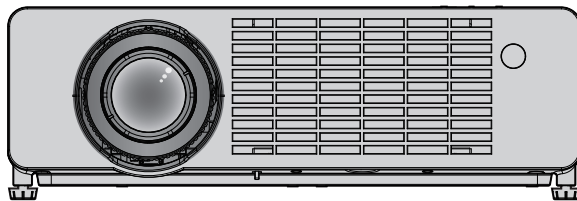


Operating Instructions Functional Manual

DLP™ Projector Commercial Use

Model No. **PT-LRZ35**
PT-LRZ35U
PT-LRW35
PT-LRW35U



Thank you for purchasing this Panasonic product.

- This manual is common to all the models regardless of suffixes of the Model No.
 - for America and Taiwan region: PT-LRZ35U / PT-LRW35U
 - for other countries or regions: PT-LRZ35 / PT-LRW35
- Before operating this product, please read the instructions carefully, and save this manual for future use.
- Before using your projector, be sure to read “Read this first!” (➔ pages 4 to 13).

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Read this first!

WARNING: THIS APPARATUS MUST BE EARTHED.

WARNING: To prevent damage which may result in fire or shock hazard, do not expose this appliance to rain or moisture.
 This device is not intended for use in the direct field of view at visual display workplaces. To avoid incommoding reflexions at visual display workplaces this device must not be placed in the direct field of view.
 The equipment is not intended for used at a video workstation in compliance BildscharbV.
 The sound pressure level at the operator position is equal or less than 70 dB (A) according to ISO 7779.

WARNING:

1. Remove the plug from the mains socket when this unit is not in use for a prolonged period of time.
2. To prevent electric shock, do not remove cover. No user serviceable parts inside. Refer servicing to qualified service personnel.
3. Do not remove the earthing pin on the mains plug. This apparatus is equipped with a three prong earthing type mains plug. This plug will only fit an earthing-type mains socket. This is a safety feature. If you are unable to insert the plug into the mains socket, contact an electrician. Do not defeat the purpose of the earthing plug.

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

WARNING: RISK OF ELECTRIC SHOCK. DO NOT OPEN.



Indicated on the projector



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



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

WARNING: Do not look at the light emitted from the lens while the projector is being used. As with any bright source, do not stare into the direct beam, RG2 IEC 62471-5:2015.



Indicated on the projector

WARNING: Do not place objects in front of the lens while the projector is being used.



Indicated on the projector

Read this first!

CAUTION: To assure continued compliance, follow the attached installation instructions. This includes using the provided power cord and shielded interface cables when connecting to computer or peripheral devices. Also, any unauthorized changes or modifications to this equipment could void the user's authority to operate this device.

This is a device to project images onto a screen, etc., and is not intended for use as indoor lighting in a domestic environment.

Directive 2009/125/EC

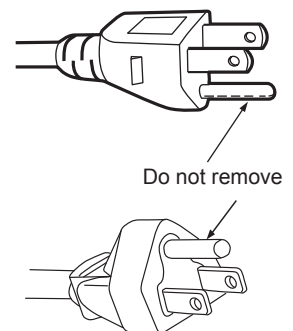
CAUTION (North/Middle/South America/Taiwan)

Power Supply: This Projector is designed to operate on 100 V - 240 V, 50 Hz/60 Hz AC, house current only.

CAUTION: The AC power cord which is supplied with the projector as an accessory can only be used for power supplies up to 125 V. If you need to use higher voltages than this, you will need to obtain a separate 250 V power cord. If you use the accessory cord in such situations, fire may result.

CAUTION (North/Middle/South America/Taiwan)

CAUTION: This equipment is equipped with a three-pin grounding-type power plug. Do not remove the grounding pin on the power plug. This plug will only fit a grounding-type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact an electrician. Do not defeat the purpose of the grounding plug.



WARNING (USA and Canada)

- Not for use in a computer room as defined in the Standard for the Protection of Electronic Computer/Data Processing Equipment, ANSI/NFPA 75.
- For permanently connected equipment, a readily accessible disconnect device shall be incorporated in the building installation wiring.
- For pluggable equipment, the socket-outlet shall be installed near the equipment and shall be easily accessible.

NOTIFICATION (Canada)

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

FCC NOTICE (USA)

Supplier's Declaration of Conformity

Model Number: PT-LRZ35U / PT-LRW35U
Trade Name: Panasonic
Responsible Party: Panasonic Corporation of North America
Address: Two Riverfront Plaza, Newark, NJ 07102-5490
General Contact: <http://www.panasonic.com/support>
Projector Contact: <https://panasonic.net/cns/projector/>

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.

To assure continued compliance, follow the attached installation instructions and do not make any unauthorized modifications.

CAUTION:

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

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

The user may find the booklet "Something About Interference" available from FCC local regional offices helpful.

FCC Warning:

To assure continued FCC emission limit compliance, follow the attached installation instructions. This includes using the provided power cord and shielded interface cables when connecting to computer or peripheral devices. Also, any unauthorized changes or modifications to this equipment could void the user's authority to operate this device.

IMPORTANT: THE MOULDED PLUG

FOR YOUR SAFETY, PLEASE READ THE FOLLOWING TEXT CAREFULLY.

This appliance is supplied with a moulded three pin mains plug for your safety and convenience. A 13 amp fuse is fitted in this plug. Should the fuse need to be replaced, please ensure that the replacement fuse has a rating of 13 amps and that it is approved by ASTA or BSI to BS1362.

Check for the ASTA mark  or the BSI mark  on the body of the fuse.

If the plug contains a removable fuse cover, you must ensure that it is refitted when the fuse is replaced. If you lose the fuse cover, the plug must not be used until a replacement cover is obtained. A replacement fuse cover can be purchased from an Authorised Service Center.

If the fitted moulded plug is unsuitable for the mains socket in your home, then the fuse should be removed and the plug cut off and disposed of safely. There is a danger of severe electrical shock if the cut off plug is inserted into any 13 amp socket.

If a new plug is to be fitted, please observe the wiring code as shown below.

If in any doubt, please consult a qualified electrician.

WARNING: THIS APPLIANCE MUST BE EARTHED.

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

Green - and - Yellow:	Earth
Blue:	Neutral
Brown:	Live

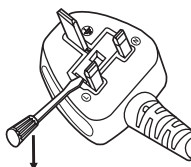
As the colours of the wire in the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows.

The wire which is coloured GREEN - AND - YELLOW must be connected to the terminal in the plug which is marked with the letter E or by the Earth symbol  or coloured GREEN or GREEN - AND - YELLOW.

The wire which is coloured BLUE must be connected to the terminal in the plug which is marked with the letter N or coloured BLACK.

The wire which is coloured BROWN must be connected to the terminal in the plug which is marked with the letter L or coloured RED.

How to replace the fuse: Open the fuse compartment with a screwdriver and replace the fuse.



Importer's name and address within the European Union

Panasonic Marketing Europe GmbH

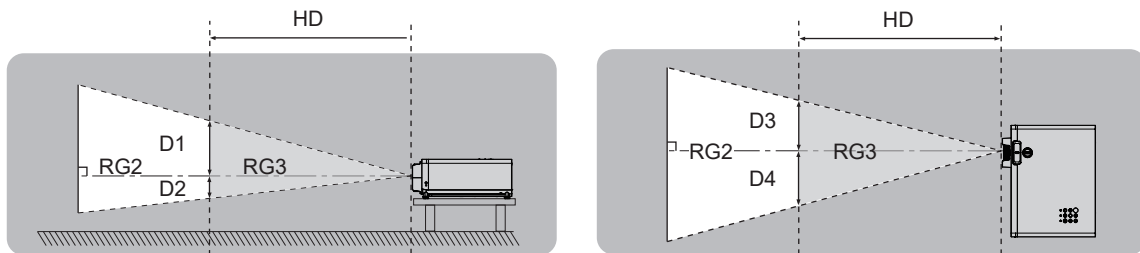
Panasonic Testing Centre

Winsbergring 15, 22525 Hamburg, Germany

■ Hazard distance (IEC 62471-5:2015)

The distance from the projection lens surface, at which the level of exposure has reached the level of the applicable Exposure Limit Value, is known as the hazard distance (HD) or safety distance.

Do not look into the projected light from inside the hazard distance (within RG3 range). The eyes may be damaged by the direct irradiation. It is considered to be safe to look into the projected light from outside the hazard distance (within RG2 range).



■ Risk group

The projector is categorized as the risk group 2 when the hazard distance is less than 1 m (39-3/8"). It is categorized as the risk group 3 when the hazard distance exceeds 1 m (39-3/8"), and it will be for professional use instead of consumer use.

In case of risk group 3, there is a possibility of damaging the eyes by direct irradiation when looking into the projection light from inside the hazard distance (within RG3 range).

In case of risk group 2, it can be used safely without damaging the eyes in any condition.

This projector is categorized as risk group 2.

WARNING:

■ POWER

The wall outlet or the circuit breaker shall be installed near the equipment and shall be easily accessible when problems occur. If the following problems occur, cut off the power supply immediately.

Continued use of the projector in these conditions will result in fire or electric shock.

- If foreign objects or water get inside the projector, cut off the power supply.
 - If the projector is dropped or the cabinet is broken, cut off the power supply.
 - If you notice smoke, strange smells or noise coming from the projector, cut off the power supply.
- Please contact an Authorized Service Center for repairs, and do not attempt to repair the projector yourself.

During a thunderstorm, do not touch the projector or the cable.

Electric shocks can result.

Do not do anything that might damage the power cord or the power plug.

If the power cord is used while damaged, electric shocks, short-circuits or fire will result.

- Do not damage the power cord, make any modifications to it, place it near any hot objects, bend it excessively, twist it, pull it, place heavy objects on top of it or wrap it into a bundle.

Ask an Authorized Service Center to carry out any repairs to the power cord that might be necessary.

Completely insert the power plug into the wall outlet and the power connector into the projector terminal.

If the plug is not inserted correctly, electric shocks or overheating will result.

- Do not use plugs which are damaged or wall outlets which are coming loose from the wall.

Do not use anything other than the provided power cord.

Failure to observe this will result in electric shocks or fire. Please note that if you do not use the provided power cord to ground the device on the side of the outlet, this may result in electric shocks.

Clean the power plug regularly to prevent it from becoming covered in dust.

Failure to observe this will cause a fire.

- If dust builds up on the power plug, the resulting humidity can damage the insulation.
 - If not using the projector for an extended period of time, pull the power plug out from the wall outlet.
- Pull the power plug out from the wall outlet and wipe it with a dry cloth regularly.

Do not handle the power plug and power connector with wet hands.

Failure to observe this will result in electric shocks.

Do not overload the wall outlet.

If the power supply is overloaded (ex., by using too many adapters), overheating may occur and fire will result.

■ ON USE/INSTALLATION

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

Doing so will cause the projector to overheat, which can cause burns, fire or damage to the projector.

Do not set up the projector in humid or dusty places or in places where the projector may come into contact with oily smoke or steam.

Using the projector under such conditions will result in fire, electric shocks or components deterioration. Components deterioration (such as ceiling mount brackets) may cause the projector which is mounted on the ceiling to fall down.

Do not install this projector in a place which is not strong enough to take the full weight of the projector or on top of a surface which is sloped or unstable.

Failure to observe this will cause projector to fall down or tip over the projector, and severe injury or damage could result.

Installation work (such as ceiling mount bracket) should only be carried out by a qualified technician.

If installation is not carried out and secured correctly it can cause injury or accidents, such as electric shocks.

- Be sure to use the wire provided with the projector mount bracket for ceiling mount as an extra safety measure to prevent the projector from falling down (Install in a different location to the ceiling mount bracket).

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

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

WARNING:

Do not cover the intake/exhaust vents.

Doing so will cause the projector to overheat, which can cause fire or damage to the projector.

- Do not place the projector in narrow, badly ventilated places.
- Do not place the projector on cloth or papers, as these materials could be drawn into the intake vent.
- Provide at least 30 cm (11-13/16") of space between any walls or objects and the exhaust vent or the front intake vent. Provide at least 10 cm (3-15/16") of space between any walls or objects and the side intake vent.

Do not place your hands or other objects close to the exhaust vent.

Doing so will cause burns or damage your hands or other objects.

- Heated air comes out of the exhaust vent. Do not place your hands or face, or objects which cannot withstand heat close to the exhaust vent.

Do not look and place your skin into the lights emitted from the lens while the projector is being used.

Doing so can cause burns or loss of sight.

- Strong light is emitted from the projector's lens. Do not look or place your hands directly into this light.
- Be especially careful not to let young children look into the lens. In addition, turn off the power and disconnect the power plug when you are away from the projector.

Do not project an image with the lens cover attached.

Doing so can cause fire.

Never attempt to remodel or disassemble the projector.

High voltages can cause fire or electric shocks.

- For any inspection, adjustment and repair work, please contact an Authorized Service Center.

Do not allow metal objects, flammable objects, or liquids to enter inside of the projector. Do not allow the projector to get wet.

Doing so may cause short circuits or overheating, and result in fire, electric shock, or malfunction of the projector.

- Do not place containers of liquid or metal objects near the projector.
- If liquid enters inside of the projector, consult your dealer.
- Particular attention must be paid to children.

Use the ceiling mount bracket specified by Panasonic.

Using the ceiling mount bracket other than the specified one will result in falling accidents.

- Attach the supplied safety cable to the ceiling mount bracket to prevent the projector from falling down.

■ ACCESSORIES

Do not use or handle the batteries improperly, and refer to the following.

Failure to observe this will cause burns, batteries to leak, overheat, explode or catch fire.

- Do not use unspecified batteries.
- Do not charge dry cell batteries.
- Do not disassemble dry cell batteries.
- Do not heat the batteries or place them into water or fire.
- Do not allow the + and - terminals of the batteries to come into contact with metallic objects such as necklaces or hairpins.
- Do not store or carry batteries together with metallic objects.
- Store the batteries in a plastic bag and keep them away from metallic objects.
- Make sure the polarities (+ and -) are correct when inserting the batteries.
- Do not use a new battery together with an old battery or mix different types of batteries.
- Do not use batteries with the outer cover peeling away or removed.

Do not allow children to reach the batteries.

Accidentally swallowing them can cause physical harm.

- If swallowed, seek medical advice immediately.

If the battery fluid leaks, do not touch it with bare hands, and take the following measures if necessary.

- Battery fluid on your skin or clothing could result in skin inflammation or injury.
Rinse with clean water and seek medical advice immediately.
- Battery fluid coming in contact with your eyes could result in loss of sight.
In this case, do not rub your eyes. Rinse with clean water and seek medical advice immediately.

Remove the depleted batteries from the remote control promptly.

- Leaving them in the unit may result in fluid leakage, overheating, or explosion of the batteries.

CAUTION:

■ POWER

When disconnecting the power cord, be sure to hold the power plug and power connector.

If the power cord itself is pulled, the lead will become damaged, and fire, short-circuits or serious electric shocks will result.

When not using the projector for an extended period of time, disconnect the power plug from the wall outlet.

Failure to do so may result in fire or electric shock.

Disconnect the power plug from the wall outlet before carrying out any cleaning.

Electric shocks can result if this is not done.

■ ON USE/INSTALLATION

Do not place heavy objects on top of the projector.

Failure to observe this will cause the projector to become unbalanced and fall, which could result in damage or injury. The projector will be damaged or deformed.

Do not put your weight on this projector.

You could fall or the projector could break, and injury will result.

- Be especially careful not to let young children stand or sit on the projector.

Do not place the projector in extremely hot locations.

Doing so will cause the outer casing or internal components to deteriorate, or result in fire.

- Take particular care in locations exposed to direct sunlight or near stoves.

Do not install the projector in a location where salt pollution or corrosive gas may occur.

Doing so may result in falling due to corrosion. Also, it may result in malfunctions.

Do not place objects in front of the lens while the projector is being used.

Do not block the projection by placing an object in front of the projection lens.

Doing so can cause fire or damage to the object and can cause the projector to malfunction.

- Strong light is emitted from the projector's lens.

Do not stand in front of the lens while the projector is being used.

Doing so can cause damage and burns to clothing.

- Strong light is emitted from the projector's lens.

Always disconnect all cables before moving the projector.

Moving the projector with cables still attached can damage the cables, which will cause fire or electric shocks to occur.

When mounting the projector on the ceiling, keep mounting screws and power cord from contacting with metal parts inside the ceiling.

Contact with metal parts inside the ceiling can cause electric shocks.

Never plug headphones and earphones into <VARIABLE AUDIO OUT> terminal.

Excessive sound pressure from earphones and headphones can cause hearing loss.

■ ACCESSORIES

When not using the projector for an extended period of time, remove the batteries from the remote control.

Failure to observe this will cause the batteries to leak, overheat, catch fire or explode, which may result in fire or contamination of surrounding area.

■ MAINTENANCE

Ask your dealer about cleaning inside the projector every 20 000 hours of usage as an estimated duration.

Continuous use while dust is accumulated inside the projector may result in fire.

- For cleaning fee, ask your dealer.

CAUTION:

■ **VIEWING 3D VIDEO**

Those with a medical history of oversensitivity to light, heart problems, or poor physical health should not view 3D images.

This may lead to a worsening of medical conditions.

If you feel tiredness or discomfort, or other abnormality while viewing with 3D Eyewear, discontinue viewing.

Continuing use may cause health problems. Take a break as necessary.

When viewing 3D movies, aim to view one movie at a time and take a break as necessary.

When viewing 3D images, for example when playing 3D games or using a PC where two way interaction is possible, take an appropriate break every 30 to 60 minutes.

Watching for long periods of time may cause eye fatigue.

When preparing contents, use contents properly created to be used for 3D.

This may cause eye fatigue or health problems.

When viewing 3D images, pay attention to people and objects in the vicinity.

3D video may be mistaken for actual objects, and the related bodily movements can cause damage to objects and lead to injury.

Use 3D Eyewear when viewing 3D videos.

Do not tilt your head when viewing with 3D Eyewear.

Those who are near or far sighted, those with weaker eyesight in one eye, or those with astigmatism should use corrective glasses etc. when using 3D Eyewear.

If the image appears distinctly double when viewing 3D video, discontinue viewing.

Watching for long periods of time may cause eye fatigue.

View at a distance of at least three times the effective height of the screen.

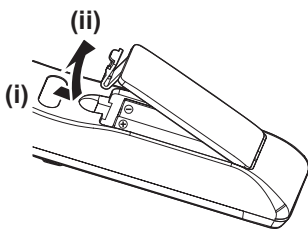
Viewing at distance closer than the recommended distance may cause eye fatigue. As with movies, if there are black bands at the top and bottom of the video, view at a distance of 3 times or more of the height of the video section.

Children younger than 5 or 6 years old should not use 3D Eyewear.

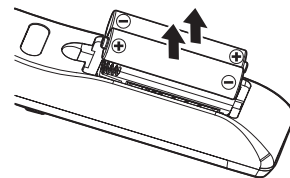
As it is difficult to gauge the reactions of children to fatigue and discomfort, their condition may worsen suddenly. If a child uses the 3D Eyewear, guardians should beware of the child's eyes becoming tired.

To remove the battery

1. Press the guide and lift the cover.



2. Remove the batteries.



Brazil Only Brasil Apenas

■ Manuseio de baterias usadas

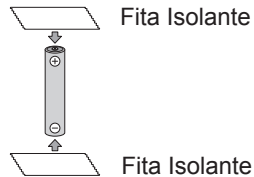


BRASIL

Após o uso, as pilhas e /ou baterias deverão ser entregues ao estabelecimento comercial ou rede de assistência técnica autorizada.

Cobrir os terminais positivo (+) e negativo (-) com uma fita isolante adesiva, antes de depositar numa caixa destinada para o recolhimento. O contato entre partes metálicas pode causar vazamentos, gerar calor, romper a blindagem e produzir fogo. (Fig. 1)

Fig. 1
Como isolar os terminais



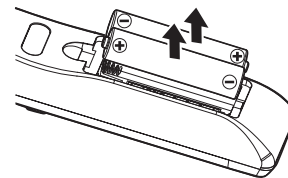
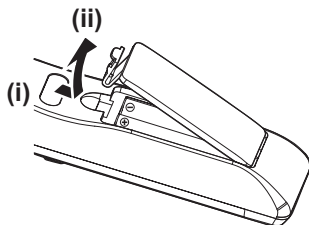
Não desmonte, não remova o invólucro, nem amasse a bateria. O gás liberado pela bateria pode irritar a garganta, danificar o lacre do invólucro ou o vazamento provocar calor, ruptura da blindagem e produzir fogo devido ao curto circuito dos terminais. Não incinere nem aqueça as baterias, elas não podem ficar expostas a temperaturas superiores a 100 °C (212 °F). O gás liberado pela bateria pode irritar a garganta, danificar o lacre do invólucro ou o vazamento provocar calor, ruptura da blindagem e produzir fogo devido ao curto circuito dos terminais provocado internamente.

Evite o contato com o líquido que vazar das baterias. Caso isto ocorra, lave bem a parte afetada com bastante água. Caso haja irritação, consulte um médico.

■ Remoção das baterias

1. Pressione a guia e levante a tampa.

2. Remova as baterias.



■ Trademarks

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- The terms HDMI and HDMI High-Definition Multimedia Interface, and the HDMI Logo are trademarks or registered trademarks of HDMI Licensing Administrator, Inc. in the United States and other countries.
- Trademark PJLink is a trademark applied for trademark rights in Japan, the United States of America and other countries and areas.
- DLP, DLP Link and BrilliantColor are trademarks or registered trademarks of Texas Instruments.
- Crestron Connected, the Crestron Connected logo, Crestron Fusion, Crestron RoomView, and RoomView are either trademarks or registered trademarks of Crestron Electronics, Inc. in the United States and/or other countries.
- Adobe, Acrobat, Flash Player, and Reader are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States and/or other countries.
- All other names, company names, and product names mentioned in this manual are trademarks or registered trademarks of their respective owners.
Please note that the ® and ™ symbols are not specified in this manual.

■ Software information regarding this product

This product incorporates the following software:

- (1) the software developed independently by or for Panasonic Corporation,
- (2) the software owned by third party and licensed to Panasonic Corporation,
- (3) the software licensed under the GNU General Public License, Version 2.0 (GPL V2.0),
- (4) the software licensed under the GNU LESSER General Public License, Version 2.1 (LGPL V2.1), and/or
- (5) open source software other than the software licensed under the GPL V2.0 and/or LGPL V2.1.

The software categorized as (3) - (5) are distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY, without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. Please refer to the detailed terms and conditions thereof shown in the "Operating Instructions - Basic Guide" supplied with the product.

At least three (3) years from delivery of this product, Panasonic will give to any third party who contacts us at the contact information provided below, for a charge no more than our cost of physically performing source code distribution, a complete machine-readable copy of the corresponding source code covered under GPL V2.0, LGPL V2.1 or the other licenses with the obligation to do so, as well as the respective copyright notice thereof.

Contact Information: oss-cd-request@gg.jp.panasonic.com

■ Illustrations in these operating instructions

- Illustrations of the projector, menu screen (OSD), and other parts may vary from the actual product.
- Illustrations displayed on the computer screen may differ depending on the computer type and its operating system.
- Illustrations of the projector with the power cord attached are only examples. The shape of the supplied power cords varies depending on the country where you purchased the product.

■ Page references

- Reference pages in this manual are indicated as: (➡ page 00).

■ Terms

- In this manual, the "Wireless remote control unit" accessory is referred to as the "Remote control".

Features of the Projector

High image quality

- ▶ Faithful colors are realized by a wide color gamut and excellent color reproducibility.
- ▶ Color breaking is virtually non-noticeable, which encourages audiences to focus on the projected image without distraction.

Simple, stress-free operability and useful function

- ▶ The CEC function is supported by the two HDMI terminals.
- ▶ USB power supply (DC 5 V, 2 A) is available using the <DC OUT> terminal.

Long-lasting stable performance

- ▶ The independent RGB LED light source and DLP(TM) system allows 24/7 operation.
- ▶ Long-term operation is achieved by filter-free design and optical block sealing technology.

Quick Steps

For details, see the corresponding pages.

1. **Set up your projector.**
(⇒ page 31)



2. **Connect with other devices.**
(⇒ page 35)



3. **Connect the power cord.**
(⇒ page 39)



4. **Power on.**
(⇒ page 40)



5. **Make initial settings.**
(⇒ page 41)

- Take this step when you power on for the first time after purchasing the projector.



6. **Select the input signal.**
(⇒ page 44)



7. **Adjust the image.**
(⇒ page 45)

Chapter 1 Preparation

This chapter describes things you need to know or check before using the projector.

Precautions for use

Intended use of the product

The product is intended to project still/moving image signals from video equipment and computers onto a screen.

Cautions when transporting

- When transporting the projector, hold it securely by its bottom and avoid excessive vibration and impacts. Doing so may damage the internal parts and result in malfunctions.
- Do not transport the projector with the adjustable feet extended. Doing so may damage the adjustable feet.

Cautions when installing

■ Do not set up the projector outdoors.

The projector is designed for indoor use only.

■ Do not set up the projector in the following locations.

- Places where vibration and impacts occur such as in a car or vehicle: Doing so may cause damage to internal components or malfunction.
- Locations near the sea or areas affected by corrosive gas: Corrosion may damage internal components or cause the projector to malfunction.
- Near the exhaust of an air conditioner: Depending on the conditions of use, the screen may fluctuate in rare cases due to the heated air from the exhaust vent or the hot or cooled air from an air conditioner. Make sure that the exhaust from the projector or other equipment, or the air from the air conditioner does not blow toward the front of the projector.
- Places with sharp temperature fluctuations such as near lights (studio lamps): Doing so may shorten the life of the light source, or result in deformation of the outer case due to heat, which may cause malfunctions. Follow the operating environment temperature of the projector.
- Near high-voltage power lines or near motors: Doing so may interfere with the operation of the projector.
- Places where there is high-power laser equipment: Directing a laser beam onto the projection lens surface causes damage to the DLP chips.

■ Ask a qualified technician or your dealer for the installation work such as installing to a ceiling.

To ensure projector performance and safety, ask a qualified technician or your dealer when installing to a ceiling or in a high place.

■ Focus adjustment

The projection lens is thermally affected by the light from the light source, making the focus unstable in the period just after switching on the power. It is recommended that the images be projected continuously for at least 30 minutes before the focus is adjusted.

■ When using the projector below 1 400 m (4 593') above sea level, make sure [High Altitude] is set to [Off].

Failure to do so may shorten the life of the internal parts and result in malfunctions.

■ When setting [Light Power] to [Normal] and using the projector between 1 400 m (4 593') and 2 100 m (6 890') above sea level, make sure [High Altitude] is set to [High 1].

Failure to do so may shorten the life of the internal parts and result in malfunctions.

■ When setting [Light Power] to [Normal] and using the projector between 2 100 m (6 890') and 2 700 m (8 858') above sea level, make sure [High Altitude] is set to [High 2].

Failure to do so may shorten the life of the internal parts and result in malfunctions.

■ When setting [Light Power] to [Eco] or [Quiet] and using the projector between 1 400 m (4 593') and 4 200 m (13 780') above sea level, make sure [High Altitude] is set to [High].

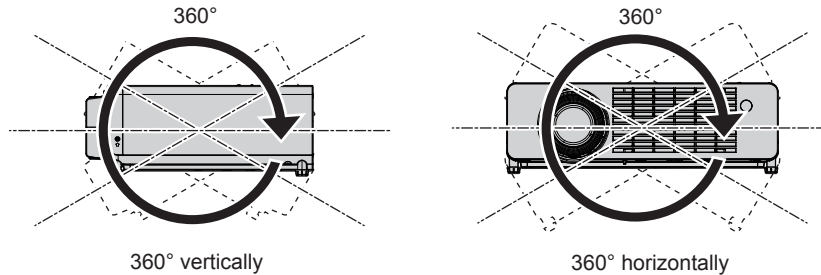
Failure to do so may shorten the life of the internal parts and result in malfunctions.

■ Do not install the projector at an altitude of 4 200 m (13 780') or higher above sea level. (Altitude of 4 200 m (13 780') above sea level is the maximum height that the performance of this projector is guaranteed.)

■ Do not use the projector in a location that the ambient temperature exceeds 40°C (104°F).

Using the projector in a location that the altitude is too high or the ambient temperature is too high may reduce the life of the components or result in malfunctions.

■ Projection in 360° vertically and horizontally is possible.



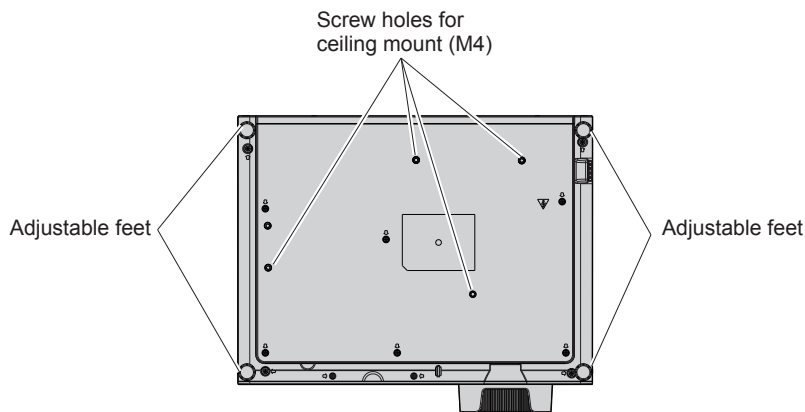
■ Cautions when setting the projectors

- Use the adjustable feet only for the floor standing installation and for adjusting the angle. Using them for other purposes may damage the projector.
- When installing the projector with a method other than the floor installation using the adjustable feet or the ceiling installation using the ceiling mount bracket, use the four screw holes for ceiling mount (as shown in the figure) to fix the projector.

In such case, make sure that there is no clearance between the screw holes for ceiling mount on the projector bottom and the setting surface by inserting spacers (metallic) between them.

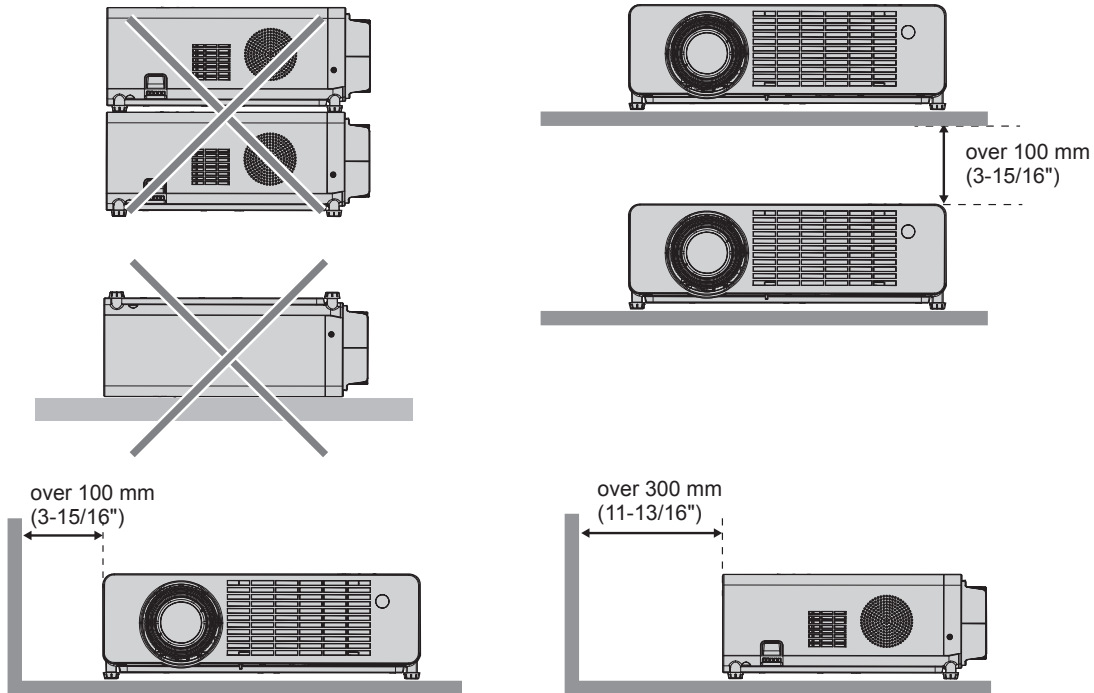
- Use a torque screwdriver or Allen torque wrench to tighten the fixing screws to their specified tightening torques. Do not use electric screwdrivers or impact screwdrivers.

(Screw diameter: M4, tapping depth inside the projector: 8 mm (5/16"), screw tightening torque: 1.25 ± 0.2 N·m)



Positions of screw holes for ceiling mount and adjustable feet

- Do not stack the projectors.
- Do not use the projector supporting it by the top.
- Do not block the vents (intake and exhaust) of the projector.
- Avoid heating and cooling air from the air conditioning system directly blow to the vents (intake and exhaust) of the projector.



- Do not install the projector in a confined space. When placing the projector in a confined space, a ventilation and/or air conditioning system is required. Exhaust heat may accumulate when the ventilation is not enough, triggering the protection circuit of the projector.
- Panasonic takes no responsibility for any damage to the product caused by an inappropriate choice of location for installing the projector, even if the warranty period of the product has not expired.

Security

Take safety measures against following incidents.

- Personal information being leaked via this product.
- Unauthorized operation of this product by a malicious third party.
- Interfering or stopping of this product by a malicious third party.

Take sufficient security measures.

- Make your password as difficult to guess as possible.
- Change your password periodically. The password can be set in [Setup] menu → [Security] → [Change Password].
- Panasonic or its affiliate company never inquires a password directly to a customer. Do not tell your password in case you receive such an inquiry.
- The connecting network must be secured by firewall or others.
- Set a password for web control and restrict the users who can log in. A password for the web control can be set in the [General Setup] page of the web control screen.

Application software supported by the projector

The projector supports following application software. For details or downloading each application software, visit the Panasonic website (<https://panasonic.net/cns/projector/>).

- **Multi Monitoring & Control Software**

This application software monitors and controls the multiple display devices (projector and flat panel display) connected to an intranet.

- **Early Warning Software**

This plug-in software monitors the status of the display devices and their peripherals within an intranet, and notifies of abnormality of such equipment and detects the signs of possible abnormality. "Early Warning Software" is preinstalled in the "Multi Monitoring & Control Software". To use the early warning function of

this plug-in software, install “Multi Monitoring & Control Software” in the PC to be used. By enabling the early warning function, it will notify of the approximate time to replace the consumables for the display devices, to clean each part of the display devices, and to replace the components of the display devices, allowing to execute maintenance in advance.

The early warning function can be used by registering maximum of 2048 display devices free of charge for 90 days after installing the “Multi Monitoring & Control Software” into a PC. To continuously use after the 90 days, it is necessary to purchase the license of “Early Warning Software” (ET-SWA100 Series) and perform the activation. Also, depending on the type of license, the number of display devices that can be registered for monitoring varies. For details, refer to the Operating Instructions of “Multi Monitoring & Control Software”.

Storage

When storing the projector, keep it in a dry room.

Disposal

To dispose of the product, ask your local authorities or dealer for correct methods of disposal. Also, dispose of the product without disassembling.

Cautions on use

■ To get a good picture quality

In order to view a beautiful image in higher contrast, prepare an appropriate environment. Draw curtains or blinds over windows and turn off any lights near the screen to prevent outside light or light from indoor lamps from shining onto the screen.

■ Projection lens

- Do not touch the surface of the projector lens with your bare hand.

If the surface of the lens becomes dirty from fingerprints or anything else, this will be magnified and projected onto the screen.

It is recommended to attach the supplied lens cap to the projection lens when you do not use the projector.

- Do not wipe the lens during operation.

Cleaning the lens during operation may cause foreign objects adhering to the lens or bring damage to the lens surface.



Indicated on the projector

■ DLP chips

- The DLP chips are precision-made. Note that in rare cases, pixels of high precision could be missing or always lit. Such a phenomenon does not indicate malfunction.
- Directing a high-power laser beam onto the projection lens surface can damage the DLP chips.

■ Light source

The light source of the projector uses LED, and has the following characteristics.

- The luminance of the light source will decrease by duration of usage.

The usage time until when the luminance of the light source decreases by half is approximately 20 000 hours. 20 000 hours is the estimated duration, and it varies depending on individual differences and usage conditions. If the light source goes off or the brightness reduces noticeably, ask your dealer about replacement of the light source unit.

■ Computer and external device connections

When connecting a computer or an external device, read this manual carefully regarding the use of power cords and shielded cables as well.

■ Viewing 3D images

The projector can display the 3D video signal input in various formats such as “frame packing”, “side by side”, etc. You are required to prepare external devices for viewing 3D images (such as 3D eyewear, video signal output devices) which are suitable for your 3D system. Connections of the projector and external devices vary depending on the 3D system to be used, see the operating instructions of external devices you use.

Refer to “List of 3D compatible signals” (➡ page 106) for the types of 3D video signals that can be used with the projector.

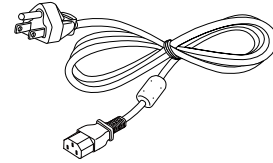
Accessories

Make sure the following accessories are provided with your projector. Numbers enclosed < > show the number of accessories.

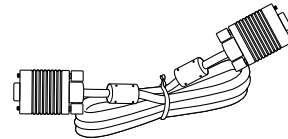
Wireless remote control unit <1>
(45.7G001G002)



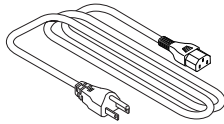
For Taiwan
(LT-202+501)



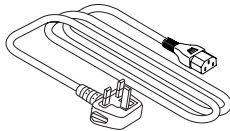
VGA cable <1>
(42.00200G110)



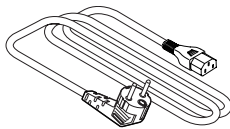
Power cord
(42.50115G101)



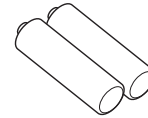
(42.00110G111)



(42.00120G111)

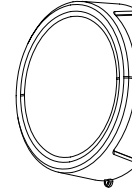


AAA/R03 or AAA/LR03 battery <2>



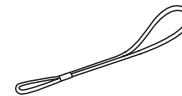
(For remote control unit)

Lens cap <1>
(75.7G003G003)



(Attached to the projector at the time of purchase)

String <1>
(51.8SF33G001)



(For lens cap)

Attention

- After unpacking the projector, discard the power cord cap and packaging material properly.
- Do not use the supplied power cord for devices other than this projector.
- For lost accessories, consult your dealer.
- Store small parts in an appropriate manner, and keep them away from young children.

Note

- The type and number of the power cord depend on the country in which you purchased the product.
- The part numbers of accessories are subject to change without prior notice.

Optional accessories

Options	Model No.
Ceiling Mount Bracket	ET-PKL100H (for high ceilings) ET-PKL100S (for low ceilings) ET-PKV400B (Projector Mount Bracket)
Early Warning Software (Basic license/3-year license)	ET-SWA100 series *1

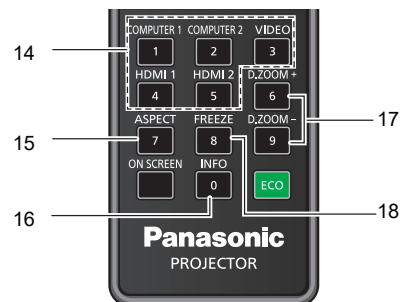
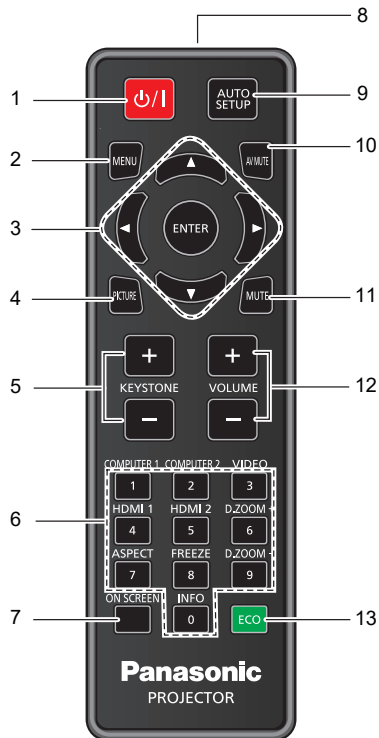
*1 The suffix of the Model No. differs according to the license type.

Note

- The model numbers of optional accessories are subject to change without prior notice.

About your projector

Remote control



1 Power <⏻/▶> button (⏻ standby / ▶ power on)

Sets the projector to the state where the projector is switched off (standby mode). Also starts projection when the power is switched off (standby mode).

2 <MENU> button

Displays or hides the main menu. (➔ page 53)
When the sub menu is displayed, pressing it will return to the previous screen.

3 <ENTER> button / ▲▼◀▶ buttons

Used to navigate through the menu screen.

4 <PICTURE> button

Displays the [Picture Mode] setting screen.
(➔ page 50)

5 <KEystone +> button / <KEystone -> button

Corrects the distortion of the projected image.
(➔ page 49)

6 Number (<0> ~ <9>) buttons

Used for entering a password.

7 <ON SCREEN> button

Switches on (display)/off (hide) the on-screen display function. (➔ page 48)

8 Remote control signal transmitter

9 <AUTO SETUP> button

Automatically adjusts the image display position while the image is projected. (➔ page 48)

10 <AV MUTE> button

Used to turn off the audio and video temporarily.
(➔ page 47)

11 <MUTE> button

Used when temporarily turning off the audio.
(➔ page 47)

12 <VOLUME +> button / <VOLUME -> button

Adjusts the volume of the built-in speaker or audio output. (➔ page 47)

13 <ECO> button

Displays the setting screen relating to ECO management. (➔ page 50)

14 Input selection buttons (<COMPUTER 1> / <COMPUTER 2> / <VIDEO> / <HDMI1> / <HDMI2>)

Switches the input signal to project. (➔ page 44)

15 <ASPECT> button

Displays the [Aspect Ratio] setting screen.
(➔ page 49)

16 <INFO> button

Displays the status of the projector. (➔ page 82)

17 <D.ZOOM +/-> buttons

Zoom in and out the images. (➔ page 49)

18 <FREEZE> button

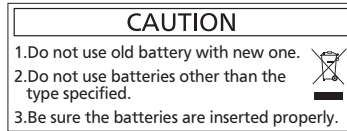
Pauses the projected image and mute the audio temporarily. (➔ page 48)

Attention

- Do not drop the remote control.
- Avoid contact with liquids.
- Do not attempt to modify or disassemble the remote control.
- Please observe the following contents that are described on the back of the remote control unit (see picture below).
 - Do not use a new battery together with an old battery.
 - Do not use unspecified batteries.
 - Make sure the polarities (+ and -) are correct when inserting the batteries.

Chapter 1 Preparation - About your projector

In addition, please read the contents that are related to batteries in the "Read this first!".



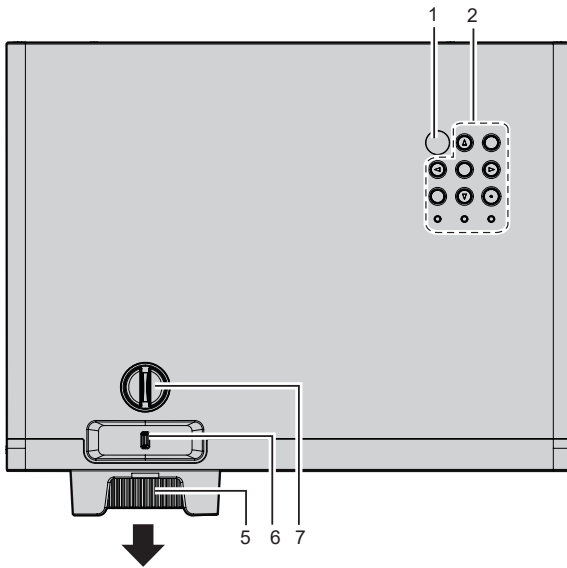
Caution label at the back of the remote control

Note

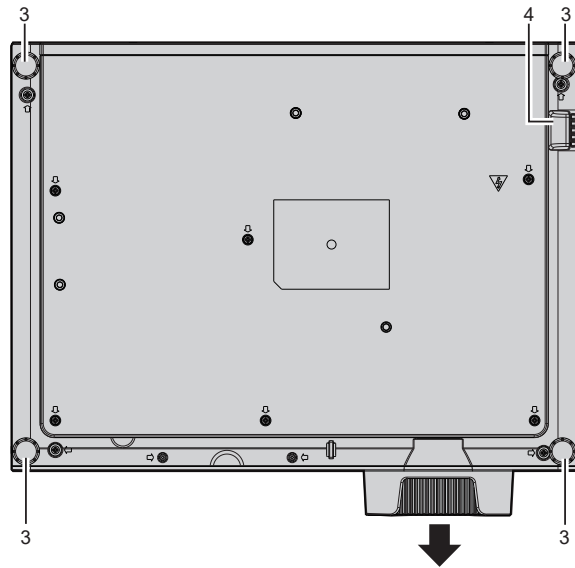
- The remote control can be used within a distance of about 8 m (26'3") if pointed directly at the remote control signal receiver. The remote control can control at angles of up to $\pm 15^\circ$ vertically and $\pm 15^\circ$ horizontally, but the effective control range may be reduced.
- If there are any obstacles between the remote control and the remote control signal receiver, the remote control may not operate correctly.
- You can operate the projector by reflecting the remote control signal on the screen. The operating range may differ due to the loss of light caused by the properties of the screen.
- When the remote control signal receiver is lit with a fluorescent light or other strong light source, the projector may become inoperative. Set the projector as far from the luminous source as possible.
- The power indicator <ON(G)/STANDBY(R)> will blink if the projector receives a remote control signal.

Projector body

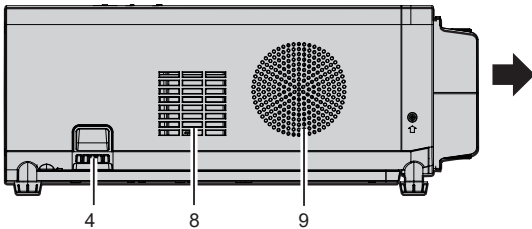
■ Top



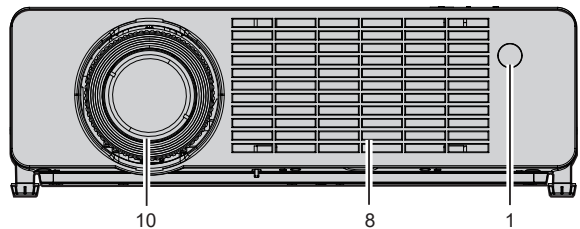
■ Bottom



■ Side



■ Front

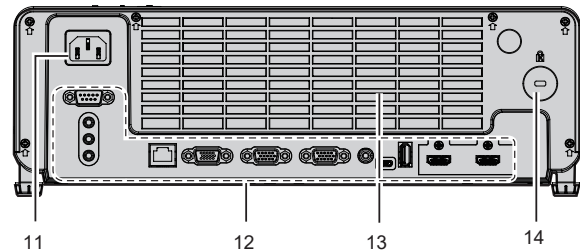


■ Side



← Projection Direction

■ Rear

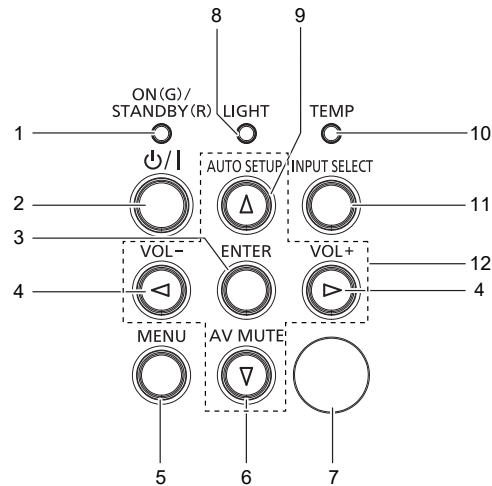


- | | |
|---|--|
| <p>1 Remote control signal receiver</p> <p>2 Control panel and indicators (→ page 26)</p> <p>3 Adjustable feet
Adjust the projection angle.</p> <p>4 Burglar hook port
Attaches a burglar prevention cable, etc.</p> <p>5 Focus ring
Adjust the focus.</p> <p>6 Zoom Lever
Adjusts the zoom.</p> <p>7 Vertical lens shift dial
Adjusts the projecting position in the vertical direction (vertical shift).</p> | <p>8 Intake vent</p> <p>9 Speaker</p> <p>10 Projection lens</p> <p>11 <AC IN> terminal
Connect the supplied power cord.</p> <p>12 Connecting terminals (→ page 27)</p> <p>13 Exhaust vent</p> <p>14 Security slot
This security slot is compatible with the Kensington security cables.</p> |
|---|--|

Attention

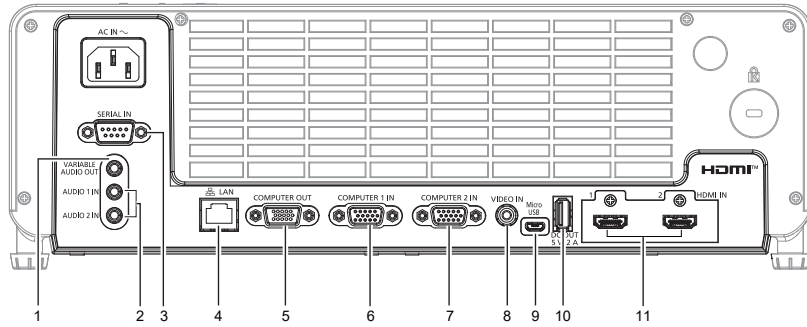
- Do not block the vents (intake and exhaust) of the projector. The components may deteriorate faster if cooling inside the projector is inhibited.

■ Control panel and indicators



- | | |
|---|--|
| <p>1 Power indicator <ON(G)/STANDBY(R)>
Displays the status of the power.</p> <p>2 Power <P/I> button (P standby / power on)
Sets the projector to the state where the projector is switched off (standby mode). Also starts projection when the power is switched off (standby mode).</p> <p>3 <ENTER> button
Determines and executes an item in the menu screen.</p> <p>4 <VOL-> button / <VOL+> button
Adjusts the volume of the built-in speaker or audio output. (➔ page 47)</p> <p>5 <MENU> button
Displays or hides the main menu. (➔ page 53)
When the sub menu is displayed, pressing it will return to the previous screen.</p> <p>6 <AV MUTE> button
Used to turn off the audio and video temporarily. (➔ page 47)</p> | <p>7 Remote control signal receiver</p> <p>8 Light source indicator <LIGHT>
Indicates the status of the light source.</p> <p>9 <AUTO SETUP> button
Automatically adjusts the image display position while the image is projected. (➔ page 48)</p> <p>10 Temperature indicator <TEMP>
Indicates the internal temperature status.</p> <p>11 <INPUT SELECT> button
Displays the [Input] setting screen. (➔ page 44)
In addition, pressing this button will automatically search for an available input if the [Setup] menu → [Options] → [Signal Search] has been set to [On].</p> <p>12 ▲▼◀▶ buttons
Used to select the menu screen items, switch the setting or adjust the level.
Also used to enter a password in the [Security] menu.</p> |
|---|--|

■ Connecting terminals



- | | |
|---|--|
| <p>1 <VARIABLE AUDIO OUT> terminal
This is the terminal to output the audio signal input to the projector.</p> <p>2 <AUDIO 1 IN> terminal / <AUDIO 2 IN> terminal
These are the terminals to input audio signals.</p> <p>3 <SERIAL IN> terminal
This is the RS-232C compatible terminal to externally control the projector by connecting a computer.</p> <p>4 <LAN> terminal
This is the LAN terminal to connect to the network.</p> <p>5 <COMPUTER OUT> terminal
This is the terminal to output the signals input from the <COMPUTER 1 IN> terminal or the <COMPUTER 2 IN> terminal to an external device.</p> <p>6 <COMPUTER 1 IN> terminal
This is the terminal to input RGB signals or $Y C_B C_R / Y P_B P_R$ signals.</p> | <p>7 <COMPUTER 2 IN> terminal
This is the terminal to input RGB signals or $Y C_B C_R / Y P_B P_R$ signals.</p> <p>8 <VIDEO IN> terminal
This is the terminal to input video signals.</p> <p>9 <Micro USB> terminal
For service use.</p> <p>10 <DC OUT> terminal
This is the USB terminal only used for power supply. (DC 5 V, maximum 2.0 A)</p> <p>11 <HDMI IN 1> terminal / <HDMI IN 2> terminal
These are the terminals to input HDMI signals.</p> |
|---|--|

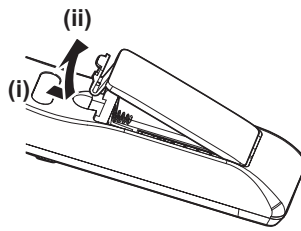
Attention

- When a LAN cable is directly connected to the projector, the network connection must be made indoors. The signal may deteriorate due to the effect of noise or cable length.

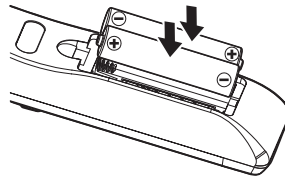
Preparing the remote control

Installing / replacing the batteries

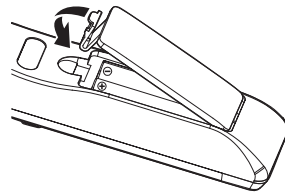
- 1) Push the clip to release the battery cover.



- 2) Install new batteries. Ensure that you have the batteries' polarity (+/-) aligned correctly.



- 3) Close the battery cover and press it down until it clicks into place.

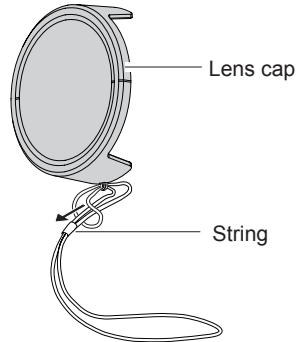


Attaching the lens cap

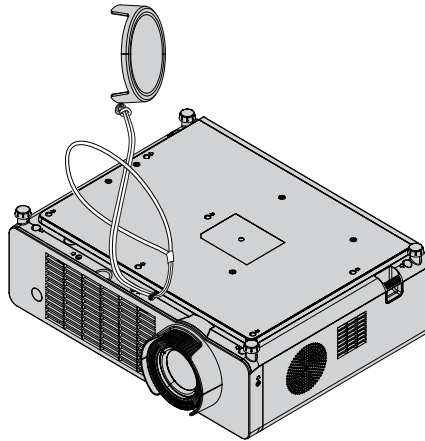
When moving this projector or while not using it over an extended period of time, it is recommended to attach the lens cap to avoid contaminating the lens.

To prevent loss of the lens cap, please attach the lens cap with the string of accessories according to the following procedures.

- 1) Thread the thinner end of the string through the hole on the lens cap.



- 2) Thread the other side (the side with larger ring) of the string through the hole at the bottom of the projector and fasten it.



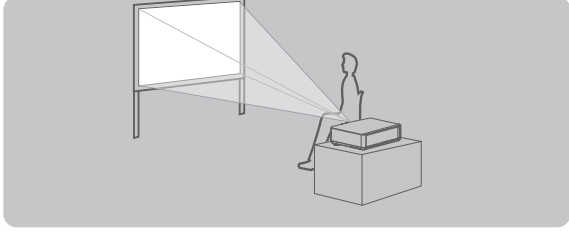
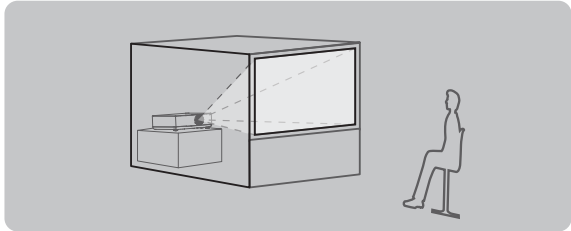
Chapter 2 Getting Started

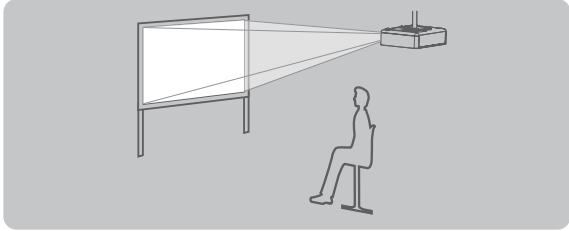
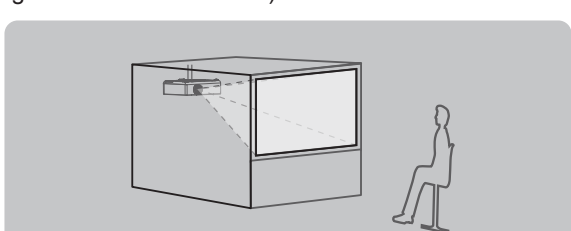
This chapter describes things you need to do before using the projector such as the setup and connections.

Setting up

Installation mode

There are four ways to set up the projector. Set the [Setup] menu → [Projection Method] (➔ page 69) depending on the installation location.

Setting on a desk/floor and projecting forward		Setting on a desk/floor and projecting from rear (Using the translucent screen)	
			
Menu item	Setting value	Menu item	Setting value
[Projection Method]	[Front] (icon)	[Projection Method]	[Rear] (icon)

Mounting on the ceiling and projecting forward		Mounting on the ceiling and projecting from rear (Using the translucent screen)	
			
Menu item	Setting value	Menu item	Setting value
[Projection Method]	[Front Ceiling] (icon)	[Projection Method]	[Rear Ceiling] (icon)

Parts for ceiling mount (Optional)

This requires an optional ceiling mount bracket. Be sure to use the Projector Mount Bracket together with the ceiling mount bracket for high ceilings or low ceilings.

Model No.: ET-PKL100H (for high ceilings), ET-PKL100S (for low ceilings), ET-PKV400B (Projector Mount Bracket)

- Use only the ceiling mount brackets specified for this projector.
- Refer to the Installation Instructions for the ceiling mount bracket when you install the bracket and the projector.

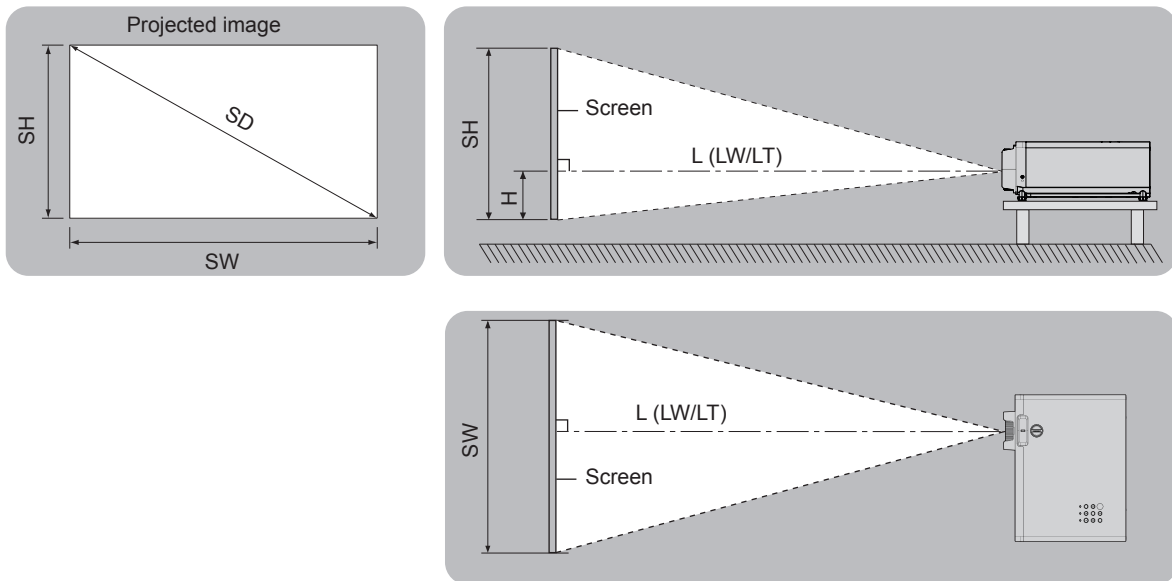
Attention

- To ensure projector performance and security, installation of the ceiling mount bracket must be carried out by your dealer or a qualified technician.

Screen size and throw distance

Refer to the screen size and projection distances to install the projector. Image size and image position can be adjusted in accordance with the screen size and screen position.

- Following illustration is prepared on the assumption that the projected image size and position have been aligned to fit full in the screen.



L (LW/LT) *1	Projection distance
SH	Image height
SW	Image width
H	Distance from the center of lens to the image lower end
SD	Projected image size

*1 LW : Minimum distance
 LT : Maximum distance

Attention

- Before installing, please read "Precautions for use" (➔ page 17).
- Do not use the projector and the high-powered laser equipment in the same room. The DLP chips can be damaged if a laser beam hits the projection lens surface.

Projection distance

A ±5% error in listed projection distances may occur.

Also, it is corrected to become smaller than the specified image size when [Keystone] is used.

PT-LRZ35 / PT-LRZ35U

(Unit: m)

Projection size	16:10 aspect ratio			16:9 aspect ratio			4:3 aspect ratio		
	Minimum distance (LW)	Maximum distance (LT)	Distance from lens center to image lower end (H)	Minimum distance (LW)	Maximum distance (LT)	Distance from lens center to image lower end (H)	Minimum distance (LW)	Maximum distance (LT)	Distance from lens center to image lower end (H)
1.02 (40")	1.09	1.44	-0.054~0.000	1.12	1.48	-0.024~0.030	1.24	1.63	-0.054~0.000
1.27 (50")	1.37	1.81	-0.067~0.000	1.41	1.86	-0.030~0.037	1.55	2.05	-0.067~0.000
1.52 (60")	1.65	2.18	-0.081~0.000	1.69	2.23	-0.036~0.045	1.86	2.46	-0.081~0.000
1.78 (70")	1.93	2.55	-0.094~0.000	1.99	2.62	-0.042~0.052	2.19	2.88	-0.094~0.000
2.03 (80")	2.21	2.91	-0.108~0.000	2.27	2.99	-0.048~0.060	2.50	3.30	-0.108~0.000
2.29 (90")	2.50	3.28	-0.121~0.000	2.57	3.38	-0.054~0.067	2.83	3.72	-0.121~0.000
2.54 (100")	2.78	3.65	-0.135~0.000	2.86	3.75	-0.060~0.075	3.15	4.14	-0.135~0.000
3.05 (120")	3.34	4.39	-0.162~0.000	3.44	4.52	-0.072~0.090	3.70	4.97	-0.162~0.000
3.81 (150")	4.19	5.50	-0.202~0.000	4.30	5.65	-0.090~0.112	4.74	6.23	-0.202~0.000
5.08 (200")	5.60	7.34	-0.269~0.000	5.75	7.55	-0.120~0.150	6.33	8.31	-0.269~0.000
6.35 (250")	7.01	9.19	-0.337~0.000	7.20	9.45	-0.150~0.187	7.93	10.41	-0.337~0.000
7.62 (300")	8.41	11.04	-0.404~0.000	8.65	11.34	-0.180~0.224	9.52	12.49	-0.404~0.000

PT-LRW35 / PT-LRW35U

(Unit: m)

Projection size	16:10 aspect ratio			16:9 aspect ratio			4:3 aspect ratio		
	Minimum distance (LW)	Maximum distance (LT)	Distance from lens center to image lower end (H)	Minimum distance (LW)	Maximum distance (LT)	Distance from lens center to image lower end (H)	Minimum distance (LW)	Maximum distance (LT)	Distance from lens center to image lower end (H)
1.02 (40")	1.14	1.51	-0.043~0.014	1.18	1.56	-0.013~0.044	1.30	1.72	-0.043~0.014
1.27 (50")	1.44	1.90	-0.054~0.017	1.48	1.95	-0.016~0.054	1.63	2.15	-0.054~0.017
1.52 (60")	1.74	2.29	-0.065~0.020	1.78	2.34	-0.020~0.065	1.96	2.58	-0.065~0.020
1.78 (70")	2.03	2.67	-0.075~0.024	2.09	2.75	-0.023~0.076	2.30	3.03	-0.075~0.024
2.03 (80")	2.33	3.06	-0.086~0.027	2.39	3.14	-0.026~0.087	2.63	3.46	-0.086~0.027
2.29 (90")	2.62	3.45	-0.969~0.030	2.70	3.55	-0.902~0.098	2.97	3.91	-0.969~0.030
2.54 (100")	2.92	3.94	-0.108~0.034	3.00	3.94	-0.033~0.108	3.31	4.34	-0.108~0.034
3.05 (120")	3.51	4.61	-0.129~0.040	3.61	4.74	-0.039~0.130	3.98	5.22	-0.129~0.040
3.81 (150")	4.40	5.78	-0.162~0.051	4.52	5.94	-0.049~0.163	4.98	6.54	-0.162~0.051
5.08 (200")	5.88	7.72	-0.215~0.067	6.04	7.93	-0.066~0.217	6.66	8.73	-0.215~0.067
6.35 (250")	7.36	9.65	-0.269~0.084	7.57	9.92	-0.082~0.271	8.33	10.92	-0.269~0.084
7.62 (300")	8.84	11.59	-0.323~0.101	9.09	11.91	-0.099~0.325	10.01	13.12	-0.323~0.101

Projection distance formulas

To use a projected image size not listed in this manual, check the projected image size SD (m) and use the respective formula to calculate the value.

The unit of all the formulae is m. (Values obtained by the following calculation formulae contain a slight error.)

When calculating the value using image size designation (value in inches), multiply the value in inches by 0.0254 and substitute it into SD in the formula.

PT-LRZ35 / PT-LRZ35U

Aspect ratio		16:10	16:9	4:3
Screen height (SH)		= 0.530 × SD	= 0.490 × SD	= 0.6 × SD
Screen width (SW)		= 0.848 × SD	= 0.872 × SD	= 0.8 × SD
Projection distance (L)	Minimum (LW)	= 1.1097 × SD - 0.0407	= 1.1402 × SD - 0.0407	= 1.2562 × SD - 0.0532
	Maximum (LT)	= 1.4535 × SD - 0.0397	= 1.4940 × SD - 0.0402	= 1.6456 × SD - 0.0443

PT-LRW35 / PT-LRW35U

Aspect ratio		16:10	16:9	4:3
Screen height (SH)		= 0.530 × SD	= 0.490 × SD	= 0.6 × SD
Screen width (SW)		= 0.848 × SD	= 0.872 × SD	= 0.8 × SD
Projection distance (L)	Minimum (LW)	= 1.1656 × SD - 0.0420	= 1.1978 × SD - 0.0412	= 1.3193 × SD - 0.0454
	Maximum (LT)	= 1.5252 × SD - 0.0282	= 1.5688 × SD - 0.0409	= 1.7279 × SD - 0.0450

Connecting

Before connecting

- Before connecting, carefully read the operating instructions for the external device to be connected.
- Turn off the power switch of the devices before connecting cables.
- Take note of the following points before connecting the cables. Failure to do so may result in malfunctions.
 - When connecting a cable to a device connected to the projector or the projector itself, touch any nearby metallic objects to eliminate static electricity from your body before performing work.
 - Do not use unnecessarily long cables to connect to a device connected to the projector or to the projector body. The longer the cable, the more it is susceptible to noise. Since using a cable while it is wound makes it act like an antenna, it is more susceptible to noise.
 - When connecting cables, connect GND first, then insert the connecting terminal of the connecting device in a straight manner.
- If any connection cable is not supplied with the device, or if no optional cable is available for connection of the device, prepare a necessary system connection cable to suit the device.
- Video signals containing too much jitter may cause the images on the screen to randomly wobble or wafture. In this case, a time base corrector (TBC) must be connected.
- The projector accepts Video signals, $YC_B C_R / YP_B P_R$ signals and analog RGB signals (synchronous signals are TTL level), and digital signal.
- Some computer models or graphics cards are not compatible with the projector.
- When using long cables to connect with each of equipment to the projector, there is a possibility that the image will not be output correctly unless a compensator is used.
- For details on what video signals the projector supports, see “List of compatible signals” (➔ page 104).

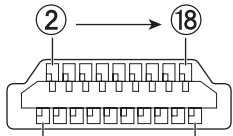
<COMPUTER 1 IN> / <COMPUTER 2 IN> terminals pin assignments and signal names

Outside view	Pin No.	Signal names	Pin No.	Signal names
	①	R/P _R	⑨	+5 V
	②	G/Y	⑩	GND
	③	B/P _B	⑪	—
	④	—	⑫	DDC data
	⑤	GND	⑬	H-Sync
	⑥	GND	⑭	V-Sync
	⑦	GND	⑮	DDC clock
	⑧	GND		

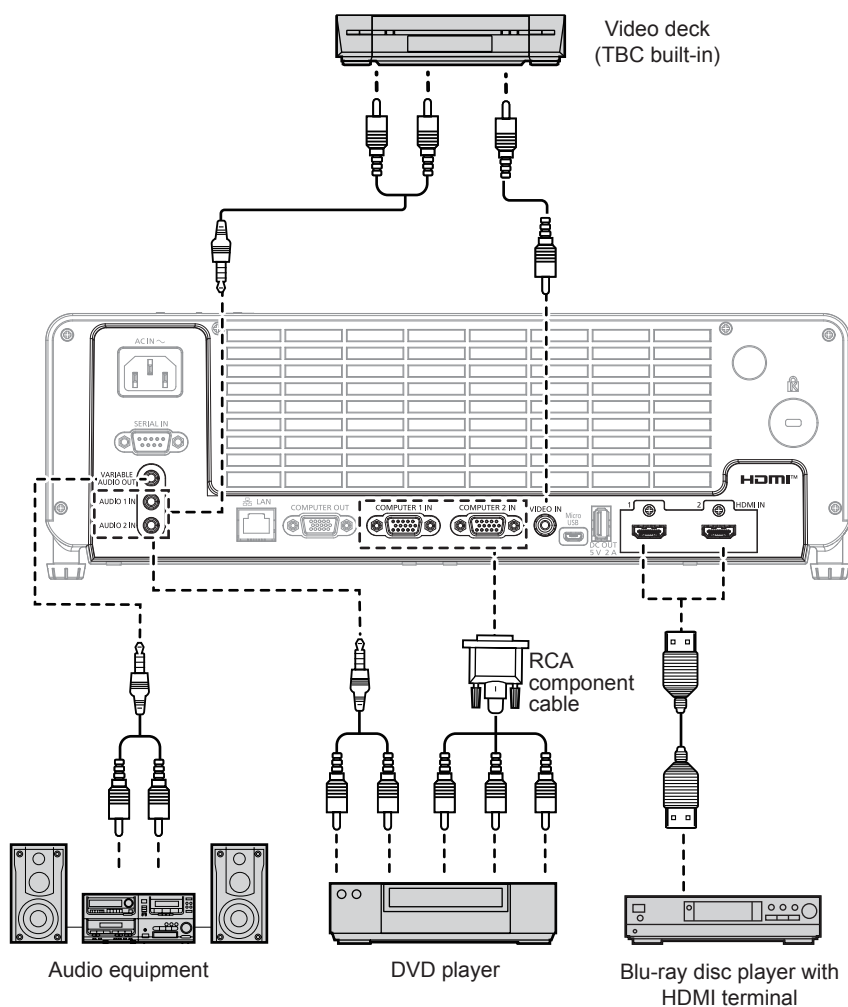
<COMPUTER OUT> terminal pin assignments and signal names

Outside view	Pin No.	Signal names	Pin No.	Signal names
	①	R/P _R	⑨	—
	②	G/Y	⑩	—
	③	B/P _B	⑪	—
	④	—	⑫	—
	⑤	GND	⑬	H-Sync
	⑥	GND	⑭	V-Sync
	⑦	GND	⑮	—
	⑧	GND		

<HDMI IN 1> / <HDMI IN 2> terminals pin assignments and signal names

Outside view	Pin No.	Signal names	Pin No.	Signal names
<p>Even-numbered pins ② to ⑱</p>  <p>Odd-numbered pins ① to ⑲</p>	①	T.M.D.S data 2+	⑪	T.M.D.S clock shield
	②	T.M.D.S data 2 shield	⑫	T.M.D.S clock -
	③	T.M.D.S data 2-	⑬	CEC
	④	T.M.D.S data 1+	⑭	—
	⑤	T.M.D.S data 1 shield	⑮	SCL
	⑥	T.M.D.S data 1-	⑯	SDA
	⑦	T.M.D.S data 0+	⑰	DDC/CEC GND
	⑧	T.M.D.S data 0 shield	⑱	+5 V
	⑨	T.M.D.S data 0-		Hot plug detection
	⑩	T.M.D.S clock +		

Connecting example : AV equipment



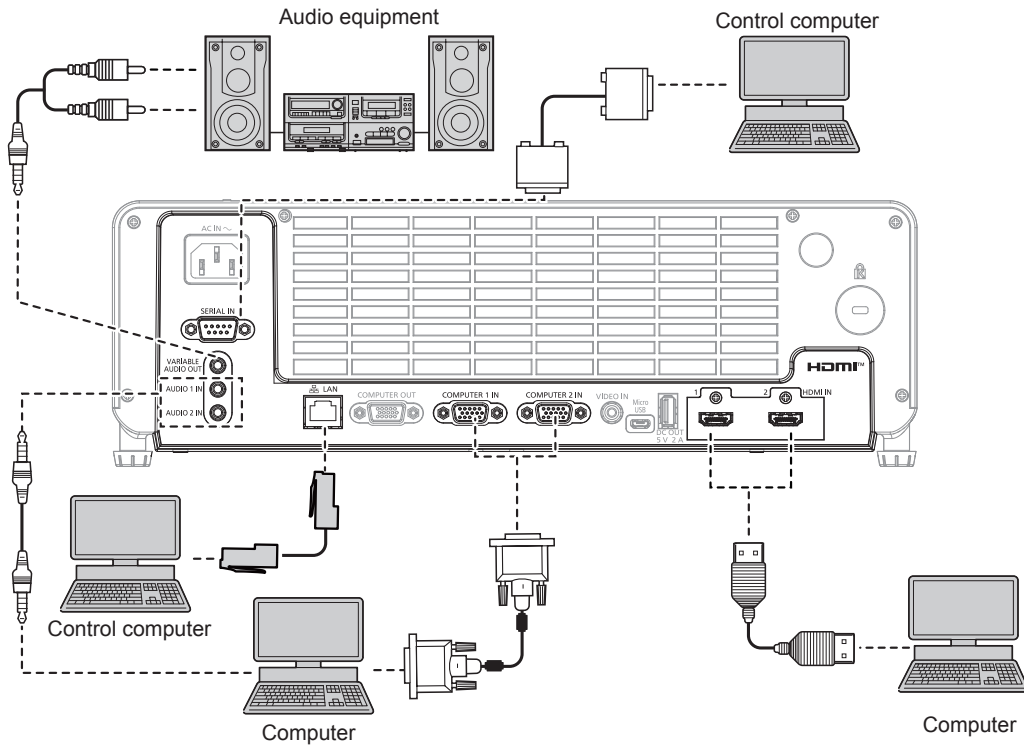
Attention

- Always use one of the following when connecting a VCR.
 - A VCR with built-in time base corrector (TBC).
 - A time base corrector (TBC) between the projector and the VCR.
- If nonstandard burst signals are connected, the image may be distorted. In such case, connect the time base corrector (TBC) between the projector and the external devices.

Note

- For an HDMI cable, use an HDMI High Speed cable that conforms to HDMI standards. If a cable that does not conform to HDMI standards is used, images may be interrupted or may not be projected.
- When the <VARIABLE AUDIO OUT> terminal is connected with cable, the sound will not be output from the built-in speaker.
- To output audio, properly set the [Audio] menu → [Audio In Select].
- This projector supports HDMI CEC (Consumer Electronics Control). (➔ page 72)

Connecting example : Computers



Attention

- When connecting the projector to a computer or an external device, use the power cord supplied with each device and commercially available shielded cables.
- To assure continued performance and FCC compliance, use only VGA cable with two ferrite cores for connecting with the <COMPUTER 1 IN> terminal, the <COMPUTER 2 IN> terminal or the <COMPUTER OUT> terminal.
- The temperature of HDMI cable, VGA cable and other cables connected to the terminals may rise due to the effect from the exhaust vent.

Note

- For an HDMI cable, use an HDMI High Speed cable that conforms to HDMI standards. If a cable that does not conform to HDMI standards is used, images may be interrupted or may not be projected.
- If you operate the projector using the computer with the resume feature (last memory), you may have to reset the resume feature to operate the projector.
- When the <VARIABLE AUDIO OUT> terminal is connected with cable, the sound will not be output from the built-in speaker.
- The <HDMI IN 1> terminal / <HDMI IN 2> terminal can be connected to an external device with the DVI-D terminal by using an HDMI/DVI conversion cable. However, this may not function properly for some external devices, and image may not be projected.

Chapter 3 **Basic Operations**

This chapter describes basic operations to start with.

Powering on/off

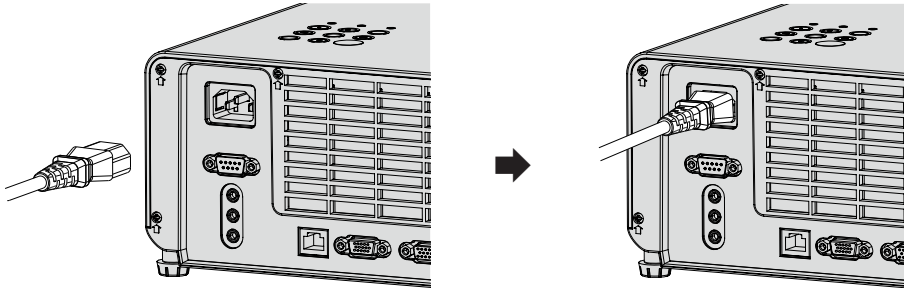
Connecting the power cord

Make sure that the supplied power cord is securely fixed to the <AC IN> terminal of the projector body to prevent it from being removed easily.

For details of power cord handling, refer to “Read this first!” (➔ page 4).

Attaching

- 1) Check the shapes of the <AC IN> terminal on the back of the projector body and the power cord connector and insert the connector completely in the correct direction.



Attention

- The temperature of the power cord connected to the <AC IN> terminal may rise due to the effect from the exhaust vent.

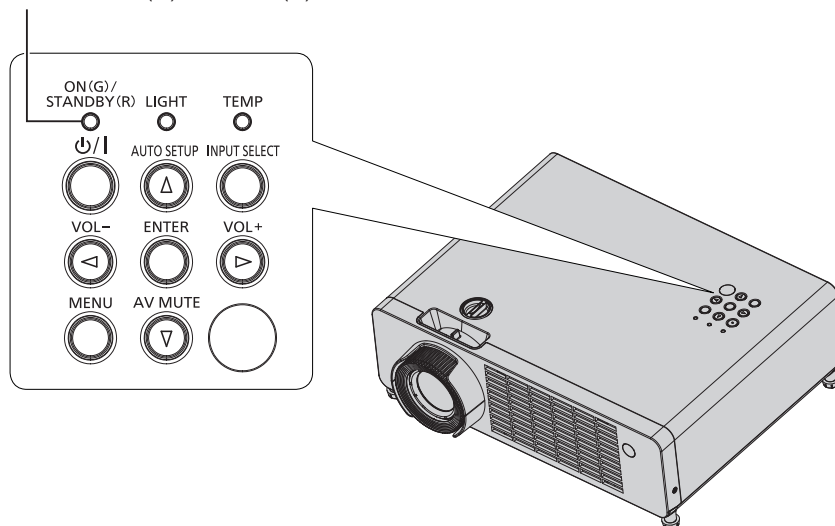
Removing

- 1) Confirm that the projector is in standby mode, and remove the power plug from the outlet.
- 2) Remove the power cord connector from the <AC IN> terminal.

Power indicator

The power indicator <ON(G)/STANDBY(R)> indicates the status of the power. Confirm the status of the power indicator <ON(G)/STANDBY(R)> before operating the projector.

Power indicator <ON(G)/STANDBY(R)>



Indicator status		Projector status
No illumination		The power plug is not connected to the outlet.
Red	Lighting	<p>The projector is turned off. (In standby mode) Projection will start when the power <⏻/ > button is pressed.</p> <ul style="list-style-type: none"> The setting of the projector is as follows. <ul style="list-style-type: none"> - The [Setup] menu → [Eco Management] → [Standby Mode] is set to [Eco.]; or - [USB Power], [Audio Out], [Speaker], [Computer Out] and [Quick Startup] in the [Setup] menu → [Eco Management] → [Normal Standby] are all set to [Off]. When the light source indicator <LIGHT> or the temperature indicator <TEMP> is lighting or blinking, the projection will not start even if the power <⏻/ > button is pressed. (➔ page 95)
	Blinking ^{*1}	<p>The projector is turned off. (In standby mode) Projection will start when the power <⏻/ > button is pressed.</p> <ul style="list-style-type: none"> The standby power consumption is high. The projector is set as follows: <ul style="list-style-type: none"> - All or any one of [USB Power], [Audio Out], [Speaker], [Computer Out] and [Quick Startup] in the [Setup] menu → [Eco Management] → [Normal Standby] is set to [On]. When the light source indicator <LIGHT> or the temperature indicator <TEMP> is lighting or blinking, the projection will not start even if the power <⏻/ > button is pressed. (➔ page 95)
Green	Lighting	Projecting.
	Blinking ^{*2}	<p>The light source is turned off because the AV mute function is in use. The projector lights up and begins to project when you press the <AV MUTE> button on the remote control or the control panel.</p>

*1 The indicator flashes in the cycle: 0.3 seconds (off) → 2.9 seconds (light)

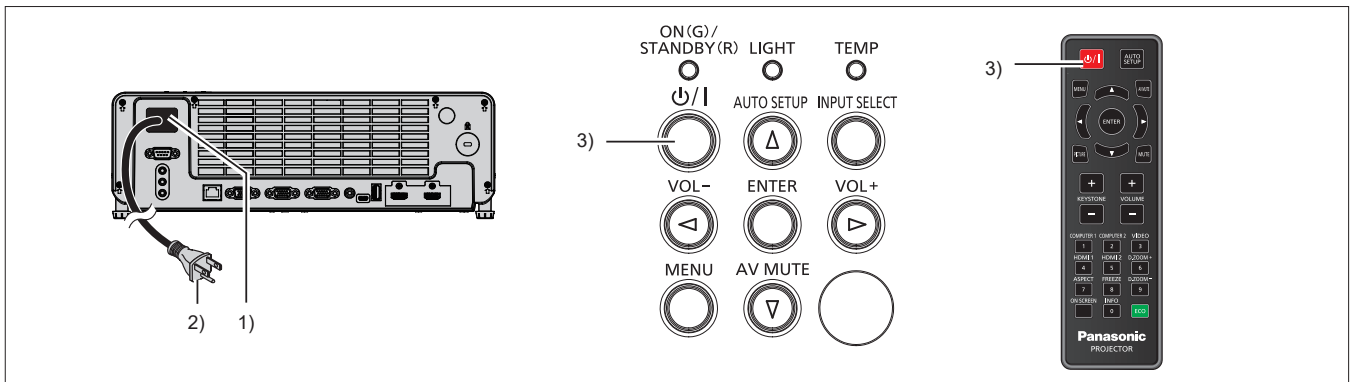
*2 The indicator flashes in the cycle: 0.8 seconds (off) → 0.8 seconds (light)

Note

- For several seconds after the projector is turned off, the indicator does not light up even if the power is turned on. Turn on the power again after the power indicator <ON(G)/STANDBY(R)> lights in red.
- The projector consumes power even in standby mode (power indicator <ON(G)/STANDBY(R)> lights in red). Refer to “Power consumption” (➔ page 107) for the power consumption.
- The power indicator <ON(G)/STANDBY(R)> will blink if the projector receives a remote control signal.

Powering on the projector

Before switching on the projector, make sure all the other devices are correctly connected (➔ page 35).
Remove the lens cap beforehand.



- 1) Connect the power cord to the projector body.**
- 2) Connect the power plug to an outlet.**
 - The power indicator <ON(G)/STANDBY(R)> lights in red, and the projector will enter the standby mode.
- 3) Press the power <⏻/|> button.**
 - The power indicator <ON(G)/STANDBY(R)> lights in green and the image is soon projected on the screen.

Attention

- Be sure to remove the lens cap before starting projection.

When the initial setting screen is displayed

When the projector is switched on for the first time after purchase or the [Setup] menu → [Reset] → [Reset to Default] is executed, the initial setting screen is displayed after the projection starts. Set them in accordance with circumstances.

In other occasions, you can change the settings by menu operations.

If you press the <MENU> button while the initial setting screen is displayed, the default setting will be applied and the next initial setting screen will appear.

Note

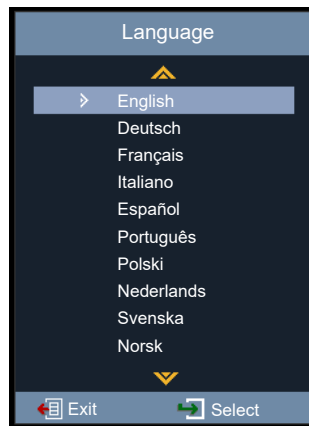
- When the projector is used for the first time, in order to clearly display the menu screen, it may be necessary to adjust the focus ring and the zoom lever on the projector (➔ page 25). For details, refer to “How to adjust the state of the image” (➔ page 45).

Initial setting (display language)

Select the language to show on the screen.

After completing the initial setting, you can change the display language from the [Setup] menu → [Options] → [Language].

1) Press ▲▼ to select the display language.



2) Press the <ENTER> button to proceed to the following initial setting.

Initial setting (projection method)

If the screen display is upside down or is reversed, please change the settings. Refer to “Installation mode” (➔ page 31). After initial setting, you can change the setting from the [Setup] menu → [Projection Method].



1) Press ▲▼◀▶ to switch the setting.

- To project from the rear of the screen, select [Rear] (icon) or [Rear Ceiling] (icon) (using a translucent screen).

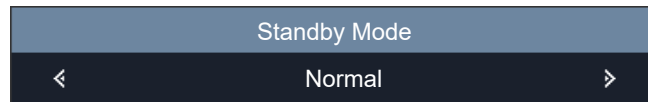
2) Press the <ENTER> button.

- A confirmation screen is displayed.

3) Press ▶▶ to select [Yes], and then press the <ENTER> button to proceed to the following initial setting.

Initial setting (standby mode)

Set the operating mode at standby. When the initial setting is completed, you can change the setting from the [Setup] menu → [Eco Management] → [Standby Mode].



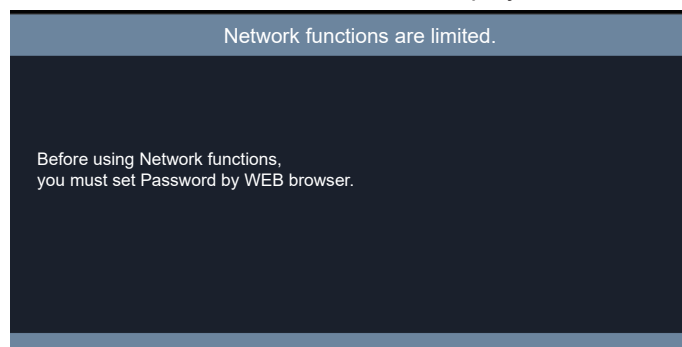
1) Press ◀▶ to select the operation mode.

- The factory default setting is [Normal], which enables the network functions and the functions set in [Normal Standby] during standby.
- To lower the power consumption level during standby, set it to [Eco.].

2) Press the <ENTER> button to proceed to the following initial setting.

Initial setting (network function message)

The message prompting the users to set the network account is displayed.



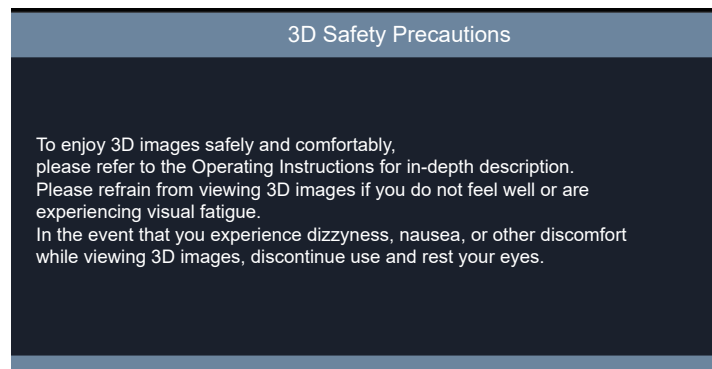
1) Press the <ENTER> button to proceed to the following initial setting.

Note

- To use the network functions, it is necessary to set the network account by using the web browser. For details, refer to "Web control function" (➔ page 86).

Initial setting (3D safety precaution message)

The 3D safety precaution message is displayed.

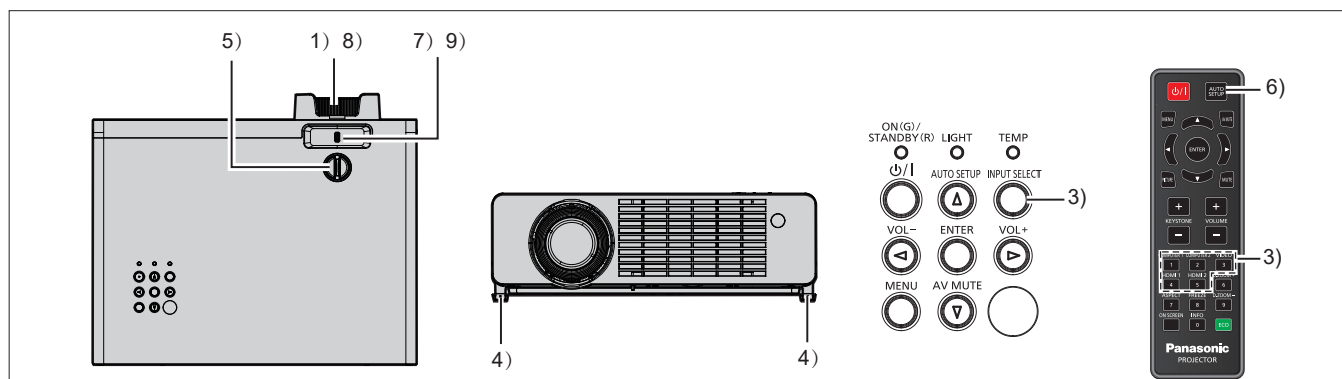


1) Press the <ENTER> button to complete the initial setting.

- If the <ENTER> button is not pressed, the message will also disappear after 30 seconds have elapsed.

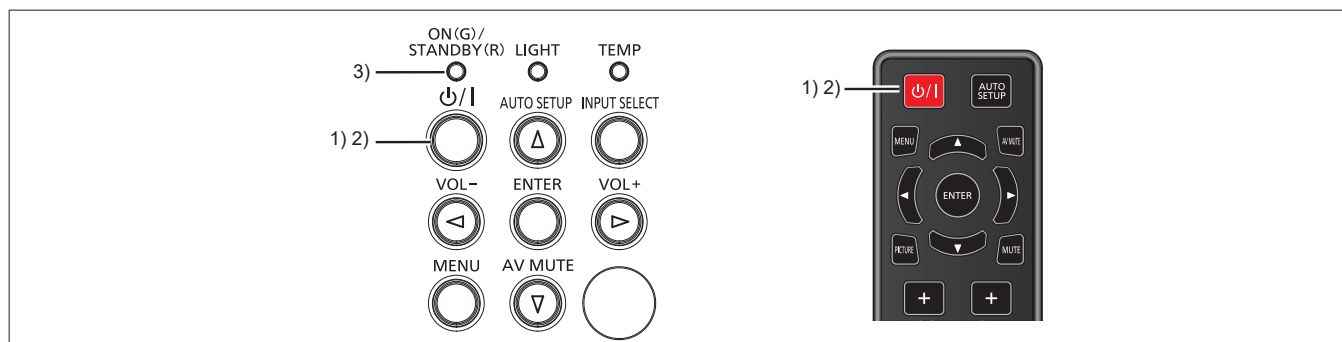
Making adjustments and selections

It is recommended that images are projected continuously for at least 30 minutes before the focus is adjusted.



- 1) Roughly adjust the focus of the image with the focus ring. (➔ page 45)
- 2) Change the settings of the [Setup] menu → [Projection Method] depending on the installation mode. (➔ page 31)
 - Refer to “Navigating through the menu” (➔ page 53) for the operation of the menu screen.
- 3) Press the <INPUT SELECT> button on the control panel or the input selection (<COMPUTER 1>, <COMPUTER 2>, <VIDEO>, <HDMI1>, <HDMI2>) buttons on the remote control to select the input signal. (➔ page 44)
- 4) Adjust the projection angle of the projector with the adjustable feet. (➔ page 46)
- 5) Adjust the vertical projection position with the vertical lens shift dial. (➔ page 45)
- 6) If the input signal is an analog RGB signal, press the <AUTO SETUP> button.
- 7) Adjust the size of the image to match the screen with the zoom lever. (➔ page 45)
- 8) Adjust the focus with the focus ring again.
- 9) Adjust the size of the image to match the screen with the zoom lever again.

Powering off the projector



- 1) Press the power <ON/GI/STANDBY(R)> button.
 - The power-off confirmation screen is displayed.
- 2) Press the power <ON/GI/STANDBY(R)> button again.
 - Projection of the image will stop, and the power indicator <ON(G)/STANDBY(R)> blinks in green. (The fan keeps running.)
- 3) Wait until the power indicator <ON(G)/STANDBY(R)> lights in red.
 - The projector enters standby mode when the power indicator <ON(G)/STANDBY(R)> lights in red.
- 4) Disconnect the plug of the power cord from the outlet.

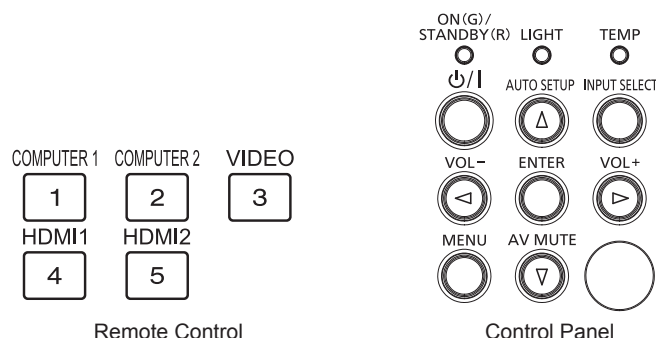
Note

- 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 packing the projector for transportation and storage, please make sure that the power indicator is off.
- Even if the power is turned off by pressing the power <ON/GI/STANDBY(R)> button, the projector consumes power if the power plug is connected to the outlet.
 - When the [Setup] menu → [Eco Management] → [Standby Mode] is set to [Eco.], use of some functions is restricted, but the power consumption during standby mode can be conserved.

Projecting

Check the connections of the peripheral devices (➔ page 35) and connection of the power cord (➔ page 39) and switch on the power (➔ page 40) to start the projector. Select the image and adjust the state of the image.

Selecting the input signal



The input for projection can be switched. Method to switch the input is as follows.

- Press the input selection buttons on the remote control and directly specify the input to project.
- Press the <INPUT SELECT> button on the control panel to display the input selection screen and select the input to project from the list.

When using the remote control

The input for projection can be switched directly by pressing the input selection button on the remote control.

- 1) Press the input selection (<COMPUTER 1>, <COMPUTER 2>, <VIDEO>, <HDMI1>, <HDMI2>) buttons.

<COMPUTER 1>	Switches the input to COMPUTER 1 IN. The image of the signal input to the <COMPUTER 1 IN> terminal is projected.
<COMPUTER 2>	Switches the input to COMPUTER 2 IN. The image of the signal input to the <COMPUTER 2 IN> terminal is projected.
<VIDEO>	Switches the input to VIDEO IN. The image of the signal input to the <VIDEO IN> terminal is projected.
<HDMI1>	Switches the input to HDMI 1 IN. The image of the signal input to the <HDMI IN 1> terminal is projected.
<HDMI2>	Switches the input to HDMI 2 IN. The image of the signal input to the <HDMI IN 2> terminal is projected.

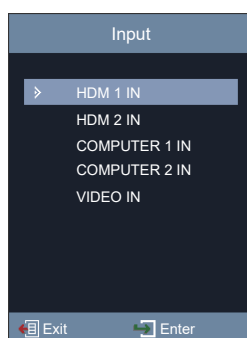
Attention

- Images may not be projected properly depending on the connected device and DVD, video tape, etc. to be played. Select a system format that is suitable for the input signal in [Picture] menu → [Image Settings] → [Color Settings] → [Color Space] (➔ page 59).
- Check the aspect ratio of the screen and the image and select the optimum aspect ratio under the [Picture] menu → [Aspect Ratio] (➔ page 63).

When using the control panel

The input for projection can be selected by displaying the input screen with the control panel.

- 1) Press the <INPUT SELECT> button.
 - The [Input] screen is displayed.



2) Press ▲▼ to select one item and then press the <ENTER> button.

- The selected input will be projected.

Note

- You can also select the input from the [Setup] menu → [Options] → [Input].

How to adjust the state of the image

If the projected image or the position is not correct when the positioning of the projector and the screen is correctly installed, adjust the projection angle, zoom, focus and vertical shift.

1) Adjust the projection angle.

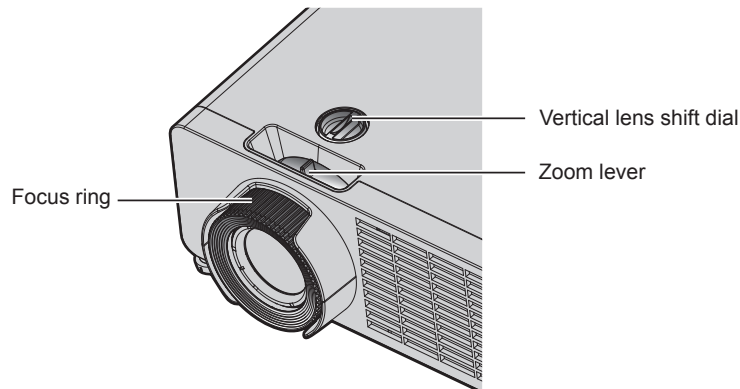
- Place the projector on a level surface and make its front side parallel to the screen surface so that the projection screen is rectangular.
- If the projector is facing downward with respect to the screen, extend the adjustable feet and adjust the projected image so that the projected image is rectangular.
For details, refer to “Adjusting adjustable feet” (➔ page 46).

2) Adjust the zoom and the focus.

- Operate the zoom lever to adjust the projected image size to fit the screen.
- Operate the focus ring to adjust the focus.

3) Adjust the vertical shift.

- Turn the vertical lens shift dial and adjust the vertical projection position on the screen. For details, refer to “About lens shift adjustment range” (➔ page 46).



Note

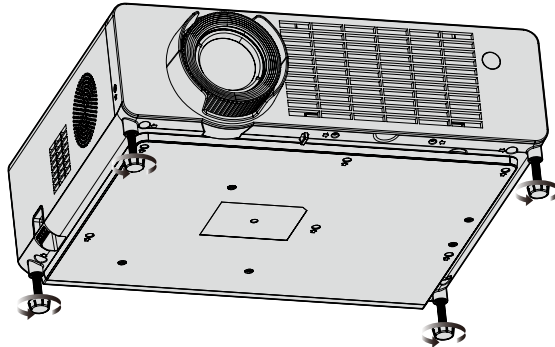
- It is recommended that the images are projected continuously for at least 30 minutes before the focus is adjusted.
- When the focus is adjusted, the projection screen size also changes slightly. Depending on the image projection situation, repeat Steps 1) to 3) to adjust to the best projection condition.
- Adjust from the [Picture] menu → [Keystone] (➔ page 65) when the projected image is distorted.
- The focus ring may detach if it is turned counterclockwise beyond the limit when viewed from the front side of the projector.

Adjusting adjustable feet

Install the projector on a flat surface so that the front of the projector is parallel to the screen surface and the projected image is rectangular.

If the screen is tilted downward, extend the front adjustable feet so that the projected image becomes rectangular. The adjustable feet can also be used to adjust the projector to be level when it is tilted in the horizontal direction.

Adjustable feet can be extended by turning them as shown in the figure. Turning them in the opposite direction will return them to the original position.



Maximum adjustable range

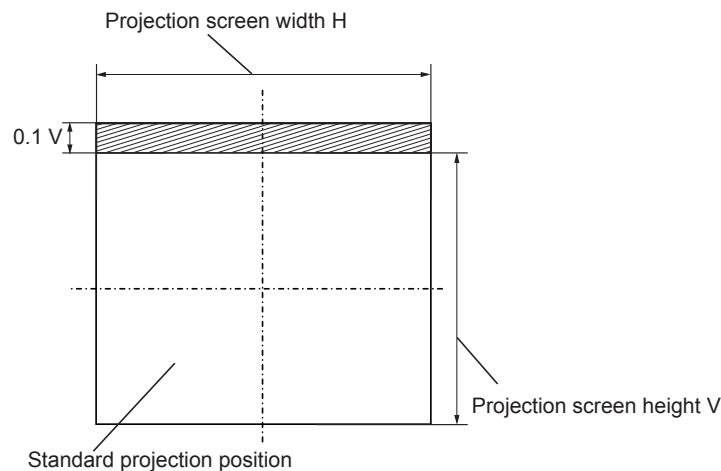
Adjustable feet : 18 mm (23/32") each

Attention

- Be careful not to block the intake/exhaust vents with your hands or any objects when adjusting the adjustable feet while the light source is on. (➔ page 25)
- Adjust from the [Picture] menu → [Keystone] (➔ page 65) when the projected image is distorted.

About lens shift adjustment range

The projector supports lens shift in vertical direction. The following figure shows the lens shift adjustable range in vertical direction with reference to the standard projection position.



Note

- The standard projection position indicates the projection screen position in the state without vertical shift adjustment.

Basic operations by using the remote control



Using the AV mute function

If the projector is not used for a certain period of time during the meeting intermission, for example, it is possible to turn off the image and audio temporarily.



AV MUTE button

- 1) **Press the <AV MUTE> button on the remote control.**
 - The image and audio disappear.
 - This operation can be also performed by pressing the <AV MUTE> button on the control panel.
- 2) **Press the <AV MUTE> button again.**
 - The image and audio reappear.

Using the mute function

This button allows you to turn off the audio temporarily.



MUTE button

- 1) **Press the <MUTE> button on the remote control.**
 - The audio turns off.
- 2) **Press the <MUTE> button again.**
 - The audio turns on.

Adjusting the volume

You can control the volume of the built-in speaker and audio output.



VOLUME + / **VOLUME -** buttons

- 1) **Press the <VOLUME +> button / <VOLUME -> button on the remote control.**

<VOLUME +>	Increases the volume.
<VOLUME ->	Decreases the volume.

Note

- You can also operate with the <VOL -> button and <VOL +> button on the control panel.

Using the freeze function

You can freeze the projected image and stop the sound temporarily, regardless of the playing condition of the external device.

FREEZE



- 1) Press the <FREEZE> button on the remote control.
 - The video is paused and the audio is muted.
- 2) Press the <FREEZE> button again.
 - The video playback resumes and the audio is unmuted.

Using the on-screen display function

Turn off the on-screen display function (no display) when you do not wish the viewers to see the on-screen display, such as the menu or the input terminal name.

ON SCREEN



- 1) Press the <ON SCREEN> button.
 - The on-screen display disappears.
- 2) Press the <ON SCREEN> button again.
 - The on-screen display appears.

Note

- If you press the <MENU> button on the control panel for at least three seconds while the on-screen display is off (hidden), the on-screen display is turned on.

Using the auto setup function

The dot clock, clock phase and image position can be adjusted automatically when the analog RGB still image signal is input. (Analog RGB signal is a signal structured with dots just like the computer signal.)

It is recommended to input an image with bright white borders at the edges and high-contrast black and white characters when the automatic adjustment is being performed.

Avoid using images that include halftones or gradation, such as photographs and computer graphics.



- 1) Press the <AUTO SETUP> button on the remote control.

Note

- You can also use this function with the <AUTO SETUP> button on the control panel.
- Automatic adjustment cannot be performed if the [Picture] menu → [Image Settings] → [Signal] → [Automatic] is set to [Off] (➡ page 59).
- The clock phase may shift even if the automatic adjustment is performed. In such a case, adjust the [Picture] menu → [Image Settings] → [Signal] → [Phase] (➡ page 60).
- When the input signal is a blurred-edge image or a dark image, it may not be able to be adjusted correctly even if the automatic adjustment is performed. In this case, adjust the following settings:
 - For dot clock: [Picture] menu → [Image Settings] → [Signal] → [Dot Clock] (➡ page 60)
 - For clock phase: [Picture] menu → [Image Settings] → [Signal] → [Phase] (➡ page 60)
 - For horizontal image position: [Picture] menu → [Image Settings] → [Signal] → [H. Position] (➡ page 60)
 - For vertical image position: [Picture] menu → [Image Settings] → [Signal] → [V. Position] (➡ page 60)
- Automatic adjustment may not be performed depending on the computer model and input signal.
- Images may be disrupted for a few seconds during automatic adjustment, but it is not a malfunction.
- If the automatic setup function is used while moving images are being input, the adjustment may not be performed properly even for a signal that can use automatic setup.

Using the screen adjustment function

You can correct the vertical trapezoidal distortion of the projected image.



KEYSTONE



buttons

1) Press the <KEYSTONE +> button / <KEYSTONE -> button on the remote control.

- The adjustment range is within -30 to 30.

Note

- For more details, refer to the [Picture] menu → [Keystone] (➔ page 65).

Using the digital zoom function

You can enlarge the center of the projected image.

D ZOOM +



D ZOOM -



buttons

1) Press the <D.ZOOM +> or <D.ZOOM -> button on the remote control.

- The [Digital Zoom] individual adjustment screen is displayed.

Operation	Adjustment	Adjustment range
Press the <D.ZOOM +> button.	Increases magnification.	-5 ~ 25
Press the <D.ZOOM -> button.	Decreases magnification.	

Note

- For more details, refer to the [Picture] menu → [Digital Zoom] (➔ page 64).
- The enlarged area of the image cannot be moved.
- The digital zoom function is not canceled even after the input signal changes or the power is turned on or off.
- The digital zoom function is unavailable if the [3D] menu → [3D Mode] is set to [DLP Link].

Switching the image aspect ratio

Switch the image aspect ratio according to the input.

ASPECT



button

1) Press the <ASPECT> button on the remote control.

- The [Aspect Ratio] individual adjustment screen is displayed.

2) Press ◀▶ to switch the item.

3) Press the <ENTER> button.

Note

- For more details, refer to the [Picture] menu → [Aspect Ratio] (➔ page 63).

Using the status function

Display the status of the projector.

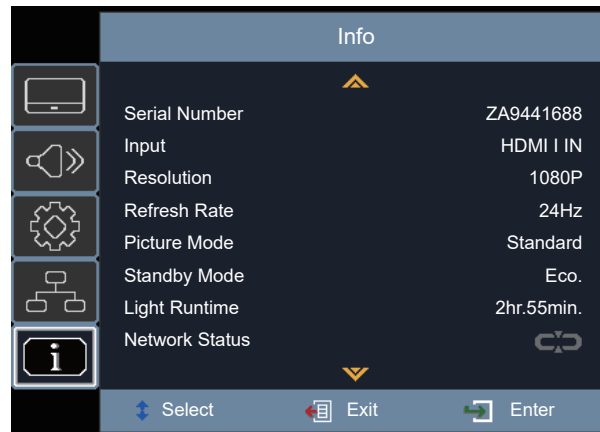
INFO



button

1) Press the <INFO> button on the remote control.

- The [Info] screen is displayed.



2) Press the <INFO> button again.

- The [Info] screen disappears.

Note

- For more details, refer to the [Info] menu (➔ page 82).

Using the ECO management function

Display the setting screen relating to ECO management.



button

1) Press the <ECO> button on the remote control.

Note

- Refer to the [Setup] menu → [Eco Management] (➔ page 69) for details.

Switching the picture mode

This function allows you to switch the picture mode.



button

1) Press the <PICTURE> button on the remote control.

- The [Picture Mode] individual adjustment screen is displayed.

2) Press ▲▼ to switch the item.

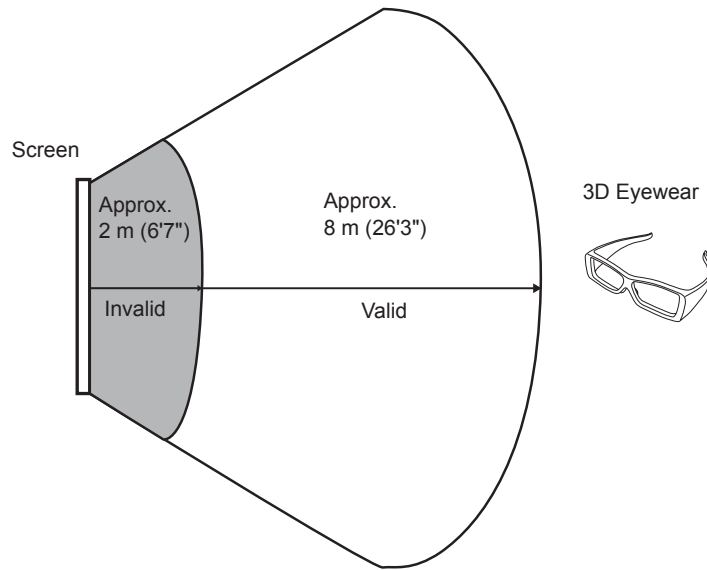
3) Press the <ENTER> button.

Note

- For details, please refer to the [Picture] menu → [Image Settings] → [Picture Mode] (➔ page 56).

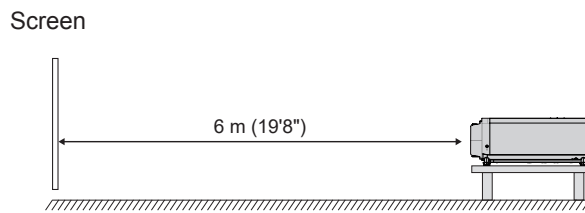
Communication range of 3D Eyewear

The communication range of the 3D Eyewear is as shown below.



The diagram above shows the communication range under the following conditions:

- When the distance between the projector and the screen is 6 m (19'8").
- When the projector is arranged in front of the screen without performing lens shift.



- When using a 3.81 m (150"), screen gain [1], diffuser screen.

Chapter 4 Settings

This chapter describes the settings and adjustments you can make using the on-screen menu.

Menu Navigation

The on-screen menu (Menu) is used to perform various settings and adjustments of the projector.

Navigating through the menu

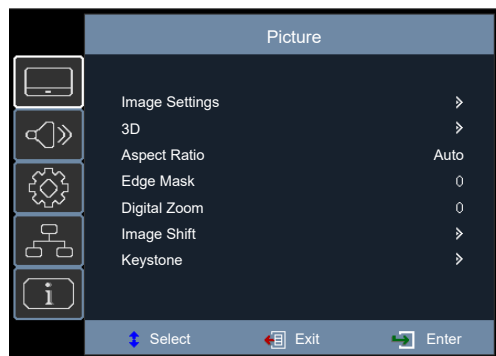
Operating procedure



button

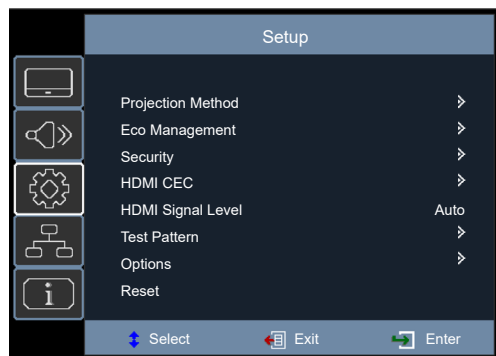
1) Press the <MENU> button on the remote control or the control panel.

- The main menu screen appears.



2) Press ▲▼ to select an item from the main menu.

- The selected item is highlighted.



3) Press ► or the <ENTER> button.

- You can operate the sub-menus of the selected main menu.

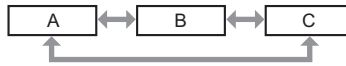


4) Press ▲▼ to select a sub-menu item, and press ► or the <ENTER> button.

- Proceed to Step 5) directly if there is no lower menu under the sub-menu.
- If there is any lower menu under the sub-menu, pressing ► or the <ENTER> button will enter the further setting menu and you can make further settings by using Step 4) to Step 6).

5) Press ▲▼ or ◀▶ to switch or adjust settings.

- Some items will switch in order as follows each time you press ▲▼ or ◀▶.



- For some items, you can press ◀▶ to adjust in an individual adjustment screen with a bar scale as shown below.



6) Press the <ENTER> button or the <MENU> button.

- The changed settings or the adjusted value is confirmed.






Note

- Pressing the <MENU> button while the menu screen is displayed returns to the previous menu or exits the menu screen.
- Some items may not be adjusted or used for certain signal formats to be input to the projector. The menu items that cannot be adjusted or used are hidden or shown in gray characters, and they cannot be selected.
- Some items can be adjusted even if signals are not input.
- For menu items, refer to “Main menu” (➔ page 54) and “Sub-menu” (➔ page 54).

Main menu

The following items are in the main menu.

When a main menu item is selected, the screen changes to a submenu selection screen.

Main menu item		Page
	[Picture]	56
	[Audio]	67
	[Setup]	69
	[Network]	80
	[Info]	82

Sub-menu

The sub-menu screen of the selected main menu appears, and you can set and adjust the various items in the submenu.

[Picture] 

Sub-menu item	Factory default	Page
[Image Settings]	—	56
[3D]	—	61
[Aspect Ratio]	—	63
[Edge Mask]	[0]	64
[Digital Zoom]	[0]	64
[Image Shift]	[0]	65
[Keystone]	—	65

[Audio] 

Sub-menu item	Factory default	Page
[Mute]	[Off]	67
[Volume]	[5]	67
[Audio In Select]	—	67

[Setup] 

Sub-menu item	Factory default	Page
[Projection Method]	[Front] (icon)	69
[Eco Management]	—	69
[Security]	—	71
[HDMI CEC]	—	72
[HDMI Signal Level]	[Auto]	75
[Test Pattern]	[Grid]	75
[Options]	—	76
[Reset]	—	79

[Network] 

Sub-menu item	Factory default	Page
[LAN]	—	80
[Control]	—	81

[Info] 

Details (➔ page 82)

Note

- Some items may not be adjusted or used for certain signal formats to be input to the projector.
The menu items that cannot be adjusted or used are hidden or shown in gray characters, and they cannot be selected.
- Sub-menu items and factory default settings differ depending on the selected input.

[Picture] menu

On the menu screen, select [Picture] from the main menu, and select an item from the sub-menu. Refer to “Navigating through the menu” (➔ page 53) for the operation of the menu screen.

[Image Settings]

Set the image settings.

- 1) Press ▲▼ to select [Image Settings].
- 2) Press ► or the <ENTER> button.
 - The [Image Settings] screen is displayed and you can select an item for setting.

Note

- If no signal is detected, then [Image Settings] menu items are hidden.

[Picture Mode]

You can switch to the desired picture mode most suitable for the image source and the environment in which the projector is used.

- 1) Press ▲▼ to select [Picture Mode].
- 2) Press ► or the <ENTER> button.
 - The [Picture Mode] screen is displayed.
- 3) Press ▲▼ to switch the item.
 - The items will switch each time you press the button.

[Standard]	The picture becomes suitable for movie-based images in general.
[Cinema]	Select this mode to provide the best colors for watching movies.
[Natural]	Select this mode for natural looking colors with a balance of warm and cool tones.
[Rec709]	Select this mode to match the REC.709 color standard as closely as possible.
[DICOM SIM.]	Select this mode for viewing monochrome medical images such as X-rays, MRIs, etc.
[Dynamic]	Select this mode to increase contrast when viewing gray or dark contents.
[Graphic]	Select this mode to display PC / Photo sources.
[Black Board]	Select this mode to achieve optimum color settings when projecting onto a black board.
[White Board]	Select this mode to achieve optimum color settings when projecting onto a white board.
[User]	Select this mode for user customized color setting.
[3D]	This item can be selected only when the 3D function is enabled. To experience 3D you need DLP Link 3D glasses and video source capable of sending 3D content.

Note

- Rec709 is an abbreviation of “ITU-R Recommendation BT.709” and is color standard of high-definition television.
- DICOM is an abbreviation of “Digital Imaging and Communication in Medicine” and is a standard for medical imaging devices. Although the DICOM name is used, the projector is not a medical device, and display images should not be used for medical purposes such as diagnosis.
- If the [Picture Mode] is set to [3D], the other items under [Picture Mode] are grayed out.
- If the high refresh rate (96 Hz or higher) signal is input, only [Cinema] can be selected.

[Brightness]

You can adjust the dark (black) part of the projected image.

- 1) Press ▲▼ to select [Brightness].
- 2) Press ► or the <ENTER> button.
 - The [Brightness] screen is displayed.
- 3) Press ◀▶ to adjust the level.

Operation	Adjustment	Adjustment range
Press the ► button.	Increases the brightness of the dark (black) parts of the screen.	-20 ~ 20
Press the ◀ button.	Reduces the brightness of the dark (black) parts of the screen.	

[Contrast]

You can adjust the contrast of the colors.

- 1) Press ▲▼ to select [Contrast].
- 2) Press ► or the <ENTER> button.
 - The [Contrast] screen is displayed.
- 3) Press ◀▶ to adjust the level.

Operation	Adjustment	Adjustment range
Press the ► button.	Brightens the screen and makes the color deeper.	-20 ~ 20
Press the ◀ button.	Darkens the screen and makes the color lighter.	

Attention

- Adjust [Brightness] first when you need to adjust [Brightness] and [Contrast].

[Sharpness]

You can adjust the sharpness of the projected image.

- 1) Press ▲▼ to select [Sharpness].
- 2) Press ► or the <ENTER> button.
 - The [Sharpness] screen is displayed.
- 3) Press ◀▶ to adjust the level.

Operation	Adjustment	Adjustment range
Press the ► button.	Contours become sharper.	1 ~ 15
Press the ◀ button.	Contours become softer.	

[Color]

(Only for YP_BP_R/YC_BC_R signals)

You can adjust the color saturation of the projected image.

- 1) Press ▲▼ to select [Color].
- 2) Press ► or the <ENTER> button.
 - The [Color] screen is displayed.
- 3) Press ◀▶ to adjust the level.

Operation	Adjustment	Adjustment range
Press the ► button.	Deepens colors.	-50 ~ 50
Press the ◀ button.	Weakens colors.	

[Tint]

(Only for YP_BP_R/YC_BC_R signals)

You can adjust the skin tone in the projected image.

- 1) Press ▲▼ to select [Tint].
- 2) Press ► or the <ENTER> button.
 - The [Tint] screen is displayed.
- 3) Press ◀▶ to adjust the level.

Operation	Adjustment	Adjustment range
Press the ► button.	Adjusts skin tone toward greenish color.	-50 ~ 50
Press the ◀ button.	Adjusts skin tone toward reddish purple.	

[Gamma]

You can switch gamma mode.

- 1) Press ▲▼ to select [Gamma].
- 2) Press ► or the <ENTER> button.
 - The [Gamma] screen is displayed.
- 3) Press ▲▼ to switch the item.
 - The items will switch each time you press the button.

Gamma 1	Set so that images become as you like.
Gamma 2	
Gamma 3	
Gamma 4	
Gamma 5	

Note

- [Gamma] is grayed out if the [Image Settings] menu → [Picture Mode] is set to [DICOM SIM.] or the [3D] menu → [3D Mode] is set to [DLP Link].

[Color Settings]

Configure the color settings.

Setting with [BrilliantColor™]

This function utilizes a new color-processing algorithm and enhancements to enable higher brightness while providing true, more vibrant colors.

- 1) Press ▲▼ to select [Color Settings].
- 2) Press ► or the <ENTER> button.
- 3) Press ▲▼ to select [BrilliantColor™].
- 4) Press ► or the <ENTER> button.
 - The [BrilliantColor™] screen is displayed.
- 5) Press ◀▶ to switch the item.
 - The items will switch each time you press the button.

[Off]	Disables the BrilliantColor™ function.
[On]	Enables the BrilliantColor™ function.

- 6) Press the <ENTER> button.

Note

- [BrilliantColor™] is grayed out if the [Image Settings] menu → [Picture Mode] is set to [Cinema], [Natural], [Rec709], [DICOM SIM.], [Dynamic] or [3D].

Setting with [Color Temperature]

You can switch the color temperature if the white areas of the projected image are bluish or reddish.

- 1) Press ▲▼ to select [Color Settings].
- 2) Press ► or the <ENTER> button.
- 3) Press ▲▼ to select [Color Temperature].
- 4) Press ► or the <ENTER> button.
 - The [Color Temperature] screen is displayed.
- 5) Press ◀▶ to switch the item.

- The items will switch each time you press the button.

[Low]	Becomes a reddish image. Select this when the white areas of the projected image are bluish.
[Standard]	Becomes an image with standard color.
[High]	Becomes a bluish image. Select this when the white areas of the projected image are reddish.

Note

- [Color Temperature] is grayed out if the [Image Settings] menu → [Picture Mode] is set to [Natural], [Rec709], [DICOM SIM.], [Dynamic] or [3D].

Setting with [Color Space]

The projector will automatically detect the input signal, but you can set the system format manually when an unstable signal is input. Set the system format matching the input signal.

- 1) Press ▲▼ to select [Color Settings].
- 2) Press ► or the <ENTER> button.
- 3) Press ▲▼ to select [Color Space].
- 4) Press ► or the <ENTER> button.
 - The [Color Space] screen is displayed.
- 5) Press ◀▶ to switch the item.
 - The items will switch each time you press the button.

[Auto] ^{*1}	The color matrix type is selected automatically according to the input signal.
[RGB] ^{*2}	Select an appropriate color matrix type.
[YPBPR/YCBCR] ^{*3}	

*1 Only for HDMI signals
 *2 Only for RGB signals
 *3 Only for YP_BP_R/YC_BC_R signals

Note

- [Color Space] is hidden if a NTSC/PAL/SECAM signal is input.
- For details of the image signals that can be used with the projector, refer to “List of compatible signals” (➡ page 104).
- This may not operate properly for some connected external devices.

[Signal]

(Only for COMPUTER 1 IN and COMPUTER 2 IN input)
 Adjust the signal synchronization settings for COMPUTER / Component sources.

- 1) Press ▲▼ to select [Signal].
- 2) Press ► or the <ENTER> button.
- 3) Press ▲▼ to switch the item.
 - The items will switch each time you press the button.

[Automatic]	[On]	Configure the signal automatically.
	[Off]	[Dot Clock], [Phase], [H. Position] and [V. Position] will be available for tuning and saving the settings.
[Dot Clock]	Use this function to adjust the dot clock and minimize the effect of interference caused by projection of patterns consisting of vertical stripes.	
[Phase]	Adjusts to achieve an optimal image when there is a flickering image or smeared outlines.	
[H. Position]	Adjusts the image position if the image projected on the screen is shifted left or right even when the positions of the projector and screen are correct.	
[V. Position]	Adjusts the image position if the image projected on the screen is shifted up or down even when the positions of the projector and screen are correct.	

Setting with [Dot Clock]

Use this function to adjust the dot clock and minimize the effect of interference caused by projection of patterns consisting of vertical stripes.

The projection of the vertical striped pattern may cause cyclic patterns (noise). Adjust so that the amount of interference is at a minimum.

- 1) Press ▲▼ to select [Dot Clock].
- 2) Press ► or the <ENTER> button.
 - The [Dot Clock] screen is displayed.
- 3) Press ◀▶ to adjust the level.
 - The adjustment values are [-10] to [10] and the default value is [0].

Attention

- Set it before adjusting [Phase].

Setting with [Phase]

You can adjust the clock phase to achieve an optimal image when there is a flickering image or smeared outlines.

- 1) Press ▲▼ to select [Phase].
- 2) Press ► or the <ENTER> button.
 - The [Phase] screen is displayed.
- 3) Press ◀▶ to adjust the level.
 - The adjustment values are [0] to [31]. Adjust so that the amount of interference is at a minimum.

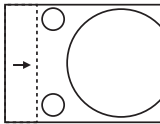
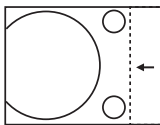
Note

- Certain signals may not be adjustable.
- Optimal value may not be achieved if the output from the input computer is unstable.
- To project a signal with dot clock frequency with 162 MHz or higher, noise may not disappear even if [Phase] is adjusted.
- [Phase] cannot be adjusted when a digital signal is input.

Setting with [H. Position]

Adjust the image position if the image projected on the screen is shifted left or right even when the positions of the projector and screen are correct.

- 1) Press ▲▼ to select [H. Position].
- 2) Press ► or the <ENTER> button.
 - The [H. Position] screen is displayed.
- 3) Press ◀▶ to adjust the horizontal image position.
 - The adjustment values are [-5] to [5] and the default value is [0].

Orientation	Operation	Adjustment	
Horizontal (left and right) adjustment.	Press the ► button.	The image position moves to the right.	
	Press the ◀ button.	The image position moves to the left.	

Setting with [V. Position]

Adjust the image position if the image projected on the screen is shifted up or down even when the positions of the projector and screen are correct.

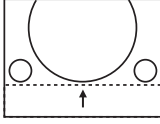
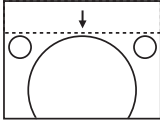
- 1) Press ▲▼ to select [V. Position].

2) Press ► or the <ENTER> button.

- The [V. Position] screen is displayed.

3) Press ◀▶ to adjust the vertical image position.

- The adjustment values are [-5] to [5] and the default value is [0].

Orientation	Operation	Adjustment	
Vertical (up and down) adjustment.	Press the ► button.	The image position moves up.	
	Press the ◀ button.	The image position moves down.	

[Light Power]

Switch the brightness of the light source according to the operating environment of the projector or the purpose.

1) Press ▲▼ to select [Light Power].

2) Press ► or the <ENTER> button.

- The [Light Power] screen is displayed.

3) Press ◀▶ to switch the item.

- The items will switch each time you press the button.

[Normal]	Maximum brightness and fan noise level is standard.
[Eco]	Brightness is reduced and fan noise level is adjusted.
[Quiet]	Brightness is further reduced and fan noise level is adjusted.

[Reset]

Return the color settings to the factory default.

1) Press ▲▼ to select [Reset].

2) Press ► or the <ENTER> button.

- The confirmation screen is displayed.

3) Press ◀▶ to select [OK].

4) Press the <ENTER> button.

- The settings are reset to the factory default.

[3D]

Make the settings for viewing 3D images.

1) Press ▲▼ to select [3D].

2) Press ► or the <ENTER> button.

- The [3D] screen is displayed and you can select an item for setting.

Note

- This projector is a 3D ready projector with DLP Link 3D solution. Please make sure your 3D glasses are used for DLP Link 3D before enjoying your video.
- Frame Sequential (page flip; 120 Hz), Side-by-Side (SBS) and Top Bottom 3D video formats are supported.
- When 3D from a Blu-Ray 3D is detected, the message indicating whether to enable the 3D function is displayed.
- [3D] is hidden if no signal is detected.

[3D Mode]

Set whether to use the 3D function.

- 1) Press ▲▼ to select [3D Mode].
- 2) Press ► or the <ENTER> button.
 - The [3D Mode] screen is displayed.
- 3) Press ◀▶ to switch the item.
 - The items will switch each time you press the button.

[Off]	Select this item to turn off 3D mode.
[DLP Link]	Select this item to turn on 3D mode.

Note

- If 2D and 3D sources are both connected, selecting the 2D source will turn off 3D.
- [Aspect Ratio], [Digital Zoom], [Edge Mask] and [Image Shift] are grayed out if 3D signal is input but [3D Mode] is set to [Off].

[3D - 2D]

Specify how the 3D content should appear on the screen.

- 1) Press ▲▼ to select [3D - 2D].
- 2) Press ► or the <ENTER> button.
 - The [3D - 2D] screen is displayed.
- 3) Press ◀▶ to switch the item.
 - The items will switch each time you press the button.

[3D]	Displays 3D signal.
[L]	Displays the left frame of 3D content.
[R]	Displays the right frame of 3D content.

Note

- [3D - 2D] is grayed out if [3D Mode] is set to [Off].

[3D Format]

Select the appropriate 3D format content.

- 1) Press ▲▼ to select [3D Format].
- 2) Press ► or the <ENTER> button.
 - The [3D Format] screen is displayed.
- 3) Press ▲▼◀▶ to switch the item.
 - The items will switch each time you press the button.

[Auto]	When a 3D identification signal is detected, the 3D format is selected automatically.
[Side By Side] *1	Displays 3D images in side by side format.
[Top and Bottom]	Displays 3D images in top and bottom format.
[Frame Sequential]	Displays 3D images in frame sequential format (page flip; 120 Hz).

*1 Supports Side by Side Half.

Note

- [3D Format] is grayed out if the input refresh rate is 72 Hz - 94 Hz or [3D Mode] is set to [Off].

[3D Sync Invert]

Display images by inverting the timing when the left and right images are swapped. Change the setting when there is something wrong with the 3D image being viewed.

- 1) Press ▲▼ to select [3D Sync Invert].
- 2) Press ► or the <ENTER> button.
 - The [3D Sync Invert] screen is displayed.

3) Press ◀▶ to switch the item.

- The items will switch each time you press the button.

[Off]	Do not change the [Off] setting if the 3D images are displayed correctly.
[On]	Select this item when left and right 3D images are swapped to be displayed.

Note

- [3D Sync Invert] is grayed out if [3D Mode] is set to [Off] or [3D - 2D] is not set to [3D].

[Safety Precautions Message]

Set to show or hide the safety precautions message related to 3D viewing when the projector is switched on.

1) Press ▲▼ to select [Safety Precautions Message].

2) Press ▶ or the <ENTER> button.

- The [Safety Precautions Message] screen is displayed.

3) Press ◀▶ to switch the item.

- The items will switch each time you press the button.

[On]	Shows the safety precautions message related to 3D viewing when the projector is switched on.
[Off]	Hides the safety precautions message related to 3D viewing when the projector is switched on.

Note

- If [Off] is set, the safety precautions message related to 3D viewing is not displayed when the projector is switched on.

Attention

- If 3D images are viewed by unspecified number of people for commercial use, display the safety precautions message related to 3D viewing to notify viewers.

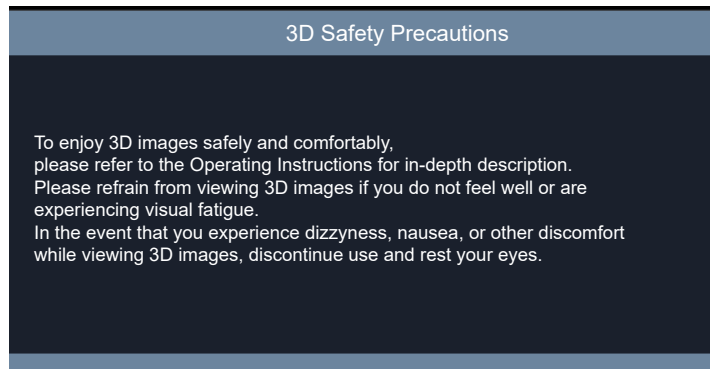
[3D Safety Precautions]

Show the safety precautions message related to 3D viewing.

1) Press ▲▼ to select [3D Safety Precautions].

2) Press ▶ or the <ENTER> button.

- The [3D Safety Precautions] screen is displayed.



[Aspect Ratio]

You can switch the aspect ratio of the image.

1) Press ▲▼ to select [Aspect Ratio].

2) Press ▶ or the <ENTER> button.

- The [Aspect Ratio] screen is displayed.

3) Press ◀▶ to switch the item.

- The items will switch each time you press the button.

[4:3]	This format is for 4:3 input sources.
[16:10]	This format is for 16:10 input sources, like widescreen laptops.
[LBX] *1*2	This format is for non-16x9, letterbox source and if you use external 16x9 lens to display 2.35:1 aspect ratio in full resolution.
[Native]	This format displays the original image without any scaling.
[Auto]	The appropriate display format is selected automatically.

*1 Some Letter-Box Format DVDs are not enhanced for 16x9 TVs. In this situation, the image will not look right when displaying the image in 16:9 mode. In this situation, please try to use the 4:3 mode to view the DVD. If the content is not 4:3, there will be black bars around the image in 16:9 display. For this type of content, you can use LBX mode to fill the image on the 16:9 display.

*2 When using an external anamorphic lens, the LBX mode allows you to watch 2.35:1 content, including Anamorphic DVD and HDTV film sources. In this case there are no black bars, light source power and vertical resolution are fully utilized.

Note

- The scaling tables are as follows.

- For PT-LRZ35 / PT-LRZ35U:

	480i/p	576i/p	1080i/p	720p	PC
[4:3]	Scale to 1 600 x 1 200.				
[16:10]	Scale to 1 920 x 1 200.				
[LBX]	Scale to 1 920 x 1 440, then get the central 1 920 x 1 200 image to display.				
[Native]	- 1:1 mapping centered. - No scaling will be made; the image is displayed with the resolution based on input source.				
[Auto]	- If this format is selected, the screen type will automatically become 16:10 (1 920 x 1 200). - If source is 4:3, the screen type will be scaled to 1 600 x 1 200. - If source is 16:9, the screen type will be scaled to 1 920 x 1 080. - If source is 16:10, the screen type will be scaled to 1 920 x 1 200.				

- For PT-LRW35 / PT-LRW35U:

	480i/p	576i/p	1080i/p	720p	PC
[4:3]	Scale to 1 066 x 800.				
[16:10]	Scale to 1 280 x 800.				
[LBX]	Scale to 1 280 x 960, then get the central 1 280 x 800 image to display.				
[Native]	- 1:1 mapping centered. - No scaling will be made; the image is displayed with the resolution based on input source.				
[Auto]	- If this format is selected, the screen type will automatically become 16:10 (1 280 x 800). - If source is 4:3, the screen type will be scaled to 1 066 x 800. - If source is 16:9, the screen type will be scaled to 1 280 x 720. - If source is 16:10, the screen type will be scaled to 1 280 x 800 and cut 1 280 x 960 area to display.				

- [Aspect Ratio] is grayed out if no signal is detected.
- [Auto] is hidden if the input is VIDEO IN.
- For PT-LRZ35 / PT-LRZ35U, [Aspect Ratio] forcibly switches to 16:10 if 3D function is enabled.

[Edge Mask]

Use this function to remove the video encoding noise on the edge of video source.

- Press ▲▼ to select [Edge Mask].
- Press ► or the <ENTER> button.
 - The [Edge Mask] screen is displayed.
- Press ◀▶ to adjust the level.
 - The adjustment values are [0] to [10] and the default value is [0].

Note

- [Edge Mask] is hidden if no signal is detected.
- [Edge Mask] is grayed out if the [3D] menu → [3D Mode] is set to [DLP Link].
- The adjustable maximum value of [Edge Mask] depends on the current value of [Digital Zoom].

[Digital Zoom]

Use this function to reduce or magnify an image on the projection screen.

- Press ▲▼ to select [Digital Zoom].

- 2) Press ► or the <ENTER> button.
 - The [Digital Zoom] screen is displayed.
- 3) Press ◀▶ to adjust the level.
 - The adjustment values are [-5] to [25] and the default value is [0].

Note

- The enlarged area of the image cannot be moved.
- The digital zoom function is not canceled even after the input signal changes or the power is turned on or off.
- [Digital Zoom] is hidden if no signal is detected.
- [Digital Zoom] is grayed out if the [3D] menu → [3D Mode] is set to [DLP Link].
- The adjustable maximum value of [Digital Zoom] depends on the current value of [Edge Mask].

[Image Shift]

Adjust the projected image position horizontally or vertically.

- 1) Press ▲▼ to select [Image Shift].
- 2) Press ► or the <ENTER> button.
 - The [Image Shift] screen is displayed.
- 3) Press ▲▼◀▶ to adjust the level.

Item	Operation	Adjustment	Range
[H]	Press the ► button.	The projected image moves to the right.	-100 ~ 100
	Press the ◀ button.	The projected image moves to the left.	
[V]	Press the ▲ button.	The projected image moves up.	
	Press the ▼ button.	The projected image moves down.	

Note

- [Image Shift] is grayed out if no signal is detected.

[Keystone]

Correct a keystone image shape in which the top and bottom borders of the image are unequal in length.

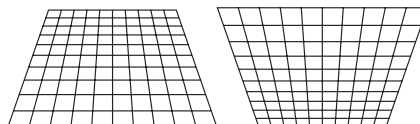
- 1) Press ▲▼ to select [Keystone].
- 2) Press ► or the <ENTER> button.
- 3) Press ▲▼ to switch the item.
 - The items will switch each time you press the button.

[V Keystone]	Adjusts vertical image distortion making the image more square.
[Reset]	Returns to the factory default settings.

Setting [V Keystone]

- 1) Press ▲▼ to select [V Keystone].
- 2) Press ► or the <ENTER> button.
 - The [V Keystone] screen is displayed.
- 3) Press ◀▶ to adjust the level.
 - The default value is [0].

Operation	Adjustment	Adjustment range
Press the ► button.	The top becomes smaller.	-30 ~ 30
Press the ◀ button.	The bottom becomes smaller.	



Note

- Correcting up to $\pm 30^\circ$ for the tilt in the vertical direction is available for adjustments with [V Keystone]. However, the image quality will degrade and it will get harder to focus with more correction. Install the projector so that the correction will be as small as possible.
- The image size will also change when [V Keystone] is used to perform adjustments.

Resetting the correction state of [V Keystone]

Cancel the state corrected with [V Keystone], and return to the factory default.

- 1) Press **▲▼** to select [Reset].
- 2) Press **▶** or the **<ENTER>** button.
 - The confirmation screen is displayed.
- 3) Press **◀▶** to select [OK].
- 4) Press the **<ENTER>** button.
 - [V Keystone] is reset to the factory default.

[Audio] menu

On the menu screen, select [Audio] from the main menu, and select an item from the sub-menu. Refer to “Navigating through the menu” (➔ page 53) for the operation of the menu screen.

[Mute]

Turn off the audio temporarily.

- 1) Press ▲▼ to select [Mute].
- 2) Press ► or the <ENTER> button.
 - The [Mute] screen is displayed.
- 3) Press ◀▶ to switch the item.
 - The items will switch each time you press the button.
 - You can also press the <MUTE> button on the remote control. (➔ page 47)

[Off]	Audio is output.
[On]	Audio is not output.

Note

- The mute function affects both internal and external speaker volume.
- When [Mute] is set to [On], you will see the associated icon on top-right side of the screen.

[Volume]

Adjust the volume of the built-in speaker or audio output.

- 1) Press ▲▼ to select [Volume].
- 2) Press ► or the <ENTER> button.
 - The [Volume] screen is displayed.
- 3) Press ◀▶ to adjust the level.
 - You can also press the <VOLUME +> or <VOLUME -> button on the remote control. (➔ page 47)

Operation	Adjustment	Range
Press the ► button.	Turns up the volume.	0 ~ 10
Press the ◀ button.	Turns down the volume.	

[Audio In Select]

Select the audio input terminal for each input signal.

- 1) Press ▲▼ to select [Audio In Select].
- 2) Press ► or the <ENTER> button.
- 3) Press ▲▼ to select one item of [Audio In Select] to set.

[HDMI 1 IN]	Set the audio output for HDMI 1 IN input.
[HDMI 2 IN]	Set the audio output for HDMI 2 IN input.
[COMPUTER 1 IN]	Set the audio output for COMPUTER 1 IN input.
[COMPUTER 2 IN]	Set the audio output for COMPUTER 2 IN input.
[VIDEO IN]	Set the audio output for VIDEO IN input.

- 4) Press ► or the <ENTER> button.
- 5) Press ▲▼ to switch the item.
 - The sub items will switch each time you press the button.

[Default] ^{*1}	Audio input to HDMI 1 IN or HDMI 2 IN is output.
[Audio 1]	Audio connected to the <AUDIO 1 IN> terminal is output during projection of image from the set input terminal.
[Audio 2]	Audio connected to the <AUDIO 2 IN> terminal is output during projection of image from the set input terminal.

*1 Only for HDMI 1 IN or HDMI 2 IN input

6) Press the <ENTER> button.

[Setup] menu

On the menu screen, select [Setup] from the main menu, and select an item from the sub-menu. Refer to “Navigating through the menu” (➔ page 53) for the operation of the menu screen.

[Projection Method]

Set the projection method in accordance with the installation status of the projector.

Change the projection method if the screen display is upside down or inverted.

- 1) Press ▲▼ to select [Projection Method].
- 2) Press ► or the <ENTER> button.
 - The [Projection Method] screen is displayed.
- 3) Press ▲▼◀▶ to switch the item.
 - The items will switch each time you press the button.

[Front] (icon)	When installing the projector on the desk, etc., in front of the screen.
[Rear] (icon)	When installing the projector on the desk, etc., behind the screen (with a translucent screen).
[Front Ceiling] (icon)	When installing the projector in front of the screen with the Ceiling Mount Bracket (optional).
[Rear Ceiling] (icon)	When installing the projector behind the screen (with a translucent screen) with the Ceiling Mount Bracket (optional).

- 4) Press the <ENTER> button.
 - The confirmation screen is displayed.
- 5) Press ◀▶ to select [Yes].
- 6) Press the <ENTER> button.

[Eco Management]

Set [Eco Management] to reduce the power consumption and enhance the life of the light source.

[Direct Power On]

Set whether or not to enable the [Direct Power On] function.

- 1) Press ▲▼ to select [Eco Management].
- 2) Press ► or the <ENTER> button.
- 3) Press ▲▼ to select [Direct Power On].
- 4) Press ► or the <ENTER> button.
 - The [Direct Power On] screen is displayed.
- 5) Press ◀▶ to switch the item.
 - The items will switch each time you press the button.

[Off]	The [Direct Power On] function is disabled.
[On]	The projector automatically powers on when AC power is supplied, without pressing the power <⏻/ > button on the projector control panel or on the remote control.

[Signal Power On]

Set whether or not to enable the [Signal Power On] function.

- 1) Press ▲▼ to select [Eco Management].
- 2) Press ► or the <ENTER> button.
- 3) Press ▲▼ to select [Signal Power On].

- 4) Press ► or the <ENTER> button.
 - The [Signal Power On] screen is displayed.
- 5) Press ◀▶ to switch the item.
 - The items will switch each time you press the button.

[Off]	The [Signal Power On] function is disabled.
[On]	The projector automatically powers on when a signal is detected, without pressing the power <⏻/▶> button on the projector control panel or on the remote control.

Note

- Only supports HDMI 1 IN, HDMI 2 IN, COMPUTER 1 IN and COMPUTER 2 IN inputs.
- Depending on the computer model, the function may not be performed when the input is COMPUTER 1 IN or COMPUTER 2 IN.

[Auto Power Off (min)]

You can set the countdown timer interval. The countdown timer will start when there is no signal being sent to the projector. The projector will automatically power off when the countdown has finished.

- 1) Press ▲▼ to select [Eco Management].
- 2) Press ► or the <ENTER> button.
- 3) Press ▲▼ to select [Auto Power Off (min)].
- 4) Press ► or the <ENTER> button.
 - The [Auto Power Off (min)] screen is displayed.
- 5) Press ◀▶ to set the timer.
 - The time can be set in 5-minute increments from 0 to 180 minutes.
 - The factory default value is 20 minutes.

[Standby Mode]

Set the power consumption during standby.

- 1) Press ▲▼ to select [Eco Management].
- 2) Press ► or the <ENTER> button.
- 3) Press ▲▼ to select [Standby Mode].
- 4) Press ► or the <ENTER> button.
 - The [Standby Mode] screen is displayed.
- 5) Press ◀▶ to switch the item.
 - The items will switch each time you press the button.

[Eco.]	Select this item to reduce power consumption during standby.
[Normal]	Select this item to use the network functions, the serial communication function, or the functions set in [Normal Standby] during standby.

Note

- When [Standby Mode] is set to [Eco.], the network function cannot be used during standby. Also, some RS-232C commands cannot be used.

[Normal Standby]

Perform the normal standby setting.

- 1) Press ▲▼ to select [Eco Management].
- 2) Press ► or the <ENTER> button.
- 3) Press ▲▼ to select [Normal Standby].
- 4) Press ► or the <ENTER> button.

5) Press ▲▼ to select one item to set.

[USB Power]	Enables or disables the USB power function when the projector is in normal standby mode.
[Audio Out]	Enables or disables audio out function when the projector is in normal standby mode.
[Speaker]	Enables or disables speaker function when the projector is in normal standby mode.
[Computer Out]	Enables or disables Computer Out function when the projector is in normal standby mode.
[Quick Startup]	Enables or disables the [Quick Startup] function when the projector is in normal standby mode.

6) Press ► or the <ENTER> button.

7) Press ◀▶ to switch the item.

- The sub items will switch each time you press the button.

[Off]	Disables the selected function.
[On]	Enables the selected function.

Note

- [Normal Standby] can be set only when [Standby Mode] is set to [Normal].
- When [USB Power], [Audio Out], [Speaker], [Computer Out] and [Quick Startup] are all set to [Off], some RS-232C commands cannot be used during standby.
- When any one of [USB Power], [Audio Out], [Speaker], [Computer Out] and [Quick Startup] is set to [On], all RS-232C commands can be used during standby.
- [Quick Startup] is forcibly set to [On] if any one of [USB Power], [Audio Out], [Speaker] and [Computer Out] is set to [On]. After that, [Quick Startup] remains at [On] even if any one of [USB Power], [Audio Out], [Speaker] and [Computer Out] is set to [Off].
- When [Quick Startup] is set to [On], the power consumption during normal standby becomes high during the period when the [Quick Startup] function is valid.

[Security]

Perform security settings.

[Security]

Set whether or not to enable the security password entry.

If the security password entry is enabled, the password input screen will be displayed and the security password is required for the following cases.

- Connect the power plug to the outlet and turn the power on.
- Execute the [Setup] menu → [Reset] → [Reset to Default].
- Execute the [Network] menu → [LAN] → [Reset].
- Set [Change Password].

1) Press ▲▼ to select [Security].

2) Press ► or the <ENTER> button.

3) Press ▲▼ to select [Security].

4) Press ► or the <ENTER> button.

- The password input screen is displayed.

5) Press ▲▼◀▶ or the number buttons (<0>-<9>) to enter the 4-digit password, and press the <ENTER> button.

- The [Security] individual adjustment screen is displayed.

6) Press ◀▶ to switch the item.

- The items will switch each time you press the button.

[Off]	Disables the security password entry.
[On]	Enables the security password entry.

Note

- The initial security password is "1234".
- A warning message is displayed on the screen and the projector powers off automatically in 10 seconds if you input an incorrect password consecutively for three times.

- This item is set to [Off] in the factory default setting or when the [Setup] menu → [Reset] → [Reset to Default] is executed. Set it to [On] as necessary.
- If this item is set to [Off], [Change Password] is grayed out.

[Change Password]

Change the security password.

- 1) Press ▲▼ to select [Security].
- 2) Press ► or the <ENTER> button.
- 3) Press ▲▼ to select [Change Password].
- 4) Press ► or the <ENTER> button.
 - The password input screen is displayed.
- 5) Press ▲▼◀▶ or the number buttons (<0>-<9>) to enter the old 4-digit password, and press the <ENTER> button.
 - The [Change Password] screen is displayed.
- 6) Press ▲▼◀▶ or the number buttons (<0> - <9>) to enter a new 4-digit password as you want.
- 7) Press the <ENTER> button.
- 8) Re-enter the new password for confirmation and press the <ENTER> button.
 - The password is changed successfully.

Note

- Change the password periodically that is hard to guess.
- To return the security password to the factory default setting, please consult your dealer.

[HDMI CEC]

When you connect HDMI CEC-compatible devices to the projector with HDMI cables, you can operate some of their menu items or control them on the same power on or power off status using the HDMI Link control feature in the projector's OSD.

[HDMI-CEC Control]

Set whether to enable the HDMI CEC function.

- 1) Press ▲▼ to select [HDMI CEC].
- 2) Press ► or the <ENTER> button.
- 3) Press ▲▼ to select [HDMI-CEC Control].
- 4) Press ► or the <ENTER> button.
 - The [HDMI-CEC Control] screen is displayed.
- 5) Press ◀▶ to switch the item.
 - The items will switch each time you press the button.

[Off]	Disables the HDMI CEC function.
[On]	Enables the HDMI CEC function.

Note

- [HDMI 1], [HDMI 2], [HDMI-CEC Operation], [MENU code] and [Link Function] are grayed out if [HDMI-CEC Control] is set to [Off].

[HDMI 1] / [HDMI 2]

The names of HDMI CEC-compatible devices connected to the <HDMI IN 1> terminal and the <HDMI IN 2> terminal of the projector are displayed. You can select one of the devices that are displayed.

- 1) Press ▲▼ to select [HDMI CEC].
- 2) Press ► or the <ENTER> button.

- 3) Press ▲▼ to select [HDMI 1] or [HDMI 2].
- 4) Press ► or the <ENTER> button.
 - The [HDMI 1] or [HDMI 2] screen is displayed.
- 5) Press ◀▶ to select a connected device.

Note

- When there is no available HDMI CEC compatible device, [-] will be displayed.

[HDMI-CEC Operation]

Display the menu for turning on / off the HDMI-CEC compatible device or operating the device's menu by using the remote control of the projector.

- 1) Press ▲▼ to select [HDMI CEC].
- 2) Press ► or the <ENTER> button.
- 3) Press ▲▼ to select [HDMI-CEC Operation].
- 4) Press ► or the <ENTER> button.
 - The [HDMI-CEC Operation] screen is displayed. At this time, you can operate the external device, whose model number is displayed on the screen, via the following buttons on the remote control of the projector:
 - <7> button (<ASPECT> button): Used to display or hide the menu of the external device.
 - <8> button (<FREEZE> button): Used to turn on / off the external device.
 - <9> button (<D.ZOOM-> button): Used as the return operation when operating the menu of the external device.
 - ▲▼◀▶ buttons: Used to move the cursor on the menu of the external device.
 - <ENTER> button: Used to confirm the operation on the menu of the external device.

Note

- [HDMI-CEC Operation] is grayed out if the input is not HDMI 1 IN or HDMI 2 IN.

[MENU code]

Change the code assigned to [MENU] on the [HDMI-CEC Operation] screen.
You need to assign a code according to the external device.

- 1) Press ▲▼ to select [HDMI CEC].
- 2) Press ► or the <ENTER> button.
- 3) Press ▲▼ to select [MENU code].
- 4) Press ► or the <ENTER> button.
 - The [MENU code] screen is displayed.
- 5) Press ◀▶ to switch the item.
 - The items will switch among [1] ~ [6] each time you press the button.

[Link Function]

Control the HDMI CEC-compatible devices and the projector on the same power on or power off status.

- 1) Press ▲▼ to select [HDMI CEC].
- 2) Press ► or the <ENTER> button.
- 3) Press ▲▼ to select [Link Function].
- 4) Press ► or the <ENTER> button.
- 5) Press ▲▼ to switch the item.
 - The items will switch each time you press the button.

[Projector → Device]	Enables or disables the projector to perform interlocking control of the HDMI-CEC compatible device.
[Device → Projector]	Enables or disables the HDMI-CEC compatible device to perform interlocking control of the projector.

Note

- The <HDMI IN 1> terminal of the projector is used as the default terminal for HDMI Link control.

Setting [Projector → Device]

- 1) Press ▲▼ to select [Projector → Device].
- 2) Press ► or the <ENTER> button.
 - The [Projector → Device] screen is displayed.
- 3) Press ◀▶ to switch the item.
 - The items will switch each time you press the button.

[Power On / Off]	The HDMI-CEC compatible device turns on or off in conjunction with the power-on/off operation of the projector.
[Disable]	Disables the projector to perform interlocking control of the device. Even if the power status of the projector changes, the power status of the device will not be affected.
[Power Off]	Turning off the projector turns off all the devices connected to the <HDMI IN 1> and <HDMI IN 2> terminals. The power-on operation is not interlocked.

Note

- When set to [Power On / Off]:
 - Turning on the projector turns on the HDMI-CEC compatible device connected to the <HDMI IN 1> or <HDMI IN 2> terminal when the input is HDMI 1 IN or HDMI 2 IN.
 - Turning off the projector turns off all the connected HDMI-CEC compatible devices.
 - Switching the input of the projector to HDMI 1 IN or HDMI 2 IN turns on the HDMI-CEC compatible device connected to the <HDMI IN 1> or <HDMI IN 2> terminal.
- When set to [Power Off]:
 - Turning off the projector turns off all the connected HDMI-CEC compatible devices.
- Switching from [Disable] or [Power Off] to [Power On / Off] turns on the HDMI-CEC compatible device connected to the <HDMI IN 1> or <HDMI IN 2> terminal when the input of the projector is HDMI 1 IN or HDMI 2 IN.

Setting [Device → Projector]

- 1) Press ▲▼ to select [Device → Projector].
- 2) Press ► or the <ENTER> button.
 - The [Device → Projector] screen is displayed.
- 3) Press ◀▶ to switch the item.
 - The items will switch each time you press the button.

[Power On / Off]	The power status of the projector interlocks with the power-on/off operation of the device.
[Disable]	Disables the device to perform interlocking control of the projector. Even if the power status of the device changes, the power status of the projector will not be affected.
[Power On]	Turning on the device turns on the projector, and the input (HDMI 1 IN / HDMI 2 IN) is switched to that of the device.

Note

- When set to [Power On / Off]:
 - Turning on the HDMI-CEC compatible device turns on the projector, and switches the projector's input to HDMI 1 IN or HDMI 2 IN to which the device is connected.
 - Turning off the HDMI-CEC compatible device connected to the <HDMI IN 1> or <HDMI IN 2> terminal turns off the projector when the input of the projector is HDMI 1 IN or HDMI 2 IN.
- When set to [Power On]:
 - Turning on the HDMI-CEC compatible device turns on the projector, and switches the projector's input to HDMI 1 IN or HDMI 2 IN to which the device is connected.

- The device interlocking function, which turns off this unit, realizes the interlocking operations by monitoring signal statuses of devices. Depending on the setting, the device continues to output signals even in the power-off state. In this case, the interlocking function does not operate.
In this case, refer to the manuals of the devices.
- Depending on the projector status or video equipment status, such as during start-up, the interlocking operation may not be performed.

[HDMI Signal Level]

Switch the setting when the external device is connected to the <HDMI IN 1> terminal / <HDMI IN 2> terminal of the projector and the image is not projected correctly.

- 1) Press ▲▼ to select [HDMI Signal Level].
- 2) Press ► or the <ENTER> button.
 - The [HDMI Signal Level] screen is displayed.
- 3) Press ◀▶ to switch the item.
 - The items will switch each time you press the button.

[Auto]	Sets the signal level automatically.
[64-940]	Select when the HDMI terminal of an external device (such as a blu-ray player) is connected to the <HDMI IN 1> terminal / <HDMI IN 2> terminal of the projector.
[0-1023]	Select when the DVI terminal output of an external device (such as a computer) is connected to the <HDMI IN 1> terminal / <HDMI IN 2> terminal of the projector via a conversion cable or similar cable. Select also when the HDMI terminal output of a computer or other device is connected to the <HDMI IN 1> terminal / <HDMI IN 2> terminal of the projector.

Note

- The optimal setting varies depending on the output setting of the connected external device. Refer to the operation instruction of the external device regarding the output of the external device.
- The displayed signal level is assumed when the input is 30 bits.

[Test Pattern]

Display the test pattern built-in to the projector.

Settings of position, size, and other factors will not be reflected in test patterns. Make sure to display the input signal before performing various adjustments.

- 1) Press ▲▼ to select [Test Pattern].
- 2) Press ► or the <ENTER> button.
 - The [Test Pattern] screen is displayed.
- 3) Press ◀▶ to switch the item.
 - The items will switch each time you press the button.

[Off]	Disables displaying a test pattern.
[Grid]	Select a test pattern so that it is easy to make various adjustments.
[Horizontal Line]	
[Vertical Line]	
[Full White]	
[Black]	
[Color Bars]	
[Checker Board]	

Note

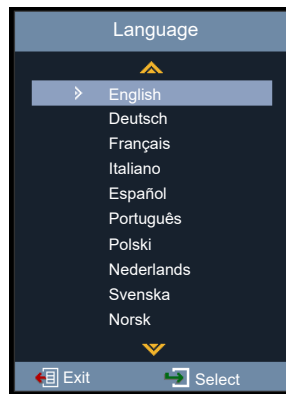
- [Test Pattern] is hidden if the the [3D] → [3D Mode] is set to [DLP Link] or the high refresh rate (96 Hz or higher) signal is input.
- Pressing the <ENTER> button can hide the OSD display on the test pattern.

[Options]

[Language]

You can select the language of the on-screen display.

- 1) Press ▲▼ to select [Options].
- 2) Press ► or the <ENTER> button.
- 3) Press ▲▼ to select [Language].
- 4) Press ► or the <ENTER> button.
 - The [Language] screen is displayed.
- 5) Press ▲▼ to switch the language.
 - The language will switch each time you press the button.



- 6) Press the <ENTER> button.
 - Various menus, settings, adjustment screens, control button names, etc., are displayed in the selected language.
 - The language can be changed to English, German, French, Italian, Spanish, Portuguese, Polish, Dutch, Swedish, Norwegian, Finnish, simplified Chinese, Japanese, Korean, Russian, Hungarian, Czech, Arabic, Thai, Turkish, Vietnamese, Romanian, Kazakh and Danish.

Note

- The on-screen display language of the projector is set to English by default and when the [Setup] menu → [Reset] → [Reset to Default] (➔ page 79) is executed.

[Closed Caption]

Set the closed caption.

- 1) Press ▲▼ to select [Options].
- 2) Press ► or the <ENTER> button.
- 3) Press ▲▼ to select [Closed Caption].
- 4) Press ► or the <ENTER> button.
 - The [Closed Caption] screen is displayed.
- 5) Press ◀▶ to switch the item.
 - The items will switch each time you press the button.

[Off]	Closed caption is not displayed.
[CC1]	Displays CC1 data.
[CC2]	Displays CC2 data.

Note

- Closed caption is a function that displays text information of video signals mainly used in North America. Captions may not be displayed depending on the connected devices or contents being played back.

- [Closed Caption] is available only if an NTSC signal is input.
- If [Closed Caption] is set to the item except for [Off], the brightness of image may be changed according to the external devices or the used content of the closed caption corresponding connection.
- Closed captions are not displayed when the menu screen is displayed.

[Menu Settings]

Set the menu location on the screen and configure menu timer settings.

- 1) Press ▲▼ to select [Options].
- 2) Press ► or the <ENTER> button.
- 3) Press ▲▼ to select [Menu Settings].
- 4) Press ► or the <ENTER> button.
- 5) Press ▲▼ to switch the item.
 - The items will switch each time you press the button.

[OSD Position]	Set the position of the menu screen (OSD).
[Menu Timer]	Set the duration the OSD menu stays visible on the screen.

Setting with [OSD Position]

Set the position of the menu screen (OSD).

- 1) Press ▲▼ to select [OSD Position].
- 2) Press ► or the <ENTER> button.
 - The [OSD Position] screen is displayed.
- 3) Press ▲▼◀▶ to change the menu position.
 - The menu position will switch each time you press the button.

Setting with [Menu Timer]

Set the duration the OSD menu stays visible on the screen. If no menu operation is performed, the OSD menu disappears once the time set in [Menu Timer] has elapsed.

- 1) Press ▲▼ to select [Menu Timer].
- 2) Press ► or the <ENTER> button.
 - The [Menu Timer] screen is displayed.
- 3) Press ◀▶ to switch the item.
 - The items will switch each time you press the button.

[Off]	The menu timer function is disabled.
[5 sec]	The OSD menu disappears if no menu operation is performed in 5 seconds.
[10 sec]	The OSD menu disappears if no menu operation is performed in 10 seconds.

[Signal Search]

Set whether to enable the signal search function.

If the signal search function is enabled, the projector will automatically find an input with input signal.

- 1) Press ▲▼ to select [Options].
- 2) Press ► or the <ENTER> button.
- 3) Press ▲▼ to select [Signal Search].
- 4) Press ► or the <ENTER> button.
 - The [Signal Search] screen is displayed.
- 5) Press ◀▶ to switch the item.
 - The items will switch each time you press the button.

[Off]	The projector only searches for the input selected.
[On]	The projector automatically searches for all the input until an available input with input signal is found. After an available input with input signal is found, you can press any input selection button on the remote control or the <INPUT SELECT> button on the control panel to automatically find the next input with input signal.

[Input]

Set the input source.

- 1) Press ▲▼ to select [Options].
- 2) Press ► or the <ENTER> button.
- 3) Press ▲▼ to select [Input].
- 4) Press ► or the <ENTER> button.
 - The [Input] screen is displayed.
- 5) Press ▲▼ to switch the item.
 - The items will switch each time you press the button.

[HDMI 1 IN]	Set the input to HDMI 1 IN.
[HDMI 2 IN]	Set the input to HDMI 2 IN.
[COMPUTER 1 IN]	Set the input to COMPUTER 1 IN.
[COMPUTER 2 IN]	Set the input to COMPUTER 2 IN.
[VIDEO IN]	Set the input to VIDEO IN.

- 6) Press the <ENTER> button.
 - The selected input will be projected.

[High Altitude]

Change the setting according to the altitude in which you use the projector.

- 1) Press ▲▼ to select [Options].
- 2) Press ► or the <ENTER> button.
- 3) Press ▲▼ to select [High Altitude].
- 4) Press ► or the <ENTER> button.
 - The [High Altitude] screen is displayed.
- 5) Press ◀▶ to switch the item.
 - The items will switch each time you press the button.

[Off]	When using the projector below 1 400 m (4 593') above sea level.
[High 1] ^{*1}	When using the projector between 1 400 m (4 593') and 2 100 m (6 890') above sea level.
[High 2] ^{*1}	When using the projector between 2 100 m (6 890') and 2 700 m (8 858') above sea level.
[High] ^{*2}	When using the projector between 1 400 m (4 593') and 4 200 m (13 780') above sea level.

*1 Available only when the [Picture] menu → [Image Settings] → [Light Power] is set to [Normal].

*2 Available only when the [Picture] menu → [Image Settings] → [Light Power] is set to [Eco] or [Quiet].

Note

- Set [High Altitude] properly according to the setting of [Light Power] and the altitude at which the projector is being used. Failure to do so may shorten the life of the internal parts and result in malfunctions.
- When [Light Power] is set to [Normal], do not set the projector at 2 700 m (8 858') or higher above sea level. Failure to do so may shorten the life of the internal parts and result in malfunctions.
- When [Light Power] is set to [Eco] or [Quiet], do not set the projector at 4 200 m (13 780') or higher above sea level. Failure to do so may shorten the life of the internal parts and result in malfunctions.
- When it is set to [High], [High 1] or [High 2], the fan noise becomes louder and fan speed increases.

[Logo]

Set whether to display the logo on the projector startup screen.

- 1) Press ▲▼ to select [Options].
- 2) Press ► or the <ENTER> button.
- 3) Press ▲▼ to select [Logo].
- 4) Press ► or the <ENTER> button.
 - The [Logo] screen is displayed.
- 5) Press ◀▶ to switch the item.
 - The items will switch each time you press the button.

[Default]	The Panasonic logo is displayed on the projector startup screen.
[Neutral]	The Panasonic logo is not displayed on the projector startup screen. The startup screen is displayed in a color selected in the [Setup] menu → [Options] → [Background Color].

Note

- If the [Setup] menu → [Eco Management] → [Normal Standby] → [Quick Startup] is set to [On], the logo is not displayed at projector startup.

[Background Color]

Set the display of the projected screen when there is no signal input.

- 1) Press ▲▼ to select [Options].
- 2) Press ► or the <ENTER> button.
- 3) Press ▲▼ to select [Background Color].
- 4) Press ► or the <ENTER> button.
 - The [Background Color] screen is displayed.
- 5) Press ◀▶ to switch the item.
 - The color will switch each time you press the button.
Black → Blue → Logo → Black...

[Reset]

Return various setting values to their factory default settings.

- 1) Press ▲▼ to select [Reset].
- 2) Press ► or the <ENTER> button.
- 3) Press ► or the <ENTER> button again.
 - The [Reset to Default] screen is displayed.
- 4) Press ◀▶ to select [OK] and then press the <ENTER> button.
 - The setting values are reset successfully after the [Processing...] message disappears.

Note

- If the [Setup] menu → [Security] → [Security] is set to [On], the password input screen will be displayed after the [Setup] menu → [Reset] → [Reset to Default] is executed. Enter the security password set for the projector and the setting values are reset to default.
- Even if the [Setup] menu → [Reset] → [Reset to Default] is performed, the settings of [Network] cannot be initialized. To initialize the settings of [Network], perform the [Network] menu → [LAN] → [Reset].
- After the [Setup] menu → [Reset] → [Reset to Default] is executed, the initial setting screen is displayed when the projection starts next time.

[Network] menu

On the menu screen, select [Network] from the main menu, and select an item from the sub-menu. Refer to “Navigating through the menu” (➔ page 53) for the operation of the menu screen.

[LAN]

Perform the connection setting to use wired LAN.

- 1) Press ▲▼ to select [LAN].
- 2) Press ► or the <ENTER> button.
- 3) Press ▲▼ to select an item, and then press ► or the <ENTER> button to change the setting according to the instructions.

[Network Status]	Displays the network connection status (read-only).	
[MAC Address]	Displays the MAC address (read-only).	
[DHCP] *1	[Off]:	Select this item when a DHCP server does not exist in the network to which the projector is connected. You need to specify the IP address, subnet mask, gateway address and DNS.
	[On]:	Select this item when a DHCP server exists in the network to which the projector is connected. The projector will obtain an IP address automatically from your network.
[IP Address]	Enter the IP address when [DHCP] is set to [Off].	
[Subnet Mask]	Enter the subnet mask when [DHCP] is set to [Off].	
[Gateway]	Enter the gateway address when [DHCP] is set to [Off].	
[DNS]	Enter the DNS server address when [DHCP] is set to [Off].	
[Reset]	Returns settings of the [Network] menu to the factory defaults.	

*1 The entered value will be applied when exiting the menu.

- 4) After completing the setting, press the <MENU> button.
 - The confirmation screen is displayed.
 - The screen with a message prompting invalid settings is displayed if the settings are invalid. Correct the settings.
- 5) Press ◀▶ to select [Yes] and then press the <ENTER> button.
 - The entered values are applied after the screen with a message prompting the users to wait disappears.
 - The following settings are set before the projector leaves the factory.

[DHCP]	Off
[IP Address]	192.168.0.100
[Subnet Mask]	255.255.255.0
[Gateway]	192.168.0.254
[DNS]	168.95.1.1

- Proceed to Step 6) if you want to reset the settings.

- 6) Press ▲▼ to select [Reset].
- 7) Press ► or the <ENTER> button.
 - The confirmation screen is displayed.
- 8) Press ◀▶ to select [OK] and then press the <ENTER> button.
 - The setting values are reset after the screen with a message prompting the users to wait disappears.

Note

- When using the projector by setting [DHCP] to [On], confirm that the DHCP server is operating.
- For the setting content of each item, consult your network administrator.
- Note that the settings of both [LAN] and [Control] return to the factory default values once the [Network] menu → [Lan] → [Reset] is executed.

- If the [Setup] menu → [Security] → [Security] is set to [On], the password input screen will be displayed after the [Network] menu → [LAN] → [Reset] is executed. Enter the security password set for the projector and the [Network] menu is reset to default.

[Control]

Set up the control method of the network.

1) Press ▲▼ to select [Control].

2) Press ► or the <ENTER> button.

- If the network account has not been set, [Control] cannot be set and the message prompting the users to set the network account is displayed. In this case, set the network account first (► page 86).
- If the network account has been set, proceed to Step 3).

3) Press ▲▼ to select an item.

[Crestron Connected(TM)]	Set to [On] to control with Crestron Connected of Crestron Electronics, Inc. Port 41794
[PJLink Control] ^{*1}	Set to [On] to control with the PJLink protocol. Port 4352
[AMX Device Discovery]	Set to [On] to control with the controller of AMX Corporation. Setting this function to [On] enables detection through "AMX Device Discovery". For details, visit the website of AMX Corporation. URL http://www.amx.com/ Port 9131
[HTTP]	Set to [On] to control with the web browser. Port 80

*1 Supports Class 1 only.

4) Press ► or the <ENTER> button.

5) Press ◀▶ to switch the item.

- The sub items will switch each time you press the button.

[On]	Enables the selected control method.
[Off]	Disables the selected control method.

[Info] menu

On the menu screen, select [Info] from the main menu.

Refer to “Navigating through the menu” (➔ page 53) for the operation of the menu screen.

[Info]

Display the projector information as listed below.

1) Press ▲▼ to select [Info].

- The [Info] screen is displayed.
- You can also press the <INFO> button on the remote control (➔ page 49).

[Serial Number]	Displays the serial number of the projector.	
[Input]	Displays the input currently selected.	
[Resolution]	Displays the resolution of the input signal.	
[Refresh Rate]	Displays the refresh rate of input signal.	
[Picture Mode]	Displays the setting of [Picture Mode].	
[Standby Mode]	Displays the setting of [Standby Mode].	
[Light Runtime]	Displays the runtime of the light source.	
[Network Status]	Displays the network connection status of the projector.	
[IP Address]	Displays the IP address of the projector.	
[Light Power]	Displays the setting of [Light Power].	
[FW Version]	[System]	Displays the main version of the projector.
	[LAN]	Displays the network version of the projector.
	[MCU]	Displays the sub version of the projector.

Chapter 5 **Operation of Function**

This chapter describes the operation methods of some functions.

Network connection

This projector has network function that allows the following by connecting a computer.

- **WEB control**

By accessing to the projector from a computer, you can perform setting, adjustment, status display, etc. of the projector. Refer to “Web control function” (➡ page 86) for details.

- **Multi Monitoring & Control software**

“Multi Monitoring & Control Software”, a software application to monitor and control multiple display devices (projector or flat panel display) connected to intranet, can be used.

Plug-in software “Early Warning Software”, which monitors the status of the display devices and their peripherals within an intranet, and notifies of abnormality of such equipment and detects the signs of possible abnormality, can also be used.

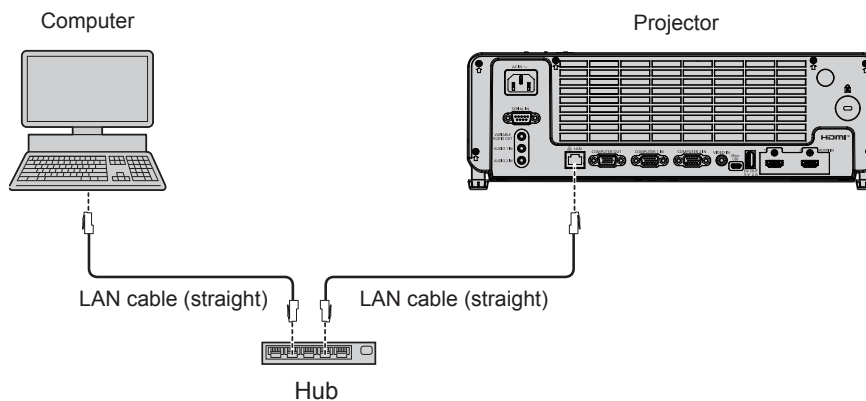
For details, visit the Panasonic website (<https://panasonic.net/cns/projector/>).

- **PJLink**

By using PJLink protocol, you can send inquiries about the operations or status of the projector from a computer. Refer to “Using the PJLink protocol” (➡ page 100) for details.

Connecting to the network

Connection example



Attention

- When a LAN cable is directly connected to the projector, the network connection must be made indoors.

Note

- A LAN cable is required to use the wired LAN function.
- Use shielded LAN cable (STP cable) that is compatible with category 5 or above.
- Use a LAN cable with length of 100 m (328'1") or shorter.

Projector settings

- 1) Use the LAN cable (Straight) to connect the projector with computer.
- 2) Turn on the projector.
- 3) Set the [Network] menu → [LAN].
 - For details, refer to the [Network] menu → [LAN] (➡ page 80).

Note

- Please confirm with your network administrator before you connect to an existing network.
- The following is preset as the factory default setting.

[DHCP]	Off
[IP Address]	192.168.0.100
[Subnet Mask]	255.255.255.0
[Gateway]	192.168.0.254
[DNS]	168.95.1.1

Computer setting

- 1) Turn on the computer.
- 2) Make the network setting according to your system administrator.
 - If the projector settings are the default settings, the computer can be used with the following network settings.

[IP Address]	192.168.0.99
[Subnet Mask]	255.255.255.0
[Gateway]	192.168.0.254

Web control function

Using Web control functions, you can perform the following operations from a computer.

- Setting and adjustment of the projector
- Displaying projector status
- Setting of E-mail message sending

The projector supports “Crestron Connected”, and the following application software of Crestron Electronics, Inc. can be used.

- RoomView Express
- Crestron Fusion

Note

- Communication with an E-mail server is required to use the E-mail function. Confirm that the E-mail can be used beforehand.
- “Crestron Connected” is a system of Crestron Electronics, Inc. that collectively manages and controls devices on multiple systems connected to a network using a computer.
- For details of “Crestron Connected”, refer to the website of Crestron Electronics, Inc. (English only)

URL <https://www.crestron.com>

To download “RoomView Express”, go to the website of Crestron Electronics, Inc. (English only)

URL <https://www.crestron.com/en-US/resources/get-roomview>

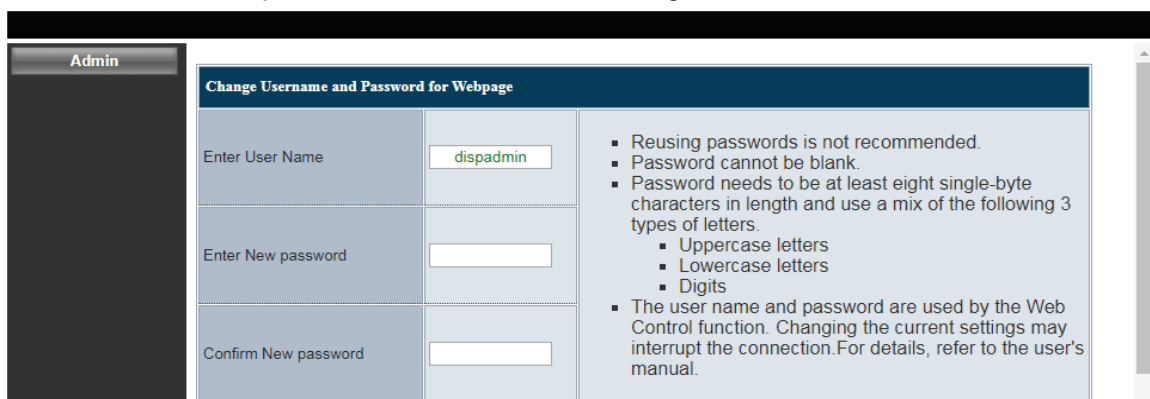
Computer that can be used for setting

A web browser is required to use the web control function. Confirm that your web browser can be used beforehand.

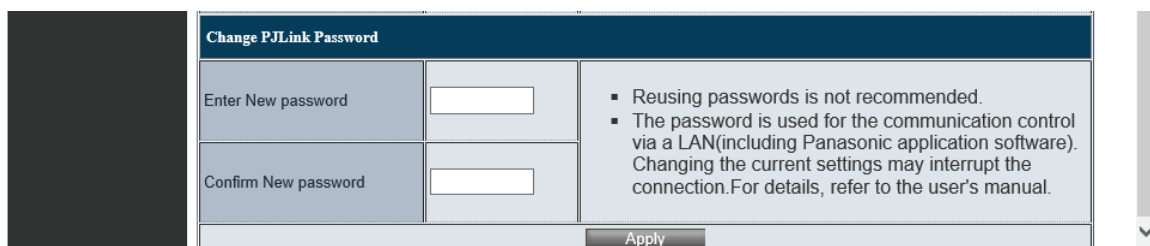
OS	Compatible web browser
Windows	Internet Explorer 11.0 Microsoft Edge
Mac OS	Safari 8.0/9.0/10.0/11.0

Accessing from the web browser

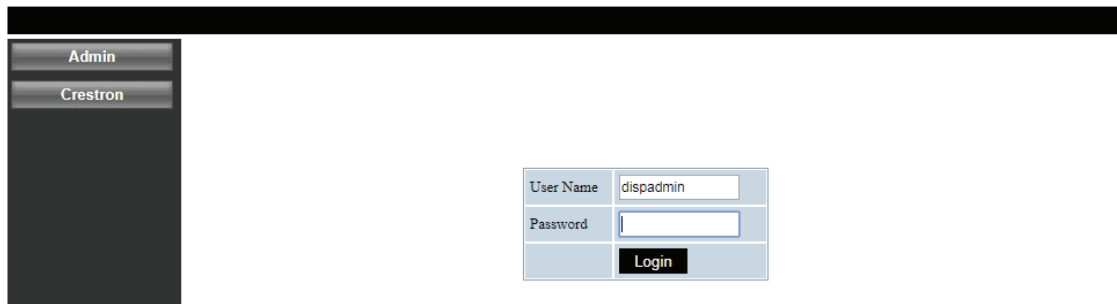
- 1) **Activate the Web browser in the personal computer.**
- 2) **Enter the IP address set by the projector into the URL input field of the web browser.**
 - If the network account (user name and password) has not been set, perform Step 3) to 4).
 - If the network account has been set, perform Step 5) to 6).
- 3) **Set the user name and password for web control, and the password for PJLink control.**
 - Set the user name and password for web control according to instructions.



- Set the password for PJLink control according to instructions. The input fields can be left blank if the password is not needed.



- 4) Click [Apply].
 - The [System Status] page is displayed.
- 5) Enter the user name and the password for web control.

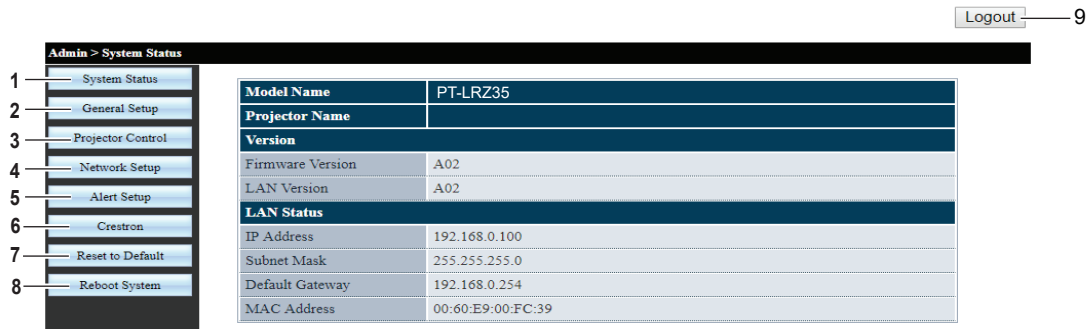


- 6) Click [Login].
 - The [System Status] page is displayed.

Note

- The web control screen is displayed in English only.
- To control with the web browser, set the [Network] menu → [Control] → [HTTP] to [On] (▶ page 81).
- To control with Crestron Connected, set the [Network] menu → [Control] → [Crestron Connected(TM)] to [On] (▶ page 81).
- Do not perform setting or control simultaneously by starting up multiple web browsers. Do not set or control the projector from multiple computers.
- If the screen for the web control is not displayed, consult your network administrator.
- About computer screen illustrations
The screen size and the display may differ from this manual depending on the OS, web browser or the type of computer you are using.

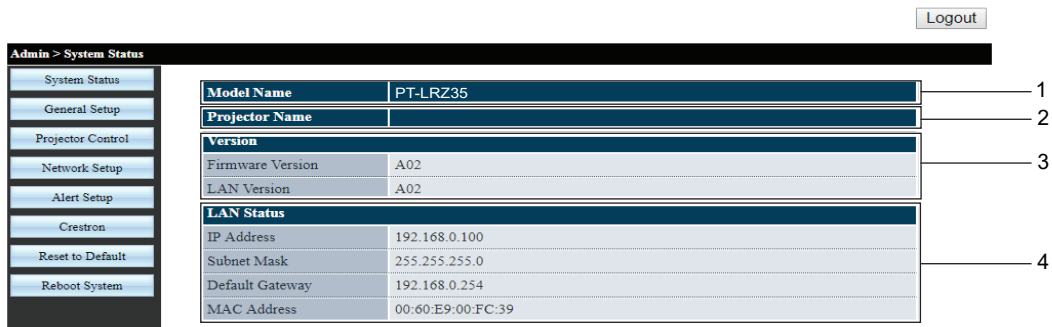
Description of each item



- | | |
|--|--|
| <ol style="list-style-type: none"> 1 [System Status]
The [System Status] page is displayed by clicking this item. 2 [General Setup]
The [General Setup] page is displayed by clicking this item. 3 [Projector Control]
The [Projector Control] page is displayed by clicking this item. 4 [Network Setup]
The [Network Setup] page is displayed by clicking this item. | <ol style="list-style-type: none"> 5 [Alert Setup]
The [Alert Setup] page is displayed by clicking this item. 6 [Crestron]
The control page of Crestron Connected is displayed by clicking this item. 7 [Reset to Default]
All network settings are reset to default by clicking this item. 8 [Reboot System]
The web control screen is rebooted by clicking this item. 9 [Logout]
Click it to exit the web control. |
|--|--|

[System status] page

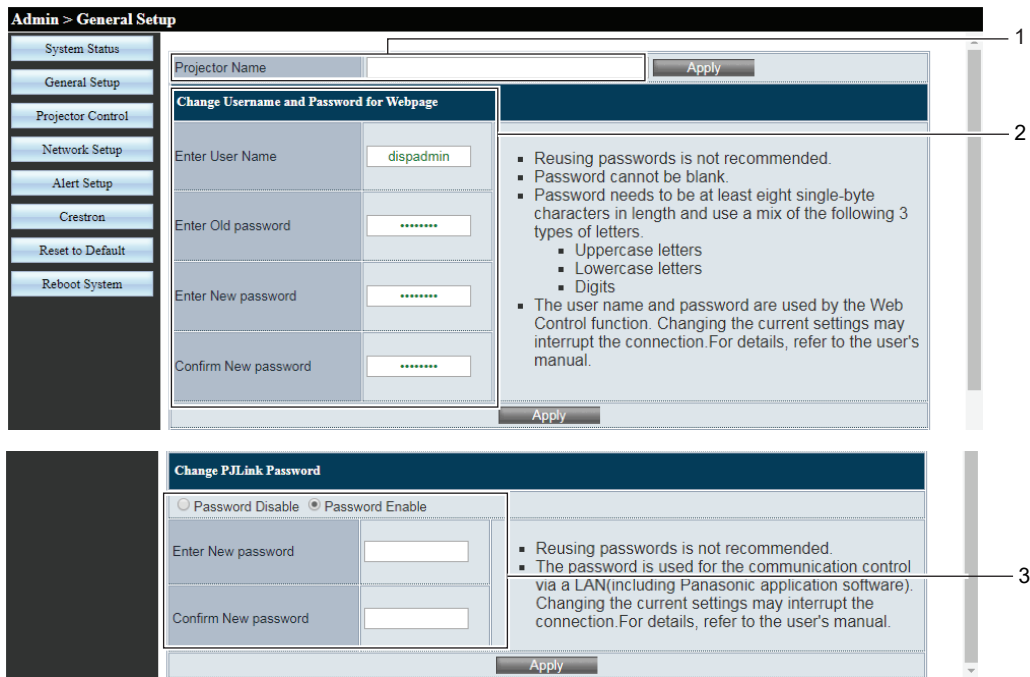
Display the status of the projector for the following items.



- | | |
|---|---|
| <p>1 [Model Name]
Displays the model No. of the projector.</p> <p>2 [Projector Name]
Displays the projector name.</p> | <p>3 [Version]
Displays the firmware version and the LAN version of the projector.</p> <p>4 [LAN Status]
Displays the connection status of the LAN.</p> |
|---|---|

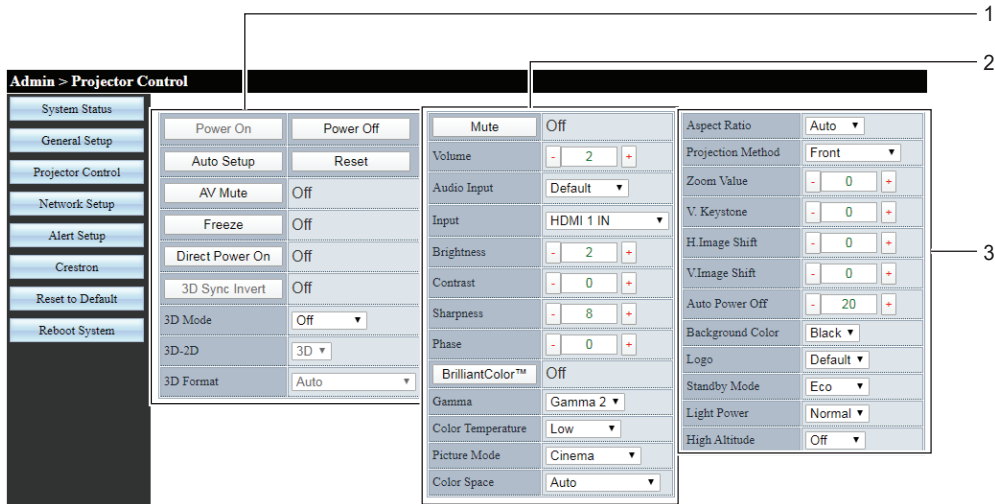
[General Setup] page

Change the projector name, the user name and password of web control function, and the password of PJLink control function.



- | | |
|---|--|
| <p>1 [Projector Name]
Enters a new projector name if you want to change the projector name. Then click [Apply] to updates the settings.</p> <p>2 [Change Username and Password for Webpage]
 [Enter User Name]
Enters a new user name.
 [Enter Old password]
Enters the old password.
 [Enter New password]
Enters a new password.
 [Confirm New password]
Enters the new password again for confirmation. Then click [Apply] to update the settings.</p> | <p>3 [Change PJLink Password]
 [Password Disable] / [Password Enable]
Disables or enables password entry to use the PJLink control function.
 [Enter New password]
Enters a new password.
 [Confirm New password]
Enters the new password again for confirmation. Then click [Apply] to update the settings.</p> |
|---|--|

[Projector Control] page



1 [Power On], [Power Off]

Turns on/off the power.

[Auto Setup]

Automatically adjusts the image display position while the image is projected.

[Reset]

Returns various setting values to their factory default settings.

[AV Mute]

Switches whether to use the AV mute function.

[Freeze]

Temporarily pauses the image.

[Direct Power On]

Switches whether to activate the [Direct Power On] function.

[3D Sync Invert]

Switches whether to activate the [3D Sync Invert] function.

[3D Mode]

Sets whether to use the 3D function.

[3D-2D]

Specifies how the 3D content should appear on the screen.

[3D Format]

Selects the appropriate 3D format content.

2 [Mute]

Switches whether to use the mute function.

[Volume]

Adjusts the volume level.

[Audio Input]

Choose the audio input terminal for each input signal.

[Input]

Switches the image input to be projected.

[Brightness], [Contrast], [Sharpness], [Phase]

Adjusts the brightness, contrast, sharpness and clock phase of the projected image.

[BrilliantColor™]

Switches whether to use the BrilliantColor™ function.

[Gamma]

Switches the gamma mode based on the details of the bright picture.

[Color Temperature]

Adjusts the color temperature of the projected image.

[Picture Mode]

Switches the picture mode.

[Color Space]

Sets the system format matching the input signal.

3 [Aspect Ratio]

Switches the aspect ratio of the projected image.

[Projection Method]

Switches the projection method.

[Zoom Value]

Adjusts the zoom value.

[V. Keystone]

Corrects the keystone in vertical direction.

[H. Image Shift], [V. Image Shift]

Adjusts the horizontal or vertical position of the projected image.

[Auto Power Off]

Sets the countdown time interval to automatically turn off the projector when there is no signal input.

[Background Color]

Sets the display of the projected screen when there is no signal input.

[Logo]

Set whether to display the logo on the projector startup screen.

[Standby Mode]

Sets the standby power consumption.

[Light Power]

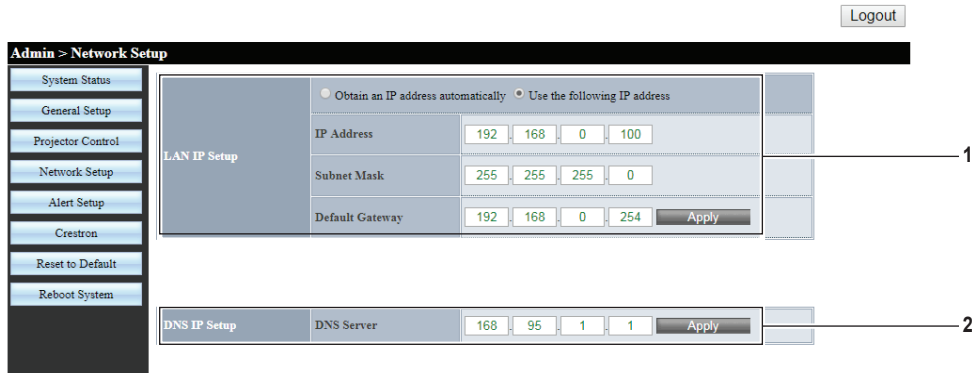
Switches the brightness of the light source according to the operating environment of the projector or the purpose.

[High Altitude]

Switches the high altitude mode.

[Network Setup] page

Network settings can be configured on the [Network Setup] page.



1 [LAN IP Setup]

Sets the items of the wired LAN.

[Obtain an IP address automatically] / [Use the following IP address]

Select [Obtain an IP address automatically] if you want to enable the DHCP client.

[IP Address]

Enter the IP address when not using a DHCP server.

[Subnet Mask]

Enter the subnet mask when not using a DHCP server.

[Default Gateway]

Enter the default gateway address when not using a DHCP server.

[Apply]

Updates the settings.

2 [DNS IP Setup]

[DNS Server]

Enter the DNS server address.

Permissible characters for the entry of DNS server address:

Numbers (0 - 9), period (.)
(Example: 168.95.1.1)

[Apply]

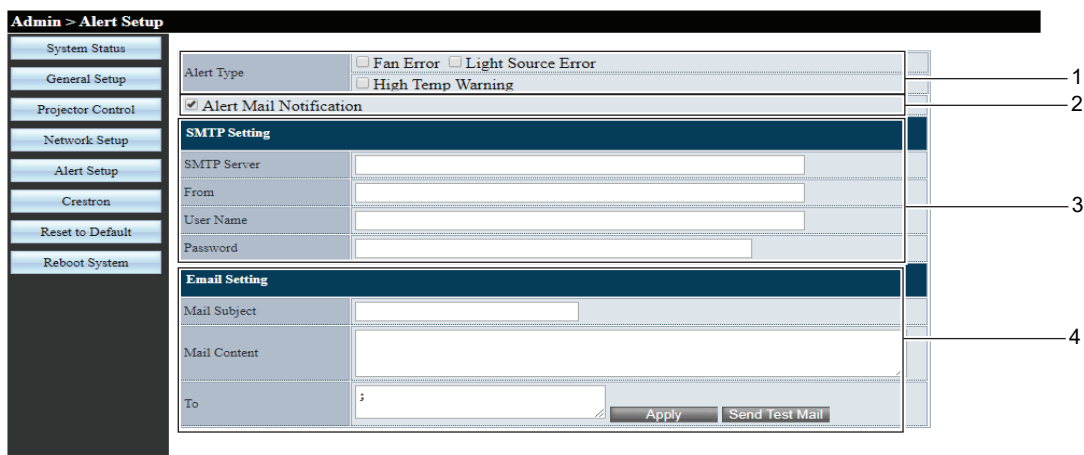
Updates the settings.

Note

- Changing LAN settings while connected to the LAN may cause the connection to cut out.
- If the IP address is changed, the new IP address will have to be put in the URL window of the browser to use the web control function.

[Alert Setup] page

Set the contents of the E-mail to inform the abnormality of the projector.



1 [Alert Type]

Select the alert type.

2 [Alert Mail Notification]

Check [Alert Mail Notification] so that an E-mail can be sent if there is a fault with the projector.

3 [SMTP Setting]

[SMTP Server]

Enter the IP address of SMTP server.

[From]

Enter the E-mail address of the projector.

[User Name]

Enter the user name.

[Password]

Enter the password.

4 [Email Setting]

[Mail Subject]

Enter the subject of the E-mail.

[Mail Content]

Enter the content of E-mail which is associated with the selected [Alert Type].

[To]

Enter the recipients of the E-mail. If you want to send E-mail to some recipients, please separate them by using semicolon (;).

[Apply]

Click [Apply] to save the content after entering each item.

[Send Test Mail]

Click [Send Test Mail] to send a test E-mail.

Note

- If the server is not compatible with the login authentication of the advanced SMTP, the e-mail function is disabled.
- If the server is not compatible with the advanced SMTP, [User Name] is required, but [Password] is not required.
- If the test E-mail is not sent, make sure that each item is set correctly.

[Crestron] page

The projector can be monitored/controlled with Crestron Connected.

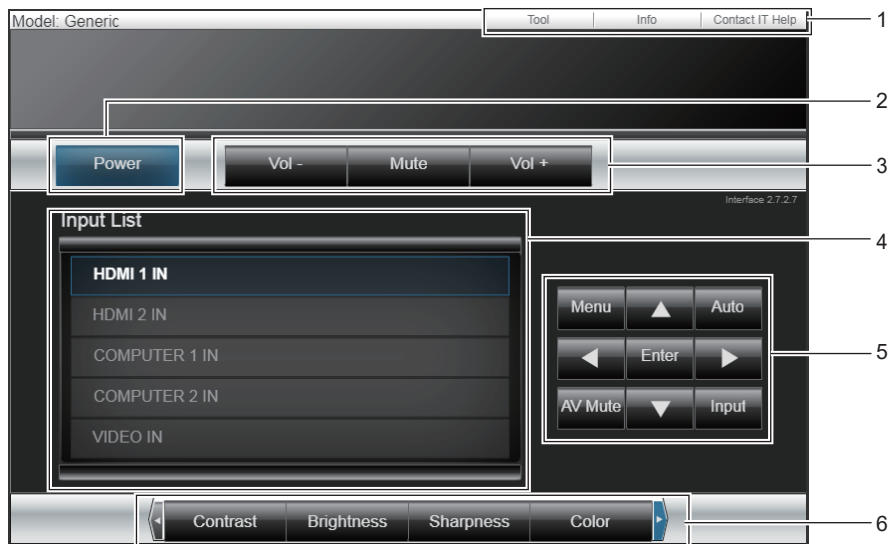
The control page of Crestron Connected is displayed by clicking [Crestron].

It is not displayed if Adobe® Flash® Player is not installed on the computer used, or the browser used does not support Flash.

Note

- When Microsoft Edge is used for a web browser, the operation of the [Crestron] page may not be possible depending on its version. If a web browser freezes when the [Crestron] button is clicked, use "Windows Update" to install the update program.

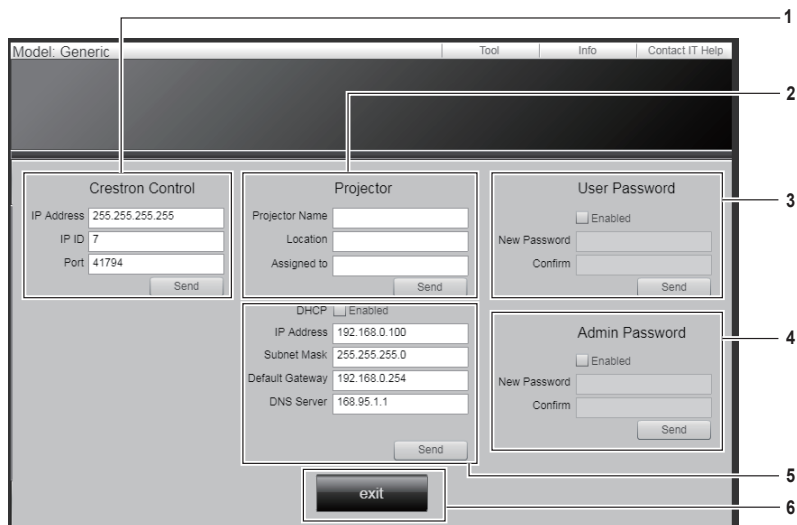
Operation page



- | | |
|--|---|
| <p>1 [Tool], [Info], [Contact IT Help]
Tabs for selecting the setting, information, or help page of the projector.</p> <p>2 [Power]
Turns off/on the power.</p> <p>3 [Vol -], [Vol +]
Adjusts the volume.</p> <p>[Mute]
Switches whether to use the mute function.</p> <p>4 [Input List]
Controls input selection.
Not available when the power of the projector is turned off.</p> | <p>5 Four directional selection keys / [Enter] / [Menu]
Navigates the menu screen.</p> <p>[Auto]
Automatically adjusts the image display position while the image is projected.</p> <p>[AV Mute]
Switches whether to use the AV mute function.</p> <p>[Input]
Displays the [Input] screen.</p> <p>6 [Contrast]/[Brightness]/[Color]/[Zoom]
Controls items related to image quality and digital zoom.</p> |
|--|---|

[Tool] page

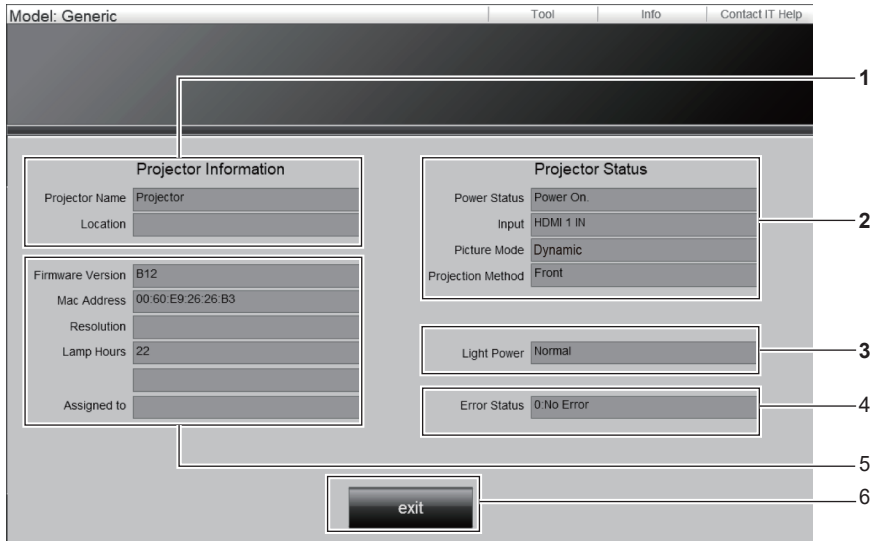
Click [Tool] on the control page.



- | | |
|--|--|
| <p>1 [Crestron Control]
Sets the information required for communicating with the controller to be connected with the projector.</p> <p>2 [Projector]
Sets the name/location of the projector and the name of the individual, group or room where the projector is assigned.</p> <p>3 [User Password]
Sets the user rights password for the Crestron Connected control page.</p> | <p>4 [Admin Password]
Sets the administrator rights password for the Crestron Connected control page.</p> <p>5 Network status
Adjusts the settings of wired LAN.</p> <p>6 [exit]
Returns to the control page.</p> |
|--|--|

[Info] page

Click [Info] on the control page.



1 [Projector Information]

Displays the projector name and location.

2 [Projector Status]

Displays the power status and the currently selected input / picture mode / projection method.

3 [Light Power]

Displays the [Light Power] setting.

4 [Error Status]

Displays the error status.

5 [Firmware Version]

Displays the firmware version.

[Mac Address]

Displays the MAC address.

[Resolution]

Displays the resolution.

[Lamp Hours]

Displays the runtime of the light source.

[Assigned to]

Displays the specified name of the individual, group or room where the projector is assigned.

6 [exit]

Returns to the control page.

[Contact IT Help] page

Click [Contact IT Help] on the control page.

The [Title] window is displayed.



1 [Title]

Send/receive messages to/from an administrator who uses Crestron Connected.

Chapter 6 Maintenance

This chapter describes methods of inspection when there are problems, maintenance, and replacement of the units.

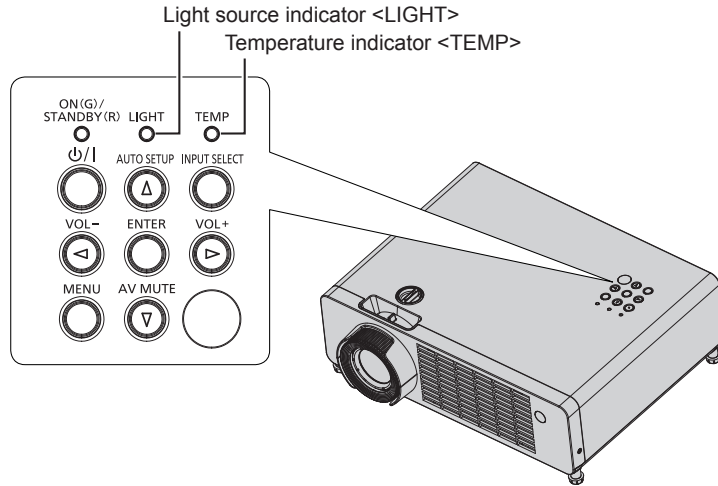
Light source and temperature indicators

When an indicator lights up

If a problem occurs inside the projector, the light source indicator <LIGHT> and the temperature indicator <TEMP> will inform you by lighting or blinking. Check the status of the indicators and remedy the indicated problems as follows.

Attention

- Before you take a remedial measure, follow the procedure of switching the power off indicated in “Powering off the projector” (➔ page 43).



Light source indicator <LIGHT>

Indicator status	Blinking in red (3 times)
Status	The light source does not light up, or the light source turns off while the projector is in use.
Solution	Disconnect the power cord plug from the outlet, reconnect the power cord and switch the power on again. The light source indicator <LIGHT> may not light up or blink.

Note

- If the light source indicator <LIGHT> continues to light or blink even after the measure is taken, switch off the projector and remove the power cord plug from the outlet, then ask your dealer for repair.

Temperature indicator <TEMP>

Indicator status	Lighting in red	Blinking in red (2 times)	Blinking in red (3 times)
Status	Internal temperature is high (warning).	Internal temperature is high (standby status).	The cooling fan has stopped.
Cause	<ul style="list-style-type: none"> • Is the air intake/exhaust vent blocked? • Is the room temperature high? 		—
Solution	<ul style="list-style-type: none"> • Remove any objects that are blocking the air intake/exhaust vent. • Use the projector in an appropriate operating environment temperature*1. • Do not use the projector at high altitudes of 4 200 m (13 780') or higher above sea level. 		<ul style="list-style-type: none"> • Unplug the AC power cord and contact the dealer or the service center for service and checkup.

*1 For details of operating environment temperature of the projector, refer to “Operating environment temperature” (➔ page 107).

Note

- If the temperature indicator <TEMP> is still lighting or blinking after taking the preceding measures, ask your dealer for repair.

Maintenance

Before performing maintenance

When you perform maintenance of the projector, make sure to turn off the power and disconnect the power plug from the wall outlet according to the procedures in “Powering off the projector” (➔ page 43).

Maintenance

Outer Case

Wipe off dirt and dust using a soft dry cloth.

- If the dirt is persistent, soak the cloth with water and wring it thoroughly before wiping. Dry off the projector with a dry cloth.
- Do not use benzene, thinner, or rubbing alcohol, other solvents, household cleaners. Using them may cause deterioration of the outer case.
- When using chemical treated dusters, follow its instruction.

Lens front surface

Wipe off the dirt and dust off the front surface of the lens with soft clean cloth.

- Do not use a cloth that has an abrasive surface or a cloth that is moist, oily, or covered with dust.
- Do not use excessive force when wiping the lens as it is fragile.
- Do not use benzene, thinner or rubbing alcohol, other solvents or household cleaners. Using them may cause deterioration of the lens.

Attention

- The lens may be damaged if you hit with a hard object or wipe with excessive force. Please handle with care.



DO NOT WIPE THE LENS DURING OPERATION.

Cleaning the lens during operation may cause foreign objects adhering to the lens or bring damage to the lens surface.

Troubleshooting

Please check following points. For details, see the corresponding pages.

Problem	Points to be checked	Reference page
Power does not turn on.	<ul style="list-style-type: none"> Is the power plug firmly connected to the outlet? Is the wall outlet supplying electricity? Have the circuit breakers tripped? Is the light source indicator <LIGHT> or temperature indicator <TEMP> lit or blinking? 	— — — 95
No image appears.	<ul style="list-style-type: none"> Are connections to external devices correctly performed? Is the input selection setting correct? Is the [Brightness] adjustment setting at a minimum? Is the external device that is connected to the projector working properly? Is the AV mute function activated? Are the pins of connectors crooked or broken? 	35 44 56 — 47 —
Image is fuzzy.	<ul style="list-style-type: none"> Is the lens cap still attached? Is the lens focus set correctly? Is the projection distance appropriate? Is the lens dirty? Is the projector installed perpendicular to the screen? 	29 45 32 20 —
Color is pale or grayish.	<ul style="list-style-type: none"> Is [Color] or [Tint] adjusted correctly? Is the external device connected to the projector adjusted correctly? Is the VGA cable damaged? 	57, 57 — —
Audio is not output.	<ul style="list-style-type: none"> Is the external device connected correctly to the audio input terminal? Is the volume set to the minimum level? Is the AV mute function activated? Is the mute function activated? Is the audio input selection in [Audio In Select] set correctly? Is [Audio Out] or [Speaker] set correctly? Is the cable connected to the <VARIABLE AUDIO OUT> terminal? If connected, the built-in speaker will not output audio. 	35 47, 67 47 47, 67 67 70 36
Remote control does not work.	<ul style="list-style-type: none"> Are the batteries depleted? Is the polarity of the batteries set correctly? Are there any obstructions between the remote control and the remote control signal receiver of the projector? Is the remote control used beyond its effective operation range? Is the remote control subject to influences from fluorescent light, etc.? 	— 28 24 24 24
Image does not display correctly.	<ul style="list-style-type: none"> Is there a problem with the video tape or other image sources on the external devices to output images? Is the signal input incompatible with the projector? 	— 104
Image from a computer does not appear.	<ul style="list-style-type: none"> Is the cable too long? (For D-Sub cables, the cable length should be 10 m (32'10") or shorter.) Is the external video output on the laptop computer set correctly? 	— —
Image is stretched when displaying 16:9 DVD title.	<ul style="list-style-type: none"> When playing anamorphic sources or 16:9 sources, the projector will display the best image in 16:9 format. When playing a Letterbox (LBX) formatted source, set [Aspect Ratio] to [LBX]. If you play 4:3 format DVD title, set [Aspect Ratio] to [4:3]. Please setup the display format as 16:9 (wide) aspect ratio type on your DVD player. 	63 63 63 —
Video from HDMI compatible device does not appear or it appears jumbled.	<ul style="list-style-type: none"> Is the HDMI cable securely connected? Turn the power of the projector and the external device off and on. Is the signal input incompatible with the projector? 	35 — 104
Audio from HDMI compatible device is not output.	<ul style="list-style-type: none"> Set to the linear PCM audio for the connected devices. 	—
Distorted sound from the projector.	<ul style="list-style-type: none"> If audio distortion occurs while playing sound through the <VARIABLE AUDIO OUT> terminal, decrease the volume level manually. 	47, 67
The projector stops responding to all controls.	<ul style="list-style-type: none"> If possible, turn off the projector, then unplug the power cord and wait at least 20 seconds before reconnecting power. 	43

Chapter 6 Maintenance - Troubleshooting

Problem	Points to be checked	Reference page
No power supplied from <DC OUT> terminal.	<ul style="list-style-type: none">• Is the [USB Power] set correctly?• Has the external device connected to the <DC OUT> terminal exceeded the rating (5 VDC, maximum 2 A)?	70 27

Attention

- If the problem persists, after confirming the contents of the table, please consult your dealer.

Chapter 7 Appendix

This chapter describes specifications and after-sales service for the projector.

Technical information

Using the PJLink protocol

The network function of the projector supports PJLink class 1, and the PJLink protocol can be used to perform projector setting and projector status query operations from a computer.

Control commands

The following table lists the PJLink protocol commands that can be used to control the projector.

• x characters in tables are non-specific characters.

Command	Control details	Parameter / return string	Remark		
POWR	Power supply control	0 1	Standby Power on		
POWR ?	Power supply status query	0 1	Standby Power on		
INPT	Input selection	11 12 21 31	COMPUTER 1 IN COMPUTER 2 IN VIDEO IN HDMI 1 IN		
INPT ?	Input selection query	32	HDMI 2 IN		
AVMT	AV mute control/audio output control	20 21 30 31	Mute function disabled Mute function enabled (muted) AV mute function disabled, mute function disabled AV mute function enabled, mute function enabled (muted)		
AVMT ?	AV mute status query/ audio output status query	21 30 31	AV mute function disabled, mute function enabled (muted) AV mute function disabled, mute function disabled AV mute function enabled, mute function enabled (muted)		
ERST ?	Error status query	xxxxxx	1st byte	Indicates fan errors, and returns 0 or 2.	<ul style="list-style-type: none"> • 0 = No error known • 1 = Warning • 2 = Error
			2nd byte	Indicates light source errors, and returns 0, 1 or 2.	
			3rd byte	Indicates temperature errors, and returns 0, 1 or 2.	
			4th byte	Returns 0.	
			5th byte	Returns 0.	
			6th byte	Returns 0.	
LAMP ?	Light source status query	AAAAA X	AAAAA: Light source runtime X: 0 = Light source off, 1 = Light source on		
INST ?	Input selection list query	11 12 21 31 32	—		
NAME ?	Projector name query	xxxxx	Returns the name set in [General Setup] page → [Projector Name] on the web control screen.		
INF1 ?	Manufacturer name query	Panasonic	Returns manufacturer name.		
INF2 ?	Model name query	PT-LRZ35 / PT-LRZ35U / PT-LRW35 / PT-LRW35U	Returns model name.		
INF0 ?	Other information query	xxxxx	Returns information such as version number.		
CLSS ?	Class information query	1	Returns class for PJLink.		

PJLink security authentication

A security authentication password can be set separately for PJLink control (► pages 86, 88). When using the projector without security authentication, do not set a password for PJLink control.

- For specifications related to PJLink, refer to the website of Japan Business Machine and Information System Industries Association.

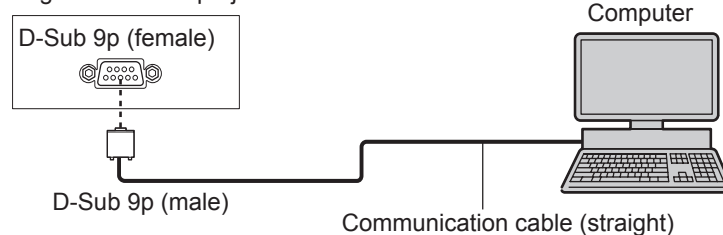
URL <https://pjlink.jbmia.or.jp/english/>

<SERIAL IN> terminal

The <SERIAL IN> terminal of the projector conforms with RS-232C so that the projector can be connected to and controlled from a computer.

Connection

Connecting terminals on projector



Pin assignments and signal names

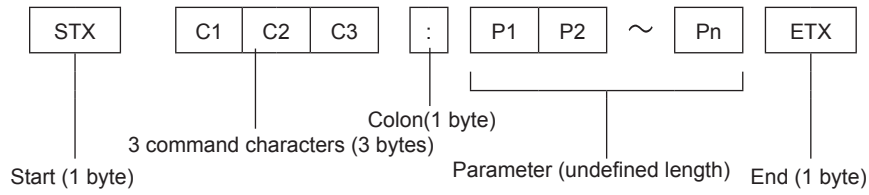
D-Sub 9-pin (female) Outside view	Pin No.	Signal name	Contents
	①	—	NC
	②	TXD	Transmitted data
	③	RXD	Received data
	④	—	NC
	⑤	GND	Earth
	⑥	—	NC
	⑦	—	NC
	⑧	—	NC
	⑨	—	NC

Communication conditions

Signal level	RS-232C-compliant
Sync. method	Asynchronous
Baud rate	9 600 bps
Parity	None
Character length	8 bits
Stop bit	1 bit
X parameter	None
S parameter	None

Basic format

Transmission from the computer starts with STX, then the command, parameter, and ETX are sent in this order. Add parameters according to the details of control.



Attention

- If a command is transmitted after the light source starts illuminating, there may be a delay in response or the command may not be executed. Try sending or receiving any command after 60 seconds.
- When transmitting multiple commands, be sure to wait until 0.5 seconds has elapsed after receiving the response from the projector before sending the next command. When transmitting a command which does not need a parameter, a colon (:) is not necessary.

Note

- If a command cannot be executed, the “ER401” response is sent from the projector to the computer.
- If an invalid parameter is sent, the “ER402” response is sent from the projector to the computer.
- STX and ETX are character codes. STX shown in hexadecimal is 02, and ETX shown in hexadecimal is 03.

Cable specifications

When connected to a computer:

Projector (<SERIAL IN> terminal)	1	NC	NC	1	Computer (DTE specifications)
	2			2	
	3			3	
	4	NC	NC	4	
	5			5	
	6	NC	NC	6	
	7	NC	NC	7	
	8	NC	NC	8	
	9	NC	NC	9	

Control commands

When controlling the projector from a computer, the following commands are available.

■ Projector control command

Command	Control contents	Parameter/return string	Remark (parameter)
PON	Power on	—	To check if the power is on, use the “Power query” command.
POF	Power standby		
IIS	Switching the input signal	RG1 RG2 VID HD1 HD2	COMPUTER 1 IN COMPUTER 2 IN VIDEO IN HDMI 1 IN HDMI 2 IN
AUU	Volume up	—	—
AUD	Volume down		
OFZ	Freeze	0 1	Freeze function disabled (off) Freeze function enabled (on)
OSH	AV mute control	0	AV mute function off
QSH	AV mute status query	1	AV mute function on
DZU	D. ZOOM up	—	—
DZD	D. ZOOM down		
AMT	Mute function	0 1	Off On
QPW	Power query	000 001	Standby Power on
VSE	Aspect ratio switch	0 1 2	Auto 4:3 LBX
QS1	Aspect ratio settings query	5 6	Native 16:10

List of compatible signals

The following table specifies the type of signals compatible with the projectors.

- Symbols that indicate formats are as follows.
 - V: VIDEO
 - R: RGB (analog)
 - Y: YP_BP_R/YC_BC_R (analog)
 - H: HDMI
- Input corresponding to each item in the plug and play column is as follows.
 - COMPUTER: COMPUTER 1 IN / COMPUTER 2 IN input
 - HDMI: HDMI 1 IN / HDMI 2 IN input

Mode	Display resolution (dots)	Scanning frequency		Dot clock frequency (MHz)	Format	Plug and play ¹	
		H (kHz)	V (Hz)			COMPUTER	HDMI
NTSC/NTSC4.43/ PAL-M/PAL60	720 x 480i	15.7	59.9	--	V	--	--
PAL/PAL-N/ SECAM	720 x 576i	15.6	50.0	--	V	--	--
480/60i	720 x 480i	15.7	59.9	13.5	Y	--	--
576/50i	720 x 576i	15.6	50.0	13.5	Y	--	--
480/60i	720 (1 440) x 480i ²	15.7	59.9	27.0	H	--	✓
576/50i	720 (1 440) x 576i ²	15.6	50.0	27.0	H	--	✓
480/60p	720 x 480	31.5	59.9	27.0	Y/H	--	✓
576/50p	720 x 576	31.3	50.0	27.0	Y/H	--	✓
720/60p	1 280 x 720	45.0	60.0 ³	74.3	Y/H	--	✓
720/50p	1 280 x 720	37.5	50.0	74.3	Y/H	--	✓
1080/60i	1 920 x 1 080i	33.8	60.0 ³	74.3	Y/H	--	✓
1080/50i	1 920 x 1 080i	28.1	50.0	74.3	Y/H	--	✓
1080/24p	1 920 x 1 080	27.0	24.0 ³	74.3	Y/H	--	✓
1080/24sF	1 920 x 1 080i	27.0	48.0 ³	74.3	Y/H	--	--
1080/25p	1 920 x 1 080	28.1	25.0	74.3	Y/H	--	--
1080/30p	1 920 x 1 080	33.8	30.0 ³	74.3	Y/H	--	--
1080/60p	1 920 x 1 080	67.5	60.0 ³	148.5	Y/H	--	✓
1080/50p	1 920 x 1 080	56.3	50.0	148.5	Y/H	--	✓
640 x 480/60	640 x 480	31.5	59.9	25.2	R/H	✓	✓
640 x 480/73	640 x 480	37.9	72.8	31.5	R/H	✓	✓
640 x 480/75	640 x 480	37.5	75.0	31.5	R/H	✓	✓
640 x 480/85	640 x 480	43.3	85.0	36.0	R/H	--	--
640 x 480/120	640 x 480 ⁴	61.1	120.0	44.0	R/H	✓	✓
800 x 600/56	800 x 600	35.2	56.3	36.0	R/H	✓	✓
800 x 600/60	800 x 600	37.9	60.3	40.0	R/H	✓	✓
800 x 600/72	800 x 600	48.1	72.2	50.0	R/H	✓	✓
800 x 600/75	800 x 600	46.9	75.0	49.5	R/H	✓	✓
800 x 600/85	800 x 600	53.7	85.1	56.3	R/H	--	--
800 x 600/120	800 x 600 ⁴	76.3	120.0	73.3	R/H	✓	✓
1024 x 768/60	1 024 x 768	48.4	60.0	65.0	R/H	✓	✓
1024 x 768/70	1 024 x 768	56.5	70.1	75.0	R/H	✓	✓
1024 x 768/75	1 024 x 768	60.0	75.0	78.8	R/H	✓	✓
1024 x 768/85	1 024 x 768	68.7	85.0	94.5	R/H	--	--
1152 x 864/75	1 152 x 864	67.5	75.0	108.0	R/H	--	--
1280 x 720/60	1 280 x 720	45.0	60.0	74.3	R/H	✓	✓
1280 x 720/120	1 280 x 720 ⁴	90.0	120.0	148.5	R/H	✓	✓
1280 x 768/60	1 280 x 768	47.8	59.9	79.5	R/H	--	--
1280 x 768/75	1 280 x 768	60.3	74.9	102.3	R/H	--	--

Chapter 7 Appendix - Technical information

Mode	Display resolution (dots)	Scanning frequency		Dot clock frequency (MHz)	Format	Plug and play ^{*1}	
		H (kHz)	V (Hz)			COMPUTER	HDMI
1280 x 768/85	1 280 x 768	68.6	84.8	117.5	R/H	--	--
1280 x 800/60	1 280 x 800	49.7	59.8	83.5	R/H	✓	✓
1280 x 800/120	1 280 x 800 ^{*4}	101.6	119.9	146.3	R/H	✓	✓
1280 x 960/60	1 280 x 960	60.0	60.0	108.0	R/H	--	--
1280 x 960/75	1 280 x 960	75.2	74.9	130.0	R/H	--	--
1280 x 1024/60	1 280 x 1 024	64.0	60.0	108.0	R/H	--	--
1280 x 1024/75	1 280 x 1 024	80.0	75.0	135.0	R/H	✓	✓
1280 x 1024/85	1 280 x 1 024	91.1	85.0	157.5	R/H	--	--
1366 x 768/60	1 366 x 768	47.7	59.8	85.5	R/H	✓	✓
1400 x 1050/60	1 400 x 1 050 ^{*4}	64.7	59.9	101.0	R/H	--	--
1440 x 900/60	1 440 x 900 ^{*4}	55.5	59.9	88.8	R/H	✓	✓
1600 x 1200/60	1 600 x 1 200	75.0	60.0	162.0	R/H	✓	✓
1680 x 1050/60	1 680 x 1 050 ^{*4}	64.7	59.9	119.0	R/H	--	--
1920 x 1080/60	1 920 x 1 080	67.5	60.0	148.5	R/H	✓	✓
1920 x 1080/50	1 920 x 1 080	56.3	50.0	148.5	R/H	✓	✓
1920 x 1200/60	1 920 x 1 200 ^{*4}	74.0	60.0	154.0	R/H	✓ ^{*5}	✓ ^{*5}

*1 Signal with ✓ in the plug and play column is a signal described in the EDID (extended display identification data) of the projector. The signal that does not have ✓ in the plug and play column can also be input if it is described in the format column. The resolution may not be selected in the computer even if the projector is compatible with the signal that does not have ✓ in the plug and play column.

*2 Pixel-Repetition signal (dot clock frequency 27.0 MHz) only.

*3 The signal with 1/1.001x vertical scanning frequency is also supported.

*4 VESA CVT-RB (Reduced Blanking)-compliant.

*5 Only for PT-LRZ35 / PT-LRZ35U.

Note

- A signal with a different resolution is converted to the number of display dots. The number of display dots is as follows.
 - PT-LRZ35 / PT-LRZ35U: 1 920 x 1 200
 - PT-LRW35 / PT-LRW35U: 1 280 x 800
- The “i” at the end of the resolution indicates an interlaced signal.
- When interlaced signals are connected, flicker may occur on the projected image.
- The image may not be displayed in full screen according to the computer output setting.

List of 3D compatible signals

The following table specifies the 3D compatible video signals compatible with the projector.

- Abbreviations for input formats and 3D formats in the table have the following meanings.
 - FP: Frame packing format
 - SBS: Side by side format
 - TB: Top and bottom format

Signal name (SIGNAL FORMAT)	Resolution (Dots)	Scanning frequency		Dot clock frequency (MHz)	HDMI ^{*1}		
		H (kHz)	V (Hz)		FP	SBS ^{*2}	TB
720/60p	1 280 x 720	45.0	60.0 ^{*3}	74.3	✓	✓	✓
720/50p	1 280 x 720	37.5	50.0	74.3	✓	✓	✓
1080/60i	1 920 x 1 080i	33.8	60.0 ^{*3}	74.3	--	✓	--
1080/50i	1 920 x 1 080i	28.1	50.0	74.3	--	✓	--
1080/24p	1 920 x 1 080	27.0	24.0 ^{*3}	74.3	✓	✓	✓
1080/60p	1 920 x 1 080	67.5	60.0 ^{*3}	148.5	--	✓	✓
1080/50p	1 920 x 1 080	56.3	50.0	148.5	--	✓	✓

*1 Signal with ✓ in the HDMI column is a signal described in the EDID (extended display identification data) of the projector.

*2 Supports half.

*3 The signal with 1/1.001x vertical scanning frequency is also supported.

Specifications

The specifications of the projector are as follows.

Power supply		100 V - 240 V \sim (100 V - 240 V alternating current), 50 Hz/60 Hz	
Power consumption		420 W (4.2 A)	
Power consumption (during standby)		Approx. 0.5 W (When [Standby Mode] is set to [Eco].)	
		Approx. 37 W (When [Standby Mode] is set to [Normal], and the [USB Power] / [Audio Out] / [Speaker] / [Computer Out] / [Quick Startup] functions are used.)	
		Approx. 2 W (When [Standby Mode] is set to [Normal], network function is used, and the [USB Power] / [Audio Out] / [Speaker] / [Computer Out] / [Quick Startup] functions are not used.)	
DLP chip	Panel size	PT-LRZ35 / PT-LRZ35U	17 mm (0.67") (aspect ratio 16:10)
		PT-LRW35 / PT-LRW35U	16.5 mm (0.65") (aspect ratio 16:10)
	Display system	DLP chip x 1, DLP projection system	
	Drive system	DMD system	
	Number of pixels	PT-LRZ35 / PT-LRZ35U	2 304 000 pixels (1 920 x 1 200 dots)
PT-LRW35 / PT-LRW35U		1 024 000 pixels (1 280 x 800 dots)	
Lens	Manual zoom	1.3 x	
	Manual focus	F=1.7 to 1.86 f=19.03 mm to 24.95 mm	
Light source		Light Emitting Diode	
Light output *1		3 500 lm (When [Picture Mode] is set to [Dynamic] and [Light Power] is set to [Normal])	
Contrast ratio *1		30 000:1 (When [Picture Mode] is set to [Dynamic])	
Center to corner zone ratio *1		90%	
Color system		7 (NTSC, NTSC4.43, PAL, PAL-N, PAL-M, SECAM, PAL60)	
Projection image size		1.02 m - 7.62 m (40" - 300")	
Image aspect ratio		16:10	
Projection method		Front, Rear, Front Ceiling, Rear Ceiling	
Built-in speaker		3.0 cm \times 7.0 cm, rectangular, x 1	
Maximum usable volume output		10 W (monaural)	
Power cord length		1.8 m (70-7/8")	
Outer case		Molded plastic	
Dimensions		Width: 375 mm (14-3/4") Height: 124 mm (4-7/8") (when adjustable feet shortened) Depth: 314 mm (12-3/8")	
Weight		Approx. 6.7 kg (14.77 lbs.) *2	
Noise level *1		When [Light Power] in [Image Settings] is set to [Normal]: 35 dB When [Light Power] in [Image Settings] is set to [Eco]: 27 dB When [Light Power] in [Image Settings] is set to [Quiet]: 24 dB	
Operating environment temperature *3		When [Light Power] is set to [Normal]	0°C (32°F) to 40°C (104°F) (Altitude: below 1 400 m (4 593'); [High Altitude]: [Off])
			0°C (32°F) to 35°C (95°F) (Altitude: 1 400 m (4 593') ~ 2 100 m (6 890'); [High Altitude]: [High 1])
			0°C (32°F) to 35°C (95°F) (Altitude: 2 100 m (6 890') ~ 2 700 m (8 858'); [High Altitude]: [High 2])
		When [Light Power] is set to [Eco] or [Quiet]	0°C (32°F) to 40°C (104°F) (Altitude: below 1 400 m (4 593'); [High Altitude]: [Off])
			0°C (32°F) to 35°C (95°F) (Altitude: 1 400 m (4 593') ~ 2 700 m (8 858'); [High Altitude]: [High])
			0°C (32°F) to 30°C (86°F) (Altitude: 2 700 m (8 858') ~ 4 200 m (13 780'); [High Altitude]: [High])

Operating environment humidity		20% to 80% (no condensation)
Remote control	Power supply	DC 3 V (AAA/R03/LR03 battery x 2)
	Operating range	Approx. 8 m (26'3") (when operated directly in front of receptor)
	Weight	40 g (1.4 ozs.) (not including batteries)
	Dimensions	Width: 38 mm (1-1/2"), Length : 125 mm (4-29/32"), Height : 20 mm (25/32")

*1 Measurement, measuring conditions and method of notation all comply with ISO/IEC 21118:2020 international standards.

*2 This is an average value. It may differ depending on individual product.

*3 The projector cannot be used at an altitude of 4 200 m (13 780') or higher above sea level. Note that altitude of 4 200 m (13 780') above sea level is the maximum height that the performance of this projector is guaranteed.

Note

- The part numbers of accessories and separately sold components are subject to change without notice.

■ Connecting terminal

<COMPUTER 1 IN> terminal	1 (High-density D-sub 15 pin female) RGB signal 0.7 V [p-p] 75 Ω (When G-SYNC: 1.0 V [p-p] 75 Ω) HD/SYNC TTL high impedance, positive/negative polarity compatible with VESA Standard VD TTL high impedance, positive/negative polarity compatible with VESA Standard HD/SYNC and VD do not support 3 value SYNC. YP_BP_R signal Y: 1.0 V [p-p] including synchronization signal, P _B P _R : 0.7 V [p-p] 75 Ω
<COMPUTER 2 IN> terminal	1 (High-density D-sub 15 pin female) RGB signal 0.7 V [p-p] 75 Ω (When G-SYNC: 1.0 V [p-p] 75 Ω) HD/SYNC TTL high impedance, positive/negative polarity compatible with VESA Standard VD TTL high impedance, positive/negative polarity compatible with VESA Standard HD/SYNC and VD do not support 3 value SYNC. YP_BP_R signal Y: 1.0 V [p-p] including synchronization signal, P _B P _R : 0.7 V [p-p] 75 Ω
<COMPUTER OUT> terminal	1 (High-density D-sub 15 pin female) RGB signal 0.7 V [p-p] 75 Ω (When G-SYNC: 1.0 V [p-p] 75 Ω) HD/SYNC TTL high impedance VD TTL high impedance HD/SYNC and VD do not support 3 value SYNC. YP_BP_R signal Y: 1.0 V [p-p] including synchronization signal, P _B P _R : 0.7 V [p-p] 75 Ω
<VIDEO IN> terminal	1 (Pin jack 1.0 V [p-p] 75 Ω)
<HDMI IN 1> / <HDMI IN 2> terminals	2 (HDMI 19 pin, HDCP and Deep color compatible, Supralok / LockIt compatible) Audio signal Linear PCM (Sampling frequency: 48 kHz/44.1 kHz/32 kHz)
<AUDIO IN 1> / <AUDIO IN 2> terminals	2 (M3 stereo mini jack, 0.5 V [rms], input impedance 22 kΩ and more)
<VARIABLE AUDIO OUT> terminal	1 (M3 stereo mini jack, monitor output and stereo compatible, 0 V [rms] to 2.0 V [rms] variable, output impedance 2.2 kΩ and less)
<Micro USB> terminal	1 (For service use)
<DC OUT> terminal	1 (USB connector (type A), for power supply (DC 5 V, maximum 2 A))
<SERIAL IN> terminal	1 (D-sub 9 pin female, RS-232C compliant, for computer control use)
<LAN> terminal	1 (for RJ-45 network connection, PJLink compatible, 10Base-T/100Base-T)

■ **Compatible signals**

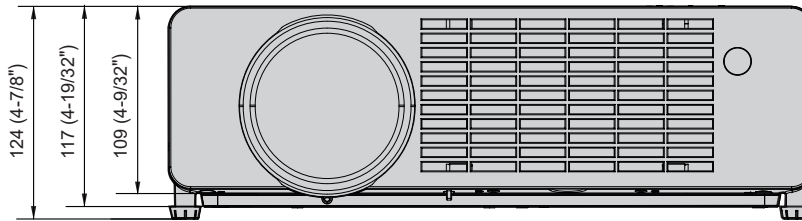
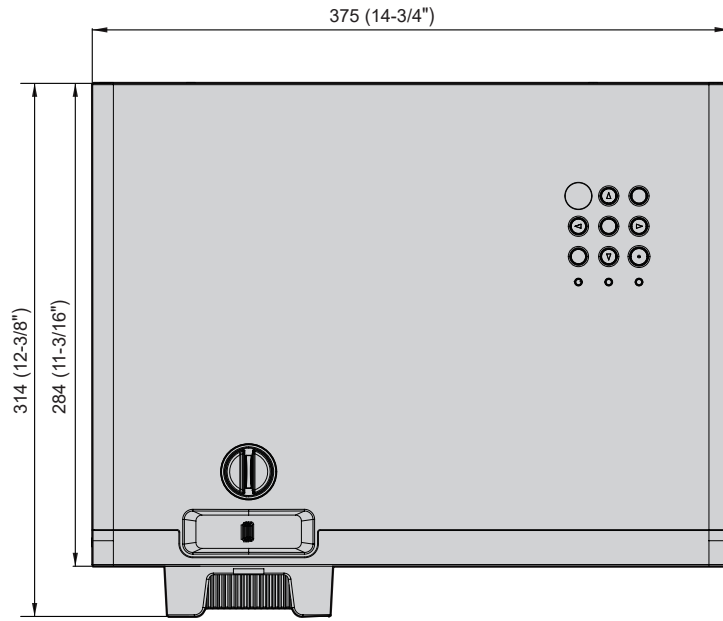
Refer to “List of compatible signals” (➔ page 104) for the types of video signals that can be used with the projector.

For video signal	Horizontal: 15.73 kHz, Vertical: 59.94 Hz
	Horizontal: 15.63 kHz, Vertical: 50.00 Hz
For RGB signal	Horizontal 15 kHz - 100 kHz, Vertical 24 Hz - 120 Hz
	Dot clock frequency: 162 MHz or less
For YP_BP_R/YC_BC_R signal	Displayable resolution: 480i/576i to 1 920 x 1 080
	Dot clock frequency: 148.5 MHz or less
For HDMI signal	Displayable resolution for movie-based signals: 480i/576i*1 to 1 920 x 1 080
	Displayable resolution for still image signals: 640 x 480 to 1 920 x 1 200 (non-interlaced)
	Dot clock frequency: 25 MHz to 162 MHz

*1 Pixel-Repetition signal (dot clock frequency 27.0 MHz) only

Dimensions

Unit: mm (inch)



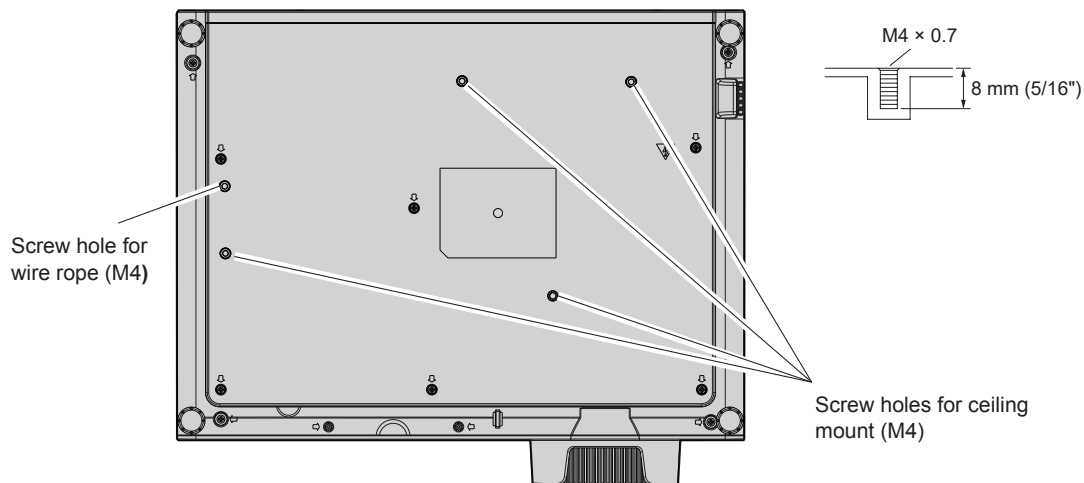
* Actual dimension may differ by product.

Ceiling mount bracket safeguards

- When installing the projector to a ceiling, be sure to use the specified optional Ceiling Mount Bracket for Projectors.
Model No.: ET-PKL100H (for high ceilings), ET-PKL100S (for low ceilings), ET-PKV400B (Projector Mount Bracket)
- When installing the projector, attach the drop-prevention kit included with the Ceiling Mount Bracket for Projectors.
- Ask a qualified technician to do the installation work such as mounting the projector on the ceiling.
- Panasonic takes no responsibility for any damage to the projector resulting from use of a ceiling mount bracket not manufactured by Panasonic or the inappropriate choice of location for installation, even if the warranty period of the projector has not expired.
- Unused products must be removed promptly by a qualified technician.
- Use a torque screwdriver or Allen torque wrench to tighten bolts to their specified tightening torques. Do not use electric screwdrivers or impact screwdrivers.
(Screw tightening torque: $1.25 \pm 0.2 \text{ N}\cdot\text{m}$)
- Read the Installation Instructions for the Ceiling Mount Bracket for Projectors for details.
- The model numbers of accessories and optional accessories are subject to change without prior notice.

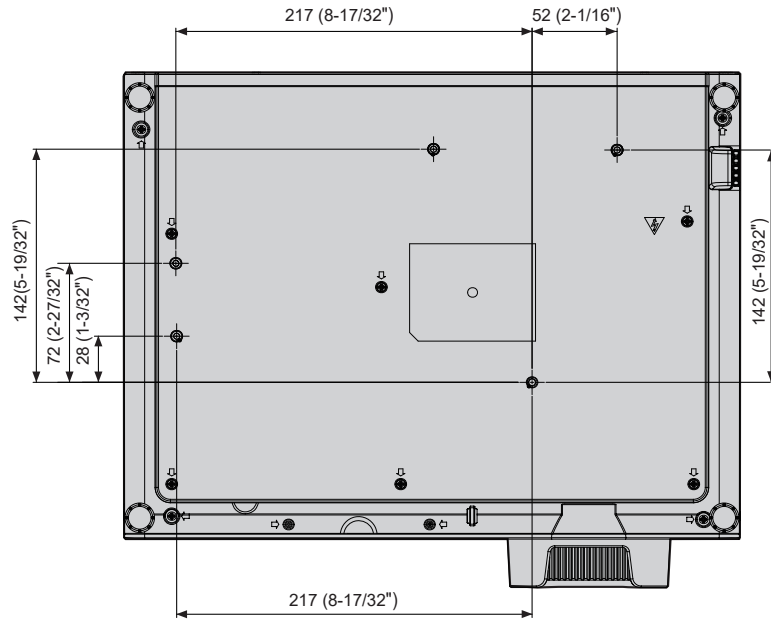
■ Specification for the screw holes to fix the projector (projector bottom view)

Unit: mm (inch)



■ Dimensions for the screw holes to fix the projector (projector bottom view)

Unit: mm (inch)



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Disposal of Old Equipment and Batteries Only for European Union and countries with recycling systems



These symbols on the products, packaging, and/or accompanying documents mean that used electrical and electronic products and batteries must not be mixed with general household waste. For proper treatment, recovery and recycling of old products and used batteries, please take them to applicable collection points in accordance with your national legislation. By disposing of them correctly, you will help to save valuable resources and prevent any potential negative effects on human health and the environment.

For more information about collection and recycling, please contact your local authority. Penalties may be applicable for incorrect disposal of this waste, in accordance with national legislation.



Note for the battery symbol (bottom symbol)

This symbol might be used in combination with a chemical symbol. In this case it complies with the requirement set by the Directive for the chemical involved.

Information on Disposal in other Countries outside the European Union

These symbols are only valid in the European Union.

If you wish to discard these items, please contact your local authorities or dealer and ask for the correct method of disposal.

Product information (for Turkey only)

AEEE Yönetmeliğine Uygundur.

Eski Ekipman ve Bataryaların İşlenmesi.

Sadece geri dönüşüm sistemleri olan Avrupa Birliği ve ülkeleri için geçerlidir.



Ürünler, ambalaj ve/veya ekli belgeler üzerindeki bu semboller kullanılmış elektrik ve elektronik ürünlerin ve pillerin genel ev atığı ile karıştırılmaması gerektiğini ifade eder.

Eski ürünlerin ve pillerin toplanması ve geri kazanılması için bu atıkları lütfen yasayla belirlenmiş olan uygun toplama merkezlerine teslim ediniz.

Bu atıkların doğru işlenmesiyle, değerli kaynakların korunmasına ve insan sağlığı ve çevreye olası negatif etkilerinin engellenmesine yardımcı olabilirsiniz.

Atıkların toplanması ve geri dönüşümü için detaylı bilgi için lütfen bağlı olduğunuz yerel yönetimlerle iletişime geçiniz.

Atıkların atılmasıyla ilgili yanlış uygulamalar yasayla belirlenmiş olan cezalara sebebiyet verebilir.

Panasonic Corporation

Web Site : <https://panasonic.net/cns/projector/>

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