

SHARP

Projector

P721Q-W/P601Q-W

User's Manual

HDMITM

CHDBT³
ASE

Model No.
XP-P721Q-W/XP-P601Q-W

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IMPORTANT INFORMATION

Cable Information

Use shielded cables so as not to interfere with radio and television reception.

Supplier's Declaration of Conformity

SHARP PROJECTOR, XP-P721Q-W / XP-P601Q-W

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.

Responsible Party:

SHARP ELECTRONICS CORPORATION

100 Paragon Drive, Montvale, NJ 07645

TEL: 1-888-GO-SHARP / 1-888-467-4277 www.sharpusa.com

WARNING:

FCC Regulations state that any unauthorized changes or modifications to this equipment not expressly approved by the manufacturer could void the user's authority to operate this equipment.

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.

U.S.A. ONLY

Notice Concerning Electromagnetic Interference (EMI) (For other regions)

WARNING:

Operation of this equipment in a residential environment could cause radio interference.

(For Customers in U.K.)

IMPORTANT

- The wires in this mains lead are coloured in accordance with the following code:

GREEN-AND-YELLOW: "Earth"

BLUE: "Neutral"

BROWN: "Live"

- As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug proceed as follows:
 - The wire which is coloured GREEN-AND-YELLOW must be connected to the terminal in the plug which is marked by the letter **E** or by the safety earth symbol  or coloured green or green-and-yellow.
 - The wire which is coloured BLUE must be connected to the terminal which is marked with the letter **N** or coloured black.
 - The wire which is coloured BROWN must be connected to the terminal which is marked with the letter **L** or coloured red.
- Ensure that your equipment is connected correctly. If you are in any doubt consult a qualified electrician.

"WARNING: THIS APPARATUS MUST BE EARTHED."

⚠️ WARNING

- **INGESTION HAZARD:** This product contains a button cell or coin battery.
- **DEATH** or serious injury can occur if ingested.
- A swallowed button cell or coin battery can cause **Internal Chemical Burns** in as little as **2 hours**.
- **KEEP** new and used batteries **OUT OF REACH** of **CHILDREN**
- **Seek immediate medical attention** if a battery is suspected to be swallowed or inserted inside any part of the body.



- The compatible battery type: CR2032
- The nominal battery voltage: 3V
- This product contains non-replaceable batteries.

- Remove and immediately recycle or dispose of used batteries according to local regulations and keep away from children. Do NOT dispose of batteries in household trash or incinerate.
- Even used batteries may cause severe injury or death.
- Call a local poison control center for treatment information.
- The compatible battery type: CR2032
- The nominal battery voltage: 3V
- Non-rechargeable batteries are not to be recharged.
- Do not force discharge, recharge, disassemble, heat above 95°F (35°C) or incinerate. Doing so may result in injury due to venting, leakage or explosion resulting in chemical burns.
- This product contains non-replaceable batteries.

This product utilizes a CR coin Lithium battery which contains a Perchlorate material. Special handling for this material may apply. See www.dtsc.ca.gov/hazardouswaste/perchlorate.

Disposing of Your Used Product



Information on the Disposal of this Equipment and its Batteries

IF YOU WISH TO DISPOSE OF THIS EQUIPMENT OR ITS BATTERIES, DO NOT USE THE ORDINARY WASTE BIN, AND DO NOT PUT THEM INTO A FIREPLACE!

Used electrical and electronic equipment and batteries should always be collected and treated SEPARATELY in accordance with local law.

Separate collection promotes an environment-friendly treatment, recycling of materials, and minimizing final disposal of waste. IMPROPER DISPOSAL can be harmful to human health and the environment due to certain substances! Take USED EQUIPMENT to a local, usually municipal, collection facility, where available.

Remove USED BATTERIES from equipment, and take them to a battery collection facility; usually a place where new batteries are sold.

If in doubt about disposal, contact your local authorities or dealer and ask for the correct method of disposal.

ONLY FOR USERS IN THE EUROPEAN UNION, AND SOME OTHER COUNTRIES; FOR INSTANCE NORWAY AND SWITZERLAND: Your participation in separate collection is requested by law.

The symbol shown above appears on electrical and electronic equipment and batteries (or the packaging) to remind users of this. If 'Hg' or 'Pb' appears below the symbol, this means that the battery contains traces of mercury (Hg) or lead (Pb), respectively.

Users from PRIVATE HOUSEHOLDS are requested to use existing return facilities for used equipment and batteries. Batteries are collected at points of sale. Return is free of charge.

If the equipment has been used for BUSINESS PURPOSES, please contact your SHARP dealer who will inform you about take-back. You might be charged for the costs arising from take-back. Small equipment (and small quantities) might be taken back by your local collection facility. For Spain: Please contact the established collection system or your local authority for take-back of your used products.



Information on the Disposal of this Equipment and its Batteries

IF YOU WISH TO DISPOSE OF THIS EQUIPMENT, DO NOT USE THE ORDINARY WASTE BIN, AND DO NOT PUT THEM INTO A FIREPLACE!

Used electrical and electronic equipment and batteries should always be collected and treated SEPARATELY in accordance with local law.

Separate collection promotes an environment-friendly treatment, recycling of materials, and minimizing final disposal of waste. IMPROPER DISPOSAL can be harmful to human health and the environment due to certain substances! Take USED EQUIPMENT to a local, usually municipal, collection facility, where available.

This equipment contains a BATTERY which cannot be removed by the user. For battery exchange, please contact your dealer.

If in doubt about disposal, contact your local authorities or dealer and ask for the correct method of disposal.

ONLY FOR USERS IN THE EUROPEAN UNION, AND SOME OTHER COUNTRIES; FOR INSTANCE NORWAY AND SWITZERLAND: Your participation in separate collection is requested by law.

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If the equipment has been used for BUSINESS PURPOSES, please contact your SHARP dealer who will inform you about take-back. You might be charged for the costs arising from take-back. Small equipment (and small quantities) might be taken back by your local collection facility. For Spain: Please contact the established collection system or your local authority for take-back of your used products.

Laser Safety Caution

WARNING

CLASS 1 LASER PRODUCT [IEC 60825-1:2014]

CLASS 1 CONSUMER LASER PRODUCT OF EN 60825-1:2014+A11:2021 (For EU and UK)

- The laser module is equipped in this product. Use of controls or adjustments of procedures other than those specified herein may result in hazardous radiation exposure.
Laser energy exposure near aperture may cause burns.

- This product is classified as Class 1 of IEC 60825-1:2014.
- For EU and UK, EN 60825-1:2014+A11:2021 and EN 50689:2021 are also conformed.
- Obey the laws and regulations of your country in relation to the installation and management of the device.

For USA

Complies with 21 CFR 1040.10 and 1040.11 except for conformance as a Risk Group 2 LIP as defined in IEC 62471-5:Ed. 1.0. For more information see Laser Notice No. 57, dated May 8, 2019.

WARNING

- Do not allow to look into the projector beam at any distance from the projector. An adult should supervise the children to prevent exposure risks.
- Check that there is no one looking at the lens, when using the remote control for starting the projector.
- Do not look at the projected light using optical devices(binoculars, telescopes, magnifying glasses, reflectors, etc).
- [WARNING: MOUNT ABOVE THE HEADS OF CHILDREN.]
The use of a ceiling mount is recommended with this product to place it above the eyes of children.

- Outline of laser emitted from the built-in light module:
 - Wave length: 455 nm
 - Maximum power: 216W

Light Module

- A light module containing multiple laser diodes is equipped in the product as the light source.
- These laser diodes are sealed in the light module. No maintenance or service is required for the performance of the light module.
- End user is not allowed to replace the light module.
- Contact qualified distributor for light module replacement and further information.

Risk Groups

This projector is classified as either IEC/EN 62471-5:2015 risk group 2.

Risk group 2 (RG2)



WARNING

As with any bright light source, do not stare into the beam, RG2 IEC/EN 62471-5:2015.

To the dealer and the installer

1. To prevent the projector from falling, install it on the ceiling in a way with sufficient strength to withstand the combined weight of the projector and the ceiling mount unit for an extended period of time.
2. When installing the projector on the ceiling, be sure to do so correctly in accordance with the installation manual for the Ceiling Mount Unit. Be sure to use the fixed metal fittings and to tighten the screws securely.
3. To prevent the projector from falling, use fall prevention wires.
 - Use commercially available metal fittings to join the robust part of a building or construction and the security bar of the projector with the fall prevention wires.
 - Use commercially available metal fittings and fall prevention wires that have sufficient strength to withstand the combined weight of the projector and the ceiling mount unit.
 - Slightly slack off the fall prevention wires so as not to put a load on the projector.
 - Refer to the "Product Overview" for the location of the security bar. Please refer page 28 for details.

(for Germany only)

Machine Noise Information Regulation - 3. GPSGV,

The highest sound pressure level is less than 70 dB (A) in accordance with EN ISO 7779.

Information of the AUDIO OUT mini jack

The AUDIO OUT mini jack does not support earphone/headphone terminal.

Securing Personal Information

Personally identifiable information, such as IP addresses, may be saved on the projector. Before transferring or disposing of the projector, clear this data by performing [System] → [Reset] → [Reset All] on the on-screen menu.

About the Symbols

To ensure safe and proper use of the product, this manual uses a number of symbols to prevent injury to you and others as well as damage to property.

The symbols and their meanings are described below. Be sure to understand them thoroughly before reading this manual.

 WARNING	Failing to heed this symbol and handling the product erroneously could result in accidents leading to death or major injury.
 CAUTION	Failing to heed this symbol and handling the product erroneously could result in personal injury or damage to surrounding property.

Examples of symbols

	This symbol indicates you should be careful of electric shocks.
	This symbol indicates you should be careful of high temperatures.
	This symbol indicates something that must be prohibited.
	This symbol indicates something that must not be got wet.
	This symbol indicates you should not touch with wet hands.
	This symbol indicates something that must not be disassembled.
	This symbol indicates things you must do.
	This symbol indicates that the power cord should be unplugged from the power outlet.

Safety Cautions

WARNING

Projected light

 PROHIBITED	<p>Projected light and the pictogram/label indicated on the cabinet</p> <ul style="list-style-type: none">• Do not look into the projector's lens.• Strong light that could damage your vision is projected when the projector is operating. Laser energy exposure near aperture may cause burns. Be especially careful when children are around.• Do not look at the projected light using optical devices (magnifying glasses, reflectors, etc.). Doing so could result in vision impairment.• Check that there is no one looking at the lens within the projection range before turning on the projector.• Do not allow children to operate the projector alone. When a child is operating the projector an adult should always be present and watch the child carefully.• The following labels are stuck on the projector. <p>Label 1 FDA additional warning label (For USA only)</p> <div data-bbox="302 817 811 1024" style="border: 2px solid orange; padding: 10px;"><p>“WARNING: MOUNT ABOVE THE HEADS OF CHILDREN.” Additional warning against eye exposure for close exposures less than 1 m. “AVERTISSEMENT : INSTALLER AU-DESSUS DE LA TÊTE DES ENFANTS.” Avertissement supplémentaire contre l'exposition oculaire pour des expositions à une distance de moins de 1 m. “警告：安装在高于孩童头顶处” 关于小于1 m近距离眼睛暴露的附加警告 「警告：安装在高於兒童頭部處」 針對 1 m 以下近距離眼睛接觸的額外警告</p></div> <p>“WARNING: MOUNT ABOVE THE REACH AND SIGHT OF CHILDREN.” The use of a ceiling mount is recommended with this product to place it above the eye level of children. Additional warning against eye exposure for close exposures less than 1 m.</p>
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Continue to next page



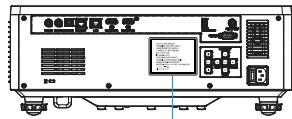
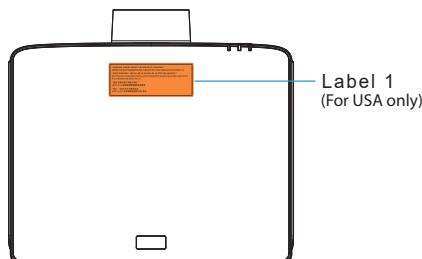
WARNING

Label 2

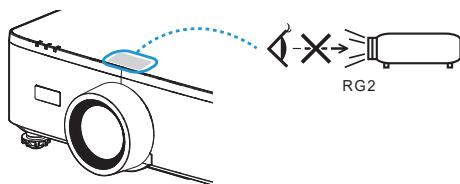
Laser explanatory label



Label Location



- This product is classified as RG2 of IEC/EN 62471-5:2015.
- The below pictogram, that is indicated near the lens on the cabinet, describes this projector is categorized in the risk group 2 of IEC/EN 62471-5:2015. As with any bright light source, do not stare into the beam, RG2 IEC/EN 62471-5:2015.





WARNING

Power supply

 REQUIRED	<p>Use a suitable voltage power supply.</p> <ul style="list-style-type: none">This projector is designed to be used with a 100–240 VAC, 50/60 Hz power supply. Before using the projector, check that the power supply to which the projector is to be connected meets these requirements.Use a power outlet as the projector's power supply. Do not connect the projector directly to electrical light wiring. Doing so is dangerous.
 MUST BE EARTHED	<p>Connecting the power cord to earth</p> <ul style="list-style-type: none">This equipment is designed to be used in the condition of the power cord connected to earth. If the power cord is not connected to the earth, it may cause electric shock. Please make sure the power cord is connected to the wall outlet directly and earthed properly. Do not use a 2-pin plug converter adapter.Be sure to connect the projector and the computer (signal source) to the same earth point. If the projector and the computer (signal source) will be connected to different earth points, fluctuations in the earth potential may cause fire or smoke.
 REQUIRED  PROHIBITED	<p>Handling the power cord</p> <ul style="list-style-type: none">Please use the power cord supplied with this projector. If the supplied power cord does not satisfy requirements of your country's safety standard, and voltage and current for your region, make sure to use the power cord that conforms to and satisfies them.<ul style="list-style-type: none">The power cord you use must be approved by and comply with the safety standards of your country. Please refer to the page 104 about the power cord specification.For selecting an appropriate power cord, please check rated voltage for your region by yourself.The power cord included with this projector is exclusively for use with this projector. For safety, do not use it with other devices.

Continue to next page



WARNING



HAZARDOUS VOLTAGE

- Handle the power cord with care. Damaging the cord could lead to fire or electric shock.
 - Do not place heavy objects on the cord.
 - Do not place the cord under the projector.
 - Do not cover the cord with a rug, etc.
 - Do not scratch or modify the cord.
 - Do not bend, twist or pull the cord with excessive force.
 - Do not apply heat to the cord.
- Should the cord be damaged (exposed core wires, broken wires, etc.), ask your dealer to replace it.
- Do not touch the power plug should you hear thunder. Doing so could result in electric shock.
- Do not connect or disconnect the power cord with wet hands. Doing so could result in electric shock.



DO NOT TOUCH WITH WET HANDS

Installation



PROHIBITED

Do not use in places such as those described below.

- Do not use in places such as those described below. Doing so could lead to fire or electric shock.
 - Shaky tables, inclined surfaces or other unstable places.
 - Poorly ventilated spaces.
 - Near a radiator, other heat sources, or in direct sunshine.
 - Continual vibration areas.
 - Humid, dusty, steamy, or oily areas.
 - An environment where there are corrosive gases (sulfur dioxide, hydrogen sulfide, nitrogen dioxide, chlorine, ammonia, ozone, etc.).
 - Outdoors.
 - High-temperature environment where humidity changes rapidly and condensation is likely to occur.

Continue to next page

⚠️ **WARNING**

 DO NOT WET  UNPLUG THE POWER CORD	<ul style="list-style-type: none"> Do not use in places such as those described below where the projector could get wet. Doing so could lead to fire or electric shock. <ul style="list-style-type: none"> - Do not use in the rain or snow, on a seashore or waterfront, etc. - Do not use in a bathroom or shower room. - Do not install under equipment that discharges water, such as air conditioners. - Do not place vases or potted plants on the projector. - Do not place cups, cosmetics or medicines on the projector. <p>Should water, etc. get inside the projector, first turn off the projector's power, then unplug the power cord from the power outlet and contact your dealer.</p>
 CAUTION	<p>Installing suspended from the ceiling</p> <ul style="list-style-type: none"> Consult your dealer for installing the projector on the ceiling. Special skills are required for ceiling installation. DO NOT perform installation work by people other than installers. Doing so may result in the projector falling and causing injury. We are not liable for any accident or/and damage resulting from improper installation or handling, misuse, modification, or natural disasters. When installed suspended from the ceiling, etc. do not hang from the projector. The projector could drop and cause injury. When installing suspended from the ceiling, use a power outlet that is within reach so the power cord can be easily plugged and unplugged.
On use	<p>Do not place objects inside the projector.</p> <ul style="list-style-type: none"> Do not insert or drop metal or combustible objects or other foreign materials into the projector from the vents. Doing so could lead to fire or electric shock. Be particularly careful if there are children in the home. Should a foreign object get inside the projector, first turn off the projector's power, then unplug the power cord from the power outlet and contact your dealer.



WARNING

 UNPLUG THE POWER CORD	<p>Unplug the power cord if the projector malfunctions.</p> <ul style="list-style-type: none">Should the projector emit smoke or strange odors or sounds, or if the projector has been dropped or the cabinet broken, turn off the projector's power, then unplug the power cord from the power outlet. Otherwise it may cause not only fire or electric shock but also serious damage to your eyesight or burns. Contact your dealer for repairs. <p>Never try to repair the projector on your own. Doing so is dangerous.</p>
 DO NOT DISASSEMBLE	<p>Do not disassemble the projector.</p> <ul style="list-style-type: none">Do not remove or open the projector's cabinet. <p>Also, do not modify the projector. There are high voltage areas in the projector. It may cause fire, electric shock, or laser light leakage, resulting in serious damage to your eyesight or burns.</p> <p>Have qualified service personnel perform inspection, adjustments and repairs of the interior.</p>
  PROHIBITED CAUTION FOR HIGH TEMPERATURE	<p>Do not place objects in front of the lens while the projector is operating.</p> <ul style="list-style-type: none">Do not place objects in front of the lens that obstruct the light while the projector is operating. The object could get hot and be broken or catch fire.The below pictogram indicated on the cabinet means the precaution for avoiding to place objects in front of the projector lens. 
 PROHIBITED	<p>When cleaning the projector</p> <ul style="list-style-type: none">Do not use flammable gas sprays to remove dust from the lens, cabinet, etc. Doing so could lead to fire.
 PROHIBITED	<p>Do not use in high security locations.</p> <ul style="list-style-type: none">Usage of the product must not be accompanied by fatal risks or dangers that, could lead directly to death, personal injury, severe physical damage or other loss, including nuclear reaction control in nuclear facility, medical life support system, and missile launch control in a weapon system.



CAUTION

Power cord

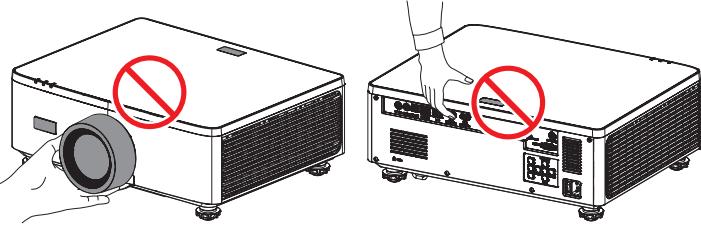
 REQUIRED	Handling the power cord <ul style="list-style-type: none">The projector should be installed close to an easily accessible power outlet.When connecting the power cord to the projector's AC IN terminal, make sure the connector is fully and firmly inserted. Loose connection of the power cord could lead to fire or electric shock.
 REQUIRED  UNPLUG THE POWER CORD	Handling the power cord by following below to avoid fire or electric shock <ul style="list-style-type: none">When connecting or disconnecting the power cord, pull the power cord out by holding onto its plug.Unplug the power cord from the power outlet before cleaning the product or when not planning to use the product for an extended time.When the power cord or plug is heat or damaged, unplug the power cord from the power outlet, and contact your dealer.
 REQUIRED	Periodically clean dust and other debris from the power plug <ul style="list-style-type: none">Failure to do so could result in fire or electric shock.
 REQUIRED	Disconnect power cords and other cables before moving the projector <ul style="list-style-type: none">Before moving the product, make sure the product power is off, then unplug the power cord from the power outlet and check that all cables connecting the product to other devices are disconnected.
 PROHIBITED	Do not use the power cord with a power tap <ul style="list-style-type: none">Adding an extension cord may lead to fire as a result of overheating.

⚠ CAUTION

On use

 PROHIBITED	Do not use on networks subject to overvoltage. <ul style="list-style-type: none">Connect the projector's HDBaseT port and LAN port to a network for which there is no risk of overvoltage being applied. Overvoltage applied to the HDBaseT or LAN port could result in electric shock.
 REQUIRED	Lens shift, focus and zoom operations <ul style="list-style-type: none">When shifting the lens or adjusting the focus or zoom, do so from either behind or the side of the projector. If adjustments are performed from the front, your eyes could be exposed to strong light and get injured.
 PROHIBITED	Handling batteries <p>Incorrect usage of batteries can result in leaks or bursting.</p> <ul style="list-style-type: none">Use the specified batteries only.Insert batteries matching the (+) and (-) signs on each battery to the (+) and (-) signs of the battery compartment.Do not mix battery brands.Do not combine new and old batteries. This can shorten battery life or cause liquid leakage of batteries.Remove dead batteries immediately to prevent battery acid from leaking into the battery compartment. <p>If leaked battery fluid gets on your skin or clothing, rinse immediately and thoroughly. If it gets into your eye, bathe your eye well rather than rubbing and seek medical treatment immediately. Leaked battery fluid that gets into your eye or your clothing may cause a skin irritation or damage your eye.</p> <ul style="list-style-type: none">If you will not use the remote control for a long time, remove the batteries.Leaving a battery in an extremely high temperature surrounding environment, or a battery subject to extremely low air pressure, that can result in an explosion or the leakage of flammable liquid or gas.Properly dispose of depleted batteries. Disposal of a battery into water, fire, or a hot oven, or mechanically crushing, cutting, or modifying a battery can result in an explosion.Do not short-circuit the batteries.Do not charge the batteries. The batteries provided are not rechargeable.Contact your dealer or local authorities when disposing of batteries.

! CAUTION

 PROHIBITED  CAUTION FOR HIGH TEMPERATURE	<h3>About the vents</h3> <ul style="list-style-type: none"> Do not obstruct the projector's vents. Also, do not place such soft objects as paper or cloths underneath the projector. Doing so could lead to fire. Leave sufficient space between the place where the projector is installed and its surroundings. Do not touch the exhaust vent area while projecting or immediately after projecting images. The exhaust vent area may be hot at this time and touching it could cause burns.
 PROHIBITED	<h3>Moving the projector</h3> <ul style="list-style-type: none"> When moving the projector, do not hold the lens hood. The lens hood could become loose and the main unit could fall down, causing injuries. Do not put your hand into the recess of the connection terminal. The projector could be damaged or fall down, resulting in injuries. 
 PROHIBITED	<p>Do not push or climb on the product. Do not grab or hang onto the product. Do not rub or tap the product with hard objects. The product may fall, causing damage to the product or personal injury.</p>
 REQUIRED	<h3>Avoid locations with extreme temperatures and humidity</h3> <ul style="list-style-type: none"> Failure to do so could lead to fire or electric shock or damage to the projector. The usage environment for this projector is as follows: <ul style="list-style-type: none"> The operating temperature: 0°C to 45°C / 32°F to 113°F / humidity: 10 to 85% (without condensation) The storage temperature: -10°C to 60°C / 14°F to 140°F / humidity: 20 to 90% (without condensation)

CAUTION

Inspections and Cleaning



REQUIRED

Inspecting the projector and cleaning the inside

- Consult with your dealer about once per year for cleaning of the inside of the projector. Dust could accumulate inside of the projector if it is not cleaned for extended periods of time, leading to fires or malfunction.

3D



REQUIRED

Health precautions to users viewing 3D images

Before viewing, be sure to read health care precautions that may be found in the user's manual included with your 3D eyeglasses or your 3D compatible content such as Blu-ray Discs, video games, computer's video files and the like.

To avoid any adverse symptoms, heed the following:

- Do not use 3D eyeglasses for viewing any material other than 3D images.
- Allow a distance of 2 m/7 feet or greater between the screen and a user. Viewing 3D images from too close a distance can strain your eyes.
- Avoid viewing 3D images for a prolonged period of time. Take a break of 15 minutes or longer after every hour of viewing.
- If you or any member of your family has a history of light-sensitive seizures, consult a doctor before viewing 3D images.
- While viewing 3D images, if you get sick such as nausea, dizziness, queasiness, headache, eyestrain, blurry vision, convulsions, and numbness, stop viewing them. If symptoms still persist, consult a doctor.
- View 3D images from the front of the screen. Viewing from an angle may cause fatigue or eyestrain.

Notes on Installation and Maintenance

Do not install or store in such places as those described below.

- Locations that amplify vibrations and impacts

If installed in places where the vibrations from power sources and the like are conveyed, or in vehicles or on vessels, etc. the projector could be affected by vibrations or shocks that may damage internal parts and lead to malfunction.

- Close to high voltage power lines and power sources
It could disrupt the unit.

- Places where strong magnetic fields are generated
Doing so could lead to malfunction.

- Outdoors and places with humid or dust

Places exposed to oil smoke or steam

Places where corrosive gases are generated

Attached substances such as oil, chemicals and moisture may cause deformation or cracks of the cabinet, corrosion of the metal parts, or malfunction.

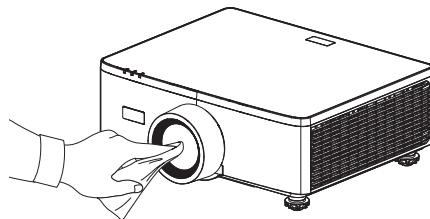
Cleaning the Lens

- The projector has a glass lens. Use a commercially available glass lens cleaner.
- Do not scratch or mar the lens surface as a glass lens is easily scratched.
- Never use alcohol or glass lens cleaner as doing so will cause damage to the glass lens surface.



WARNING

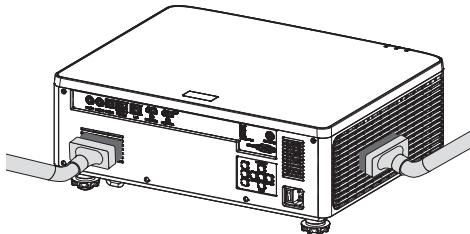
- Do not use a spray containing flammable gas to remove dust attached to the lens, etc. Doing so may result in fire.
- Turn off the power and unplug the power plug from the socket for cleaning. If the unit turns on while cleaning the lens, the strong light from the lens could damage your eyes. It could also burn your fingers.



Cleaning the Cabinet

Turn off the projector, and unplug the projector before cleaning.

- Use a dry soft cloth to wipe dust off the cabinet.
If heavily soiled, use a mild detergent.
- Never use strong detergents or solvents such as alcohol or thinner.
- When cleaning the ventilation slits or the speaker using a vacuum cleaner, do not force the brush of the vacuum cleaner into the slits of the cabinet.



Vacuum the dust off the ventilation slits or the speaker.

- Poor ventilation caused by dust accumulation in ventilation openings can result in overheating and malfunction. These areas should be cleaned regularly.
- Do not scratch or hit the cabinet with your fingers or any hard objects.
- Contact your dealer for cleaning the inside of the projector.

Note: *Do not apply volatile agent such as insecticide on the cabinet, the lens, or the screen.*
Do not leave a rubber or vinyl product in prolonged contact with it. Otherwise the surface finish will be deteriorated or the coating may be stripped off.

Cautions for ensuring the projector's performance

- If intense light like laser beams enters from the lens, it could lead to malfunction.
- Consult your dealer before using in places where much cigarette smoke or dust is present.
- This unit has a built-in air pressure sensor, and the "High Altitude Mode" will automatically switch to "On" depending on the altitude of the installation location. When the High Altitude Mode is switched to On, the cooling fan will rotate at high speed.
- If the High Altitude Mode does not switch to On even when the altitude exceeds 1500 m/5000 ft, manually switch "System" → "High Altitude" in the on-screen menu to "On".
- When the projector is used at high altitudes (places where the atmospheric pressure is low), it may be necessary to replace the optical parts sooner than usual.
- About moving the projector
Do not subject the projector to vibrations or strong shocks. The projector could be damaged otherwise.
- Do not use the tilt feet for purposes other than adjusting the projector's tilt.
Improper handling, such as carrying the projector by the tilt feet or using it leaned against a wall, could lead to malfunction.
- The projector does not support stack installation. Do not stack projectors directly on top of each other. Failure to do so may cause damage or failure.
- Do not touch the surface of the projection lens with bare hands.
Fingerprints or dirt on the surface of the projection lens will be enlarged and projected on the screen. Do not touch the surface of the projection lens.
- Do not unplug the power cord from the projector or the power outlet while projecting. It could lead to malfunction.
- About handling of the remote control
 - The remote control will not work if the projector's remote signal sensor or the remote control's signal transmitter is exposed to strong light or if there are obstacles between them that obstruct the signals.
 - Operate the remote control from within 6 meters (19.7 feet) from the projector, pointing it at the projector's remote signal sensor.
 - Do not drop the remote control or handle it improperly.
 - Do not let water or other liquids get on the remote control. Should the remote control get wet, wipe it off immediately.
 - Avoid using in hot and humid places as far as possible.
- Take measures to prevent external light from shining on the screen.
Make sure only the light from the projector shines on the screen. The less external light on the screen, the higher the contrast and the more beautiful the images.
- About screens
Images will not be clear if there is dirt, scratches, discoloration, etc. on your screen. Handle the screen with care, protecting it from volatile substances, scratches and dirt.

- About Copyright of original projected pictures

Please note that using this projector for the purpose of commercial gain or the attraction of public attention in a venue such as a coffee shop or hotel and employing compression or expansion of the screen image with the following functions may raise concern about the infringement of copyrights which are protected by copyright law. [Aspect Ratio], [V Keystone / H Keystone], Magnifying feature and other similar features.

Power management function

The projector has power management functions. To reduce power consumption, the power management functions (1 and 2) are factory preset as shown below. To control the projector from an external device via a LAN or serial cable connection, use the on-screen menu to change the settings for 1 and 2.

1. STANDBY MODE (Factory preset: Normal Standby)

To control the projector from an external device, select [Network Standby] or [Sleep] for [Standby Mode].

(→ User's manual: page 83)

2. AUTO POWER OFF (Factory preset: 20 minutes)

To control the projector from an external device, select [0] for [Auto Power Off (min)].

(→ User's manual: page 84)

Trademarks

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For more information on each software, visit our web site.

https://sharp-displays.jp.sharp/dl/en/pj_manual/lineup.html

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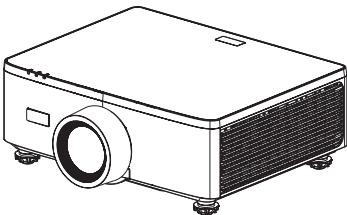
Package Overview

Carefully unpack and verify that you have the items listed below under standard accessories. Some of the items under optional accessories may not be available depending on the model, specification and your region of purchase. Please check with your place of purchase. Some accessories may vary from region to region.

The warranty card is only supplied in some specific regions. Please consult your dealer for detailed information.

Standard Accessories

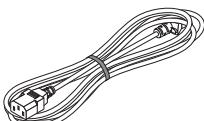
Projector



Remote control



AAA Manganese batteries (x2)

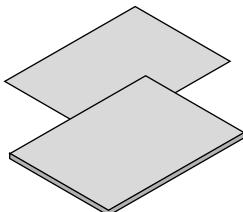


Power cord

Plug type	
For USA	For EU

Documents

- Important Information
(For North America: TINS-0035VW**)
(For Other countries than North America: TINS-0035VW** and TINS-0036VW**)
- Quick Setup Guide (TINS-0037VW**)
- Security Sticker (Use this sticker when security password is set on.)



For USA only

Limited warranty

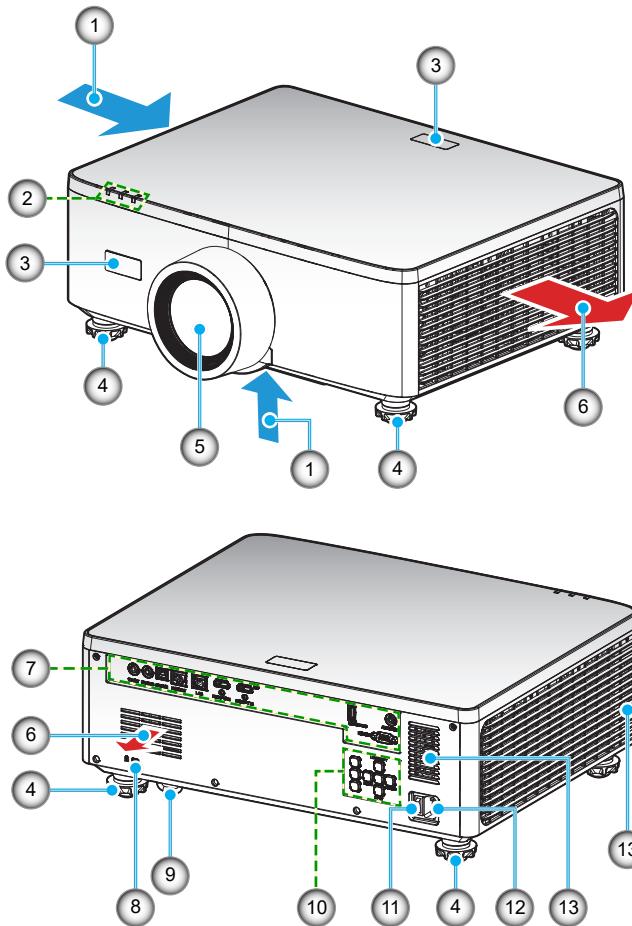
For customers in Europe

You will find our current valid Guarantee Policy on our Web Site:

<https://sharpdisplays.eu>

INTRODUCTION

Product Overview



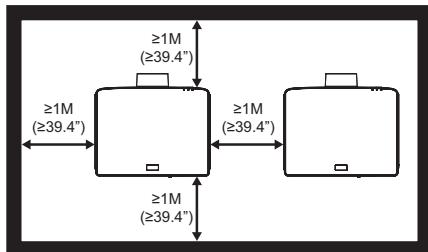
No.	Item	Function
1.	Ventilation (Inlet)	Take in outside air to cool the unit.
2.	LED Indicators	The indicator light turns on or blinks to relay the status of the projector.
3.	IR Receivers	Receive signals from the remote control.
4.	Tilt-Adjustment Feet	Rotate the tilt feet to adjust the projector's height.

INTRODUCTION

No.	Item	Function
5.	Lens	Images are projected from here.
6.	Ventilation (Outlet)	Heated air is exhausted from here.
7.	Input / Output	Connect the cables for the various audio and video signals.
8.	Security Slot (K)	This is used when attaching an anti-theft cable. TIP: <ul style="list-style-type: none">• Security and theft protection lock compatible with Kensington security cables/equipment. For products, visit Kensington's website.
9.	Security Bar	Attach an anti-theft device. The security bar accepts security wires or chains up to 0.18 inch/4.6 mm in diameter.
10.	Control Panel	Use the buttons to power the projector on/off and configure the projector settings. Refer to page 32 for more details.
11.	Main Power Switch	Turn on and off the power supply.
12.	AC Inlet	Connect the supplied power cord here, and plug the other end into an active wall outlet.
13.	Speaker	Emit sound.

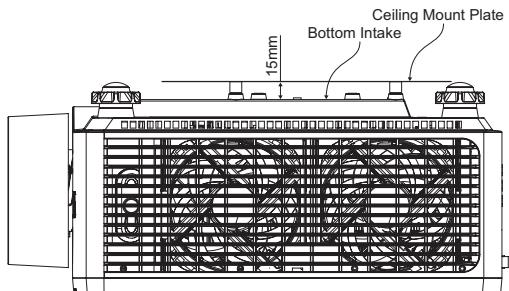
Note:

- Do not block projector intake and exhaust vents.
- When operating the projector in an enclosed space, allow at least 1m (39.4") clearance around the intake and exhaust vents.



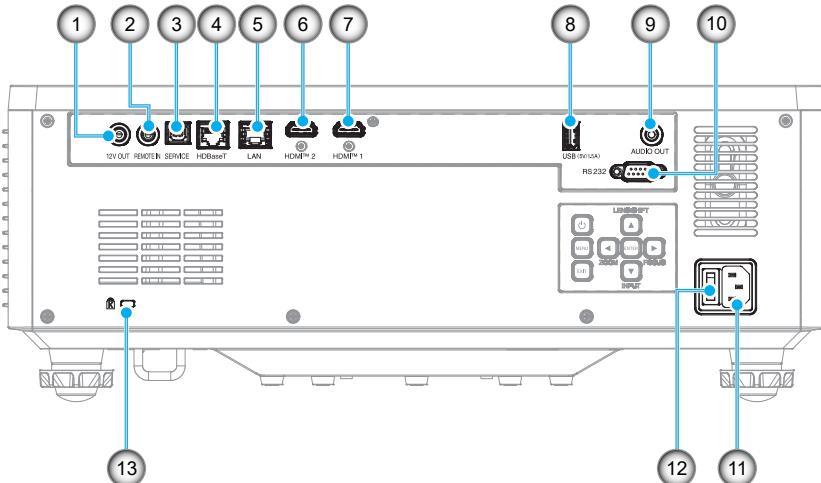
INTRODUCTION

- Need to keep at least 15mm between the ceiling mount and bottom intake.



INTRODUCTION

Connections



No.	Item
1.	12V Out Connector
2.	Remote In Connector (*1)
3.	USB Connector
4.	HDBaseT Connector
5.	LAN Connector
6.	HDMI 2 Connector
7.	HDMI 1 Connector

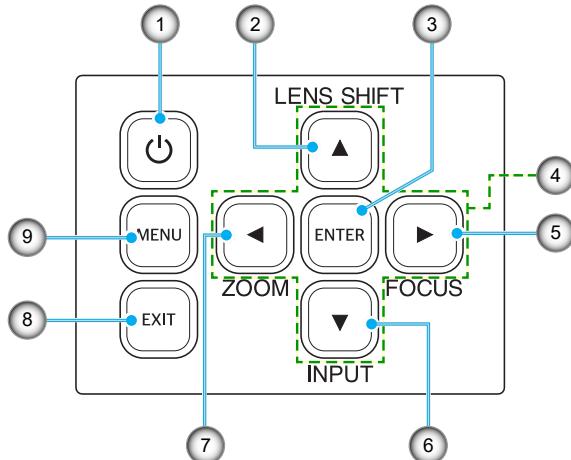
No.	Item
8.	USB Connector (Power 5V---1.5A) (*2)
9.	Audio Out Connector (*3)
10.	RS-232 Connector
11.	AC Inlet
12.	Main Power Switch
13.	Security Slot (R)

Note:

- *1 The system will automatically detect when a wired remote control is plugged in, and when a wired remote control is detected, the system will disable the reception and control of wireless remote control signals.
- *2 Not recommended for charging a cell phone.
- *3 Audio Out connector provides an audio signal output only if the projector is in the power-on state.

INTRODUCTION

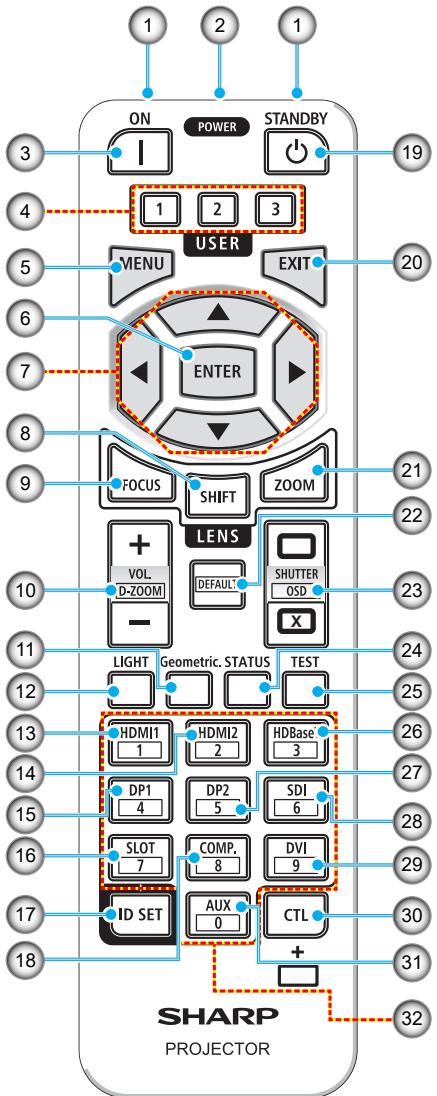
Control Panel



No.	Button	Function
1.	Power Button	Turns the projector on or off.
2.	Lens Shift	Adjust the lens vertical / horizontal position.
3.	Enter	Confirm the settings.
4.	Four Directional Select Keys	Navigation keys.
5.	Focus	Adjust the image focus.
6.	Input	Select the input signal port.
7.	Zoom	Adjust the image size.
8.	Exit	Returns to previous menu or exit menu if at top level.
9.	Menu	Shows the main menu on screen.

INTRODUCTION

Remote Control



1. Infrared Transmitter

Remote control signals are sent via infrared signal. Point the remote control at the remote control receiver on the projector.

2. Remote Jack

Connect a commercially available remote cable here for wired operation.

3. POWER ON Button (|)

Turns power ON when in sleep or standby mode.

4. USER 1/2/3 Button

The following 9 functions can be selected and set. Available options are Color Mode, A/V Mute, Color Temperature, Orientation, Aspect Ratio, Freeze Screen, Network Setup, Audio Mute, and On Screen Display.

5. MENU Button

Displays the on-screen menu for various settings and adjustments.

6. ENTER Button

Moves to the next menu when the on-screen menu is displayed. Confirms the item when the confirmation message is displayed.

7. ▲▼◀▶ Button

When the on-screen menu is displayed, use the ▲▼◀▶ buttons to select the item that you wish to set or adjust.

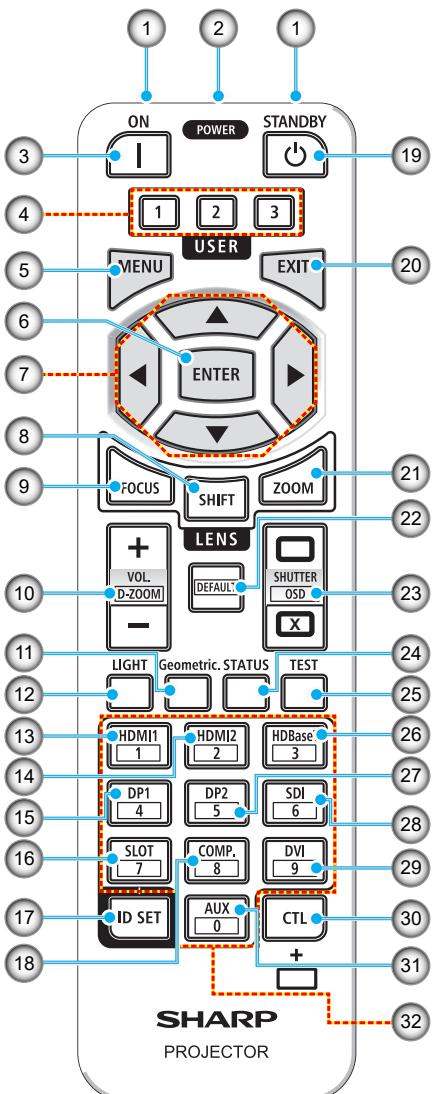
8. SHIFT Button

The lens shift adjustment screen will be displayed. Use the ▲▼◀▶ buttons to adjust the lens position.

9. FOCUS Button

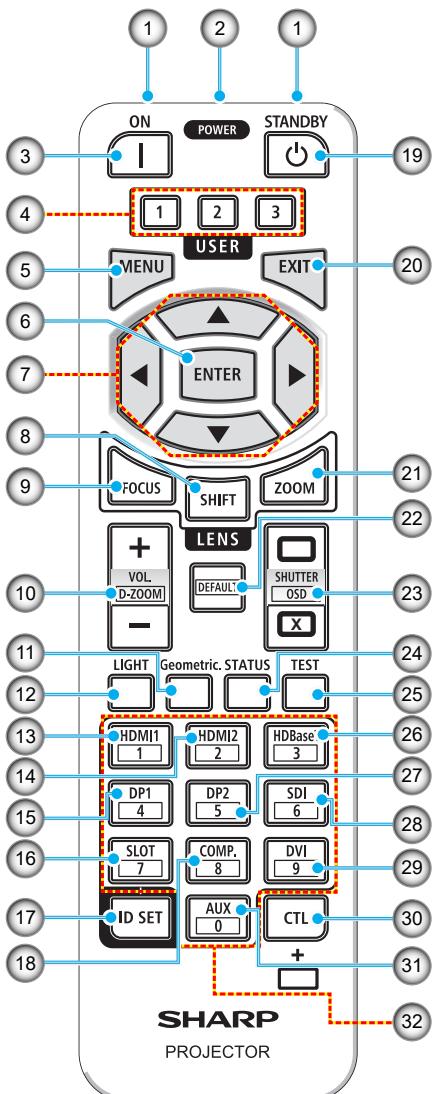
Opens the focus adjustment screen. Adjust the focus (of the lens) with the ▲/▼ buttons.

INTRODUCTION



10. **VOL./D-ZOOM (+)(-)** Button
Adjusts the volume level of the audio output terminals. Simultaneously pressing the CTL button will expand or shrink the image (return to the original state).
11. **Geometric. Button**
Displays [Geometric Correction] from the on-screen menu. Use it to adjust distortions in projected images.
12. **LIGHT Button**
Displays the light mode screen.
13. **HDMI1 Button**
Selects the HDMI1 input.
14. **HDMI2 Button**
Selects the HDMI2 input.
15. **DP1 Button**
(Not available on this series of projectors.)
16. **SLOT Button**
(Not available on this series of projectors.)
17. **ID SET Button**
Used to set the control ID when performing individual operations on multiple projectors using the remote control.
18. **COMP. Button**
(Not available on this series of projectors.)
19. **POWER STANDBY Button (髯)**
Pressing the button once will display the shutdown confirmation message. Press the POWER STANDBY button once more to power down the projector.

INTRODUCTION



20. EXIT Button

Returns to the menu on the previous level when the on-screen menu is displayed. Closes the menu when a cursor appears in the main menu. Cancels the operation when the confirmation message is displayed.

21. ZOOM Button

Opens the zoom adjustment screen. Adjust zoom with the $\blacktriangle/\blacktriangledown$ buttons.

22. DEFAULT Button

(Not available on this series of projectors.)

23. SHUTTER / OSD OPEN (□) / CLOSE (✗) Button

Press the CLOSE button to turn off the light source and temporarily stop projection. Press the OPEN button to resume. Simultaneously press the CTL and CLOSE buttons to close the on-screen display (On-Screen Mute). Simultaneously press the CTL and OPEN buttons to go back.

24. STATUS Button

Displays [Information] from the on-screen menu.

25. TEST Button

Projects a test pattern.

26. HDBaseT Button

Selects the HDBaseT input.

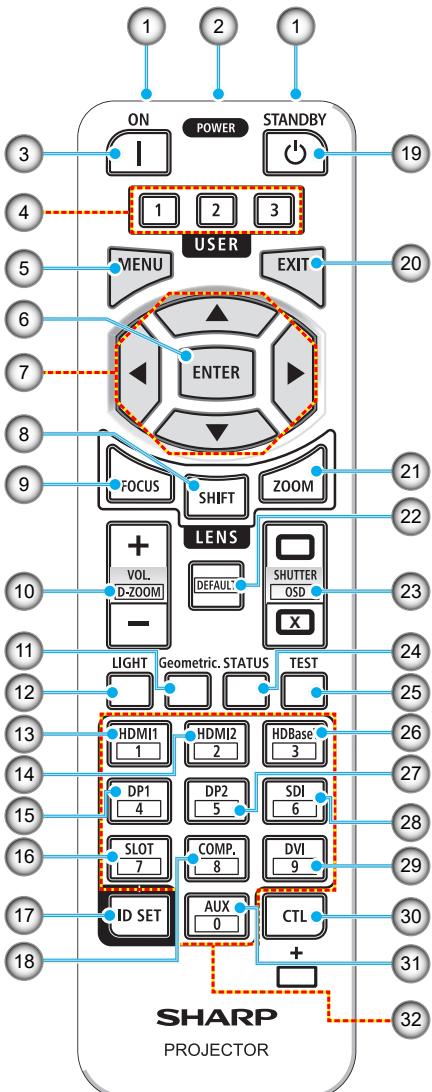
27. DP2 Button

(Not available on this series of projectors.)

28. SDI Button

(Not available on this series of projectors.)

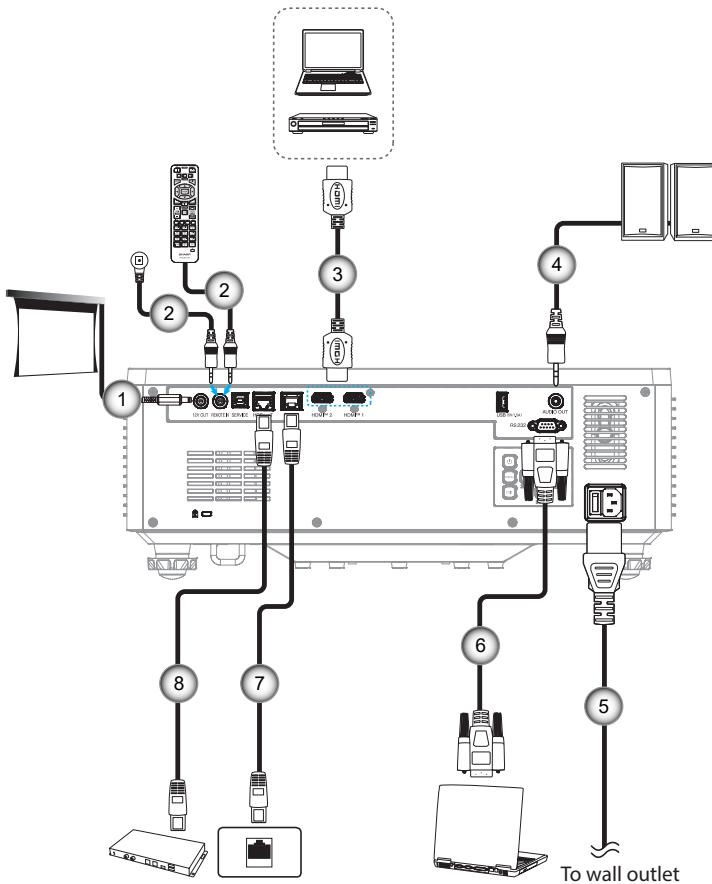
INTRODUCTION



29. **DVI Button**
(Not available on this series of projectors.)
30. **CTL Button**
This is a multipurpose button for combined use with other buttons.
31. **AUX Button**
(Not available on this series of projectors.)
32. **Numeric Keypad Button**
Used to input the control ID when performing individual operations on multiple projectors using the remote control (set the control ID). Pressing the 0 button while holding down the ID SET button will remove any control ID settings.

SETUP AND INSTALLATION

Connecting Sources to the Projector



No.	Item
1.	12V DC Jack
2.	Wired Remote Control Cable or IR Receiver Cable (3.5mm TRS type)
3.	HDMI Cable
4.	Audio Out Cable

No.	Item
5.	Power Cord
6.	RS232C Cable (Cross Cable)
7.	RJ-45 Cable (Cat.5e)
8.	RJ-45 Cable (Cat.6A)

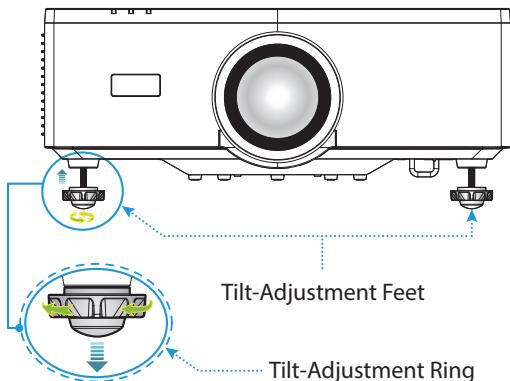
SETUP AND INSTALLATION

Adjusting the Projector Image

Adjusting the Projector's Height

The projector is equipped with elevator feet for adjusting the image height.

1. Locate the adjustable foot you wish to adjust on the underside of the projector.
2. Rotate the adjustable foot clockwise or counterclockwise to raise or lower the projector.



Note:

- Do not lengthen the tilt foot any more than 19 mm (0.75"). Doing so will make the projector unstable.
- Do not use the tilt foot for any purpose other than adjusting inclination of the projector installation angle. Handling the tilt foot improperly, such as carrying the projector by grasping the tilt foot or hooking it onto a wall using the tilt foot, could damage the projector.

SETUP AND INSTALLATION

Lens Shift Range

This device features a Motorized lens shift function that allows you to adjust the screen position using the Remote control or Control Panel on the back of the projector (see page 32). You can perform lens shift within the following range.

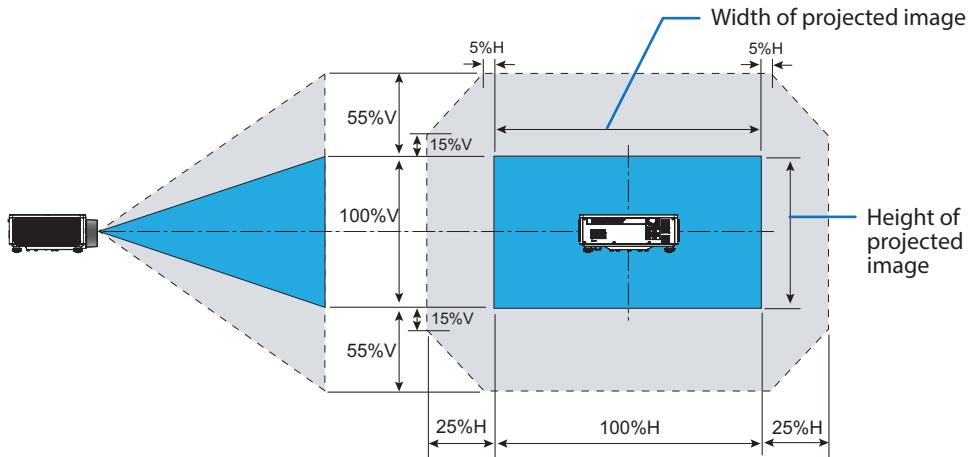
Lens Shift Range

Vertical Direction	Horizontal Direction
± 55%	± 25%

Note: If the lens shift exceeds the range shown in the diagram, the edges of the screen may appear blurry or exhibit shadows.

The symbols represent:

- V for vertical (height of the projected screen).
- H for horizontal (width of the projected screen). The lens shift range is expressed as a ratio of height and width.



SETUP AND INSTALLATION

Calculation Example: When projecting with 150 inches

- According to the "Image Size and Projection Distance" (→ page 96), the screen dimensions are **H=332.1 cm** and **V=186.8 cm**.
- **Vertical Adjustment Range:** You can move the projection screen **upwards by approximately 103 cm** ($0.55 \times 186.8 \text{ cm} \approx 103 \text{ cm}$) and **downwards by approximately 103 cm**.
- **Horizontal Adjustment Range:** You can move the projection screen **leftwards by approximately 83 cm** ($0.25 \times 332.1 \text{ cm} \approx 83 \text{ cm}$) and **rightwards by approximately 83 cm**.

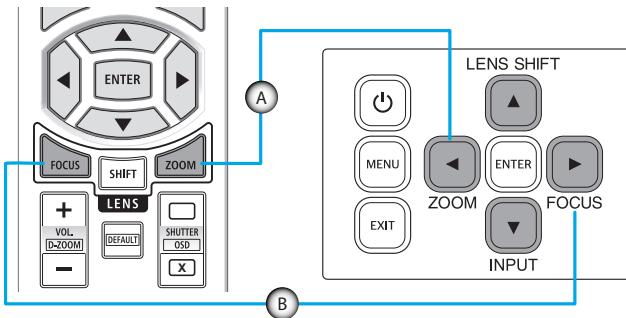
Note: *There may be a few percent error due to the simplified calculation formula.*

SETUP AND INSTALLATION

Adjusting the Projector's Zoom and Focus

Use the remote control or projector keypad to adjust the zoom and focus of the projected image.

- To adjust the image size, press **ZOOM** and the **▲/▼** buttons to get the required image size. **A**
- To adjust the image focus, press **FOCUS** and the **▲/▼** buttons until the image is sharp and legible. **B**



Note: Recommend to perform the focus adjustment after leaving the projector under the state the Test Pattern has been projected for over 30 minutes. Please refer to page 53 and 69 about the Test Pattern.

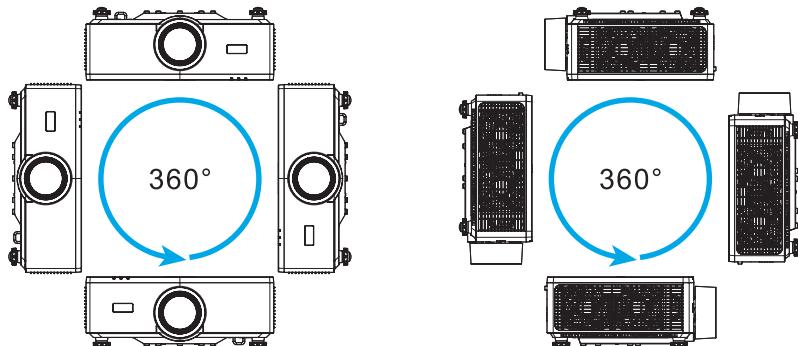
SETUP AND INSTALLATION

Adjusting the Projector Position

When you select a position for the projector, consider the size and shape of your screen, the location of your power outlets, and the distance between the projector and the rest of your equipment.

Follow these general guidelines:

- Position the projector on a flat surface at a right angle to the screen. The distance must be at least 64.6 inch (1.64 m) from the projection screen.
- Position the projector to the desired distance from the screen. The distance from the lens of the projector to the screen, the zoom setting, and the video format determine the size of the projected image.
- Lens throw ratio: 1.25 ~ 2.0
- 360 degrees free orientation operation.



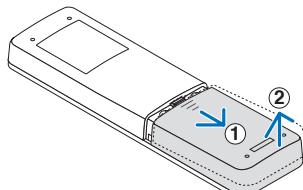
- When installing multiple projectors, keep at least 1m (39.4") space between the adjacent projectors.
- For ceiling/wall mount installations, make sure to leave 15 mm (0.6") between the ceiling mount and the bottom intake vents of the projector.

SETUP AND INSTALLATION

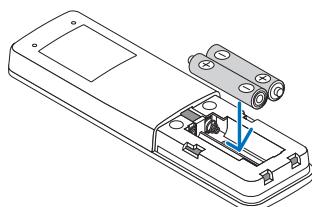
Remote Setup

Battery Installation

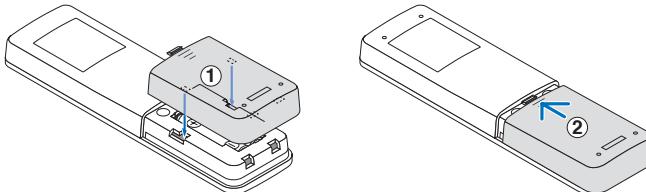
1. Press the catch and remove the battery cover.



2. Install new ones (AAA manganese or alkaline batteries). Ensure that you have the batteries' polarity (+/-) aligned correctly.



3. Slip the cover back over the batteries until it snaps into place.



Note: Do not mix different types of batteries or new and old batteries.

Remote Control Precautions

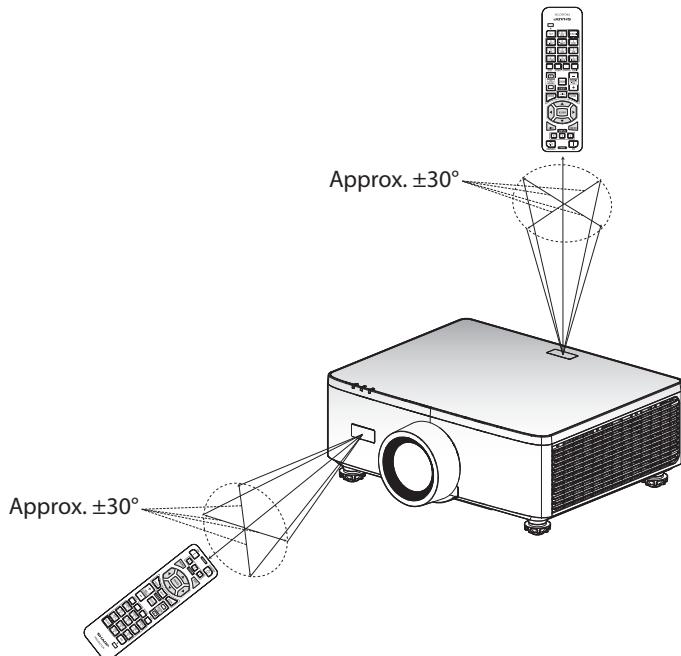
- Handle the remote control carefully.
- If the remote control gets wet, wipe it dry immediately.
- Avoid excessive heat and humidity.
- Do not short, heat, or take apart batteries.
- Do not throw batteries into fire.
- If you will not be using the remote control for a long time, remove the batteries.
- 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.
- Please note that if multiple projectors are installed nearby, other projectors may unintentionally light up when you turn on the power using the remote control.

SETUP AND INSTALLATION

Remote Control Effective Range

Infra-Red (IR) remote control sensor is located on the top and front of the projector. Ensure to hold the remote control at an angle within 30 degrees perpendicular to the projector's IR remote control sensor to function correctly. The distance between the remote control and the sensor should not be longer than 6 meters (19.7 feet) when holding not longer than 8 meters (26.3 feet) when aiming the sensor at 0°.

- Make sure that there are no obstacles between the remote control and the IR sensor on the projector that might obstruct the infra-red beam.
- Make sure the IR transmitter of the projector/remote control is not being shined by sunlight or fluorescent lamps directly.
- Please keep the remote controller away from fluorescent lamps for over 2 m or the remote controller might become malfunction.
- If the remote control is close to Inverter-Type fluorescent lamps, it might become ineffective from time to time.
- If the remote control and the projector are within a very short distance, the remote control might become ineffective.
- When you aim at the screen, the effective distance is less than 5 m from the remote control to the screen and reflecting the IR beams back to the projector. However, the effective range might change according to screens.

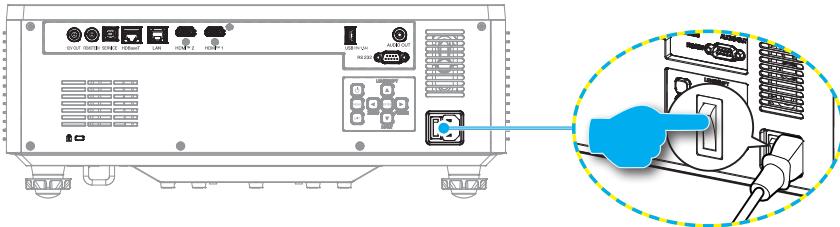


USING THE PROJECTOR

Powering On / Off the Projector

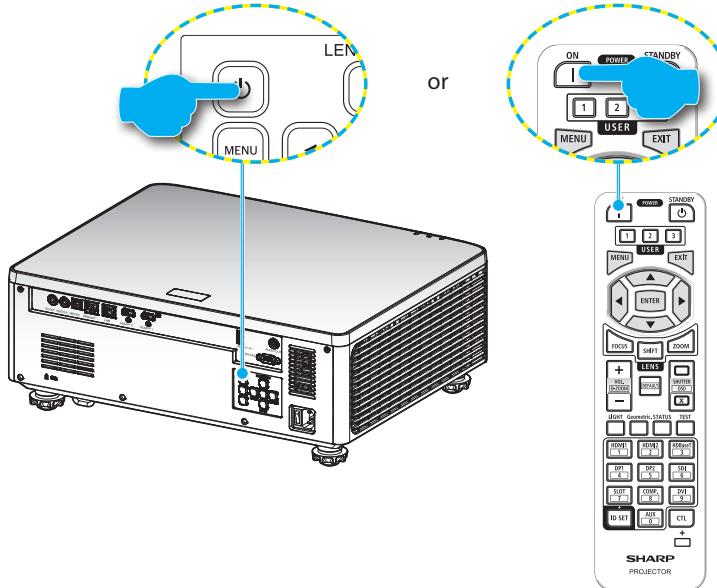
Powering On

1. Securely connect the power cord and signal/source cable.
2. Set the main power switch to the “I” (On) position and wait until the power LED turns solid or flashing orange.



3. Turn on the projector by pressing the “

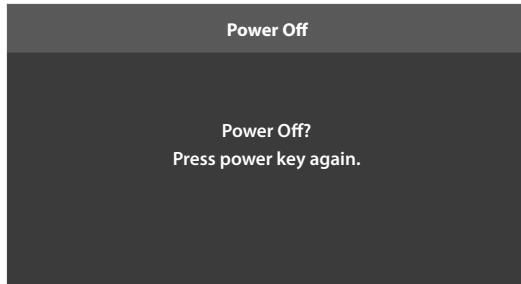
During startup the power LED is flashing red and during normal operation, the power LED is solid green.



USING THE PROJECTOR

Powering Off

1. Turn off the projector by pressing the “” button on the projector keypad or the POWER STANDBY () button on the remote control. The following message will be displayed:



2. Press the  or POWER STANDBY () button again to confirm, otherwise the message will disappear after 15 seconds. When you press the  or POWER STANDBY () button for the second time, the projector will shut down.
3. During the cooling cycle, the power LED is flashing green. When the power LED turns solid or flashing orange, this indicates the projector has entered standby mode. If you wish to turn the projector back on, you must wait until the cooling cycle has finished and the projector has entered standby mode. When the projector is in standby mode, simply press the “” button on the projector or the POWER ON () button to turn on the projector.
4. Disconnect the power cord from the electrical outlet and the projector.

Note:

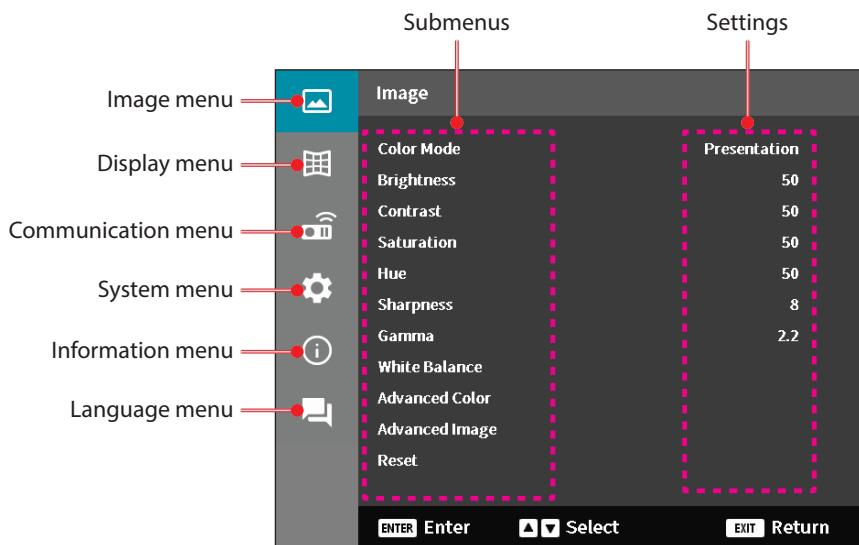
- *It is not recommended that the projector is turned on immediately, right after a power off procedure.*
- *By default, the projector turns off automatically after 20 minutes of inactivity. You can modify the idle time length in “Auto Power off (min)” menu in “System ⇒ Power Settings”. If you want the projector to enter standby mode instead, disable auto power off and set the sleep time interval in “System ⇒ Power Settings ⇒ Off Timer (min)”.*

USING THE PROJECTOR

Menu Navigation and Features

The projector has multilingual on-screen display (OSD) menus that allow you to make image adjustments and change a variety of settings.

1. To open the OSD menu, press the **MENU** key on the remote control or projector keypad.
2. To select a main menu or sub menu, use the **▲▼** buttons to highlight it. Then, press the **ENTER** button to enter the sub menu.
3. Press the **EXIT** button to return to the previous menu or exit the OSD menu if at top level.
4. Setting methods to adjust the function value or selection an option.
 - To adjust the slide bar values, highlight the function, and use the **◀▶** buttons to change value.
 - To check or uncheck a checkbox, highlight the function, and press **ENTER**.
 - To input a number or symbol, highlight the number or symbol, and use the **▲▼** buttons to make a selection. You can also use the number keys on the remote control or keypad.
 - To select a function option, use the **▲▼◀▶** buttons to make the selection. If no **ENTER** icon shows at the navigation bar, the highlighted option is automatically applied. If there is an **ENTER** icon at the navigation bar, press **ENTER** to confirm your selection.



USING THE PROJECTOR

OSD Menu Tree

Main Menu	Sub Menu 2	Sub Menu 3	Sub Menu 4	Sub Menu 5	Option / Value	Default
Image	Color Mode				Presentation HDR HLG Cinema sRGB High Bright DICOM SIM. 3D High Frame Rate	Color mode defaults depending on source. By Color Table Color Mode should reapplied to previous user setting after 3D is turned on and off. Always autosave image settings to each mode.
	Brightness				0 - 100	By Color Table
	Contrast				0 - 100	By Color Table
	Saturation				0 - 100	By Color Table
	Hue				0 - 100	By Color Table
	Sharpness				1 - 15	By Color Table
	Gamma				Graphics 1.8 2.0 2.4 2.6 3D Blackboard DICOM SIM. HDR	By Color Table
White Balance	Color Temperature				Warm Standard Cool	By Color Table
	Red Gain				0 - 100	50
	Green Gain				0 - 100	50
	Blue Gain				0 - 100	50
	Red Offset				0 - 100	50
	Green Offset				0 - 100	50
	Blue Offset				0 - 100	50

USING THE PROJECTOR

Main Menu	Sub Menu 2	Sub Menu 3	Sub Menu 4	Sub Menu 5	Option / Value	Default
Image	Advanced Color	Color Space			Auto	Auto
					RGB(0~255)	
					RGB(16~235)	
					YUV	
		Wall Color			Off	Off
					Blackboard	
					Light Yellow	
					Light Green	
					Light Blue	
					Pink	
					Gray	
	Color Correction	Color			Red	Red
					Green	
					Blue	
					Cyan	
					Magenta	
					Yellow	
					White	
		Hue			0 - 254	By Color Table
		Saturation			0 - 254	By Color Table
		Luminance			0 - 254	By Color Table
		Reset			Yes / No (Dialog box)	
Advanced Image	Dynamic Contrast	Dynamic Black			Checkbox	Unchecked
		Extreme Black			Checkbox	Unchecked
	Dynamic Range	HDR			Off	Auto
		HDR Brightness			Auto	
	3D Setup	3D Mode			0 - 10	By HDR/HLG source
					Off	Auto
					Auto	
		3D Format			Auto	Auto
					Frame Packing	
					SBS	
					Top and Bottom	
					Frame Sequential	

USING THE PROJECTOR

Main Menu	Sub Menu 2	Sub Menu 3	Sub Menu 4	Sub Menu 5	Option / Value	Default
Image	Advanced Image	3D Setup	3D Sync Invert	Off	Off	
				On		
		Reset		Yes / No (Dialog box)		
	Reset			Yes / No (Dialog box)		
Display	Lens	Focus		Focus In / Out		
		Zoom		Zoom In / Out		
		Lens Shift		Up (icon)		
				Down (icon)		
				Left (icon)		
				Right (icon)		
		Lens Shift Memory	Save Memory	Memory 1 - Memory 5		
			Apply Memory	Memory 1 - Memory 5		
			Clear Memory	Yes / No (Dialog box)	No	
		Lens Shift Calibration		Yes / No (Dialog box)	No	
				Off	Off	
		Lens Lock		On		
				Yes / No (Dialog box)		
		Reset				
		Aspect Ratio		4:3	Auto	
				16:9		
				21:9		
				Letter Box		
				Auto		
Scale	Digital Zoom			80 - 180	100	
	Image Shift	Horizontal		0 - 100	50	
				Vertical	0 - 100	50

USING THE PROJECTOR

Main Menu	Sub Menu 2	Sub Menu 3	Sub Menu 4	Sub Menu 5	Option / Value	Default
Display	Geometric Correction	V Keystone			0 - 40	20
		H Keystone			0 - 40	20
		4-Corner	Press "Up"/ "Down"/"Left"/ "Right" to focus the point and press "OK" to select the point. Then press "Up"/ "Down"/ "Left"/ "Right" to shift the selected point location. [Default: Top- Left].	Top Left	right (0 - 1152) left (0 - 1152) up (0 - 648) down (0 - 648)	0
				Top Right	right (2688 - 3839) left (2688 - 3839) up (0 - 648) down (0 - 648)	3839
				Bottom Left	right (0 - 1152) left (0 - 1152) up (1512 - 2159)	0
					up (1512 - 2159)	2159
				Bottom Right	right (2688 - 3839) left (2688 - 3839) up (1512 - 2159)	3839
					up (1512 - 2159)	2159

Warping	Off	Off
	On	
Warping Adjustment	(Execute)	
Grid Color	Green	Green
	Magenta	
	Red	
	Cyan	
Reset	Yes / No	
	(Dialog box)	

USING THE PROJECTOR

Main Menu	Sub Menu 2	Sub Menu 3	Sub Menu 4	Sub Menu 5	Option / Value	Default
Display	On Screen Display	Menu Position			Top Left	Center
					Top Right	
					Center	
		Menu Timer			Off	10s
					5s	
					10s	
					20s	
					30s	
					60s	
	Information Hide				Off	Off
					On	
Background					Blue	Blue
					Black	
Input Signal Setting	Auto Signal				Off	On
					On	
	Quick Resync				Off	On
					On	
	Input Signal				HDMI 1	HDMI 1
					HDMI 2	
					HDBaseT	
	EDID Settings	HDMI 1 EDID			1.4	2.0
					2.0	
		HDMI 2 EDID			1.4	2.0
					2.0	
		HDBaseT EDID			1.4	2.0
					2.0	
Orientation	Ceiling	Reset			Yes / No (Dialog box)	
					Auto	Auto
					On	
	Rear				Off	
					On	

USING THE PROJECTOR

Main Menu	Sub Menu 2	Sub Menu 3	Sub Menu 4	Sub Menu 5	Option / Value	Default
Display	Test Pattern				Off	Off
					Green Grid	
					Magenta Grid	
					White Grid	
					White	
					Black	
					Red	
					Green	
					Blue	
					Yellow	
					Magenta	
					Cyan	
					ANSI Contrast	
					4x4	
					Color Bars	
					Focus	
	Reset				Yes / No (Dialog box)	
Communication	Remote Setup	Remote Code			0 - 99	0
		Remote Lock			Off	Off
					1 - 9	
	Remote Sensor	Front			Off	On
					On	
		Top			Off	Off
					On	
		HDBaseT			Off	Off
					On	
	User1				Color Mode	A/V Mute
					A/V Mute	
					Color	
					Temperature	
					Orientation	
					Aspect Ratio	
					Freeze Screen	
					Network Setup	
					Audio Mute	
					On Screen	
					Display	

USING THE PROJECTOR

Main Menu	Sub Menu 2	Sub Menu 3	Sub Menu 4	Sub Menu 5	Option / Value	Default
Communication	Remote Setup	User2		Color Mode	Color Mode	Freeze Screen
				A/V Mute	A/V Mute	
				Color Temperature	Color Temperature	
				Orientation	Orientation	
				Aspect Ratio	Aspect Ratio	
				Freeze Screen	Freeze Screen	
				Network Setup	Network Setup	
				Audio Mute	Audio Mute	
				On Screen Display	On Screen Display	
				Color Mode	Color Mode	Audio Mute
Network Setup		User3		A/V Mute	A/V Mute	
				Color Temperature	Color Temperature	
				Orientation	Orientation	
				Aspect Ratio	Aspect Ratio	
				Freeze Screen	Freeze Screen	
				Network Setup	Network Setup	
				Audio Mute	Audio Mute	
				On Screen Display	On Screen Display	
				RJ-45	RJ-45	
		Network Status		HDBaseT		
				Connected	Connected	
				Disconnected	Disconnected	
				AA:BB:CC:DD:FF:EE		
		MAC Address		Off	Off	
				On	On	
		DHCP		---.---.---.---.---	192.168.0.100	
				---.---.---.---.---	255.255.255.0	
		IP Address		---.---.---.---.---	192.168.0.51	
				---.---.---.---.---	0.0.0.0	
		Subnet Mask		---.---.---.---.---	0.0.0.0	
				---.---.---.---.---	0.0.0.0	
		Gateway		Yes / No (Dialog box)	Yes / No (Dialog box)	
				Yes / No (Dialog box)	Yes / No (Dialog box)	
		DNS 1				
		DNS 2				
		Apply				
		Reset				

USING THE PROJECTOR

Main Menu	Sub Menu 2	Sub Menu 3	Sub Menu 4	Sub Menu 5	Option / Value	Default
Communication	Control	Crestron		Off	On	
				On		
		PJ Link		Off	On	
				On		
		AMX		Off	On	
				On		
	HTTP			Off	On	
				On		
System	Standby Mode			9600	115200	
				19200		
				38400		
				57600		
				115200		
	Command Format			A	A	
				B		
	Reset			Yes / No (Dialog box)		
	Power Settings			Normal Standby	Normal Standby	
				Network Standby		
				Sleep		
		Direct Power On		Off	Off	
				On		
Light Source	Setup	Auto Power On		Off	Off	
				On		
		Auto Power Off (min)		0, 2-180	20	
		Off Timer (min)		0-960	0	
	Brightness Level	Light Mode		Normal	Normal	
				Eco.		
		Constant Brightness		Constant Brightness		
		Light Power Adjustment		Light Power Adjustment		
	Keypad LED Settings			10% - 100%	100%	
				Off	On	
				On		

USING THE PROJECTOR

Main Menu	Sub Menu 2	Sub Menu 3	Sub Menu 4	Sub Menu 5	Option / Value	Default
System	Security	Security		Off	Off	
				On		
	Security	Month		0 - 35	0	
	Timer	Day		0 - 29	0	
		Hour		0 - 23	0	
		Change Password				
	12V Trigger			Off	Off	
				On		
	High Altitude			Off	Off	
				On		
	Audio Settings	Volume		0 - 10	5	
		Mute		Off	Off	
				On		
		Audio Output		Auto	Auto	
				Internal Speaker		
				Line Out		
		Reset		Yes / No (Dialog box)		
	User Data	Save All Settings		Memory 1 - Memory 5	Memory 1	
		Load All Settings		Memory 1 - Memory 5	Memory 1	
	Reset	Reset OSD		Yes / No (Dialog box)		
		Reset All		Yes / No (Dialog box)		
	Service	Note: This menu is for service personnel only. Customers cannot use it.				
Information	Projector	Model Name				
		Serial Number				
	System Status	Standby Mode				
		Total Projector Hours				
		Light Source Hours				
		Ambient Temp.				
		System Temp.				

USING THE PROJECTOR

Main Menu	Sub Menu 2	Sub Menu 3	Sub Menu 4	Sub Menu 5	Option / Value	Default
Information	Control	Remote				
		Code				
		Crestron				
		PJ Link				
		AMX				
	Communication	HTTP				
		LAN				
		Interface				
		MAC				
		Address				
Signal	Signal	Network				
		Status				
		DHCP				
		IP Address				
		Subnet Mask				
		Gateway				
		DNS 1				
		DNS 2				
FW Version	FW Version	Input Signal				
		Resolution				
		Signal				
		Format				
		Pixel Clock				
		Horz Refresh				
		Vert Refresh				
		Color Space				
	FW Version	Main Version				
		F-MCU				
		Version				
		A-MCU				
		Version				
		LAN Version				
		Formatter				
		Version				
		HDBaseT				
		Version				

USING THE PROJECTOR

Main Menu	Sub Menu 2	Sub Menu 3	Sub Menu 4	Sub Menu 5	Option / Value	Default
Language					English	English
					German	
					French	
					Italian	
					Spanish	
					Swedish	
					Korean	
					Polish	
					Hungarian	
					Russian	
					Greek	
					Turkish	
					Portuguese	
					Arabic	
					Czech	
					T-Chinese	
					Norwegian	
					Dutch	
					Japanese	
					S-Chinese	
					Thai	

USING THE PROJECTOR

Image Menu

Learn how to configure image settings.

Submenus

- Color Mode
- Brightness
- Contrast
- Saturation
- Hue
- Sharpness
- Gamma
- White Balance
- Advanced Color
- Advanced Image
- Reset

Color Mode

There are several predefined display modes that you can choose from to suit your viewing preference. Each mode has been fine-tuned by our expert colour team to ensure superior colour performance for wide range of content.

Presentation

In this mode, the color saturation and brightness are well-balanced.

HDR / HLG

Decodes and displays High Dynamic Range (HDR) / Hybrid Log Gamma (HLG) content for the deepest blacks, brightest whites, and vivid cinematic color using REC.2020 color gamut. This mode will be automatically enabled if HDR/HLG is set to Auto (and HDR/HLG Content is sent to projector – 4K UHD Blu-ray, 1080p/4K UHD HDR/HLG Games, 4K UHD Streaming Video). While HDR/HLG mode is active, other display modes (Cinema, Reference, etc.) cannot be selected.

Cinema

Provides the best balance of detail and colors for watching movies.

sRGB

Standardized accurate color.

High Bright

This mode is suitable for environments where extra-high brightness is required, such as using the projector in well-lit rooms.

USING THE PROJECTOR

DICOM SIM.

This sets the settings to be similar to the DICOM standard used in the medical industry.

Note: *The [DICOM SIM.] option is for training/reference only and should not be used for actual diagnosis.*

3D

Optimized settings for watching 3D content.

Note: *To experience the 3D effect, you will need to have compatible DLP Link 3D glasses. See 3D section for more information.*

High Frame Rate

High Frame Rate (HFR) refers to higher frame rates than typical prior practice.

Note: *High Frame Rate mode only supports input with 1080p 120/240Hz timing and cannot be manually set. The system automatically detects and switches to this mode.*

Brightness

Adjust the luminous brightness of the projected image to adapt to different ambient light.

Contrast

Adjust the contrast ratio of the projected image. The contrast controls the degree of difference between the lightest and darkest parts of the image.

Saturation

Adjust the saturation of the selected color. The value indicates the color shifts from or towards the white in the center of the chromaticity diagram.

Hue

Adjust the color balance of red and green in video images.

Sharpness

Adjust the clarity of details in the projected image to make the image clearer and sharper.

USING THE PROJECTOR

Gamma

Select an appropriate gamma value to optimize the image conformance to different input sources.

Graphics

Best for projecting photos from PC input.

1.8 / 2.0 / 2.2 / 2.4 / 2.6

Select a preset gamma value to adjust the image performance. In general, the smaller the value, the brighter the dark areas of the image will become. The standard gamma value is 2.2.

3D

Best for playing 3D videos.

Blackboard

Best for projecting on to a blackboard.

DICOM SIM.

Best for projecting monochrome medical images, such as X-ray diagram.

HDR

Best for playing HDR videos.

White Balance

Adjust the white balance of the projected image via gain and offset. Gain and offset are individual controls for each RGB channels used to set greyscale.

Color Temperature

Adjust the color temperature of the projected image. The available options are Warm, Standard, or Cool.

Red / Green / Blue Gain

Adjust the color of the image's bright areas.

Red / Green / Blue Offset

Adjust the color of the image's dark areas.

Note:

- *When 3D or High Frame Rate mode is selected, the Color Temperature will be unavailable.*
- *When displaying a video with difference color space (such as YCbCr), the Red Gain/Green Gain/Blue Gain option will be unavailable.*

USING THE PROJECTOR

Advanced Color

Configure the color advanced settings of the projected image to improve the color performance.

Color Space

Select a color space that has been specifically tuned for the input signal. The available options are Auto (default), RGB (0 ~ 255), RGB (16 ~ 235), and YUV.

Wall Color

Set the wall color of the projector to achieve best color performance for a specific wall. The available options are Off, Blackboard, Light Yellow, Light Green, Light Blue, Pink, and Gray.

Color Correction

Change the color of a projected image by adjusting each color component in the image. The adjustable color includes Red, Green, Blue, Cyan, Yellow, and Magenta (R / G / B / C / Y / M).

- **Red / Green / Blue / Cyan / Magenta / Yellow:** Select a color for further adjustment.
 - **Hue:** Adjust the hue of the selected color. The value reflects the number of degrees of rotation around the chromaticity diagram from the original color. Increasing value indicates counterclockwise rotation, and decreasing value, clockwise rotation.
 - **Saturation:** Adjust the saturation of the selected color. The value indicates the color shifts from or towards the white in the center of the chromaticity diagram.
 - **Luminance:** Adjust the luminance of the selected color. Increase the value to brighten the image (add white to a color) or decrease the value to darken the image (add black to a color).
 - **Reset:** Reset the Red, Green, Blue, Cyan, Magenta, or Yellow color to factory default values.
- **White:** Adjust the white color performance via setting the Red, Green, and Blue values.
 - **Red / Green / Blue:** Adjust the red, green, and blue colors to optimize the white color performance.

USING THE PROJECTOR

Advanced Image

Configure other advanced settings of the projected image.

Dynamic Contrast

Set up the Dynamic Contrast to maximize the contrast for dark content.

- **Dynamic Black:** Enable this function to automatically adjust the contrast ratio for video sources. It improves the black level in dark scenes by reducing the light output.
- **Extreme Black:** Enable this function to automatically increase the contrast ratio by turning off the laser light when black image is detected. This function is only available for RGB signal format.

Note:

- *When Dynamic Black is turned on, the Extreme Black will be unavailable.*
- *When Extreme Black is turned on, the Dynamic Black will be unavailable.*

Dynamic Range

Configure the HDR (High Dynamic Range) setting and its effect when displaying video from 4K Blu-ray players and streaming devices.

- **HDR:** Enable or disable the HDR function.
 - **Off:** Turn off HDR Processing. When set to Off, the projector will NOT decode HDR content.
 - **Auto:** Auto detect HDR signal.
- **HDR Brightness:** Adjust the strength of HDR/HLG.

Note:

- *For HDR signal, the default value is 5.*
- *For HLG signal, the default value is 3.*

3D Setup

3D video file combines two slightly different images (frames) of the same scene representing the different views that the left and right eyes see. When these frames are displayed fast enough and viewed with 3D glasses synchronized with the left and right frames, the viewer's brain then assemble the separate images into a single 3D image. 3D Menu provides options to set up the 3D functions to correctly display 3D videos.

- **3D Mode:** Enable or disable the 3D mode.
 - **Off:** Select "Off" to turn off 3D mode.
 - **Auto:** Select "Auto" to turn on 3D mode.

USING THE PROJECTOR

- **3D Format:** Use this option to select the appropriate 3D format content.
 - **Auto:** When a 3D identification signal is detected, the 3D format is selected automatically.
 - **Frame Packing:** Display 3D signal in “Frame Packing” format.
 - **SBS (Side by Side):** Display 3D signal in “Side-by-Side” format.
 - **Top and Bottom:** Display 3D signal in “Top and Bottom” format.
 - **Frame Sequential:** Display 3D signal in “Frame Sequential” format.
- **3D Sync Invert:** Use this option to enable/disable the 3D sync invert function.
- **Reset:** Reset the function settings to factory default values

Note:

- *This projector is a 3D ready projector with DLP-Link 3D solution.*
- *Please ensure that 3D glasses are in use for DLP-Link 3D content before enjoying your video.*
- *This projector supports frame sequential (page-flip) 3D via HDMI1/HDMI2 ports.*
- *To enable 3D mode, the input frame rate should be set to 60Hz only, lower or higher frame rate is not supported.*
- *To reach the best performance, resolution 1920x1080 is recommended, please note that 4K (3840x2160) resolution is not supported in 3D mode.*
- *When 3D mode is selected, the Presentation, HDR, HLG, Cinema, sRGB, High Bright, DICOM SIM., High Frame Rate, User mode will be unavailable.*

Reset

Reset all the image settings to factory default values.

USING THE PROJECTOR

Display Menu

Learn how to configure the settings to properly project images according to your installation circumstances.

Submenus

- Lens
- Aspect Ratio
- Scale
- Geometric Correction
- On Screen Display
- Background
- Input Signal Setting
- Orientation
- Test Pattern
- Reset

Lens

Configure the lens settings to adjust the image quality and position.

Focus

Use the ▲ and ▼ buttons to adjust the focus of the projected image.

Zoom

Use the  and  buttons to adjust the size of the projected image.

Lens Shift

Use the ▲, ▼, ◀, ▶ buttons to adjust the lens position to shift the projected area.

Lens Shift Memory

This projector can save up to five lens settings, which records the lens position.

- **Save Memory:** Select a record from 1 to 5 to save the current lens settings.
- **Apply Memory:** Select a record from 1 to 5 to apply the lens settings.
- **Clear Memory:** Clear the saved lens records.

Lens Shift Calibration

Calibrate the lens position to return it to the center.

Note:

- *Ensure that the lens shift calibration has been executed before performing the lens shift.*
- *Performing a lens shift calibration will clear the saved lens records.*
- *When the lens shift calibration is not completed, the lens shift memory will be unavailable.*

USING THE PROJECTOR

Lens Lock

Lock the lens to prevent the lens motors from moving, which disables all lens functions.

Note:

- *Enabling the Lens Lock function will display the lens lock icon [] at the upper right corner of the screen.*
- *Focus, Zoom, Lens Shift, Lens Shift Calibration, and Lens Shift Memory will not be available when the Lens Lock function is enabled. An [] icon appears at the upper right corner of the screen.*

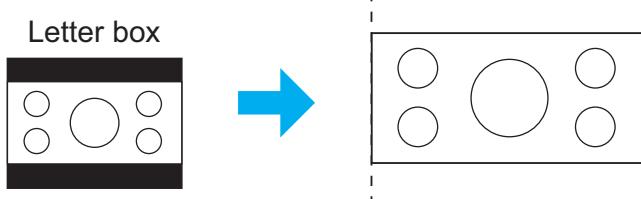
Reset

Reset the lens settings to factory default values.

Aspect Ratio

Set the aspect ratio of the projected image. The available options are 4:3, 16:9, 21:9, Letter Box, or Auto. Select Auto to display the detected image size.

- **4:3:** This format is for 4:3 input sources.
- **16:9:** This format is for 16:9 input sources, like HDTV and DVD enhanced for Wide screen TV.
- **21:9:** This format is for 21:9 input source, like HDTV and DVD enhanced for Wide screen TV.
- **Letter Box:** To ensure that the letterbox signal is properly projected, it will be enlarged equally in both the vertical and horizontal directions.



- **Auto:** Automatically selects the appropriate display format.

Scale

Digital Zoom

Use to reduce or magnify an image on the projection screen. Digital Zoom is not the same as optical zoom and can result in degradation of image quality.

Note: *Zoom settings are retained on power cycle of the projector.*

USING THE PROJECTOR

Image Shift

Adjust the projected image position.

- **Horizontal:** Use the **◀** and **▶** buttons to adjust the projected image position horizontally.
- **Vertical:** Use the **▲** and **▼** buttons to adjust the projected image position vertically.

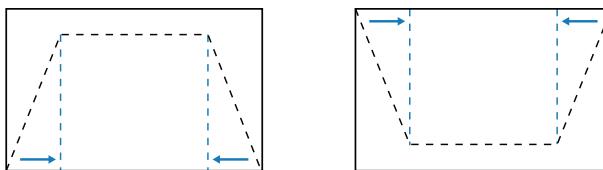
Note: When the input signal is 2K resolution timing and 3D timing, image shifting will not be available.

Geometric Correction

Configure the geometric settings to reshape the image for different projection surfaces.

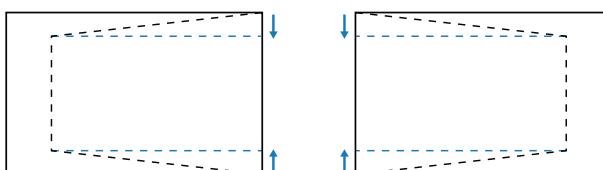
V Keystone

Adjust image distortion vertically and make a squarer image. Vertical keystone is used to correct a keystoneed image shape in which the top and bottom are slanted to one of the sides. This is intended when for use with vertically on-axis applications.



H Keystone

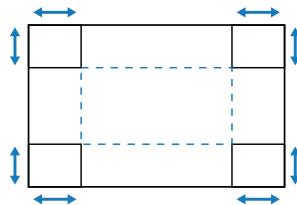
Adjust image distortion horizontally and make a squarer image. Horizontal keystone is used to correct a keystoneed image shape in which the left and right borders of the image are unequal in length. This is intended for use with vertically on-axis applications.



USING THE PROJECTOR

4-Corner

Reshape the image by moving the 4 corners of the image to have it fit a specific projection surface.

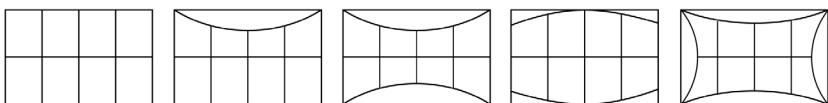


Warping

Enable or disable the application of warping adjustment effect.

Warping Adjustment

Use warping to adjust the image to align with the border of the projection surface (screen) or to eliminate image distortion (cause by an uneven surface).



Grid Color

Select a grid color for warp between Green, Magenta, Red, and Cyan.

Reset

Reset geometric correction settings to factory default values.

On Screen Display

Menu Position

Select the menu location from Top Left, Top Right, and Center.

Menu Timer

Set the length of time the menu displays on the screen.

Information Hide

Enable or disable the corner information messages, such as input source, IP address, and so on.

USING THE PROJECTOR

Background

Set a background color to display when no input signal is detected. The available options are Blue and Black.

Input Signal Setting

Learn how to configure the projector input settings.

Auto Signal

When Auto Signal is enabled, the projector automatically detects and selects the input signal. Once an input source is selected, press the Input button on the remote control or keypad to switch to other available sources. When the function is disabled, pressing Input will bring up the Active Inputs submenu.

Quick Resync

When this function is enabled, auto signal detection will be faster.

Input Signal

Select an input signal from the source list. The available input sources are HDMI1, HDMI2, and HDBaseT.

EDID Settings

Switch EDID versions.

- **1.4:** Compatible with standard video signals.
- **2.0:** Supports 4K video signals. Set this when displaying 4K video using a device that supports 4K video.

Reset

Reset the signal settings to factory default values.

Orientation

Change the image direction by selecting a proper projection mode.

Ceiling

Enable the function for ceiling mount installation.

Rear

Check the function for rear projection.

Test Pattern

Select a test pattern. The available options are Off, Green Grid, Magenta Grid, White Grid, White, Black, Red, Green, Blue, Yellow, Magenta, Cyan, ANSI Contrast 4x4, Color Bars, and Focus.

USING THE PROJECTOR

Reset

Reset all the display settings to factory default values.

USING THE PROJECTOR

Communication Menu

Communication menu is used to configure the settings that allow the projector to communicate with other projectors or control devices.

Submenus

- Remote Setup
- Network Setup
- Control
- Baud Rate
- Command Format
- Reset

Remote Setup

Configure the settings of the Infra-Red (IR) remote control.

Remote Code

Setting the Remote Code can prevent interference from other identical remote controls. After adjusting this setting, you must also change the corresponding control ID on the remote control. Please refer to the ID SET button function description in item 17 on page 34.

Remote Lock

The IR receiving function of the projector can be temporarily deactivated by hot key (0 ~ 9) to avoid the IR interference between projectors. The remote ID needs to be set to All.

Note: Enabling the Remote Lock function will display the remote lock icon  at the upper right corner of the screen.

Remote Sensor

Set the remote receiver for the projector to control the communication between the projector and the IR remote.

- **Front:** Enable or disable the front remote receiver.
- **Top:** Enable or disable the top remote receiver.
- **HDBaseT:** Select On to set the HDBaseT terminal as the remote receiver.

Note:

- Only one of the Front and Top IR receivers can be turned on or off at the same time.
- The system will automatically detect when a wired remote control is plugged in, and when a wired remote control is detected, the system will disable the reception and control of wireless remote control signals.

USING THE PROJECTOR

User 1 / User 2 / User 3

Assign a function to the User 1, User 2, and User 3 buttons on the remote control. It allows you to use the function easily without going through the OSD menus. The available functions are Color Mode, A/V Mute, Color Temperature, Orientation, Aspect Ratio, Freeze Screen, Network Setup, Audio Mute, and On Screen Display.

Note: When the Freeze and Audio Mute functions are enabled, the respective icon will appear at the upper right corner of the screen:
Freeze icon  / Audio Mute icon .

Network Setup

Configure the projector's network settings.

LAN Interface

Specify the LAN interface to RJ-45 or HDBaseT.

Network Status

Display the network connection status. (Read only)

MAC Address

Display the MAC address. (Read only)

DHCP

Turn on DHCP to automatically acquire IP address, subnet mask, gateway, and DNS.

IP Address

Assign the projector's IP address.

Subnet Mask

Assign the projector's subnet mask.

Gateway

Assign the projector's gateway.

DNS 1/DNS 2

Assign the projector's DNS 1/DNS 2.

Apply

Apply the wired network settings.

Note: If you have adjusted the settings of DHCP, IP Address, Subnet Mask, Gateway, DNS1/2, please be sure to execute "Apply" before the system will apply the settings to the network settings.

Reset

Reset the network settings to default factory values.

USING THE PROJECTOR

Control

This projector can be controlled remotely by a computer or other external devices through wired network connection. It allows the user to control one or more projectors from a remote control center, such as powering the projector on or off, and adjusting the image brightness or contrast.

Use the Control submenu to select a control device for the projector.

Crestron

Control the projector with Crestron controller and related software (Port: 41794). For more information, please visit <https://www.crestron.com>.

PJLink

Control the projector with PJLink Class2 commands (Port: 4352). For more information, please visit <http://pjlink.jbmia.or.jp/english>.

AMX

Control the projector with AMX devices (Port: 9131). For more information, please visit <http://www.amx.com>.

HTTP

Control the projector with web browser (Port: 80). For more information, refer to "Overview of the web control panel" on page 76.

Baud Rate

Set the baud rate for Serial Port In and Serial Port Out. The available options are 9600, 19200, 38400, 57600, and 115200 (default).

Command Format

Switch between the available control commands. For the two supported control functions and commands, refer to the 'RS232 Protocol Function List' table on page 106.

Reset

Reset all control settings to default factory values.

USING THE PROJECTOR

Setup Network Control

LAN / RJ45 function

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.

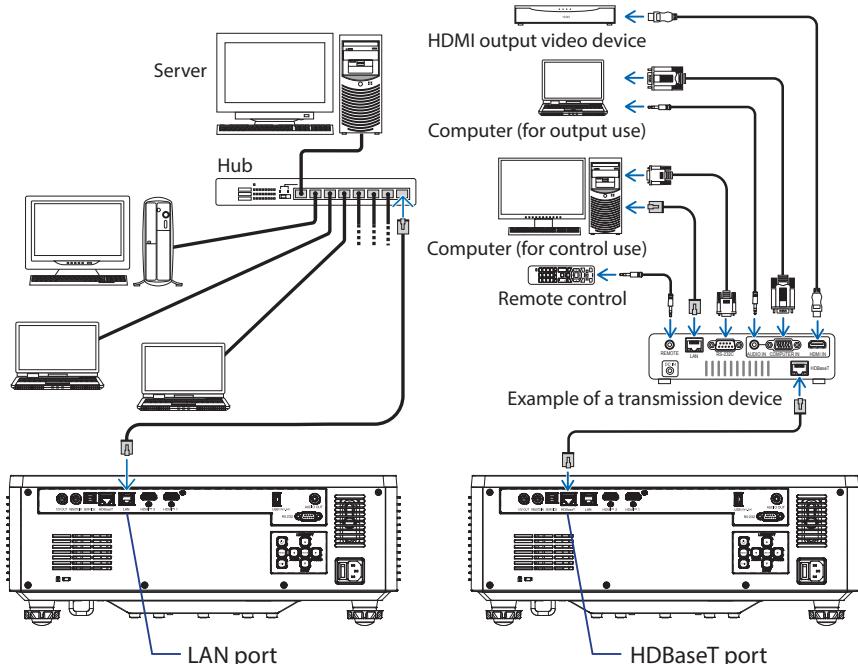
HDBaseT function

Use a LAN cable sold commercially to connect the HDBaseT port of the projector to a HDBaseT transmission device sold commercially.

The HDBaseT port of the projector supports HDMI signals (HDCP) from transmission devices, control signals from external devices (serial, LAN) and remote control signals (IR commands).

Note: Refer to the owner's manual accompanied with your HDBaseT transmission for connecting with your external devices.

Connection examples of the wired LAN and HDBaseT



USING THE PROJECTOR

Wired LAN terminal functionalities

This projector can be controlled via the LAN port using a PC (laptop) or other external devices, supporting control functions such as NaViSet Administrator 2 / Web control / Crestron Connected V2 / AMX (Device-Discovery) / PJLink Class2.

Using the web control panel

The web control panel allows the user to configure various projector settings using a web browser from any personal computer or mobile devices.

System Requirements

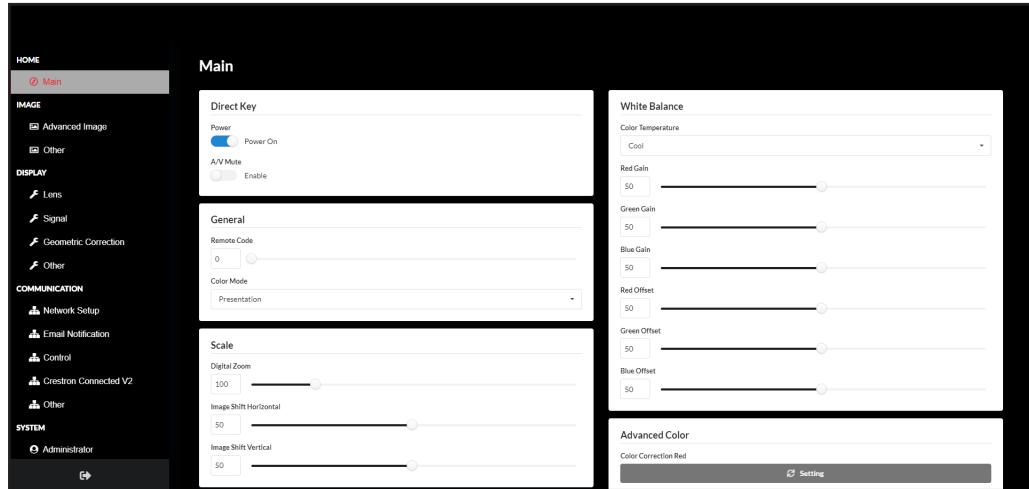
To use the web control panel, make sure your devices and software meet the minimum system requirements

- RJ45 cable for HDBaseT port: CAT.6A
- RJ45 cable for LAN port: CAT.5e
- PC, laptop, mobile phone, or tablet installed with a web browser

USING THE PROJECTOR

Overview of the web control panel

Configure the projector settings using web browser.



Menu	Description
HOME	View the projector information and firmware version details.
IMAGE	To configure image settings.
DISPLAY	To configure the settings to properly project images according to your installation circumstances.
COMMUNICATION	Communication menu is used to configure the settings that allow the projector to communicate with other projectors or control devices.
SYSTEM	To configure the system settings for the projector.
INFORMATION	View the projector information about its status and settings. The projector information is read only.
LANGUAGE	Set system display language.

USING THE PROJECTOR

Accessing the web control panel

When network is available, connect the projector and the computer to the same network. Use the projector address as the web URL to open the web control panel in a browser.

1. Check the projector address using the OSD menu.
 - Setup: **Communication** ⇒ **Network Setup** ⇒ **IP Address**.
2. Open a web browser and type the projector address in the address bar.
3. The web page redirects to the web control panel.
4. On first access, in the Username and Password fields, enter your username and password as follows:
 - Username: admin
 - Password: (Keep blank and no need to enter)

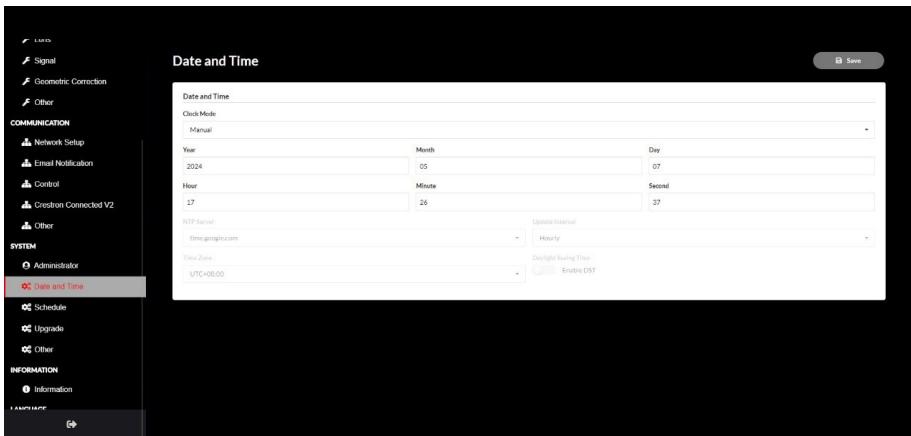
Note:

- *When logging in for the first time, you don't need to enter a password.*
- *It is needed to enter the own password once you have logged in. It is also advised to use a strong password.*
- *When you enter the password, pay enough attention to people around for the password abuse protection. If you have anxiety the password is cheated, change the password immediately.*

USING THE PROJECTOR

Date and Time

The projector can set the system date and time, and can automatically adjust the time through the NTP server.



Clock Mode

You can choose to adjust the time manually or through the NTP server.

Manual

Manually set the system date and time. If "Manual" setting is enabled, only Year/Month/Day/Hour/Minute/Second settings can be adjusted.

Use NTP Server

Correct the system date and time in the corresponding time zone through NTP Server. If "Use NTP Server" setting is enabled, only NTP Server/Update Interval/Time Zone/Daylight Saving Time settings can be adjusted.

Year

Manually adjust year settings. The adjustment range is 2000 - 2037.

Month

Manually adjust month settings. The adjustment range is 1 - 12.

Day

Manually adjust day settings. The adjustment range is 1 - 31.

Hour

Manually adjust hour settings. The adjustment range is 00 - 23.

Minute

Manually adjust minute settings. The adjustment range is 00 - 59.

USING THE PROJECTOR

Second

Manually adjust second settings. The adjustment range is 00~59.

NTP Server

The system provides the following commonly used NTP servers to choose from:

1. time.google.com
2. asia.pool.ntp.org
3. europe.pool.ntp.org
4. north-america.pool.ntp.org

Update Interval

The interval at which the system automatically synchronizes time to the NTP server. Supports Hourly/Daily.

Time Zone

The system supports 38 time zone options from UTC+14 to UTC-12.

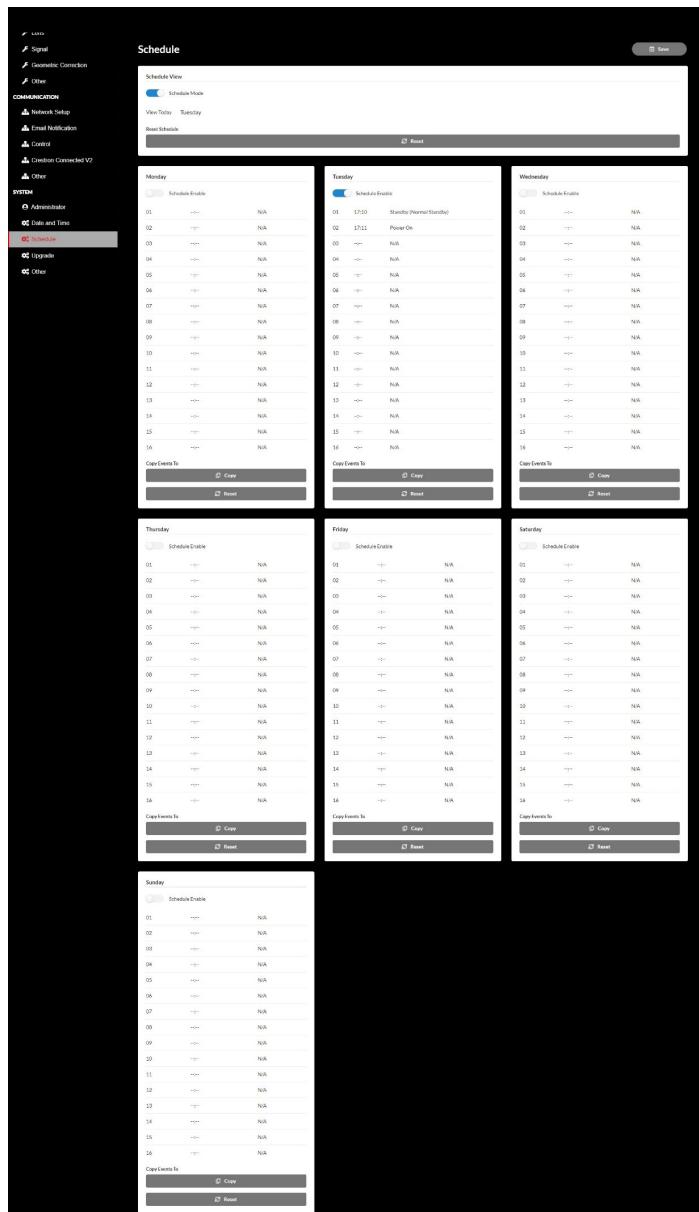
Daylight Saving Time

The daylight saving time setting can be enabled or disabled according to the needs of the area of use. When DST is enabled, the system will automatically adjust the time according to the selected time zone.

USING THE PROJECTOR

Schedule

The projector can be scheduled to perform repeated functions every day of the week.



Schedule

Schedule View

Schedule Mode: Normal

View Today: Tuesday

Reset Schedule

Monday

Schedule Enable Schedule Mode: Normal

Hour	Min	Status	Duration
01	00	N/A	
02	00	N/A	
03	00	N/A	
04	00	N/A	
05	00	N/A	
06	00	N/A	
07	00	N/A	
08	00	N/A	
09	00	N/A	
10	00	N/A	
11	00	N/A	
12	00	N/A	
13	00	N/A	
14	00	N/A	
15	00	N/A	
16	00	N/A	

Copy Events To

Tuesday

Schedule Enable Schedule Mode: Standby (Normal/Standby)

Hour	Min	Status	Duration
01	00	Standby (Normal/Standby)	17:51
02	00	Power On	
03	00	N/A	
04	00	N/A	
05	00	N/A	
06	00	N/A	
07	00	N/A	
08	00	N/A	
09	00	N/A	
10	00	N/A	
11	00	N/A	
12	00	N/A	
13	00	N/A	
14	00	N/A	
15	00	N/A	
16	00	N/A	

Copy Events To

Wednesday

Schedule Enable Schedule Mode: Normal

Hour	Min	Status	Duration
01	00	N/A	
02	00	N/A	
03	00	N/A	
04	00	N/A	
05	00	N/A	
06	00	N/A	
07	00	N/A	
08	00	N/A	
09	00	N/A	
10	00	N/A	
11	00	N/A	
12	00	N/A	
13	00	N/A	
14	00	N/A	
15	00	N/A	
16	00	N/A	

Copy Events To

Thursday

Schedule Enable Schedule Mode: Normal

Hour	Min	Status	Duration
01	00	N/A	
02	00	N/A	
03	00	N/A	
04	00	N/A	
05	00	N/A	
06	00	N/A	
07	00	N/A	
08	00	N/A	
09	00	N/A	
10	00	N/A	
11	00	N/A	
12	00	N/A	
13	00	N/A	
14	00	N/A	
15	00	N/A	
16	00	N/A	

Copy Events To

Friday

Schedule Enable Schedule Mode: Normal

Hour	Min	Status	Duration
01	00	N/A	
02	00	N/A	
03	00	N/A	
04	00	N/A	
05	00	N/A	
06	00	N/A	
07	00	N/A	
08	00	N/A	
09	00	N/A	
10	00	N/A	
11	00	N/A	
12	00	N/A	
13	00	N/A	
14	00	N/A	
15	00	N/A	
16	00	N/A	

Copy Events To

Saturday

Schedule Enable Schedule Mode: Normal

Hour	Min	Status	Duration
01	00	N/A	
02	00	N/A	
03	00	N/A	
04	00	N/A	
05	00	N/A	
06	00	N/A	
07	00	N/A	
08	00	N/A	
09	00	N/A	
10	00	N/A	
11	00	N/A	
12	00	N/A	
13	00	N/A	
14	00	N/A	
15	00	N/A	
16	00	N/A	

Copy Events To

Sunday

Schedule Enable Schedule Mode: Normal

Hour	Min	Status	Duration
01	00	N/A	
02	00	N/A	
03	00	N/A	
04	00	N/A	
05	00	N/A	
06	00	N/A	
07	00	N/A	
08	00	N/A	
09	00	N/A	
10	00	N/A	
11	00	N/A	
12	00	N/A	
13	00	N/A	
14	00	N/A	
15	00	N/A	
16	00	N/A	

Copy Events To

USING THE PROJECTOR

Schedule View

Display the current input signal of the projector.

Schedule Mode

Enable/Disable all scheduled events.

View Today

Display the current day of week.

Reset Schedule

Reset all scheduled events settings.

Monday – Sunday

Display list of scheduled events for day of week.

Schedule Enable

Enable/disable all scheduled events for the day.

Event 01 - 16

Supports up to 16 events per day.

Create Schedule

Create new event for day.

Hour

User can set 00 to 23 for hour.

Minute

User can set 00 to 59 for minute.

Function

Supports Power Settings / Input Source / Light Mode / A/V Mute of functions.

Event

Provides the following events based on user selection function:

1. Power Settings
 - i. Power On: Trigger projector power on.
 - ii. Standby (Normal Standby): Trigger the projector into standby and set the power setting to Normal Standby.
 - iii. Standby (Network Standby): Trigger the projector into standby and set the power setting to Network Standby.
 - iv. Standby (Sleep): Trigger the projector into standby and set the power setting to Sleep.

USING THE PROJECTOR

2. Input Source
 - i. HDMI 1: Trigger the projector to switch input source to HDMI 1 port.
 - ii. HDMI 2: Trigger the projector to switch input source to HDMI 2 port.
 - iii. HDBaseT: Trigger the projector to switch input source to HDBaseT port.
3. Light Mode
 - i. Normal: Trigger the projector and set the light mode to Normal.
 - ii. Eco.: Trigger the projector and set the light mode to Eco..
 - iii. Constant Brightness: Trigger the projector and set the light mode to Constant Brightness.
 - iv. Light Power Adjustment: Trigger the projector and set the light mode to Light Power Adjustment.
4. A/V Mute
 - i. A/V Mute On: Trigger the projector to mute Video and Audio.
 - ii. A/V Mute Off: Trigger the projector to disabled mute Video and Audio.

Copy Events To

Copy events scheduled throughout the day.

Current Day

Show today's week.

Copy To

Users can copy today's scheduled events to other days (Sunday to Saturday).

Reset

Reset scheduled events for the day.

USING THE PROJECTOR

System Menu

Learn how to configure the system settings for the projector.

Submenus

- Standby Mode
- Power Settings
- Light Source Setup
- Keypad LED Settings
- Security
- 12V Trigger
- High Altitude
- Audio Settings
- User Data
- Reset

Standby Mode

Setup the projector's standby mode.

Normal Standby

Minimum power consumption (0.5 Watt) which does not allow network control. The POWER indicator short flashes in orange.

Network Standby

Low power consumption (< 2 Watt) which allows the LAN module to enter sleep mode and supports to be woken by Wake on LAN (WoL). When the LAN module is woken by WoL, the projector is ready to receive commands over the network. The POWER indicator lights in orange.

Sleep

More power consumption that allows controlling the projector over the network. The POWER indicator long flashes in orange.

Power Settings

Configure the projector's power settings.

Direct Power On

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

Auto Power On

Turn on this function to have the projector automatically turning on when

USING THE PROJECTOR

connected to HDMI and HDBaseT input sources. It only applies to the standby projector set to Sleep.

Auto Power Off (min)

Set an interval timer for the projector to automatically turn off if no signal is detected within the specified time period. Press the \blacktriangleleft and \triangleright buttons to add or reduce time, 1 minutes for each press.

Off Timer (min)

Set an interval timer for the projector to automatically turn off after operating for the specified amount of time.

Note: *In the last minute before reaching a specified timer, including Auto Power Off, Off Timer, and Security Timer, an on-screen message will pop up warning that the projector shuts down in 60 seconds. Press any button on the remote control or projector keypad to reset the timer and the projector remains on.*

Light Source Settings

Adjust the energy saving settings and brightness matching between each projector when projecting multiple screens.

If you want to vary the brightness level at will, use "Constant Brightness" mode or "Light Power Adjustment" mode.

Light Mode

Select a light source mode depending on the installation requirements.

• Normal	The Brightness Level is fixed at 100%.
• Eco.	The Brightness Level is fixed at 50%.
	Brightness and fan control reduces noise and power consumption.
• Constant Brightness	The brightness level is controlled to keep the brightness constant. The "Brightness Level" can be adjusted from 80% to 50%.
• Light Power Adjustment	The image is projected at the brightness set by the Brightness Level. The Brightness Level can be adjusted from 100% to 10%. Power consumption decreases according to the Brightness Level, and the brightness changes depending on the time the projector is used.

Note: "Constant Brightness" mode keeps the brightness constant. The color will not be constant.

USING THE PROJECTOR

Brightness Level

Adjust the "Brightness Level" when the "Constant Brightness" and "Light Power Adjustment" are selected in Light Mode.

When you select "Normal" or "Eco.", you cannot select the "Brightness Level".

Keypad LED Settings

Enable or disable the keypad LED.

Security

Set up security verification to protect the projector.

Security

Select On to protect the projector with a password. If the user enters incorrect password three times, a message will pop up warning that the projector shuts down in 10 seconds.

Security Timer

Specify the length of time the projector can be used without the password. Once the timer counts to 0, the user must enter a password to use the projector. The timer restarts every time the projector is turned on.

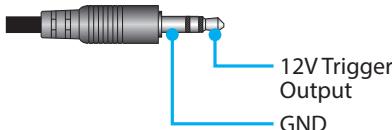
Change Password

Change the projector password.

12V Trigger

Use this function to enable or disable the trigger.

Note: 3.5mm TS type mini jack that outputs 12V 200mA (max.) for relay system control.



High Altitude

This unit has a built-in air pressure sensor, and the "High Altitude Mode" will automatically switch to "On" depending on the altitude of the installation location. When the High Altitude Mode is switched to On, the cooling fan will rotate at high speed.

If the High Altitude Mode does not switch to On even when the altitude exceeds 1500 m/5000 ft, manually switch "High Altitude" to "On".

USING THE PROJECTOR

Audio Settings

Configure the projector built-in speaker settings.

Volume

Adjust the volume level.

Mute

Turn off or turn on the projector sound.

Note: Enabling the Audio Mute function will display the mute icon  at the upper right corner of the screen.

Audio Output

Select the audio output between Internal Speaker and Line Out.

Reset

Reset the audio settings to default factory values.

User Data

User can save the projector settings as user data and reload the settings later.

Save All Settings

Save all of the projector settings as user data. User can save up to 5 records.

Load All Settings

Load the previously saved user data.

USING THE PROJECTOR

Reset

Reset the settings to factory default values.

Reset OSD

Reset OSD settings to default values.

Reset All

Reset all projector settings to default values.

Reset table

Reset path	Category	System	
	SubCategory	Reset	
	SubSubCategory	Reset OSD	Reset All
Image	Color Mode	◎	◎
	Brightness	◎	◎
	Contrast	◎	◎
	Sharpness	◎	◎
	Gamma	◎	◎
	White Balance	◎	◎
	Color Space	◎	◎
	Wall Color	◎	◎
	Color Correction	◎	◎
	Dynamic Contrast	◎	◎
	Dynamic Range	◎	◎
	3D Setup	◎	◎
Display	Lens-Lens Shift Memory	◎	◎
	Lens-Lens Lock	◎	◎
	Aspect Ratio	◎	◎
	Scale	◎	◎
	On Screen Display	◎	◎
	Background	◎	◎
	Geometric Correction - V Keystone		◎
	Geometric Correction - H Keystone		◎
	Geometric Correction - 4-Corner		◎
	Geometric Correction - Warping		◎
	Geometric Correction - Grid Color		◎
	Input Signal Setting	◎	◎
	Orientation	◎	◎
	Freeze Screen	◎	◎
	Test Pattern	◎	◎

USING THE PROJECTOR

Reset path	Category	System	
	SubCategory	Reset	
	SubSubCategory	Reset OSD	Reset All
Communication	Projector ID	<input type="radio"/>	<input type="radio"/>
	Remote Setup	<input type="radio"/>	<input type="radio"/>
	Network Setup		<input type="radio"/>
	Control		<input type="radio"/>
	Baud Rate	<input type="radio"/>	<input type="radio"/>
	Command Format	<input type="radio"/>	<input type="radio"/>
System	Standby Mode		<input type="radio"/>
	Power Settings	<input type="radio"/>	<input type="radio"/>
	Light Source Setup	<input type="radio"/>	<input type="radio"/>
	Keypad LED Settings	<input type="radio"/>	<input type="radio"/>
	Security		<input type="radio"/>
	12V Trigger	<input type="radio"/>	<input type="radio"/>
	Audio Settings	<input type="radio"/>	<input type="radio"/>
	User Data	<input type="radio"/>	<input type="radio"/>
Language			<input type="radio"/>

USING THE PROJECTOR

Information Menu

View the projector information about its status and settings. The projector information is read only.

Submenus

- Projector
- System Status
- Control
- Communication
- Signal
- FW Version

Projector

Display the projector factory information.

Model Name

Display the projector model name.

Serial Number

Display the projector serial number.

System Status

Display the projector system status information.

Standby Mode

Display the current standby mode setting of the projector.

Total Projector Hours

Display the total projector usage hours.

Light Source Hours

Display the projector laser usage hours.

Ambient Temp.

Display the current ambient temperature of the projector.

System Temp.

Display the current system temperature of the projector.

USING THE PROJECTOR

Control

Display projector control setting information.

Remote Code

Display the current remote code setting of the projector.

Crestron

Display the current Crestron on or off setting of the projector.

PJLink

Display the current PJLink on or off setting of the projector.

AMX

Display the current AMX on or off setting of the projector..

HTTP

Display the current HTTP on or off setting of the projector.

Communication

Display the projector communication setting information.

LAN Interface

Display the current LAN interface settings of the projector.

MAC Address

Display the projector MAC address information.

Network Status

Display the projector network connection status.

DHCP

Display the projector DHCP settings.

IP Address

Display the current IP address of the projector.

Subnet Mask

Display the current Subnet Mask of the projector.

Gateway

Display the current Gateway of the projector.

DNS 1 / DNS 2

Display the current DNS1 and DNS2 address of the projector.

USING THE PROJECTOR

Signal

Display the projector input signal information.

Input Signal

Display the current input signal of the projector.

Resolution

Display the resolution of the current input signal source of the projector.

Signal Format

Display the format of the current input signal source of the projector.

Pixel Clock

Display the pixel clock of the projector's current input signal source.

Horz. Refresh

Display the horizontal refresh frequency of the projector's current input signal source.

Vert. Refresh

Display the vertical refresh frequency of the projector's current input signal source.

Color Space

Display the color space of the projector's current input signal source.

FW Version

Display the projector firmware version information.

Main / F-MCU / A-MCU / LAN / Formatter / HDBaseT Version

Display the projector firmware version information.

USING THE PROJECTOR

Language Menu

Learn how to select the language for the OSD (on-screen display) menu of the projector.

Submenus

- Language

Language

Select a language for the OSD menu. The available languages are English, German, French, Italian, Spanish, Swedish, Korean, Polish, Hungarian, Russian, Greek, Turkish, Portuguese, Arabic, Czech, Traditional Chinese, Norwegian, Dutch, Japanese, Simplified Chinese, and Thai.

ADDITIONAL INFORMATION

Compatible Resolutions

Horizontal : 15 - 255KHz

Vertical : 23 – 120Hz, 240Hz

Digital

Signal	Resolution (dots)	Aspect Ratio	Refresh Rate (Hz)	Note
VGA	640 x 480	4:3	60	
SVGA	800 x 600	4:3	60	
XGA	1024 x 768	4:3	60	
WXGA	1280 x 768	15:9	60	Only EDID1.4 support
WXGA	1280 x 800	16:10	60	
SXGA	1280 x 960	4:3	60	
SXGA	1280 x 1024	5:4	60	
FWXGA	1360 x 768	16:9	60	Only EDID1.4 support
FWXGA	1366 x 768	16:9	60	Only EDID1.4 support
WXGA+	1440 x 900	16:10	60	
HD+	1600 x 900	16:9	60	
UXGA	1600 x 1200	4:3	60	
WSXGA+	1680 x 1050	16:10	60	
WUXGA	1920 x 1200	16:10	60	Reduce Blanking
UWFHD	2560 x 1080	21:9	24/25/30/50/60	Only EDID 2.0 support
480P	720 x 480	4:3	60	
576p	720 x 576	5:4	50	
720p	1280 x 720	16:9	50/60/120	
1080p	1920 x 1080	16:9	24/25/30/50/60/120/240	Only EDID2.0 supports 1080P240
2160p	3840 x 2160	16:9	24/25/30/50/60	EDID1.4 supports up to 2160P 30Hz
4K2K	4096 x 2160	17:9	24/25/30/50/60	EDID1.4 supports up to 4K2K 24Hz

ADDITIONAL INFORMATION

3D

Signal	Resolution (dots)	Aspect Ratio	Refresh Rate (Hz)	Note
720p	1280 x 720	16:9	50/60	Top - and - Bottom
1080p	1920 x 1080	16:9	24/60	Top - and - Bottom
1080p	1920 x 1080	16:9	24/50/60	Side- by-Side (Half)
720p	1280 x 720	16:9	50/60	Frame packing
1080p	1920 x 1080	16:9	24	Frame packing
XGA	1024 x 768	4:3	120	Frame Sequential
720p	1280 x 720	16:9	120	Frame Sequential
1080p	1920 x 1080	16:9	60/120	Frame Sequential
WUXGA	1920 X 1200	16:10	60	Frame Sequential

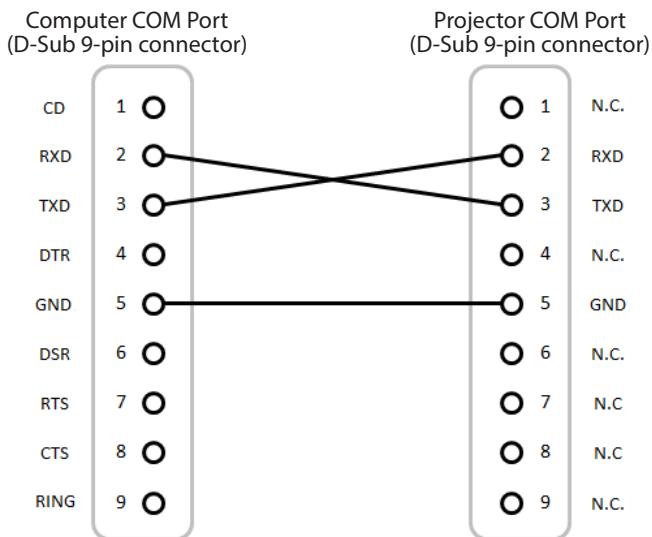
ADDITIONAL INFORMATION

RS232 Port Setting and Signals Connection

RS232 Port Setting

Items	Method
Communication Method	Asynchronous Communication
Baud Rate	115200
Data Bits	8 bits
Parity	None
Stop Bits	1
Flow Control	None

RS232 Signals Connection



Note: RS232 shell is grounded.

ADDITIONAL INFORMATION

Image Size and Projection Distance

The size of projected images is 60 ~ 300 inches (1.64 ~ 13.35 m)

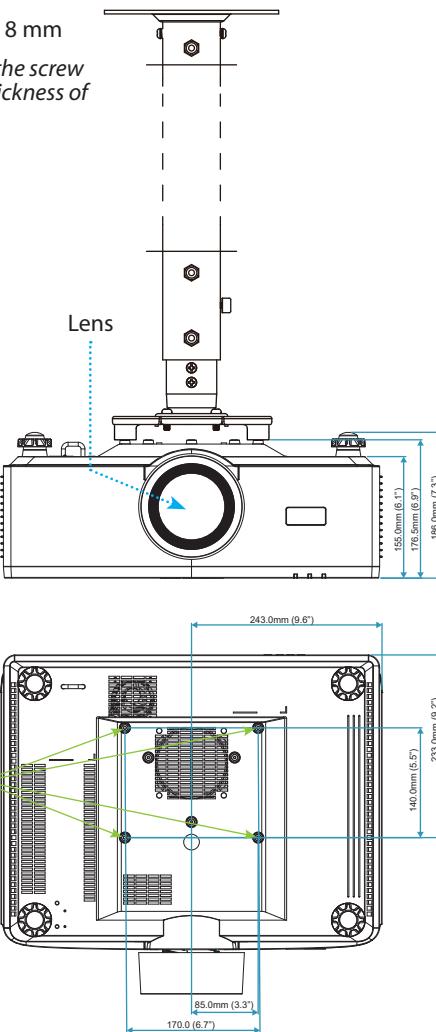
Screen Size 16:9 (WxH)						Projector Distance			
Diagonal Length of Image		Width		Height		Wide		Tele	
inch	m	inch	m	inch	m	inch	m	inch	m
60	1.52	52.3	1.33	29.4	0.75	64.6	1.64	103.5	2.63
70	1.78	61.0	1.55	34.3	0.87	75.7	1.92	121.1	3.08
80	2.03	69.7	1.77	39.2	1.00	86.8	2.20	138.7	3.52
90	2.29	78.4	1.99	44.1	1.12	97.9	2.49	156.3	3.97
100	2.54	87.2	2.21	49.0	1.25	109.0	2.77	173.9	4.42
120	3.05	104.6	2.66	58.8	1.49	131.2	3.33	209.1	5.31
150	3.81	130.7	3.32	73.5	1.87	164.5	4.18	261.8	6.65
180	4.57	156.9	3.98	88.2	2.24	197.8	5.03	314.6	7.99
200	5.08	174.3	4.43	98.0	2.49	220.0	5.59	349.8	8.88
250	6.35	217.9	5.53	122.5	3.11	275.6	7.00	437.7	11.12
300	7.62	261.5	6.64	147.1	3.74	331.1	8.41	525.7	13.35

ADDITIONAL INFORMATION

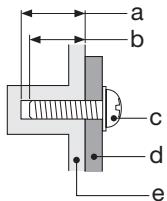
Ceiling Mount Installation

1. To prevent damage to your projector, please use ceiling mount.
2. If you wish to use a third party ceiling mount kit, please ensure the screws used to attach a mount to the projector meet the following specifications:
 - Screw type: M4*4
 - Minimum screw length: 8 mm

Note: The minimum length of the screw is 8mm, excluding the thickness of the ceiling mount.



ADDITIONAL INFORMATION



a: Screw hole depth 8 mm/0.31"

b: Screw length excluding bracket thickness 8 mm/0.31"

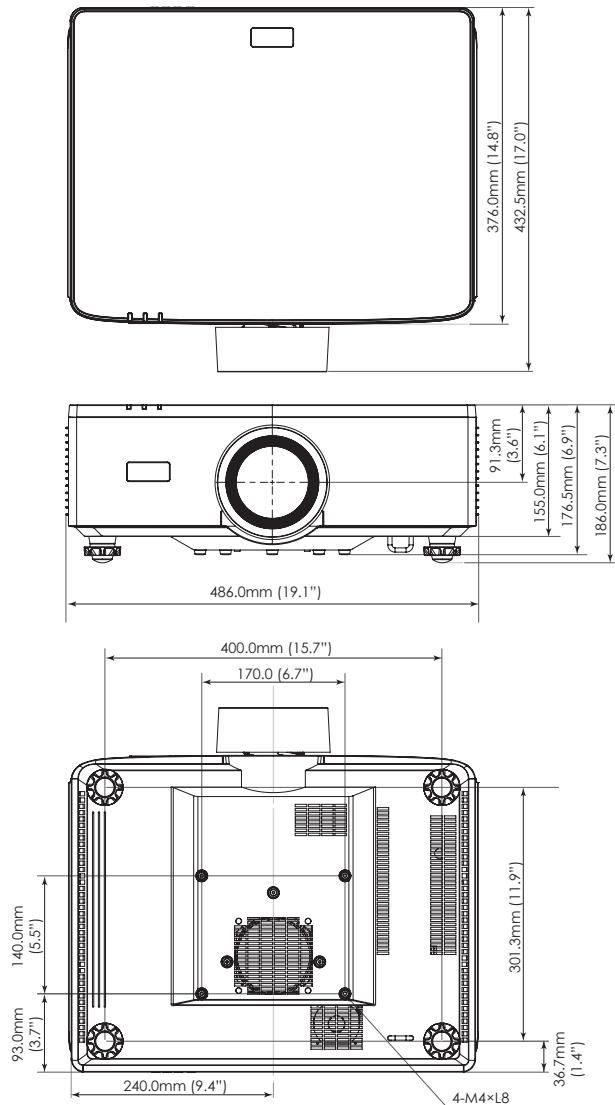
c: Screw M4

d: Mounting bracket

e: Projector mount section

ADDITIONAL INFORMATION

External Dimensions



ADDITIONAL INFORMATION

Troubleshooting

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

Image problems

No image appears on-screen

- Ensure all the cables and power connections are correctly and securely connected as described in the *Setup and Installation* section.
- Ensure the pins of connectors are not crooked or broken.
- Ensure that the Shutter feature is not turned on.

Image is out of focus

- Press the **FOCUS** button on the remote control or projector keypad. Then press the ▲ or ▼ button to adjust the focus until the image is sharp and legible.
- Make sure the projection screen is between the required distance from the projector. (Please refer to *Image size and projection distance* page 96).

The image is stretched when displaying 16:9 DVD title

- When you play anamorphic DVD or 16:10 DVD, the projector will show the best image in 16:9 format on projector side.
- If you play 4:3 format DVD title, please change the format as 4:3 in projector OSD.
- Please setup the display format as 16:9 (wide) aspect ratio type on your DVD player.

Image is too small or too large

- Press the **ZOOM** button on the remote control or projector keypad . Then press the ▲ or ▼ button to adjust the projected image size.
- Move the projector closer to or further from the screen.
- From the OSD menu, select **Display** ⇒ **Aspect Ratio** to change the aspect ratio.

Image has slanted sides:

- If possible, reposition the projector so that it is centered on the screen and below the bottom of the screen.
- Press the **Geometric.** buttons on the remote control to adjust distortions in projected images.

Image is reversed

- From the OSD menu, select **Display** ⇒ **Orientation** ⇒ **Rear** to reverse the image so you can project from behind a translucent screen.

ADDITIONAL INFORMATION

Other problems

The projector stops responding to all controls

- If possible, turn off the projector, then unplug the power cord and wait at least 20 seconds before reconnecting power.

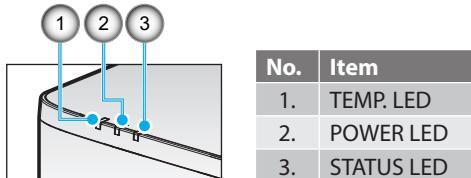
Remote control problems

If the remote control does not work

- Check that the operating angle of the remote control is pointed within $\pm 30^\circ$ to the IR receivers on the projector.
- Make sure there are not any obstructions between the remote control and the projector. Move to within 6 meters (19.7 feet) of the projector.
- Make sure batteries are inserted correctly.
- Replace batteries if they are exhausted.

ADDITIONAL INFORMATION

LED Indicators and Lightning Messages



Status Light Color	STATUS LED	POWER LED				TEMP. LED	Note
		Red	Red	Green	Orange		
NORMAL STANDBY					FLASH SHORT		
NETWORK STANDBY	-	-	-		ON	-	-
SLEEP					FLASH LONG		
POWER ON	-	-	ON		-	-	-
WARMING UP STATE	-	FLASH	-	-	-		-
COOLING DOWN STATE	-	-	FLASH FAST		-	-	-
AV Mute / Shutter	FLASH	-	ON	-	-		-
ERROR STATUS						Recovery	
POWER NG Error (Power Failure)	ON	-	-	-	ON	Repair	
FAN LOCK	-	-	-	-	FLASH SLOW	Repair	
WHEEL SPEED ERROR	-	-	-	-	FLASH	Repair	
OVER HEAT					ON	Reboot	
LD OVERHEAT					ON	Reboot	
DMD OVER TEMPERATURE					ON	Reboot	
WARNING STATUS						Recovery	
DIM POWER	-	-	-	-	FLASH FAST	Reboot or Ambient Temp Cool Down	
DMD PROTECTION MODE	FLASH FAST	-	-	-	FLASH FAST	Reboot or Ambient Temp Cool Down	

Note:

- FLASH means 1s; FLASH_FAST means 500ms; FLASH_SLOW means 3s.
- Repair means the device needs to be repaired and the AC power cord has to be unplugged from the device.
- Reboot means Re-press the "power on" button on the remote control.
- DIM Power (Diminish Power)
- DMD PROTECTION MODE: Brightness dim to Eco. Mode.

ADDITIONAL INFORMATION

Specifications

This section provides technical information about projector's performance.

Projector

Model name	XP-P721Q-W	XP-P601Q-W
Method	1 Chip DLP type	
Resolution	4K UHD (3840 dots x 2160 lines)	
Specifications of main parts		
DMD panel	Size Pixels (*1)	0.65" (aspect ratio: 16:9) 2,073,600 (1920 dots x 1080 lines)
Projection lenses	F=2.0-2.4 / f=18.7~29.6 mm	
	Zoom	Motorized
	Focus	Motorized
	Lens shifting	Motorized
Light source	Laser diode	
Light output (*2) (*3)	7200 lm	6000 lm
Screen size (throw distance)	60 to 300 inches (1.6 - 13.4 m)	
Color reproducibility	10-bit color processing (approx. 1.07 billion colors)	
Scanning frequency		
	Horizontal	15KHz to 255KHz
	Vertical	24Hz to 85Hz, 120Hz for 2D/3D, 240Hz for 2D
Input/output terminals		
HDMI 1/2	Video input	Type A x 2, Deep Color, LipSync, HDCP (*4), 4K
	Audio input	Sampling frequency: 32/44.1/48 kHz Sampling bits: 16/20/24 bit
HDBaseT	Video input	RJ-45 x 1, Deep Color, LipSync, HDCP (*4), 4K
	Audio input	Sampling frequency: 32/44.1/48 kHz Sampling bits: 16/20/24 bit
AUDIO OUT		Stereo mini jack x 1
USB		USB type A x 1, 5.0 V/1.5 A power supply
SERVICE		USB type B x 1

ADDITIONAL INFORMATION

Model name	XP-P721Q-W	XP-P601Q-W
Control Terminals		
	LAN	RJ-45 x 1, 10BASE-T/100BASE-TX
	RS232	D-Sub 9-pin x 1, RS232C
	REMOTE IN	Stereo mini jack x 1
	12V OUT	Stereo mini jack x 1
Built-in Speaker	10 W x 2	
Usage environment	Operating temperature: 0 to 45°C / 32 to 113°F Operating humidity: 10 to 85% (with no condensation)	
	Storage temperature: -10 to 60°C / 14 to 140°F Storage humidity: 20 to 90% (with no condensation)	
	Operating altitude: 0 to 3048m / 0 to 10000 feet (1524 to 3048 m / 5000 to 10000 feet: Set [High Altitude] to [On])	
	0 to 762m / 0~2,500 ft.: 0°C~45°C 762 to 1524m / 2,500~5,000 ft.: for 0°C~35°C 1524 to 3048m / 5,000~10,000 ft.: for 0°C~30°C	
Power supply	100-240 VAC, 50/60 Hz	
Power consumption	530 W (100 - 120 V) / 520 W (200 - 240 V)	
Power consumption (Standby state)		
	Network enabled	less than 2.0 W (100–120 V) / less than 2.0 W (200–240 V)
	Network disabled	less than 0.5 W (100–120 V) / less than 0.5 W (200–240 V)
Rated input current	6.5 A (100–120 V) – 2.6 A (200–240 V)	
Power cord specification	10 A or higher	
External dimensions	19.1" (width) x 7.3" (height) x 17.0" (depth)/ 486 (width) x 186 (height) x 432.5 (depth) mm (including protrusions)	
	19.1" (width) x 6.9" (height) x 17.0" (depth)/ 486 (width) x 176.5 (height) x 432.5 (depth) mm (not including protrusions)	
Weight	32.4 lbs / 14.7 kg	

ADDITIONAL INFORMATION

Note:

- ***1** Effective pixels are more than 99.99%.
- ***2** Compliance with ISO 21118-2020.
- ***3** This is the light output value (lumens) when [Color Mode] is set to [High Bright] and [Light Mode] is set to [Normal]. If any other mode is selected, the light output value may drop slightly.
- ***4** If you are unable to view material via the HDMI and HDBaseT input, this does not necessarily mean the projector is not functioning properly. With the implementation of HDCP, there may be cases in which certain content is protected with HDCP and might not be displayed due to the decision/intention of the HDCP community (Digital Content Protection, LLC).
 - Video: Deep Color, 8/10/12-bit, Lip Sync.
 - Audio: LPCM: up to 2 ch, sample rate 32/44.1/48 KHz, sample bit: 16/20/24-bit
 - Version: HDMI: Supports HDCP 2.3
 - HDBaseT: Supports HDCP 2.3
- These specifications and the product's design are subject to change without notice.

For additional information, visit:

US: <https://business.sharpusa.com>

Europe: <https://sharpdisplays.eu>

Global: <https://sharp-displays.jp.sharp/global/index.html>

ADDITIONAL INFORMATION

RS232 Protocol Function List

Command Format - A

Function	Code Data							
POWER ON	02H	00H	00H	00H	00H	02H		
POWER OFF	02H	01H	00H	00H	00H	03H		
INPUT SELECT HDMI 1	02H	03H	00H	00H	02H	01H	A1H	A9H
INPUT SELECT HDMI 2	02H	03H	00H	00H	02H	01H	A2H	AAH
INPUT SELECT HDBaseT	02H	03H	00H	00H	02H	01H	BFH	C7H

Command Format - B

Function	Code Data							
POWER ON	P	O	W	R	<SP>	<SP>	<SP>	1 <CR>
POWER OFF	P	O	W	R	<SP>	<SP>	<SP>	0 <CR>
INPUT SELECT HDMI 1	I	R	G	B	<SP>	<SP>	3	1 <CR>
INPUT SELECT HDMI 2	I	R	G	B	<SP>	<SP>	3	2 <CR>
INPUT SELECT HDBaseT	I	N	E	T	<SP>	<SP>	5	1 <CR>
AV MUTE OFF	I	M	B	K	<SP>	<SP>	<SP>	0 <CR>
AV MUTE ON	I	M	B	K	<SP>	<SP>	<SP>	1 <CR>
AUDIO MUTE OFF	M	U	T	E	<SP>	<SP>	<SP>	0 <CR>
AUDIO MUTE ON	M	U	T	E	<SP>	<SP>	<SP>	1 <CR>

Note:

- <SP> in Parameter area means "space(20h)" in ASCII code.
- <CR> in Parameter area means "0DH" in ASCII code.
- Contact your local dealer for a full list of the PC Control Codes if needed.

ADDITIONAL INFORMATION

REGISTER YOUR PROJECTOR!

(for residents in the United States and Mexico)

Please take time to register your new projector. This will activate your limited parts and labor warranty and InstaCare service program.

Visit our web site at <https://proavreg.sharpusa.com> and submit your completed form online.

Upon receipt, we will send a confirmation letter with all the details you will need to take advantage of fast, reliable warranty and service programs from the industry leader, Sharp Imaging and Information Company of America.

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