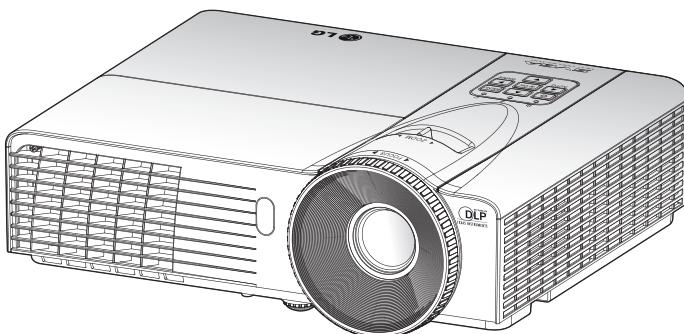




LG

DLP Projector

BE320-SD



Owner's Manual

P/N: SAC30190915 Rev. A

www.lg.com

Table of Contents

Table of Contents

Usage Notice

Safety Instructions 2

Introduction

Product Features 5

Package Overview 6

Product Overview 7

Connection Ports 8

Control Panel 9

Remote Control Battery Installation 10

Remote Control 11

Remote Control Operating Range 13

Installation

Connecting the Projector 14

Connect to Computer/Notebook 14

Connect to Video 15

Powering On/Off the Projector 16

Powering On the Projector 16

Powering Off the Projector 17

Adjusting the Projected Image 18

Adjusting the Height of Projector Image 18

Adjusting the Projector's Zoom and Focus 19

Adjusting Projection Image Size 19

User Controls

On Screen Display 21

How to operate 21

IMAGE 22

IMAGE | Advanced 24

IMAGE | Advanced | Color 25

IMAGE | Advanced | Input 25

SCREEN 26

SETTING 28

SETTING | Signal 30

SETTING | Advanced 31

OPTIONS 32

OPTIONS | Lamp Settings 33

OPTIONS | Information 34

OPTIONS | Advanced 35

Appendices

Troubleshooting 37

Replacing the lamp 42

Compatibility Mode 44

Computer Compatibility (Analog, PC) 44

RGB to RCA adapter 44

Configurations of Terminals 45

Terminal: RS232 Pin Assignments 45

RS232 Protocol Function List 46

Dimensions 49

Specifications 50

Regulation & Safety Notices 51

Usage Notice

Safety Instructions

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

→ Safety Instructions are given in two forms as detailed below.

 **WARNING :** The violation of this instruction may cause serious injuries and even death.

 **NOTES :** The violation of this instruction may cause injuries or damage to the projector.

→ After reading this manual, keep it in the place that you can access easily.

Indoor Installation

WARNING

Do not place the Projector in direct sunlight or near heat sources such as radiators, fires, stove etc.
This may cause a fire hazard !

Do not place flammable materials in, on or near the projector
This may cause a fire hazard!

Do not hang on the installed projector.
It may cause the projector to fall, causing injury or death.

Do not block the vents of the projector or restrict air-flow in any way.
This would cause the internal temperature to increase and could cause a fire hazard or damage to the unit!

Do not place the projector close to sources of steam or oil such as a humidifier.

Do not place the projector where it might be exposed to dust.

This may create a fire hazard or an electric shock hazard !

This may cause a fire hazard or damage to the unit!

Do not use the projector in a damp place such as a bathroom where it is likely to get wet.

This may cause a fire or an electric shock hazard!

Do not place the projector directly on a carpet, rug or place where ventilation is restricted.

This would cause its internal temperature to increase and might create a fire hazard or damage the unit.

Ensure good ventilation around the projector. The distance between the projector and the wall should be more than 30cm/12 inches.

An excessive increase in its internal temperature may cause a fire hazard or damage to the unit!

Indoor Installation

NOTES

When installing the projector on a table, be careful not to place it near the edge.
The projector could fall causing injury and damage to the projector.
Only use a suitable stand.

Disconnect from the power supply and remove all connections before moving, or cleaning.

Only use the projector on a level and stable surface.

It may fall and cause injury and/or damage to the unit.

Power

WARNING

Earth wire should be connected.
Ensure that you connect the earth ground wire to prevent possible electric shock (i.e.a Projector with a three-prong grounded AC plug must be connected to a three-prong grinded AC outlet).
If grounding methods are not possible, have a qualified electrician install a separate circuit breaker.
Do not try to ground the unit by connecting it to telephone wires, lightening rods, or gas pipes.

The power cord should be inserted fully into the power outlet to avoid a fire hazard!

This may cause a fire hazard or damage the unit.

Do not place heavy objects on the power cord.

This may cause a fire or an electric shock hazard !

Usage Notice

Power		 WARNING
<p>Never touch the power plug with a wet hand This may cause an electric shock-hazard!</p>		<p>Do not plug-in too many items into one power outlet. It may result in overheating of the outlet and create a fire hazard!</p>
<p>Hold the plug firmly when unplugging. If you pull the cord, it may be damaged. This may cause a fire hazard !</p>		<p>Do not use if the power cord or the plug is damaged or any part of the power outlet is loose. This may cause a fire or an electric-shock hazard or damage to the unit!</p>
<p>Place the projector where people will not trip or tread on the power cord. This may cause a fire or an electric-shock hazard or damage to the unit!</p>		<p>Do not turn the projector On/Off by plugging-in or unplugging the power plug to the wall outlet. (Allow the unit to cool before removing power.) It may cause mechanical failure or could cause an electric shock.</p>
Using		
<p>Do not place anything containing liquid on top of the projector such as flowerpot, cup, cosmetics or candle. This may cause a fire hazard or damage to the unit!</p>	<p>In case of impact shock or damage to the projector switch it off and unplug it from the power outlet and contact an authorized service center. This may cause a fire or an electric shock hazard or damage to the unit!</p>	<p>Do not allow any objects to fall into the projector. This may cause an electric shock hazard or damage to the unit!</p>
<p>If water is spilled into the projector unplug it from the power supply immediately and consult your Service Agent. This may cause an electric shock hazard or damage to the unit!</p>	<p>Dispose of used batteries carefully and safely. In the case of a battery being swallowed by a child please consult a doctor immediately.</p>	
<p>Do not remove any covers. High risk of Electric Shock!</p>	<p>Don't look directly into the lens when the projector is in use. Eye damage may occur!</p>	<p>Do not touch metal parts during or soon after operation since the vents will remain very hot!</p>
<p>CAUTION concerning the Power Cord It is recommended that most appliances be placed on a dedicated circuit; that is, a single outlet circuit which powers only that appliance and has no additional outlets or branch circuits. Check the specification page of this owner's manual to be certain. Do not overload wall outlets. Overloaded wall outlets, loose or damaged wall outlets, extension cords, frayed power cords, or damaged or cracked wire insulation are dangerous. Any of these conditions could result in electric shock or fire. Periodically examine the cord of your appliance, and if its appearance indicates damage or deterioration, unplug it, discontinue use of the appliance, and have the cord replaced with an exact replacement part by an authorized service personnel. Protect the power cord from physical or mechanical abuse, such as being twisted, kinked, pinched, closed in a door, or walked upon. Pay particular attention to plugs, wall outlets, and the point where the cord exits the appliance.</p>		

Usage Notice

Using	⚠️ WARNING	
If the projector is in a room that experiences a gas leak, do not touch the projector. It can cause a fire or a burn by a spark.	Don't look at laser beam directly as it can cause eye damage!	Always open the lens door or remove the lens cap when the projector lamp is on.
Using	⚠️ NOTES	
Do not place heavy objects on top of projector. This may cause mechanical failure or personal injury!	Take care not to impact the lens particularly when moving the projector.	Do not touch the lens of the projector. It is delicate and easily damaged.
Do not use any sharp tools on the projector as this will damage the casing.	In the event that an image does not appear on the screen please switch it off and unplug it from the power outlet and contact your Service Agent. This may cause a fire or an electric shock hazard or damage to the unit!	Do not drop the projector or allow impact shock. This may cause mechanical failure or personal injury!
Cleaning	⚠️ WARNING	
Do not use water while cleaning the projector. This may cause damage to the projector or an electric shock hazard.	In the unlikely event of smoke or a strange smell from the projector, switch it off, unplug it from the wall outlet and contact your dealer or service centre. This may cause a fire or an electric shock hazard or damage to the unit!	Use an air spray or soft cloth that is moist with a neutral detergent and water for removing dust or stains on the projection lens.
Cleaning	⚠️ NOTES	
Contact the Service Center once a year to clean the internal parts of the projector. Accumulated dust can cause mechanical failure.	When cleaning the plastic parts such as projector case, unplug the power and wipe it with a soft cloth. Do not use cleanser, spray water or wipe with a wet cloth. Especially, never use cleanser (glass cleaner), automobile or industrial shiner, abrasive or wax, benzene, alcohol etc., which can damage the product. Use an air spray or soft cloth that is moist with a neutral detergent and water for removing dust or stains on the projection lens. It can cause fire, electric shock or product damage (deformation, corrosion and damage).	
Others	⚠️ WARNING	
Do not attempt to service the projector yourself. Contact your dealer or service center. This may cause damage to the projector and could give an electric Shock as well as invalidating the warranty!		
Others	⚠️ NOTES	
Be sure to unplug if the projector is not to be used for a long period. Accumulated dust may cause a fire hazard or damage to the unit!	Only use the specified type of battery. This could cause damage to the remote control.	

Product Features

- SVGA (800x600) Native resolution
- RGB monitor Loop Thru
(works on standby mode > 0.5 W)
- BrilliantColor™ Technology
- RS232C control
- Rapid shutdown

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

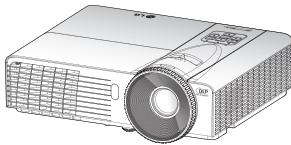
Introduction

Package Overview

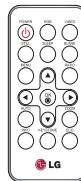
This projector comes with all the items shown below. Check to make sure your unit is complete. Contact your dealer immediately if anything is missing.

Note

- ❖ Due to the difference in applications for each country, some regions may have different accessories.
- ❖ Battery is included inside the remote control.



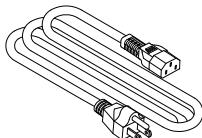
Projector



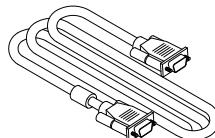
Wireless Remote Control



Battery



Power Cable



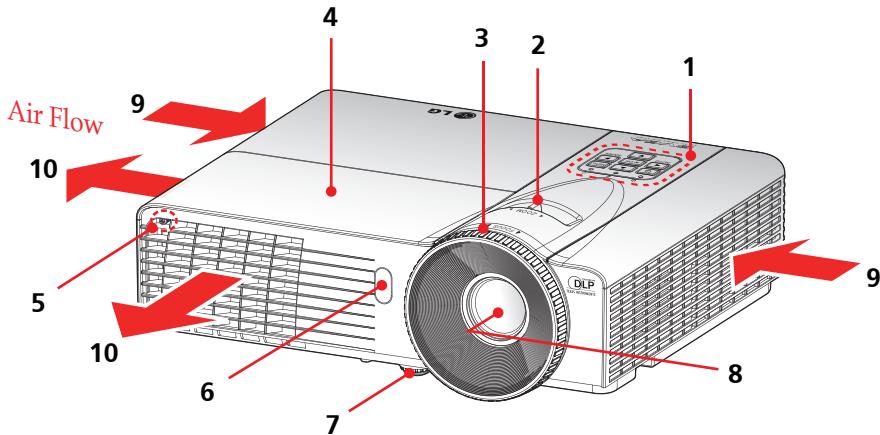
RGB Cable



User's Manual

Introduction

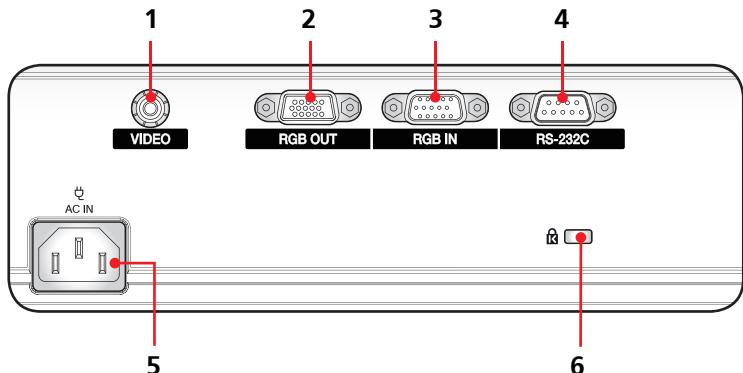
Product Overview



-
- 1. Control Panel
 - 2. Zoom Lever
 - 3. Focus Ring
 - 4. Lamp Cover
 - 5. Lamp Cove Screw
 - 6. Remote Sensor
 - 7. Tilt-Adjustable Feet
 - 8. Lens
 - 9. Ventilation (inlet)
 - 10. Ventilation (outlet)
-

Introduction

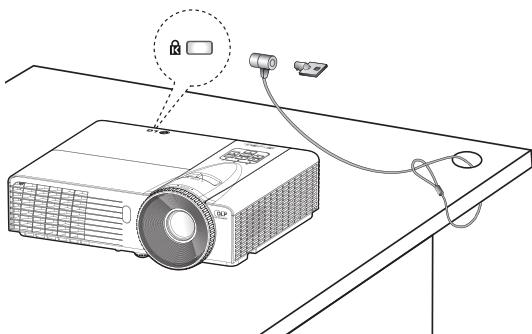
Connection Ports



- | | |
|----------------------|------------------------|
| 1. VIDEO Connector | 4. RS232C Control Port |
| 2. RGB OUT Connector | 5. AC IN |
| 3. RGB IN Connector | 6. Kensington™ Lock |

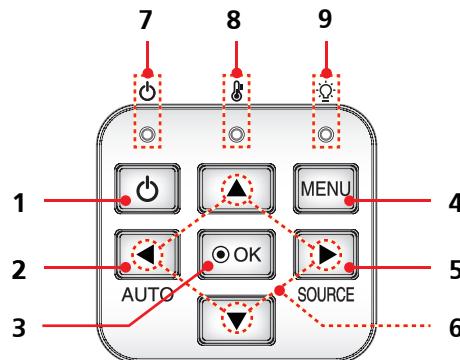
Kensington Security System

- ❖ This projector has a Kensington Security System Connector on the back panel. Connect the Kensington Security System cable as below.
- ❖ For the detailed installation and use of the Kensington Security System, refer to the user's guide included with the Kensington Security System set. And for further information, contact <http://www.kensington.com>, the internet homepage of the Kensington company that deals with expensive electronic equipment such as notebook PCs or projectors.
- ❖ The Kensington Security System is an optional item.



Introduction

Control Panel



1	POWER	Refer to the "Power On/Off the Projector" section on pages 16~17.
2	AUTO	Automatically synchronize the projector to the VGA(RGB) and Video signal input sources.
3	OK	Confirm your item selection.
4	MENU	Press "MENU" to launch the on-screen display (OSD) menu. To exit OSD, press "MENU" again.
5	SOURCE	Press "SOURCE" to select an input signal.
6	Four Directional Select Keys	Use or or or to select items or make adjustments to your selection.
7	POWER LED	Indicate the projector's status.
8	TEMP LED	Indicate the projector's temperature status.
9	LAMP LED	Indicate the projector's lamp status.

Introduction

Remote Control Battery Installation

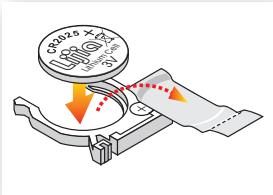


Procedure

1. Remove the battery holder by holding down the side release firmly and pulling out the battery holder. ①
2. Insert a CR2025 coin cell battery and align the polarity correctly according to the marking in the battery holder. Ensure that the side with a "+" is facing up. ②
3. Replace the battery holder. ③

Note

When you use the remote control for the first time, there is a plastic sheet between the battery and its contact. Remove the sheet before use.

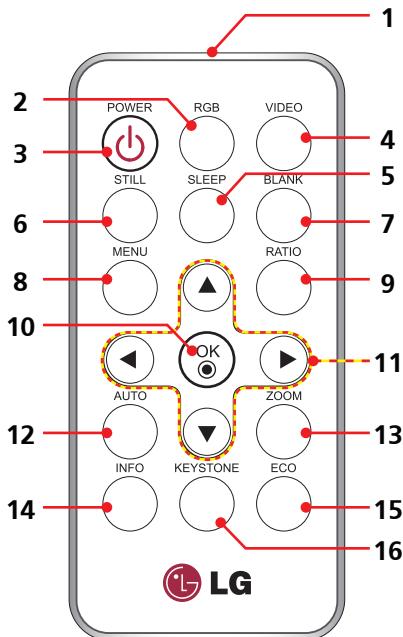


Warning: To ensure safe operation, please observe the following precautions :

- Use CR2025 type battery.
- Avoid contact with water or liquid.
- Do not expose the remote control to moisture or heat.
- Do not drop the remote control.
- If the battery has leaked in the remote control, carefully wipe the case clean and install new battery.
- Risk of an explosion if battery is replaced by an incorrect type.
- Dispose of used battery according to the instructions.

Introduction

Remote Control



Note

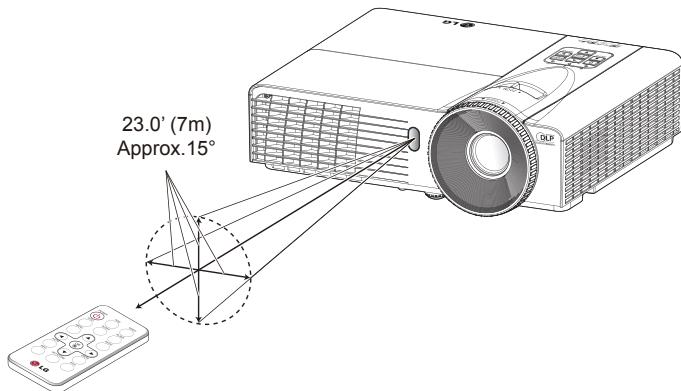
- ❖ You can only turn the projector on/off with POWER button on the projector.
- ❖ You can operate all of the functions of the projector via the remote control. Make sure not to lose the remote control.

1	Infrared transmitter	Sends signals to the projector.
2	RGB	Press "RGB" to choose RGB connector.
3	Power	Refer to the "Power On/Off the Projector" section. (refer to pages 16~17)
4	Video	Press "Video" to choose VIDEO connector.

Introduction

5	Sleep	Press “Sleep” to set the countdown timer interval. The projector will automatically power off when the countdown has finished. (in minutes)
6	Still	Pause the screen image. Press again to resume the screen image.
7	Blank	Use this function to choose blank color.
8	Menu	Press “Menu” to launch the Onscreen display (OSD), back to the top level of OSD for the OSD main menu operation
9	Ratio	Use this function to choose your desired aspect ratio.
10	OK	Confirm your selection of items in sub menu operation.
11	Four Directional Select Keys	Use ▲ or ▼ or ◀ or ▶ to select items or make adjustments to your selection.
12	Auto	Automatically synchronize the projector to the VGA(RGB) and Video signal input sources.
13	Zoom	Zoom out or zoom in the projector display.
14	Info	To display the projector information for “Source”, “Resolution or Video”, “ECO Mode” and “Sleep Countdown” on the screen. (refer to page 34)
15	Eco	When Eco mode is activated, the brightness detected to significantly reduced lamp power consumption (up to 70%) during periods of inactivity.
16	Keystone	Press to adjust image distortion caused by tilting the projector.

Remote Control Operating Range



Point the remote control toward the projector (Infrared Remote Receiver) when pressing any button. Maximum operating range for the remote control is about 23.0' (7m) and 30° in front of the projector.

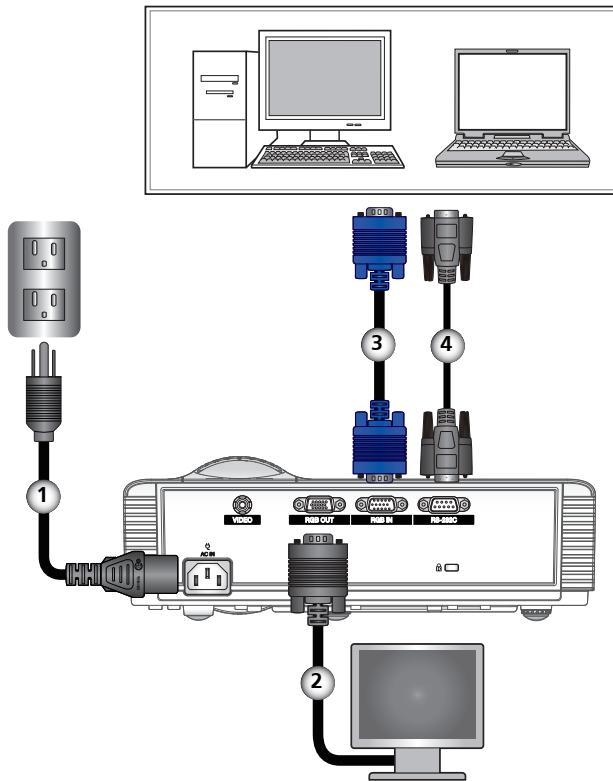
Installation

Connecting the Projector

Connect to Computer/Notebook

Note

- ❖ Due to the difference in applications for each country, some regions may have different accessories.



- | | |
|--------|------------------------------|
| 1..... | Power cable |
| 2..... | Monitor out cable (optional) |
| 3..... | RGB cable |
| 4..... | RS232C cable (optional) |

Note

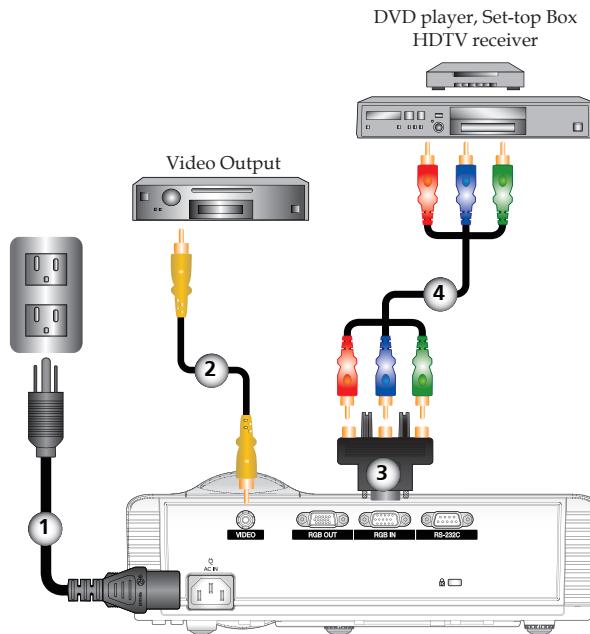
❖ Optional Extras

To purchase optional extras, visit an electronics store or online shopping site or contact the retail store where you purchased the product.

Without prior notice, optional extras are subject to change in order to improve the performance of the product, and new accessories may be added.

Installation

Connect to Video



Note

- ❖ Due to the difference in applications for each country, some regions may have different accessories.
- ❖ (*) If you want to connect the HDTV, it is recommended to buy the "RGB to RCA adaptor".

1.....	Power cable
2.....	Composite video cable (optional)
3.....	(*) RGB to RCA adaptor (optional)
4.....	3 RCA component cable (optional)

Note

❖ Optional Extras

To purchase optional extras, visit an electronics store or online shopping site or contact the retail store where you purchased the product.

Without prior notice, optional extras are subject to change in order to improve the performance of the product, and new accessories may be added.

Installation

Powering On/Off the Projector

Powering On the Projector

1. Ensure that the power cable and signal cable are securely connected. The POWER LED will turn orange.
2. Turn on the lamp by pressing “POWER 

Powering Off the Projector

1. Press the “POWER A screenshot of a projector's on-screen display. It features a blue header bar with a small orange icon on the left. Below this is a white rectangular area containing a red circular power button icon with a black outline. To the right of the icon, the text "Power Off?" is displayed. Below that, the instruction "Press power key again." is shown. The entire message is enclosed in a thin gray border.

2. Press the ‘POWER 

17

Installation

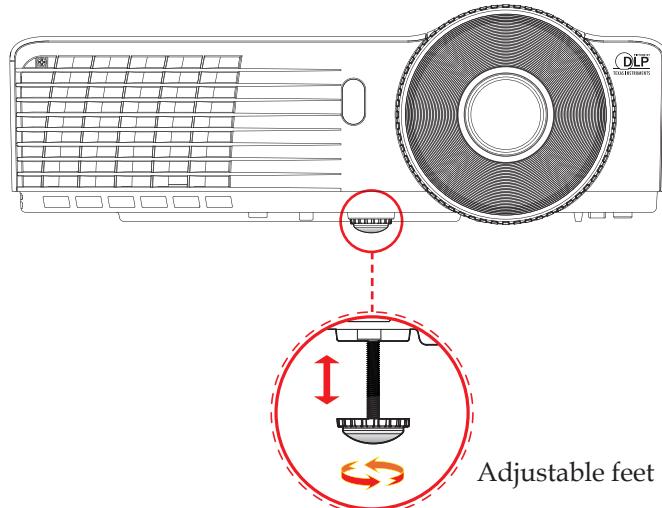
Adjusting the Projected Image

Adjusting the Height of Projector Image

The projector is equipped with adjustable feet to raise and lower the image to fill the screen.

To raise/lower the image:

Use “Adjustable feet” to fine-tune the display angle.

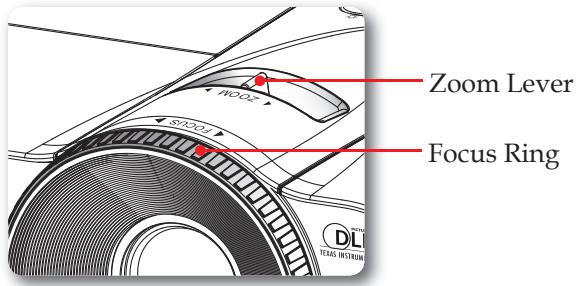


- ❖ You can raise the projector front up by rotating the adjustable feet.

Installation

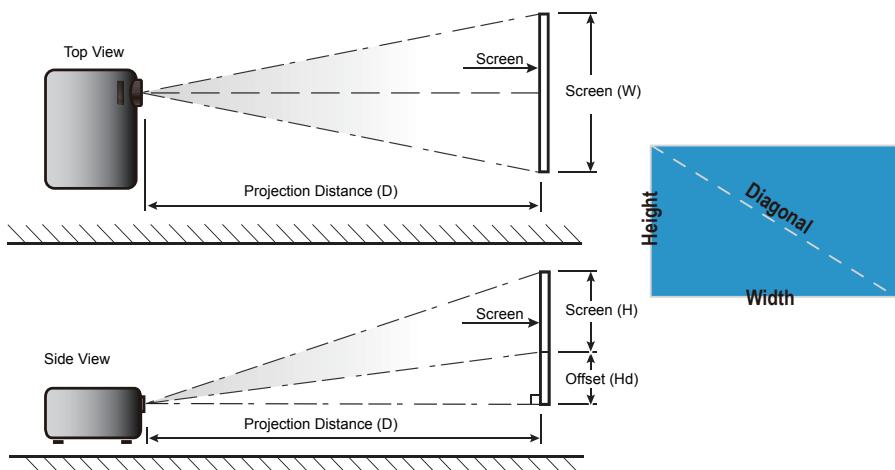
Adjusting the Projector's Zoom and Focus

To focus the image, rotate the focus ring until the image is clear. The projector will focus at distances from 3.28 to 39.37 feet (1.0 to 12.0 meters) with mechanical travel. To turn the zoom lever to zoom in or out.



Adjusting Projection Image Size

Projection Image Size from 22.9" to 255.0" (0.6 to 6.48 meters).



Installation

Diagonal length (inch) size of 4:3 Screen	Screen Size W x H				Projection Distance (D)				Offset (Hd)	
	(meter)		(inch)		(meter)		(feet)			
	Width	Height	Width	Height	wide	tele	wide	tele	(m)	(feet)
30	0.610	0.457	24	18	1.183	1.301	3.880	4.268	0.069	0.225
40	0.813	0.610	32	24	1.577	1.735	5.173	5.691	0.091	0.300
60	1.219	0.914	48	36	2.365	2.602	7.760	8.536	0.137	0.450
70	1.422	1.067	56	42	2.759	3.035	9.053	9.959	0.160	0.525
80	1.626	1.219	64	48	3.154	3.469	10.347	11.381	0.183	0.600
90	1.829	1.372	72	54	3.548	3.903	11.640	12.804	0.206	0.675
100	2.032	1.524	80	60	3.942	4.336	12.933	14.227	0.229	0.750
120	2.438	1.829	96	72	4.731	5.204	15.520	17.072	0.274	0.900
150	3.048	2.286	120	90	5.913	6.504	19.400	21.340	0.343	1.125
180	3.658	2.743	144	108	7.096	7.805	23.280	25.608	0.411	1.350
250	5.080	3.810	200	150	9.855	10.841	32.333	35.567	0.572	1.875
300	6.096	4.572	240	180	11.826	13.009	38.800	42.680	0.686	2.250

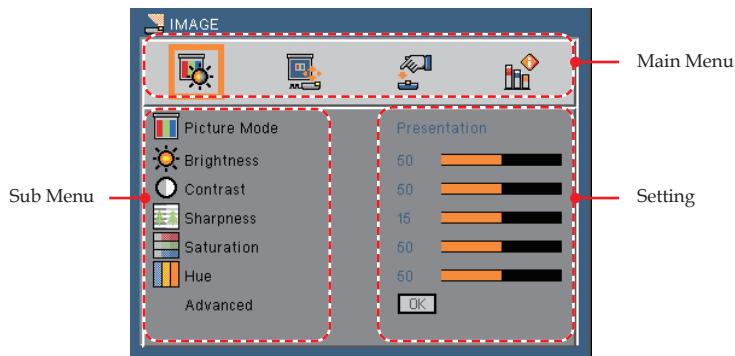
- ❖ Both side view and top view refer to the above table.
- ❖ This table is for user's reference only.

On Screen Display

The Projector has multilingual On-screen Display menus that allow you to make image adjustments and change a variety of settings. The projector will automatically detect the source.

How to operate

1. To open the OSD, press “MENU” on the Remote Control or Control Panel.
2. When OSD is displayed, use **◀ ▶** keys to select any item in the main menu. While making a selection on a particular page, press **▼** or **▲** key to enter sub menu.
3. Use **▲ ▼** keys to select the desired item in the sub menu and adjust the settings using **◀ ▶** key.
4. Select the next item to be adjusted in the sub menu and adjust as described above.
5. Press “OK” to confirm, and the screen will return to the sub menu.
6. To exit, press “MENU” repeat again. The OSD will be closed and the projector will automatically save the new settings.



User Controls



IMAGE

Picture Mode

There are many factory presets optimized for various types of images. Use the ▲ or ▼ to select the item.

Note

❖ When you change the items, the picture mode will be set "User1".

- ▶ Presentation: This mode is suitable for showing in front of public in connection to the PC.
- ▶ High-Bright: This mode is recommended when you want maximum brightness.
- ▶ Classroom: This mode is recommended for projecting in a classroom.
- ▶ Movie: This mode is suitable for watching video.
- ▶ sRGB: Standardized accurate color.
- ▶ Blackboard: This mode should be selected to achieve optimum color settings when projecting onto a blackboard (green).
- ▶ User1/User2: Memorize user's settings.

Brightness

Adjust the brightness of the image. (range: 0~100)

- ▶ Press the ▲ to darken image.
- ▶ Press the ▼ to lighten the image.

Contrast

The contrast controls the degree of difference between the lightest and darkest parts of the picture. (range: 0~100)

Note

❖ "Sharpness", "Saturation" and "Hue" functions are only supported under Video mode.

- ▶ Press the ◀ to decrease the contrast.
- ▶ Press the ▶ to increase the contrast.

Sharpness

Adjust the sharpness of the image. (range: 0~31)

- ▶ Press the ◀ to decrease the sharpness.
- ▶ Press the ▶ to increase the sharpness.

Saturation

Adjust a video image from black and white to fully saturated color.
(range: 0~100)

- ▶ Press the ◀ to decrease the amount of color in the image.
- ▶ Press the ▶ to increase the amount of color in the image.

Hue

Adjust the color balance of red and green. (range: 0~100)

- ▶ Press the ◀ to increase the amount of green in the image.
- ▶ Press the ▶ to increase the amount of red in the image.

User Controls



IMAGE | Advanced

Gamma

This allows you to choose a gamma table that has been fine-tuned to bring out the best image quality for the input.

- ▶ Film: This mode is recommended for movie
- ▶ Video: This mode is recommended for video or TV.
- ▶ Graphics: This mode is recommended for image.
- ▶ PC: This mode is recommended for presentation.
- ▶ Blackboard: This mode is recommended for using blackboard (green).

BrilliantColor™

Produces an expanded on-screen color spectrum that delivers enhanced color saturation for bright, true-to-life images. (range: 0~10)

Color Temp.

Adjust the color temperature. At cool temperature, the screen looks colder, at warm temperature, the screen looks warmer.

At medium temperature screen looks between Cool and Warm temperature.

Color Space

Select an appropriate color matrix type from AUTO, RGB or YUV.

Exit

Return to previous menu.

User Controls



IMAGE | Advanced | Color

Color

Red Gain/Green Gain/Blue Gain/Cyan Gain/Magenta Gain/Yellow Gain/Red Bias/Green Bias/Blue Bias: Use the ▲ or ▼ button to select Red, Green, Blue, Cyan, Magenta and Yellow Colors. Then use the ◀ or ▶ button to adjust the setting. (range: -50~50)

Reset

Choose “Yes” to return the factory default settings for “Color”.

Exit

Return to previous menu.

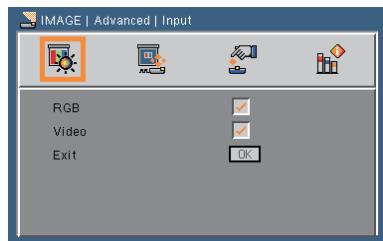
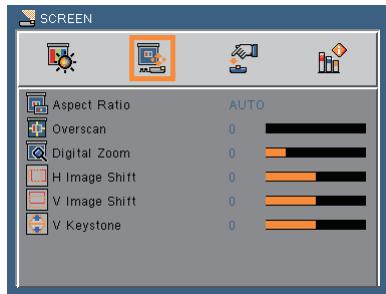


IMAGE | Advanced | Input

Input

Use this option to enable / disable input sources. Press “OK” to enter the sub menu and select which sources you require. Press “OK” to finalize the selection. The projector will not search for inputs that are not selected.

User Controls



SCREEN

Aspect Ratio

Use this function to choose your desired aspect ratio.

- ▶ 4:3: This format is for 4×3 input sources.
- ▶ 16:9: This format is for 16×9 input sources, like HDTV and DVD enhanced for Wide screen TV.
- ▶ 16:10: This format is for 16×10 input sources, like widescreen laptops.
- ▶ 15:9: This format is for non-16×9, letterbox sources and for users who use external 16×9 lens to display 1.67:1 aspect ratio using full resolution.
- ▶ 5:4: This format is for 5×4 input sources.
- ▶ Native: This format displays the original image without any scaling.
- ▶ AUTO: Automatically selects the appropriate display format.

Overscan

Overscan function removes the noise in a video image. Overscan the image to remove video encoding noise on the edge of video source.
(range: 0~3)

Digital Zoom

Adjust the size of projector's display area. (range: -20~100)

- ▶ Press the ◀ to reduce the size of an image on the projection screen.
- ▶ Press the ▶ to increase an image on the projection screen.

User Controls

H Image Shift

Shift the projected image position horizontally. (range: -50~50)

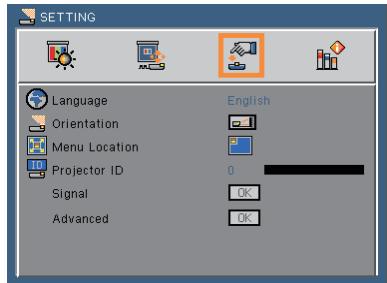
V Image Shift

Shift the projected image position vertically. (range: -50~50)

V Keystone

Press the **◀** or **▶** to adjust image distortion vertically and makes a rectangular image. (range: -40~40)

User Controls



SETTING

Language

Choose the multilingual OSD. Press ▲ or ▼ button into the sub menu and then use ▲ or ▼ or ◀ or ▶ button to select your preferred language. Press "OK" to finalize the selection.



Orientation



The factory default setting. The image is projected straight on the screen.



When you select this function, the projector reverses the image so you can project behind a translucent screen.



When you select this function, the projector turns the image upside down for ceiling-mounted projection.



Rear-Ceiling

When you select this function, the projector reverses and turns the image upside down at same time. You can project from behind a translucent screen with ceiling mounted projection.

Menu Location

Choose the menu location on the display screen.

Projector ID

ID definition can be set up by menu (range 0~99), and allow user control an individual projector by RS232C.

User Controls



SETTING | Signal



❖ "Signal" is only supported in Analog VGA (RGB) signal.

Phase

Synchronize the signal timing of the display with the graphic card. If the image appears to be unstable or flickers, use this function to correct it. (range: 0~31)

Clock

Change the display data frequency to match the frequency of your computer's graphic card. Use this function only if the image appears to flicker vertically. (range: -5~5)

H. Position (Horizontal Position) (range: -5~5)

- ▶ Press the ◀ to move the image left.
- ▶ Press the ▶ to move the image right.

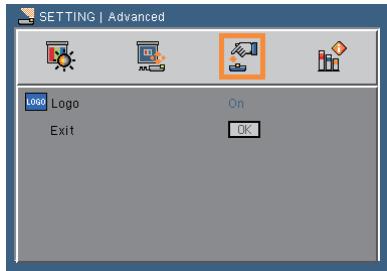
V. Position (Vertical Position) (range: -5~5)

- ▶ Press the ◀ to move the image down.
- ▶ Press the ▶ to move the image up.

Exit

Return to previous menu.

User Controls



SETTING | Advanced

Logo

Use this function to set the desired startup screen. If changes are made they will take effect the next time the projector is powered on.

- ▶ On: LG startup screen. (default)
- ▶ Off: No logo is displayed.

Exit

Return to previous menu.

User Controls



OPTIONS

Input Search

- ▶ When “On” is selected, the projector will search for other signals if the current input signal is lost.
- ▶ When “Off” is selected, the projector will only search a specified connection port.

Fan Mode

- ▶ AUTO: The built-in fans automatically run at a variable speed according to the internal temperature.
- ▶ High Speed: The built-in fans run at high speed.

Information Hide

- ▶ On: Choose “On” to hide the “searching” message.
- ▶ Off: Choose “Off” to show the “searching” message.

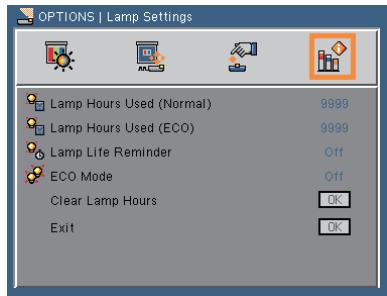
Blank Color

Use this feature to display a “Black”, “Red”, “Green”, “Blue” or “White” screen when no signal is available.

Reset

Resets all adjustments and settings to their factory settings.

User Controls



OPTIONS | Lamp Settings

Lamp Hours Used (Normal)

Display the projection time of normal mode.

Lamp Hours Used (ECO)

Display the projection time of ECO mode.

Lamp Life Reminder

- ▶ On: Choose "On" to show the lamp end of life warning message.
- ▶ Off: Choose "Off" to hide the lamp end of life warning message.

ECO Mode

- ▶ On: Choose "On" to dim the projector lamp which will lower power consumption and extend the lamp life.
- ▶ Off: Choose "Off" to increase the brightness.

Clear Lamp Hours

Reset the lamp hour counter after replacing the lamp.

Exit

Return to previous menu.

User Controls



OPTIONS | *Information*



- ❖ All functions in **Information** display the status of the projector only.

Source

Display the input connector type.

Resolution (Resolution or Video)

Display the current display resolution.

ECO Mode

Display the ECO mode.

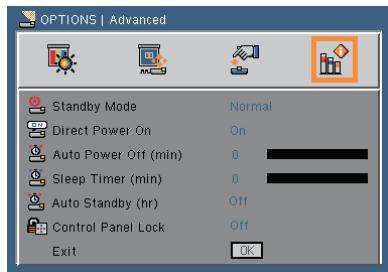
Sleep Countdown

Display the countdown timer interval.

Exit

Return to previous menu.

User Controls



OPTIONS | Advanced

Standby Mode

- ▶ Power-Saving: Choose "Standby" to save power dissipation further < 0.5 W.
- ▶ Normal: Choose "Normal" to return to normal standby mode and the "MONITOR OUT" port will be enabled.

Direct Power On

Choose "On" to activate Direct Power mode. The projector will automatically power on when AC power is supplied, without pressing the "POWER ⏻" key on the projector control panel or "POWER ⏻" key on the remote control.

Auto Power Off (min)

Sets the countdown timer interval. The countdown timer will start, when there is no signal being sent to the projector. The projector will automatically power off when the countdown has finished. (range: 0~180 mim)

Sleep Timer (min)

Sets the countdown timer interval. The countdown timer will start, with or without a signal being sent to the projector. The projector will automatically power off when the countdown has finished. (range: 0, 30, 60, 90...360 mim)

Auto Standby (hr)

Sets the countdown timer interval. The countdown timer will start, when the projector is not operated via control panel or remote control. The projector will automatically power off when the countdown has finished. (range: 4, 6, 8 hr)

User Controls

Control Panel Lock

When the control panel lock function is “On”, the control panel will be locked however, the projector can be operated by the remote control. By selecting “Off”, you will be able to reuse the control panel. Press and hold the “OK” button on the projector to turn off “Control Panel Lock”.

Exit

Return to previous menu.

Troubleshooting

If you experience trouble with the projector, refer to the following information. If the problem persists, please contact your local dealer or service center.

Problem: No image appears on screen

- ▶ Ensure all the cables and power connections are correctly and securely connected as described in the “Installation” section.
- ▶ Ensure the pins of connectors are not crooked or broken.
- ▶ Check if the projection lamp has been securely installed. Please refer to the “Replacing the lamp” section.
- ▶ Make sure you have removed the lens cap and the projector is switched on.

Problem: Partial, scrolling or incorrectly displayed image

- ▶ Press “Auto” on the remote control or on the control panel.
- ▶ If you are using a Notebook:
 1. First, follow the steps above to adjust resolution of the computer.
 2. Press the toggle output settings. Example: [Fn]+[F4]

Acer ↴	[Fn]+[F5]	IBM/Lenovo ↴	[Fn]+[F7]
Asus ↴	[Fn]+[F8]	HP/Compaq ↴	[Fn]+[F4]
Dell ↴	[Fn]+[F8]	NEC ↴	[Fn]+[F3]
LG ↴	[Fn]+[F7]	Toshiba ↴	[Fn]+[F5]

Mac Apple:
System Preference ↴ Display ↴ Arrangement ↴ Mirror display

- ▶ If you experience difficulty hanging resolutions or your monitor freezes, restart all equipment including the projector.

Appendices

Problem: The screen of the Notebook or PowerBook computer is not displaying a presentation

► If you are using a Notebook PC:

Some Notebook PCs may deactivate their own screens when a second display device is in use. Each has a different way to be reactivated. Refer to your computer's documentation for detailed information.

Problem: Image is unstable or flickering

- Adjust the "Phase" to correct it. Refer to the "SETTING | signal" section for more information.
- Change the monitor color setting from your computer.

Problem: Image has vertical flickering bar

- Adjust the "Clock" to correct it. (refer to pages 30)
- Check and reconfigure the display mode of your graphic card to make it compatible with the product.

Problem: Image is out of focus

- Adjust the focus ing on the projector lens.
- Make sure the projection screen is between the required distance 3.28 to 39.37 feet (1.0 to 12.0 meters) from the projector. (refer to pages 19)

Appendices

Problem: The image is stretched when displaying 16:9 DVD

The projector automatically detects 16:9 DVD and adjusts the aspect ratio by digitizing to full screen with 4:3 default setting.

If the image is still stretched, you will also need to adjust the aspect ratio by referring to the following:

- ▶ Please select 4:3 aspect ratio type on your DVD player if you are playing a 16:9 DVD.
- ▶ If you can't select 4:3 aspect ratio type on your DVD player, please select 4:3 aspect ratio in the on-screen menu.

Problem: Image is too small or too large

- ▶ Move the projector closer to or further from the screen.
- ▶ Press "MENU" button on the remote control or projector panel, go to "SCREEN --> Aspect Ratio" and try the different settings.

Problem: Image is reversed

- ▶ Select "SETTING -->Orientation" from the OSD and adjust the projection direction.

Problem: Lamp burns out or makes a popping sound

- ▶ When the lamp reaches its end of life, it will burn out and may make a loud popping sound. If this happens, the projector will not turn on until the lamp module has been replaced. To replace the lamp, follow the procedures in the "Replacing the Lamp".

Appendices

Problem: LED lighting message

Message	POWER-LED		LAMP-LED	TEMP-LED
	(Green)	(Orange)	(Red)	(Red)
Standby (Input power cable)	○	☀	○	○
Normal (Power on)	☀	○	○	○
Powering up (Warming up)	Flashing	○	○	○
Power off (Cooling: It can't accept any key at this status)	○	Flashing	○	○
Error (Lamp failed)	○	○	☀	○
Error (Fan lock)	○	○	○	Flashing
Error (Over temp.)	○	○	○	☀
Error (Color wheel)	○	○	Flashing	○

Note

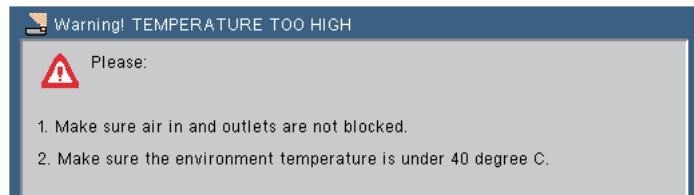
Steady light => ☀

No light => ○

Appendices

Problem: Message Reminders

- ▶ Over temperature - the projector has exceeded its recommended operating temperature and must be allowed to cool down before it may be used.

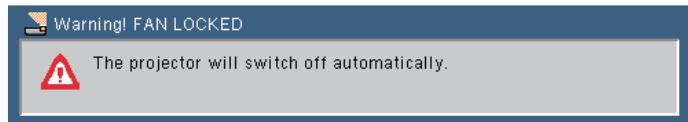


- ▶ Replacing the lamp - the lamp is about to reach its maximum life-time. Prepare to replace it soon.



If this happens, after replacing the lamp, connect the power cord and then press the "POWER " button on the remote control. This will allow you to turn on the projector. Clear the lamp hours by selecting "OPTIONS" -> "Lamp Settings" -> "Clear Lamp Hours" from the menu.

- ▶ Fan failed - the system fan is not working.



Appendices

Replacing the lamp

The projector will detect the lamp life itself. It will show you a warning message



When you see this message, please contact your local reseller or service center to change the lamp as soon as possible. Make sure the projector has been cooled down for at least 45 minutes before changing the lamp.

⚠️ ⚠️ ⚠️ CAUTION!

HIGH PRESSURE LAMP MAY EXPLODE IF
IMPROPERLY HANDLED. REFER TO
LAMP REPLACEMENT INSTRUCTIONS.

ATTENTION:

Les lampes à haute pression peuvent exploser
si elles sont mal utilisées.
Confier l'entretien à une personne qualifiée.



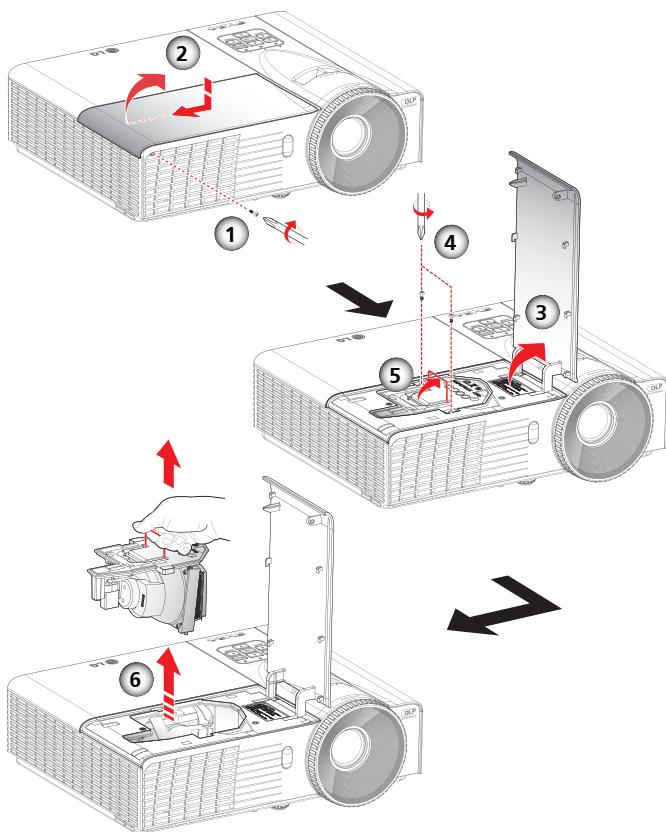
Warning: Lamp compartment may be hot! Allow it to cool down before changing the lamp!



Warning: To reduce the risk of personal injury, do not drop the lamp module or touch the lamp bulb. The bulb may shatter and cause injury if it is dropped.

Note

- The screws on the lamp cover and the lamp cannot be removed.
- Do not touch the glass area of the lamp. Hand oil can cause the lamp to shatter. Use a dry cloth to clean the lamp module if it was accidentally touched.



Lamp Replacing Procedure:

- Switch off the power to the projector by pressing the "POWER .
- Allow the projector to cool down at least 45 minutes.
- Disconnect the power cable.
- Unscrew the one screw on the front cover. **①**
- Push and slide the top cover **②** and then open the top cover. **③**
- Remove the 2 screws from the lamp module **④** and pull up the lamp bar. **⑤**
- Pull out the lamp module by force. **⑥**
- Install the new lamp module by reversing the previous steps.
- After replacing the lamp, turn on the power, and select the menu -> [OPTIONS | Lamp Settings] ->[Clear Lamp Hours] to reset the lamp usage hours. refer to page 33.

Appendices

Compatibility Mode

Computer Compatibility (Analog, PC)

Modes	Resolution	V-Sync (Hz)	H-Sync (kHz)
VGA	640 x 350	70	31.50
	640 x 480	60	31.50
	640 x 480	72	37.90
	640 x 480	75	37.50
	720 x 400	70	31.50
SVGA	800 x 600	56	35.20
	800 x 600	60	37.90
	800 x 600	72	48.10
	800 x 600	75	46.90
XGA	1024 x 768	60	48.40
	1024 x 768	70	56.50
	1024 x 768	75	60.00
WXGA	1280 x 768	60	47.40
	1280 x 720	60	45.00
	1280 x 800	60	49.702
SXGA	1152 x 864	75	67.50
	1280 x 1024	60	63.98
	1280 x 1024	75	79.98
	1280 x 960	60	60.00
SXGA+	1400 x 1050	60	63.98
	1680 x 1050	60	65.30
UXGA	1600 x 1200	60	75.00

Note

- ❖ Please note that using resolutions other than native 800 x 600 (SVGA) may result in some loss of image clarity.
- ❖ If projector does not auto lock the input signal, "Out of display range" message appears on the screen.
- ❖ If the input signal is not in the compatibility table, the image may not be displayed clearly.

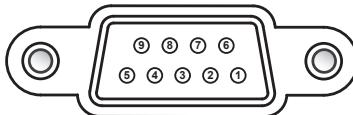
RGB to RCA adapter

Modes	Resolution	V-Sync (Hz)	H-Sync (kHz)
480i	720 x 480	29.97	15.735
480p	720 x 480	59.94	31.469
576i	720 x 576	25	15.625
576p	720 x 576	50	31.250

Appendices

Configurations of Terminals

Terminal: RS232 Pin Assignments



Pin no.	Spec. (from projector back)
1	GND
2	Received Data (RXD)
3	Transmitted Data (TXD)
4	GND
5	GND
6	GND
7	GND
8	GND
9	GND

Appendices

RS232 Protocol Function List



1. There is a <CR> after all ASCII commands.
 2. 0D is the HEX code for <CR> in ASCII code.

Baud Rate : 9600
 Data Bits: 8
 Parity: None
 Stop Bits: 1
 Flow Control: None
 UART16550 FIFO: Disable

Projector Return (Pass): P
 Projector Return (Fail): F
 XX=00-99, projector's ID,
 XX=00 is for all projectors

SEND to projector

ASCII Code	HEX Code	Function	Description
-XX00 1	7E 30 30 30 30 20 31 0D	Power ON	(Support the command on standby mode)
-XX00 0	7E 30 30 30 30 20 30 0D	Power OFF	
-XX01 1	7E 30 30 30 31 20 31 0D	Auto	
-XX04 1	7E 30 30 30 34 20 31 0D	Still	
-XX04 0	7E 30 30 30 34 20 30 0D	Unstill	
-XX05 1	7E 30 30 30 35 20 31 0D	Zoom Plus	
-XX06 1	7E 30 30 30 36 20 31 0D	Zoom Minus	
-XX07 1	7E 30 30 30 37 20 31 0D	Up	
-XX08 1	7E 30 30 30 38 20 31 0D	Down	
-XX09 1	7E 30 30 30 39 20 31 0D	Left	
-XX10 1	7E 30 30 31 30 20 31 0D	Right	
-XX12 5	7E 30 30 31 32 20 35 0D		RGB
-XX12 10	7E 30 30 31 32 20 31 30 0D		Video
-XX20 1	7E 30 30 32 30 20 31 0D	Picture Mode	Presentation
-XX20 2	7E 30 30 32 30 20 32 0D		High-Bright
-XX20 3	7E 30 30 32 30 20 33 0D		Classroom
-XX20 4	7E 30 30 32 30 20 34 0D		Movie
-XX20 5	7E 30 30 32 30 20 35 0D		sRGB
-XX20 6	7E 30 30 32 30 20 36 0D		Blackboard
-XX20 7	7E 30 30 32 30 20 37 0D		User1
-XX20 8	7E 30 30 32 30 20 38 0D		User2
-XX21 n	7E 30 30 32 31 20 a 0D	Brightness	n = 0 (a=30) ~ 100 (a=31 30 30)
-XX22 n	7E 30 30 32 32 20 a 0D	Contrast	n = 0 (a=30) ~ 100 (a=31 30 30)
-XX23 n	7E 30 30 32 33 20 a 0D	Sharpness	n = 0 (a=30) ~ 31 (a=33 31)
-XX45 n	7E 30 30 34 35 20 a 0D	Saturation	n = 0 (a=30) ~ 100 (a=31 30 30)
-XX44 n	7E 30 30 34 34 20 a 0D	Hue	n = 0 (a=30) ~ 100 (a=31 30 30)
-XX24 n	7E 30 30 32 34 20 a 0D	Color	Red Gain Green Gain Blue Gain
-XX25 n	7E 30 30 32 35 20 a 0D		n = -50 (a=2D 35 30) ~ 50 (a=35 30)
-XX26 n	7E 30 30 32 36 20 a 0D		n = -50 (a=2D 35 30) ~ 50 (a=35 30)
-XX27 n	7E 30 30 32 37 20 a 0D		n = -50 (a=2D 35 30) ~ 50 (a=35 30)
-XX28 n	7E 30 30 32 38 20 a 0D		n = -50 (a=2D 35 30) ~ 50 (a=35 30)
-XX29 n	7E 30 30 32 39 20 a 0D		n = -50 (a=2D 35 30) ~ 50 (a=35 30)
-XX30 n	7E 30 30 33 30 20 a 0D		Cyan Gain Blue Bias
-XX31 n	7E 30 30 33 31 20 a 0D		n = -50 (a=2D 35 30) ~ 50 (a=35 30)
-XX32 n	7E 30 30 33 32 20 a 0D		n = -50 (a=2D 35 30) ~ 50 (a=35 30)
-XX33 1	7E 30 30 33 33 20 31 0D		Magenta Gain Yellow Gain
-XX34 n	7E 30 30 33 34 20 a 0D		n = -50 (a=2D 35 30) ~ 50 (a=35 30)
-XX35 1	7E 30 30 33 35 20 31 0D	BrilliantColor™ Gamma	Reset~
-XX35 2	7E 30 30 33 35 20 32 0D		n = 0 (a=30) ~ 10 (a=31 30)
-XX35 3	7E 30 30 33 35 20 33 0D		
-XX35 4	7E 30 30 33 35 20 34 0D		
-XX35 5	7E 30 30 33 35 20 35 0D		
-XX36 1	7E 30 30 33 36 20 31 0D	Color Temp.	Film Video
-XX36 2	7E 30 30 33 36 20 32 0D		Graphics PC
-XX36 3	7E 30 30 33 36 20 33 0D		Blackboard Warm
-XX37 1	7E 30 30 33 37 20 31 0D	Color Space	Medium Cool
-XX37 2	7E 30 30 33 37 20 32 0D		Auto RGB
-XX37 3	7E 30 30 33 37 20 33 0D		YUV
-XX60 1	7E 30 30 36 30 20 31 0D	Aspect Ratio	4:3
-XX60 2	7E 30 30 36 30 20 32 0D		16:9
-XX60 3	7E 30 30 36 30 20 33 0D		16:10
-XX60 4	7E 30 30 36 30 20 34 0D		15:9
-XX60 5	7E 30 30 36 30 20 35 0D		5:4
-XX60 6	7E 30 30 36 30 20 36 0D		Native
-XX60 7	7E 30 30 36 30 20 37 0D		Auto

Appendices

-XX61 n	7E 30 30 36 31 20 a 0D	Overscan	n = 0 (a=30) ~ -3 (a=33)
-XX62 n	7E 30 30 36 32 20 a 0D	Digital Zoom	n = -20 (a=2D 32 30) ~ 100 (a=31 30 30)
-XX63 n	7E 30 30 36 33 20 a 0D	H Image Shift	n = -50 (a=2D 35 30) ~ +50 (a=35 30)
-XX64 n	7E 30 30 36 34 20 a 0D	V Image Shift	n = -50 (a=2D 35 30) ~ +50 (a=35 30)
-XX66 n	7E 30 30 36 36 20 a 0D	V Keystone	n = -40 (a=2D 34 30) ~ 40 (a=34 30)
<hr/>			
-XX70 1	7E 30 30 37 30 20 31 0D	Language	English
-XX70 2	7E 30 30 37 30 20 32 0D		German
-XX70 3	7E 30 30 37 30 20 33 0D		French
-XX70 4	7E 30 30 37 30 20 34 0D		Italian
-XX70 5	7E 30 30 37 30 20 35 0D		Spanish
-XX70 6	7E 30 30 37 30 20 36 0D		Portuguese
-XX70 7	7E 30 30 37 30 20 37 0D		Polish
-XX70 8	7E 30 30 37 30 20 38 0D		Russian
-XX70 9	7E 30 30 37 30 20 39 0D		Swedish
-XX70 10	7E 30 30 37 30 20 31 30 0D		Norwegian/Danish
-XX70 11	7E 30 30 37 30 20 31 32 0D		Greek
-XX70 12	7E 30 30 37 30 20 31 33 0D		Hungarian
-XX70 13	7E 30 30 37 30 20 31 34 0D		Czechoslovak
-XX70 14	7E 30 30 37 30 20 31 35 0D		Simplified Chinese
-XX70 15	7E 30 30 37 30 20 31 36 0D		Japanese
-XX70 16	7E 30 30 37 30 20 31 37 0D		Korean
-XX70 17	7E 30 30 37 30 20 31 38 0D		Turkish
-XX70 18	7E 30 30 37 30 20 31 39 0D		Arabic
-XX70 19	7E 30 30 37 30 20 32 30 0D		Traditional Chinese
-XX70 20	7E 30 30 37 30 20 32 32 0D		Indonesia
<hr/>			
-XX71 1	7E 30 30 37 31 20 31 0D	Orientation	Front-Desktop
-XX71 2	7E 30 30 37 31 20 32 0D		Rear-Desktop
-XX71 3	7E 30 30 37 31 20 33 0D		Front-Ceiling
-XX71 4	7E 30 30 37 31 20 34 0D		Rear-Ceiling
-XX72 1	7E 30 30 37 32 20 31 0D	Menu Location	Top Left
-XX72 2	7E 30 30 37 32 20 32 0D		Top Right
-XX72 3	7E 30 30 37 32 20 33 0D		Centre
-XX72 4	7E 30 30 37 32 20 34 0D		Bottom Left
-XX72 5	7E 30 30 37 32 20 35 0D		Bottom Right
-XX73 n	7E 30 30 37 33 20 a 0D	Signal	Clock n = -5 (a=2D 35) ~ 5 (a=35) By signal
-XX74 n	7E 30 30 37 34 20 a 0D		Phase n = 0 (a=30) ~ -31 (a=33 31) By signal
-XX75 n	7E 30 30 37 35 20 a 0D		H. Position n = -5 (a=2D 35) ~ 5 (a=35) By timing
-XX76 n	7E 30 30 37 36 20 a 0D		V. Position n = -5 (a=2D 35) ~ 5 (a=35) By timing
<hr/>			
-XX82 1	7E 30 30 38 32 20 31 0D	Logo	On
-XX82 0	7E 30 30 38 32 20 33 0D		Off
<hr/>			
-XX100 1	7E 30 30 31 30 30 20 31 0D	Input Search	On
-XX100 0	7E 30 30 31 30 30 20 30 0D		Off
-XX101 1	7E 30 30 31 31 30 21 30 0D	Fan Mode	High Speed
-XX101 0	7E 30 30 31 30 31 20 30 0D		Auto
-XX102 1	7E 30 30 31 30 32 20 31 0D	Information Hide	On
-XX102 0	7E 30 30 31 30 32 20 30 0D		Off
-XX104 1	7E 30 30 31 30 34 20 31 0D	Blank Color	Blue
-XX104 2	7E 30 30 31 30 34 20 32 0D		Black
-XX104 3	7E 30 30 31 30 34 20 33 0D		Red
-XX104 4	7E 30 30 31 30 34 20 34 0D		Green
-XX104 5	7E 30 30 31 30 34 20 35 0D		White
<hr/>			
-XX105 1	7E 30 30 31 30 35 20 31 0D	Advanced	Direct Power On On
-XX105 0	7E 30 30 31 30 35 20 30 0D		Off
-XX106 n	7E 30 30 31 30 36 20 a 0D		Auto Power Off (min) n = 0 (a=30) ~ 180 (a=31 38 30)
-XX107 n	7E 30 30 31 30 37 20 a 0D		Sleep (min) n = 0 , 30, 60 , 90.. 360 (a=30) ~ 360 (a=33 36 30)
-XX113 0	7E 30 30 31 31 33 20 30 0D		Auto Standby (hr) Off
-XX113 1	7E 30 30 31 31 33 20 31 0D		4
-XX113 2	7E 30 30 31 31 33 20 32 0D		6
-XX113 3	7E 30 30 31 31 33 20 33 0D		8
-XX114 1	7E 30 30 31 31 34 20 31 0D	Standby Mode	Normal
-XX114 0	7E 30 30 31 31 34 20 30 0D		Power-Saving
-XX103 1	7E 30 30 31 30 33 20 31 0D	Control Panel Lock	On
-XX103 0	7E 30 30 31 30 33 20 30 0D		Off
<hr/>			
-XX109 1	7E 30 30 31 30 39 20 31 0D	Lamp Life Reminder	On
-XX109 ~0	7E 30 30 31 30 39 20 30 0D		Off
-XX110 1	7E 30 30 31 31 30 20 31 0D	Eco Mode	Off
-XX110 0	7E 30 30 31 31 30 20 30 0D		On
-XX111 1	7E 30 30 31 31 31 20 31 0D	Clear Lamp Hours	Yes
<hr/>			
-XX112 1	7E 30 30 31 31 32 20 31 0D	Reset	Yes

Appendices

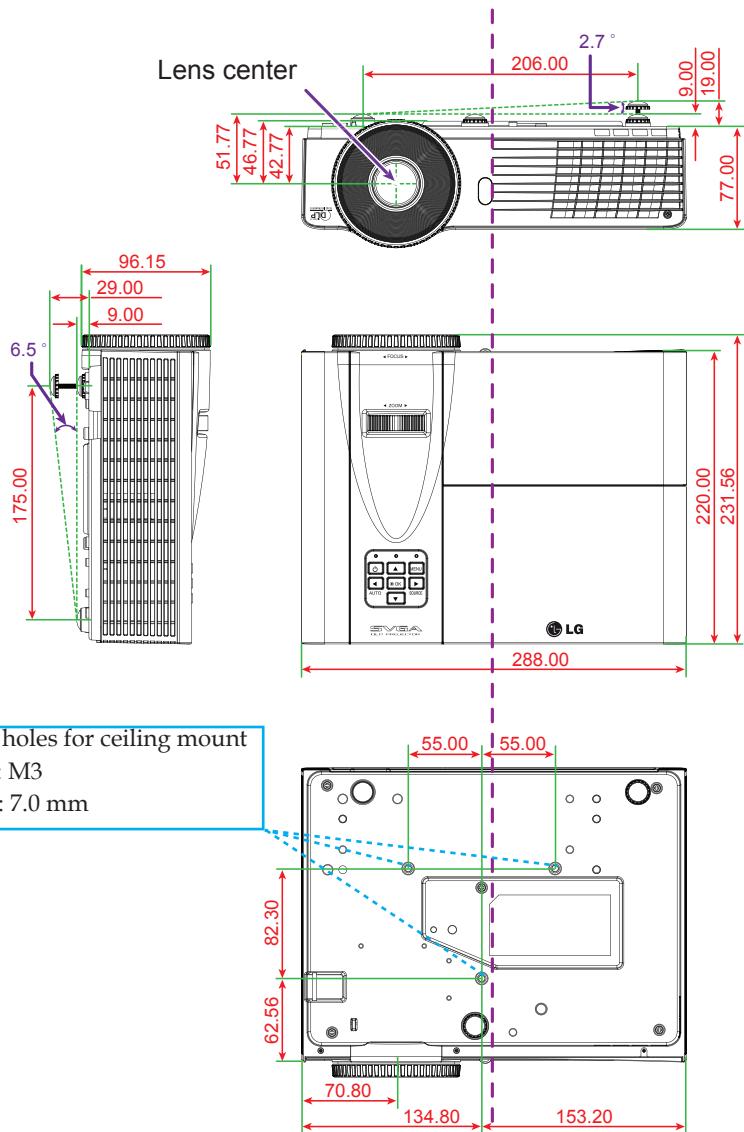
SEND from projector automatically

ASCII Code	HEX Code	Function	Projector Return	Description
		when Standby/Warming/Cooling/Out of Range/Lamp fail/Fan Lock/Over Temperature/Lamp Hours Running Out	INFOn	n : 0/1/2/3/4/5/6/7 = Standby/Warming/Cooling/Out of Range/Lamp fail/Fan Lock/Over Temperature/Lamp Hours Running Out

READ from projector

ASCII Code	HEX Code	Function	Projector Return	Description
-XX121 1	7E 30 30 31 32 31 20 31 0D	Input Source Commands	OKn	n : 0/5/10 No Signal/RGB/Video
-XX122 1	7E 30 30 31 32 32 20 31 0D	Software Version	OKddd	ddd: FW version
-XX123 1	7E 30 30 31 32 33 20 31 0D	Picture Mode	OKn	n : 0/1/2/3/4/5/6/7/8 = No Signal/ Presentation/ High-Bright/ Classroom/ Movie/ sRGB/ Blackboard/User1/User2/
-XX124 1	7E 30 30 31 32 34 20 31 0D	Power State	OKn	n : 0/1 = Off/On (Support the command on standby mode)
-XX125 1	7E 30 30 31 32 35 20 31 0D	Brightness	OKn	
-XX126 1	7E 30 30 31 32 36 20 31 0D	Contrast	OKn	
-XX127 1	7E 30 30 31 32 37 20 31 0D	Aspect Ratio	OKn	n : 0/1/2/3/4/5/6 = 4:3/16:9/16:10/15:9/5:4/Native/AUTO
-XX128 1	7E 30 30 31 32 38 20 31 0D	Color Temp.	OKn	n : 0/1/2 = Warm/Medium/Cool
-XX129 1	7E 30 30 31 32 39 20 31 0D	Orientation Mode	OKn	n : 0/1/2/3 = Front-Desktop/ Rear-Desktop/ Front-Ceiling/ Rear-Ceiling
-XX150 1	7E 30 30 31 35 30 20 31 0D	Information	OKabbccddde	a : 0/1 = Off/On bbb: LampHour cc: source 00/05/10 = No Signal/RGB/Video ddd: FW version e : Display mode 0/1/2/3/4/5/6/7/8 No Signal/ Presentation/ High-Bright / Classroom/ Movie/ sRGB/ Blackboard/ User1/ User2
-XX108 1	7E 30 30 31 30 38 20 31 0D	Lamp Hours Used (Normal)	OKbbbb	bbbb: LampHour
-XX108 2	7E 30 30 31 30 38 20 32 0D	Lamp Hours Used (Eco)	OKbbbb	bbbb: LampHour
-XX108 3	7E 30 30 31 30 38 20 33 0D	Operating Hours	OKbbbb	bbbb: LampHour

Dimensions



Unit: mm

Appendices

Specifications

Resolution (Pixel)	800 x 600
Aspect ratio	4:3
Panel size	0.55" SVGA DMD
Projection distance	1.0~12.0 m (Mechanical travel)
Throw ratio	1.93~2.15, w/Zoom 1.1x
Power supply	AC 100 ~ 240 V @ 50/60 Hz <ul style="list-style-type: none">• 180W Lamp @ Normal operation• 160W Lamp @ ECO operation
Dimension (L x W x H)	220 mm x 288 mm x 77 mm
Weight	2.2 kg
Operation environment	Temperature <ul style="list-style-type: none">• Operating: 5°C ~ 40°C• Storage: -20°C ~ 60°C Humidity <ul style="list-style-type: none">• Operating: 10~85%RH, non-condensing• Storage: 5~95%RH, non-condensing
Connection terminal	Video, VGA-OUT, VGA-IN, RS232 (9pin)

Note

- ❖ The specifications listed are subject to change without notice.

Regulation & Safety Notices

This appendix lists the general notices of your projector.

FCC notice

This device 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 device 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 device does cause harmful interference to radio or television reception, which can be determined by turning the device 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 device and receiver.
- Connect the device into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/television technician for help.

Notice: Shielded cables

All connections to other computing devices must be made using shielded cables to maintain compliance with FCC regulations.

Caution

Changes or modifications not expressly approved by the manufacturer could void the user's authority, which is granted by the Federal Communications Commission, to operate this projector.

Appendices

Operation conditions

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference and
2. This device must accept any interference received, including interference that may cause undesired operation.

Notice: Canadian users

This Class B digital apparatus complies with Canadian ICES-003.

Remarque à l'intention des utilisateurs canadiens

Cet appareil numerique de la classe B est conforme a la norme NMB-003 du Canada.

Declaration of Conformity for EU countries

- EMC Directive 2004/108/EC (including amendments)
- Low Voltage Directive 2006/95/EC
- R & TTE Directive 1999/5/EC (if product has RF function)

Disposal instructions



Do not throw this electronic device into the trash when discarding. To minimize pollution and ensure utmost protection of the global environment, please recycle it.