Fi Screen Share.

To Connect the Wi-Fi Screen

- 1 Press the **Settings** button.
- 2 Select a network using the \wedge and \vee buttons and press the **OK** button.
- 3 Select **Wi-Fi Screen Share** using the \wedge , \vee , \lt and \gt buttons, and press the **OK** button.
- 4 Set **Wi-Fi Screen Share** to On. (If you don't want to use this function, set to Off.)
- 5 Enable the Wi-Fi Direct settings on the device that you want to connect to.
- 6 In the list of devices that can connect to the laser projector will be displayed.
- 7 Select a device to connect to.
- 8 Select Yes when the connection request message appears.
- 9 If the device that you want to connect to accepts the request, **Wi-Fi Screen Share** will be connected.

SmartShare

Connecting a USB Storage Device

Connect a USB storage device (external HDD or USB memory stick) to the USB port of the projector to view multimedia content.

You cannot write or delete data from the USB storage device.

Connect a USB memory stick as shown below.



To disconnect the USB storage device

- 1 Press the **Q.MENU** button.
- 2 Use the \lt or \gt 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 a USB Device

- A USB storage device installed using an automatic recognition program or its own driver might not be recognizable.
- Some USB devices may not be supported or will not work properly.
- Please use only a USB storage device formatted as a FAT32 or NTFS file system provided by Windows.
- It is recommended to use an external USB hard disk with rated voltage of 5V or less and rated current of 500mA or less.
- It is recommended to use a USB hub or hard disk drive with power supplied. (If the power supplied is not enough, the USB storage device may not be detected properly.)
- It is recommended to use a USB memory stick which is 32 GB or less and a USB hard drive which is 1 TB or less.
- If a USB external hard drive with the power saving function does not work, turn the hard drive off and on again to make it work properly. See the owner's manual of the USB hard drive for more information.
- The data of a USB device may be damaged, so it is recommended to backup any important files. Users are responsible for data management. The manufacturer bears no responsibility.

Supported Files for SmartShare™

- Maximum data transmission rate: 20 Mbps (Megabit per second)
- Supported external subtitle formats: *.smi, *.srt, *.sub (MicroDVD, Sub-Viewer 1.0/2.0), *.ass, *.ssa, *.txt (TMPlayer), *.psb (PowerDivX)
- Supported internal subtitle formats: XSUB (subtitles from DivX6 are supported)

Connecting DLNA

Digital Living Network Alliance (DLNA) allows you to enjoy videos, music and photos saved on your projector through a home network.

Connecting a DLNA-Certified**Mobile Device**

- The projector and mobile device must be connected via the same network.
- 1 Check if Wi-Fi is enabled on your mobile device.
 - 2 Install and run an app that allows you to share files on your mobile device.
 - 3 Choose to share on your mobile device.
 - 4 Select the type of file (video/audio/photo) to play.
 - 5 Select the video, music or photo to play on the projector.
 - 6 Click the Add icon to open the Browse Folder window.
 - 7 On the device where the file will play, select the projector model. (You can find the projector model on the product label.)
 - 8 Press Play ► to watch the selected file using the projector.

Connecting DLNA DMR**(Digital Media Renderer)**

- If the computer operating system is Windows 7 (or newer), or if the DLNA-certified device (mobile phone) is connected via a network, you can play music, video or photos using the projector without installing an additional program.
- 1 Configure the projector and PC on the same network. Configure the network on the PC where Windows 7 is installed.
 - 2 Right-click the desired music, video or photo file, and select the model using the "Play To" function provided in Windows 7 by default to play what is selected.
To play on your mobile device, see its owner's manual.
 - 3 Select Yes in the projector's popup window. Even when multiple projectors are connected, the selected file is played through only one projector. The playback rate may vary depending on the network connection.

Connecting DLNA DMP**(Digital Media Player)**

- Music, video or photo files on your PC where Nero Media Home 4 Essentials is installed can be played through the projector via a home network.
- 1 Configure the projector and PC on the same network. The DLNA service is available only when the projector and all the devices are connected to a single router.
 - 2 Install Nero Media Home 4 Essentials found at <http://www.lge.co.kr> on your PC. Before installation, exit all programs running in the PC such as firewall, anti-virus, etc.
 - 3 In Nero MediaHome 4 Essentials, select the file/folder to be shared.
 1. Run Nero MediaHome 4 Essentials on your PC.
 2. Select the items to be shared in the folder.
 3. Create the shared folder and click Start Server. The server will start.

! NOTE

- If the shared folder is not displayed on the screen connected to the projector, click the Local Folder tab to search again.
- For more information, see the website <http://www.nero.com>.

System Requirements

for Installing

Nero MediaHome 4 Essentials

- Windows® XP (Service Pack 2 or later), Windows Vista®, Windows® XP Media Center Edition 2005 (Service Pack 2 or later), Windows Server® 2003 (Service Pack 1 or later)
- Windows® 7 Home Premium, Professional, Enterprise or Ultimate (32-bit and 64-bit)
- Windows Vista® 64-bit version (applications in 32-bit mode)
- Windows® 7 64-bit version (applications in 32-bit mode)
- Hard drive space: 200MB or more
- CPU: 1.2G Hz Intel® Pentium® III or AMD Sempron™ 2200+ processor
- Memory: 256 MB RAM or more
- Graphic card: 32 MB or more; 800 x 600 + resolution, 16-bit or higher color support
- Windows® Internet Explorer® 6.0 or later
- DirectX® 9.0c revision 30 (Aug. 2006) or later
- Network environment: 100 Mb Ethernet, wireless WLAN (IEEE 802.11g) or higher

When DLNA is Malfunctioning

- Check your network settings when the DLNA option does not work properly.
- To watch the 1080p video through DLNA, a router that uses 5 GHz frequency is required. If a 2.4 GHz router is used, the video does not play properly.
- When playing a video in DLNA mode, the Multi Audio and Closed Caption features are not supported.
- If multiple TVs are connected to one server in the DLNA mode, the content may not be played properly depending on server performance.
- Subtitles are only supported on some DMC devices.
- The DLNA function may not work properly depending on the network environment.
- The DLNA function may not be supported for a router that does not support multi-cast. For more information, refer to the user guide that came with your router or contact to the manufacturer.
- Even for the file format supported by the projector, the supported file format may differ depending on the DLNA server environment.
- If there are too many folders or files in a folder, it may not work properly.
- The information on the file imported from the DLNA server may not be displayed correctly.
- To watch the video subtitles on the DLNA server, Nero MediaHome 4 Essentials is recommended.
- When a subtitle file is added later, disable the shared folder and then enable it again.
- The DRM file and document file in the DLNA server are not played.

Using SmartShare™

- 1 Press the **USB** button on the remote control.

You can watch the photo, music, video and document on the projector by connecting a USB or home network (DLNA). The photo, music, video and document files of all devices connected to the projector are displayed. (For the document files, only those in the devices connected via USB are displayed.)



Watching Videos

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

Tips for Playing Videos

- Some subtitles created by a user may not work.
- 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.
- Streaming files which include GMC (Global Motion Compensation) or Qpel (Quarterpel Motion Estimation) is not supported.
- H.264/AVC profile level 4.1 or below is supported.
- The file sizes that can be played may be different depending on the encoding environment.
- Video files created by some encoders may not be played back.
- Video files in formats other than the ones specified here may not be played back.
- Videos stored on a USB device that does not support high-speed playback may not play properly.
- The DTS is supported only for playback of USB video file.

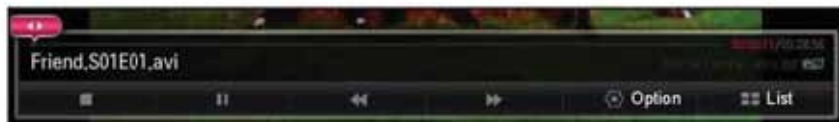
Supported Video Codecs

Maximum resolution: 1920 x 1080 @30p

Extension	Codec	
.asf .wmv	Video	VC-1 Advanced Profile, VC-1 Simple and Main Profile
	Audio	WMA Standard, WMA 9 Professional
.divx .avi	Video	DivX3.11, DivX4, DivX5, DivX6, XVID, H.264/AVC, Motion Jpeg
	Audio	MPEG-1 Layer I, II, MPEG-1 Layer III (MP3), Dolby Digital, Dolby Digital Plus, LPCM, ADPCM, DTS
.mp4 .m4v .mov	Video	H.264/AVC, MPEG-4 Part 2
	Audio	AAC
.mkv	Video	H.264/AVC
	Audio	HE-AAC, Dolby Digital
.ts .trp .tp	Video	H.264/AVC, MPEG-2, VC-1
	Audio	MPEG-1 Layer I, II, MPEG-1 Layer III (MP3), Dolby Digital, Dolby Digital Plus, AAC
.vob	Video	MPEG-1, MPEG-2
	Audio	Dolby Digital, MPEG-1 Layer I, II, DVD-LPCM
.mpg .mpeg	Video	MPEG-1
	Audio	MPEG-1 Layer I, II

Controlling Video Playback

You can control playback using the following buttons.



Item	Description
◀▶	Shows the current playing position. Use the < or > button to move forward or backward.
■	Stops playing and returns to Movie List.
▶	Resumes normal playback.
⏸	Pauses the media player. If no button is pressed on the remote control for 10 minutes after pausing, playback is restarted.
⏪▶	Displays in slow motion.
⏩▶	Whenever this button is pressed, the playback speed is changed.
Option	Sets the option.
List	Stops the playback and returns to the list.

Viewing Photos

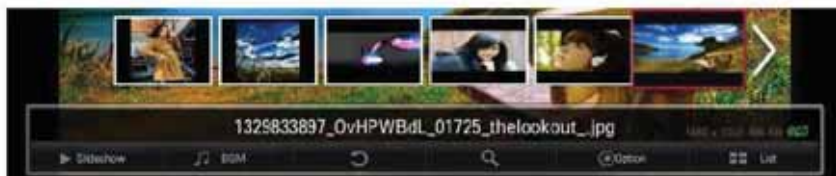
You can view photos stored on a connected device.

Photo File

File Format	Item	Profile	
2D (jpeg, jpg, jpe)	Supported format	SOF0: Baseline SOF1: Extend Sequential SOF2: Progressive	
	Size	Min.	64 x 64
		Max.	Normal Type: 15360 (W) x 8640 (H) Progressive Type: 1920 (W) x 1440 (H)

Controlling Photo Playback

You can control playback using the following buttons.



Item	Description
<, >	Selects the previous or next photo.
Slide-show	If no picture is selected, all photos in the current folder are displayed in a slide show. If some photos are selected, those photos are displayed in a slide show. <ul style="list-style-type: none"> • Set Slide Speed in the Option → Set Photo View menu.
BGM	You can listen to music while viewing full-size photos. <ul style="list-style-type: none"> • Set BGM in the Option → Set Photo View menu.
⤵	Rotates photos. <ul style="list-style-type: none"> • Rotates a photo 90°, 180°, 270°, 360° clockwise. • Photos cannot be rotated if their width is greater than the height of the maximum supported resolution.
Q	Enlarges or reduces the photo. Use the Up/Down/Left/Right buttons to select a page and press the OK button.
Option	A setting popup window will appear.
List	Stops the playback and returns to the list.

Listening to Music

You can play audio files stored on the connected device.

Audio File

No	Audio Codec	Bit rate	Sampling rate	Remark
1	MP3	32 Kbps - 320 Kbps	16 kHz, 48 kHz	MPEG1, MPEG2, Layer2, Layer3

Controlling Music Playback

You can control playback using the following buttons.



Item	Description
◀▶	Changes the playing position.
■	Stops playing.
▶	Resumes normal playback.
	Pauses the media player.
◀▶	Plays the previous/next file.
⤵	Sets the repeat playback.
✖	Sets the random playback.
Option	Sets Option for the music list.
List	Returns to a list.

Viewing Files

You can see document files stored on a connected device.

Supported File Formats

XLS, DOC, PPT, TXT, XLSX, PPTX, DOCX, PDF, HWP

Microsoft Office 97/2000/2002/2003/2007 version

Adobe PDF 1.0/1.1/1.2/1.3/ 1.4 version

Hangul 97/2000/2002/2005/2007

- 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 is large or has many pages, it may take longer to load the document.
- Unsupported fonts may be replaced by other fonts.

Browsing File Viewer

You can control playback using the following buttons.

- Press the **Go Page** button to move to the previous or next page.
- Press the volume button to **zoom in** or **zoom out**.
 1. Press the **OK** button.
 2. Press the **Up/Down/Left/Right** buttons to move to Go Page or Zoom.



Item	Description
Go Page	Moves to the page you want.
Zoom	Enlarges or reduces the photo.
Option	Sets Option for File Viewer.
List	Returns to a list.

Using Magical Mirroring

The magical mirroring feature is used to wirelessly transmit and project the screen of a network-connected laptop (PC) to a projector. To use this feature, the MirrorOp Sender, an application for PC, should be installed in the user's laptop (PC).

You can download this PC program from www.MirrorOp.com.

(To obtain a full-featured MirrorOp Sender program, a user should purchase one.)

Running Magical Mirroring

- 1 Select Magical Mirroring from the Settings.



CAUTION

- Magical Mirroring is available only when a network is connected.
- When Magical Mirroring is running, only the following buttons are available on the remote control and control panel: Power, Volume, Previous and Exit.

- 2 After running Magical Mirroring, execute the MirrorOp Sender program in the PC on a standby screen as follows.



- 3 To the Remote Device IP field of the MirrorOp Sender, enter the IP which is the same as the host IP of the Magical Mirroring and press **Connect**.



<PC Screen>

- 4 If MirrorOp Sender runs normally, the connected PCs are displayed in the Device List of Magical Mirroring as shown below. (All connected PCs are displayed.)



If MirrorOp Sender does not run, the Device List of Magical Mirroring is shown as follows. Check the network connection.



- 5 In the Device List, select a desired PC by pressing the Up/Down key, and press **OK** button.

CAUTION

- While running Magical Mirroring, the video or audio transmitted from the PC may be interrupted due to PC performance or wireless network status.

MirrorOp Sender

Changing MirrorOp Mode



- Move the button to this position to change the transfer mode to **application mode**.



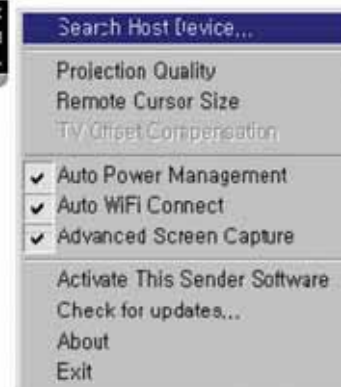
- Move the button to this position to change the transfer mode to **movie mode**.

Mode	Description
Application Mode	When MirrorOp is set to this mode, the software will transfer images with greater quality. When you run applications such as games, you can set to this mode. This mode requires large bandwidth, so we suggest you to use the wired network when using this mode.
Movie Mode	This mode is only for movies. When you play a movie on your PC, you can change to this mode. In this mode, the mouse and other applications do not work in real time.

Configuring MirrorOp

- Search Device

-Remote App Search



- Projection Quality



! NOTE

- Using this option, you can select "Normal" or "Best" for the projection quality. If the network connection is good, select the "Best"; if not, "Normal".

- Projector Offset Compensation



- Auto Power Management

- Select this option when running the MirrorOp application on a laptop. This option helps a laptop to switch to an active mode. So your Wi-Fi network card will always work at an optimum level.

- Auto Wi-Fi Connect

- When you choose this option, you MirrorOp will automatically connect to the server and log in.

- Advanced Screen Capture

- Different PCs have different video output designs. When this option is not selected, some layers might not be captured, for example if you play a movie using a special media player. When you play a movie on your pc, and cannot see the picture on the projector, make sure to choose this option. With this option, the mouse pointer on the screen may get a double image; check to see if it does.



NOTE

- This option is used to adjust the vertical and horizontal display position. Please read the notice on the panel.

- Activate This Sender Software

- Buy a license or import the license if you already have one.

- Check for Updates

- Check the newest version on the network.









System Requirements

CPU	Dual core 1.8 GHz or higher (excluding Atom processor)
Display Adaptor	nVIDIA or ATI graphic card with 64MB VRAM or above
Operating System	Windows Vista, Windows 7
WiFi	802.11 n

CUSTOMIZING SETTINGS

SETUP Menu

- 1 Press the **MENU** button.
- 2 Use the **^**, **v**, **<** or **>** button to select the desired item and press the **OK** button.
- 3 Use the **^**, **v**, **<** or **>** button to set up the desired item and press the **OK** button.
- 4 Press the **EXIT** button when completed.

Menu	Description
 PICTURE	Adjusts the image quality for optimal viewing.
 AUDIO	Adjusts the sound quality and volume level.
 TIME	Sets time-related settings.
 OPTION	Customizes the general settings.
 NETWORK	Sets the network.
 SUPPORT	Shows the projector information.
 INPUT	Lets you select the desired input.
 SMART SHARE	Allows you to view photo, music, video and document files on the projector by connecting to a USB or home network (DLNA).

PICTURE Settings

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



The available picture settings are described as follows.

Item	Description
Energy Saving	Adjusts the brightness. • If the temperature around the projector is high, mode changing is limited to protect the internal system.
Picture Mode	Selects one of the preset images or customizes options in each mode for the best screen performance. You can also customize advanced options for each mode.
Mode	
Vivid	Maximizes the visual effect of video. Displays a crystal clear picture by enhancing contrast, brightness, and sharpness.
Standard	Displays the picture with normal contrast, brightness and sharpness.
Cinema	Optimizes the image for a movie.
Game	Optimizes the image for playing games on fast-moving screens.
Expert1/2	Adjusts the detailed image settings.
Contrast	Increases or decreases the gradient of the video signal.
Brightness	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. Horizontal and Vertical Sharpness are available only in Expert1/2.
Color	Adjusts the intensity of all colors.
Tint	Adjusts the balance between red and green levels.

Item	Description
Advanced Control	Customizes the advanced settings.
Picture Option	Sets optional settings.
Picture Reset	Restores each mode's options to the factory default.
Aspect Ratio	Resizes the picture.
Screen (RGB-PC)	Adjusts the picture quality in RGB-PC input.
Item	
Resolution	Available resolutions are 768 resolution (1024x768/ 1280x768/ 1360x768, 60 Hz) and 1050 resolution (1400x1050/ 1680x1050, 60 Hz).
Auto Config.	Provides optimized picture quality by automatically calibrating mismatched horizontal width and shaky picture caused by conflicts between the internal settings of the projector and various PC graphic signals. <ul style="list-style-type: none"> 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

Item	Description
Dynamic Contrast	Adjusts the contrast to keep it at the best level for the brightness of the screen.
Dynamic Color	Adjusts screen colors so that they look natural.
Clear White	Makes the white area of the screen look brighter and whiter.
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.
Super Resolution	Improves blurry and unclear parts in the picture to make the picture more vivid.
Color Temperature	Adjusts the overall color of the picture. You can select Warm, Cool or Medium.
Gamma	Sets a gradation curve between video input and output signal.
Color Gamut	Selects the range of colors to display. <ul style="list-style-type: none"> Standard: Displays the original colors of an input signal regardless of the display features. Wide: Makes use of the display's rich colors.

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

Picture Option

Item	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.
TruMotion	Makes the picture look smooth by compensating it.

AUDIO Settings

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



The available audio settings are described as follows.

Item	Description
Sound Mode	Sets the sound mode.
User EQ	Allows you to adjust the treble and bass sound. * It is activated when "User Setting" is selected in Sound Mode.
Volume Mode	Sets the projector volume.
Virtual Surround	Provides realistic stereo sound.
Clear Voice II	Makes the voice from the projector crisp and clear.
AV Sync.	Allows you to manually adjust picture and audio when they are not synced.
Sound Settings	Balances the sound.
Mic Setting	Allows you to connect and use a microphone. * When using a microphone, it is normal to only hear sound from the microphone. * You can adjust the microphone volume using the volume key. * The microphone function is only available for external inputs (RGB, HDMI, AV, or Component).

TIME Settings

- 1 Press the **MENU** button.
- 2 Use the **^** or **v** button to select **TIME** and press the **OK** button.
- 3 Use the **^**, **v**, **<** 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	The projector is turned off at the preset time.
Auto Off	If there is no signal, the projector automatically turns off after the preset time has elapsed.
Automatic Standby	Turns off the projector automatically if there is no input for the given time.
Presentation Timer	Time Alarm Displays an alarm at the specified time. * If you set the time to 5 minutes, the time is displayed on the screen at a 1 minute interval. If you set the time to 10 minutes or more, the time is displayed at a 5 minute interval. If the remaining time is less than 5 minutes, it is displayed at a 1 minute interval. * You can set the time to 5, 10, ..., 60 minutes in 5-minute increments.
	Time Keeper Displays the time remaining until the time specified on the screen. * For between 1 and 10 minutes, the time can be set in increments of 1 minute; and for between 10 and 60 minutes, in increments of 5 minutes.

OPTION Settings

- 1 Press the **MENU** button.
- 2 Use the \wedge or \vee button to select **OPTION** and press the **OK** button.
- 3 Use the \wedge , \vee , \lt or \gt button to set up the desired item and press the **OK** button.
- To return to the previous menu, press the \rightarrow button.



The available option settings are described below.

Item	Description			
Language	Selects the desired language.			
Set ID	Sets the unique number of a projector when it is being remotely controlled by PC.			
PJT Mode	Turns the projected image upside down or flips it horizontally.			
Keystone	Compensates for the trapezoidal image shape created when projecting an image from an angle not perpendicular to the screen.			
Blank Image	Selects the background for blank image.			
Auto Power	Makes the projector turn on automatically when the power cord is connected.			
	Item			
	<table border="1"> <tr> <td>On</td> <td>When the power cord is connected to the projector, it turns on automatically.</td> </tr> <tr> <td>Off</td> <td>When the power cord is connected to the projector, it goes into standby mode.</td> </tr> </table>	On	When the power cord is connected to the projector, it turns on automatically.	Off
On	When the power cord is connected to the projector, it turns on automatically.			
Off	When the power cord is connected to the projector, it goes into standby mode.			
Interactive	Sets the Interactive mode. (For SA565)			
High Altitude	If the projector is used at an altitude higher than 1200 meters, turn this option on. When High Altitude is not enabled, 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.			
Monitor Out	You can select one of the two RGB inputs connected as an output of the RGB OUT port. When "Auto" is selected, the current input you are watching is displayed, among "RGB1" and "RGB2" inputs.			

Item	Description
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.
Initial Setting	Resets all projector settings to the factory default.

NETWORK Settings

- 1 Press the **MENU** button.
- 2 Use the \wedge or \vee button to select **NETWORK** and press the **OK** button.
- 3 Use the \wedge , \vee , \lt or \gt button to set up the desired item and press the **OK** button.
- To return to the previous menu, press the **BACK** button.
- 4 Press the **EXIT** button when completed.

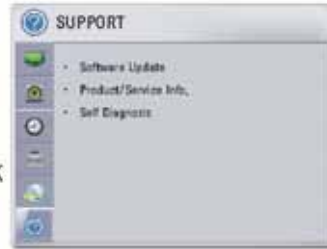


The available network settings are described below.

Item	Description
Network Connection	Connects a wireless network.
Network Status	Sets the wireless network.
Wi-Fi Screen Share	Wi-Fi Screen Share supports wireless connection technology, such as Wi-Fi Direct and WiDi. You can share the file and screen of the devices connected by the Wi-Fi Screen Share on the SmartShare.
Smart Share Setting	Changes the settings for SmartShare.
Magical Mirroring	Transmits wirelessly and projects the screen of a network-connected laptop (PC) to a projector.
eZ-Net Manager	Allows you to control one or more projectors in an easier way through a local area network.

SUPPORT

- 1 Press the **MENU** button.
- 2 Use the **^** or **v** button to select **SUPPORT** and press the **OK** button.
- 3 Use the **^**, **v**, **<** or **>** button to set up the desired item and press the **OK** button.
 - To return to the previous menu, press the **BACK** button.
- 4 Press the **EXIT** button when completed.



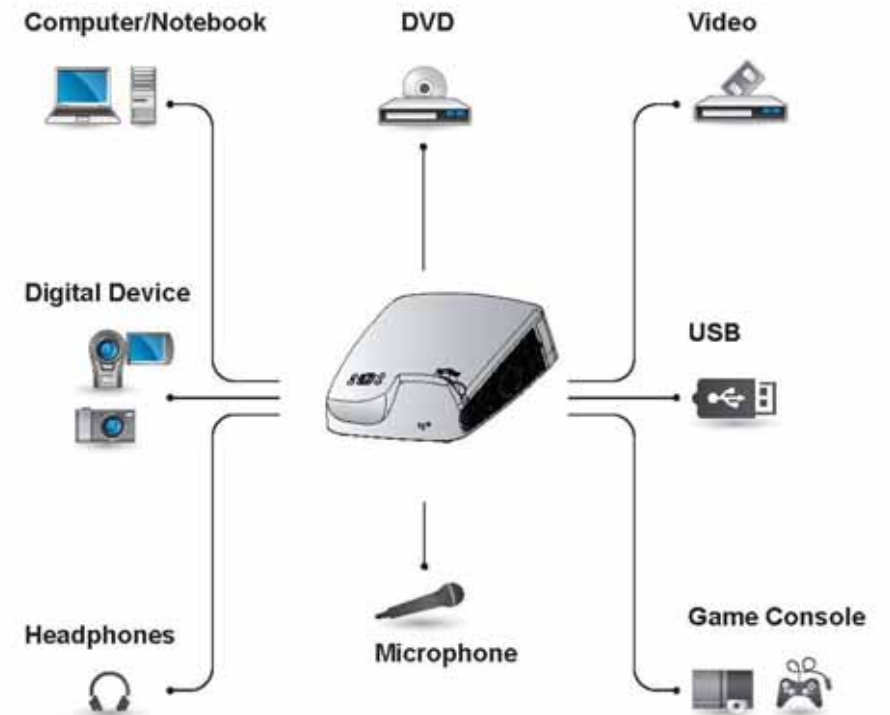
The available support settings are described below.

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.

- The ports on the back of the projector are designed for the ceiling installation, so their label is printed upside down for your convenience.
- The picture may be different from the actual product.



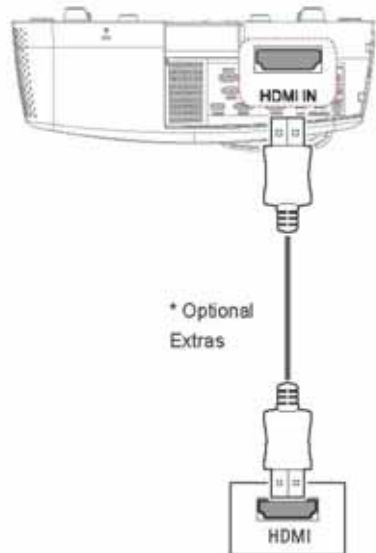
Connecting to HD Receiver, DVD, or VCR Player

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

HDMI Connection

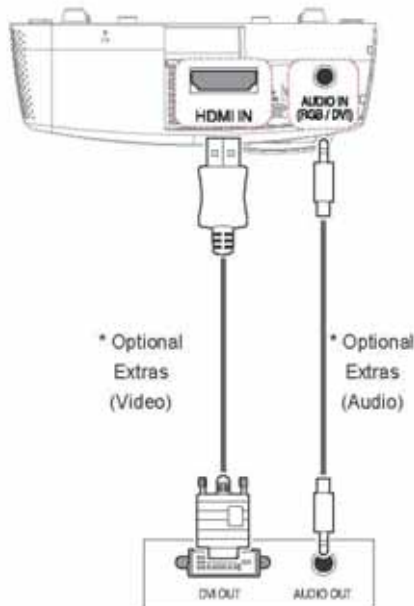
With an HDMI cable, you can enjoy high quality picture and sound. Connect the projector's HDMI IN port to the HDMI output port.

Press the **INPUT** button on the remote control to select HDMI.



HDMI to DVI Connection

Using an HDMI to DVI cable, connect the projector's HDMI IN port to the DVI OUT port. To output audio, use an audio cable for connection. Press the **INPUT** button on the remote control to select HDMI.



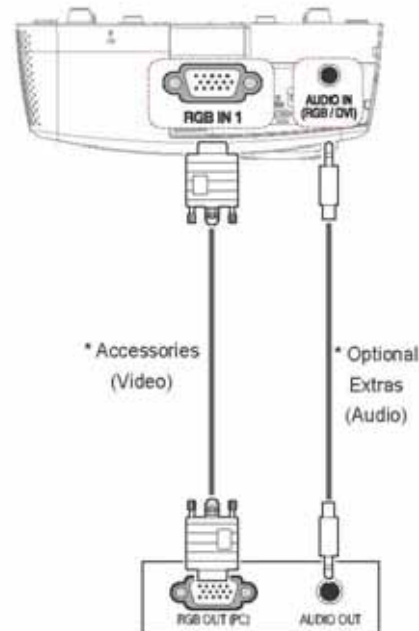
PC Connection

The projector supports Plug & Play. Your PC will automatically detect the projector and requires no driver installation.

RGB Connection

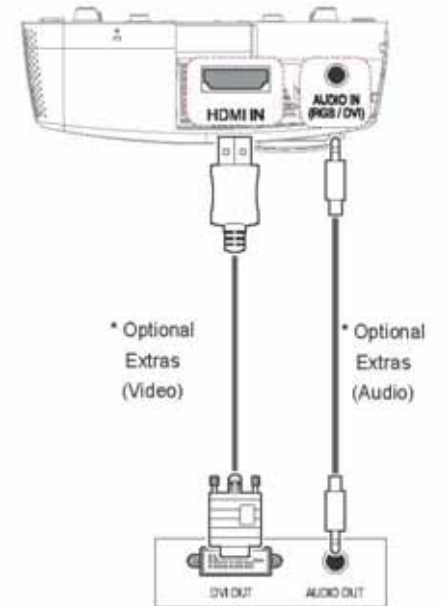
Connect the PC output and the PC video input port of the projector with the RGB cable.

Connect the projector's RGB IN 1 or RGB IN 2 port to the RGB out port. To output the audio, connect the PC to the projector using an audio cable.



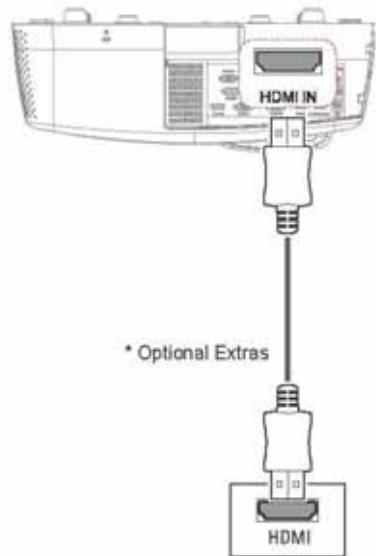
HDMI to DVI Connection

Using an HDMI to DVI cable, connect the projector's HDMI IN port to the DVI OUT port. To output audio, use an audio cable to connect the PC to the projector.



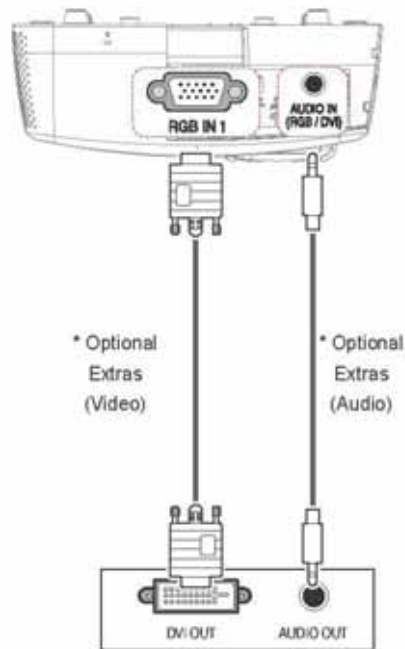
HDMI Connection

With an HDMI cable, you can enjoy high quality picture and sound. Connect the projector's HDMI IN port to the HDMI output port. Press the **INPUT** button on the remote control to select **HDMI**.



RGB to DVI Connection

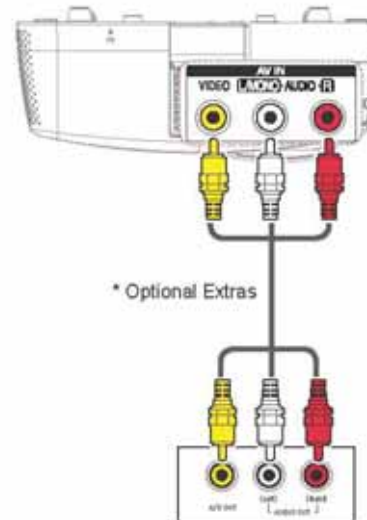
Connect the projector's DVI IN 1 or RGB IN 2 port to the RGB out port. To output the audio, connect the PC to the projector using an audio cable.



Connecting to External Devices

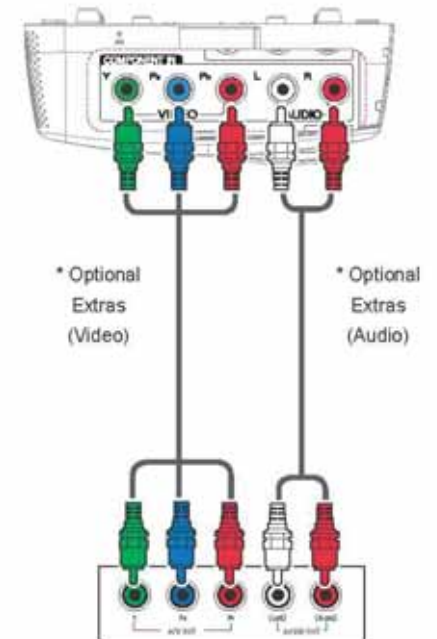
AV Connection

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



Component Connection

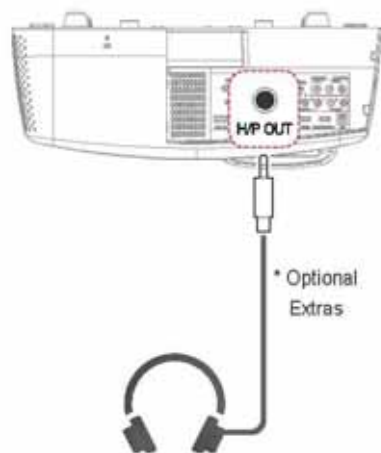
You can enjoy vivid images when you connect an external device with a component port to the COMPONENT IN port of the projector. Press the **INPUT** button on the remote control to select **Component**. The output jack Y, P_B or P_R of the DVD player may be marked as Y, B-Y, R-Y/Y, Cb, Cr/Y, Pb or Pr depending on the model.



Connecting to Headphones

Headphone Connection

You can listen to the audio through a headphone.



Connecting to a Microphone

Microphone Connection

You can connect a microphone to the MIC IN port of the projector.



Connecting to a Laptop

You can connect the projector to a laptop to use various functions.

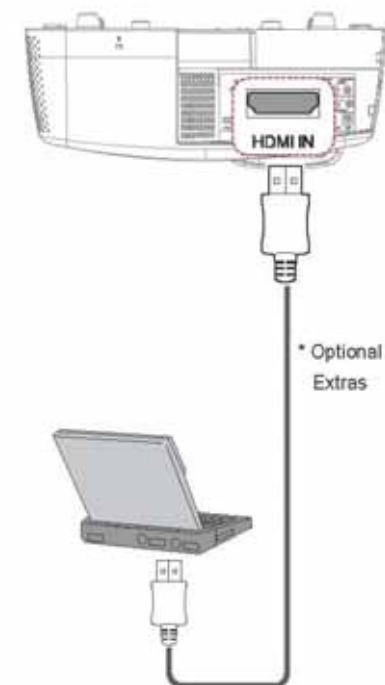
RGB Connection

You can connect your laptop to the RGB IN 1 or RGB IN 2 port of the projector.



HDMI Connection

Connect the projector's HDMI IN port to the HDMI output port.



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.

Serial Communication Function

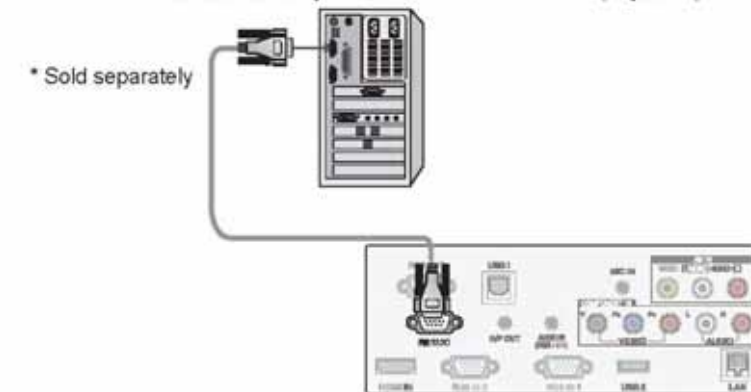
Using Serial Communication

If the projector is connected to a PC through an RS-232C cable, you can use the PC to control functions of the projector such as power On/Off or input selection, etc. It cannot be used with the Ez-Net Manager concurrently. For serial communication, use LAN Off in the Network Settings.

Establishing Serial Communication

Connect the RS-232C (serial connector) of the PC to the RS-232C connector at the back of the projector. You need to purchase a cable to connect the RS-232C connectors as it is not provided as an accessory.

* A RS-232C cable is necessary for the remote control of the projector (see Figure 1).



[Figure 1] RS-232 Connection Diagram



* There is no connection to Pin 1 and Pin 9.

Communication Parameter Setup

- Baud Rate: 9600 bps(UART)
- Data Length: 8 bit
- Parity: none
- Stop bit: 1 bit
- Flow Control: none
- Communication code: ASCII code

Communication Protocol

1. Transmission

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

- * [Command1]: The first command to control the projector (k, j, x, ASCII code, 1 character)
- * [Command2]: The second command to control the projector (ASCII code, 1 character)
- * [Set ID]: Used to select the set to control; ID can be granted for each set listed in the Special Menu, which can be selected from the range '1 - 99 (0 x 01 - 0 x 63)'. If Set ID is set to '00', you can control all the sets. In the command line, a hexadecimal value is used as a Set ID.
- * [Data]: Used to send data needed for the commands mentioned above. If it is in ASCII code, 2 characters are sent.
- * If the data is 'FF', it means data read mode.
- * [Cr]: Carriage Return
It corresponds to ASCII code '0x0D'.
- * []: ASCII code character corresponding to "Space Bar" separating command, Set ID, and data.

2. OK Acknowledgement

```
[Command2][ ][Set ID][ ][OK][Data][x]
```

* If a set receives the data successfully, it returns ACK in the above format. Here, the data will be the information from the projector indicating the current status of the projector if it is in data read mode. The projector itself will return the data from the PC if it is in data write mode.

3. Error Acknowledgement

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

* If a set receives an abnormal piece of data such as a non-supported function or there is a communication error, it returns ACK in the above format.

- Data [01] : illegal code
(This command is not supported.)
- [02]: not support function
(This function is not supported.)
- [03]: wait and retry
(Wait and try again after a while.)

Data Structure

10	16																						
0	00	10	16	10	16	10	16	10	16	10	16	10	16	10	16	10	16	10	16	10	16	10	16
1	01	11	0B	21	15	31	1F	41	29	51	33	61	3D	71	47	81	51	91	5B				
2	02	12	0C	22	16	32	20	42	2A	52	34	62	3E	72	48	82	52	92	5C				
3	03	13	0D	23	17	33	21	43	2B	53	35	63	3F	73	49	83	53	93	5D				
4	04	14	0E	24	18	34	22	44	2C	54	36	64	40	74	4A	84	54	94	5E				
5	05	15	0F	25	19	35	23	45	2D	55	37	65	41	75	4B	85	55	95	5F				
6	06	16	10	26	1A	36	24	46	2E	56	38	66	42	76	4C	86	56	96	60				
7	07	17	11	27	1B	37	25	47	2F	57	39	67	43	77	4D	87	57	97	61				
8	08	18	12	28	1C	38	26	48	30	58	3A	68	44	78	4E	88	58	98	62				
9	09	19	13	29	1D	39	27	49	31	59	3B	69	45	79	4F	89	59	99	63				
10	0A	20	14	30	1E	40	28	50	32	60	3C	70	46	80	50	90	5A	100	64				

Command Reference List

	Command 1	Command 2	Data
01. Power	k	a	00 - 01
02. Aspect Ratio	k	c	*
03. Blank Image	k	d	00 - 01
04. Contrast	k	g	00 - 64
05. Brightness	k	h	00 - 64
06. Color	k	i	00 - 64
07. Tint	k	j	00 - 64
08. Sharpness	k	k	00 - 64
09. OSD Select	k	l	00 - 01
10. Key Lock	k	m	00 - 01
11. Color Temperature	k	u	00 - 04 (excluding 03)
12. Black Level	n	m	00 - 01
13. Energy Saving	n	p	00 - 02
14. Auto Config.	j	u	01
15. Input	x	b	*
16. Key	m	c	*
17. Picture Mode	n	s	00 - 07
18. Mute	k	e	00 - 01
19. Volume	k	f	00 - 64
20. Monitor Out	n	r	00 - 02

01. Power (Command: ka)

⇒ Powers the set on/off.

Transmission**[k][a][Set ID][Data][Cr]**Data 00: Power Off
01: Power OnAck**[a][Set ID][OK][Data][x]**Data 00: Power Off
01: Power On

⇒ Shows the power on/off status.

Transmission**[k][a][Set ID][FF][Cr]**Ack**[a][Set ID][OK][Data][x]**Data 00: Power Off
01: Power On

* As with other functions, if data is transmitted as '0xFF' in the above format, the current status of each function is returned as a feedback in Ack data.

02. Screen size (Command: kc)

⇒ Adjusts the screen size.

Transmission**[k][c][Set ID][Data][Cr]**Data 01: Normal Screen (4:3)
02: Wide Screen (16:9)
04: Zoom
06: Set By Program
08: Full
09: Just Scan
10 - 1f. Cinema Zoom 1 - 16Ack**[c][Set ID][OK][Data][x]**Data 01: Normal Screen (4:3)
02: Wide Screen (16:9)
04: Zoom
06: Set By Program
08: Full
09: Just Scan
10 - 1f. Cinema Zoom 1 - 16**03. Blank Image (Command: kd)**

⇒ Enables/disables the blank image.

Transmission**[k][d][Set ID][Data][Cr]**Data 00: Screen Mute Off (picture on)
01: Screen Mute On (picture off)Ack**[d][Set ID][OK][Data][x]**Data 00: Screen Mute Off (picture on)
01: Screen Mute On (picture off)**04. Contrast (Command: kg)**

⇒ Adjusts the contrast.

Disabled when the chalkboard mode is selected.

Transmission**[k][g][Set ID][Data][Cr]**Data Min : 0H - Max : 64H
(* Transmitted in hexadecimal code)
* See the data structure.Ack**[g][Set ID][OK][Data][x]**

Data Min : 0H - Max : 64H

05. Brightness (Command: kh)

⇒ Adjusts the brightness.

Disabled when the chalkboard mode is selected.

Transmission**[k][h][Set ID][Data][Cr]**Data Min : 0H - Max : 64H
(* Transmitted in hexadecimal code)
* See the data structure.Ack**[h][Set ID][OK][Data][x]**

Data Min : 0H - Max : 64H

06. Color (Command: ki)⇒ Adjusts the color. (Video/ Component)
Disabled when the chalkboard mode is selected.Transmission**[k][i][Set ID][Data][Cr]**Data Min : 0H - Max : 64H
(* Transmitted in hexadecimal code)
* See the data structure.Ack**[i][Set ID][OK][Data][x]**

Data Min : 0H - Max : 64H

07. Tint (Command: kj)⇒ Adjusts the tint. (Video/ Component)
Disabled when the chalkboard mode is selected.Transmission**[k][j][Set ID][Data][Cr]**Data Red : 0H - Green : 64H
(* Transmitted in hexadecimal code)
* See the data structure.Ack**[j][Set ID][OK][Data][x]**

Data Red : 0H - Green : 64H

08. Sharpness (Command: kk)

⇒ Adjusts the sharpness. (Video/ Component)
Disabled when the chalkboard mode is selected.

Transmission

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

Data Min : 0H - Max : 32H
(* Transmitted in hexadecimal code)
* See the data structure.

Ack

[k][Set ID][OK][Data][x]

Data Min : 0H - Max : 32H

09. OSD Select (Command: kl)

⇒ Selects OSD On/Off.

Transmission

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

Data 00: OSD Select Mode Off
01: OSD Selection Mode On

Ack

[l][Set ID][OK][Data][x]

Data 00: OSD Select Mode Off
01: OSD Selection Mode On

10. Key Lock (Command: km)

⇒ Enables the lock function for the remote control and local keypad.

Transmission

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

Data 00 : Lock Off
01 : Lock On

Ack

[m][Set ID][OK][Data][x]

Data 00 : Lock Off
01 : Lock On

* This function is used when the remote control is not being used. If remote control lock is on, none of the buttons of the local keypad and remote control will work.

11. Color Temperature (Command: ku)

⇒ Adjusts the color temperature.

Transmission

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

Data 00: Medium 01: Cool
02: Warm 04: Natural
(* Transmitted in hexadecimal code)

*Data 03 is not used.

Ack

[u][Set ID][OK][Data][x]

Data 00: Medium 01: Cool
02: Warm 04: Natural

12. Black Level (Command: nm)

⇒ Adjusts the black level.

Transmission

[n][m][Set ID][Data][Cr]

Data 00: Low 01: High
(* Transmitted in hexadecimal code)

Ack

[m][Set ID][OK][Data][x]

Data 00: Low 01: High

13. Energy Saving (Command: np)

⇒ Sets the energy saving mode.

Transmission

[n][p][Set ID][Data][Cr]

Data 00: Minimum
Data 01: Medium
Data 02: Maximum
(* Transmitted in hexadecimal code)

Ack

[p][Set ID][OK][Data][x]

Data 00: Minimum
Data 01: Medium
Data 02: Maximum

14. Auto Configure (Command: ju)

⇒ Adjusts the video position in RGB mode and minimizes image shaking.

Transmission

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

Data 01 : To set
(* Transmitted in hexadecimal code)

Ack

[u][Set ID][OK][Data][x]

Data 01 : To set

15. Input Select (Command: xb)

⇒ Select the input signal of the set.

Transmission

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

Data 20: AV 40: Component
60: RGB 1 61: RGB 2
90: HDMI
(* Transmitted in hexadecimal code)

Ack

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

Data 20: AV 40: Component
60: RGB 1 61: RGB 2
90: HDMI

16. Key (Command: mc)

⇒ Sends a key code of the IR remote control.

Transmission`[m][c][Set ID][Data][Cr]`Data Key Code: see page 85.
(* Transmitted in hexadecimal code)Ack`[c][Set ID][OK][Data][x]`

Data Key Code

17. Picture Mode (Command: ns)

⇒ Sets the picture mode.

Transmission`[n][s][Set ID][Data][Cr]`Data 00 : Vivid 01 : Standard
02 : Natural 03 : Cinema
04 : Sport 05 : Game
06 : Expert1 07 : Expert2
(* Transmitted in hexadecimal code)Ack`[s][Set ID][OK][Data][x]`Data 00 : Vivid 01 : Standard
02 : Natural 03 : Cinema
04 : Sport 05 : Game
06 : Expert1 07 : Expert2
(* Transmitted in hexadecimal code)**18. Mute (Command: ke)**

⇒ Enables/disables the mute function.

Transmission`[k][e][Set ID][Data][Cr]`Data 00 : Mute Off (Volume On)
01 : Mute Off (Volume Off)Ack`[e][Set ID][OK][Data][x]`Data 00 : Mute Off (Volume On)
01 : Mute Off (Volume Off)**19. Volume (Command: kf)**

⇒ Adjusts the volume.

Transmission`[k][f][Set ID][Data][Cr]`Data Min : 0H - Max : 64H
(* Transmitted in hexadecimal code)
* See the data structure.Ack`[f][Set ID][OK][Data][x]`

Data Vol 00 : 0H - Vol 100 : 64H

20. Monitor Out (Command: nr)

⇒ Select either RGB 1 or 2 input as Monitor Out.

Transmission`[n][r][Set ID][Data][Cr]`Data 00 : RGB 1 01 : RGB 2
02: AutoAck`[r][Set ID][OK][Data][x]`Data 00 : RGB 1 01 : RGB 2
02: Auto**<Key Code>**

Key Name	Key Code	Code (Hexa)	Key
∧	0x40	Blue	0x61
∨	0x41	Keystone ▲	0xA4
>	0x06	Keystone ▼	0xA5
<	0x07	Mic	0xE4
Power	0xAD	USB	0x7C
Input	0xEF	Mute	0x43
Settings	0x43	Page ∧	0x00
Back ↵	0x28	Page ∨	0x01
Confirm	0x44	Self Check	0x81
Energy Saving	0x95	Still	0xBC
Aspect Ratio	0x79	Exit □	0x5B
Blank Image	0x84	0	0x10
Picture Mode	0x4D	1	0x11
Auto Config.	0x92	2	0x12
Q.Menu	0x45	3	0x13
Sleep Timer	0x0E	4	0x14
AV Mode	0x30	5	0x15
Volume +	0x02	6	0x16
Volume -	0x03	7	0x17
Red	0x72	8	0x18
Green	0x71	9	0x19
Yellow	0x63		

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.

Updating Software

When software update is required, run the software update to obtain the latest software version.

You can manually check for and download any software updates.

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

Item	Description
Software Update	Enable this option. When an update file is found, it is downloaded automatically. When the update file is finished downloading, a software update window appears.
Check Update Version	If an update file of a higher version exists after checking the latest update version, you can proceed with the update manually.

- The update service to get the latest version is provided through an Internet connection.
- If the software is not updated, some functions may not work well.

Wireless Specifications

- As the wireless device may cause electromagnetic interferences, the manufacturer and installer may not provide the safety or medical services.

Wireless Specs of Wireless LAN Module (TWFM-B003D)

Medium	IEEE802.11a/b/g/n
Frequency Range	2400 MHz - 2483.5 MHz 5150 MHz - 5825 MHz
Modulation	CCK / OFDM / MIMO
Output	802.11a: 15 dBm 802.11b: 17.5 dBm 802.11g: 17 dBm 802.11n - 2.4 GHz: 17 dBm 802.11n - 5 GHz: 15 dBm
Data Rate	802.11a/g: 54 Mbps 802.11b: 11 Mbps 802.11n: 300 Mbps
Antenna Gain	2400 MHz - 2483.5 MHz: -2.5 dBi 5150 MHz - 5825 MHz: -2.2 dBi
Frequency Band	802.11a/b/g: HT20 802.11n: HT20/40

Charge the interactive pen. (For SA565 only)

- The interactive pen communicates with the interactive a projector's interactive dongle.

- Frequency range: 2400 MHz – 2483.5 MHz
- Modulation : MSK
- Transmission power : 0 dBm
- Receive sensitivity : -82 dBm
- Data rate : 500 kbps

SPECIFICATIONS

Model	SA560 (SA560-JP) / SA565(SA565-JP)	
Resolution (Pixel)	1280 (Horizontal) × 800 (Vertical)	
Aspect ratio	16:10 (Horizontal:Vertical)	
Panel size (mm)	16.51	
Projection distance (Video size)	0.452 m - 0.711 m (177.8 cm - 279.4 cm)	
Ratio of upward projection	128%	
Working range of the remote control	6 m	
Audio output	7 W + 7 W	
Reception type	NTSC, PAL-B, D, G, H, I, PAL M, PAL N, PAL 60, SECAM	
Height (mm)	147.5 (without foot), 162 (with foot)	
Width (mm)	468.0	
Depth (mm)	415.0	
Weight (kg)	8.5	
Headphone, ear-phone	Impedance: 16 Ω / Output power: 10 mW / Jack thickness: 3.5 mm	
USB Device	5 V, 0.5 A (Max.)	
POWER	AC 100 V - 240 V ~ 50 Hz/ 60 Hz	
Operation environment	Temperature	
	Operation	0 °C to 40 °C
	Storage	-20 °C to 60 °C
	Relative humidity	
	Operation	0 % - 80 %
Storage	0 % - 85 %	

Supported Monitor Display

Resolution	Horizontal Frequency (kHz)	Vertical Frequency (Hz)
640*350	31.468	70.09
720*400	31.469	70.08
640*480	31.469	59.94
800*600	37.879	60.31
1024*768	48.363	60.00 119.99
1152*864	54.348	60.053
1280*800	49.68	60
1280*1024	63.981	60.020
1400*1050	65.317	59.979
1680*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 sync signals supported: Separate Sync.
- In PC mode, 1280x800 is recommended for the best picture quality.
- The 1400x1050 resolution may not be supported depending on the PC type.

Component Port Connection

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

HDMI/DVI-DTV mode supported

Resolution	Horizontal Frequency (kHz)	Vertical Frequency (Hz)
480p	31.47	60
	31.47	59.94
	31.5	60
576p	31.25	50
	37.5	50
720P	44.96	59.94
	45	60
	28.125	50
1080i	33.75	60
	56.25	50
1080p	33.72	59.94
	67.5	60
	67.432	59.939
	27	24
	26.97	23.976
	28.12	25
	33.75	30
	33.71	29.97

Open Source software Information

To obtain the source code under the GPL, LGPL, MPL and other open source licenses, which is contained in this product, please visit

<http://opensource.lge.com>.

In addition to the source code, all referenced license terms, warranty disclaimers and copyright notices are available for download.

If you send an email to opensource@lge.com to request the software's open source code installed on the projector within three years of purchase, we will send you a CD-ROM. You will only be charged a minimum for packaging and delivery.



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 _____