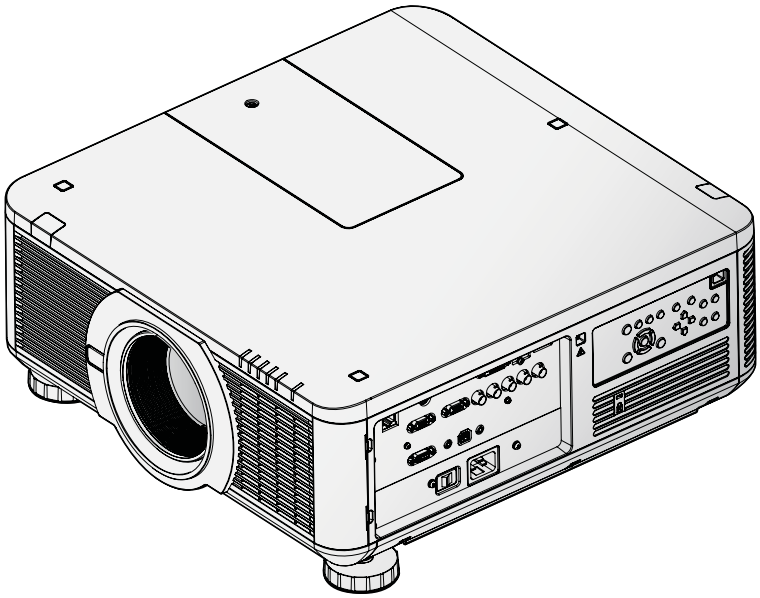
Canon

MULTIMEDIA PROJECTOR

LX-MU700

User's Manual



HDBT™ HDMI™ HIGH DEFINITION MULTIMEDIA INTERFACE CRESTRON connected

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♦ *Projector Installation Notice*

- Place the projector in a horizontal position
  If installing the projector on the floor or hanging from the ceiling, the left /right inclination of the projector should be no more than 10 degrees. An inclination of more than 10 degrees may damage the lamp.
- Allow at least 70 cm clearance around the exhaust vent.
- Ensure that the intake vents do not recycle hot air from the exhaust vent.
- When operating the projector in an enclosed space, ensure that the surrounding air temperature within the enclosure does not exceed operation temperature while the projector is running, and the air intake and exhaust vents are unobstructed.

♦ *Verify Installation Location*

- Turn on Altitude Mode when located in high altitude areas.
- The projector can only be installed upright or inverted.
- When installation the bracket, make sure the weight limit is not exceed and firmly secured.
- Avoid installing at high temperature, insufficient cooling and heavy dust locations.
- Keep your product away from fluorescent lamps to avoid malfunction caused by IR interference.
- The VGA IN connector should be connected to the VGA IN port. Note that it should be inserted tightly, with the screws on both sides securely fastened to ensure proper connection of the signal wire for achieving optimal display effect.
- The power cord and signal cable should be connected before power on the projector. During the projector starting and operating process, DO NOT insert or remove the signal cable or the power cord to avoid damaging the projector.

♦ *Cooling notes*

Air outlet

- Air outlet location should not be in front of the lens of other projector to avoid causing illusions.
- Keep the outlet at least 70 cm away from the inlets of other projectors.
- The projector generates a massive amount of heat during use. The internal fan dissipates the heat of the projector when shutting down, and such process may continue for a certain period. After the project enters STANDBY MODE status, press the AC power button to turn off the projector and remove the power cord. DO NOT remove the power cord during the shutdown process, as it may cause damage to the projector. In the meantime, the delayed heat radiating will also affect the service life of the projector. The shutdown process may vary depending on the model used. Whatever the case may be, be sure to disconnect the power cord till after the projector enters the STANDBY status.

Air inlet

- Make sure there is no object blocking air input within 50 cm.
- Keep the inlet away from other heat sources.
- Avoided heavy dust area.

♦ *Power Safety*

- Only use the supplied power cord.
- Do not place anything on the power cord. Place the power cord where it will not be in the way of foot traffic.
- Remove the batteries from the remote control when storing or not in use for a prolonged period.
- The wall outlet must be able to meet the power demands of the device.

♦ *Replacing the Lamp*

Replacing the lamp can be hazardous if done incorrectly. See “Replacing the Projection Lamp” on page 58 for clear and safe instructions for this procedure. Before replacing the lamp:

- Unplug the power cord.
- Allow the lamp to cool for about 45 minutes.

> ⚠ ***Warnings:***
>
> *Precautions when replacing lamps that stop working*
>
> - *If illumination suddenly stops, either when you turn the projector on or after it has been on for a while, the lamp may have ruptured. In this case, never attempt to replace the lamp by yourself. Always request service from the Canon Customer Support Center.*
> - *With ceiling-mounted projectors, the lamp may fall out when you open the lamp cover, or during replacement. During replacement, stand to the side of the lamp cover, not directly under it.*
> - *If the lamp ruptures, dust and gas (containing mercury vapor) may come out of the exhaust vents. If this happens, immediately open the windows and doors to provide ventilation to the room.*
> - *If you accidentally inhale gas from the lamp or get any pieces in your eyes or mouth, consult a doctor immediately.*

About this manual

This manual is intended for qualified technicians / end users and describes how to install and operate the DLP projector. Wherever possible, relevant information—such as an illustration and its description—has been kept on one page. This printer-friendly format is both for your convenience and to help save paper, thereby protecting the environment. It is suggested that you only print sections that are relevant to your needs.

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Safety Instructions

Before installing and operating the projector, read this manual thoroughly.

This projector provides many convenient features and functions. Operating the projector properly enables you to manage those features and maintain it in good condition for many years to come.

Improper operation may result in not only shortening the product life, but also malfunctions, fire hazards, or other accidents.

If your projector does not seem to be operating properly, read this manual again, check operations and cable connections, and try the solutions in the “Troubleshooting” section in the user’s manual. If the problem still persists, contact the Canon Customer Support Center.

CAUTION

RISK OF ELECTRIC SHOCK
DO NOT OPEN

THIS SYMBOL INDICATES THAT DANGEROUS VOLTAGE CONSTITUTING A RISK OF ELECTRIC SHOCK IS PRESENT WITHIN THIS UNIT.

THIS SYMBOL INDICATES THAT THERE ARE IMPORTANT OPERATING AND MAINTENANCE INSTRUCTIONS FOR THIS UNIT IN THE USER’S MANUAL.

CAUTION

Not for use in a computer room as defined in the Standard for the Protection of Electronic Computer / Data Processing Equipment, ANSI / NFPA 75.

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Safety Precautions

WARNING:

- **THIS APPARATUS MUST BE GROUNDED.**
- **TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.**
- This projector produces intense light from the projection lens. Do not stare directly into the lens, otherwise eye damage could result. Be especially careful that children do not stare directly into the beam.
- Install the projector in a proper position. Otherwise it may result in a fire hazard.
- Do not cover the ventilation slots on the projector. Heat build-up can reduce the service life of your projector, and can also be dangerous.
- If the projector is unused for an extended time, unplug the projector from the power outlet.
- Do not project the same image for a long time.

An afterimage may remain on the DMD panel due to the characteristics of the panel of the projector.

Caution on Hanging from the Ceiling

When hanging the projector from the ceiling, clean the air intake vents and top of the projector periodically with a vacuum cleaner. If you leave the projector unclean for a long time, the cooling fans can be clogged with dust, and it may cause a breakdown or a disaster.

DO NOT SET THE PROJECTOR IN GREASY, WET, OR SMOKY CONDITIONS SUCH AS IN A KITCHEN TO PREVENT A BREAKDOWN OR A DISASTER. IF THE PROJECTOR COMES IN CONTACT WITH OIL OR CHEMICALS, IT MAY BECOME DETERIORATED.

♦ *READ AND KEEP THIS MANUAL FOR LATER USE.*

All the safety and operating instructions should be read before beginning to operate the product.

Read all of the instructions given here and retain them for later use. Unplug this projector from the AC power supply before cleaning. Do not use liquid or aerosol cleaners on the projector. Use a damp cloth for cleaning.

Follow all warnings and instructions marked on the projector.

For added protection of the projector during a lightning storm, or when it is left unattended or unused for long periods of time, unplug it from the wall outlet. This will prevent damage due to lightning and power surges.

Do not expose this unit to rain or use near water. For example, in a wet basement, near a swimming pool..., etc.

Do not use attachments not recommended by the manufacturer as they may result in hazards.

Do not place this projector on an unstable cart, stand, or table. The projector may fall, causing serious injury to a child or adult, and serious damage to the projector. Use only with a cart or stand recommended by the manufacturer, or sold with the projector. For wall or shelf mounting, use a tool such as a mounting kit to secure the projector.

An appliance and cart combination should be moved with care.

Sudden stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.

Slots and openings in the rear and front of the cabinet are provided for ventilation, to insure reliable operation of the equipment and to protect it from overheating.

The openings should never be covered with cloth or other materials, and the bottom opening should not be blocked by placing the projector on a bed, sofa, rug, or other similar surface. This projector should never be placed near or over a radiator or heat register.

This projector should not be placed in a built-in installation such as a book case unless proper ventilation is provided.

Never push objects of any kind into this projector through cabinet slots as they may touch dangerous voltage points or short out parts that could result in a fire or electric shock. Never spill liquid of any kind onto the projector.

Do not install the projector near the ventilation duct of air-conditioning equipment.

This projector should be operated using only the type of power source indicated on the marking label. If you are not sure of the type of power supplied, contact the Canon Customer Support Center or local power company.

Do not overload wall outlets and extension cords as this can result in fire or electric shock. Do not allow anything to rest on the power cord. Do not locate this projector where the cord may be damaged by people walking on it.

Do not attempt to service this projector yourself as opening or removing covers may expose you to dangerous voltages or other hazards. Refer all servicing to qualified service personnel.

Unplug this projector from the wall outlet and refer servicing to qualified service personnel under the following conditions:

1. When the power cord or plug is damaged or frayed.
2. If liquid has been spilled into the projector.
3. If the projector has been exposed to rain or water.
4. If the projector does not operate normally after following the operating instructions. Adjust only those controls that are covered in the operating instructions as improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the projector to normal operating condition.
5. If the projector has been dropped or the cabinet has been damaged.
6. When the projector exhibits a distinct change in performance-this indicates a need for servicing.

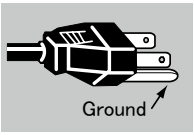
When replacement parts are required, be sure the service technician uses replacement parts specified by the manufacturer that have the same characteristics as the original parts. Unauthorized substitutions may result in fire, electric shock, or injury.

Upon completion of any service or repairs to this projector, ask the service technician to perform routine safety checks to determine that the projector is in safe operating condition.

AC Power Cord Requirement

The AC Power Cord supplied with this projector meets the requirements for use in the country you purchased it.

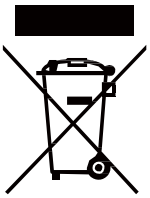
AC Power Cord for the United States and Canada:
The AC Power Cord used in the United States and Canada is listed by the Underwriters Laboratories (UL) and certified by the Canadian Standard Association (CSA).



The AC Power Cord has a grounding-type AC line plug. This is a safety feature to ensure the plug fits into the power outlet. Do not try to tamper with this safety feature. Should you be unable to insert the plug into the outlet, contact your electrician.

THE SOCKET-OUTLET SHOULD BE INSTALLED NEAR THE EQUIPMENT AND EASILY ACCESSIBLE.

Hg	For the U.S. and Canada, LAMP (S) INSIDE THIS PRODUCT CONTAIN MERCURY AND MUST BE RECYCLED OR DISPOSED OF ACCORDING TO LOCAL, MUNICIPAL, STATE, PROVINCIAL, OR FEDERAL LAWS. For lamp recycling and disposal information please call 1-800-OK-CANON for the U.S. and Canada.



Only for European Union and EEA (Norway, Iceland and Liechtenstein)

These symbols indicate that this product is not to be disposed of with your household waste, according to the WEEE Directive (2012/19/EU), the Battery Directive (2006/66/EC) and/or national legislation implementing those Directives.

If a chemical symbol is printed beneath the symbol shown above, in accordance with the Battery Directive, this indicates that a heavy metal (Hg = Mercury, Cd = Cadmium, Pb = Lead) is present in this battery or accumulator at a concentration above an applicable threshold specified in the Battery Directive.

This product should be handed over to a designated collection point, e.g., on an authorized one-for-one basis when you buy a new similar product or to an authorized collection site for recycling waste electrical and electronic equipment (EEE) and batteries and accumulators. Improper handling of this type of waste could have a possible impact on the environment and human health due to potentially hazardous substances that are generally associated with EEE. Your cooperation in the correct disposal of this product will contribute to the effective usage of natural resources.

For more information about the recycling of this product, please contact your local city office, waste authority, approved scheme or your household waste disposal service or visit http://www.canon-europe.com/weee, or http://www.canon-europe.com/battery.

Federal Communication Commission Notice

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.

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.

Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

The cable with a ferrite core provided with the projector must be used with this equipment in order to comply with Class A of the FCC Rules.

Use of a shielded cable is required to comply with Class A of FCC Rules.

Do not make any changes or modifications to the equipment unless otherwise specified in the instructions. If such changes or modifications should be made, you could be required to stop operation of the equipment.

Warning:

This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

The cable with a ferrite core provided with the projector must be used with this equipment in order to comply with Class A.

Use of a shielded cable is required to comply with Class A.

Safety Symbols in this Manual

This section describes the safety symbols used in this manual. Important projector safety information is identified by the following symbols. Always observe the safety information by these symbols.

	Denotes the risk of death or serious injury from improper handling if the information is not observed. To ensure safe use, always observe this information.
	Denotes the risk of injury from improper handling if the information is not observed. To ensure safe use, always observe this information.

Precautions for Use

As this section contains important safety-related information, be sure to read the following carefully beforehand in order to use your projector correctly and safely.

⚠ Warning

During installation, keep the projector plug easily accessible so that the projector can be unplugged immediately if necessary, or keep a circuit breaker within reach.

If the following situations occur, turn the power off, remove the power plug from the power outlet and contact the Canon Customer Support Center. Failure to do so could cause a fire or result in an electric shock.

- If smoke is emitted
- If an unusual smell or noise is emitted
- If water or other liquid has entered the projector
- If metal or any other foreign material has entered the projector
- If the projector is knocked over or dropped and the cabinet is damaged

Pay attention to the following points for handling the power cord. Failure to do so may cause a fire, electric shock or personal injury.

- Do not place any objects on the power cord and do not allow it to become trapped under the projector.
- Do not cover the power cord with a carpet.
- Do not modify or excessively bend, twist, pull, wind, or bundle the power cord.
- Keep the power cord away from heaters and other sources of heat.
- Do not use a damaged power cord. If the power cord is damaged, purchase a replacement from your dealer.
- The power cord included with this projector is for use exclusively with this product. Do not use this cord for other products.
- Be sure to connect the ground wire of the power cord to ground.
- Be sure to connect the ground wire before connecting the power plug to the outlet. Also when you disconnect the ground wire, be sure to unplug the power plug from the outlet beforehand.

⚠ Warning

Pay attention to the following points regarding the power source, power plug and handling of the connector. Failure to do so may cause a fire, electric shock or personal injury.

- Do not use any power source with a voltage other than the voltage indicated (AC 100–240 V).
- Do not pull the power cord and be sure to hold the power plug or connector when removing. Incorrect handling may damage the power cord.
- Do not insert any metal objects into the contact parts of the power plug or connector.
- Do not remove the power plug or connector with wet hands.
- Insert the power plug and connector securely up to the base. Additionally, do not use a damaged power plug or an outlet that is loose.
- When using an extension cord, do not exceed the cord's rated capacity.
- Periodically inspect the power plug and outlet and remove any dust or dirt from between the plug and the outlet.

Installation and Handling Precautions

Pay attention to the following points regarding installation and handling of the projector. Failure to do so may cause a fire, electric shock or personal injury.

- Do not use the projector where it might get wet, such as outdoors or by bathtubs or showers.
- Do not place containers containing a liquid on top of the projector.
- Do not touch the projector itself, the power cord, or the cable if lightening strikes.
- Do not move the projector until you have switched off the power, removed the power plug from the power outlet and unplugged any other cables.
- Unplug the projector before cleaning or maintenance.
- Before installing or replacing a lens unit, make sure to remove the power plug from the outlet. Failure to do so could result in an electric shock or injury.

⚠ Warning

Pay attention to the following points regarding installation and handling of the projector. Failure to do so may cause a fire, electric shock or personal injury.

- Do not remove the cabinet from the projector or disassemble it. The interior of the projector contains high-voltage components as well as parts that are hot. If inspection, maintenance or repair is required, contact the Canon Customer Support Center.
- Do not disassemble or modify the projector (including consumable parts) or the remote control.
- Do not look directly into the exhaust vents during use.
- Do not insert any object into vents in the projector, such as the air intake vent or exhaust vents.
- Do not place a pressurized can in front of the exhaust vents. The pressure of the contents of the can may increase due to heat from the exhaust vents and this could result in an explosion.
- Using the lens shift function the lens in the projector moves up / down / left / right powered by a motor. Do not touch the lens when the lens is moving. Doing so could cause a personal injury.
- Before replacing the lens unit, wait at least one hour after the projector is turned off to allow the projector to cool thoroughly. Failure to do so could result in a burn or injury.
- When cleaning off dust or dirt from the projector lens etc., do not use any kind of spray that is flammable. As the temperature of the lamp inside the projector is high, it could ignite, causing a fire.
- As strong light beams are emitted while the projector is in use, do not look directly into the projector lens. Doing so could cause an eye injury. Pay particular attention to prevent small children from doing so.
- When setting the projector on a high surface for projection, be sure the surface is flat and stable.
- For ceiling mounting precautions, refer to the installation manual included with the ceiling mount (sold separately).
- When hanging the projector from a ceiling, put the projector down on the floor or a workbench before attaching or replacing the lens unit. Failure to do so could result in parts falling off the projector and may cause an accident or personal injury.

⚠ Warning

Precautions on the Lamp

This projector uses a high-pressure mercury lamp, which must be handled carefully and correctly as described below.

The mercury lamp has the following characteristics.

- The lamp will gradually become darker over time.
- Impact, abrasion, or use of worn-out lamps may cause lamps to rupture (accompanied by a loud noise) or burn out.
- Lamps are more likely to rupture after the lamp replacement message is displayed (see “Replacing the Projection Lamp” on page 58). Replace the lamp with a new one as soon as possible.
- Useful life of lamps varies widely from lamp to lamp and depending on the environment of use. Some lamps may fail or rupture soon after they are first used.
- Be prepared by keeping a spare lamp.

Note the following precautions during lamp replacement or when a lamp has ruptured. Failure to do so could result in an electric shock or personal injury.

- Before replacing the lamp, always unplug the projector and wait at least an hour.
- Ruptured lamps may scatter shards of glass inside the projector. Contact the Canon Customer Support Center for cleaning and inspection of the projector interior and lamp replacement.

Precautions when replacing lamps that stop working

- If illumination suddenly stops, either when you turn the projector on or after it has been on for a while, the lamp may have ruptured. In this case, never attempt to replace the lamp by yourself. Always request service from the Canon Customer Support Center.
- With ceiling-mounted projectors, the lamp may fall out when you open the lamp cover, or during replacement. During replacement, stand to the side of the lamp cover, not directly under it.
- If the lamp ruptures, dust and gas (containing mercury vapor) may come out of the exhaust vents. If this happens, immediately open the windows and doors to provide ventilation to the room.
- If you accidentally inhale gas from the lamp or get any pieces in your eyes or mouth, consult a doctor immediately.

⚠ Warning

Precautions for the Batteries of the Remote Control

Pay attention to the following points regarding handling of batteries. Failing to do so could result in a fire or personal injury.

- Do not heat, short circuit or disassemble the batteries, or place them in a fire.
- Do not attempt to recharge the batteries that are included with the remote control.
- Remove the batteries when they are flat or when the remote control will not be used for a long period of time.
- When replacing the batteries, replace both at the same time. Also, do not use two batteries of a different type at the same time.
- Insert the batteries with the + and - terminals in the correct directions.
- If any liquid from inside the batteries leaks out and contacts your skin, be sure to wash the liquid off thoroughly.

⚠ Caution

Pay attention to the following points regarding installation and handling of the projector.

- If the projector will not be used for a long period of time, be sure to remove the power plug from the power outlet to ensure safety. Failure to do so presents a risk of fire if dust accumulates on the plug or outlet.
- Parts of the cabinet around and above the exhaust vents may become hot during projection. Touching these areas during operation could cause burns to the hands. Pay particular attention in preventing young children from touching these parts. Additionally, do not place any metal objects around or above the exhaust vents. Due to the heat from the projector, doing so could cause an accident or personal injury.
- Do not place the projector where it may be exposed to oily smoke or steam, such as near kitchen counters or humidifiers. Doing so may cause fire or electric shock.
- Do not place any heavy objects on top of the projector or sit / stand on it. Pay particular attention to prevent small children from doing so. The projector may be knocked over and this could result in damage or a personal injury.
- Do not place the projector on an unstable or slanted surface. Doing so may cause the projector to fall or be knocked over and could result in a personal injury.
- Do not place any objects in front of the lens during projection. Doing so could cause a fire.
- Presenters in front of the projector should stand where the light does not seem too bright, and where their shadow does not fall on the screen.

When handling the lamp, pay attention to the following points.

- Be sure not to handle the lamp immediately after it has been used. Be sure to switch off the power and wait for approximately 1 hour for the lamp and the projector to cool down sufficiently. Failure to do so could result in a burn or personal injury due to heat from the lamp or projector.

Caution for Viewing 3D Content

⚠ Caution

Pay attention to the following points when viewing 3D content.

- Photosensitive patients, patients with heart disease, pregnant women, elderly people, and people with serious illness and/or with a history of epilepsy should not view 3D content.
- We advise that you should refrain from viewing 3D content if you are in bad physical condition, need sleep or have been drinking alcohol.
- Stop watching 3D content if you experience the following symptoms. If you experience such symptom, immediately stop viewing 3D content and take a break until the symptom has subsided.
  - You see doubly-blurred images or you cannot view the image stereoscopically.
  - You feel fatigue or discomfort.
- Take breaks when viewing 3D content for an extended period of time. As this may cause eye fatigue. Viewing 3D content for an extended period of time or viewing them from an oblique angle can cause eye strain.
- Parents should accompany and monitor their children as children cannot properly express discomfort with 3D content viewing. Children who are six year of age or younger should not view 3D content.
- The optimum 3D viewing distance from the screen is about 3 times of the vertical screen size or more and your eyes should be level with the screen.

⚠ Caution

Pay attention to the following points when carrying or transporting the projector.

- This projector is a precision instrument. Do not knock it over or subject it to impacts. Doing so may cause a malfunction.
- When carrying or holding up the projector after attaching the lens unit, be sure not to hold the lens. Doing so may cause damage to the lens unit.
- Do not reuse any packaging or shock-absorbent materials that were supplied with the projector at the time of purchase for transporting or shipping the projector. Protection of the projector cannot be guaranteed if used packaging or shock-absorbent materials are reused. Fragments from shock-absorbent material may also enter the interior of the projector which could cause a malfunction.
- If transportation is necessary, the lens unit should be removed before transporting the projector. If the projector is subjected to excessive impacts during transportation, the lens unit may be damaged. Removal and installation of the lens unit should not be performed by the user. Be sure to have the procedure performed by a qualified technician or contact the Canon Customer Support Center.
- Disconnect the cables connected to the projector. Carrying the projector while the cables are attached may cause an accident.
- Retract the adjustable feet before moving the projector. Leaving the feet extended may cause damage.

⚠ Caution

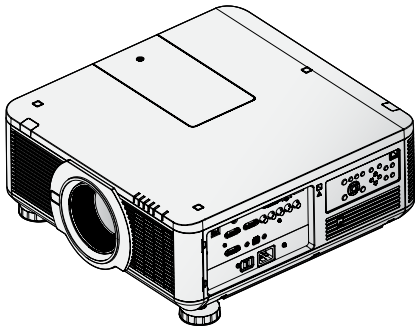
Pay attention to the following points when installing or using the projector.

- Do not touch the lens with bare hands. Doing so may result in deterioration of image quality.
- If the projector is abruptly taken from a cool to a warm location, condensation may form on the lens or mirrors, which may cause a blurred image. Wait until the condensation has evaporated for the image projected to return to normal.
- Do not install the projector in a location where the temperature is high or low. Doing so may cause a malfunction. For guidelines on operating temperatures, see “Product Specifications”.
- Do not place any objects on top of the projector that may change shape or color due to heat.
- Projector settings must be adjusted when using the projector at high altitudes or in upward or downward projection. Failure to adjust the settings may shorten the lamp life or damage the lamp. For details, contact the Canon Customer Support Center.
- Do not install the projector near high-voltage electrical power lines or an electrical power source.
- Do not use the projector on a soft surface such as carpet or sponge mat, etc. Doing so could cause heat to build up inside the projector and this could result in a malfunction.
- Do not block the air intake or exhaust vents of the cooling fan. If the air intake or exhaust vent is blocked, heat cannot be released from inside the projector, which may shorten the useful life of the lamp or cause malfunction.
- Installing the projector in the wrong direction may cause a malfunction or accident. Do not install the projector with one side raised, or with the projector tilted toward the left or right.
- Install the projector with sufficient space between air intakes and exhaust vents and walls. Failure to do so could cause a malfunction.
- Do not install the projector in a location that is damp, or where there is a lot of dust, oily smoke or tobacco smoke. Doing so could cause contamination of optical components such as the lens and the mirror and may result in deterioration of image quality.

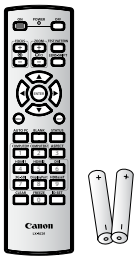
Getting Started

Packing Checklist

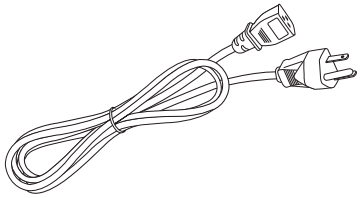
Carefully unpack the projector and check that the following items are included:



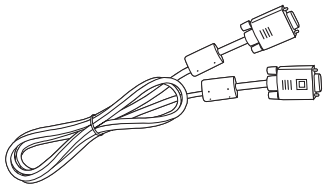
Projector



Remote Control
(with two AA batteries)

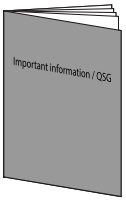


Power Cord (2.5M/8.2 ft)



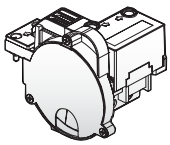
Computer Cable (1.8M/5.9 ft)

CD-ROM
(This User's manual)



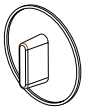
Important Information

Warranty Card



Color Wheel*

Anti-theft Screw for Lens
M4 x 0.7 x 70 mm



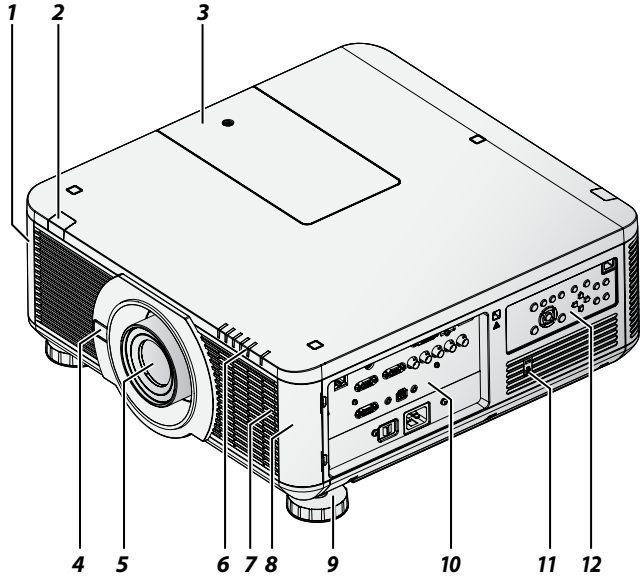
Dust Cap

Contact your dealer immediately if any items are missing, appear damaged, or if the unit does not work. It is recommend that you keep the original packing material should you ever need to return the equipment for warranty service.

* A six-segment color wheel (6 Segment-BRT), optimized for brightness, is fitted as standard. Use the optional color wheel (6 Segment-COL) for optimized color.

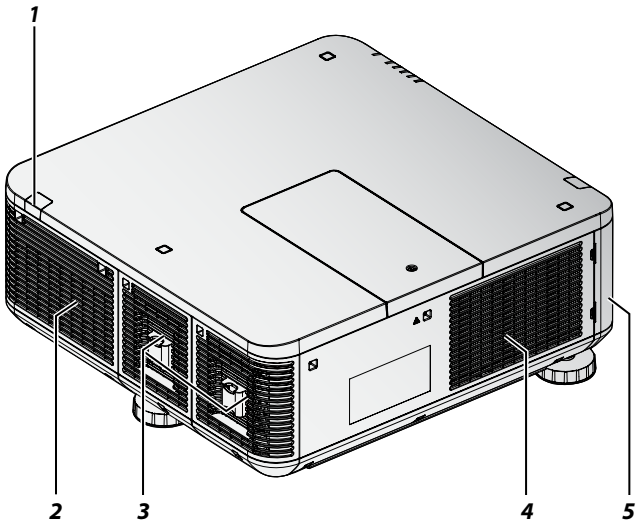
Views of Projector Parts

Front-right View



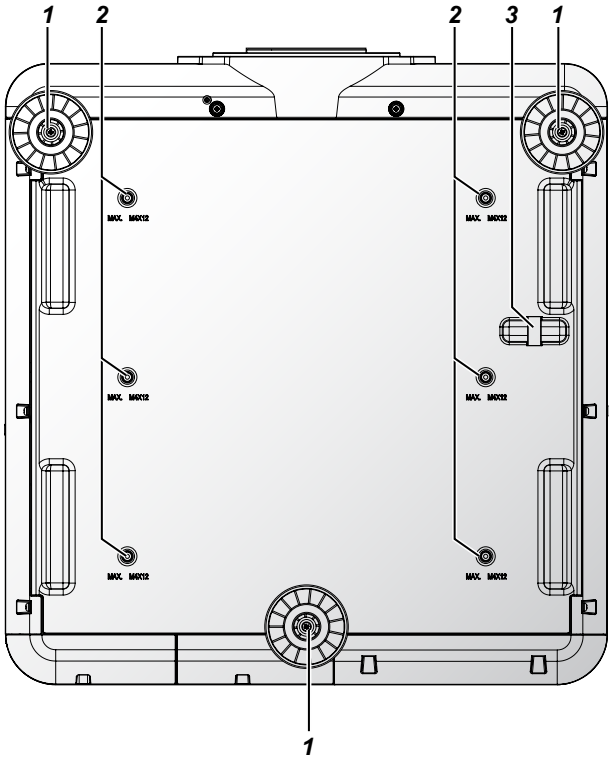
Item	Label	Description
1	Filter Cover	The internal fan pulls cool air to the projector via the intake.
2	Front IR Receiver	Receives IR signal from remote control.
3	Color Wheel Cover	Slide to change the color wheel.
4	Lens Release Button	Push to change the projector lens.
5	Lens	Projection lens. (Optional)
6	LED Indicators	Shows the status of the projector.
7	Filter	Clean filter every 500 hours to prolong the life of the projector.
8	Filter Cover	The internal fan pulls cool air to the projector via the intake.
9	Adjusting Foots	Adjust the levelness the projection angle.
10	I/O Panel	Use to connect to other devices.
11	Kensington Lock	Secure to permanent object with a Kensington® Lock system.
12	Control Panel	Use buttons to select or adjust the settings of the projector.

Rear-left View



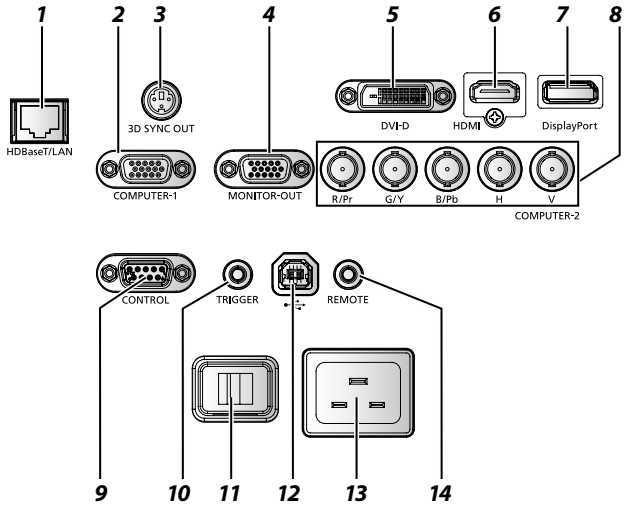
Item	Label	Description
1	Rear IR Receiver	Receives IR signal from remote control.
2	Exhaust	Heat is discharged from the projector via the exhaust. Make sure that the exhaust is clear.
3	Lamp Cover	Remove to change the lamp.
4	Filter	Clean filter every 500 hours to prolong the life of the projector.
5	Filter Cover	The internal fan pulls cool air to the projector via the intake.

Bottom View



Item	Label	Description
1	Adjusting foots	Adjust the levelness the projection angle.
2	Fixture screw holes	Screw holes for ceiling mount.
3	Security bar	Additional option to secure projector.

I/O Panel



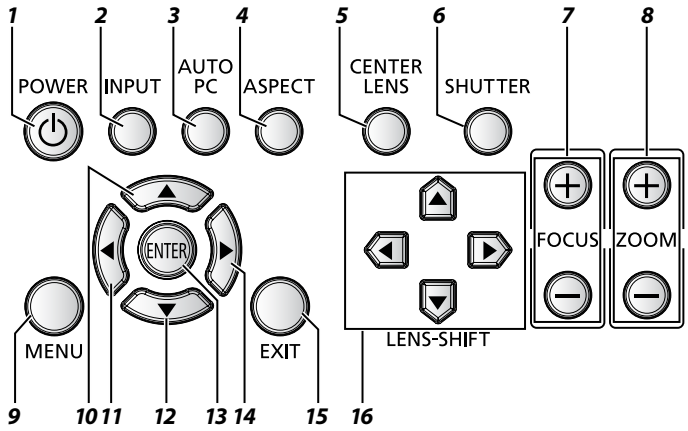
Item	Label	Description
1	HDBaseT/LAN*	Connect to the RJ45 cable.
2	COMPUTER-1	Connect to RGB, HD component or PC.
3	3D SYNC OUT	Connect to the 3D IR synchronization signal transmitter.
4	MONITOR-OUT	Connect to other display equipment for an additional display option.
5	DVI-D	Connect to DVI-D devices.
6	HDMI	Connect to HDMI devices.
7	DisplayPort	Connect to devices that contain a DisplayPort device.
8	COMPUTER-2	Connect BNC-type input connectors to the RGB or YPbPr/YCbCr output signal video equipment.
9	CONTROL	Connect to the PC for system maintenance and projector maintenance.
10	TRIGGER	Provide 12V (+/- 1.5) output for screen operation.
11	Power Switch	Turn on or off AC power of the projector.
12		Connect to an PC for maintenance.
13	Power Socket	Connect the projector to a wall socket for power.
14	REMOTE	Connect a 1.5 mm jack from a wired remote.

Note:
If your video equipment has various input sources, it is recommended to connect in priority of HDMI/ DVI-D, component (through VGA), Composite for better picture quality.

* Notes on HDBaseT

- Use a shielded cable rated at CAT5e or better.
- Maximum transmission distance is 100 m.
- However, maximum transmission distance may be shorter in some environments.
- Do not use the LAN cable when it is coiled or bundled.
- Inserting or removing the LAN cable during projection may cause noise.
- Connectivity with all HDBaseT transmitters on the market is not guaranteed.
- Some HDBaseT transmitters may not enable correct projection when used to connect source equipment to the projector.

Control Panel



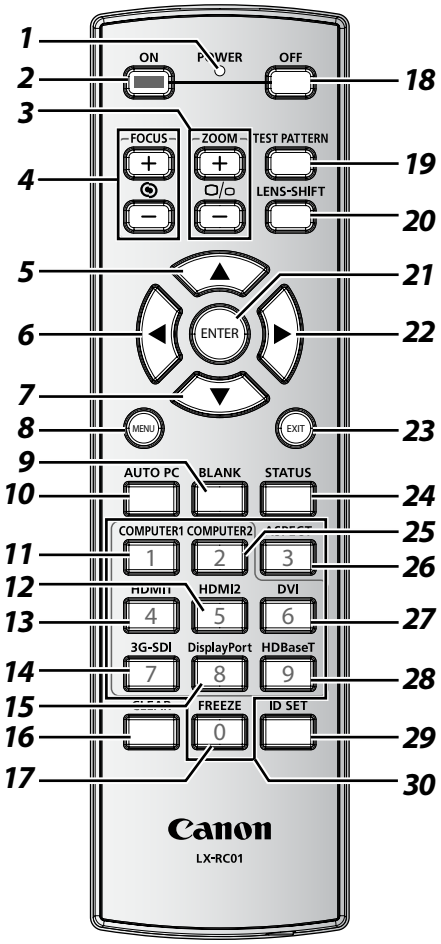
Item	Label	Description
1	POWER	Press to turn on or off the projector.
2	INPUT	Press to select the input source.
3	AUTO PC	Press to initiate the automatic synchronization procedure.
4	ASPECT	Press to switch to the next aspect ratio setting.
5	CENTER LENS	Press to center the lens. ***Note:*** *Please center the lens every time after the lens is installed.*
6	SHUTTER	Press to open or close the shutter.
7	FOCUS	Press to adjust the focus of the projected image.
8	ZOOM	Press to adjust the size of the projected image.
9	MENU	Press to display or hide the OSD menu.
10	▲	Navigates and changes settings in the OSD.
11	◄	Navigates and changes settings in the OSD.
12	▼	Navigates and changes settings in the OSD.
13	ENTER*	Press to confirm the changed settings.
14	►	Navigates and changes settings in the OSD.
15	EXIT	Press to return the previous level or exit the OSD menu.
16	LENS-SHIFT	Press to move the lens up, down, right or left.

* Lens Adjustment Screen appears when **ENTER** button is pressed when OSD is not displayed.

Remote Control Parts

Remote Control Precaution

- Handle the remote control carefully.
- Avoid excessive heat and humidity.
- Do not short, heat, or take apart batteries.
- Do not throw batteries into fire.
- If you will not be using the remote control for a long time, remove the batteries.
- Ensure that you have the batteries' polarity (+/-) aligned correctly.
- Do not use new and old batteries together, or use different types of batteries together.
- Dispose of used batteries according to your local regulations.



Important:

1. *Avoid using the projector with bright fluorescent lighting turned on. Certain high-frequency fluorescent lights can disrupt remote control operation.*
2. *Be sure nothing obstructs the path between the remote control and the projector.*
3. *The buttons and keys on the projector have the same functions as the corresponding buttons on the remote control. This user's manual describes the functions based on the remote control.*
4. *Use an exclusive Remote Control (LX-RC01).*

Item	Label	Description
1	LED indicator	Lights when the key is pressed.
2	ON	Press to turn on the projector.
3	ZOOM	Press to adjust the size of the projected image.
4	FOCUS	Press to adjust the focus of the projected image.
5	▲	Navigates and changes settings in the OSD.

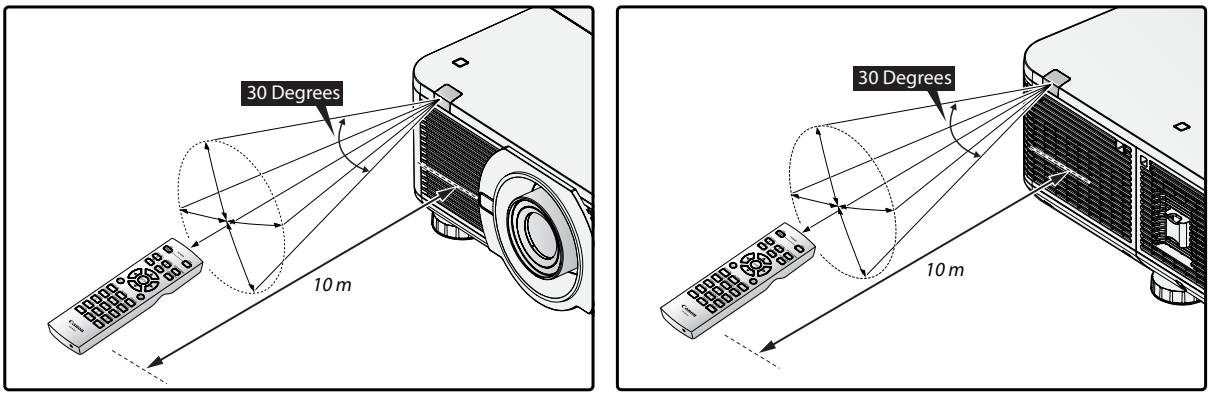
Item	Label	Description
6	◄	Navigates and changes settings in the OSD.
7	▼	Navigates and changes settings in the OSD.
8	MENU	Press to display or hide the OSD menu.
9	BLANK	Press to open or close the shutter.
10	AUTO PC	Press to initiate the automatic synchronization procedure.
11	COMPUTER1	Press to switch input source to COMPUTER1.
12	HDMI2	Press to switch input source to HDMI.
13	HDMI1	Press to switch input source to HDMI.
14	3G-SDI	No function.
15	DisplayPort	Press to switch input source to DisplayPort.
16	CLEAR	Reset the stored Remote ID.
17	FREEZE (*1)	Press to freeze the projected image.
18	OFF	Press to turn off the projector.
19	TEST PATTERN	Press to display the test pattern and press again to switch to the next test pattern. Press **EXIT** to return the projected image.
20	LENS-SHIFT	Press to move the lens up, down, right or left.
21	ENTER (*2)	Press to confirm the changed settings.
22	►	Navigates and changes settings in the OSD.
23	EXIT	Press to return the previous level or exit the OSD menu.
24	STATUS	Press to display the **SERVICE** menu (OSD).
25	COMPUTER2	Press to switch input source to COMPUTER2.
26	ASPECT	Press to switch to the next aspect ratio setting.
27	DVI	Press to switch input source to DVI.
28	HDBaseT	Press to switch input source to HDBaseT.
29	ID SET	Press to set the Remote ID.
30	Numeric buttons	Press numeric to set Control ID or Remote ID.

(*1) This function is applicable to 2D signal.

(*2) Lens Adjustment Screen appears when **ENTER** button is pressed when OSD is not displayed.

Remote Control Operating Range

The remote control uses infrared transmission to control the projector. Provided you are not holding the remote perpendicular to the sides or the rear of the projector, the remote will function well within a radius of about 10 meters and 30 degrees above or below the projector level. If the projector does not respond to the remote control, move a little closer.



Setting the Remote ID to the Projector

To operate multiple projectors independently, set this ID function.

- "Remote ID" is for a remote control.
- "Control ID" is for a projector. See page 56.

1. Press the **ID SET** button for three seconds. The LED indicator on the remote control blinks.
2. To designate the Remote ID, press and hold the 2 digit number (01 ~ 99) each button for 1 second at least. The remote control backlight blinks. Once initiated, the ID set procedure allows for ten seconds to complete the process. After ten seconds, you must restart the procedure.

> ***Note:***
> *The factory default is "X / X". "X" means all ID. And the left side is "Control ID". The right side is "Remote ID". See page 56.*

Clearing the Remote ID

Press the **ID SET** and **CLEAR** for five seconds. The remote control backlight blinks signifying that the ID setting is cleared.

Projector and Remote Control Buttons

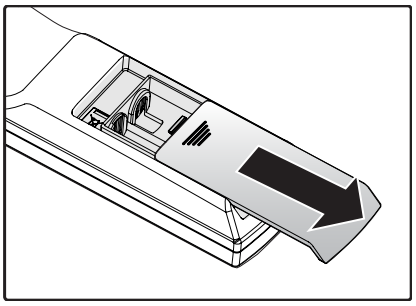
The projector can be operated using the remote control or the buttons on the side of the projector. All operations can be carried out with the remote control; however, the buttons on the projector are limited in use.

Setup and Operation

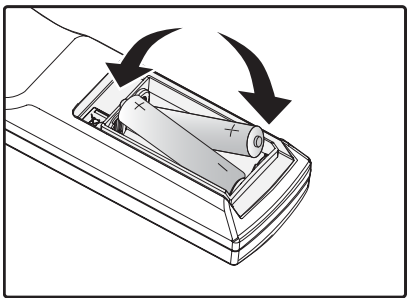
Inserting the Remote Control Batteries

- Make sure the battery is installed with the correct polarity.
- Do not use the old and new batteries or the batteries of different types together.
- Remove the battery if the remote control may not be used for a long time to prevent the damage caused by leaks.

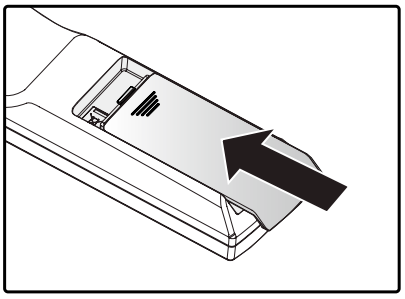
1. Slide the battery cover as illustrated.



2. Place two AA batteries in the compartment, make sure the polarity in the compartment and batteries are aligned correctly.

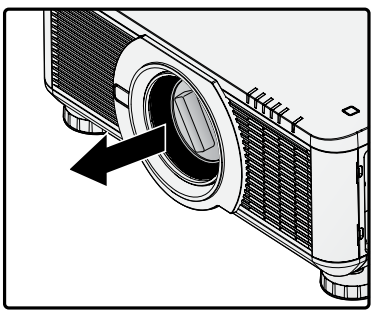


3. Slide the battery cover back.

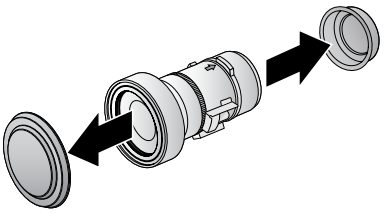


Installing the Lens

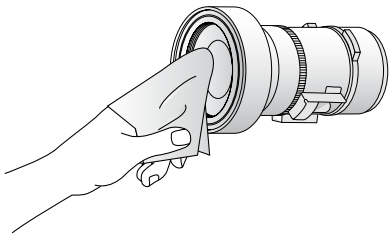
1. Remove the dust cap.



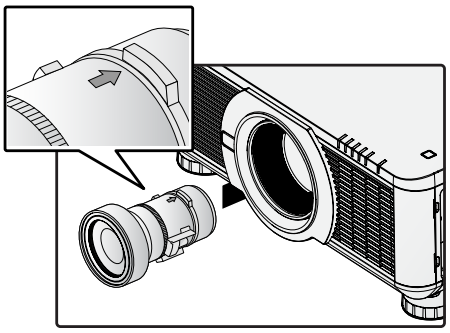
2. Remove the new lens from its packaging.
3. Remove the lens covers from the rear and front of the new lens. Remove them before continuing.



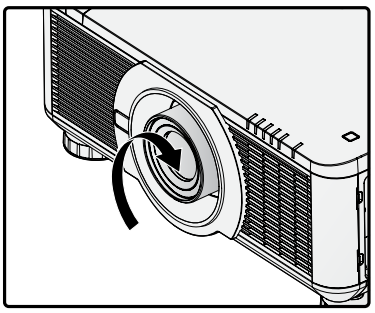
4. Clean the new lens before installing. Take care when cleaning to prevent scratching the surface of the new lens.



5. Make sure the connector is facing up and new lens is pushed into the holder.



6. Turn the new lens clockwise until and audible Click is heard signifying the new lens is secured and seated correctly.



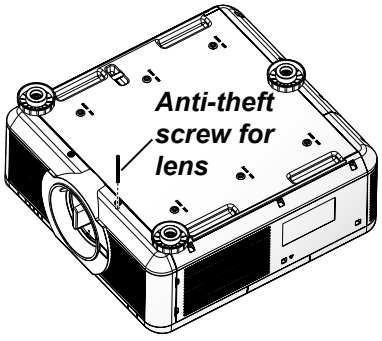
7. Gently pull on the new lens to ensure it is locked in place. If the new lens does not come off, it is seated correctly.

Note:

- *The projector supports the lens memory function. Perform the memory function every time when you install the lens.*
- *Be sure to execute "Center Lens" after the lens is changed.*
- *Refer to User's Manual attached to optional lens as well.*

Using the Anti-theft Screw for Lens

To prevent the accidental removal of the lens, fasten the Anti-theft screw for lens included with the projector to the bottom of the projector.



Precaution for Installing the Projector

The high quality display from the project is only available when the projector is correctly installed. Generally, the light source facing the screen should be reduced or eliminated as much as possible. The contrast of the image will be obviously reduced if the light directly shines on the screen, such as the beam from windows or the searchlight cast on the image. The image may become faded and not bright.

Projector Installation and Setup

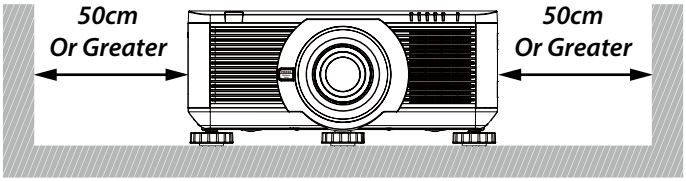
There are six fixture screw holes (M4 x 0.7 x 12mm) at the bottom of projector for ceiling mounting. The available installation options are available as follows:

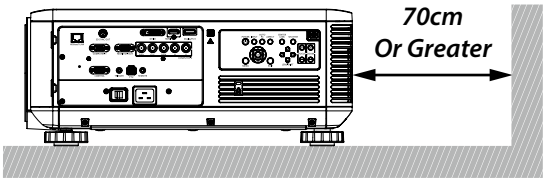
- **Front Table:** Install the projector on the table and project the image forward.
- **Rear Table:** Install the image behind the screen and project onto the screen.
- **Front Ceiling:** Mounting the projector on the ceiling and project the image forward.
- **Rear Ceiling:** Mounting the projector on the ceiling behind the screen and project onto the screen.
- **Up + Front:** Projector is mounted vertically upwards and the image is projected onto the ceiling mounted screen.
- **Down + Front:** Projector is mounted vertically downwards the image is projected onto the floor mounted screen.

Cautions for Ventilation

The product is a high-brightness projector. The intake with filters are located on the left and right sides to provide sufficient air for cooling. The projector has two vents on the back for cool air discharging. When installing, make sure the intake and outlet vents meet the required clearance to allow for the proper cooling requirements of the system. At least 50cm around the intake and 70cm around the vent should be clear.

Make sure that there is no obstruction or flammable material in proximity of the vents when the projector is installed so that necessary cooling is applied to the system.



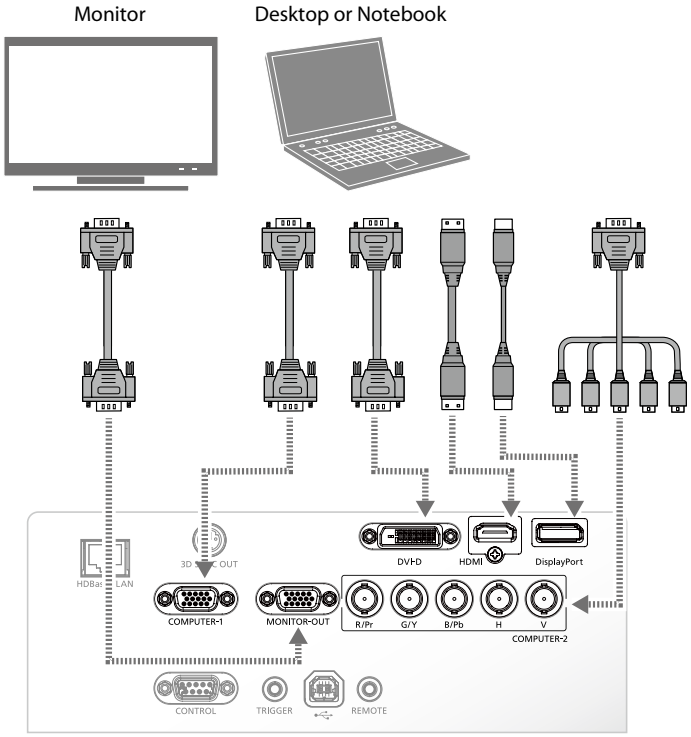


Note:

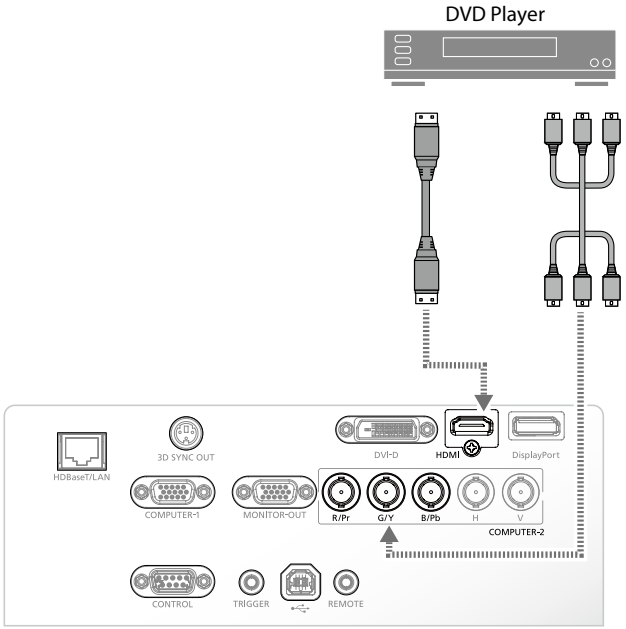
- *Inadequate cooling may cause the projector to stop operations due to overheating.*
- *Overheating may shorten the life of components or lamps.*
- *If installation requirements necessitate installation in a structure or enclosed space, the intake and outtake vents should not be obstructed to prevent overheating.*

Connecting the Projector

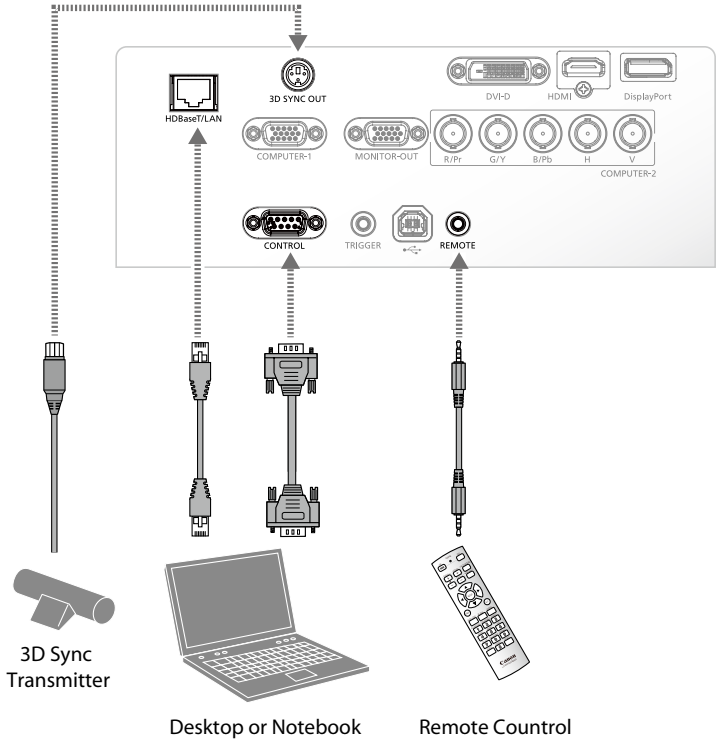
Connecting to the PC



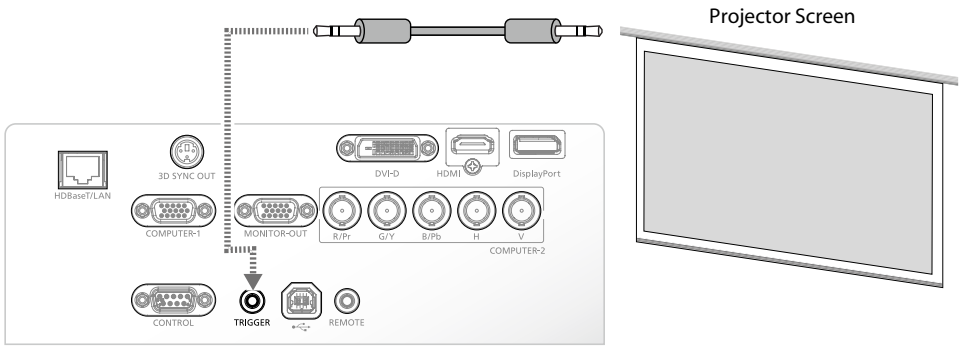
Connecting to the Video Devices



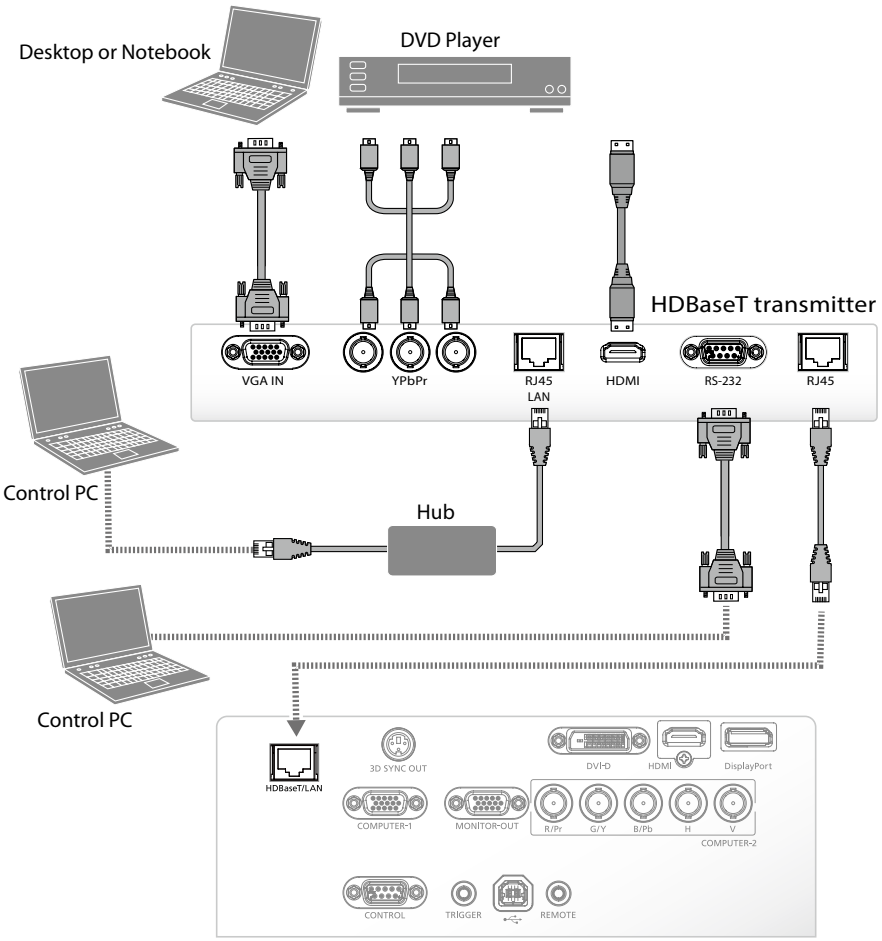
Connecting to the Control Devices



Connecting to the Screen Trigger

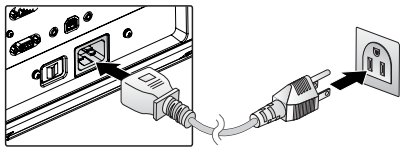


Connecting to the External HDBaseT Transmitter

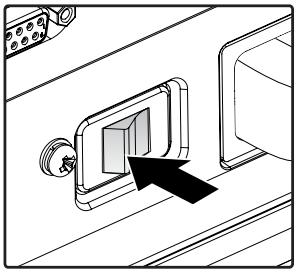


Starting and Shutting down the Projector

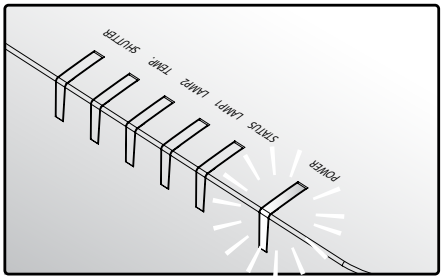
1. Connect the power cord to the projector. Connect the other end to a wall outlet.



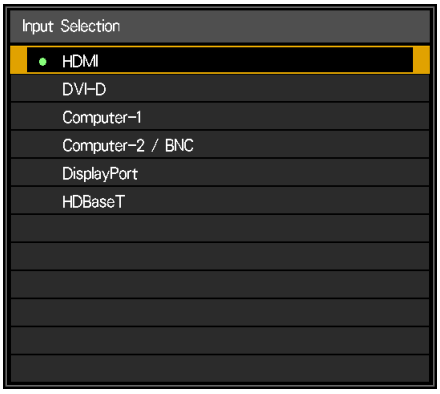
2. Turn on the power switch.



3. Make sure the **POWER** LED displays solid red.
   Press the **POWER** button on the projector or the **ON** button on the remote control to turn on the projector.
   See “Power LED Indicator” on page 73.



4. Press the source buttons on the remote control or **INPUT** on the projector to select a desired input source.



5. Press the **POWER** button on the projector or the **OFF** button on the remote control to show the “Power Off? / Press Power again” prompt.
6. Press the **POWER** button on the projector or the **OFF** button on the remote control to turn off the projector.

   The cooling fan continues to rotate for a while after Power Switch is turned off or the power cable is unplugged.

Note:

- *Use the projector’s supplied power cord.*
- *Confirm the projector’s power requirements before installing to make sure the power supply meets the projector’s specification requirements.*

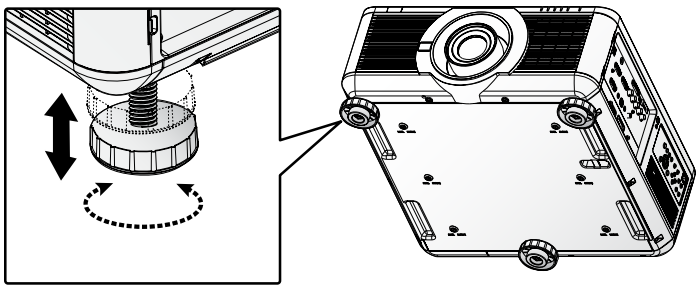
Caution:

*Do not unplug the power cord and do not turn off the power switch until the **POWER** LED solid red - indicating the projector has cooled down.*

Adjusting the Projector Level

Take note of the following when setting up the projector:

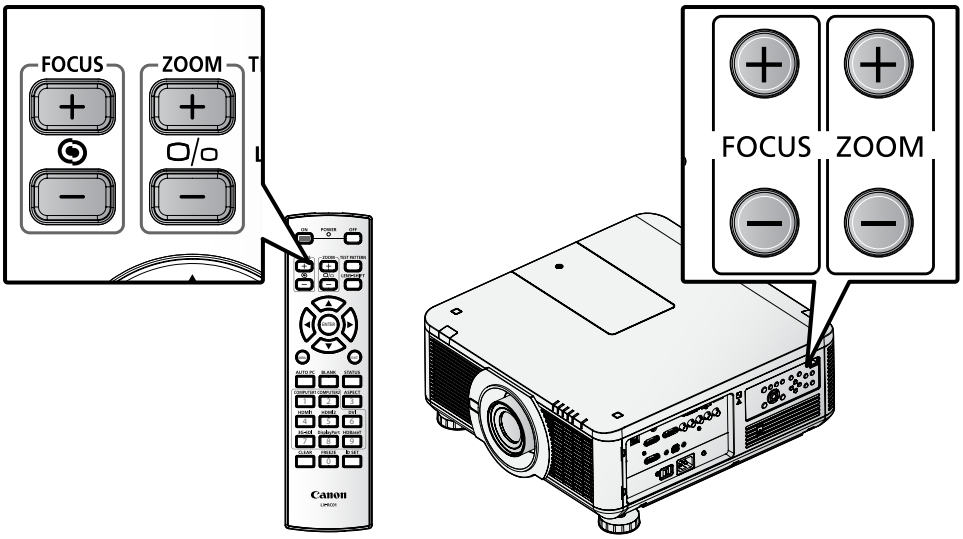
- The projector table or stand should be level and sturdy.
- Position the projector so that it is perpendicular to the screen.
- Ensure the cables are secured and out of the way to avoid tripping on them and prevent damage or injury.



To level the projector on the installation surface, turn the tilt-adjuster right or left until the desired angle is achieved.

Adjusting the Focus and Zoom

1. Press **FOCUS +/-** on the projector or the remote control to sharpen the projected image.
2. Press **ZOOM +/-** on the projector or the remote control to adjust the size of the image (**ZOOM +** increases image size, **ZOOM -** decreases image size).



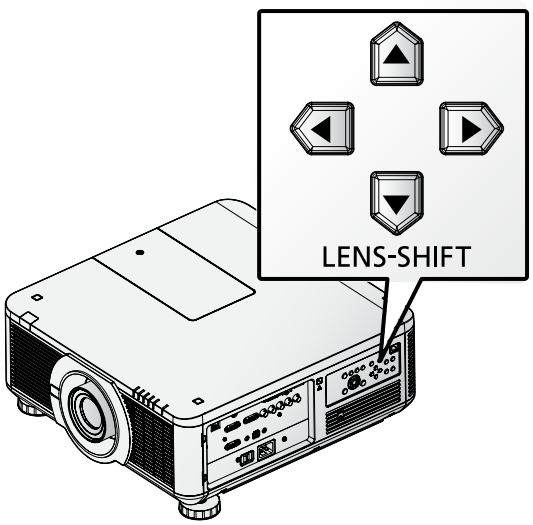
Adjust the Keystone

1. Press **MENU**. Press ◄ or ► to navigate to **ALIGNMENT**.
2. Press ▲ or ▼ until **Keystone** is selected.
3. Press **ENTER** to enter keystone control menu.
4. Press ◄ or ► to correct keystone distortion.

When the aspect is set to real in low-resolution mode, OSD may become out of range depending on the level of Keystone adjustment.

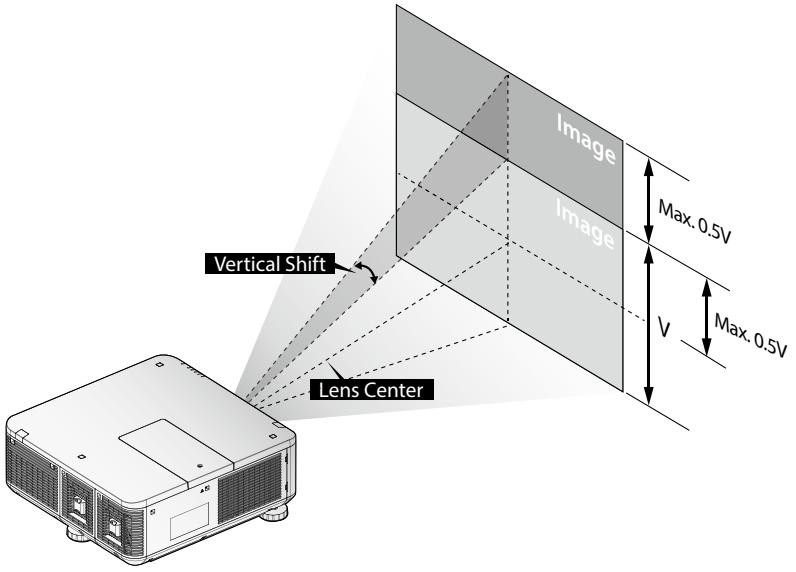
Adjusting the Lens Shift

The projector has the lens shift feature and the image can be vertically adjusted without moving the projector.

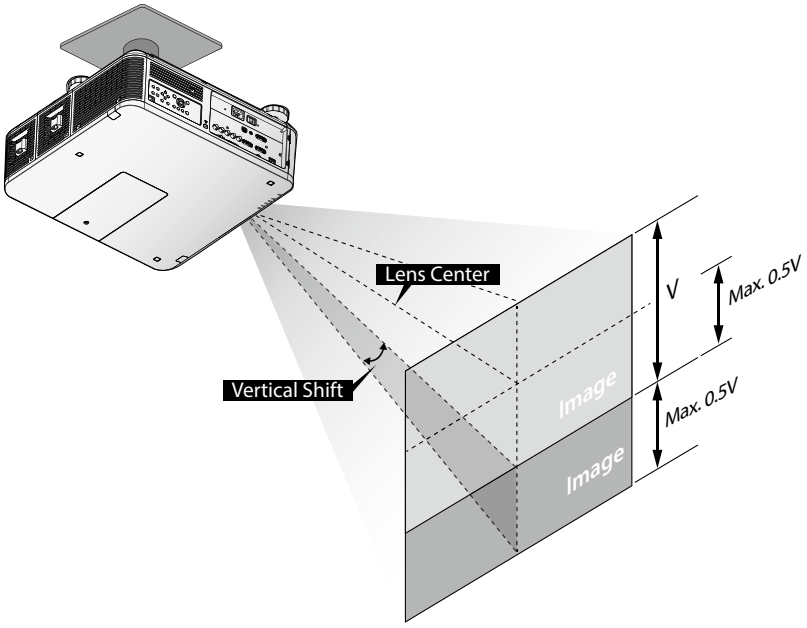


Vertical Lens Shift

The lens on a desk mounted projector can move down to up from 0% to 50% (0.5V).



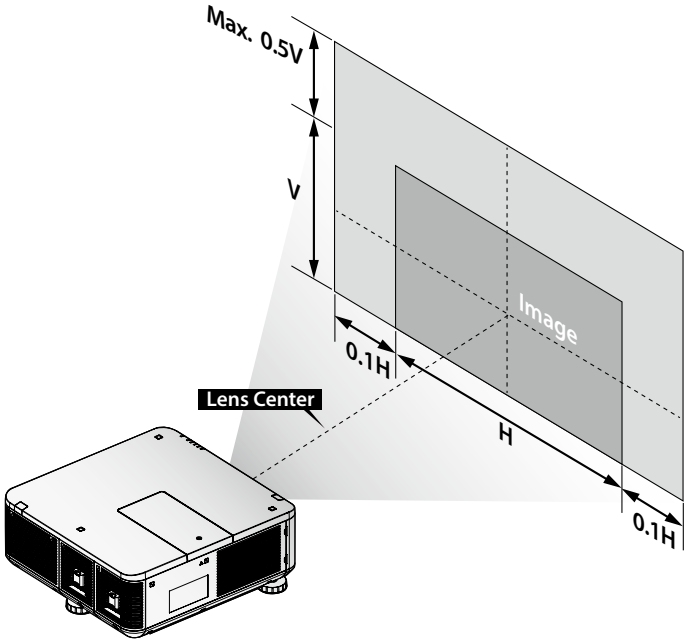
The lens of the ceiling mounted projector can move up to down from 0% to 50% (0.5V).



- The above lens shift range is for LX-IL01UW (ultra wide zoom lens), LX-IL02WZ (wide zoom lens), LX-IL03ST (standard zoom lens), LX-IL04MZ (middle zoom lens), LX-IL05LZ (long zoom lens), LX-IL06UL (ultra long zoom lens), except LX-IL07WF (short fixed lens).
- Optical performance guaranteed range for lens shift varies according to the lens to be mounted.
- The LX-IL07WF (short fixed lens), optical performance guaranteed range is limited at 0% position.

Horizontal Lens Shift

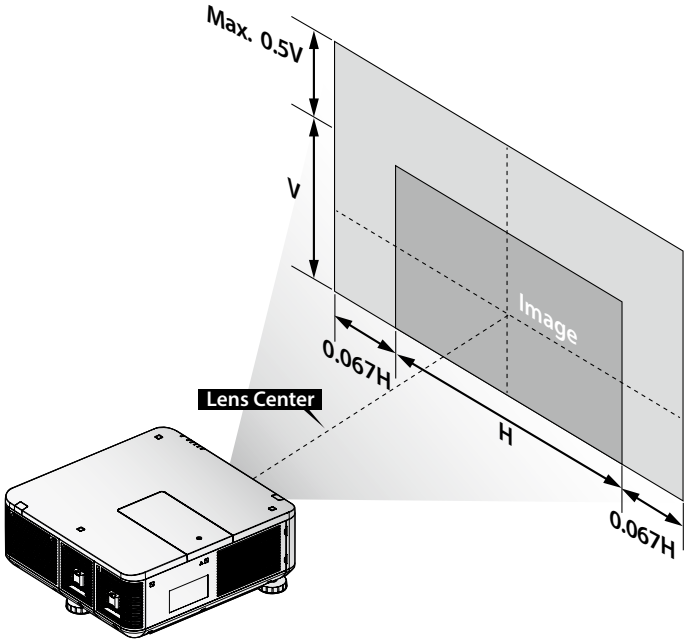
The image can be shifted horizontally to the right or left by 10% (0.1H) without moving the projector.



- The above lens shift range is for LX-IL02WZ (wide zoom lens), LX-IL03ST (standard zoom lens), LX-IL04MZ (middle zoom lens), LX-IL05LZ (long zoom lens), LX-IL06UL (ultra long zoom lens).
- Optical performance guaranteed range for lens shift varies according to the lens to be mounted.
- The LX-IL07WF (short fixed lens), optical performance guaranteed range is limited at 0% position.

Horizontal Lens Shift for LX-IL01UW (Ultra Wide Zoom Lens)

The image can be shifted horizontally to the right or left by 6.70% (0.067H) without moving the projector.



- The above lens shift range is for LX-IL01UW (ultra wide zoom lens).
- Optical performance guaranteed range for lens shift varies according to the lens to be mounted.

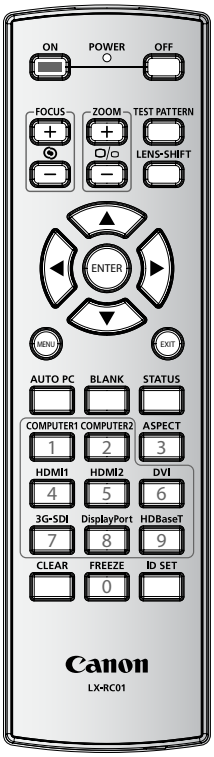
On-Screen Display (OSD) Menu Settings

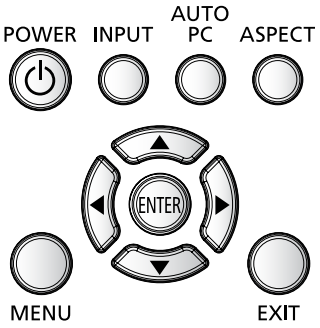
OSD Menu Controls

The projector has an OSD that lets you make image adjustments and change various settings.

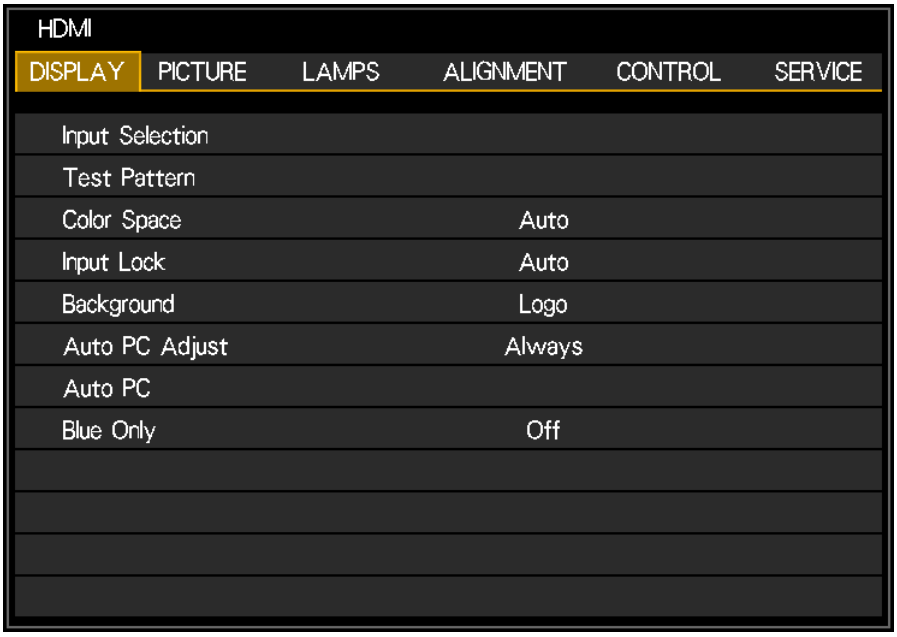
Navigating the OSD

You can use ▲, ▼, ◄ or ► on the remote control or the projector keypad to navigate and adjust settings.





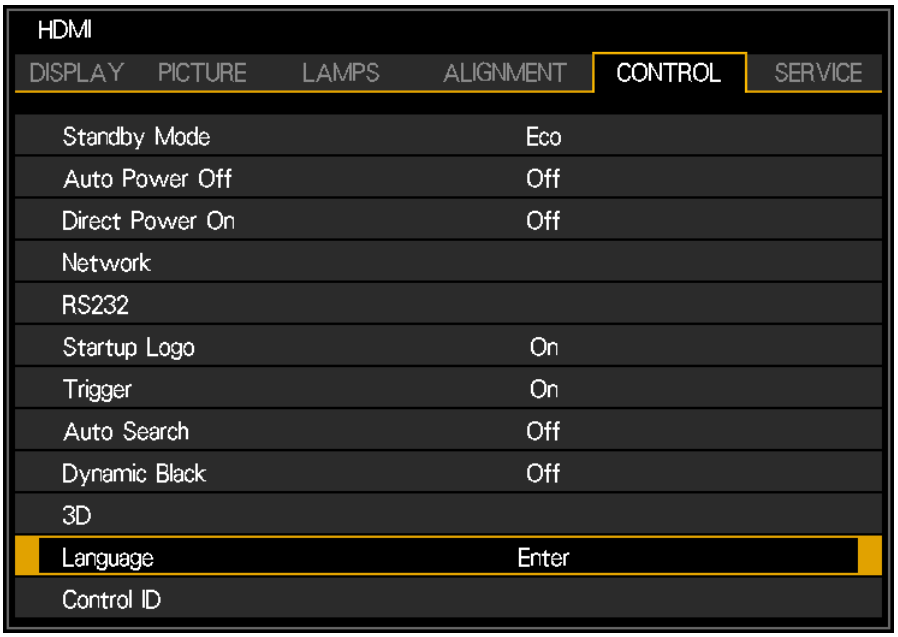
1. Press **MENU** to enter the OSD.
2. There are six menus. Press ◄ or ► to move through the menus.
3. Press ▲ or ▼ to move up and down in a menu.
4. Press ◄ or ► to change values for settings.
5. Press **MENU** to close the OSD or return the previous menu.



Setting the OSD Language

Set the OSD language (default: English) to your preference before continuing.

1. Press **MENU**. Press ◄ or ► to navigate to **CONTROL**.
2. Press ▲ or ▼ until **Language** is selected.



3. Press ▲ or ▼ until the language you want is selected.

4. Press **MENU** three times to close the OSD.

OSD Menu Overview

Main Menu	Sub Menu	Setting	
DISPLAY	Input Selection	**HDMI** / DVI-D / Computer-1 / Computer-2/BNC / DisplayPort / HDBaseT	
	Test Pattern	Color Bar / Crosshatch / Burst / Red / Green / Blue / White / Black / H Ramp / Uncorrected Red / Uncorrected Green / Uncorrected Blue / Uncorrected White / Uncorrected Black / Off	
	Color Space	**Auto** / YCbCr / YPbPr / RGB-PC / RGB-Video	
	Input Lock	**Auto** / 48Hz / 50Hz / 60Hz	
	Background	**Logo** / Blue / Black / White	
	Auto PC Adjust	Auto / **Always**	
	Auto PC	Enter	
	Blue Only	On / **Off**	
PICTURE	Picture Mode	**Presentation** / Standard / Video	
	Contrast	0 ~ 200	
	Brightness	0 ~ 200	
	Saturation	0 ~ 200	
	Hue	0 ~ 200	
	Gamma	Film / Graphics / **Video** / Linear / PC	
	Color	Color Temperature	**Native** / 5400K / 6500K / 9300K
		White Balance	Red Offset / Green Offset / Blue Offset / Red Gain / Green Gain / Blue Gain
		Hue	Red / Green / Blue / Cyan / Magenta / Yellow
		Saturation	Red / Green / Blue / Cyan / Magenta / Yellow
		Gain	Red / Green / Blue / Cyan / Magenta / Yellow
		White Gain	Red / Green / Blue
	Sharpness	0 ~ 31	
	Noise Reduction	0 ~ 15	
	Aspect Ratio	5:4 / 4:3 / **16:10** / 16:9 / 1.88 / 2.35 / Letterbox / Auto / True Size	
	Overscan	**Off** / Crop / Zoom	
	VGA Setup	H Total / H Start / H Phase / V Start	
LAMPS	Mode	**Dual** / Lamp 1 / Lamp 2 / Single	
	Power	**Normal** / Eco / Custom Power Level	
	High Altitude	On / **Off**	
	Custom Power Level	75% ~ 100% (32 steps)	
	Lamp Warning Display	**On** / Off	
	Lamp 1 Status	**On** / Off	
	Lamp 2 Status	**On** / Off	

Factory Settings (after reset) are in bold letters.

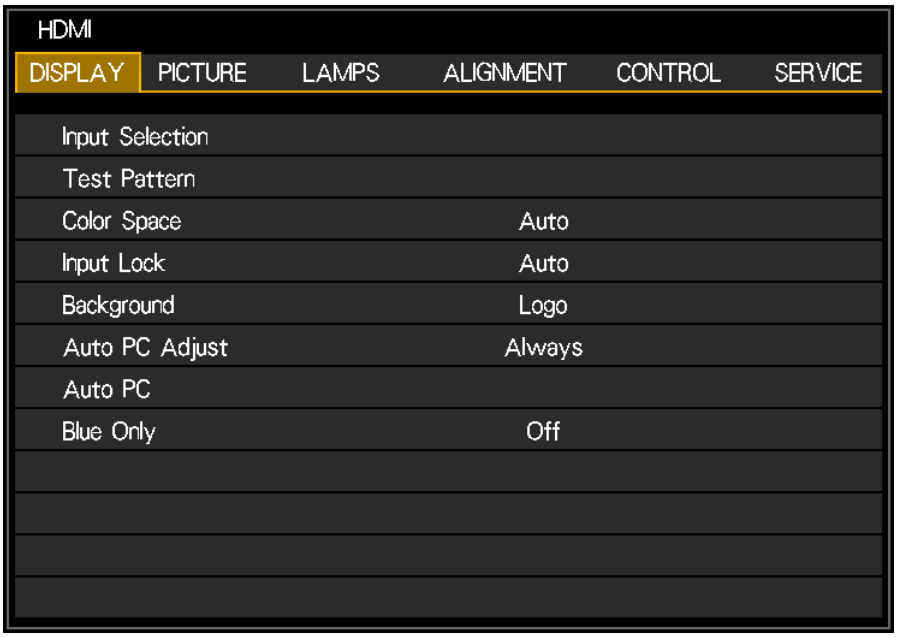
Main Menu	Sub Menu	Setting	
ALIGNMENT	Projection Mode	**Front Table** / Rear Table / Front Ceiling / Rear Ceiling / Up + Front / Down + Front	
	Lens Control	Enter to Zoom/Focus	
	Lens Memory	Load Memory	Memory 1, 2, 3, 4, 5, 6, 7, 8, 9, 10
		Edit Memory	Memory 1, 2, 3, 4, 5, 6, 7, 8, 9, 10
	Center Lens	Enter	
	Keystone	-80 ~ +80	
	Digital Alignment	Digital Zoom / Digital Pan / Digital Scan / Reset	
	H/V Alignment	H Zoom / V Zoom / H Shift / V Shift / Reset	
CONTROL	Standby Mode	**Standard** / ECO / Network	
	Auto Power Off	On / **Off**	
	Direct Power On	On / **Off**	
	Network	IP Address	192.168.0.100
		Subnet mask	255.255.255.0
		Gateway	192.168.0.254
		DHCP	On / **Off**
		Apply	OK / **Cancel**
	RS232	Baud rate	**115200** / 57600 / 38400 / 19200 / 14400 / 9600 / 4800 / 2400
		Channel	**Local** / HDBaseT
	Startup Logo	**On** / Off	
	Trigger	**On** / Off	
	Auto Search	On / **Off**	
	Dynamic Black	On / **Off**	
	3D	3D Format	Off / **Auto** / Side by Side / Top and Bottom / Frame Sequential
		DLP Link	**Off** / On
		3D Swap	**Normal** / Reverse
		3D 24Hz Display	**96Hz** / 144Hz
	Language	**English** / Français / Español / Deutsch / Português / Nederlands / Italiano / русский / 简体中文 / 繁體中文 / 한국어 / 日本語	
	Control ID	Control ID Enable	**Off** / On
		Control ID Number	1 ~ 99
		Remote ID Number	1 ~ 99

Factory Settings (after reset) are in bold letters.

Main Menu	Sub Menu	Setting	
SERVICE	Model	LX-MU700	
	Serial Number	XXXXXXXXXXXX	
	Software Version 1	MP05-SE06-RD01-9B07	
	Software Version 2	0D06-LD11-PD06-3090	
	Control / Remote ID	X / X	
	Active Source	Computer-1	
	Pixel Clock	148.50 MHZ	
	Signal Format	1920 x 1080P	
	H/V Refresh Rate	H: 67.5 KHZ V: 60 HZ	
	Lamp 1 / 2 Time	xxxx / xxxx HRS	
	Power On Time	xxxx HRS	
	Factory Reset	Reset Everything ?	OK / **Cancel**

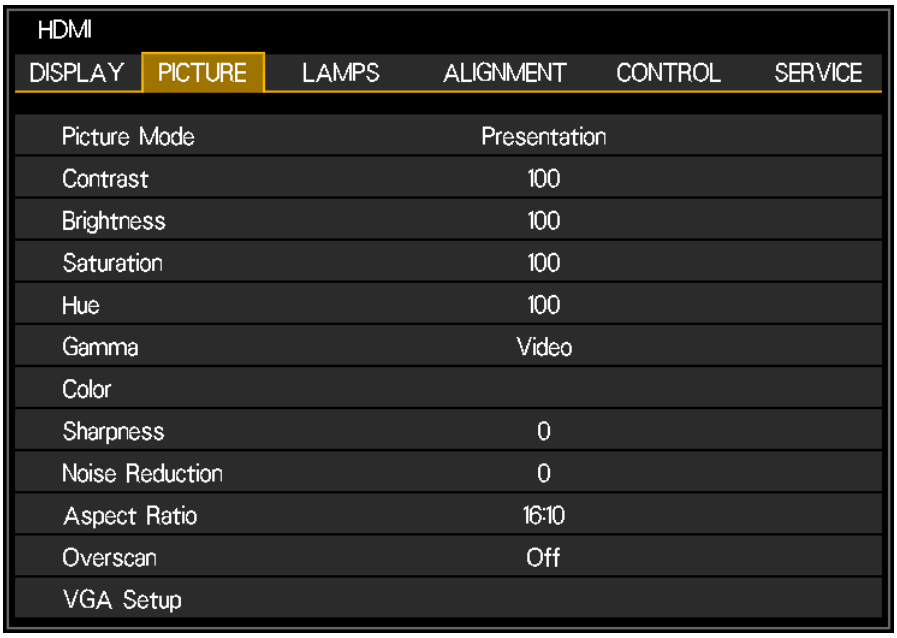
Factory Settings (after reset) are in bold letters.

DISPLAY Menu



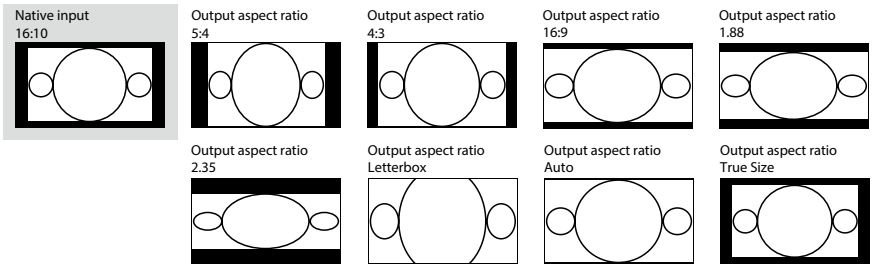
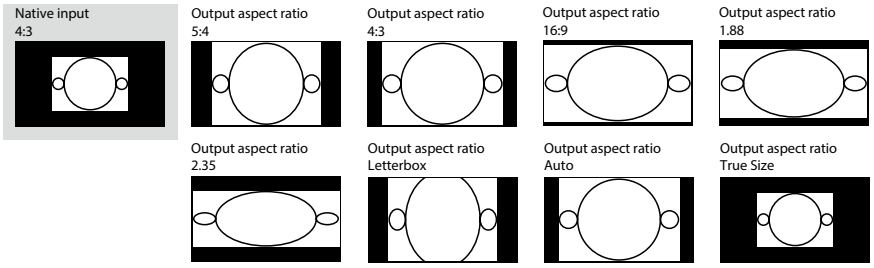
Label	Description
Input Selection	Press **ENTER** to enter the **Input Selection** menu.
Test Pattern	Press **ENTER** to display different test patterns for projector installation check. Press **EXIT** to close test pattern.
Color Space	Press ◄ or ► to adjust the color space. The options are **Auto**, **YCbCr**, **YPbPr**, **RGB-PC** and **RGB-Video**.
Input Lock	Press ◄ or ► to lock the input source to internal sync signal. The options are **Auto**, **48Hz**, **50Hz** and **60Hz**.
Background	Press ◄ or ► to specify the image to be background when no signal. The options are **Logo**, **Blue**, **Black** and **White**.
Auto PC Adjust	Press ◄ or ► to set auto synchronization for the input signal. The options are **Auto** and **Always**.
Auto PC	Press **ENTER** to execute the auto sync input signal.
Blue Only	Turns **Blue Only** mode **On**/**Off**. Used for maintenance.

PICTURE Menu



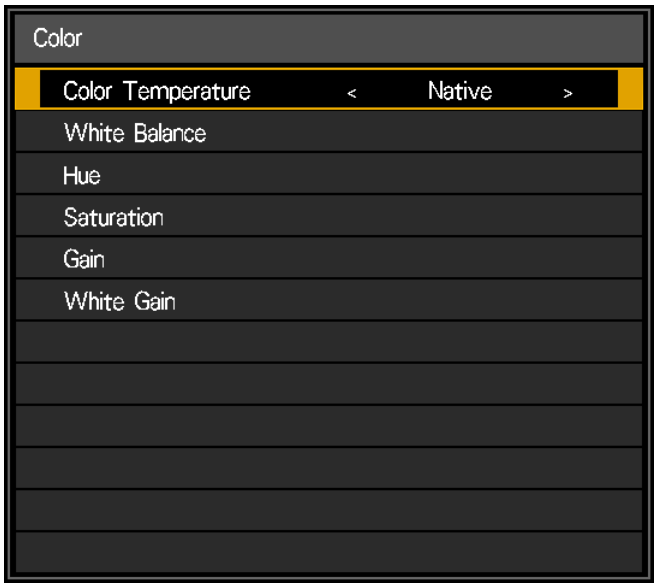
Label	Description
Picture Mode (*1)	Press ◄ or ► to select a picture mode. The options are **Presentation**, **Standard** and **Video**
Contrast	Press ◄ or ► to adjust the contrast of the projected image.
Brightness	Press ◄ or ► to adjust the brightness of the projected image.
Saturation (*2)	Press ◄ or ► to adjust the saturation level of the color.
Hue (*2)	Press ◄ or ► to adjust the level of hue for reproduction of the true color.
Gamma	Press ◄ or ► to adjust the gamma correction of the projected image. The options are **Film**, **Graphics**, **Video**, **Linear** and **PC**.
Color	Press **ENTER** to enter the **Color** menu. See “Color Menu” on page 37.
Sharpness	Press ◄ or ► to adjust the sharpness.
Noise Reduction	Press ◄ or ► to adjust the noise of the projected image.

(*1) Picture Mode is set as the standard for 3D projection.
(*2) Adjustment is possible only when video signal is input.

Label	Description
Aspect Ratio	Press ◄ or ► to adjust the aspect of the projected image. **Aspect ratio for 16:10:**  **Aspect ratio for 4:3:** 
Overscan	Press ◄ or ► to hide edge of the projected image to damage the noise appear. The options are **Off**, **Crop** and **Zoom**.
VGA Setup*	Press **ENTER** to enter the **VGA Setup** menu. See “VGA Setup Menu” on page 38.

* Adjustment is possible only when signals from the computer is input through Computer-1 and Computer-2/BNC.

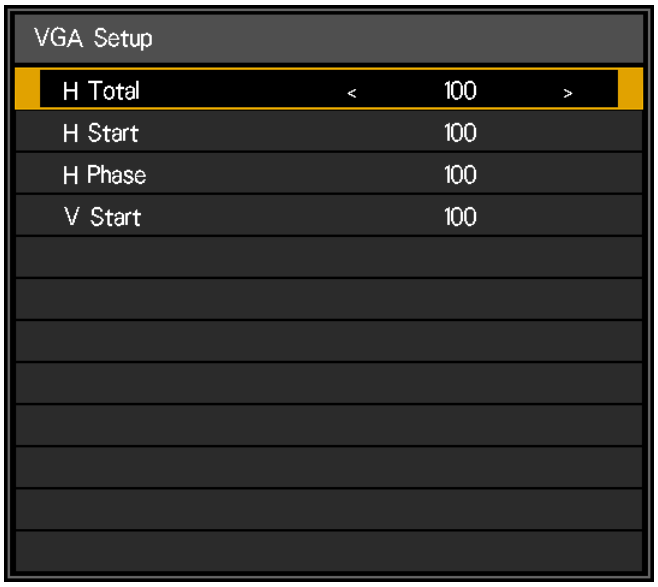
Color Menu



Label	Description
Color Temperature	Press ◄ or ► to adjust the color temperature. The options are **Native**, **5400K**, **6500K** and **9300K**.
White Balance	Press **ENTER** to enter the **White Balance** menu. Press ▲, ▼, ◄ or ► to adjust settings.

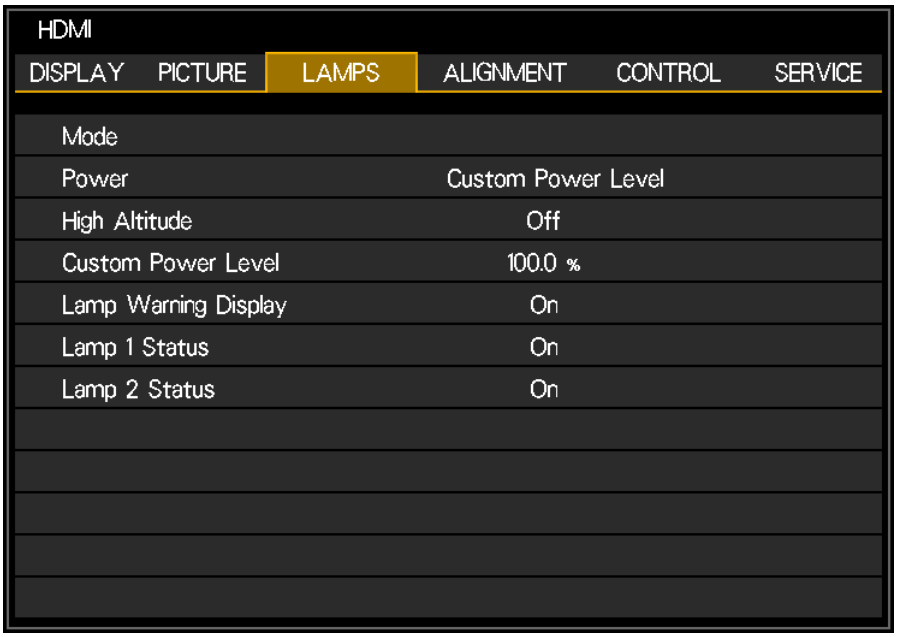
Label	Description
Hue	Press **ENTER** to enter the **Hue** menu. Press ▲, ▼, ◄ or ► to adjust settings.
Saturation	Press **ENTER** to enter the **Saturation** menu. Press ▲, ▼, ◄ or ► to adjust settings.
Gain	Press **ENTER** to enter the **Gain** menu. Press ▲, ▼, ◄ or ► to adjust settings.
White Gain	Press **ENTER** to enter the **White Gain** menu. Press ▲, ▼, ◄ or ► to adjust settings.

VGA Setup Menu



Label	Description
H Total	Press ◄ or ► to adjust H Total for the Computer-1 / Computer-2/BNC signal display.
H Start	Press ◄ or ► to adjust H Start for the Computer-1 / Computer-2/BNC signal display.
H Phase	Press ◄ or ► to adjust H Phase for the Computer-1 / Computer-2/BNC signal display.
V Start	Press ◄ or ► to adjust V Start for the Computer-1 / Computer-2/BNC signal display.

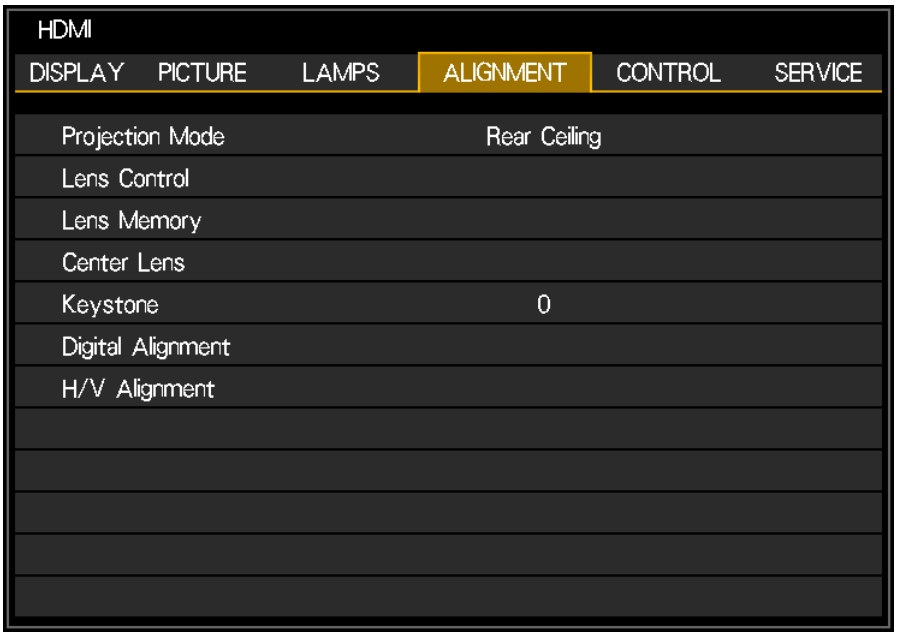
LAMPS Menu

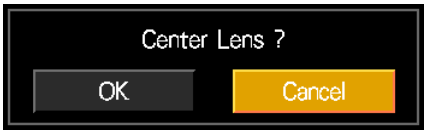


Label	Description
Mode	Press **ENTER** to enter the **Mode** menu. Press ▲ or ▼ to select lamp mode. The options are **Dual**, **Lamp 1**, **Lamp 2** and **Single**. ***Note:*** ***1.*** *In **Lamp 1/2** mode, the projector switches between lamps when a lamp error is detected. The corresponding lamp LED flashes.* ***2.*** *A system reboot is recommended after setting the lamp mode to **Single** mode. In Single mode, the projector choose shorter one of the lamp usage time at start up, and use it while the Lamp is ON.* ***3.*** *Lamp life may be shortened if the user quickly switches between lamp mode. Lamp mode function is disabled between switch mode operations until the operation is completed.* ***4.*** *The lamp mode options are not available before lamp mode switching is complete. It takes about 5 minutes.*
Power	Press ◄ or ► to select a power mode. The options are **Normal**, **Eco** and **Custom Power Level**.
High Altitude	This setting is required under the following conditions. **Temperature** / **Sea Level** 5°C ≤ , ≤ 23°C / 1200 m ~ 3000 m 23°C < , ≤ 40°C / 1219 m ~ 3048 m Press ◄ or ► to enable or disable the cooling fan of the projector. ***Note:*** *If the projector is in operation in a high heat or high altitude environment, it may shut down automatically. In this setup, you can enable the **High Altitude** function by selecting **On** and setting the fan to operate at a higher speed to maintain proper cooling levels on the projector.*
Custom Power Level	Press ◄ or ► to adjust custom power level. The function is only available when **Power** is **Custom Power Level**.

Label	Description
Lamp Warning Display	Press ◄ or ► to enable or disable the warning message. Specify whether to show a lamp replacement message after the lamp has been used for a specified period. ■ Setting display to **Off** will disable both the message to prepare a replacement lamp and the warning to replace the lamp. To review the replacement timing, check the lamp counter. ■ Lamps that are still used after the timing for lamp replacement are more likely to rupture. Replace the lamp with a new one as soon as possible.
Lamp 1 Status	Shows the current status of Lamp 1.
Lamp 2 Status	Shows the current status of Lamp 2.

ALIGNMENT Menu



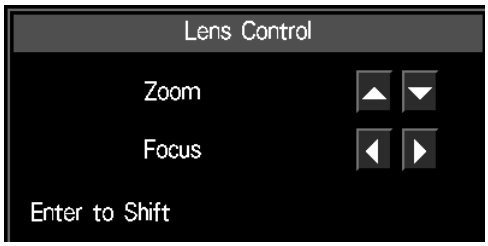
Label	Description
Projection Mode	Press ◄ or ► to select a projection mode. The options are **Front Table**, **Rear Table**, **Front Ceiling**, **Rear Ceiling**, **Up + Front** and **Down + Front**.
Lens Control	Press **ENTER** to enter the **Lens Control** menu. See “Lens Control Menu” on page 41.
Lens Memory	Press **ENTER** to enter the **Lens Memory** menu. See “Lens Memory Menu” on page 41.
Center Lens	Press **ENTER** to set the lens to the default center position.  ***Note:*** *Calibrate the lens whenever a lens is mounted on the projector.*
Keystone	Press ◄ or ► to adjust vertical distortion brought by the projection angle.
Digital Alignment*	Press **ENTER** to enter the **Digital Alignment** menu. See “Digital Alignment Menu” on page 43.

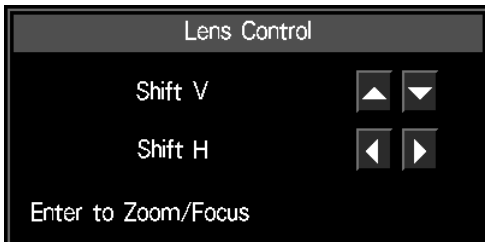
Label	Description
H/V Alignment	Press **ENTER** to enter the **H/V Alignment** menu. See “H/V Alignment Menu” on page 43.

* This function is grayed-out and unusable when in 3D projection. Additionally, settings made in 2D projection will be reset (turned to 0) when 3D projection is turned on.

Lens Control Menu

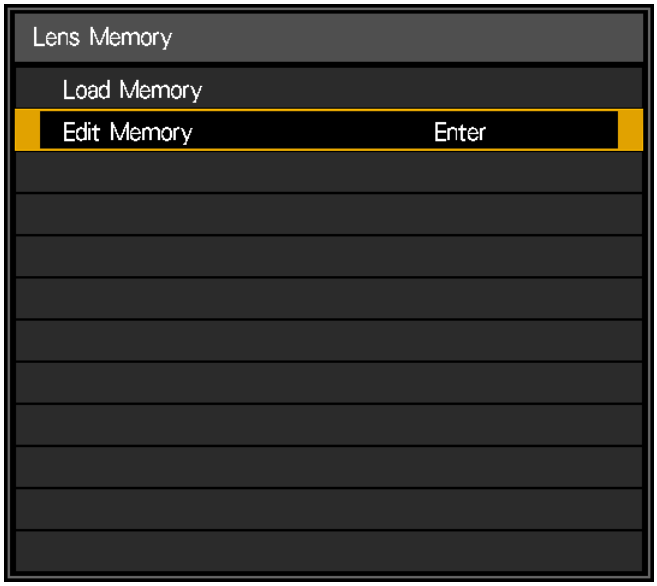
Switch between **Lens Shift**, **Zoom/Focus** menus by pressing **ENTER** button.





Label	Description
Zoom	Press ▲ or ▼ to adjust zooming of the lens.
Focus	Press ◄ or ► to adjust focusing of the lens.
Shift V	Press ▲ or ▼ to adjust horizontal shift of the lens.
Shift H	Press ◄ or ► to adjust vertical shift of the lens.

Lens Memory Menu



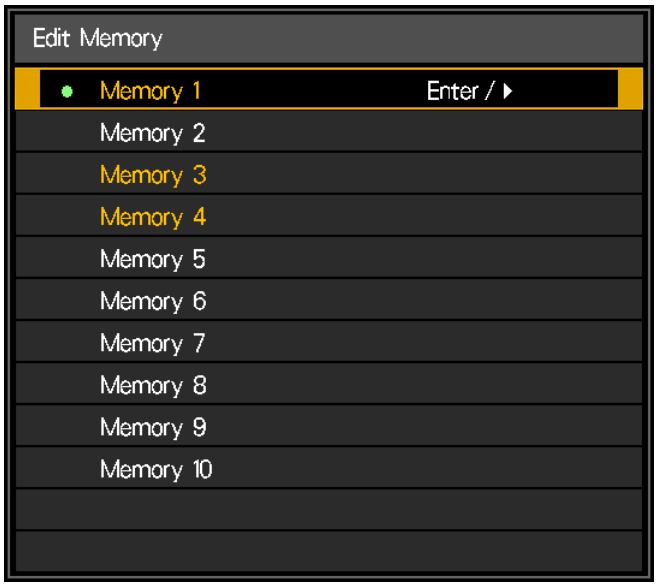
Label	Description
Load Memory	Press **ENTER** to enter the lens memory list. Press ▲ or ▼ to select and press **ENTER** to execute the lens setting.
Edit Memory	Press **ENTER** to enter the lens memory list. See “Edit Memory” on page 42.

Note:

The projector can save information about the lens position in memory. Up to ten sets of lens information (including focus, zoom, and lens shift settings) can be saved, and the lens can be restored to these positions.

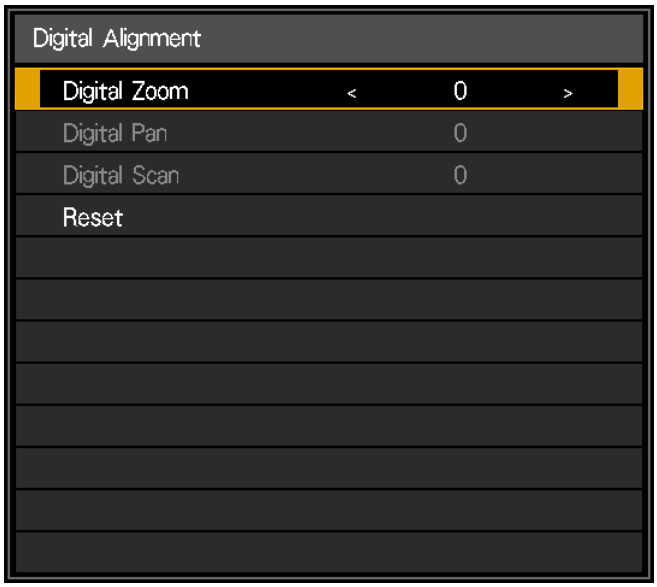
- *When saved lens positions are restored, images may be projected in a slightly different position than the saved position.*
- *Specifying a somewhat smaller image size than the screen size (image area) enables you to switch among multiple lens positions without having the image extend off the screen.*
- *When precise positioning is needed, use lens shift, zoom, and focus functions for fine adjustment.*

Edit Memory



Label	Description
Memory 1 - 10	Press ▲ or ▼ to select, press **ENTER** to saving settings and press ► to open the **Edit Memory** window and keyboard. Press ▲, ▼, ◄ or ► and **ENTER** to select or confirm the setting. ***Note:*** *A maximum number of nine letters, numbers, symbols and spaces are allowed.*

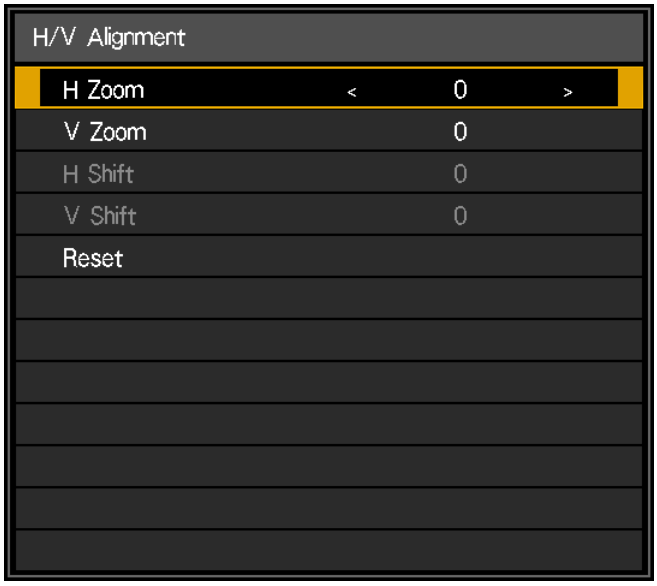
Digital Alignment Menu



Label	Description
Digital Zoom	Press ◄ or ► to enlarge the projected image.
Digital Pan	Press ◄ or ► to move the projected image horizontally. The function is only available when the image is enlarged.
Digital Scan	Press ◄ or ► to move the projected image vertically. The function is only available when the image is enlarged.
Reset	Press **ENTER** to set to the default value.

Note:
This function is grayed-out and unusable when in 3D projection. Additionally, settings made in 2D projection will be reset (turned to 0) when 3D projection is turned on.

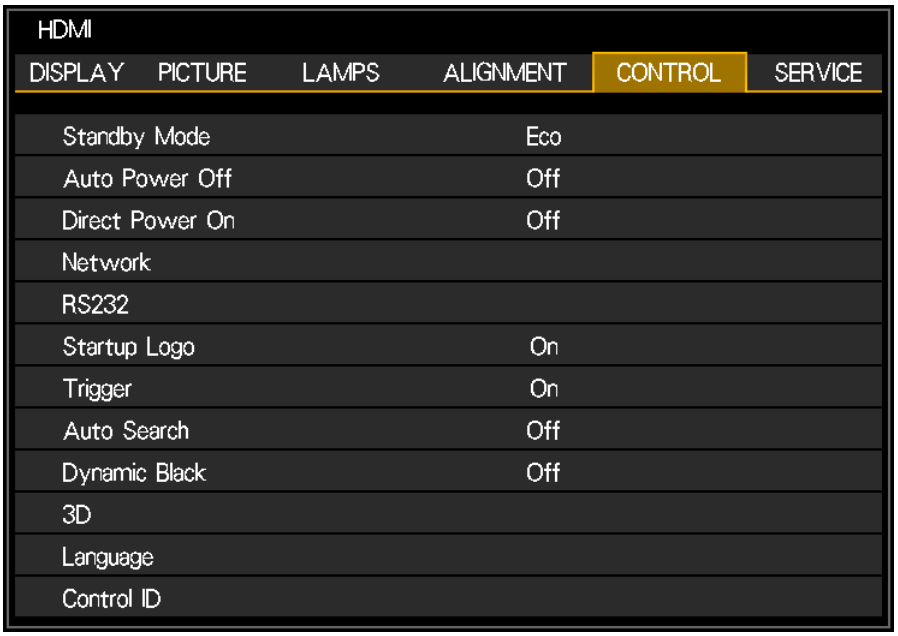
H/V Alignment Menu



Label	Description
H Zoom	Press ◄ or ► to narrow the horizontal size of the projected image.
V Zoom	Press ◄ or ► to narrow the vertical size of the projected image.

Label	Description
H Shift	Press ◄ or ► to move the narrowed projected image horizontally. The function is only available when the image is narrowed.
V Shift	Press ◄ or ► to move the narrowed projected image vertically. The function is only available when the image is narrowed.
Reset	Press **ENTER** to set to the default value.

CONTROL Menu

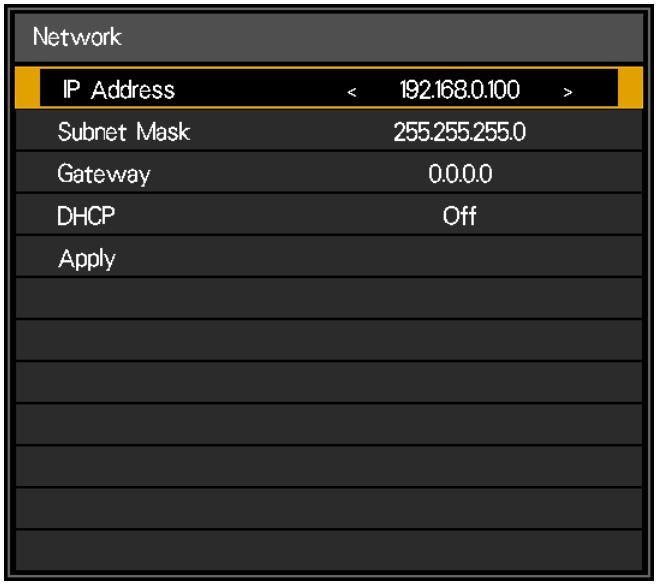


Label	Description
Standby Mode	Press ◄ or ► to select a standby mode. The options are **Standard**, **ECO** and **Network**. Refer to the "Note" on page 50 for details.
Auto Power Off	Press ◄ or ► to enable or disable turning off the projector when no input signal is received within 15 minutes.
Direct Power On	Press ◄ or ► to enable or disable turning on the projector when connect to an AC power.
Network	Press **ENTER** to enter the **Network** menu. See "Network Menu" on page 45.
RS232	Press **ENTER** to enter the **RS232** menu. See "RS232 Menu" on page 50.
Startup Logo	Press ◄ or ► to enable or disable the Startup Logo.
Trigger	Press ◄ or ► to enable or disable turning on the screen when the projector is powered on.
Auto Search	Press ◄ or ► to enable or disable auto search function.
Dynamic Black*	Press ◄ or ► to enable or disable dynamic black function
3D	Press **ENTER** to enter the **3D** menu. See "3D Menu" on page 54. ***Note:*** *Before adjusting the 3D setting, ensure the input signal is connected.*

* Optimizes the contrast depending on the brightness of each scene by adjusting lamp output automatically based on the brightness data from the input source.

Label	Description
Language	Press **ENTER** to enter the **Language** menu. Press ▲ or ▼ to select the language of OSD menu. The options are **English**, **Français**, **Español**, **Deutsch**, **Português**, **Nederlands**, **Italiano**, **русский**, **简体中文**, **繁體中文**, **한국어** and **日本語** .
Control ID	Press **ENTER** to enter the **Control ID** menu. See “Control ID Menu” on page 56.

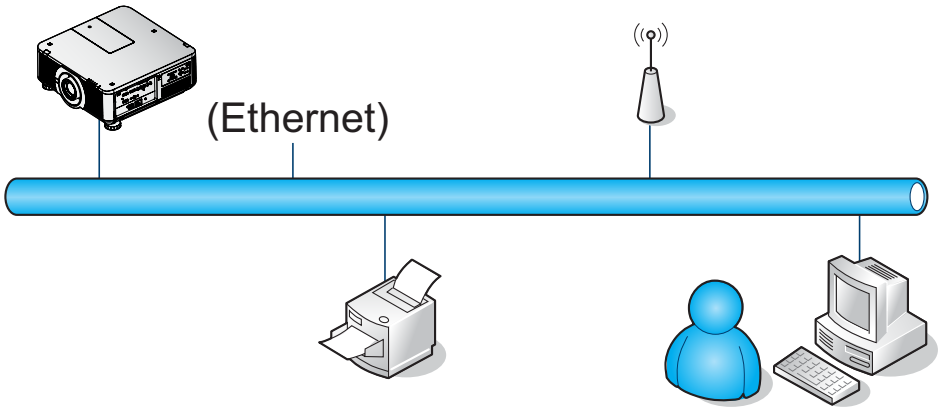
Network Menu



Label	Description
IP Address	Press **ENTER** to open the **IP Address** window. Press ◄ or ► to select the number in the address and press ▲ or ▼to increase or decrease the selected number.
Subnet mask	Use it to set the subnet mask. The input method is same as the IP address.
Gateway	Use it to set the gateway. The input method is same as the IP address.
DHCP	Press ◄ or ► to enable or disable DHCP setting.
Apply	Press **ENTER** to execute. The settings will be saved after applied.

For simplicity and ease of operation, the projector provides diverse networking and remote management features.

The LAN/RJ45 function of the projector through a network, such as remotely manage: Power On/Off, Brightness and Contrast settings. Also, projector status information, such as: Video-Source, etc.



The projector can be controlled by a PC (Laptop) or other external device with connecting to the projector's LAN/RJ45 port.

Wired LAN Terminal Functionalies

Remote control and monitoring of a projector from a PC (or Laptop) via wired LAN is also possible. Compatibility with Crestron / AMX (Device Discovery) / Extron control boxes enables not only collective projector management on a network but also management from a control panel on a PC (or Laptop) browser screen.

- Crestron is a registered trademark of Crestron Electronics, Inc. of the United States.
- Extron is a registered trademark of Extron Electronics, Inc. of the United States.
- AMX is a registered trademark of AMX LLC of the United States.

> ***Note:***
> *There is a limitation of power on/off control sequence in Network mode. It must take around 8~9 sec after executing the power on command, regardless over the keypad, remote or IP.*

Supported External Devices

This projector is supported by the specified commands of the Crestron Electronics controller and related software (ex, RoomView®).

http://www.crestron.com/

This projector is supported by AMX (Device Discovery).

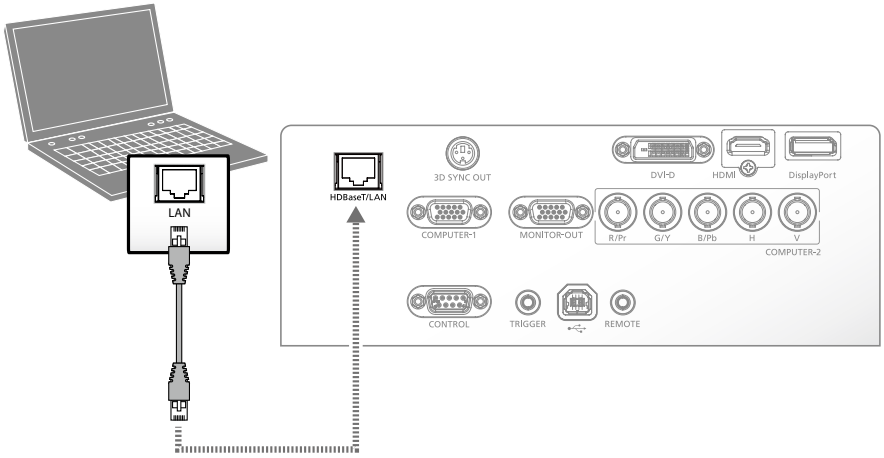
http://www.amx.com/

This projector is compliant to support Extron device(s) for reference.

http://www.extron.com/

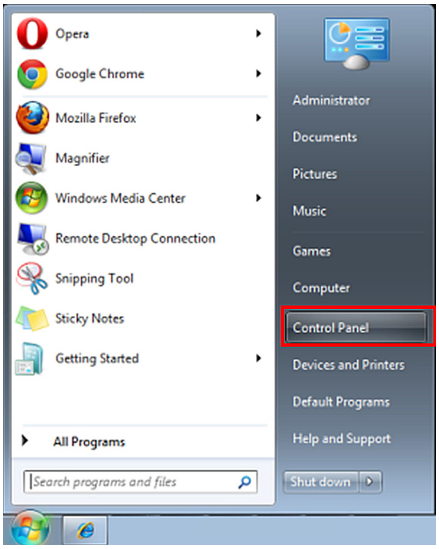
LAN RJ45

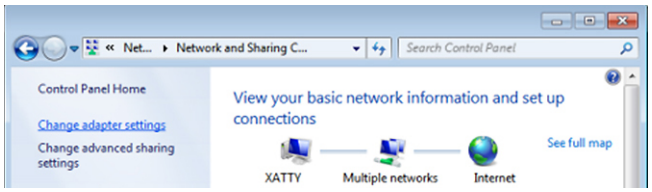
1. Connect an RJ45 cable to the RJ45 port on the projector and the PC (Laptop).



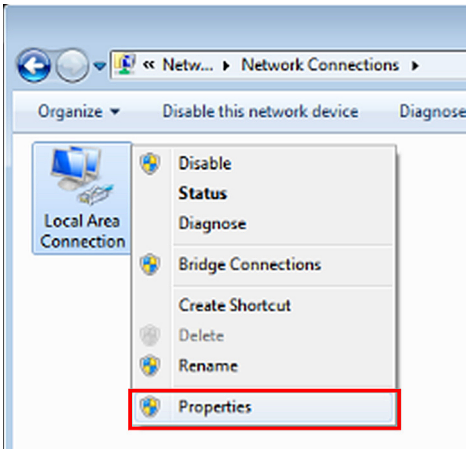
Compatible browsers are as follows.
Microsoft Internet Explorer 9 with Adobe Flash Player 9.0 or higher.

2. On the PC (Laptop), select **Start** → **Control Panel** → **Network and Internet**.

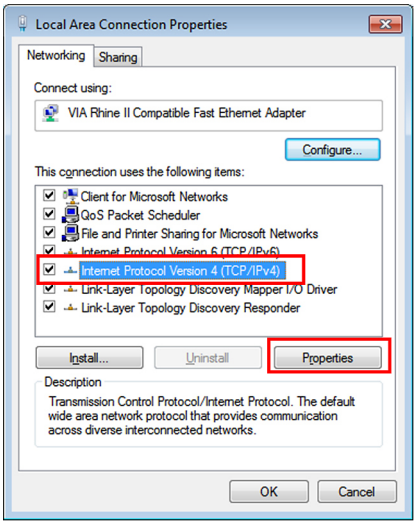




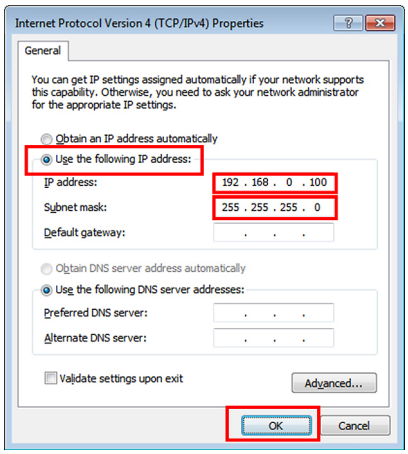
3. Right-click on **Local Area Connection**, and select **Properties**.



4. In the **Properties** window, select the **Networking** tab, and select **Internet Protocol (TCP/IP)**.
5. Click **Properties**.

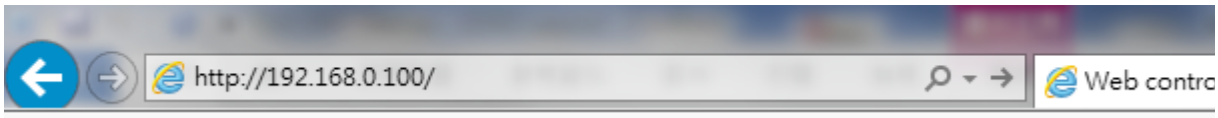


6. Click **Use the following IP address** and fill in the IP address and Subnet mask, then click **OK**.



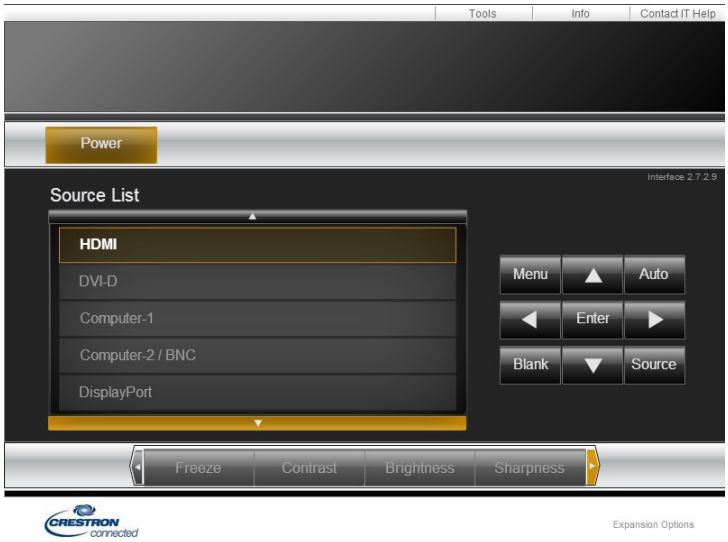
7. Press the **Menu** button on the projector.
8. Select **CONTROL** → **Network**.
9. In **Network**, input the following:
   - IP Address: 192.168.0.100
   - Subnet Mask: 255.255.255.0
   - Gateway: 0.0.0.0
   - DHCP: Off
10. Press **OK** to confirm settings.

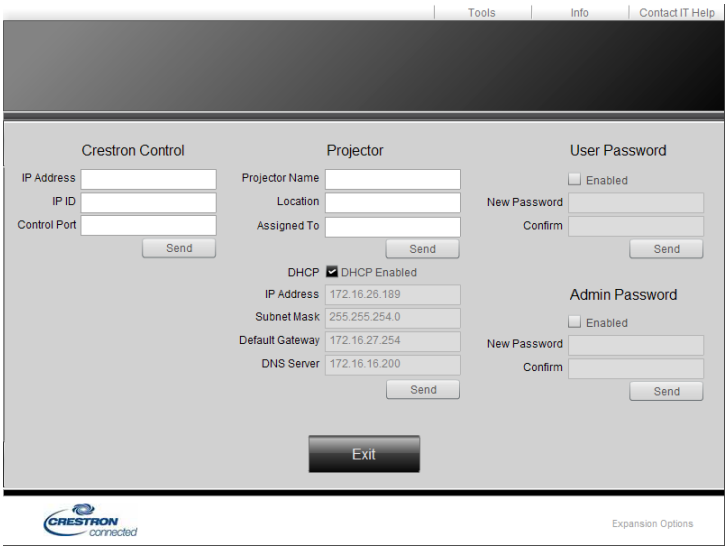
11. Open a web browser (for example, Microsoft Internet Explorer with Adobe Flash Player 9.0 or higher).
12. In the Address bar, input the IP address: 192.168.0.100.
13. Press **OK**.



The projector is setup for remote management. The LAN/RJ45 function displays as follows.

Based on network web-page for the input-string in tools tab, the limitation for Input-Length is in the below list (“space” and the other punctuation key included):





Category	Item	Input-Length
Crestron Control	IP Address	15
	IP ID	3
	Port	5
Projector	Projector Name	25
	Location	25
	Assigned To	25

Category	Item	Input-Length
Network Configuration	DHCP (Enabled)	(N/A)
	IP Address	15
	Subnet Mask	15
	Default Gateway	15
	DNS Server	15
User Password	Enabled	(N/A)
	New Password	18
	Confirm	18
Admin Password	Enabled	(N/A)
	New Password	18
	Confirm	18

For more information, please visit http://www.crestron.com/.

RS232 Menu

Label	Description
Baud rate	Press ◄ or ► to select the baud rate. The options are **115200**, **57600**, **38400**, **19200**, **14400**, **9600**, **4800** and **2400**.
Channel	Press ◄ or ► to select the channel. The options are **Local** and **HDBaseT**.

Note:

Standby Mode	RS-232	LAN (*1)	LAN (*2)
Standard	V	V	V
Network	N/A	V	N/A
Eco	N/A	N/A	N/A

*(*1) Web browser, Crestron connected, PJLink.*
*(*2) Commands (Refer to the commands on page 76 for details.)*

RS232 by Telnet Function

Besides projector connected to RS232 interface with “Hyper-Terminal” communication by dedicated RS232 command control, there is alternative RS232 command control way, so called “RS232 by TELNET” for LAN/RJ45 interface.

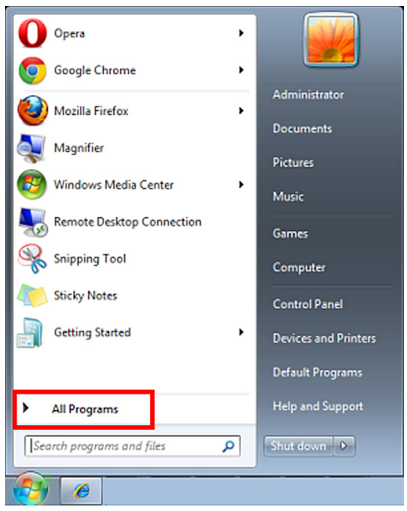
Quick Start Guide for “RS232 by TELNET”

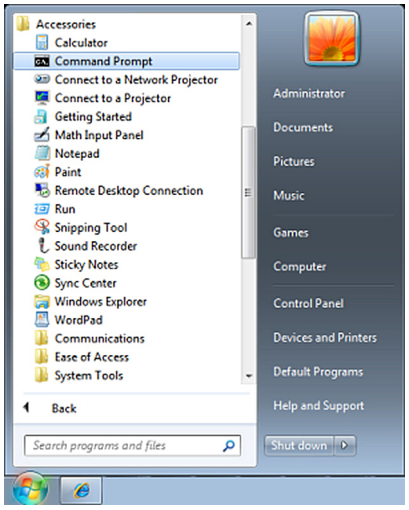
Check and get the IP address on OSD of the projector.

Make sure that laptop/PC can access the web-page of the projector.

Make sure that “Windows Firewall” setting to be disabled in case of “TELNET” function filtering out by laptop/PC.

Start → All Programs → Accessories → Command Prompt





Input the command format as seen in the following:

telnet ttt.xxx.yyy.zzz 7000 (“Enter” key pressed)

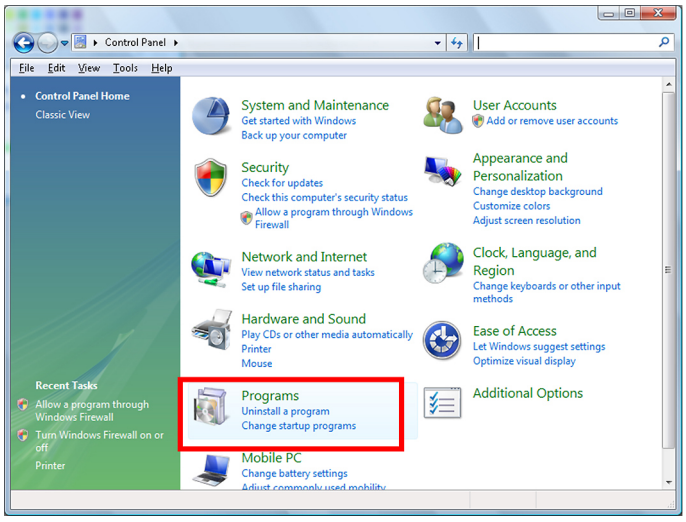
(**ttt.xxx.yyy.zzz**: IP address of the projector)

If Telnet-Connection ready, and user can have RS232 command input, then “Enter” key pressed, the RS232 command will be workable.

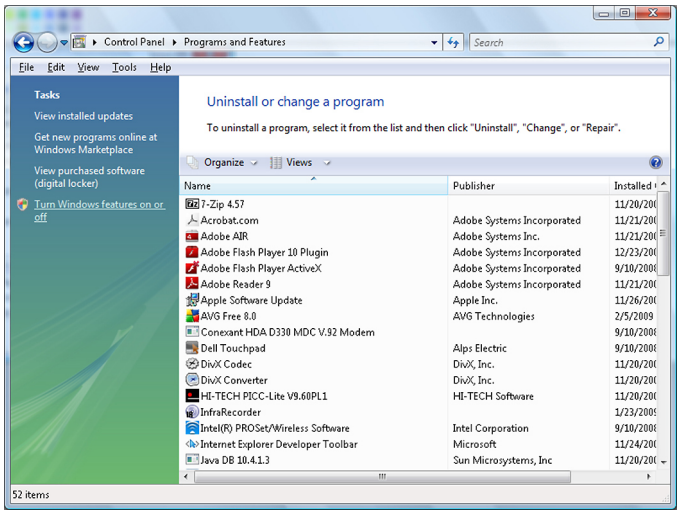
How to have TELNET enabled in Windows VISTA / 7

By default installation for Windows VISTA, “TELNET” function is not included. But end-user can have it by way of “Turn Windows features On or Off” to be enabled.

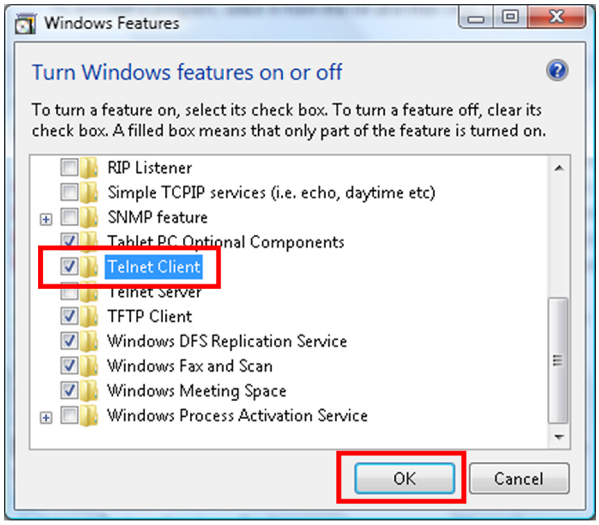
1. Open **Control Panel** in Windows VISTA.



2. Open **Programs**.



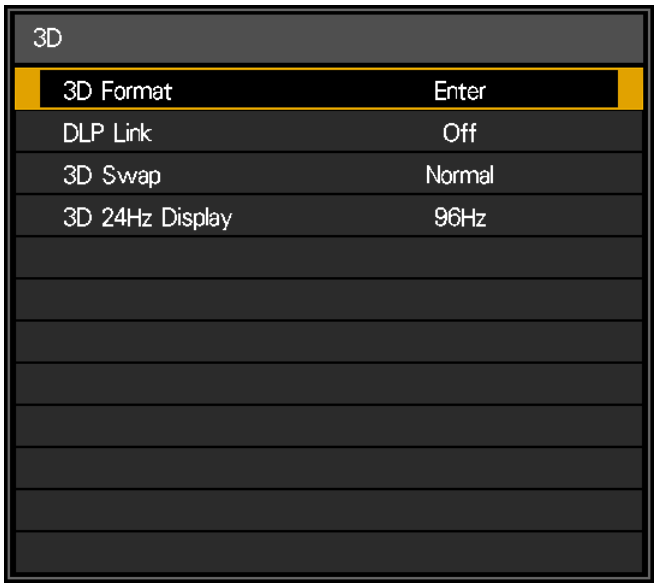
3. Select **Turn Windows features on or off** to open.
4. Have **Telnet Client** option checked, then press **OK** button.

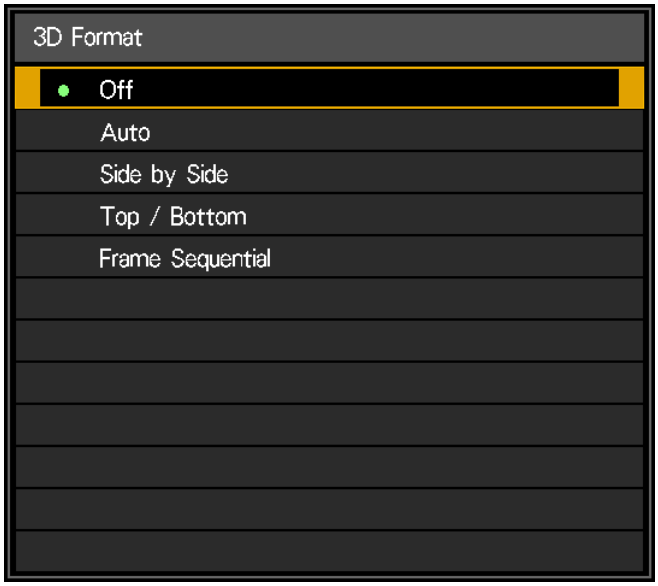


Specsheet for “RS232 by TELNET”:

- Telnet: TCP
- Telnet port: 7000
- Telnet utility: Windows “TELNET.exe” (console mode)
- Disconnection for RS232-by-Telnet control normally: Close Windows Telnet utility directly after TELNET connection ready
- Limitation 1 for Telnet-Control: there is only one connection for Telnet-Control in one projector
  Limitation 2 for Telnet-Control: there is less than 50 bytes for successive network payload for Telnet-Control application.
  Limitation 3 for Telnet-Control: there is less than 26 bytes for one complete RS232 command for Telnet-Control.
  Limitation 4 for Telnet-Control: Minimum delay for next RS232 command must be more than 200 (ms).
  (* In Windows built-in “TELNET.exe” utility, “Enter” key pressed will have “Carriage-Return” and “New-Line” code.)

3D Menu



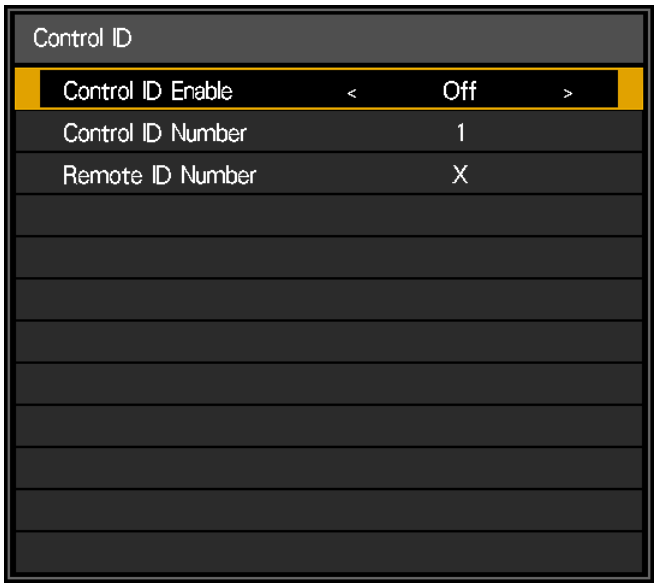
Label	Description
3D Format	Press **ENTER** to open the **3D Format** window. Press ▲ or ▼ to select the 3D format. The options are **Off**, **Auto**, **Side by Side**, **Top and Bottom** and **Frame Sequential**. 
DLP Link	Press ◄ or ► to activate or deactivate the DLP Link sync.
3D Swap	Press ◄ or ► to select a status for 3D images viewed through the 3D glasses. The options are **Inverse** and **Normal**.
3D 24Hz Display	Press ◄ or ► to set 3D 24Hz image frame rate. The options are **96Hz** and **144Hz**.

Note:

Cautions when viewing 3D content

- *3D content should not be viewed by people with a history of photosensitive epilepsy, people with heart conditions, pregnant women, the elderly, people with serious illnesses, or people with a history of epileptic seizures. Viewing 3D content could aggravate their pre-existing conditions.*
- *Do not view 3D content if you are feeling unwell or are tired. In addition, do not view 3D content if you are sleep deprived or inebriated.*
- *If you notice any of the following symptoms, stop viewing the 3D content immediately and wait until the symptoms subside.*
  - *If the image appears to be doubled or if the 3D effect is not clear.*
  - *Stop viewing if you feel your physical condition change, such as if you feel fatigued or unwell.*
  - *When enjoying 3D content that rotates, rolls, or shakes you may feel as if you are were moving, which can trigger a form of “sea sickness”.*
- *Viewing 3D content for too long may cause eyestrain. To avoid this, be sure to take regular breaks.*
- *Viewing 3D content for too long or viewing them from an angle may cause eyestrain and so on.*
- *Children viewing 3D content should always be accompanied by an adult.*
- *Children may not tell you if they are feeling unwell when viewing 3D content, so always be sure to check with the child. The minimum recommended age for viewing 3D content is six years old.*
- *Make sure you are at an appropriate distance from the front of the screen when viewing 3D content.*
- *Make sure you are at least three times the height of the screen away from the screen when viewing 3D content, and that your eyes are level with the screen.*
- *The image source may be reversed.*
- *Check that the settings are correct and that the 3D effect is being correctly applied. If the image is inversed and the left and right eye images are swapped, the 3D effect does not work, which could cause eye strain or cause you to feel unwell.*

Control ID Menu

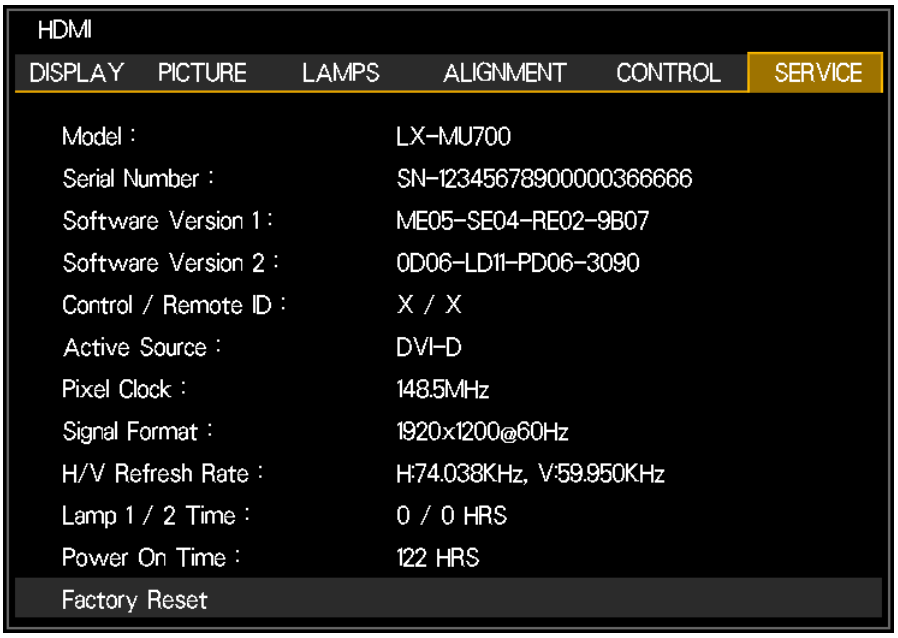


Label	Description
Control ID Enable*	Press ◄ or ► to enable or disable control ID.
Control ID Number	Press ◄ or ► to set the control number for the projector. Press **ENTER** to set the value.

* To operate multiple projectors independently, set this ID function.

- “Control ID” is for a projector.
- “Remote ID” is for a remote control .See page 19.

SERVICE Menu



Label	Description
Model	Displays the projector model name.
Serial Number	Displays the projector serial number.
Software Version 1	Displays the version of the installed software part I in the projector.
Software Version 2	Displays the version of the installed software part II in the projector.
Control / Remote ID	Display the control ID / Remote ID.
Active Source	Displays the connected input source.
Pixel Clock	Displays the pixel clock of the connected input source.
Signal Format	Displays the signal format of the connected input source.
H/V Refresh Rate	Displays the H/V refresh rate of the projected image.
Lamp 1 / 2 Time	Displays the using hours of Lamp 1 / 2.
Power On Time	Displays the operation time.
Factory Reset	Press **ENTER** to restore the OSD to the default settings. ***Note:*** ***Factory Reset*** *will not reset the following settings.* ■ *Lamp Warning Display* ■ *Lens Memory* ■ *Network* ■ *Language* ■ *Lamp 1 / 2 Time* ■ *Power On Time*

Maintenance and Security

Replacing the Projection Lamp

Prior to the end of the life expectancy of the lamp, a notification displays for 10 seconds when the projector is turned on. One of two possible messages displays, “Obtain a new lamp” or “Replace with a new lamp”.

Replacement message does not appear when Lamp Warning Messages is turned OFF.

Lamp No.: LX-LP01

The projection lamp must be replaced with a certified replacement part before it burns out. Certified replacement parts can be ordered through the local dealer.

Once the lamp is replaced and once you power up, the message “Did you replace the lamp?” displays. Select **Yes** at the prompt to reset the lamp lifespan timer.

⚠ ***Warnings:***

This projector uses a high-pressure mercury lamp, which must be handled carefully and correctly as described below.

The mercury lamp has the following characteristics.

- *The lamp will gradually become darker over time.*
- *Impact, abrasion, or use of worn-out lamps may cause lamps to rupture (accompanied by a loud noise) or burn out.*
- *Lamps are more likely to rupture after the lamp replacement message is displayed. Replace the lamp with a new one as soon as possible.*
- *Useful life of lamps varies widely from lamp to lamp and depending on the environment of use. Some lamps may fail or rupture soon after they are first used.*
- *Be prepared by keeping a spare lamp.*

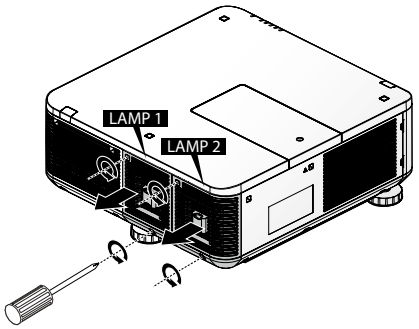
Note the following precautions during lamp replacement or when a lamp has ruptured. Failure to do so could result in an electric shock or personal injury.

- *Before replacing the lamp, always unplug the projector and wait at least an hour.*
- *Ruptured lamps may scatter shards of glass inside the projector. Contact the Canon Customer Support Center for cleaning and inspection of the projector interior and lamp replacement.*

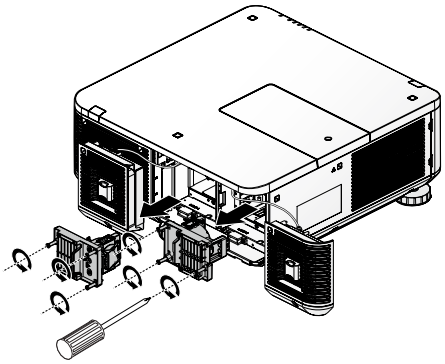
Precautions when replacing lamps that stop working

- *If illumination suddenly stops, either when you turn the projector on or after it has been on for a while, the lamp may have ruptured. In this case, never attempt to replace the lamp by yourself. Always request service from the Canon Customer Support Center.*
- *With ceiling-mounted projectors, the lamp may fall out when you open the lamp cover, or during replacement. During replacement, stand to the side of the lamp cover, not directly under it.*
- *If the lamp ruptures, dust and gas (containing mercury vapor) may come out of the exhaust vents. If this happens, immediately open the windows and doors to provide ventilation to the room.*
- *If you accidentally inhale gas from the lamp or get any pieces in your eyes or mouth, consult a doctor immediately.*

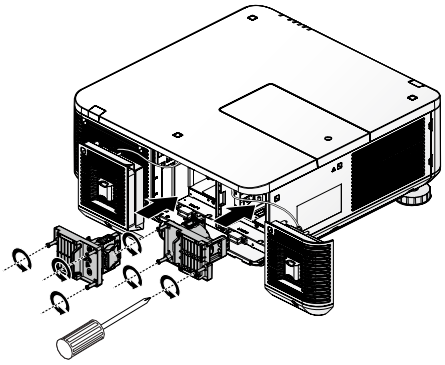
1. A proper power off procedure requires that you turn off the projector and wait for the power LED to turn solid red. At this time, it is safe to disconnect the power cord. Allow the lamp and devices to cool down for at least 45 minutes.
2. Loosen the captive screw and remove the lamp cover.



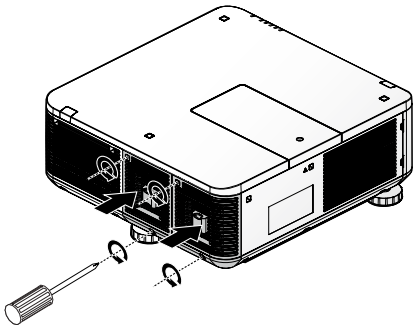
3. Loosen the captive screws and remove the used lamp.



4. Install the new lamp following the directions of the original lamp.
5. Secure the captive screws on the lamp.

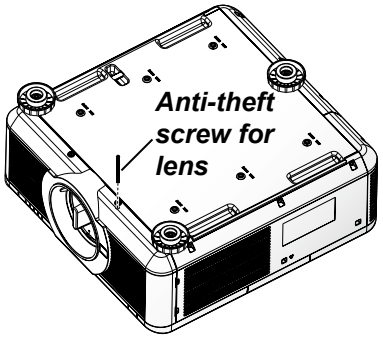


6. Install the lamp cover.
7. Secure the lamp cover with the captive screw.

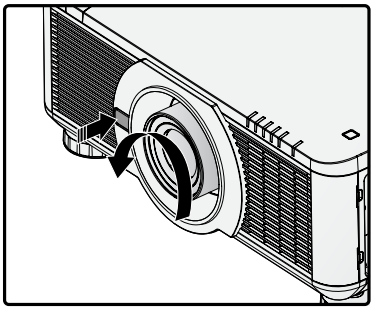


Replacing the Lens

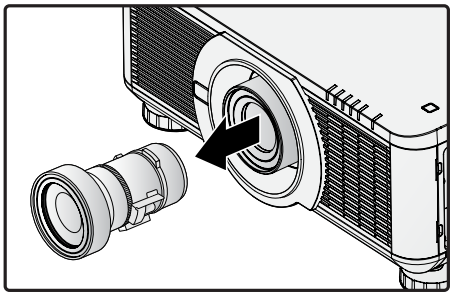
1. A proper power off procedure requires that you turn off the projector and wait for the power LED to turn solid red. At this time, it is safe to disconnect the power cord. Allow the lamp and devices to cool down for at least 45 minutes.
2. Remove the anti-theft screw for lens on the underside of the projector. See the following figure for a reference to the location.



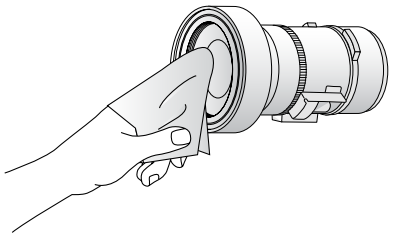
3. Press the release button and support the old lens with a hand.
4. Turn the old lens counterclockwise to loosen.



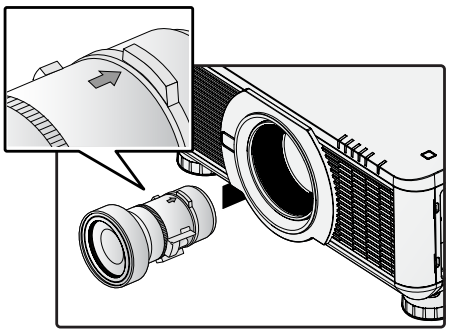
5. Remove the old lens from the holder.



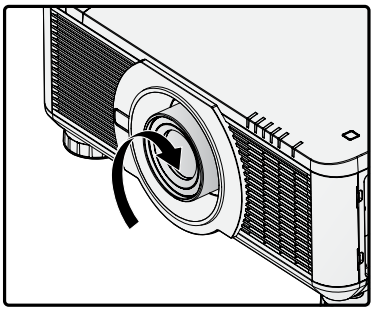
6. Clean the new lens before installing. Take care when cleaning to prevent scratching the surface of the new lens.



7. Make sure the arrow sign is facing up and new lens is pushed into the holder.



8. Turn the new lens clockwise until and audible Click is heard signifying the new lens is secured and seated correctly.



9. Gently pull on the new lens to ensure it is locked in place. If the new lens does not come off, it is seated correctly.
10. Install the anti-theft screw for lens to prevent removal of the lens. See “Using the Anti-theft Screw for Lens” on page 21.

Note:

- *Make sure you press and hold the release button to loosen and unlock the old lens from the projector when removing the old lens.*
- *Be sure to execute **Center Lens** after the lens is changed.*
- *Do not adjust lens manually (except LX-IL01UW).*

Replacing the Filter

Filter No.: LX-FL01.

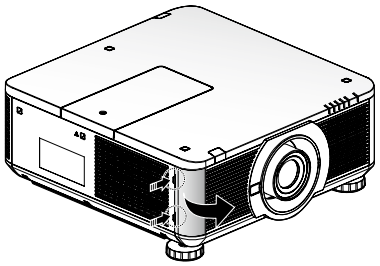
Before replacing the filter, wait approximately 45 minutes after the projector is turned off to allow the projector to cool thoroughly.

Note:

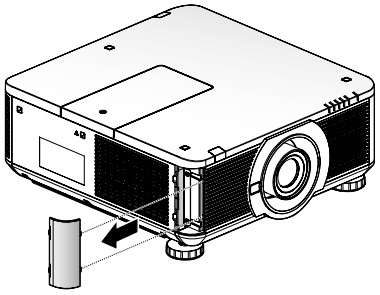
- *Dirty filter may reduce the amount of air flowing into the projector and the temperature in the projector may rise as a result. This may activate the protection mechanism or damage the components.*
- *Check, clean and replace the filter regularly.*
- *It is recommended to replace the filter every time when you replace the lamp.*
- *Power off and unplug power cord, waiting projector cool at least 45 minutes.*

Replacing the Filter on the Left Side

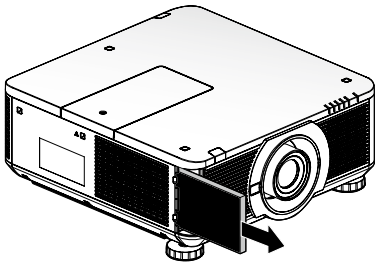
1. Flip the filter cover following the direction.



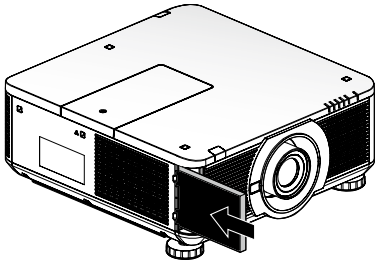
2. Remove the filter cover.



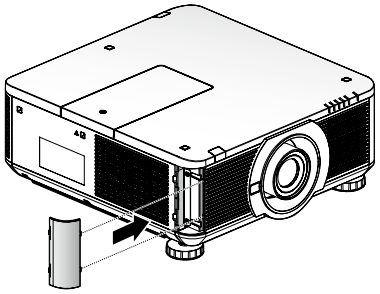
3. Remove the filter from the front side of the projector.



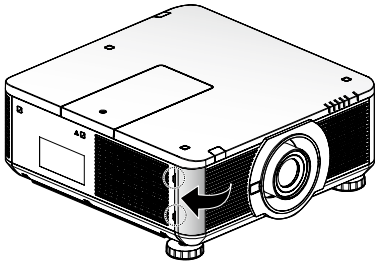
4. Install the filter.



5. Align the pins on the filter cover with the projector.

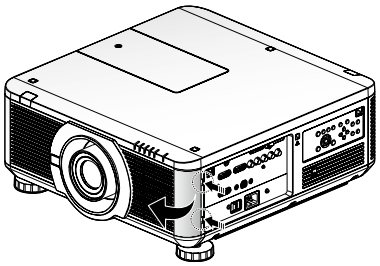


6. Flip to install the filter cover.

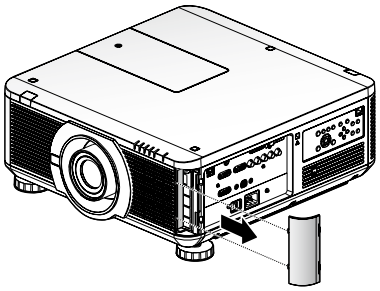


Replacing the Filter on the Right Side

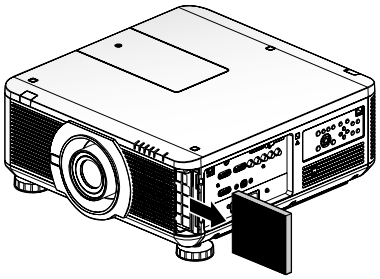
1. Flip the filter cover following the direction.



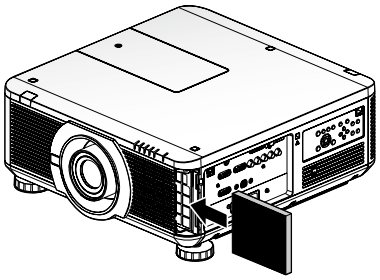
2. Remove the filter cover.



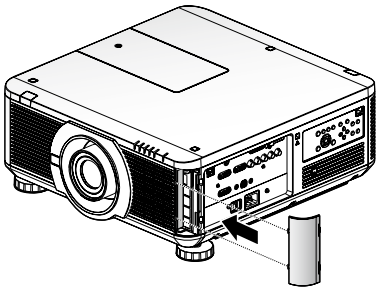
3. Remove the filter from the right side of the projector.



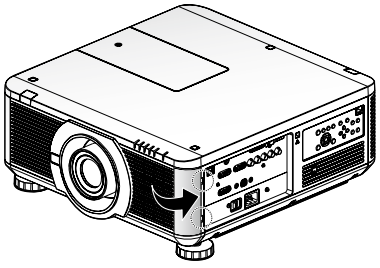
4. Install the filter.



5. Align the pins on the filter cover with the projector.



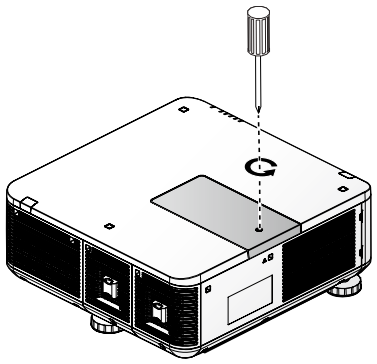
6. Flip to install the filter cover.



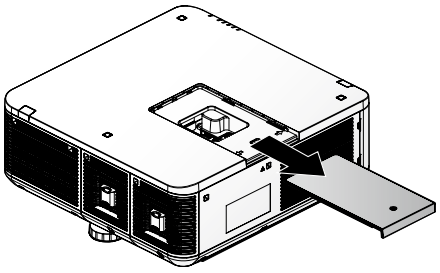
Replacing the Color Wheel

Before replacing the unit, wait approximately 45 minutes after the projector is turned off to allow the projector to cool thoroughly.

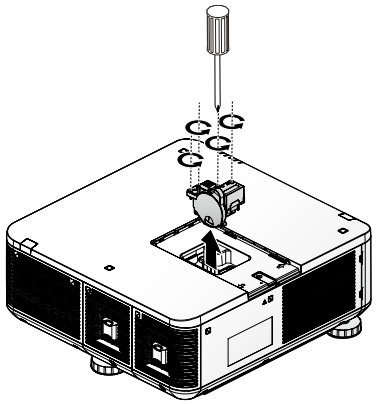
1. A proper power off procedure requires that you turn off the projector and wait for the power LED to turn solid red. At this time, it is safe to disconnect the power cord. Allow the lamp and devices to cool down for at least 45 minutes.
2. Loosen the captive screw on the color wheel cover.



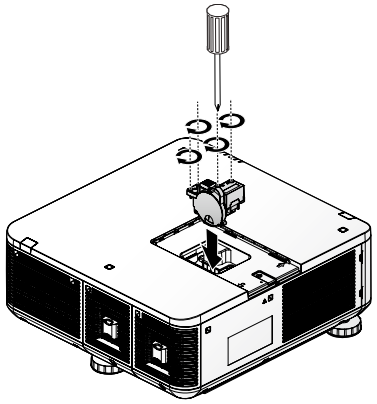
3. Slide the color wheel cover to remove.



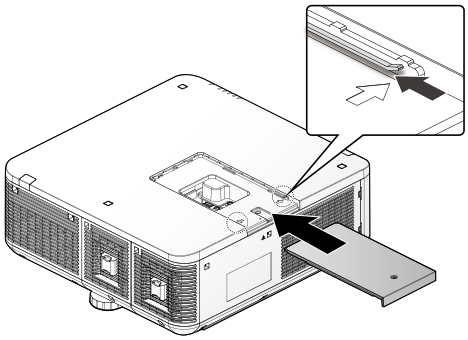
4. Loosen the captive screws on the color wheel.
5. Remove the color wheel.



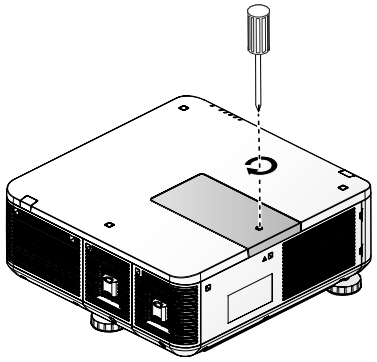
6. Install the color wheel.
7. Secure the captive screws on the color wheel.



8. Align the color wheel cover with projector and slide to install.



9. Secure the captive screw.



Cleaning the Projector

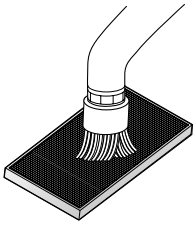
Cleaning the projector to remove dust and grime will help ensure trouble-free operation.

> ***Warning:***
> *Be sure to turn off and unplug the projector at least 45 minutes before cleaning. Failure to do so could result in a severe burn.*

Cleaning the Filters

The filter sponge keeps dust and dirt from getting inside the projector and should be frequently cleaned. If the filter is dirty or clogged, your projector may overheat.

1. Turn off the projector before cleaning.
2. Remove the filter refer to “Replacing the Filter” on page 61.
3. Use a vacuum cleaner to vacuum the dust inside.
4. Install the filter.



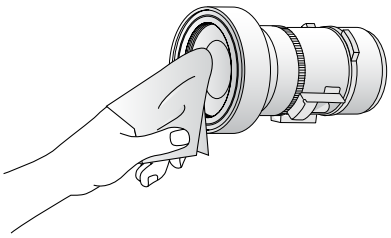
> ***Note:***
> - *Whenever you vacuum the filter, use the soft brush attachment from the vacuum to avoid damaging the filter.*
> - *Do not wash the filter with water. Doing so can result in filter clogging.*
> - *Turn on the projector after installing the filter.*

Cleaning the Lens

You can purchase optic lens cleaner from most camera stores. Refer to the following to clean the projector lens.

> ***Caution:***
> ***1.*** *Do not use abrasive cleaners or solvents.*
> ***2.*** *To prevent discoloration or fading, avoid getting cleaner on the projector case.*

1. Turn off the projector before cleaning.
2. Apply a little optic lens cleaner to a clean soft cloth. (Do not apply the cleaner directly to the lens.)
3. Lightly wipe the lens in a circular motion.

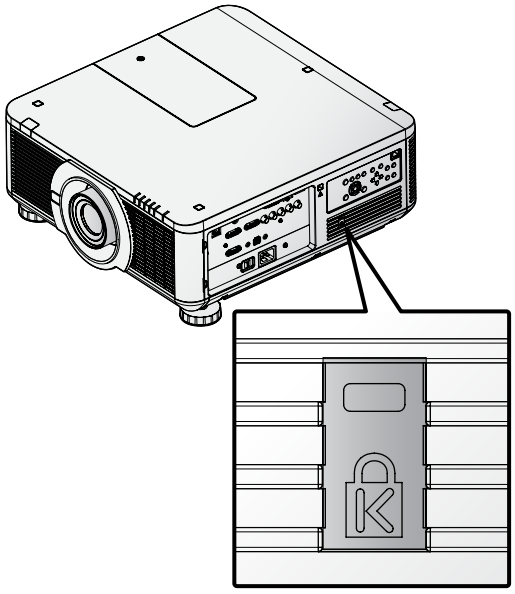


Cleaning the Cabinet

1. Turn off the projector before cleaning.
2. Use a dry soft cloth to wipe dust off the cabinet. If heavily soiled, use a mild detergent.

Using the Kensington® Lock

If you are concerned about security, attach the projector to a permanent object with the Kensington slot and a security cable.



> ***Note:***
> *Contact your vendor for details on purchasing a suitable Kensington security cable.*

Troubleshooting

Image Problems

Problem: No image appears on the screen.

1. Verify the settings on your notebook or desktop PC.
2. Turn off all equipment and power up again in the correct order.

Problem: The image is blurred.

1. Adjust the **Focus** on the projector.
2. Press the **AUTO PC** button on the remote control.
3. Ensure the projector-to-screen distance is within the specified range.
4. Check that the projector lens is clean.

Problem: The image is wider at the top or bottom (keystone distortion).

1. Position the projector so it is as perpendicular to the screen as possible.
2. Use the **Keystone** button on the **ALIGNMENT** menu of the OSD.

Problem: The image is reversed.

Check the **Projector Mode** settings on the **ALIGNMENT** menu of the OSD.

Problem: The image is streaked.

1. Adjust the **VGA Setup** settings on the **PICTURE** menu of the OSD to the default settings.
2. To ensure the problem is not caused by a connected PC's video card, connect to another computer.

Problem: The image is flat with no contrast.

Adjust the **Contrast** setting on the **PICTURE** menu of the OSD.

Problem: The color of the projected image does not match the source image.

1. Adjust the **Gamma** settings on the **PICTURE** menu of the OSD.
2. Adjust the **Color Temperature** settings on the **PICTURE** menu of the OSD.

Lamp Problems

Problem: There is no light from the projector.

1. Check that the power cable is securely connected.
2. Ensure the power source is good by testing with another electrical device.
3. Restart the projector in the correct order and check that the Power LED is on.
4. If you have replaced the lamp recently, try resetting the lamp connections.
5. Replace the lamp.
6. Put the old lamp back in the projector and have the projector serviced.

Problem: The lamp goes off.

1. Power surges can cause the lamp to turn off. Re-plug power cord. When the Power LED is on, press the power button.
2. Replace the lamp.
3. Put the old lamp back in the projector and have the projector serviced.

Remote Control Problems

Problem: The projector does not respond to the remote control.

1. Direct the remote control towards remote sensor on the projector.
2. Ensure the path between remote and sensor is not obstructed.
3. Turn off any fluorescent lights in the room.
4. Check the battery polarity.
5. Replace the battery.
6. Turn off other Infrared-enabled devices in the vicinity.
7. Have the remote control serviced.

Having the Projector Serviced

If you are unable to solve the problem, you should have the projector serviced. Pack the projector in the original carton. Include a description of the problem and a checklist of the steps you took when trying to fix the problem: The information may be useful to service personnel. For servicing, return the projector to the place you purchased it.

Specifications

Product Specifications

Model name		LX-MU700
Display system		1-CHIP DLP™
Display device	Type	DMD
	Size / Aspect ratio	0.67”x1 / 16:10
	Drive system	DLP™ x 1 chip
	Number dots / Total number dots	2,304,000 (1920 x 1200) x 1 / 2,304,000
Projection lens (*1)	Zoom ratio / Focal length / F value	1.3x / f = 26 to 34mm / F = 1.64 to 1.86
	Zooming / Focusing system	Electric / Electric
	Lens shift	V:0% to +50% , H: ±10% Electric
Light source		Super-high pressure mercury lamp 350W x 2
Image size (projection distance) (*1)		50” to 300” (1.83m to 14.9m / 6’ to 49’)
Number of colors		1.07 billion colors
Brightness (*1) (*2) (*3)		7500 lumen (in presentation mode)
Contrast ratio (*1) (*2) (*3)		2100:1 (Fully white: fully black, Dynamic Black on, in presentation mode)
Display scanning frequency		H: 15 to108 kHz , V: 48-120 Hz
Maximum input resolution		1920 x 1200 dots
Image signal	Digital PC	WUXGA (RB) / WSXGA+ / UXGA / SXGA+ / WXGA+ / WXGA / SXGA / XGA / SVGA / VGA
	Analog PC	WUXGA (RB) / WSXGA+ / UXGA / SXGA+ / WXGA+ / WXGA / SXGA / XGA / SVGA / VGA
	Digital video	1080p / 1080i / 720p / 576p / 480p
	Component video	1080p / 1080i / 720p / 576p / 480p / 576i / 480i
	HDBaseT	Same as the Digital PC and Digital video
Terminals	HDMI	Digital PC / Digital video
	DVI-D	Digital PC / Digital video
	DisplayPort	Digital PC / Digital video
	RJ45	HDBaseT / Network
	5BNC	Analog PC / Component video
	Dsub15	Analog PC
	Dsub15 (output)	Analog PC
	Dsub9	RS-232 (serial communication)
	USB type B	Connect to an PC for maintenance
	Mini pin jack	Connect to a wired remote
	Mini pin jack	12 V output (trigger for screen operation)
	3D sync out	3D IR synchronization output
Noise		36dB/41dB (Dual-lamp Eco/Dual-lamp Normal)
Operating temperature		5°C (41°F) to 40°C (104°F)
Power supply		AC 100-240V, 50/60Hz
Maximum power consumption		850W
Standby mode power consumption		ECO Standby: <0.5W (No RJ-45, No RS-232) Networking standby: <6W with RJ-45

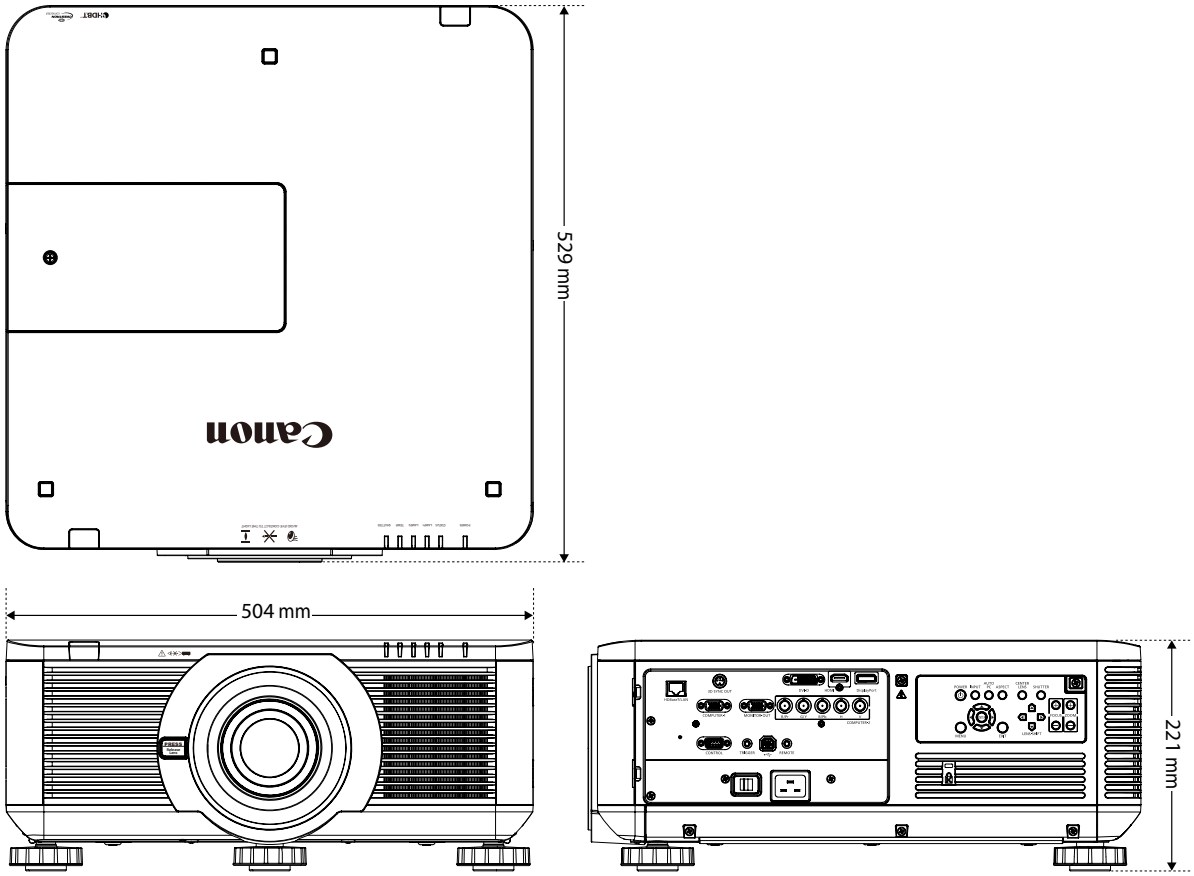
Dimensions (W x D x H)	504 x 529 x 221 mm (19.8 x 20.8 x 8.7 in), including protrusion
Weight (excluding the lens)	20.5 kg (45.2 lbs)
Accessories	Remote control, Remote control dry-cell batteries, Power cord, Computer cable, Dust cap, User manual CD, Color wheel, Anti-theft screw for lens, Important Information, Warranty card

(*1) When using a Standard Zoom Lens

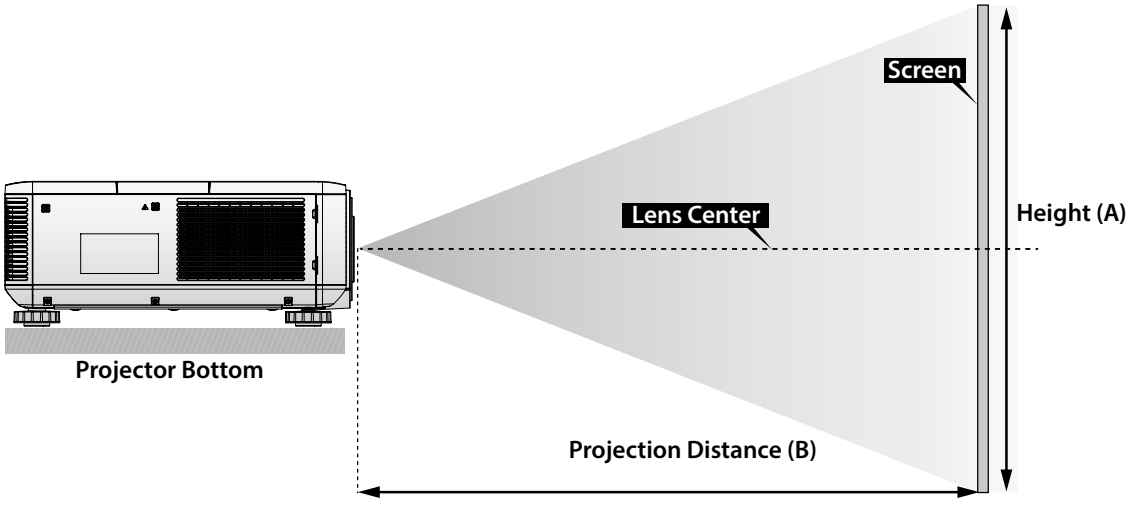
(*2) Lamp mode: Dual, Lamp Power: Normal

(*3) Compliance with ISO21118-2012

Projector Dimensions



Projection Dimension



Screen Size						LX-IL01UW				LX-IL02WZ			
						Ultra wide zoom lens				Wide zoom lens			
Diagonal		Width		Height (A)		Distance (B)							
						Wide		Tele		Wide		Tele	
(inch)	(m)	(inch)	(m)	(inch)	(m)	(inch)	(m)	(inch)	(m)	(inch)	(m)	(inch)	(m)
40	1.02	34	0.86	21	0.54	24.5	0.62	31.1	0.79	41.4	1.05	59.9	1.52
50	1.27	42	1.08	26	0.67	31.1	0.79	39.2	1	52.3	1.33	75.4	1.92
60	1.52	51	1.29	32	0.81	37.6	0.96	47.4	1.2	63.1	1.6	90.9	2.31
80	2.03	68	1.72	42	1.08	50.8	1.29	63.8	1.62	84.9	2.16	121.8	3.09
100	2.54	85	2.15	53	1.35	63.9	1.62	80.2	2.04	106.6	2.71	152.7	3.88
120	3.05	102	2.58	64	1.62	77.1	1.96	96.6	2.45	128.4	3.26	183.6	4.66
150	3.81	127	3.23	79	2.02	96.8	2.46	121.1	3.08	161	4.09	230	5.84
180	4.57	153	3.88	95	2.42	116.5	2.96	145.7	3.7	193.6	4.92	276.4	7.02
200	5.08	170	4.31	106	2.69	129.7	3.29	162.1	4.12	215.3	5.47	307.3	7.81
300	7.62	254	6.46	159	4.04	195.4	4.96	244	6.2	324	8.23	461.9	11.73
400	10.16	339	8.62	212	5.38	261.2	6.63	325.9	8.28	432.7	10.99	616.6	15.66
500	12.7	424	10.77	265	6.73	326.9	8.3	407.7	10.36	541.5	13.75	771.2	19.59

Screen Size						LX-IL03ST				LX-IL04MZ			
						Standard zoom lens				Middle zoom lens			
Diagonal		Width		Height (A)		Distance (B)							
						Wide		Tele		Wide		Tele	
(inch)	(m)	(inch)	(m)	(inch)	(m)	(inch)	(m)	(inch)	(m)	(inch)	(m)	(inch)	(m)
40	1.02	34	0.86	21	0.54	57.2	1.45	75.8	1.93	73.6	1.87	124.1	3.15
50	1.27	42	1.08	26	0.67	72.1	1.83	95.5	2.42	92.9	2.36	155.9	3.96
60	1.52	51	1.29	32	0.81	87.1	2.21	115.1	2.92	112.1	2.85	187.8	4.77
80	2.03	68	1.72	42	1.08	117	2.97	154.3	3.92	150.5	3.82	251.4	6.39
100	2.54	85	2.15	53	1.35	147	3.73	193.5	4.92	188.9	4.8	315	8
120	3.05	102	2.58	64	1.62	176.9	4.49	232.8	5.91	227.6	5.78	378.6	9.62
150	3.81	127	3.23	79	2.02	221.8	5.63	291.6	7.41	285	7.24	474.1	12.04
180	4.57	153	3.88	95	2.42	266.7	6.77	350.5	8.9	342.6	8.7	569.5	14.47
200	5.08	170	4.31	106	2.69	296.6	7.53	389.7	9.9	381	9.68	633.1	16.08
300	7.62	254	6.46	159	4.04	446.3	11.34	585.9	14.9	573.2	14.56	951.2	24.16
400	10.16	339	8.62	212	5.38	595.9	15.14	782.3	19.87	765.3	19.44	1269.7	32.25
500	12.7	424	10.77	265	6.73	745.6	18.94	978.3	24.85	957.4	24.32	1587.8	40.33

** The table indicates projection range, optical performance is only guaranteed from 50 to 300 inches.

Screen Size						LX-IL05LZ				LX-IL06UL			
						Long zoom lens				Ultra long zoom lens			
Diagonal		Width		Height (A)		Distance (B)							
						Wide		Tele		Wide		Tele	
(inch)	(m)	(inch)	(m)	(inch)	(m)	(inch)	(m)	(inch)	(m)	(inch)	(m)	(inch)	(m)
40	1.02	34	0.86	21	0.54	118.7	3.01	181	4.6	173.9	4.42	277.7	7.05
50	1.27	42	1.08	26	0.67	149.7	3.8	227.6	5.78	220.2	5.59	350	8.89
60	1.52	51	1.29	32	0.81	180.7	4.59	274.1	6.96	266.6	6.77	422.3	10.73
80	2.03	68	1.72	42	1.08	242.7	6.16	367.3	9.33	359.4	9.13	567	14.4
100	2.54	85	2.15	53	1.35	304.3	7.73	460.4	11.7	452.1	11.48	711.6	18.07
120	3.05	102	2.58	64	1.62	366.7	9.31	553.6	14.06	544.9	13.84	856.2	21.75
150	3.81	127	3.23	79	2.02	459.4	11.67	693.3	17.61	684	17.37	1073.1	27.26
180	4.57	153	3.88	95	2.42	552.4	14.03	833	21.16	823.1	20.91	1290.1	32.77
200	5.08	170	4.31	106	2.69	614.7	15.6	926.4	23.53	915.9	23.26	1434.7	36.44
300	7.62	254	6.46	159	4.04	924	23.47	1392.1	35.36	1379.6	35.04	2157.8	54.81
400	10.16	339	8.62	212	5.38	1233.9	31.34	1857.9	47.19	1843.3	46.82	2880.9	73.18
500	12.7	424	10.77	265	6.73	1543.7	39.21	2323.6	59.02	2307.1	58.6	3604	91.54

Screen Size						LX-IL07WF	
						Short fixed lens	
Diagonal		Width		Height (A)		Distance (B)	
						N/A	
(inch)	(m)	(inch)	(m)	(inch)	(m)	(inch)	(m)
40	1.02	34	0.86	21	0.54	25.1	0.64
50	1.27	42	1.08	26	0.67	31.8	0.81
60	1.52	51	1.29	32	0.81	38.5	0.98
80	2.03	68	1.72	42	1.08	52	1.32
100	2.54	85	2.15	53	1.35	65.5	1.66
120	3.05	102	2.58	64	1.62	78.9	2.01
150	3.81	127	3.23	79	2.02	99.1	2.52
180	4.57	153	3.88	95	2.42	119.3	3.03
200	5.08	170	4.31	106	2.69	132.8	3.37
300	7.62	254	6.46	159	4.04	200.1	5.08
400	10.16	339	8.62	212	5.38	267.4	6.79
500	12.7	424	10.77	265	6.73	334.8	8.5

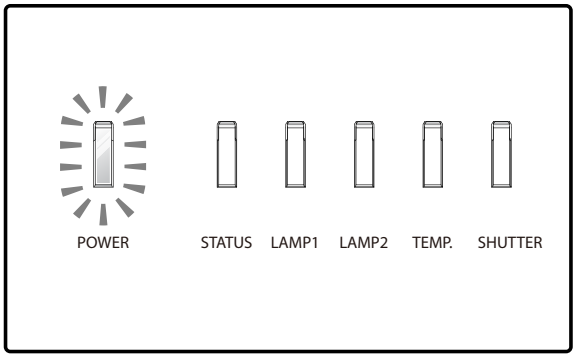
** The table indicates projection range, optical performance is only guaranteed from 50 to 300 inches.

Lens Series

Part Number	Lens Name	F Number	Focal Length	Zoom Ratio	Screen Size	Throw Ratio	Lens Shift Range	
						WUXGA	V	H
LX-IL01UW	Ultra wide zoom lens	1.96-2.3	11.3-14.1mm	1.25:1	40”-500”	0.75-0.93:1	0~50%	+/-6.7%
LX-IL02WZ	Wide zoom lens	1.85-2.5	18.7-26.5mm	1.41:1	40”-500”	1.25-1.79:1	0~50%	+/-10%
LX-IL03ST	Standard zoom lens	1.7-1.9	26-34mm	1.3:1	40”-500”	1.73-2.27:1	0~50%	+/-10%
LX-IL04MZ	Middle zoom lens	1.86-2.48	32.9-54.2mm	1.65:1	40”-500”	2.22-3.67:1	0~50%	+/-10%
LX-IL05LZ	Long zoom lens	1.85-2.41	52.8-79.1mm	1.5:1	40”-500”	3.58-5.38-1	0~50%	+/-10%
LX-IL06UL	Ultra long zoom lens	1.85-2.48	78.5-121.9mm	1.55:1	40”-500”	5.31-8.26:1	0~50%	+/-10%
LX-IL07WF	Short fixed lens	1.85	11.6mm	-	40”-500”	0.76:1	0%	0%

** The table indicates projection range, optical performance is only guaranteed from 50 to 300 inches.

LED Indicator Status



Power LED Indicator

LED Display		Projector Status	Recommended Actions
Off		Power is off	
Flashing	Green	Prepare to turn on projector	Wait till projector start displaying.
	Orange	Projector cooling	Wait until the cooling finish (~120 seconds).
On	Red	Standby mode	
	Green	Projector is on	

Status LED Indicator

LED Display		Projector Status	Recommended Actions
Off		No problem	
Flashing	Red (Cycles of 1)	Cover problem	
	Red (Cycles of 4)	Fan problem	
On	Red	System error	

Lamp 1/Lamp 2 LED Indicator

LED Display		Projector Status	Recommended Actions
Off		Lamp off	
Flashing	Green	Prepare to light lamp	
	Red (Cycles of 6)	Lamp lit fail	
On	Red	Lamp is end-of-life	
	Green	Lamp lit	

Temperature LED Indicator

LED Display		Projector Status	Recommended Actions
Off		No problem	
Flashing	Red	Temperature problem	

Shutter LED Indicator

LED Display		Projector Status	Recommended Actions
Off		Shutter is open	
Flashing	Green	Shutter is closed	

Supported Signal Input Timing

Computer

Signal Type	Resolution	Freq. H (KHz)	Freq. V (Hz)	Clock (MHz)	BNC - RGBHV	BNC - YUV	HD15 - RGBHV	HD15- YUV	DVI-D (EIA Timing)	HDMI RGB (EIA Timing)	HDMI YUV (EIA Timing)	DisplayPort	HDBaseT	3D FS Support
PC	640*480-60	31.47	59.93	25.175	V	-	V	-	V	V	-	V	V	V
	640*480-75	37.5	75	31.5	V	-	V	-	V	V	-	V	V	-
	640*480-85	43.27	85.01	36	V	-	V	-	V	V	-	V	V	-
	800*600-60	37.88	60.32	40	V	-	V	-	V	V	-	V	V	V
	800*600-75	46.88	75	49.5	V	-	V	-	V	V	-	V	V	-
	800*600-85	53.67	85.06	56.25	V	-	V	-	V	V	-	V	V	-
	848*480-60	31.02	60	33.75	V	-	V	-	V	V	-	V	V	V
	1024*768-60	48.36	60	65	V	-	V	-	V	V	-	V	V	V
	1024*768-75	60.02	75.03	78.75	V	-	V	-	V	V	-	V	V	-
	1024-768-85	68.88	85.03	94.5	V	-	V	-	V	V	-	V	V	-
	1280*720-60	44.69	59.91	74.37	V	-	V	-	V	V	-	V	V	V
	1280*768-60	47.8	59.87	79.5	V	-	V	-	V	V	-	V	V	V
	1280*800-60	49.702	59.81	83.5	V	-	V	-	V	V	-	V	V	V
	1280*960-60	60	60	108	V	-	V	-	V	V	-	V	V	V
	1280*1024-60	63.98	60.02	108	V	-	V	-	V	V	-	V	V	V
	1280*1024-75	79.98	75.02	135	V	-	V	-	V	V	-	V	V	-
	1280*1024-85	91.15	85.02	157.5	V	-	V	-	V	V	-	V	V	-
	1366*768-60	47.71	59.79	85.5	V		V		V	V		V	V	V
	1440*900-60	55.935	59.887	106.5	V	-	V	-	V	V	-	V	V	V
	1400X1050-60	65.517	59.98	121.75	V	-	V	-	V	V	-	V	V	V
	1600*1200-60	75	60	162	V	-	V	-	V	V	-	V	V	V
	1680*1050-59.94	65.179	59.94	146	V	-	V	-	V	V	-	V	V	V
	1920*1200RB-60	74.04	59.95	154	V	-	V	-	V	V	-	V	V	V
SDTV	1440x480i	15.73	60	27	-	-	-	-	-	V	V	-	V (HDMI)	
	1440x576i	15.62	50	27	-	-	-	-	-	V	V	-	V (HDMI)	-
	480i	15.734	59.94	13.5	-	V	-	V	-	-	-	-	-	-
	576i	15.625	50	13.5	-	V	-	V	-	-	-	-	-	-
EDTV	480p	31.47	59.94	27	V	V	V	V	V	V	V	V	V	-
	576p	31.25	50	27	V	V	V	V	V	V	V	V	V	-
	1080i	28.13	50	74.25	-	V	-	V	V	V	V	V	V	-
	1080i	33.75	60	74.25	-	V	-	V	V	V	V	V	V	
	720p	37.5	50	74.25	V	V	V	V	V	V	V	V	V	V
	720p	45	60	74.25	V	V	V	V	V	V	V	V	V	V
	1080p	27	24	74.25	V	V	V	V	V	V	V	V	V	-
	1080p	28.13	25	74.25	V	V	V	V	V	V	V	V	V	-
	1080p	33.72	29.97	74.175	V	V	V	V	V	V	V	V	V	-
	1080p	33.75	30	74.25	V	V	V	V	V	V	V	V	V	-
	1080p	56.25	50	148.5	V	V	V	V	V	V	V	V	V	V
	1080p	67.5	60	148.5	V	V	V	V	V	V	V	V	V	V

3D Signal Input Mode

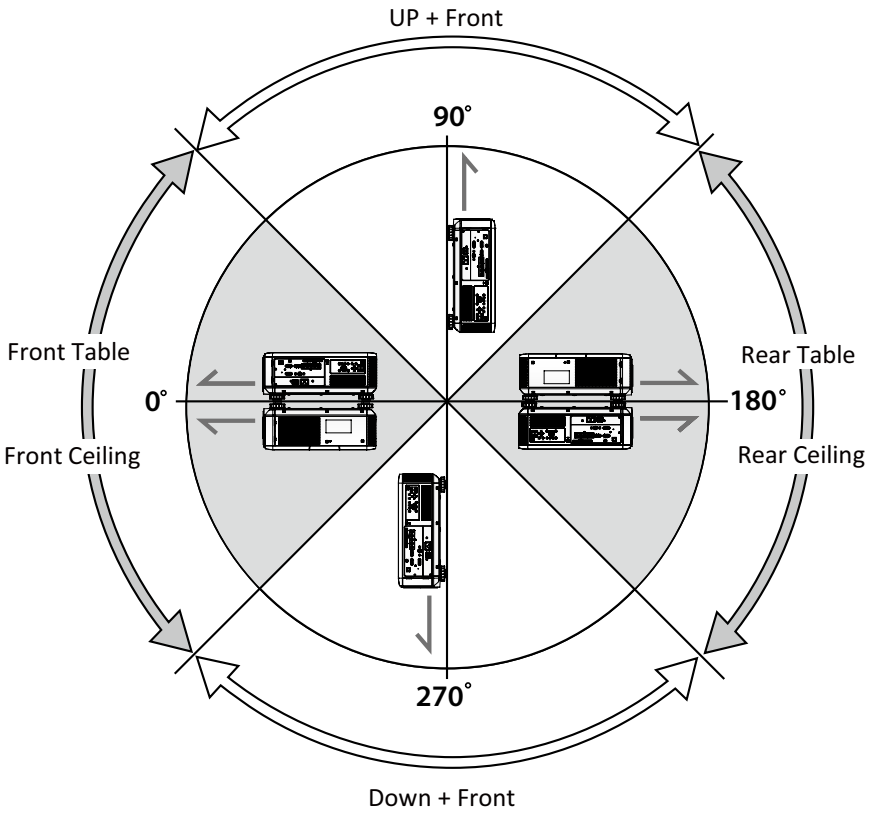
Timing Format	H Freq. (KHz)	V Freq. (Hz)	Pixel Clock (MHz)	H Total Pixel	H Display Pixel	H Front Porch	H Sync	H Back Porch	V Total Lines	V Display Lines	V Front Porch	V Sync	V Back Porch	Note Auto
720p_50	37.5	50	74.25	1980	1280	440	40	220	750	720	5	5	20	OK
720p_60	45	60	74.25	1650	1280	110	40	220	750	720	5	5	20	OK
1080i_50	28.125	25	74.25	2640	1920	528	44	148	562	540	2	5	15	OK
1080i_60	33.75	30	74.25	2200	1920	88	44	148	562	540	2	5	15	OK
1080p_24	27	24	74.25	2750	1920	638	44	148	1125	1080	4	5	36	OK
1080p_50	56.25	50	148.5	2640	1920	528	44	148	1125	1080	4	5	36	OK
1080p_60	67.5	60	148.5	2200	1920	88	44	148	1125	1080	4	5	36	OK

* The following Timing Formats require 3D formats carrying InfoFrame packets (based on the HDMI 1.4a standard) from HDMI or HDBaseT sources only.

Timing Format	3D Format Support		
	FP	SBS	TAB
720p_50	V	V	V
720p_60	V	V	V
1080i_50		V	
1080i_60		V	
1080p_24	V	V	V
1080p_50		V	V
1080p_60		V	V

Notes for Projection Mode

1. Referring to the following illustration, select a **Projection Mode** in the **ALIGNMENT** menu. The options are **Front Table**, **Rear Table**, **Front Ceiling**, **Rear Ceiling**, **Up + Front** and **Down + Front**.
2. When the projector is installed in a tilt angle over ±15 degrees, you need to select **On** at the **High Altitude** function in the **LAMPS** menu. This function sets the fan speed to high due to the high altitude environment.
3. The tilt angle of the projector should not exceed ± 15 degrees. Over tilting may decrease lamp life. If the projector is installed at a tilt angle, it is recommended to replace the lamp once it reaches a 50% life span.



Appendix

Canon LX-MU700 Protocol Command

The commands are available when **Standby Mode** is **Standard**.

Interface and Requirements (Ver 0.3)

Serial (RS-232) Interface

The RS-232 Commands use only ASCII characters which can be entered using a typical terminal emulator like Windows HyperTerminal with the following setting:

Bits per second: 115200 (default) / 57600 / 38400 / 19200 / 14400 / 9600 / 4800 / 2400 (selectable by OSD)
Data bits: 8
Parity: None
Stop bits: 1
Flow control: None

Note that each input character will be echoed on the terminal by MCU and there is no need to set the local echo “ON” with the terminal setting.

TCP/IP Interface

The operation commands are available through telnet protocol. See page 53 for setting.

Serial and TCP/IP Interface over HDBaseT

Serial bits per second setting is fixed to 9600 over HDBaseT. The other settings are same as above.

System Operation Commands

The operation commands tell the projector what to do. All commands start with 2 letters: “op” for operations commands, and a space [SP] then following a control command then finally the value wants to read, set, increase or decrease. All commands must end with a carriage return (ASCII hex 0D), shown as [CR] below. The syntax for operations commands is as follows:

op[SP]<operation command>[SP]<Setting Value>[CR]

For all but Execute functions the response from the projector will be the command and “= <value>” where <value> is the current value or “NA” if the value is not available. For execute functions the response will be the same command. All responses will be in CAPS. Please refer to the following table for command list and examples:

System Operation Command

Operation	Commands	Values
Set	= <value>	Makes the unit take that value.
Get	?	Asks what the current value is.
Increment	+	Adds 1 to the current value.
Decrement	-	Subtracts 1 from the current value.
Execute	(none)	Performs an action such as a reset.

Motor Operation Command

For motor control like lens shift, focus and zoom, the parameters “ + ” and “ - ” are defined as follows.

Command Item	Command	System Action
focus	+ -	+ => Focus Near - => Focus Far
zoomio	+ -	+ => Zoom out - => Zoom in
Vert.offset	+ -	+ => Up - => Down

Command Item	Command	System Action
horiz.offset	+ -	+ => Right - => Left
lens.center	(execute)	Midposition shift
shutter	+ -	+ => Close - => Open

Get operations command example:

Input: op bright ? [CR]
System response: OP BRIGHT = 100

Increase & Decrease operations command examples:

Input: op bright + [CR]
System response: OP BRIGHT = 101

Input: op bright - [CR]
System response: OP BRIGHT = 126

Set operations command example:

Input: op bright = 127 [CR]
System response: OP BRIGHT = 127

Execute command example:

Input: op auto.img [CR]
System response: OP AUTO.IMG

The list of valid operations commands for DP9670 SCNxA are shown in below table.

1. DISPLAY

Item	Operation	Commands	Values	Notes
1-1	input.sel	= ?	0 = HDMI 1 = DVI-D 2 = Computer-1 3 = Computer-2/BNC 4 = DP 5= HDBaseT	Note1; Note3
1-2	pattern	= ?	0 = Color Bar 1 = Cross Hatch 2 = Burst 3 = Red (TI) 4 = Green (TI) 5 = Blue (TI) 6 = WHITE (TI) 7 = BLACK (TI) 8 = HRamp (TI) 9 = Red (uncorrected) 10 = Green (uncorrected) 11 = Blue (uncorrected) 12 = White (uncorrected) 13 = Black (uncorrected) 14 = Off	Note1

Item	Operation	Commands	Values	Notes
1-3	color.space	= ?	0 = Auto 1 = YCbCr (Rec. 601) 2 = YPbPr (Rec. 709) 3 = RGB-PC (0-255) 4 = RGB-Video (16-235)	Note2
1-4	input.lock	= ?	0 = Auto 1 = 48 Hz 2 = 50 Hz 3 = 60 Hz	Note2
1-5	no.signal	= ?	0 = Logo 1 = Blue 2 = Black 3 = White	Note1
1-6	auto.img (Auto Sync)	(execute)		Note2
1-7	blue.only	= ?	0 = Off 1 = On	Note1

2. PICTURE

Item	Operation	Commands	Values	Notes
2-1	pic.mode	= ?	0 = Presentation 1 = Standard 2 = Video	
2-2	contrast	= ? + -	0 - 200	Note2
2-4	bright	= ? + -	0 - 200	Note2
2-5	saturat	= ? + -	0 - 200	Note2; Note4
2-6	tint	= ? + -	0 - 200	Note2; Note4
2-7	gamma	= ?	0 = Film 1 = Graphics 2 = Video 3 = Linear 4 = PC	Note2
2-8-1	color.temp	= ?	0 = Native 1 = 5400K 2 = 6500K 3 = 9300K	Note2; Note8
2-8-2-1	red.offset	= ? + -	0-200	Note2
2-8-2-2	green.offset	= ? + -	0-200	Note2
2-8-2-3	blue.offset	= ? + -	0-200	Note2
2-8-2-4	red.gain	= ? + -	0-200	Note2
2-8-2-5	green.gain	= ? + -	0-200	Note2
2-8-2-6	blue.gain	= ? + -	0-200	Note2
2-9	sharp	= ? + -	0 - 31	Note2
2-10	nr	= ? + -	0 –15 (Noise Reduction)	Note2

Item	Operation	Commands	Values	Notes
2-11	aspect	= ?	0 = 5:4 1 = 4:3 2 = 16:10 3 = 16:9 4 = 1.88 5 = 2.35 6 = Letterbox 7 = Auto 8 = True Size	Note1; Note5
2-12	zoom (Overscan)	= ?	0 = Off 1 = Crop 2 = Zoom	Note2
2-13-1	h.total	= ? + -	0-200	Note2; Note7
2-13-2	h.pos	= ? + -	0-200	Note2; Note7
2-13-3	h.phase	= ? + -	0-31	Note2; Note7
2-13-4	v.pos	= ? + -	0-200	Note2; Note7
2-14-1	hsg.r.gain	= ? + -	0-200	Note2
2-14-2	hsg.g.gain	= ? + -	0-200	Note2
2-14-3	Hsg.b.gain	= ? + -	0-200	Note2
2-14-4	hsg.c.gain	= ? + -	0-200	Note2
2-14-5	hsg.m.gain	= ? + -	0-200	Note2
2-14-6	Hsg.y.gain	= ? + -	0-200	Note2
2-14-7	hsg.r.sat	= ? + -	0-200	Note2
2-14-8	hsg.g.sat	= ? + -	0-200	Note2
2-14-9	Hsg.b.sat	= ? + -	0-200	Note2
2-14-10	hsg.c.sat	= ? + -	0-200	Note2
2-14-11	hsg.m.sat	= ? + -	0-200	Note2
2-14-12	Hsg.y.sat	= ? + -	0-200	Note2
2-14-13	hsg.r.hue	= ? + -	0-200	Note2
2-14-14	hsg.g.hue	= ? + -	0-200	Note2
2-14-15	Hsg.b. hue	= ? + -	0-200	Note2
2-14-16	hsg.c. hue	= ? + -	0-200	Note2
2-14-17	hsg.m. hue	= ? + -	0-200	Note2
2-14-18	Hsg.y. hue	= ? + -	0-200	Note2
2-14-19	hsg.wr.gain	= ? + -	0-200	Note2
2-14-20	hsg.wg.gain	= ? + -	0-200	Note2
2-14-21	Hsg.wb.gain	= ? + -	0-200	Note2

3. LAMPS

Item	Operation	Commands	Values	Notes
3-1	lamps	= ?	0 = Dual 1 = Lamp1 2 = Lamp2 3 = Single	Note1; Note8
3-2	lamp.mode (Drive)	= ?	0 = Standard 1 = Economy 2 = Custom Power Level	Note1

Item	Operation	Commands	Values	Notes
3-3	lamp.pwr	= ?	0-31 (75% ~ 100.0%)	Note1
3-4	altitude (High Altitude)	= ?	0 = Off 1 = On	Note1
3-5	lamp1.stat	?	0 = Off 1 = On 2 = Ignition Retry 3 = Waiting Switch Lamp 4 = Lamp Error	Note1
3-6	lamp2.stat	?	0 = Off 1 = On 2 = Ignition Retry 3 = Waiting Switch Lamp 4 = Lamp Error	Note1

4. ALIGNMENT

Item	Operation	Commands	Values	Notes
4-1	proj.mode	= ?	0 = Front Table 1 = Rear Table 2 = Front Ceiling 3 = Rear Ceiling 4 = Up + Front 5 = Down + Front	Note1
4-3-1	zoomio	+ -	+ => Zoom out - => Zoom in	Motor command; Note1
4-3-2	focus	+ -	+ => Focus Near - => Focus Far	Motor command; Note1
4-3-3	vert.offset	+ -	+ => Up - => Down	Motor command; Note1
4-3-4	horiz.offset	+ -	+ => Right - => Left	Motor command; Note1
4-4-1	lens.load	=	1..10 set of lens memory (Load)	Note1
4-4-2	lens.save	=	1..10 set of lens memory (Save)	Note1
4-5	lens.center	(execute)	Midposition shift	Note1
4-6	v.keystone	= ? + -	-80 ~ 80	Note1;

5. CONTROL

Item	Operation	Commands	Values	Notes
5-1	eco.net.pow	= ?	0 = Standard 1 = ECO 2 = Network	
5-2	auto.powoff	= ?	0 = Off 1 = On	Note1
5-3	auto.powon	= ?	0 = Off 1 = On	
5-4-1	net.ipaddr	= ?	<string>	
5-4-2	net.subnet	= ?	<string>	
5-4-3	net.gateway	= ?	<string>	
5-4-4	net.dhcp	= ?	0 = Off 1 = On	

Item	Operation	Commands	Values	Notes
5-6-1	rs232.speed	= ?	0 = 115200 bps 1 = 57600 bps 2 = 38400 bps 3 = 19200 bps 4 = 14400 bps 5 = 9600 bps 6 = 4800 bps 7 = 2400 bps	
5-6-2	rs232.channel	= ?	0 = Local 1 = HDBaseT	
5-7	startup.logo	= ?	0 = Off 1 = On	
5-8	trig.1	= ?	0 = Off 1 = On	Note1
5-9	auto.src (Auto Search)	= ?	0 = Off 1 = On	Note1
5-10	dblack	= ?	0 = Off 1 = On	Note1
5-11-1	3d.format	= ?	0 = Off 1 = Auto 2 = Side by Side 3 = Top / Bottom 4 = Frame Sequential	Note2
5-11-2	3d.dlplink	= ?	0 = Off 1 = On	Note2
5-11-3	3d.swap	= ?	0 = Normal 1 = Reverse	Note2
5-12	lang	= ?	0 = English 1 = French 2 = Spanish 3 = German 4 = Portuese 5 = Dutch 6 = Italian 7 = Russian 8 = Chinese Simplified 9 = Chinese Traditional 10 = Korean 11 = Japanese	
5-13	remote.set	= ?	Set/Get ID SET number of IR remote	

6. SERVICE

Item	Operation	Commands	Values	Notes
6-1	model	?	<string>	
6-2	ser.no	?	<string>	
6-3	sw.ver	?	<string>	Note12
6-5	pixel.clock	?	<string>	In MHz; Note2
6-6	signal	?	<string>	Note2
6-7-1	h.refresh	?	<string>	Note2

Item	Operation	Commands	Values	Notes
6-7-2	v.refresh	?	<string>	Note2
6-8	lamp1.hours	?	<string>	
6-9	lamp2.hours	?	<string>	
6-10	proj.runtime	?	<string>	
6-11	fact.reset	(execute)		

A. Others

Item	Operation	Commands	Values	Notes
A-1	power.on	(execute)		
A-2	power.off	(execute)		
A-3	status	?	0 = standby 1 = warm up 2 = imaging 3 = cooling 4 = reset	
A-4	errcode	?	Ref to Appendix A	
A-5	psoc.ver	?	Ger firmware version of PSOC	
A-6	adc.rd	?	Get ADC calibration data	
A-7	f336.ver	?	Ger firmware version of F336	
A-8	blst.ver	?	Ger HW & FW version of Ballast	
A-9	dlpsoc	(execute)	Download PSOC latest SW	
A-10	color.native	=?	0: Color setting normal for picture quality (default) 1: Color setting native for optical data measurement	
A-11	edid.rd.vga	?	Read VGA edid	
A-12	edid.rd.hdmi	?	Read HDMI edid	
A-13	edid.rd.dvi	?	Read DVI edid	
A-14	edid.rd.dp	?	Read DVI edid	
A-15	lamp1.reset	(execute)	Reset the lamp1 hours	
A-16	lamp2.reset	(execute)	Reset the lamp2 hours	

B. “ky” commands

The syntax of “ky” commands is as following:

ky[SP]<Operation>[CR]

The “ky” commands are unusable when in Network setting of Standby Mode.

Item	Operation	Actions
B-1	power.on	Power on immediately
B-2	power.off	Power off immediately
B-3	menu	Act the same as IR remote control MENU key
B-4	exit	Act the same as IR remote control EXIT key
B-5	enter	Act the same as IR remote control ENTER key
B-6	up	Act the same as IR remote control UP key
B-7	down	Act the same as IR remote control DOWN key
B-8	left	Act the same as IR remote control LEFT key
B-9	right	Act the same as IR remote control RIGHT key
B-10	nop	No operation (just to know projector is alive)

REMARK: An input command will get back with “NA” when the input command is “Not Applicable” in some specific conditions.

Note1: Not applicable in standby mode.

Note2: Not applicable in standby mode or without input signal locked.

Note3: Not applicable when blank is on.

Note4: Only valid when source is YUV.

Note5: True size aspect ratio is not applicable when zoom is set to “Zoom”.

Note6: “Zoom” command is not applicable when aspect ratio is set to True size.

Note7: Only applicable when source is one of Computer-1 and Computer-2/BNC.

Note8: Not applicable when lamp is cooling.

Note9: Not applicable when eco.net.pow is on.

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