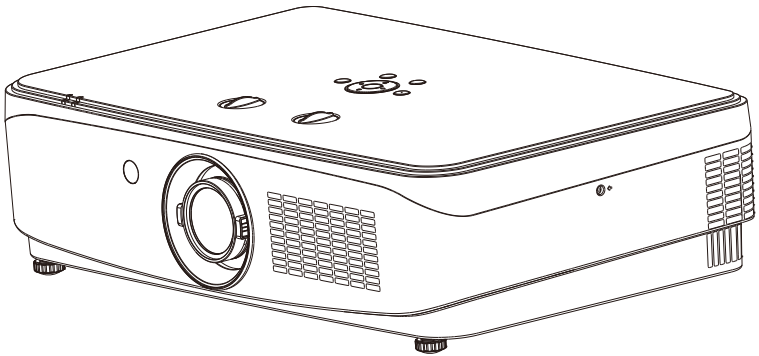


User's Manual

Laser Projector

RL-600X
RL-6500X
RL-600W
RL-6200W
RL-600U
RL-6000U



Thank you for purchasing this product.

Before operating this product, please read this manual carefully and keep it properly for future reference .

Important safety tips	1	TIMER button	34
Precautions for use	8	IMAGE MODE button	34
Part names and functions	12	ASPECT button	34
Terminal panel	13	DISPLAY button	34
Top control panel	14	Menu operation	35
Indicators	15	Direct operation	35
Remote control	16	Auto adjustment	36
Operating range of remote control	17	Horizontal position	36
Placing the projector Adjustable feet	18	Vertical position	36
Connecting to your computer	19	Phase adjustment	37
Connecting to an audio device	20	Image display mode	37
Connecting the AC power cord	24	Clock adjustment	37
Turning on the projector	25	Image size adjustment	38
Adjusting the projector tilt by shifting	27	Image display mode	38
How to operate on-screen menu	28	Selecting video system	39
Menu bar	29	Setup	40
AUTO SETUP function	30	Using Network Control	46
Keystone	31	Security password	47
Volume adjustment	32	Lens shift adjustment range	48
Remote control operation	33	Specification	49
FREEZE button	33	Dimensions	50
SOURCE button	33	Ceiling mounting holes	50
AUTO SETUP button	33	Compatible input signal *1	52
ECO button	33	Compatible input signal *2	53
BLACK SCREEN button	34	Appendix	54

Important Safety Tips !

WARNING : This device must be grounded.

WARNING : To prevent damages that may cause fire or electric shock, do not expose this appliance to rain or moisture.
This device cannot be used in the direct vision area of visual display workplace. To avoid interfering reflection in visual display workplaces, it is strictly forbidden to place this device in direct vision area. According to ISO7779, the sound pressure intensity at the operators position is equal to or less than 70dB(A).

WARNING :

1. Be sure to unplug the power cord from the power outlet if the device is not to be used for a long time.
2. To avoid electric shock, do not open the cover. Please refer to qualified personnel for service.
3. Do not remove the ground terminal of the power plug. This device is equipped with a two-pole grounding type power plug. The plug can only be used with a grounding type power outlet. This is a security feature. If you are unable to insert the plug into the outlet, please contact the electrician. Do not damage the function of the grounding plug.

WARNING : This device complies with the Class A standard of CISPR 32.
This is a Class A information technology device, which may cause radio frequency disturbance when used in residential environment. In this case, the user will be required to take some appropriate countermeasures.

Precautions : To ensure that the product continues to comply with the regulations, please follow the supplied installation instructions. Including: When connecting a computer or peripheral device, the supplied power cord and shielded interface cable are necessary. In addition, any unauthorized changes and modifications to the device may void the user's authority to operate.

WARNING : To avoid fire or electric shock, do not expose this product to rain or moisture.

WARNING : Risk of electric shock, do not open.



Marks on the projector



The lightning mark with an arrow in the equilateral triangle is intended to warn the user of the presence of a non-insulated "dangerous voltage" inside the product, which poses a risk of electric shock to personnel.



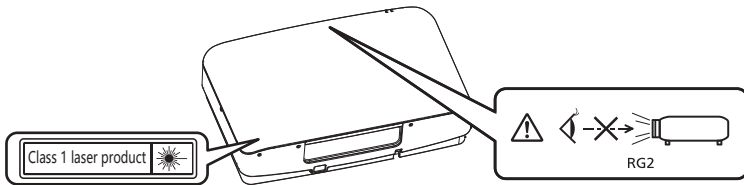
The exclamation mark in the equilateral triangle is a textual description to remind the user of the important operation and maintenance (service) attached to the product.

WARNING : Do not look directly at the light emitted from the lens while using the projector.



Mark on the projector

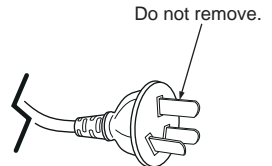
Laser Declaration : This projector complies with the first class of laser products of IEC/EN 60825-1:2014.



Precaution : Use of control, adjustment or execution procedures other than those specified here may result in the leakage of harmful radiation.

Precaution :

This device is equipped with a secondary grounding type power plug. Do not remove the grounding terminal of the power plug. This plug can only be used with grounding type power outlet. This is a security feature. If you are unable to insert the plug into the outlet, please contact the electrician. Do not damage the function of the grounding plug.



Emergency treatment method :

To prevent damage to users and others and loss of life and property, if there is any abnormality occurs, unplug the power cord immediately and stop using it.

Taiwan-limited waste battery recycling logo



Please recycle waste batteries.



WARNING :

POWER

The wall outlet or circuit breakers shall be installed near the device to ensure easy insertion and removal when problems occur. If the following problems occur, cut off the power supply immediately. In these conditions, continued use of the projector will result in fire or electric shock, or will cause visual impairment.

If foreign objects or water get inside the projector, cut off the power supply.

If the projector is dropped or the cabinet is broken, cut off the power supply.

If you notice smoke, strange smells or noise coming from the projector, cut off the power supply.

Please contact an Authorized Service Center for repairs, and do not attempt to repair the projector yourself.

In case of thunderstorms, do not touch the projector and cables, otherwise, it may cause electric shock.

Do not damage the power or the power plug.

Using a damaged power cord may result in electric shock, short circuit or fire.

Do not damage, modify, excessively bend, twist, pull, wind the power cord, or place it close to a hot object or place heavy objects on it.

Do not use the power cord other than the attached power cord, otherwise it will easily cause electric shock or fire.

Note: If the device on the side of the power outlet is grounded without using the supplied power cord, electric shock may occur.

Insert the power plug firmly into the wall outlet and ensure that the power connector is firmly inserted into the projector power supply.

If the plug is not inserted correctly, it may result in electric shock or overheating.

Do not use a damaged power plug or a loose wall outlet.

When the hand is wet, do not touch the power plug or the power connector. Otherwise, it will easily cause electric shock.

Do not overload the wall outlet.

If the power supply is overloaded (ex: excessive power strips inserted), it may cause excessive temperatures or even a fire.

Clean the power plug regularly to prevent being covered by dust, otherwise it may cause a fire. If dust builds up on the power plug, moisture in the dust may affect the insulation effect.

Use/Installation

Do not place the projector on soft materials such as carpets or sponge mats.

Otherwise, it will cause the projector body to overheat, which can cause burns, fire or damage the projector.

Do not install the projector in a place that is damp or dusty, or where the projector may be exposed to oil-smoke or steam.

Using the projector under this condition will result in fire, electric shock or component deterioration. Oil may also distort the plastic and the projector may fall, such as when mounted on a ceiling.

Do not install the projector in a place that is not strong enough to withstand the full weight of the projector or on a sloping, unstable surface. Otherwise, the projector may drop or dump, resulting in personal injury or equipment damage.

Do not install the projector in a place where people pass through.

People may bump into the projector or trip over the power cord, which could result in fire, electric shock, or injury.

WARNING:

Do not cover the intake/exhaust vent. Otherwise, it may cause the projector body to overheat, and cause fire or damage the projector.

- Do not place the projector in narrow, poorly ventilated places.
- Do not place the projector on rag or papers, as these materials could be easily drawn into the intake vent.
- Keep at least 1m (39-3/8") between the exhaust vent and any wall or object, and keep at least 50cm (19-11/16") between the intake vent and any wall or object.

While using the projector, never look directly at the light from the lens or expose the skin to such light.

Do not use optical devices (such as magnifiers or mirrors) to enter the projection beam. Doing so may result in burns or impaired vision.

- The projector lens emits strong light. Do not look directly at this light or expose your hands directly to this light.
- Please take special care not to allow children to look directly into the lens. In addition, when you leave the projector, turn off the power and mains.

Do not attempt to refit or disassemble the projector.

High voltage may cause accidents such as fire or electric shock.

● For any check, adjustment and repair work, please contact the designated service center.

Please avoid metal objects, combustibles or liquids from entering the projector. Do not wet the projector. Failure to do so may result in a short circuit or excessive temperature, which may result in fire, electric shock, or projector malfunction.

- Do not place containers of liquid or metal objects near the projector.
- If liquid enters the projector, consult your dealer.
- Please pay special attention to children.

Please use the specified ceiling mount bracket.

Using a non-designated ceiling mount bracket may cause the machine to fall.

- Install the attached safety cable on the ceiling mount bracket to prevent the projector from falling down.

Installation work should only be carried out by qualified technicians, such as mounting the projector on the ceiling.

If the installation is not properly fixed, it may cause personal injury or electric shock.

● ACCESSORIES

Please use or discard the battery properly and refer to the following instructions.

Otherwise, it may cause burns, battery leakage, overheating, explosion or fire.

- Use specified batteries.
- Do not charge dry batteries.
- Do not disassemble dry batteries.
- Do not heat the battery or immerse the battery in water or throw it into the fire.
- Do not touch the + and - terminals of the battery with metal objects such as necklaces or hairpins.
- Do not store or carry the battery together with metal objects.
- Please store the batteries in plastic bags and keep them away from metal objects.
- When loading the battery, make sure that the polarity (+ and -) is connected correctly.
- Do not mix old and new batteries or different types of batteries.
- Do not use batteries that have been peeled off.

If the battery leaks, do not touch the leakage directly with your hand and take the following measures if necessary.

- If the skin or clothing comes into contact with the liquid of the battery, it may cause redness or damage to the skin. Rinse immediately with clean water and seek medical advice.
- If the battery leaks into the eye, it may lead to blindness. In this case, please do not rub your eyes. Please rinse immediately with water and seek medical advice.

Do not let the children reach the batteries.

Accidental swallowing of accessories can cause physical harm.

- If swallowed by mistake, seek medical advice immediately.

Remove the depleted batteries from the remote control promptly.

- Leaving depleted batteries in remote controller may lead to leakage, abnormal rise of internal temperature and even explosion of the batteries.

PRECAUTION

● POWER

When unplugging the power cord, be sure to hold the power plug and power connector. If the power cord is pulled, it may damage the wire and cause fire, short circuit or serious electric shock.

When not using the projector for a long time, pull the power plug from the wall outlet. otherwise, it may result in fire or electric shock.

Before replacing the projection lens, be sure to turn off the power and pull the power plug from the wall socket.

- Unexpected projection may cause injury to eyes.
- Replacing the projection lens without pulling the power cord may cause electric shock.

Pull the power plug from the wall outlet before cleaning or replacing any components, otherwise it may lead to electric shock.

- Use/Installation

Do not place any heavy object on the top of the projector. Doing so may cause the projector to be unstable or fall, resulting in personal injury or equipment damage, and the projector may be damaged or deformed.

Do not sit on the projector. Doing so may break or damage the projector and cause injuries.

- Do not let children stand or sit on the projector.

Do not place the projector in extremely hot places. Doing so may cause the cabinet or internal components to deteriorate, or result in fire.

- Take extra care when exposed to direct sunlight or near an electric heater.

While shifting the lens, do not put your hand into the opening beside the optical lens, as this may result in injury.

Do not place the projector in a location that may be affected by salt or corrosive gases, as it may fall due to corrosion. In addition, corrosion may also cause malfunctions.

When using the projector, do not stand in front of the lens, as it may cause damage and burn clothes.

- Strong light is emitted from the projector lens.

Do not place objects in front of the lens when using the projector. Do not block the projection by placing objects in front of the projection lens. Doing so may cause fire or damage the objects and may cause malfunction of the projector.

- Strong light is emitted from the projector lens.

Remove all cables from the projector before moving the projector. Moving the projector without removing the cables may damage the cables, leading to fire or electric shock.

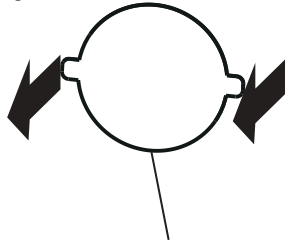
When mounting the projector to the ceiling, keep mounting screws and power cord from contact with the metal components inside the ceiling. Contact with metal elements inside the ceiling can cause electric shock.

- Accessories

When not using the projector for a long time, remove the batteries from the remote control. Failure to do so may cause the batteries to leak, overheat, catch fire or explode, which may lead to fire or contamination of the surrounding area.

Lens Protection Material

To protect the projection lens from vibration during transportation, the lens protection material has been attached to the product at the time of purchase. Remove the lens protection material before use and store it for future use. Move the lens to its original position and the attach lens protection material when transporting.



Lens protection material

Transporting Precautions

- When transporting the projector, firmly hold the bottom of the projector to avoid excessive vibration and impact. This can damage internal components and cause malfunctions.
- When transporting the projector, the adjustable feet should be retracted, otherwise the adjustable feet may be damaged.

Safety Precautions

- Do not install the projector outdoors.
The projector is designed for indoor use only.
Do not install the projector in the following locations.
- Places subject to vibration and impacts : For example, in a vehicle such as a car, it may damage internal components or cause equipment failure.
- Near the sea or where there may be corrosive gases. The projector may fail due to corrosion and it may also shorten component life and cause malfunction.
- Near the exhaust of air conditioning : Depending on the use conditions, the screen may jitter rarely due to the heated air from the exhaust vent or the cool and hot air from the air conditioner. Make sure that the exhaust gas from projector or other equipment or the air from air conditioner does not blow directly to the front of the projector.
- Places of severe temperature change : For example, near the light source (projection lamp). It may shorten the light source life, or the projector may be deformed by heat, which may cause malfunction. The projector operating environment temperature should be followed.
- Near high-voltage wire or near the motor : Doing so may interfere with the projector.
- Ask a qualified technician or dealer for installation work such as mounting the projector to the ceiling.
- To ensure the projector performance and safety, ask a qualified technician or dealer when installing to the ceiling or high.
- Have a qualified technician or dealer install the connection cable.
- If the cable transmission characteristics cannot be obtained due to improper installation, image and sound interruption may occur.
- If there are strong radio waves from broadcast stations or radios around, the projector may not work properly.
If there are any facilities or equipment that output strong radio waves near the installation location, install the projector away from such radio sources. In addition, you can wrap the LAN cable connected to the terminal with a piece of metal foil or a metal tube with both ends grounded.

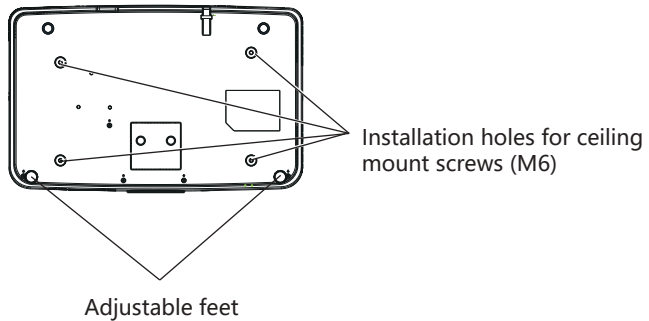
- **Focus Adjustment**

When turning on the projector, the high-transparency projection lens is easily affected by the illumination of the light source, resulting in unstable focus.

It is recommended to adjust the lens focus after continuously projecting the image for at least 30 minutes.

- Do not install the projector at an altitude of 2700M(8858")or higher.
- Do not use the projector where the ambient temperature is above 45°C (113°F). Using projectors in a location where the altitude is too high or the operating environment temperature is too high may shorten the life of components or lead to equipment malfunctions.
- Precautions when installing the projector
- Adjustable feet are only used to mount on the floor and adjust the angle. Using them for other purposes may damage the projector.
- When installing the projector, use the four screw holes for ceiling mount to fix the projector,except for floor installation with adjustable feet or ceiling mount.
- (Screw diameter: M6, Screw hole depth inside the projector: 12mm(15/32"), Screw locking torque 4±0.5N.m)

Positions of screw holes for ceiling mount and adjustable feet



Do not stack multiple projectors up and down.

- Do not use the projector supporting it by the top.
- Do not block the vents (intake and exhaust) of the projector.
- Avoid cool and hot air from air conditioning system blowing directly to the vents (intake and exhaust) of the projector.
- Do not install the projector in a small space.
If a projector is to be installed in a small space, air conditioning or ventilation devices should be installed separately. In case of poor ventilation, accumulated waste heat may trigger the protection circuit of the projector.
- The company takes no responsibility for any damage to the projector due to improper selection of the installation site, even within the effective warranty period.

Security

When using this product, take safety measures for the following events.

- Personal information leakage caused by this product.
- Unauthorized operation of this product by a malicious third party. Interfering or stopping of this product by a malicious third party.
- Take adequate security measures.
Set your password difficult to guess as much as possible.
- Change your password regularly.
- The company and its affiliates do not ask the customer directly for the password.
- Do not give your password when received such inquiries.
- The connection network must be protected by a firewall or other software. Set a password for network control and limit the users who can log in.

Disposal

To dispose of the product, ask your local authorities or dealer for correct product disposal methods. Also, do not disassemble this product when disposing of it.

Storing

Store the projector in a dry room.

Precautions for use

- To get a good picture quality
After creating a suitable environment, you can see good images with higher contrast. Pull down the curtains or blinds and close any light bulbs near the screen to avoid direct exposure of outdoor or indoor lights to the screen.
- Do not touch the surface of the projection lens directly with your hands.
If the surface of the projection lens is dirty by fingerprints or other objects, such dirt will be magnified and projected onto the screen.
- LCD panel
LCD panels are manufactured with very high precision technology, but in very few cases, there may be disappearance or constant illumination of pixels.

Please note that these phenomena are not malfunctions.

Also, when a still image is projected for a long time, the residual image may remain on the image of the LCD panel, in which case the whole white image will appear for an hour or more. Note that residual images may not disappear completely.

Optical parts

When used in environments where the ambient temperature is high or with a large amount of dust or cigarette smoke, the replacement cycle of optical parts such as LCD panels or polarizers may be shortened even if it is used for less than one year. For more information, please consult your dealer.

Light source

The light source of the projector is laser.

- Connections with computers and external devices

When connecting a computer or an external device, please read the instructions carefully about the use of power cords and shielded cables in this manual.

Disposal information in other countries outside the European Union.



Such symbols are valid only in the European Union.

To discard this product, please contact your local authorities or dealer to get the correct disposal method.



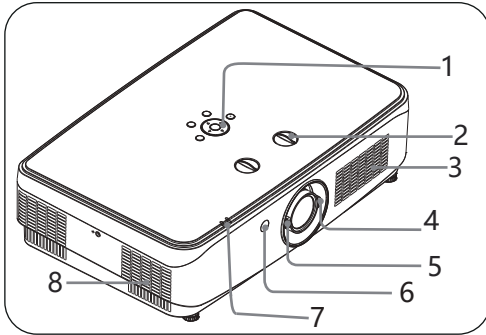
- Indication of restricted substances containment

Unit	Restricted substances and their chemical symbols					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent chromium (Cr ⁶⁺)	Polybrominated biphenyl (PBB)	Polybrominated diphenyl ether (PBDE)
Print circuit board	—	○	○	○	○	○
Projection lens	—	○	○	○	○	○
Projection light source	○	○	○	○	○	○
Cabinet	○	○	○	○	○	○
Mechanical parts	—	○	○	○	○	○
Remote control	○	○	○	○	○	○
Other accessories	○	○	○	○	○	○

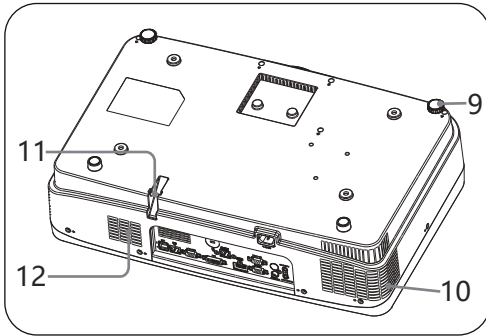
Remark 1. "○" only means that the percentage content of the restricted substance does not exceed the reference value of the percentage content.

Remark 2. "—" refers only to the restricted substance as an exclusion item.

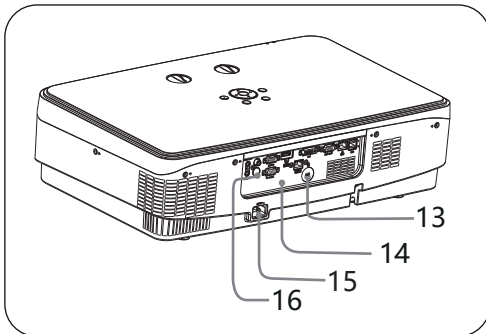
Part names and functions



- ① Control Panel
- ② Lens Shift Dial
- ③ Intake Vent+Speaker
- ④ Zoom Ring
- ⑤ Focus Ring
- ⑥ Front Remote Sensor
- ⑦ Status Indicators
- ⑧ Exhaust Vent



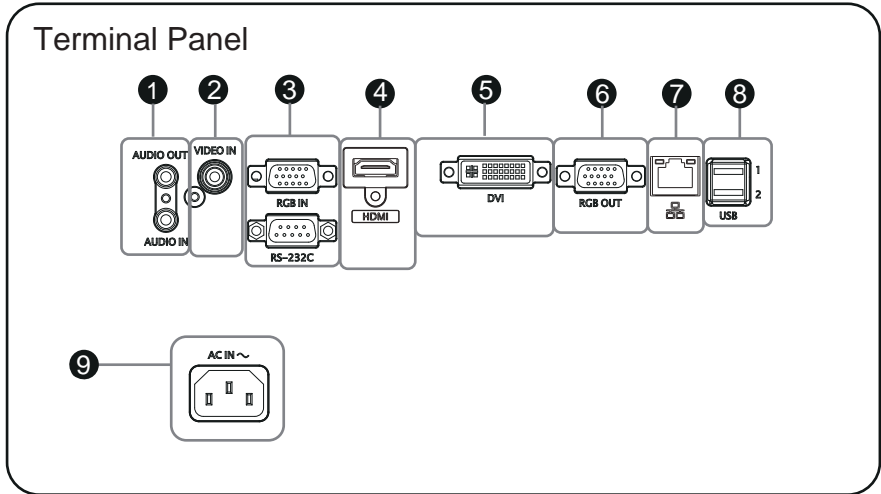
- ⑨ Adjustable Foot
- ⑩ Exhaust Vent
- ⑪ Security Bar
- ⑫ Intake Vent



- ⑬ Security Lock
- ⑭ Terminal Panel
- ⑮ Power Socket
- ⑯ Rear Remote Sensor

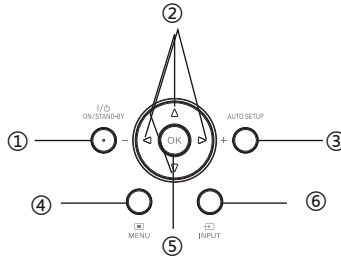
CAUTION

Do not place anything around the vents, as it may cause internal heat build-up. Do not place your hands or deformable objects (plastic, etc.) near the ventilation holes or around the projector as it may result in damage or personal injury.



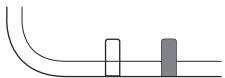
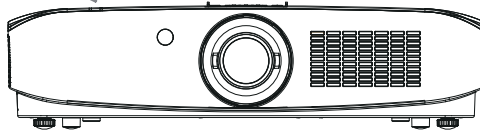
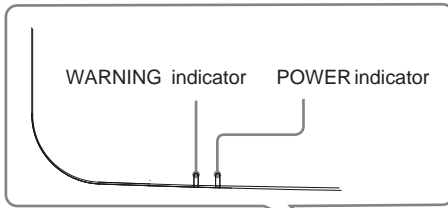
- | | |
|--|--|
| <p>① AUDIO IN
Connect the computer audio signal to this terminal.</p> <p>AUDIO OUT
Connect an external audio device to this terminal.</p> <p>② VIDEO IN
Connect the video output signal to this terminal.</p> <p>③ RGB IN
Connect the computer output RGB signal to this terminal.</p> <p>RS-232C
RS-232C compatible control interface. Connect the RS-232C interface of the computer to the RS-232C cross cable.</p> <p>④ HDMI
Connect the HDMI output signal to this terminal.</p> | <p>⑤ DVI
Connect the DVI digital output signal to this terminal.</p> <p>⑥ RGB OUT
Connect an external display device.</p> <p>⑦ LAN
Connect the network cable.</p> <p>⑧ USB Port (Type A)
When using the [USB DIAPLAY] function, connect the USB storage device to this terminal.</p> <p>⑨ AC IN (~) Socket
Connect the supplied power cord.</p> |
|--|--|

Top Control Panel



- ① **POWER Button**
Turn on or off the projector.
- ② **▲▼▶◀/VOL-/VOL+ Buttons**
 - Select an item or adjust the data in the on-screen menu.
 - Adjust the volume.
- ③ **AUTO SETUP Button**
Perform the settings that were set automatically, including [SOURCE SEARCH], [AUTO PC ADJUST] and [AUTO KEYSTONE].
- ④ **MENU Button**
Turn on or off the on-screen menu.
- ⑤ **OK Button**
 - Enter the menu operation.
 - Perform the selected item.
- ⑥ **INPUT Button**
Select the input source.

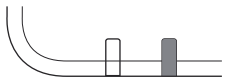
Indicators



(Off) (Red light on)

Standby

The projector is connected to the power supply and in standby mode.



(Off) (Green light on)

Power on mode

The projector is ready for projection.

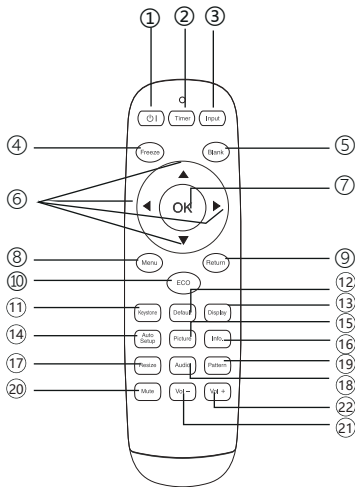


(Off) (Blink in green)

Sleep mode

Get into Sleep mode after no signal input for a period of time.

Remote Control



① **⏻ Button**
Turn on or off the projector.

② **TIMER Button**
Turn on or off the timer.

③ **SOURCE Button**
Go to source selection.

④ **FREEZE Button**
Go into Freeze mode.

⑤ **BLACK SCREEN Button**
Go into black screen mode.

⑥ **◀▶▲▼ Buttons**
Select items or adjust the date in the on-screen menu.

⑦ **OK Button**
Enter the selected menu or perform the selected adjustment item.

⑧ **MENU Button**
Open or close on-screen menu.

⑨ **EXIT Button**
Return to the upper menu.

⑩ **ECO Button**
Go into ECO mode.

⑪ **KEYSTONE Button**
Perform keystone correction.

⑫ **DEFAULT Button**
Go into default mode.

⑬ **DISPLAY Button**
Display source information.

⑭ **AUTO SETUP Button**
Go into AUTO SETUP.

⑮ **IMAGE MOGE Button**
Select the image mode.

⑯ **INFO Button**
Display the projector information menu.

⑰ **ASPECT Button**
Select an aspect ratio mode.

⑱ **SOUND MODE Button**
Select sound mode.

⑲ **TEST PATTERN Button**
Go into test pattern mode.

⑳ **MUTE Button**
Go into mute mode.

㉑ **VOL -**
Decrease the volume.

㉒ **VOL +**
Increase the volume.

Remote Control Operation



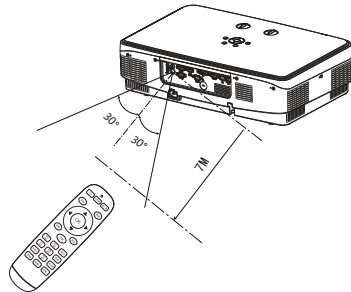
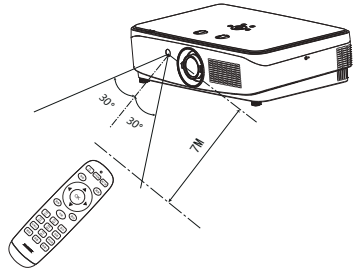
To ensure safe operation, please observe the following items:

- Use 2 AAA alkaline batteries.
- Replace both batteries at the same time.
- Do not use a new battery and an old battery at the same time.
- Avoid contact with water or other liquids.
- Do not place the remote control in a damp or hot environment.
- Do not drop the remote control.
- If the battery fluid leaks in the remote control, clean the battery case carefully and install new batteries.
- There is a danger of explosion if using batteries of other types than specified in this manual.
- Dispose of used batteries according to the instructions on batteries or local disposal regulations or guidance.

Operating Range of Remote Control

When operating, point the remote control at the remote sensing window of the projector (front and rear).

The maximum operating range of the remote control is 7 meters in linear distance and 30 degrees in front of and behind the projector.



Placing the Projector

- Since the indoor brightness can significantly affect the effect of the projection image, it is recommended to limit the indoor light in order to obtain the best image.
- The approximate values shown in the figure below may differ from the actual sizes.

Projection Distance Tables

RL-6500X

Screen	Minimum Distance (Maximum zoom)	Maximum Distance (Minimum zoom)
X(inch)	Y(m)	Y(m)
30"	0.70	1.12
80"	1.87	3.00
100"	2.30	3.70
150"	3.50	5.60
200"	4.70	7.50
300"	7.00	11.04

RL-600X (4:3 aspect ratio)

Screen size (inch)	min. (wide) (meters)	max.(tele) (meters)
30"	0.72	1.19
60"	1.49	2.43
80"	2.00	3.26
100"	2.50	4.09
120"	3.01	4.92
150"	3.77	6.17
180"	4.54	7.41
200"	5.04	8.23
300"	7.59	12.39

RL-6200W

Screen	Minimum Distance (Maximum zoom)	Maximum Distance (Minimum zoom)
X(inch)	Y(m)	Y(m)
30"	0.68	1.09
80"	1.81	2.89
100"	2.26	3.61
150"	3.39	5.43
200"	4.53	7.24
300"	6.78	10.84

RL-600W (16:10 aspect ratio)

Screen size (inch)	min. (wide) (meters)	max.(tele) (meters)
30"	0.71	1.17
60"	1.46	2.39
80"	1.96	3.20
100"	2.46	4.02
120"	2.96	4.83
150"	3.70	6.05
180"	4.45	7.27
200"	4.95	8.09
300"	7.45	12.16

RL-6500U

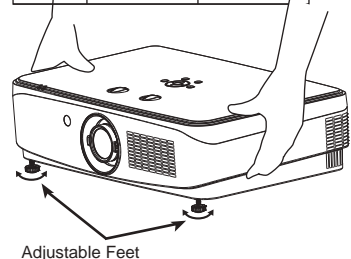
Screen	Minimum Distance (Maximum zoom)	Maximum Distance (Minimum zoom)
X(inch)	Y(m)	Y(m)
30"	0.68	1.09
80"	1.81	2.89
100"	2.26	3.61
150"	3.39	5.43
200"	4.53	7.24
300"	6.78	10.84

RL-600U(16:10 aspect ratio)

Screen size (inch)	min. (wide) (meters)	max.(tele) (meters)
30"	0.71	1.17
60"	1.46	2.39
80"	1.96	3.20
100"	2.46	4.02
120"	2.96	4.83
150"	3.70	6.05
180"	4.45	7.27
200"	4.95	8.09
300"	7.45	12.16

Adjustable Feet

The projector can be raised to 40mm using adjustable feet. Rotate the adjustable feet and tilt the projector to a proper height. To raise the projector, turn the two feet clockwise. To lower the projector or to retract the adjustable feet, turn the two feet counterclockwise.

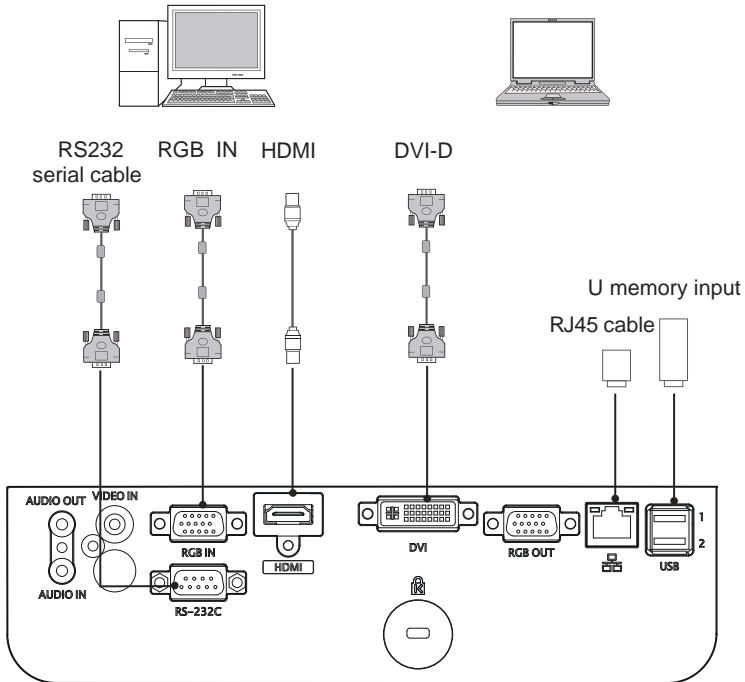


Connecting to Your Computer

Cables for connection

- DVI-D cable *
- RS232 serial cable *
- HDM I cable*
- RS232 serial cable *
- USB memory device*

(*: This projector is not equipped with this cable.)



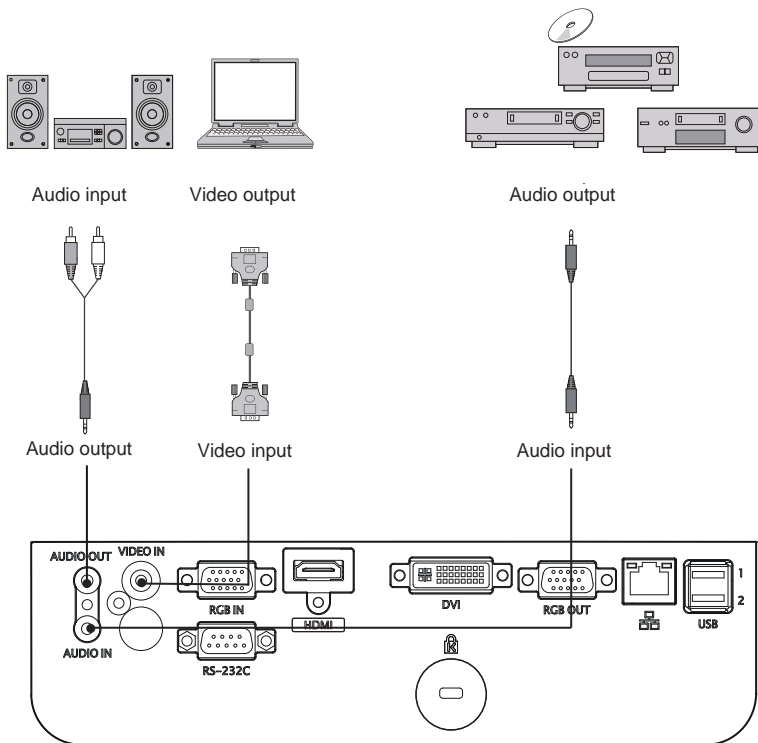
When connecting the cable, unplug the power cord of the projector and external devices from the power outlet.

Connecting to an Audio Device

Cable for connection

- Audio cable *
- (*: This projector is not equipped with this cable.)
-

External audio devices



When connecting the cable, unplug the power cord of the projector and external devices from the power outlet.

Video Decoder Support List

O refer to support
X refer to NOT support

File Extension	Container	P/N	Video Decoder	Resolution	Frame/Sec	
*.avi	AVI	DivX	Divx 3.11	1920x1080	30	O
		DivX	Divx 4.x	1920x1080	30	O
		DivX	Divx 5.1	1920x1080	30	O
		MPEG 1/2/4	XviD	1920x1080	30	O
		MPEG 1/2/4	MPEG1	768x576	30	O
		MPEG 1/2/4	MPEG2 MP@HL	1920x1080	30	O
		H.264	H.264 BP LV 4.0 (**2)	1920x1080	30	O
		H.264	H.264 MP LV 4.0	1920x1080	30	O
		H.264	H.264 HP LV 4.0	1920x1080	30	O
		MPEG 1/2/4	MPEG-4 SP@HL 3.0	1920x1080	30	O
		MPEG 1/2/4	MPEG-4 ASP@HL 4.0 (**1)	1920x1080	30	O
*.wmv *.asf	ASF	Generic(MTK)	Motion JPEG	(**4)	30	O
		VC1	Window Media Video v9	1920x1080	30	O
		DivX	Divx 3.11	1920x1080	30	O
		MPEG 1/2/4	XviD	1920x1080	30	O
		MPEG 1/2/4	MPEG-4 SP@HL 3.0	1920x1080	30	O
		MPEG 1/2/4	MPEG-4 ASP@HL 4.0 (**1)	1920x1080	30	O
		VC1	VC-1	1920x1080	30	O
*.mp4 *.mov *.3gp	MP4	H.264	H.264 BP LV 4.0 (**2)	1920x1080	30	O
		H.264	H.264 MP LV 4.0	1920x1080	30	O
		H.264	H.264 HP LV 4.0	1920x1080	30	O
		MPEG 1/2/4	MPEG-4 SP@HL 3.0	1920x1080	30	O
		MPEG 1/2/4	MPEG-4 ASP@HL 4.0 (**1)	1920x1080	30	O
		MPEG 1/2/4	H.263	1408x1152	30	O
		Generic(MTK)	Motion JPEG (*.mov only)	(**4)	30	O
*.mkv	MKV	H.264	H.264 BP LV 4.0 (**2)	1920x1080	30	O
		H.264	H.264 MP LV 4.0	1920x1080	30	O
		H.264	H.264 HP LV 4.0	1920x1080	30	O
		MPEG 1/2/4	MPEG-4 SP@HL 3.0	1920x1080	30	O
		MPEG 1/2/4	MPEG-4 ASP@HL 4.0 (**1)	1920x1080	30	O
		VC1	Window Media Video v9	1920x1080	30	O
		DivX	Divx 3.11	1920x1080	30	O
		DivX	Divx 4.x	1920x1080	30	O
		DivX	Divx 5.x	1920x1080	30	O
		VP8	VP8	1920x1080	30	X
		VC1	VC-1	1920x1080	30	O
		MPEG 1/2/4	MPEG1	768x576	30	O
		*.mpg *.mpeg *.vro *.vob	PS (Program Stream)	MPEG 1/2/4	MPEG2 MP@HL	1920x1080
MPEG 1/2/4	MPEG2 MP@HL			1920x1080	30	O
Others (ts)	TS (Transport Stream)	MPEG 1/2/4	MPEG2 MP@HL	1920x1080	30	O
		VC1	VC-1	1920x1080	30	O
		H.264	H.264 BP LV 4.0 (**2)	1920x1080	30	O
		H.264	H.264 MP LV 4.0	1920x1080	30	O
		H.264	H.264 HP LV 4.0	1920x1080	30	O
		H.264	H.264 MVC	1920x1080	(**8)	X
.rm	RM	AVS	AVS Jizhun Profile LV 6.0	1920x1080	30	O
		RM	Legacy (rv10, rv13)	1920x1080	30	X
		RM	RV G2 (rv20)	1920x1080	30	X
		RM	RV 8 (rv30)	1920x1080	30	O
		RM	RV 9 (rv40)	1920x1080	30	O
		RM	RV 10 (rv40)	1920x1080	30	O
.OGM	OGG	MPEG 1/2/4	MPEG2 MP@HL	1920x1080	30	X
		MPEG 1/2/4	MPEG-4 SP@HL 3.0	1920x1080	30	X
		MPEG 1/2/4	MPEG-4 ASP@HL 4.0 (**1)	1920x1080	30	X
.FLV	FLV(**4)	Sorenson		352x288	30	X
		VP6 (**7)		1920x1080	30	X
		H.264	H.264 BP LV 4.0 (**2)	1920x1080	30	X
		H.264	H.264 MP LV 4.0	1920x1080	30	X
		H.264	H.264 HP LV 4.0	1920x1080	30	X

Note:

1 For MPEG4 ASP profile, B-VOP and 4MV are supported. GMC is supported but only one point is allowed.

2 For H.264 BP profile, No support for FMO, ASO & redundant slice.

Audio Decoder Support List

O refer to support

X refer to NOT support

P refer to planning (under development)

File Extension	Container	PN	Audio Decoder (For MM Video)	
*.avi	AVI	Generic(MTK)	wav: PCM / ADPCM / A-law PCM / u-law PCM	O(**5)
		Generic(MTK)	MPEG1 Layer1/2	O
		Generic(MTK)	MP3 (MPEG1 Layer3)	O
		H.264	MPEG2 AAC(AAC-LC)	O
		H.264	MPEG4 AAC-LC	O
		H.264	MPEG4 HE-AAC	O
		Dolby AC3 (DD)	AC3	O
*.wma *.wmv *.asf	ASF	Generic(MTK)	WMA v8	O
		Generic(MTK)	WMA v8	O
		Generic(MTK)	MP3 (MPEG1 Layer3)	O
		Generic(MTK)	WMA v9	O
		Generic(MTK)	WMA Pro	O
*.mp4 *.3gp	MP4	Generic(MTK)	MPEG1 Layer1/2	O
		Generic(MTK)	MP3 (MPEG1 Layer3)	O
		H.264	MPEG2 AAC(AAC-LC)	O
		H.264	MPEG4 AAC-LC	O
		H.264	MPEG4 HE-AAC	O
			AMR-NB, AMR-WB	X
*.mpg *.mpeg *.vro *.vob	PS	Generic(MTK)	MPEG1 Layer1/2	O
		Generic(MTK)	MP3 (MPEG1 Layer3)	O
		Dolby AC3 (DD)	AC3	O
		Generic(MTK)	DVD LPCM	O
		Dolby AC3 (DD)	Dolby Digital EX, Dolby Digital Plus, Dolby TrueHD	O
Others (ts)	TS		DTS	O
			DTS, DTS HD	O
		Generic(MTK)	MPEG1 Layer1/2 (MPEG2)	O
		H.264	MPEG2 AAC(AAC-LC) (H.264)	O
		H.264	MPEG4 AAC-LC (H.264)	O
		H.264	MPEG4 HE-AAC (H.264)	O
		Dolby AC3 (DD)	AC3 (MPEG2, ATSC, H.264)	O
		Dolby EAC3 (DDCO)	Dolby Digital Plus (H.264)	O
		Generic(MTK)	DVD LPCM	O
		Dolby EAC3 (DDCO)	Dolby Digital Plus, Dolby lossless	O
		DTS	DTS, DTS HD, DTS HD LBR	O
Generic(MTK)	DRA	O		
*.rm	RM	Dolby AC3 (DD)	dnet: AC3 (RealAudio3)	O
		Generic(MTK)	cook: COOK (RealAudio6)	O
		H.264	raac: MPEG4 AAC-LC (RealAudio9)	O
		H.264	racp: MPEG4 HE-AAC (RealAudio10)	O
*.flv	FLV	Generic(MTK)	MPEG1 Layer1/2	O
		Generic(MTK)	MP3 (MPEG1 Layer3)	O
		H.264	MPEG2 AAC(AAC-LC)	O
		H.264	MPEG4 AAC-LC	O
		H.264	MPEG4 HE-AAC	O
*.mkv	MKV	Generic(MTK)	wav: PCM / ADPCM / A-law PCM / u-law PCM	O(**5)
		Generic(MTK)	MPEG1 Layer1/2	O
		Generic(MTK)	MP3 (MPEG1 Layer3)	O
		H.264	MPEG2 AAC(AAC-LC)	O
		H.264	MPEG4 AAC-LC	O
		H.264	MPEG4 HE-AAC	O
		Dolby AC3 (DD)	AC3	O
		Generic(MTK)	WMA v8	O
			DTS	O
*.flac	FLAC	Generic(MTK)	VORBIS	X
			FLAC	X

Image Decoder Support List

O refer to support

X refer to NOT support

SW refer to software decoder

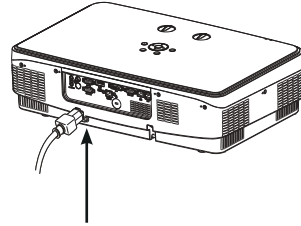
P refer to planning (under development)

File Extension	Container	Audio Decoder (For MM Video)	
*.jpg	JPEG	baseline	O (H/W)
		progressive	O (H/W)
*.bmp	BMP	(Note 1**)	O (S/W)
*.png	PNG	(Note 2**)	O (S/W)
*.gif	GIF	static	O (S/W)
		animation	O (S/W)

Connecting the AC Power Cord

The projector uses an AC power supply with standard voltage of 100-240V, which can automatically adapt to different input voltages. This unit uses single-phase power system with neutral grounding conductor.

To avoid the risk of electric shock, do not use any other type of power system. If you are uncertain of the type of power supply you are using, consult an authorized dealer or service station. Connect all the peripherals before turning on the projector.



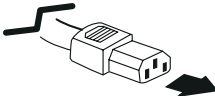
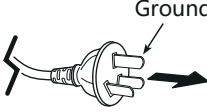
Connect the AC power cord (supplied) to the projector.

CAUTION:

The AC power outlet should be close to the projector and easy to plug and unplug.

✓ CAUTION:

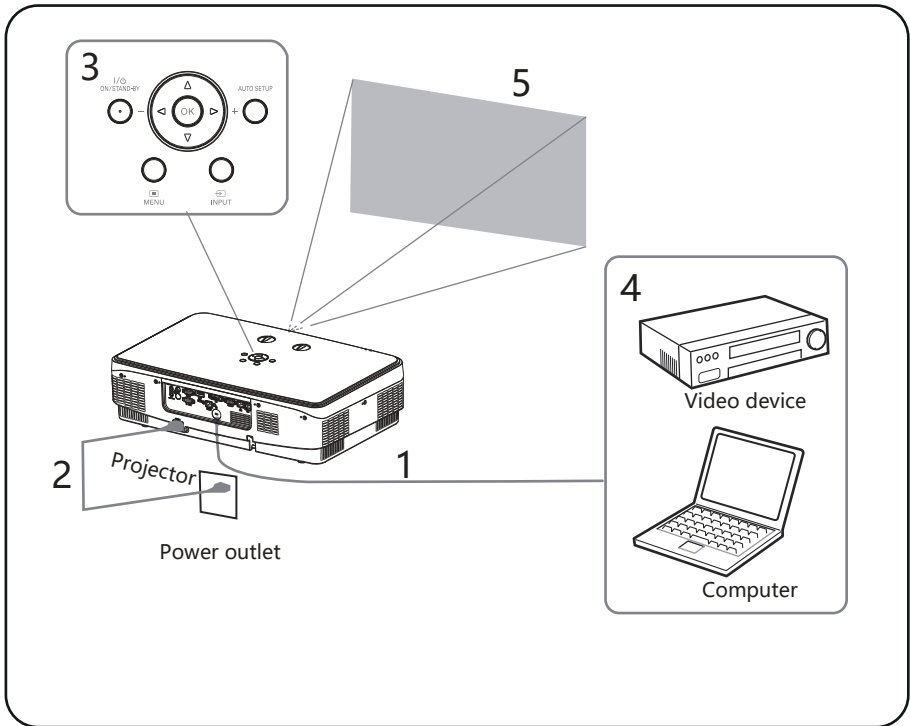
For your safety, unplug the AC power cord when not using the projector. The projector is in standby mode and consumes a little power when connected to an outlet with an AC power cord.

Precautions for power cord The AC power cord must meet the requirements of the country or area where the projector is used. Make sure that the type of AC power plug is the same as the figure below, and always use the correct AC power cord. If the supplied AC power cord does not match the AC outlet you use, contact your dealer.	
Projector terminal	Terminal which connects to AC power outlet
 <p>Connect to the power cord port of the projector</p>	 <p>Ground</p> <p>Connect to AC power outlet</p>

✓ CAUTION:

- Use of incorrect cables may affect the product performance, and may even lead to accidents such as electric shock or fire. To ensure product performance and safety, use the same type of cable as the original cable.
- Common connection cables include AC power cords, audio cables, video cables, serial control cables, etc.

Turning On the Projector



Complete the connection of external devices first before turning on the projector.

Connect the AC power cord to the AC outlet.

The power indicator lights up in red.

Press  button to turn on the projector.

Turn on the connected devices.

Select the input source.

Press the input selection button of INPUT on the projector to display the input source switching menu on the screen. Press OK button repeatedly to select the device channel you want to project.

When projecting a computer image, switch the computer output to external display.

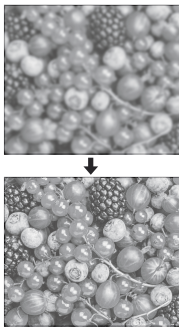
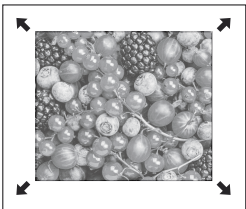
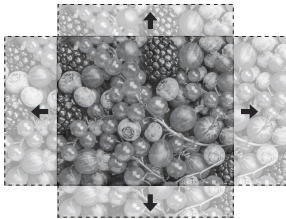
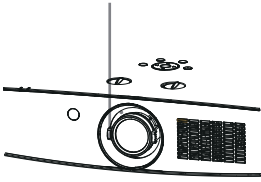
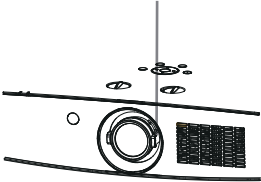
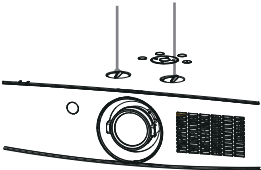
Output switching method varies according to computer types.

(example)



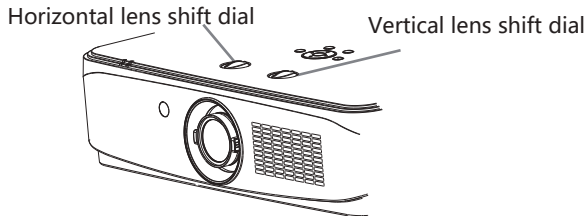
Adjust the focus, size and position of the projected image.

Adjust the focus, size and position of the projected image.

Focus	Size (Zoom)	Position (Lens shift)
 A diagram showing two images of a bunch of grapes. The top image is blurry, and the bottom image is sharp. A downward-pointing arrow indicates the transition from out-of-focus to in-focus.	 A diagram showing a central image of grapes surrounded by four arrows pointing outwards from the corners, indicating that the image size can be increased or zoomed out.	 A diagram showing a central image of grapes surrounded by four arrows pointing up, down, left, and right, indicating that the image position can be shifted in any direction.
<p data-bbox="172 1042 273 1066">Focus ring</p>  A diagram of the projector's front panel showing a circular focus ring on the left side of the lens assembly.	<p data-bbox="524 1046 624 1070">Zoom ring</p>  A diagram of the projector's front panel showing a circular zoom ring on the left side of the lens assembly.	<p data-bbox="751 1046 995 1091">Horizontal lens shift dial Vertical lens shift dial</p>  A diagram of the projector's front panel showing two dials on the right side of the lens assembly: a horizontal lens shift dial and a vertical lens shift dial.

Adjusting the Projector Tilt by Shifting

The position of projection image can be adjusted by turning the lens shift dials (horizontal lens shift dial, vertical lens shift dial). Turn the horizontal lens shift dial (for left and right adjustment), vertical lens shift (for up and down adjustment) to adjust the lens shift.



When turning the lens shift dials repeatedly, the lens can be shifted back to its original position. Turn repeatedly to find the ideal position.



CAUTION

- Do not look into the lens when adjusting the lens shift.
- When turning horizontal lens shift dial, the lens shift may move up and down. When turning vertical lens shift dial, the lens shift may move left and right. In this case, readjust the lens shift by using each dial.

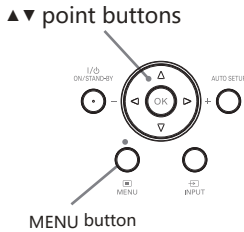
Adjusting the tilt of projector by adjusting the adjustable feet

By changing the tilt of the projector with adjustable feet, projection image position can be adjusted, and the angle can be changed.

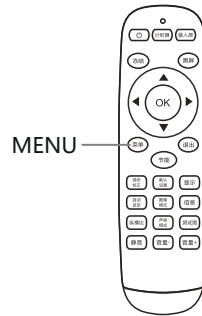
How to Operate On-screen Menu

You can adjust or set the projector through the on-screen menu. The menu has a multi-player structure, and each main menu is divided into several sub-menus, which are divided into several sub-menus. For the steps of each adjustment and setting, refer to the corresponding section of this manual.

Top control panel



Remote control



MENU

- 1 Press the MENU button on the top control panel or directly press the MENU button on the remote control to display the menu.
- 2 Press ▼ point button or OK button to select the desired sub-menu item.
- 3 Press ▲▼◀▶ point buttons to adjust settings or switch between items.
- 4 Press the MENU button to return to the previous menu.
- 5 Press the EXIT button to exit the menu.



Menu Bar

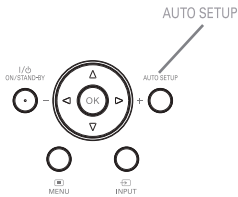


- ① **SIGNAL menu**
In VGA signal input, automatic adjustment, image display adjustment, horizontal position, vertical position, phase adjustment and clock rate adjustment are available.
- ② **IMAGE menu**
Image mode can be selected as standard, cinema, dynamic, DICOM, color matching-red, color matching-green, color matching-yellow, user.
Contrast, brightness, saturation and color temperature can be adjusted in user mode.
- ③ **SOUND menu**
For sound mode selection, volume adjustment or mute.
Sound mode can be selected as standard, speech, user and music.
- ④ **SETUP menu**
To set the operation configuration of the projector.
- ⑤ **ADVANCED SETTINGS**
For network setting and information viewing

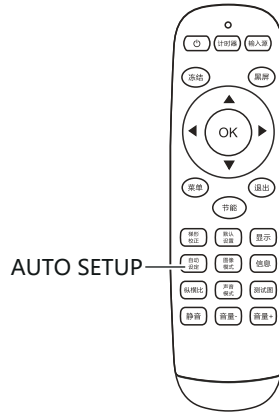
AUTO SETUP Function

This function can automatically execute the settings of [AUTO SETUP] in SETUP menu (including [SOURCE SEARCH], [AUTO PC ADJUST] and [AUTO KEYSTONE]) by pressing the AUTO SETUP button on the remote control or [AUTO SETUP] button on top control panel.

Top control panel



Remote control



Keystone

If keystone distortion occurs in projected image, the image can be manually corrected by following steps.

Press the KEYSTONE button of the remote control and the "KEYSTONE" box (including: KEYSTONE UP AND DOWN, KEYSTONE LEFT AND RIGHT, CORNERSTONE, RETURN TO DEFAULT SETTINGS) displays. Press ▲▼ point buttons to switch items, and press OK button to select. Users can store the adjustment values of KEYSTONE.

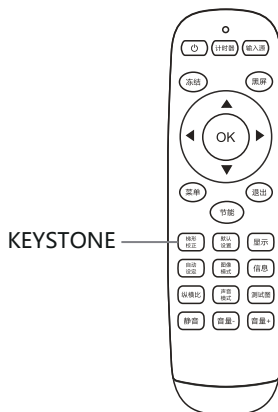
- When performing corner correction, switch to the angle needs to be adjusted, the red square becomes a red triangle. Press OK button to turn it into a green triangle, and then this corner can be corrected up and down and left and right.
- The arrow is white when there is no correction and yellow when correcting.
- Press EXIT button or MENU button to return to previous menu.
- When the keystone dialog box is displayed, if the KEYSTONE button of the remote control is pressed again, the keystone adjustment will be canceled.
- The adjustable range is limited by the input signal.



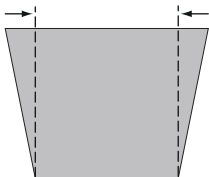
✓CAUTION:

- The AUTO KEYSTONE function can only correct vertical keystone distortion, but cannot correct horizontal keystone distortion.
- This function does not work when the CEILING function in SETUP menu is set to ON.
- AUTO SETUP function does not ensure complete correction of image distortion.
- The total points, horizontal and vertical position can be adjusted entirely by AUTO PC ADJUST function. If the image adjusted by this function is incorrect, adjust it manually.

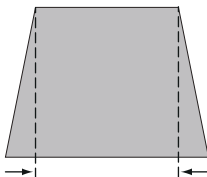
Remote control



Press ◀ point button to reduce the width of upper part.



Press ▶ point button to reduce the width of lower part.



Volume Adjustment

Direct operation, it is recommended to use the remote control. Press the SOUND MODE button to switch between standard, speech, user, music, etc.

Volume

Press the +/- button on the top control panel or VOL +/VOL- button on the remote control to adjust the volume.

Mute

Press the MUTE button on the remote control to select [ON], and the sound can be turned off temporarily. Press the MUTE button again to select [OFF] or press the VOL +/- button to turn the audio effect back on.

The mute function is also effective for the audio output interface.

Menu Operation

- 1 Press the MENU button on the remote control to display the menu. Press ◀▶ point button to move the cursor to the SOUND menu icon.
- 2 Press ▼ point button to remove the cursor to following sub-menu items to be selected, and then select the sub-menu options.

Sound Mode

Press ▶ button to switch the sound mode.

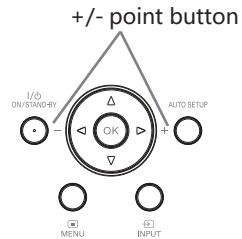
Volume

Press ▲ point button to turn up the volume, and press ▼ to turn down the volume.

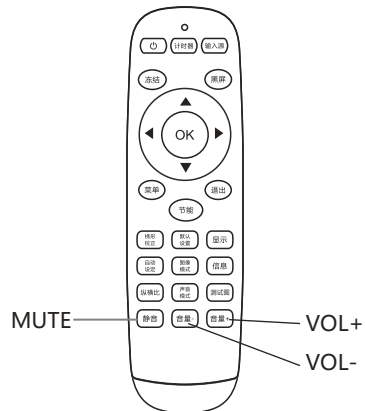
Mute

When the sound is turned off through mute function (ON/OFF), [ON] will display. The sound can be turned on by pressing the VOL +/- button again.

Top control panel



Remote control



Remote Control Operation

For some common operations, it is recommended to use the remote control. It can be operated by pressing a button without calling out the on-screen menu.

FREEZE Button

Press the FREEZE button on the remote control to freeze the screen image. To cancel the freeze function, press the FREEZE button or any other button.

SOURCE Button

Display the source information. Source information includes video, HDBaseT (optional), HDMI, DVI, VGA, USB.

AUTO SETUP Button

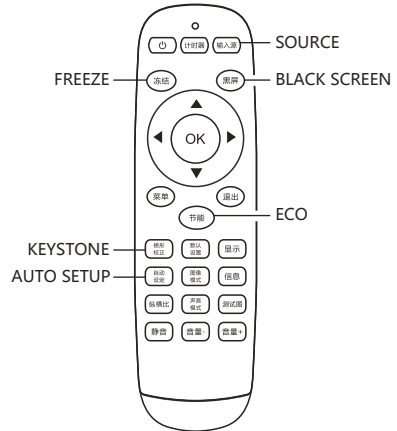
Press the AUTO SETUP button to go into AUTO SEARCH SOURCE mode.

ECO Button

Press the ECO button on the remote control to go to the laser mode selection to change the brightness of the screen.

Standard Normal brightness.
ECO 1 Low brightness.
ECO 2 Minimum brightness.

Remote control



✓CAUTION:
See the next page for descriptions of the other buttons.

BLACK SCREEB Button

Press the black screen button on the remote control, the image disappears and a black screen appears. Press the black button again and the image will return to normal. Each time you press the black screen button, the screen changes as follows:

Black → Normal → Black → Normal →

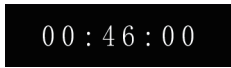


Black screen

TIMER Button

Press the TIMER button on the remote control, the timer appears on the screen at 00:00, and starts timing (00:00-59:59).

To stop timing, press the TIMER button. To cancel the timing function, press the TIMER button again.



00:46:00

IMAGE MODE Button

Press the IMAGE MODE button on the remote control to select the desired image mode.

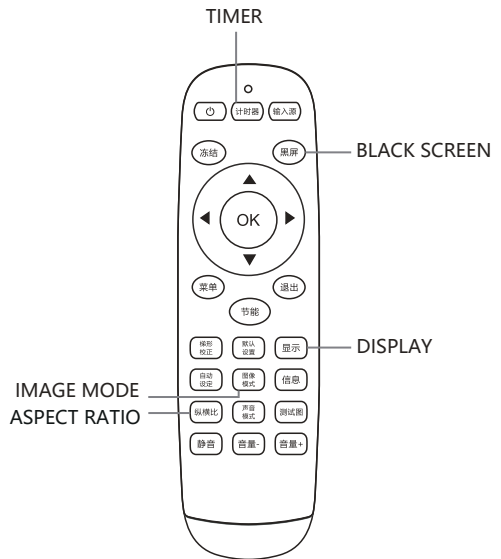
ASPECT Button

Select 16:9 SCREEN SIZE, 4:3 SCREEN SIZE, FULL SCREEN, WIDE MODE 1, WIDE MODE 2, NORMAL.

DISPLAY Button

Display input channel and resolution information.

Remote control



✓CAUTION:

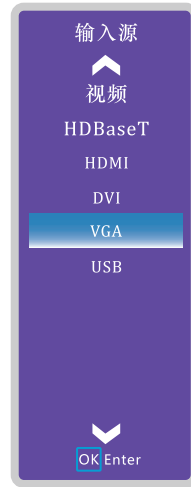
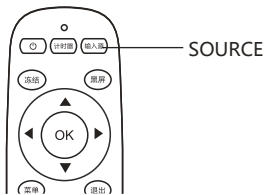
See the previous page for descriptions of the other buttons.

Menu Operation

Press the SOURCE button on the remote control to display the SOURCE menu.

Press ▲▼ button to select the source icon, then press ► point button or OK button to select VGA source.

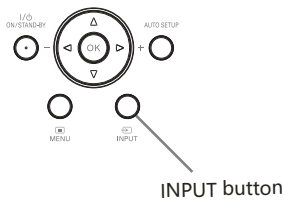
Remote control



Direct Operation

Press the INPUT button on the top control panel or the SOURCE button on the remote control to select VGA.

Top control panel



Auto Adjustment

The [AUTO SETUP] function can automatically adjust the horizontal position, vertical position, phase and clock to match the computer.

Menu Operation

- 1 Press the SOURCE button on the remote control and press ▲▼ button to select VGA source icon, then press ► button or OK button to enter.
- 2 Press the MENU button to enter the menu, and press ◀▶ button to select the source, then press ▼ button or OK button to select AUTO ADJUST icon, and press button or OK button to adjust automatically.

AUTO PC ADJUST menu



● Save the adjustment data

The projector can save the data of the AUTO PC ADJUST function.

Horizontal Position

Under the premise that the relative position of the projector and the screen is set correctly, if the position of the projected image on the screen deviates, the image position can be moved horizontally.

- 1) Press ▲▼ button to select [HORIZONTAL POSITION].
- 2) Press <OK> button.
- 3) Press ▼▲ button to adjust horizontal image position.
The adjustment range is 0 - 255.

Vertical Position

Under the premise that the relative position of the projector and the screen is set correctly, if the position of the projected image on the screen deviates, the image position can be moved vertically.

- 1) Press ▼▲ button to select [VERTICAL POSITION].
- 2) Press <OK> button.
- 3) Press ▲▼ button to adjust vertical image position.
The adjustment range is 0 - 63.

✓CAUTION:

- The horizontal and vertical position of some computers can be adjusted entirely through the AUTO PC ADJUST function. If the adjusted image of this function is not correct, use manual adjustment.

Phase Adjustment

When there is a flickering image or smeared outlines, you can adjust the image to achieve an optimal image.

1) Press ▲▼ button to select [PHASE].

2) Press <OK> button.

3) Press ▲▼ button to adjust the level.

The adjustment range is 0-31. Please adjust to the state of minimum interference.

Image Display Mode

1) Press ASPECT button on the remote control to display IMAGE DISPLAY MODE menu.

2) Press ▼▲ button to select the image display mode.

4 : 3, 16 : 9, NORMAL, FULL SCREEN, WIDE 1, WIDE 2 can be selected.

Clock Adjustment

1) Press ▼▲ button to select [CLOCK].

2) Press <OK> button.

3) Press ▼▲ button to adjust the level.

The adjustment range is 0-255. Please adjust to the state of minimum interference.



✓CAUTION:

- The horizontal and vertical position of some computers can be adjusted entirely through the AUTO PC ADJUST function. If the adjusted image of this function is not correct, use manual adjustment.

Screen Size Adjustment

This projector has an image screen size reset function that allows the user to display the desired image size. Press the ASPECT button on the remote control to display the IMAGE DISPLAY MODE menu. Then press ◀▶ point button to select the image display mode.

IMAGE DISPLAY MODE



IMAGE DISPLAY MODE

4: 3

Provide a normal video image with an aspect ratio of 4:3.

16: 9

Provide a normal video image with an aspect ratio of 16:9.

NORMAL

Keep the aspect ratio of the input signal.

FULL SCREEN

The image displays full screen.

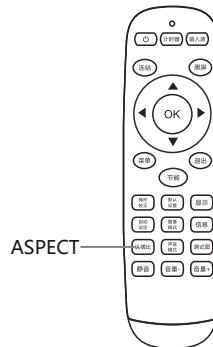
WIDE 1

The image displays stretched.

WIDE 2

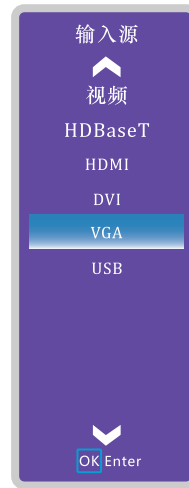
The image displays stretched.

Remote control



Selecting Video System

- 1 Press the SOURCE button on the remote control to display the SOURCE menu.
Press ▲▼ point button to select the source icon, then press ► point button or OK button to select AV input.
- 2 The projector can automatically detect the input video system and adjust itself to the optimal state.



Setup

The projector has a [SESTUP] menu, and you can set other functions as described below.

- 1 Press the MENU button on the remote control to display the menu.
Press ◀▶ button to select select the setting, then press ▼ point button or OK button to enter the sub-menu.
- 2 Press ▲▼ point button to select the desired item, then press ◀▶ button to select the selected item.



LANGUAGE

The on-screen menu is available in 2 languages.

HIGH ALTITUDE

The projector provides fan control function in [SETUP] menu.

Select the running speed of the cooling fan according to the altitude of the projector below.

HIGH ALTITUDE 1 Faster than [OFF] mode. When using the projector at high altitudes, the fan cooling effect is weakened, please choose this mode.

HIGH ALTITUDE 2 Faster than the [HIGH ALTITUDE 2] mode. When using this projector at higher altitudes, the fan cooling effect is even weaker, please choose this mode.

OFF Normal speed. When using the projector, set this function to OFF if the altitude of the surrounding environment is not high.

LASER MODE

This function can make change the screen brightness.

NORMAL Normal brightness.

ECO1 Low brightness, reducing power consumption and thereby extending laser life.

ECO2 Lower brightness, reducing power consumption and thereby extending laser life.

QUICK COOLING

The running time of the cooling fan after the projector is turned off.

NORMAL When turned off, the fan stops working after running for a long time.

10 seconds When turned off, the fan stops working in 10 seconds.

0 second When turned off, the fan stops working in 0 second.

KEYSTONE

KEYSTONE LEFT/RIGHT

Corrects vertical direction.

KEYSTONE UP/DOWN

CORNERSTONE

RESTORE DEFAULT SETTINGS

Cancel the set values of horizontal, vertical and cornerstone and restore to the initial state.



PROJECTION MODE

FRONT Project to the front projection screen.

REAR Project to the back projection screen.

CEILING FRONT Project to the front projection screen after the projector is ceiling mounted.

CEILING REAR Project to the back projection screen after the projector is ceiling mounted.

AUTO Automatically set to FRONT or CEILING of the projection.

BLUE SCREEN

Sets the background of no signal input.

BLUE The background is blue when there is no signal input.

BLACK The background is black when there is no signal input.

STARTUP SCREEN

The startup screen uses the default as the startup screen.

NONE No startup screen.

DEFAULT Display the background color of the screen.

SLEEP MODE

OFF Sleep mode is off.

5 minutes When no signal is input, the projector goes into sleep mode in 5 minutes.

10 minutes When no signal is input, the projector goes into sleep mode in 10 minutes.

15 minutes When no signal is input, the projector goes into sleep mode in 15 minutes.

20 minutes When no signal is input, the projector goes into sleep mode in 20 minutes.

25 minutes When no signal is input, the projector goes into sleep mode in 25 minutes.

30 minutes When no signal is input, the projector goes into sleep mode in 30 minutes.

#Reconnect the signal input or press any button of the remote control (except power button), the projector will exit the sleep mode.

PROJECTOR KEYBOARD LOCK

OFF The keyboard is not locked.

ON The keyboard is locked.

REMOTE CONTROL LOCK

OFF The remote control is not locked.

ON The remote control is locked.

AC DIRECT POWER ON

ON Power on directly when plugged in

OFF The function that power on directly when plugged in is off.

STANDBY MODE

This function is available when the projector is operated by the network in standby mode.

NORMAL The network function is still powered even after the projector is turned off.

You can turn on or off the projector, change the network environment, and receive emails about the projector status through the network after the projector is turned off.

LOW POWER Select Economic mode when not using the projector through a network.
When the projector is turned off, its network function stops.

TEST PATTERN

Display the built-in test pattern of the projector.

- 1) Press ▼▲ button to select [TEST PATTERN].
- 2) Press <OK> button.
- 3) Press ▼▲ button to switch the item.
- 4) Press <OK> button.

GRAYSCALE 1 / GRAYSCALE 2 / GRAYSCALE 3 / GRAYSCALE 4 / COLOR BAR / RED / GREEN / BLUE / GRID / WHITE / BLACK / GRAY : Use the menu screen to display the test pattern. Select the test mode for easy adjustment.

AUTO SETUP

SOURCE SEARCH, AUTO KEYSTONE, and AUTO PC ADJUST can be performed by pressing the AUTO SETUP button on the top control panel or AUTO SETUP button on the remote control. These functional settings can be converted as follows:

SOURCE SEARCH

This feature automatically detects the input signal. Search stops when the signal is found, press ◀▶ point button to select one of the following options:

OFF Non-use of the source search function.

ON Enable source search function in the following situations:

- Pressing the AUTO SETUP button on top control panel.
- Pressing the AUTO SETUP button on the remote control.

* If no display or freeze function is performed, cancel it to perform source search. This function does not work when the on-screen menu is displayed.

AUTO PC ADJUST

ON..... Press AUTO SSETUP in the menu settings to set the SOURCE SEARCH to ON and the AUTO PC ADJUST function will turn on.

OFF..... Cancel the AUTO PC ADJUST.

AUTO KEYSTONE

AUTO Press AUTO SETUP in the menu settings to set AUTO VERTICAL and KEYSTONE to AUTO and the AUTO KEYSTONE function will turn on.

MANUAL INPUT Cancel the AUTO KEYSTONE and go into manual mode.

OFF Disable AUTO KEYSTONE function.



CAUTION

- Only the last selected source can be checked.
- If you press the INPUT button on top control panel or SOURCE button on the remote control during the source search, the source search will stop and return to the input signal used last time.
- The AUTO KEYSTONE function corrects only vertical keystone distortion and does not correct horizontal keystone distortion.
- The AUTO KEYSTONE function does not work when the CEILING function in SETUP menu is set to On.
- The AUTO SETUP function can not ensure the complete correction of image distortion. Please press the KEYSTONE button on the remote control or select KEYSTONE in SETUP menu to adjust manually.
- The horizontal and vertical position of some computers can be adjusted entirely through AUTO PC ADJUST function. If the adjusted image of this function is not correct, use manual adjustment.

Using NETWORK CONTROL

Function: This function is suitable for remote control of the projector by computer in LAN.

Preparations

- 1 Required equipment: projector, computer, LAN cable;
- 2 Connection process:
Connect the projector to a router or switch in the LAN with a direct or crossover cable. If directly connect the projector and computer, they cannot be connected with direct cable cannot, it is recommended to use a crossover cable.
- 3 When the computer is turned on and the projector is plugged in with power cord, the indicators of the LAN interface and COMPUTER interface blink.

Using steps

- 1 Turn on the projector.
- 2 Get the network address, set DHCP to ON, and get the IP address automatically.
(If you are familiar with the network, you can manually set the IP address by setting DHCP to OFF.)
- 3 Enter network menu settings.
 - (1) Press the MENU button on back control panel or remote control. Press ▲▼ point button to select the network icon.
 - (2) Press <OK> button or ► point button to enter NETWORK menu.
 - (3) Press ▲▼ point button to select the NETWORK SETTINGS, then press <OK> button.
 - (4) Press ▲▼ point button to set DHCP to [ON], then press <OK> button.
 - (5) Press ▲▼ point button to select [YES], press select button, then [Please wait...] screen appears, and wait for it to disappear.



SECURITY PASSWORD

Enter the password to go into security password settings. K_ \]XZkf ip[\]XI & gXj j n f i [] ' ' ' ' ' %

STARTUP PASSWORD LOCK

OFF Not to lock.

ON Every time you turn on the projector, you need to enter a password.

CHANGE YOUR PASSWORD

You can change the password to the four numbers you want. Press OK button, select PASSWORD, and password change dialog box appears. then press ▲▼ point button to enter the correct password, and press [OK] button to confirm. After entering the [NEW PASSWORD], enter the password again to confirm. After the passwords matched, the new password is set successfully. A new password is required for powering off and on and entering security password settings.

Password memo

Write down the password in the table below and save it with this manual.

If you forget or lose the password and cannot operate the projector, please contact the service center.

Password setting

--	--	--	--

Factory setting number 0000

--	--	--	--

Factory setting number 0000

*If you change this four-digit number, the factory setting number will be invalid.

RETURN TO DEFAULT SETTINGS

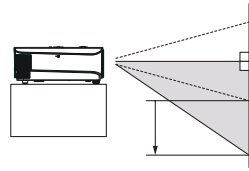
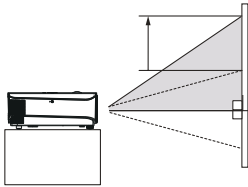
This function can return all the setting values to factory settings except USER STARTUP SCREEN, PASSWORD LOCK, STARTUP SCREEN PASSWORD LOCK.

Through the manual lens shift function, the projection lens can be moved up and down, left and right.

This function allows the user to easily adjust the position of the projected image.

The projection position can be moved up at most to a distance equal to 40% of the image range up and down.

Lens moved to the top

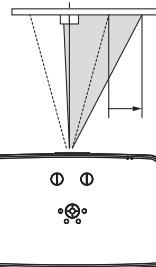
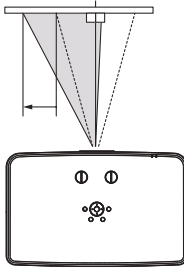


The projection position can be moved down at most to a distance equal to 40% of the image range up and down.

Lens moved to the bottom

The projection position can be moved to the left at most to the position of 10% width of the projected image.

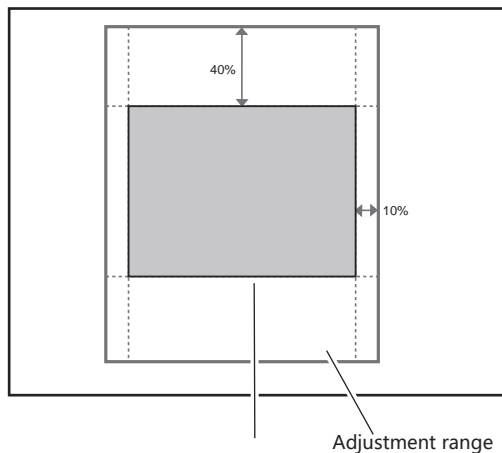
Lens moved to the far left



The projection position can be moved to the right at most to the position of 10% width of the projected image.

Lens moved to the far right

Lens shift adjustment range



Lens moved to the middle position

Specifications

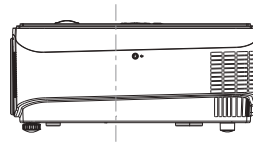
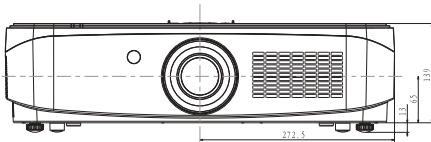
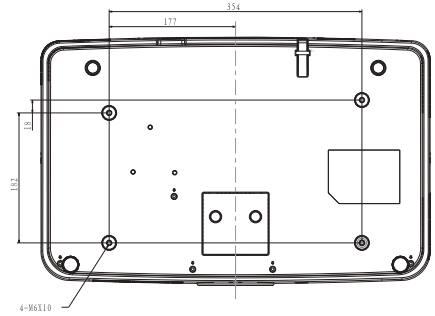
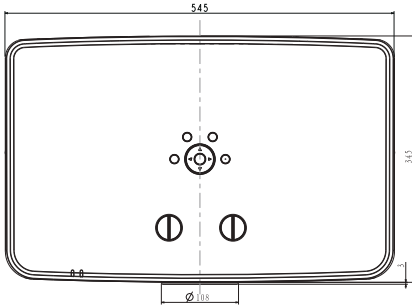
Model		RL-600X	RL-600W	RL-600U
Display Technology		Liquid Crystal Display		
LCD panel		3x0.63"(4:3)	3x0.64"(16:10)	3x0.64"(16:10)
Brightness		6000 lm		
Resolution		XGA (1024x768) Supports highest to WUXGA	WXGA (1280x800) Supports highest to WUXGA	WUXGA (1920x1200)
Number of pixels		786,432 (1024 x 768) x3, total of 2,359,296 pixels	1,024,000 (1208 x 800) x3, total of 3,072,000 pixels	2,304,000 (1920 x 1200) x3, total of 6,912,000 pixels
Contrast		3000000:1		
Center to corner uniformity		≥ 90%		
Lens		F1.6~2.2 · f=16.09~25.75mm · Manual zoom (1.6x) · Manual focus		
Screen size		30"-300"		
Throw distance		0.71m - 12.39m	0.72 - 12.16m	0.72 - 12.16m
Throw Ratio		1.21 - 1.99	1.13 - 1.85	1.13 - 1.85
Light source (service life)		Laser diode (Normal mode: 20000h, Eco mode: 25000h)		
Input Terminals	PC	DVI-D ×1 · VGA (D-sub 15pin) ×1		
	Audio	Audio in: mini jack ×1 (3.5mm)		
	Video	HDMI ×1 · Video ×1 (RCA)		
	Others	USB ×2		
Output Terminal		VGA (D-sub 15pin) ×1 · Audio out (Mini-jack) ×1 (3.5mm)		
Control Terminal		RS232 (D-sub 9pin) ×1 · RJ-45 ×1 (Control)		
Computer Signal		PC-VGA,SVGA,XGA,SXGA,WXGA,UJXGA,WUXGA / Mac		
Video Input Signal		PAL,SECAM,NTSC (480i,480p,565p,576i,576p,720p,1080i,1080p)		
Scanning Frequency		Horizontal: 15~90kHz · Vertical: 24~85Hz		
Noise		Normal mode: 37db, ECO mode: 29db		
Projection Mode		Front/Rear, Desktop/Ceiling		
Speaker		10W ×1		
Weight		9.5 kg		
Dimensions(L×W×H)		545×128×345mm (not incl. protruded part)		
Power Supply		100~240V AC (50/60Hz)		
Power Consumption		460W max (≤ 0.5W when Standby mode set to Eco)		
Projection method		Ceiling/floor · front/rear (Auto Image Rotation)		
Operation / Storage Temperature		Operation temperature: 0°C~40°C Storage temperature: -10°C~60°C		
Operation / Storage Humidity		20%~80% (non-condensing) Storage humidity: 20%~80°C (non-condensing)		
Standard accessory		Wireless remote control, power cord		
Feature		<ul style="list-style-type: none"> ◆ Vertical and horizontal keystone, cornerstone feature ◆ Supporting HDBaseT long-distance network transmission function (optional) ◆ Support horizontal and vertical 360° rotation installation ◆ Multiple image mode selection, supporting DICOM simulation mode ◆ Direct reading of picture and video by USB ◆ Quick start, quick power off, power-off protection ◆ One button black screen function ◆ Password lock and anti-theft feature ◆ Screen auto flip function ◆ Support Crestron .PJ-Link ◆ Provided with high altitude mode ◆ Support screen freeze ◆ Built-in test pattern, with a variety of color palette image modes such as blackboard and green board 		

Specifications

Model		RL-6500X		RL-6200W		RL-6000U	
Display Technology		Liquid Crystal Display					
LCD Panel		3x0.63"		3x0.64"			
luminance		6500lm		6200lm		6000lm	
Resolution		XGA (1024x768)		WXGA (1280x800)		WUXGA (1920x1200)	
Contrast		3500000:1					
Image Uniformity		≥ 90%					
Lens		F1.6~1.9, f=15.31~24.64mm, 1.6 Zoom Ratio					
Throw Ratio		1.15-1.84		1.05-1.68		1.05-1.68	
Aspect Ratio		4:3(compatible with16:9)		16:10 (compatible with 4:3)		16:10 (compatible with 4:3)	
Projection Distance (30"~300")		0.7m~11.04m		0.68-10.84m		0.68-10.84m	
Light Source		Laser diode					
Light Source Life		Normal mode: 20000h, ECO mode: 25000h					
Optical Displacement		Vertical: ±40% (Manual), Horizontal: ±10% (Manual)					
Digital Keystone		Vertical: ±40° (Auto+Manual), Horizontal: ±15° (Manual)					
Input Terminal	Computer	VGA (D-sub 15pin) ×1					
	Audio	Audio in: mini jack ×1 (3.5mm)					
	Video	DVI ×1 · HDMI ×1 · Video ×1 (RCA)					
	Others	USB ×2 · HDBaseT ×1					
Output Terminal		VGA (D-sub 15pin) ×1 · Audio out :(Mini jack ,3.5mm)×1					
Control Terminal		RS232 (D-sub 9pin) ×1 , RJ-45 ×1(Control)					
Computer Signal		VGA,SVGA,XGA,SXGA,WXGA,WUXGA,MXGA,MSXGA,WSXGA,UXGA,Mac					
Video Input Signal		PAL,SECAM,NTSC,480i,480p,565p,576p,576i,720p,1080,1080i,1080p					
Scanning Frequency		Horizontal: 15~90kHz, Vertical: 50~85Hz					
Noise		Normal mode: 37db, ECO mode: 29db					
Projection Mode		Front/Rear, Desktop/Ceiling					
Speaker		10W×1					
Weight		10.5 KG					
Dimensions(L×W×H)		545×345×135mm (not including protrusions)					
Power Supply		100~240V AC (50/60Hz)					
Power Consumption		430W max	480W max	430W max	480W max	430W max	480W max
Standby Power Consumption		≤ 0.5W					
Operation / Storage Temperature		Operation temperature: 0°C~40°C Storage temperature: -10°C~60°C					
Operation / Storage Humidity		20%~80% (non-condensing) Storage humidity: 20%~80°C (non-condensing)					
Standard Accessories		Chinese remote control, power cord, quick start card, certificate, warranty card					
Feature		<ul style="list-style-type: none"> ◆ Vertical and horizontal keystone, cornerstone feature ◆ Supporting HDBaseT long-distance network transmission function (optional) ◆ Support horizontal and vertical 360° rotation installation ◆ Multiple image mode selection, supporting DICOM simulation mode ◆ Direct reading of picture and video by USB ◆ Quick start, quick power off, power-off protection ◆ One button black screen function 			<ul style="list-style-type: none"> ◆ Password lock and anti-theft feature ◆ Screen auto flip function ◆ Support Crestron .PJ-Link ◆ Provided with high altitude mode ◆ Support screen freeze ◆ Built-in test pattern, with a variety of color palette image modes such as blackboard and green board 		

Dimensions

Unit: mm



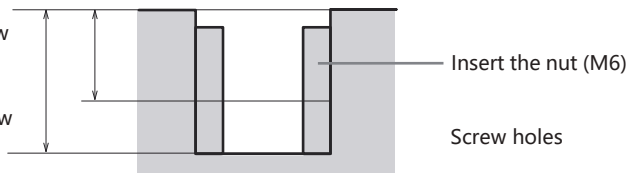
Ceiling mounting holes

Use screws with a length of 8mm (minimum) to 10mm (maximum) for ceiling mounting.

Screw locking torque: (M6)4±0.5 N.m

Minimum length of the screw

Maximum length of the screw



Projector

Unit: mm

Compatible Input Signal*1

Video Signal

Specification			
Resolution	H-freq(KHz)	V-freq(Hz)	Pixel clock(MHz)
NTSC	15.734	59.940	13.50
NTSC-443	15.734	59.940	13.50
PAL-M	15.734	59.940	13.50
PAL60	15.734	59.940	13.50
PAL	15.630	50.000	13.50
PAL-N	15.630	50.000	13.50
SECAM	15.630	50.000	13.50

HDMI and DVI

Specification			
Resolution	H-freq(KHz)	V-freq(Hz)	Pixel clock(MHz)
1440x480i	15.734	59.940	27.000
1440x576i	15.625	50.000	27.000
720x483(480 P)	31.469	59.940	27.000
720x576(576 P)	31.250	50.000	27.000
1280x720(720/60P)	45.000	60.000	74.250
1280x720(720/60P)	44.955	59.940	74.176
1280x720(720/50P)	37.500	50.000	74.250
1920x1080 i (1080/60i)	33.750	60.000	74.250
	33.716	59.940	74.176
1920x1080 i (1080/50i)	28.125	50.000	74.250
1920x1080(1080/24P)	27.000	24.000	74.250
	26.973	23.976	74.176
1920x1080(1080/25P)	28.125	25.000	74.250
1920x1080(1080/30P)	33.750	30.000	74.250
	33.716	29.970	74.176
1920x1080(1080/60P)	67.500	60.000	148.500
1920x1080(1080/60P)	67.433	59.940	148.352
1920x1080(1080/50P)	56.250	50.000	148.500
640x480	31.469	59.940	25.175
	35.000	66.667	30.240
	37.861	72.809	31.500
	37.500	75.000	31.500
	43.269	85.008	36.000

Specification			
Resolution	H-freq(KHz)	V-freq(Hz)	Pixel clock(MHz)
800x600	35.156	56.250	36.000
	37.879	60.317	40.000
	48.077	72.188	50.000
	46.875	75.000	49.500
	53.674	85.061	56.250
832x624	49.725	74.550	57.283
1024x768	48.363	60.004	65.000
	56.476	70.069	75.000
	60.023	75.029	78.750
	68.678	84.997	94.500
1152x864	67.500	75.000	108.000
1280x720	45.000	60.000	74.250
1280x768	47.776	59.870	79.500
	60.290	74.890	102.250
	68.630	84.840	117.500
1280x800	49.702	59.810	83.500
	62.795	74.934	106.500
	71.554	84.880	122.500
1280x960	60.000	60.000	108.000
1280x1024	63.981	60.020	108.000
	78.16	71.64	135.060
	79.977	75.025	135.001
	91.150	85.020	157.500
1366x768	48.000	60.000	72.000
	47.720	59.799	84.750
1400x1050	65.317	59.978	121.750
	82.278	74.867	156.000
1440x900	55.935	59.887	106.500
1600x900	60.000	60.000	108.000
1600x1200	75.000	60.000	162.000
1680x1050	65.290	59.954	146.250
1920x1080	67.500	60.000	148.500
1920x1200	74.038	59.950	154.000

Compatible Input Signal *2

VGA Signal

Specification			
Resolution	H-freq(KHz)	V-freq(Hz)	Pixel clock(MHz)
640x480	31.469	59.940	25.175
	35.000	66.667	30.240
	37.861	72.809	31.500
	37.500	75.000	31.500
	43.269	85.008	36.000
800x600	35.156	56.250	36.000
	37.879	60.317	40.000
	48.077	72.188	50.000
	46.875	75.000	49.500
	53.674	85.061	56.250
832x624	49.725	74.550	57.283
1024x768	48.363	60.004	65.000
	56.476	70.069	75.000
	60.023	75.029	78.750
	68.678	84.997	94.500
1152x864	67.500	75.000	108.000
1280x720	45.000	60.000	74.250
1280x768	47.776	59.870	79.500
	60.290	74.890	102.250
	68.630	84.840	117.500
1280x800	49.702	59.810	83.500
	62.795	74.934	106.500
	71.554	84.880	122.500
1280x960	60.000	60.000	108.000
1280x1024	63.981	60.020	108.000
	79.977	75.025	135.001
	91.150	85.020	157.500
1366x768	48.000	60.000	72.000
	47.720	59.799	84.750
1400x1050	65.317	59.978	121.750
	82.278	74.867	156.000















Specification			
Resolution	H-freq(KHz)	V-freq(Hz)	Pixel clock(MHz)
1440x900	55.935	59.887	106.500
1600x900	60.000	60.000	108.000
1600x1200	75.000	60.000	162.000
1680x1050	65.290	59.954	146.250
1920x1080	67.500	60.000	148.500
1920x1200	74.038	59.950	154.000


CAUTION

- The image may not be displayed correctly when inputting a signal other than those in the table.
- When the screen resolution of the input signal is different from that of the panel, the signal will not be displayed at its initial resolution. Text and lines may be distorted.

Indicators and Projector Status


Check the indicators for the status of the projector.

Indicators		Projector status
POWER Green / Red	WARNING Yellow	
		The projector is off (AC power cord is not plugged in) .
		The projector is in standby mode, press the standby button to turn on the projector.
		The projector is in a normal powered state.
		The projector is cooling down or ready to sleep, and the projector will not turn on until it is cooled down completely and the power light stopped blinking.
		The projector is in sleep mode.
—		The yellow indicator of the projector blinks every 2 seconds, indicating that the fan or color wheel is abnormal.
—		The yellow indicator of the projector cycles in blinking twice continuously at 2-second intervals, indicating that the lighting switch is not turned off or the temperature is abnormal.
—		The yellow indicator of the projector cycles in blinking eight times continuously at 2-second intervals, indicating that the projector humidity is abnormal.
—		The projector temperature is abnormal.

 : Off

 : Steady red

 : Blinking in red

 : Steady green

 : Blinking in green

 : Steady orange

 : Blinking in orange

— Independent of the status of this indicator

Troubleshooting

Before requesting help from your dealer or service center, please check the following items again:

Problems	Solutions
Unable to turn on	<ul style="list-style-type: none"> - Insert the projector's power plug into an AC outlet. - Confirm that if the power indicator is lighting in red. - Check the WARNING indicator. If the WARNING indicator lights in orange, then you need to check the indication of indicator status. - Do not lock the [BUTTON LOCK] function of the projector.
Automatic switching of input signals (or non-automatic switching)	<ul style="list-style-type: none"> - Make sure the input source search function is properly adjusted.
Image is fuzzy	<ul style="list-style-type: none"> - Adjust the focus of the projector. - Provide an appropriate projection distance. - Check that if the projector lens needs to be cleaned. - Moving the projector from a cold environment to a hot environment may cause moisture condensation on the projection lens. If this happens, you can not turn on the projector until the condensation disappears.
Image flips left and right Image flips up and down	<ul style="list-style-type: none"> - Check the [CEILING/REAR] function. - Check the [CEILING] function.
Image is bright enough.	<ul style="list-style-type: none"> - Check whether the contrast or brightness adjustment is appropriate. - Check whether the image mode selection is appropriate.
No image	<ul style="list-style-type: none"> - Check the connection of your computer or video device to the projector. - Check that if the input signal from the computer is correct. When connecting to some laptops, it is often necessary to change the settings of their monitor output. Please refer to the computer user's manual for settings. - The image can only be displayed after the projector is turned on for about 30 seconds. - Check the input signal, color system, video system or computer system mode. - When using NO DISPLAY function, the image cannot be displayed. Press the BLACK SCREEN button or other button on the remote control.

Color is abnormal	<ul style="list-style-type: none"> - Check the input signal, color system, video system or computer system mode. - Make sure the value of SATURATION under [IMAGE MODE] is appropriate.
AUTO PC ADJUST function is invalid	<ul style="list-style-type: none"> - Check the input source signal. The AUTO PC ADJUST function is invalid when 480p, 576p, 720p, 480i, 576i or 1080i is selected.
Settings cannot be saved after power is turned off	<ul style="list-style-type: none"> - Make sure SAVE is selected after adjusting the settings. Some settings cannot be saved without selecting [SAVE].
AUTO SETUP does not work properly	<ul style="list-style-type: none"> - Make sure that all functions in AUTO SETUP are not set to OFF. - Make sure that CEILING function is not set to OFF.
Image distortion or disappearance	<ul style="list-style-type: none"> - Check and adjust the computer adjustment menu or on-screen menu.
A password dialog box appears after power on	<ul style="list-style-type: none"> - A password lock is set.
Remote control does not work	<ul style="list-style-type: none"> - Check the batteries. - Make sure there are no obstacles between the projector and the remote control. - Make sure you are not too far from the projector when using the remote control. The maximum operation distance is 8meters. - Make sure the remote control code matches the projector code. - Unlock the buttons of the remote control in SETUP menu.
Indicator lights on or blinks	<ul style="list-style-type: none"> - Check the projector status according to the indicator and projector status.
Keyboard is invalid	<ul style="list-style-type: none"> - Make sure the key lock in the menu is not turned on.
Unable to cancel startup screen password lock, key lock and password lock	<ul style="list-style-type: none"> - Please contact your dealer or service center.

- Make sure the projector is properly connected to the peripheral device.
- Make sure that all devices are connected to an AC outlet and the power is on.
- If the projector cannot project the image of the connected computer, restart the computer.



WARNING:

This projector is operated with high voltage. Do not open the cabinet. If the problem still exists after following the above methods, please contact the vendor or service center. Please inform the model and explain the problem. We will tell you how to get repaired.