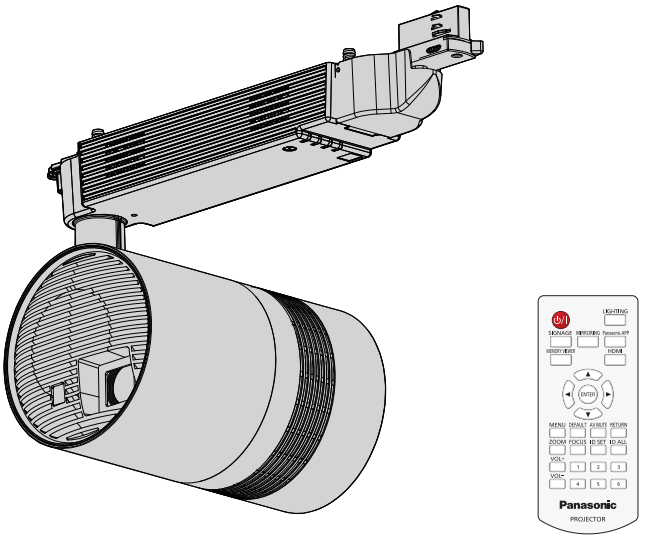
Panasonic

Operating Instructions
Functional Manual

DLP™ Projector **Commercial Use**

Model No. PT-JX200GBE
PT-JX200GWE



Thank you for purchasing this Panasonic product.

- This product is attached to track systems. Ensure that track system is installed per manufacturer's instructions.
- Before installing and operating this product, please read the instructions carefully and save this manual for future use.
- Before using this product, be sure to read "Read this first!" (➡ pages 4 to 11).
- Refer to "Operating Instructions – Content Manager Manual" for signage playback.

EU

HDMI™ HIGH-DEFINITION MULTIMEDIA INTERFACE

SD HC™

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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 use 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 projector from the track system or cut off the power supply when this projector 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.

This is a device to project images onto a screen, etc., and is intended for use as indoor lighting.
Directive 2009/125/EC

WARNING: RISK OF ELECTRIC SHOCK. DON'T 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.

RG2

Indicated on the projector

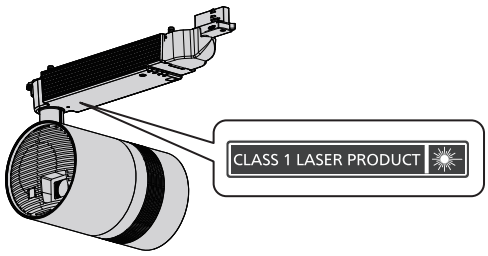
CAUTION: To assure continued compliance, follow the attached installation instructions. This includes using shielded interface cables when connecting to computer or peripheral devices. Also, any unauthorized changes or modifications to this equipment could void the user's authority to operate this device.

CAUTION: Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

Notice on laser

This projector is the Class 1 laser product that complies with IEC/EN 60825-1:2014.

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



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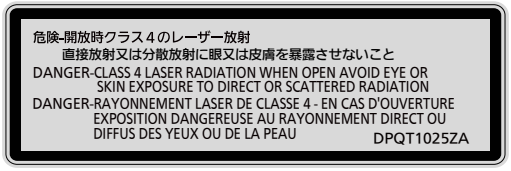


(Inside of product)

Authorized Representative's name and address within the European Union

Panasonic Marketing Europe GmbH

Panasonic Testing Centre

Winsbergring 15, 22525 Hamburg, Germany

For Australia/New Zealand

CAUTION:

- 240V, 3 circuit universal lighting track, compliant to EN 60570 or equivalent, must be used.
- The track must be installed according to its manufacturer's instructions.
- Installation must be carried out by qualified electrician and according to AS/NZS 3000 (Wiring Rules).

WARNING:

■ POWER

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, electric shock, or will cause visual impairment.

- If foreign objects or water get inside the projector, cut off the power supply.
- If you notice smoke, strange smells or noise coming from the projector, cut off the power supply.

Please contact your dealer for repairs, and do not attempt to repair the projector yourself.

When mounting/removing the projector to/from the track system, or performing maintenance, be sure to cut off the power supply.
Electric shocks can result.

When turning the adapter clockwise while holding the track system, make sure the electrical connection is in good condition.
If the power connector is not inserted correctly, electric shocks or overheating will result.

- Do not use the power connector which is damaged.

Do not do anything that might damage the adapter.

- If the adapter 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.

Ask an Authorized Service Centre to carry out any repairs to the adapter that might be necessary.

Do not use anything other than the provided adapter.
Failure to observe this will result in electric shocks or fire.

Do not handle the track system and the adapter with wet hands.
Failure to observe this will result in electric shocks.

During a thunderstorm, do not touch the projector or the track system.
Electric shocks can result.

Do not overload the track system.
If the power supply is overloaded (ex., by mounting too many devices), overheating may occur and fire will result.

■ ON USE/INSTALLATION

Ensure that track system is installed per manufacturer's instructions.
Inadequate installation may result in fire, electric shocks, or falling of the projector.

Mount the projector only to specified track systems.
Failure to observe this will result in fire, electric shocks, or falling of the projector.

Mount the projector to the track system which is installed in the horizontal ceiling or beam, and can withstand the load.
Mounting the projector to the following track system will result in fire, electric shocks, or falling of the projector.

- Track system that is installed in the wall surface
- Track system that is installed in the sloping ceiling or beam
- Track system that cannot withstand the load
- Track system that is installed on the floor

Make sure that your footing is safe and secure during installation.
If your footing is not secure, you may tip over or fall down, and an injury may result.

Make sure that the mounting work is carried out by two people.
Failure to observe this may result in damage or deformation of the projector, serious accidents or injury caused by falling.

When mounting the projector to the track system, completely turn the lever of the track mount part to the mounting direction.

Inadequate mounting to the track system will result in falling accident.

WARNING:

When removing the projector from the track system, hold the projector with your hand.
Releasing the lever of the track mount part without holding the projector will result in damage or deformation of the projector by falling, or serious accident or injury.

When removing the projector from the track system, first release the lever of the track mount part on the indicators.
Releasing the lever on the main unit first will result in the damage to the components and will cause falling accident.

Do not use the projector whose outer case or track mount part is damaged due to falling or other reasons.
Continued use of the projector in such a condition will result in fire, electric shock, or exposure to dangerous laser radiation.

Please contact your dealer for repairs, and do not attempt to repair the projector yourself.

Do not set up the projector in hot, 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 deterioration of components. Deterioration of components may cause the projector to fall down.

Do not cover the air intake/exhaust ports.
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 bring a cloth or papers close to the projector, as these materials could be drawn into the air intake port.
- Keep the air intake/exhaust ports on the power supply unit away from walls or objects by 300 mm (11-13/16") or more.

Do not look at the light emitted from the lens while the projector is being used.

Do not enter the projection luminous flux using an optical device (such as magnifier or mirror).
Doing so can cause loss of sight.
- Strong light is emitted from the projector's lens. Do not look at this light.
- Be especially careful not to let young children look into the lens. In addition, turn off the power and cut off the power supply when you are away from the projector.

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 your dealer.

Doing so may cause exposure to dangerous laser radiation.
- The laser module is built in this projector. Follow procedures specified in the Operating Instructions to make operations and adjustments.

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.
- If liquid enters inside of the projector, cut off the power supply and consult your dealer.

■ 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 use chargeable 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.

WARNING:

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 remote control may result in fluid leakage, overheating, or explosion of the batteries.

Do not allow children to reach the batteries and covers.
Accidentally swallowing them can cause physical harm.

- If swallowed, seek medical advice immediately.

CAUTION:

■ ON USE/INSTALLATION

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 heaters.

Do not install the projector in a location where corrosive gas is produced.
Doing so will result in falling of the projector or cause the projector to rust.

Do not use the projector together with dimmers such as a light controller.
Doing so will result in the damage to the components inside the projector and will cause fire.

Do not put excessive force on the projector by hanging on the projector or dangling any object.
Doing so will result in falling of the projector.

Do not place your hands or other objects close to the air exhaust port.
Doing so will cause burns or damage your hands or other objects.

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

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.

Never plug headphones and earphones into <AUDIO OUT> terminal.
Excessive sound pressure from headphones and earphones can cause hearing loss.

Always disconnect the adapter from the track system before moving the projector.
Moving the projector with the adapter still attached can damage the adapter, which will cause fire or electric shocks to occur.

Do not allow unattended children to use the projector.
Incorrect handling will cause them to be exposed to dangerous laser radiation.

- Use the projector under the supervision and control of adults.

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.

■ 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

Cut off the power supply and remove the projector from the track system before carrying out any cleaning.
Failure to do so may result in electric shock.

Ask your dealer about inspection by a qualified technician once every three years.
Using the projector for long time without inspection may result in fire, electric shocks, or falling of the projector.

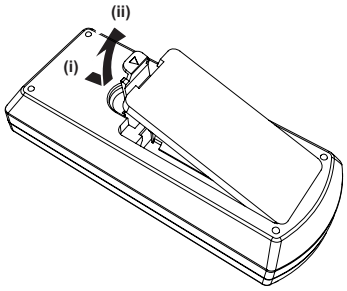
- For inspection fee, ask your dealer.

Panasonic disclaims all liability for any accidents or any damage caused by setting up the projector in an inappropriate environment, mounting the projector to unspecified track systems or mounting it using methods that are not described in the Operating Instructions.

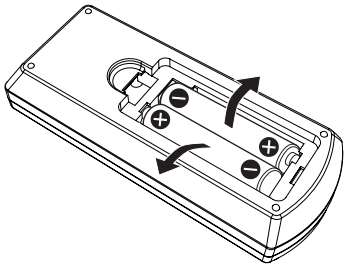
To remove the battery

Remote Control Battery

1. **Press the guide and lift the cover.**



2. **Remove the batteries.**



Declaration of Conformity

Declaration of Conformity (DoC)
This equipment is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.
Customers can download a copy of the original DoC for this product from our DoC server: http://www.ptc.panasonic.de
Contact in the EU: Panasonic Marketing Europe GmbH, Panasonic Testing Centre, Winsbergring 15, 22525 Hamburg, Germany
This product is intended to be used in the following countries.
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България
Това устройство отговаря на съществените изисквания и останалите приложими разпоредби на Директива 1999/5/ЕО.

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- This product is licensed under AVC Patent Portfolio License, VC-1 Patent Portfolio License, and MPEG-4 Visual Patent Portfolio License, and following actions except for the personal or non-profit use are not licensed.
  - Recording the image information in compliance with the AVC standard, the VC-1 standard, and the MPEG-4 Visual standard (AVC/VC-1/MPEG-4 video hereafter)
  - Playing back the AVC/VC-1/MPEG-4 video recorded by consumer practicing in a private activity, or AVC/VC-1/MPEG-4 video acquired from the licensed provider

  For details, refer to the website of MPEG LA, LLC (http://www.mpegla.com).

The trademarks and product trademarks for various companies are fully respected even if they are not mentioned.

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 licensed under the GNU GENERAL PUBLIC LICENSE Version2.0 (GPL V2.0)

(3) the software licensed under the GNU LESSER GENERAL PUBLIC LICENSE Version2.1 (LGPL V2.1)

The software that is categorized as (2) and (3) is 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. For details, refer to the license conditions included in the supplied CD-ROM.

For customers who contacted the following contact center, Panasonic provides complete and machine-readable source code based on GPL V2.0, LGPL V2.1 or software licensed under other terms imposing source code disclosure obligations in actual expenses, together with information about each copyright owner, for a period of at least 3 years from the purchase of this product.

Contact Center (Email): **sav.pj.gpl.pavc@ml.jp.panasonic.com**

■ Illustrations in this manual

- Illustrations of the projector, track system, screen, and other parts may vary from the actual product.

■ Reference pages

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

■ Terms

- In this manual, the “Wireless remote control unit” accessory is referred to as “Remote control”.
- In this manual, the “Track Lighting System” is referred to as “Track System”.
- In this manual, the SD memory card and the SDHC memory card are referred to as “SD card”.

Features of the Projector

Variety of projection function

- Various playback method can be selected, such as projecting the still image/movie in the SD card just with the projector, projecting the image in the computer by transmitting it wirelessly, projecting the contents of the Blu-ray disc via HDMI.
- The signage function is installed allowing playback of the still image/movie/music files in the SD card and turning off/on the projector according to the schedule created by yourself.

Easy setup

- Mounting and removing can be performed easily by the mounting method to the track system.
- The display can be freely layout by projecting the image vertically or horizontally.
- The projector is equipped with an electric 2.2x zoom, electric focus lens.

A design fitting in to the space

- A spotlight type design is adopted to easily conform to a space requiring conformity to the design, such as a store.

Quick Steps

For details, refer to the corresponding pages.

1. Mount the projector to the track system.
(➡ page 33)
- Be sure to ask a specialized technician or your dealer when installing.

2. Connect with external devices.
(➡ page 43)

3. Switch on the projector.
(➡ page 47)

4. Make initial settings.
(➡ page 47)
- Take this step when you switch on the power for the first time after purchasing the projector.

5. Select the input to project.
(➡ page 51)

6. Adjust the projection.
(➡ page 52)

Chapter 1 Preparation

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

Precautions for use

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 cause the projector to fall off, shorten the life of the parts 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 air exhaust port or the hot or cooled air. 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 main unit of the projector.
- Places with sharp temperature fluctuations near lights (such as studio lamps): Doing so may result in deformation of the projector due to heat, which may cause malfunctions.

  The operating environment temperature of the projector should be between 0 °C (32 °F) and 40 °C (104 °F) when using it at elevations lower than 1 000 m (3 281') above sea level, and between 0 °C (32 °F) and 35 °C (95 °F) when using it at elevations between 1 000 m (3 281') and 2 700 m (8 858') above sea level.
- 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 lens surface causes damage to the DLP chip.

■ Do not install the projector at elevations of 2 700 m (8 858') or higher above sea level.

Doing so may shorten the life of the components and result in malfunctions.

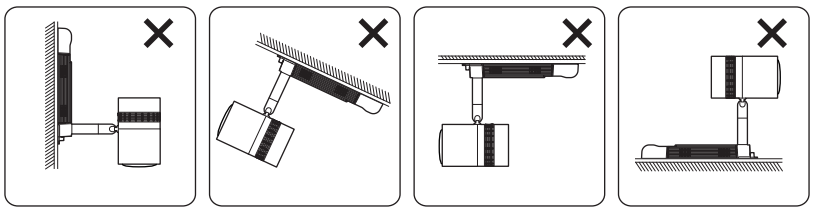
■ Ensure that track system is installed per manufacturer’s instructions.

Inadequate installation may result in fire, electric shocks or falling of the projector.

■ Mount the projector to the track system which is installed in the horizontal ceiling or beam and can withstand the weight of the projector (➡ page 146).

Mounting the projector to the following track system will result in fire, electric shocks, or falling of the projector.

- Track system that is installed in the wall surface
- Track system that is installed in the sloping ceiling or beam
- Track system that cannot withstand the load
- Track system that is installed on the floor



Cannot be installed

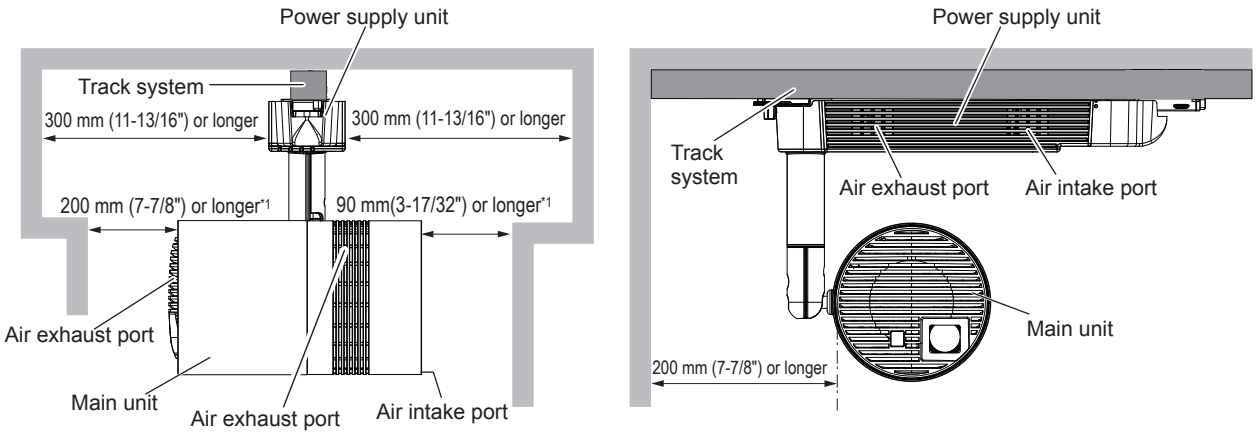
■ Focus adjustment

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 images be projected continuously for at least 30 minutes before the focus is adjusted.

■ Cautions when setting up the projector

- Do not block the ventilation ports (intake and exhaust) of the projector.

- Prevent hot and cool air from the air conditioning system to blow directly to the ventilation ports (intake and exhaust) of the projector.



*1 Distance from the wall or ceiling surface which will block the whole air intake port

- Do not install the projector in a confined space.
  When installing the projector in a confined space, provide air conditioning or ventilation separately. Exhaust heat may accumulate when the ventilation is not enough, triggering the protection circuit of the projector.

Security

When using this product, take safety measures against the 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. (➡ pages 97, 126)

- Make your password difficult to guess as much as possible.
- Change your password periodically. Set the password from the [SECURITY] menu → [SECURITY PASSWORD CHANGE].
- Panasonic Corporation or its affiliate companies will never ask for your password directly. Do not divulge your password in case you receive such inquiries.
- The connecting network must be secured by a firewall, etc.
- Set a password for the web control and restrict the users who can log in. Set the password for the web control from the [Change password] page of the web control screen.

■ Security when using the wireless LAN product

The advantage of a wireless LAN is that information can be exchanged between a PC or other such equipment and a wireless access point using radio waves, instead of using a LAN cable, as long as you are within range for radio transmissions.

On the other hand, because the radio waves can travel through obstacles (such as walls) and are available everywhere within a given range, problems of the type listed below may occur if security settings are insufficient.

- Transmitted data may be intercepted
  A malicious third-part may intentionally intercept radio waves and monitor the following transmitted data.
  − Personal information such as your ID, password, credit card number
  − Content of an Email
- Illegally accessed
  A malicious third party may access your personal or corporate network without authorization and engage in the following types of behavior.
  − Retrieve personal and/or secret information (information leak)
  − Spread false information by impersonating a particular person (spoofing)
  − Overwrite intercepted communications and issue false data (tampering)
  − Spread harmful software such as a computer virus and crash your data and/or system (system crash)

Since most wireless LAN adapters or access points are equipped with security features to take care of these problems, you can reduce the possibility of these problems occurring when using this product by making the appropriate security settings for the wireless LAN device.

Some wireless LAN devices may not be set for security immediately after purchase. To decrease the possibility of occurrence of security problems, be sure to make all security related settings according to the operation instructions supplied with each wireless LAN device before using a wireless LAN device.

Depending on the specifications of the wireless LAN, a malicious third party may be able to break security settings by special means.

Panasonic asks customers to thoroughly understand the risk of using this product without making security settings, and recommends that the customers make security settings at their own discretion and responsibility.

Notes regarding the wireless LAN

Radio wave in the 2.4 GHz/5 GHz band is used when the wireless LAN connection function of the projector is used. The license of wireless station is not required, but understand the following when using.

■ Do not use close to other wireless devices.

Following devices may be using radio wave in the same bandwidth as the projector. Using the projector close to these devices may cause the communication to be disabled or the communication speed to slow down due to interference of radio wave.

- Microwave oven, etc.
- Industrial, scientific, or medical devices, etc.
- In-plant wireless station for identifying moving vehicles used in the manufacturing lines at a plant
- Specified low power wireless station

■ Do not use cell phone, television, or radio as much as possible close to the projector.

Cell phone, television, or radio is using radio wave with different bandwidth from the projector, so there is no effect on the wireless LAN communication or the send/receive on these devices. However, noise may occur in the audio or video due to the radio wave from the projector.

■ Radio wave for wireless LAN communication does not go through the reinforcing bars, metal, or concrete.

The projector can communicate through wall or floor made of wood or glass (excluding the glass with metal mesh embedded), but it cannot communicate through wall or floor made of reinforcing bars, metal, or concrete.

■ Do not use the projector as much as possible in a location where static electricity is generated.

The communication via wireless LAN or wired LAN may be prone to disruption when the projector is used in a location where static electricity or noise is generated.

There is a rare case that the LAN connection may not be established due to static electricity or noise. In such case, turn off the power with the power button on the remote control or the power supply unit of the projector, remove the source of problematic static electricity or noise, and turn the power of the projector back on.

■ Using the projector outside the country

Note that depending on countries or regions, there are restrictions on the channels and frequencies at which you can use the wireless LAN. The wireless LAN function is forbidden when you use the projector outside the country or region where you purchased it.

■ Available wireless LAN channels

The channels (frequency range) that can be used differ according to the country or region.

Please use the wireless LAN feature in compliance with the laws of each country.

For MIRRORING mode (➡ page 131)

(When the connecting method is [MIRRORING])

Standard	Channels used	Frequency band (Center frequency)
IEEE802.11b/g/n	1 - 11	2.412 GHz - 2.462 GHz
IEEE802.11a/n	36 / 40 / 44 / 48	5.180 GHz - 5.240 GHz

For M-DIRECT mode (➡ page 84)

(When the connecting method is [M-DIRECT] of [Panasonic APPLICATION])

Standard	Channels used	Frequency band (Center frequency)
IEEE802.11b/g/n	1 - 13	2.412 GHz - 2.472 GHz
IEEE802.11a/n	36 / 40 / 44 / 48	5.180 GHz - 5.240 GHz

For USER mode (➡ page 84)

(When the connecting method is [USER] of [Panasonic APPLICATION])

Standard	Channels used	Frequency band (Center frequency)
IEEE802.11b/g/n	1 - 13	2.412 GHz - 2.472 GHz
IEEE802.11a/n	36 / 40 / 44 / 48	5.180 GHz - 5.240 GHz

■ This device is restricted to indoor use when operated in the 5.15 to 5.35 GHz frequency range (Channels 36 to 64).

Art-Net

“Art-Net” is an Ethernet communication protocol based on the TCP/IP protocol.

By using the DMX controller and the application software, illumination and stage system can be controlled. Art-Net is made based on DMX512 communication protocol.

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 projection surface to prevent outside light or light from indoor lamps from shining onto the projection surface.
- The projection lens of the projector is thermally affected by the light from the light source, making the focus unstable in the period just after switching on the power. The focus will stabilize after projection for more than 30 minutes has elapsed.

■ Do not touch the surface of the projection lens with your bare hands.

The finger print or dirt on the projection lens surface may be projected enlarged to the projection surface.

■ DLP chips

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

■ Light source

Laser is used as the light source of the projector, and it has the following characteristics.

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

  When the light source is used for approximately 20 000 hours, its luminance is reduced to half its initial luminance. 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 related section of this document including the use of power cords and shielded cables.

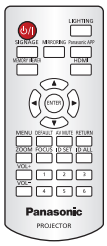
Disposal

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

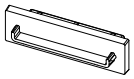
Accessories

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

Wireless remote control unit <1>
(N2QAYA000134)



Card slot cap <1>
(DPHG1011ZA)



(Attached to the projector at the time of purchase)

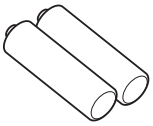
HDMI terminal cap <1>
(TKKL5575)

(Attached to the projector at the time of purchase)

LAN terminal cap <1>
(TKKL5576)

(Attached to the projector at the time of purchase)

AAA/R03 or AAA/LR03 battery <2>



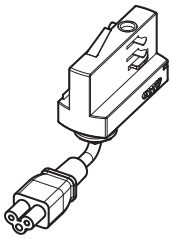
(For remote control unit)

CD-ROM <1>
(1JK1JX200GE)

Allen wrench <1>
(DPPB1005ZA)

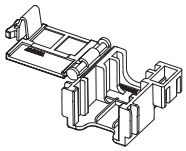
(Opposite side size 5.0 mm (3/16"))

Adapter <1>
(PT-JX200GBE: TXFKF02WDNZ)
(PT-JX200GWE: TXFKF02WDMZ)

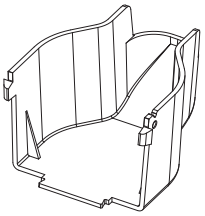


(The same color as the outer case will be supplied.)

Connector secure lock <1>
(TTRA0185)

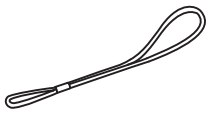


Adapter cover <1>
(PT-JX200GBE: TKFE28702)
(PT-JX200GWE: TKFE28701)

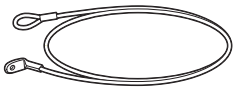


(The same color as the outer case will be supplied.)

String <1>
(6103430249)



Safety wire <1>
(DPPW1001ZA)



Attention

- After unpacking the projector, discard the packaging material properly.
- For missing accessories, consult your dealer.
- Store small parts in an appropriate manner, and keep them away from small children.

Note

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

Contents of the supplied CD-ROM

The contents of the supplied CD-ROM are as follows.

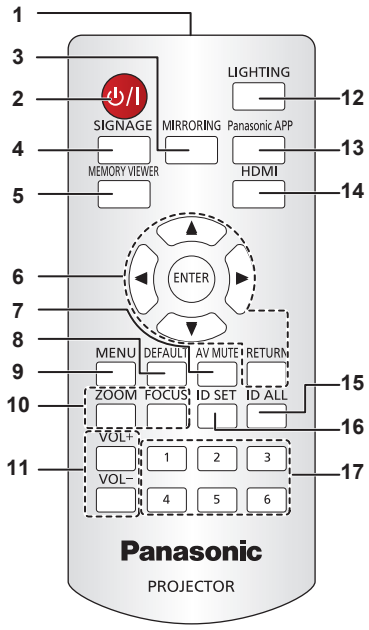
Instruction/list (PDF)	Operating Instructions – Functional Manual	
	Operating Instructions – Content Manager Manual	
	Multi Monitoring & Control Software Operating Instructions (English only)	
	Wireless Manager ME6.3 Operating Instructions (English only)	
	List of Compatible Device Models	This is a list of projectors that are compatible with the software contained in the CD-ROM and their restrictions.
	Software license	The license condition for the open source software used in the projector is contained as a PDF file.
Software	Multi Monitoring & Control Software (Windows)	This software allows you to monitor and control multiple displays (projector or flat panel display) connected to the LAN.
	Wireless Manager ME6.3 (Windows/Mac)	This software allows you to send the computer screen via wireless/wired LAN.

Note

- The “List of Compatible Device Models” for the flat panel display compatible with the “Multi Monitoring & Control Software” can be downloaded from the Panasonic website (http://panasonic.net/prodisplays/).

About your projector

Remote control



1 **Remote control signal transmitter**

2 **Power <⏻/I> button (⏻ standby / I power on)**
Turns on/off the power of the projector. (➡ page 46)

3 **<MIRRORING> button**
Switches the input to MIRRORING. (➡ page 51)

4 **<SIGNAGE> button**
Switches the input to signage. (➡ page 51)

5 **<MEMORY VIEWER> button**
Switches the input to Memory Viewer. (➡ page 51)

6 **▲▼◀▶ buttons/<ENTER> button/<RETURN> button**
Used to operate the menu screen. Also used when entering [SECURITY PASSWORD].

7 **<AV MUTE> button**
Used to turn off the image and audio temporarily. (➡ page 56)

8 **<DEFAULT> button**
Resets the settings of the sub-menu to the factory defaults. (➡ page 59)

9 **<MENU> button**
Displays the main menu. (➡ page 58)

10 **<ZOOM> button/<FOCUS> button**
Displays the lens menu and adjusts the projection lens. (➡ page 52)

11 **<VOL+>/<VOL–> buttons**
Adjusts the volume of audio output. (➡ page 55)

12 **<LIGHTING> button**
Use to turning on/off the spotlight. (➡ page 55)

13 **<Panasonic APP> button**
Switches the input to Panasonic APPLICATION. (➡ page 51)

14 **<HDMI> button**
Switches the input to HDMI. (➡ page 51)

15 **<ID ALL> button**
Used to simultaneously control all the projectors with a single remote control in a multiple projector environment. (➡ page 26)

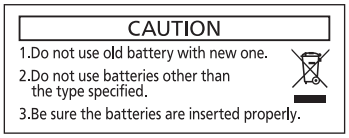
16 **<ID SET> button**
Sets the ID number of the remote control in a multiple projector environment. (➡ page 26)

17 **Number (<1> - <6>) buttons**
Used in a multiple projector environment.
Used to enter ID number or password.

Attention

- Do not drop the remote control.
- Avoid contact with liquids or moisture.
- Do not attempt to modify or disassemble the remote control.
- Observe the following instructions that are indicated on the caution label at the back of the remote control:
  - 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.

  For other instructions, read the instructions related to batteries that are described in “Read this first!”.

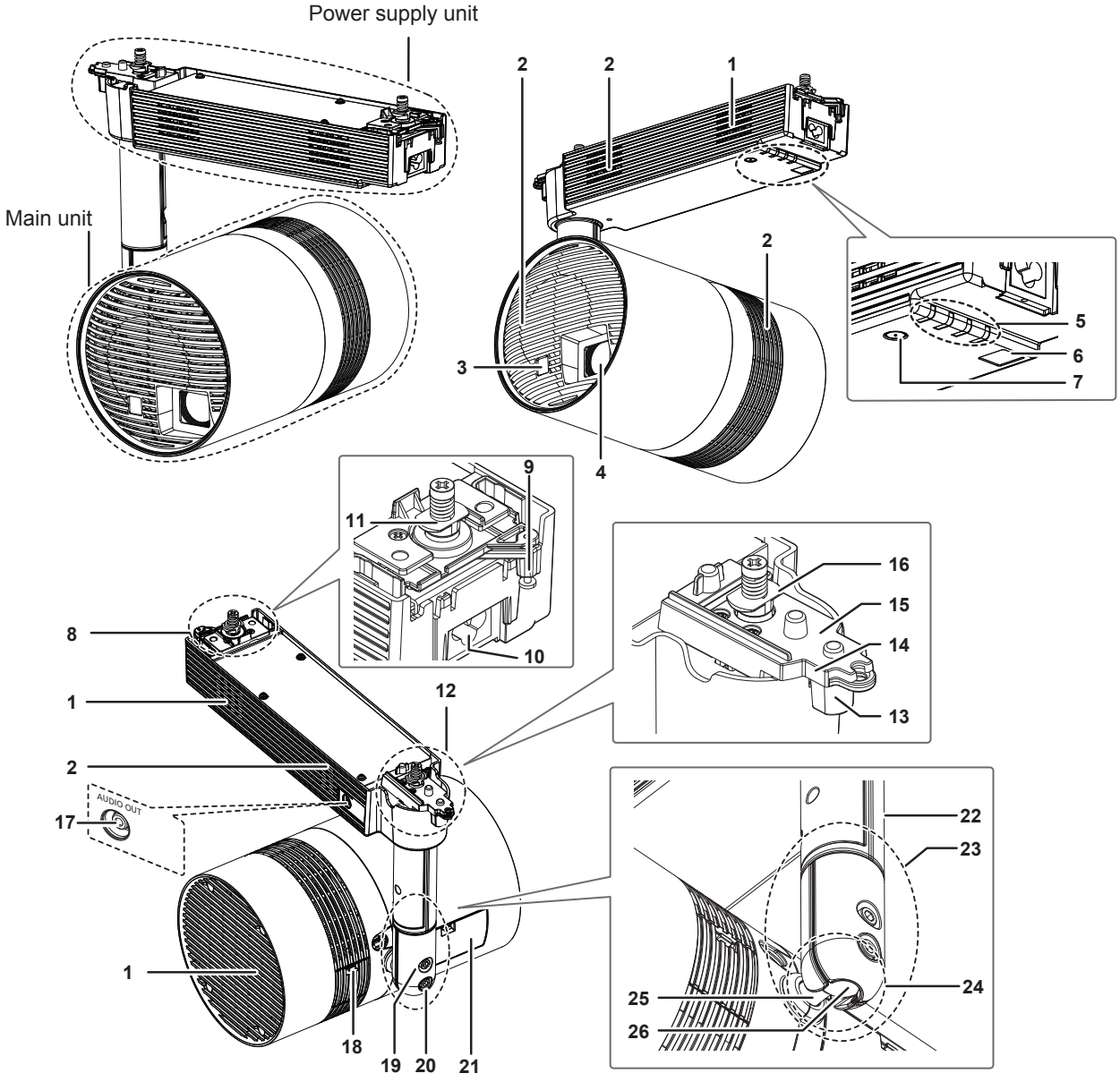


Caution label at the back of the remote control

Note

- When operating the remote control by directly pointing to the remote control signal receiver at the power supply unit of the projector, operate the remote control within a distance approximately 7 m (22'11") or shorter from the remote control signal receiver. The remote control can control at angles of up to ±30° vertically and 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 properly.
- The signal from the remote control can be reflected off the projection surface to operate the projector. However, the operating range may be limited from light reflection loss or the shape of the projection surface.
- The remote control may not operate properly if the remote control signal receiver on the power supply unit of the projector is directly receiving strong light, such as fluorescent light. Install the projector in a place distant from the light source.

Projector body



1 Air intake port

2 Air exhaust port

3 Remote control signal receiver (Main unit)

4 Projection lens

5 Indicators (➡ pages 24, 134)

6 Remote control signal receiver (Power supply unit)

7 Power <⏻/❙> button (⏻ standby / ❙ power on)
Turns on/off the power of the projector. (➡ page 46)

8 Track mount part B (➡ page 33)

9 Lever B

10 <AC IN> terminal
This is the terminal to connect the supplied adapter.

11 Hook clasp B

12 Track mount part A (➡ page 33)

13 Lever A

14 Stopper for lever A

15 Lever plate A

16 Hook clasp A

17 <AUDIO OUT> terminal
This is the terminal to output audio signal when a audio signal is input to the <HDMI IN> terminal and when the movie with audio in the SD card is played back. (➡ page 43)

18 <DC OUT> terminal cover
<DC OUT> terminal is inside. (➡ page 24)

19 Ball joint fixing screw
Fixes the angle between the shaft holder and the main unit after adjusting the orientation of the main unit. (➡ page 38)

20 Ball joint stopper
To free the ball joint movable part, remove the stopper. (➡ page 38)

21 Connecting terminals cover (➡ page 24)
The connecting terminals are inside.

22 Pole

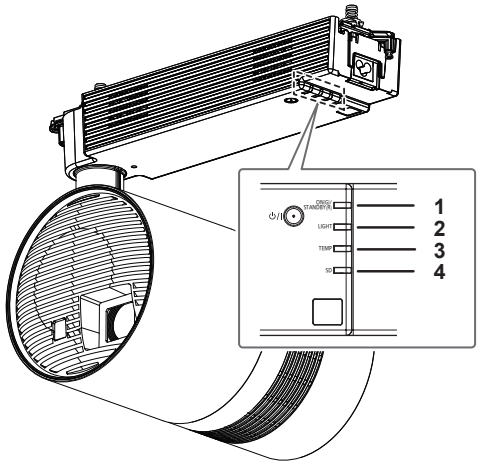
23 Shaft holder

24 Ball joint movable part

25 Shaft

26 Ball joint

■ Indicators



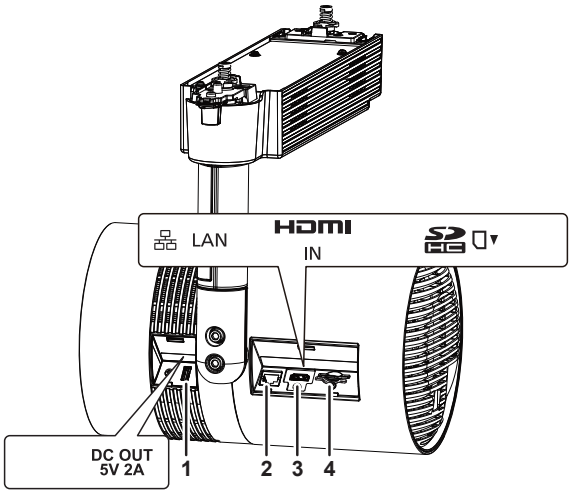
1 Power indicator <ON (G)/STANDBY (R)>
Indicates the status of the power. (➡ page 46)

2 Light source indicator <LIGHT>
Indicates the status of the light source. (➡ page 134)

3 Temperature indicator <TEMP>
Indicates the internal temperature status. (➡ page 134)

4 SD card indicator <SD>
Blinks in green when accessing the SD card.

■ Connecting terminals and <DC OUT> terminal



1 <DC OUT> terminal
This is the USB terminal only used for power supply. (DC 5 V, Maximum 2 A)

2 <LAN> terminal
This is the terminal to connect to the network. (➡ page 43)

3 <HDMI IN> terminal
This is the terminal to input HDMI signal. (➡ page 43)

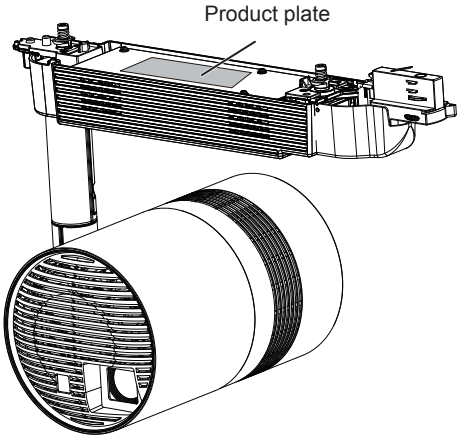
4 SD card slot
Supports SD memory card and SDHC memory card. (➡ page 53)

Attention

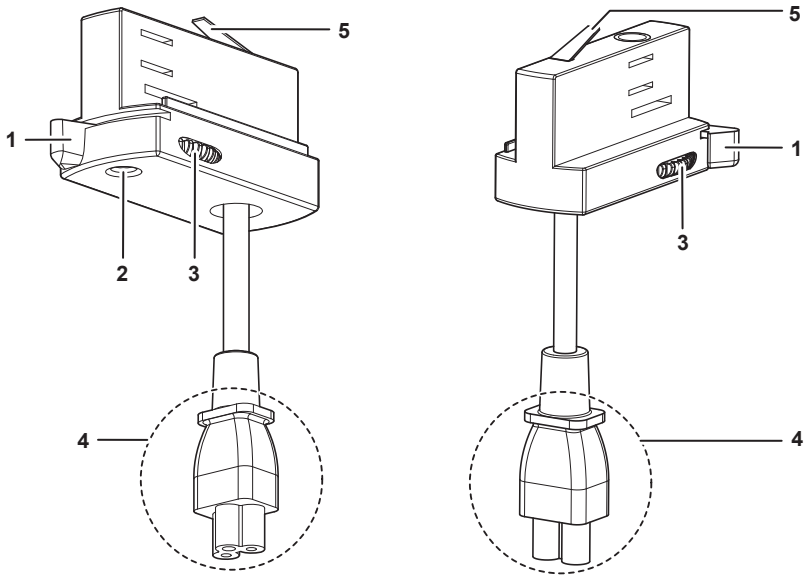
- The LAN cable connecting to the projector directly should be wired indoors only.
- Store small parts such as SD card in an appropriate manner, and keep them away from small children.

Note

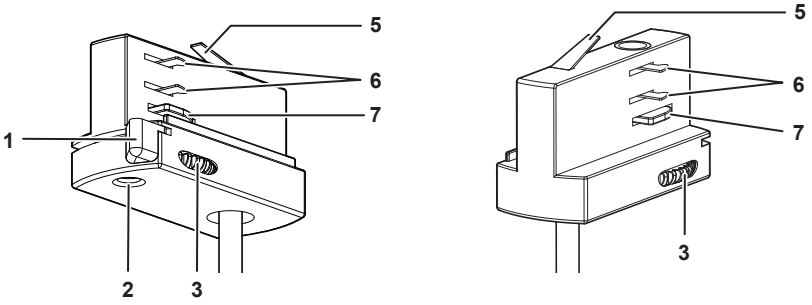
- The product number, serial number, and rating of the projector is indicated in the product plate in the position as shown in the following illustration.



Adapter



■ Illustration of the adapter attached to the track system



1 Lever

2 Power phase indicator
Indicates the current power phase.

3 Phase selector switch
Switches the power phase.

4 Power connector

5 Ground contact

6 Power contacts

7 Locking fingers

Preparing the remote control

Inserting and removing the batteries

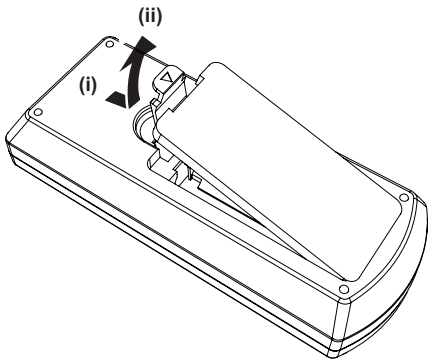


Fig. 1

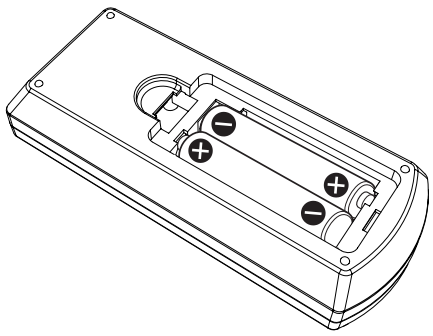


Fig. 2

1) Open the cover. (Fig. 1)

2) Insert the batteries and close the cover (insert the ⊖ side first). (Fig. 2)

- When removing the batteries, perform the steps in reverse order.

When using multiple projectors

When you use multiple projectors together, you can control all the projectors simultaneously or each projector individually using single remote control, if a unique ID number is assigned to each projector.

When using the projectors by setting the ID numbers, set the ID number ([1] - [6]) of the projector body after initial settings have been completed. Then, set the ID number of the remote control.

For initial settings, refer to “When the initial setting screen is displayed” (➡ page 47).

The factory default ID number of the projector (projector body and remote control) is set to [ALL], so you can use it as it is. Set the ID numbers of the projector body and remote control as necessary.

For details on setting the ID number of the remote control, refer to “Setting the remote control ID numbers” (➡ page 56).

Note

- Set the ID number of the projector body from the [SETUP] menu → [PROJECTOR ID].

Chapter 2 Getting Started

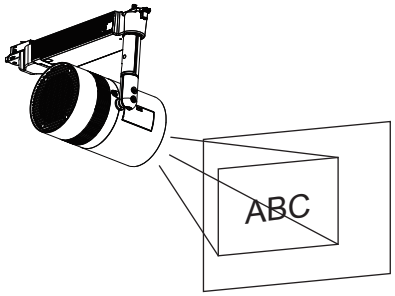
This chapter describes things you need to do before using the projector such as the setup and connections.

Before the installation

This section describes the display method using the projector before mounting to the track system.

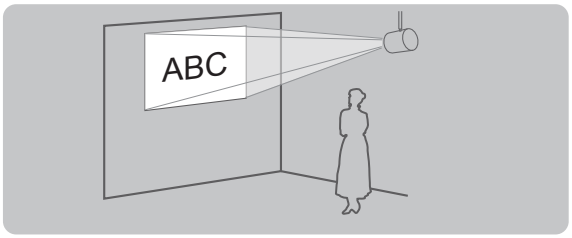
Installation form

There are a total of four installation forms: two for the projection method and two for the display direction. Set the [SETUP] menu → [PROJECTION METHOD] (➡ page 70) and [VERTICAL FLIP] (➡ page 70) depending on the installation form.



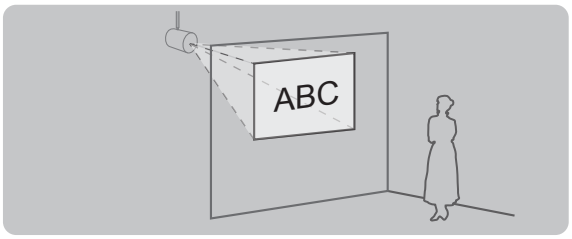
The following illustration is an example when the orientation of the main unit is adjusted to the location in the figure above.

To project forward



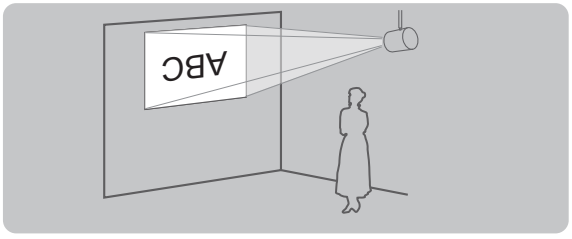
Menu item	Method
[PROJECTION METHOD]	[FRONT]
[VERTICAL FLIP]	[OFF]

To project from rear
(Using the translucent screen)



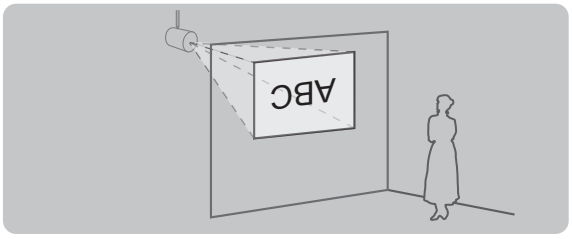
Menu item	Method
[PROJECTION METHOD]	[REAR]
[VERTICAL FLIP]	[OFF]

To project forward



Menu item	Method
[PROJECTION METHOD]	[FRONT]
[VERTICAL FLIP]	[ON]

To project from rear
(Using the translucent screen)



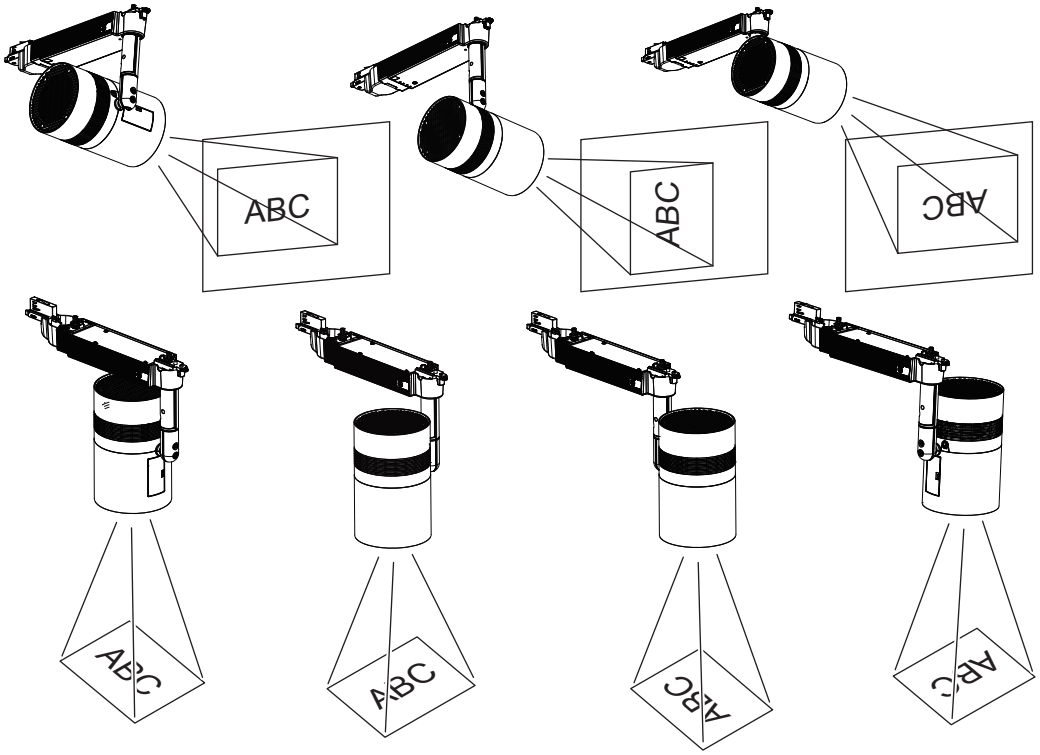
Menu item	Method
[PROJECTION METHOD]	[REAR]
[VERTICAL FLIP]	[ON]

Note

- Above illustrations for installation form are examples for explanation, and it may not be the actual condition of usage. Set the [SETUP] menu → [PROJECTION METHOD] (➡ page 70) and the [VERTICAL FLIP] (➡ page 70) according to the environment of the usage and the direction of the main unit.

Projection direction

Various expressions are possible by combination of adjustment of the direction of the main unit as described in “Adjusting the projection position” (➡ page 38) and the settings of the [SETUP] menu → [PROJECTION METHOD] (➡ page 70) and the [VERTICAL FLIP] (➡ page 70).
The following illustration is an example when [PROJECTION METHOD] is set to [FRONT] and [VERTICAL FLIP] is set to [OFF].

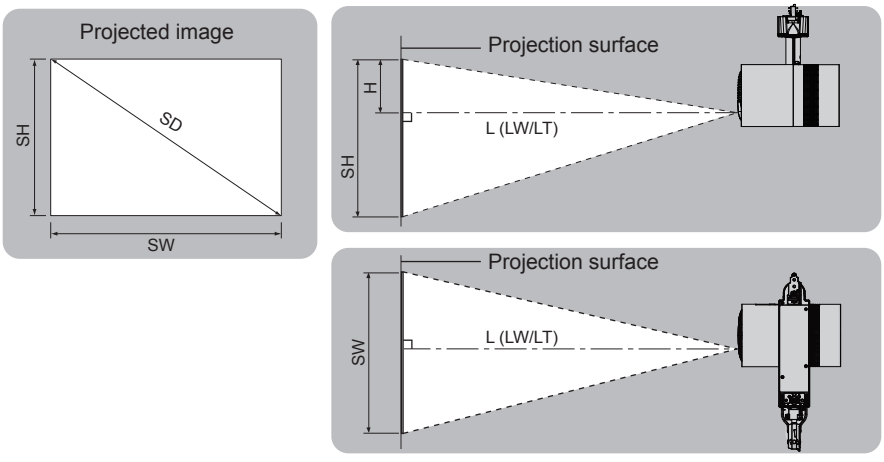


Attention

- When setting up the projector, please pay attention to the cable between the main body and the pole.

Projection dimensions

Determine the position to install the track system and the projector referencing following illustrations and projection distance dimensions. The size and position of the projected image can be adjusted according to the area and position of the projection surface.



L (LW/LT)*1	Projection distance (distance from the projection lens surface to the projection surface) (m)
SH	Image height (m)
SW	Image width (m)
SD	Image diagonal size (m)
H	Distance from the lens center to the image upper end (m)

*1 LW: Minimum projection distance
LT: Maximum projection distance

Attention

- Before setting up, read “Precautions for use” (➡ page 16).
- Do not use the projector and the high-power laser equipment in the same room. The DLP chip can be damaged if a laser beam hits the lens surface.

Projection distance

The dimension in the following table contains a slight error.
Also, it is corrected to become smaller than the specified image size when [KEYSTONE] is used.

■ When the image aspect ratio is 4:3

(Unit: m)

Projected image size			Projection distance (L)		Distance from the lens center to the image upper end (H)
Diagonal (SD)	Height (SH)	Width (SW)	Min. (LW)	Max. (LT)	
0.76 (30")	0.457	0.610	0.79	1.75	0.152
1.02 (40")	0.610	0.813	1.06	2.35	0.203
1.27 (50")	0.762	1.016	1.34	2.94	0.254
1.52 (60")	0.914	1.219	1.62	3.54	0.305
1.78 (70")	1.067	1.422	1.89	4.14	0.356
2.03 (80")	1.219	1.626	2.17	4.73	0.406
2.29 (90")	1.372	1.829	2.45	5.33	0.457
2.54 (100")	1.524	2.032	2.72	5.92	0.508
3.05 (120")	1.829	2.438	3.28	7.12	0.610
3.81 (150")	2.286	3.048	4.10	8.90	0.762
5.08 (200")	3.048	4.064	5.48	11.88	1.016

Projection distance formula

To use an image size not listed in this manual, check the projected image size SD (m) and use the respective formula to calculate projection distance (L).
The unit of the formula is all “m”. (Value obtained by the following calculation formula contains a slight error.)
When calculating a projection distance using image size designation (value in inches), multiply the value in inches by 0.0254 and substitute it into SD in the formula for calculating the projection distance.

■ When the image aspect ratio is 4:3

Minimum projection distance (LW)	L = 1.0907 × SD - 0.0507
Maximum projection distance (LT)	L = 2.3468 × SD - 0.0379

Installing/removing the projector

This section describes the mounting method of the projector to the track system and the setting method of the orientation of the main unit.

Before mounting

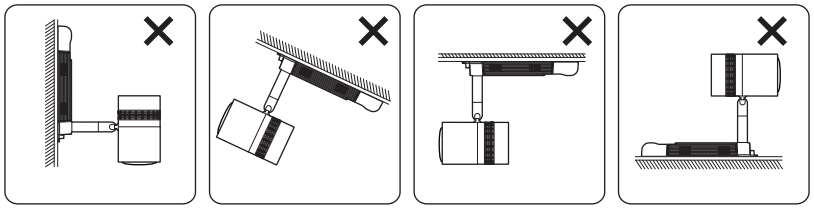
The track systems compatible for mounting the projector are as follows.

Manufacturer	Nordic Aluminium	EUTRAC Stromschienen	ERCO
Name	GLOBAL Trac Pro tracks	Surface Track Standard	ERCO track
Type No.	XTS4100/XTS4200/XTS4300/ XTS4400	25-10/25-20/25-30/25-40	78301.000/78302.000/78303.000 /78304.000

Type No. of the track system and other information described above are as of November 2016.
For the latest information, visit the following the website.
URL http://panasonic.net/avc/projector/

Attention

- Mount the projector only to specified track systems.
- Please ask a qualified technician when setting up or replacing the track system.
- It is recommended to mount the projector to the track system per manufacturer's instructions.
- Ensure that the projector is mounted to the track system by two people.
- Before mounting/removing the projector, turn off the power of the track system.
- Mount the projector to the track system which is installed in the horizontal ceiling or beam.
  Do not install the projector to the following track systems.
  - Track system that is installed in the wall surface
  - Track system that is installed in the sloping ceiling or beam
  - Track system that cannot withstand the load
  - Track system that is installed on the floor



Cannot be installed

- Ensure the installation part of the track system can withstand the weight of the projector. (➡ page 146)
- If it is hard to operate the lever on the track mount parts A/B when mounting the projector, remove the projector from the track system without turning the lever forcibly, displace the projector slightly and mount it again.
- When installing more than two projectors to one track system, please reinforce the track system and the ceiling.

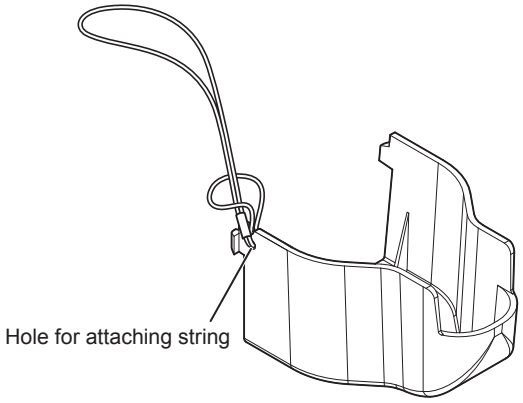
Note

- The adapter of the projector cannot be mounted to the position of the tapping screw fixing the track system to the ceiling or beam.
- When multiple projectors are mounted side by side, the brightness or the color may differ due to individual differences, even when the model number is the same.
- The model number of track system is subject to change without prior notice.

Preparing the adapter cover

1) Attach the string to the adapter cover.

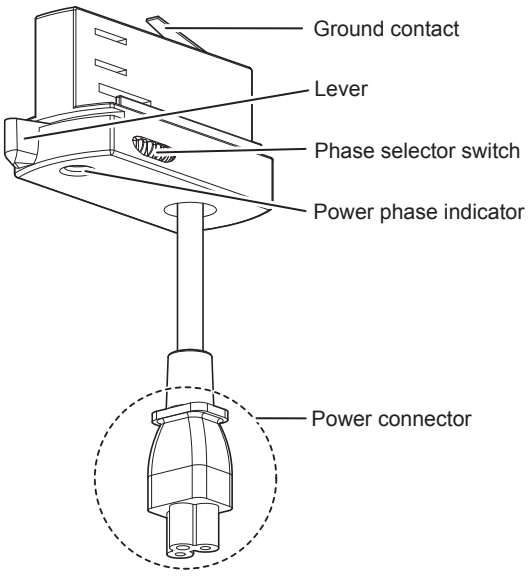
- Pass one end (with smaller ring) of the string through the hole of the adapter cover and attach it to the adapter cover as shown in the figure.

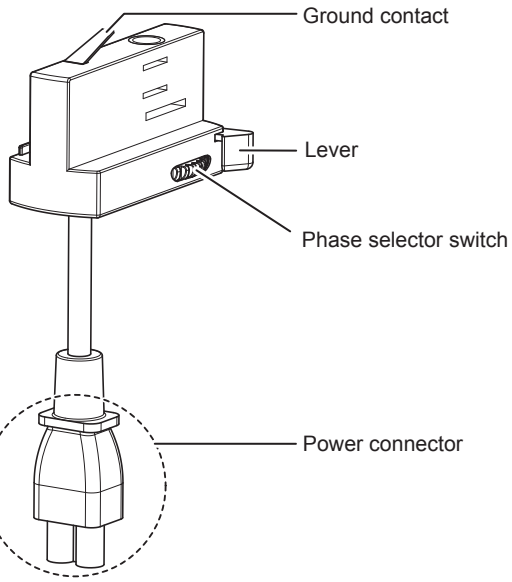


Preparing the adapter

1) Set the phase selector switch on the adapter.

- Turn the phase selector switch on the supplied adapter and adjust the power phase (1, 2, or 3) according to your track system.
- The setting of the phase selector switch can be checked with the power phase indicator.

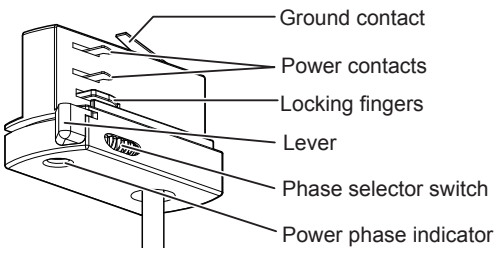


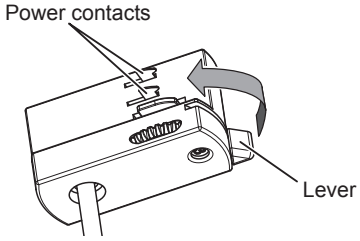


2) Make sure that the power contacts are inside the adapter.

- If the adapter lever is positioned as shown in the figure below, turn the lever in the direction of the arrow. The power contacts on both sides of the adapter are housed inside the adapter, and you can attach to the track system.

■ Illustration of the adapter attached to the track system





Note

- The setting of the phase selector switch can be changed even when the adapter is attached to the track system.
- When the phase selector switch is set to “0”, the adapter and the track system are not electrically connected.
- If you do not know which number to set the phase selector switch, consult the installation personnel of your track system.

Mounting the projector to the track system

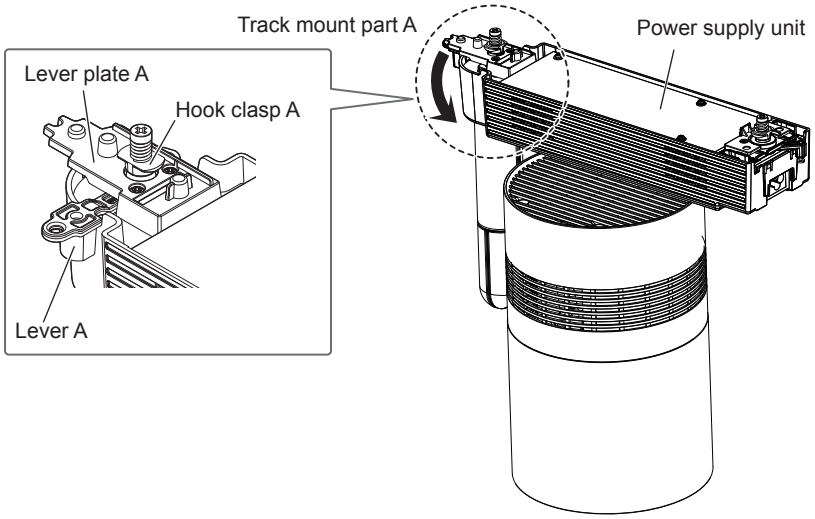
1) Turn off the power of the track system.

WARNING

When mounting the projector to the track system, be sure to turn off the power of the track system.
Electric shocks can result.

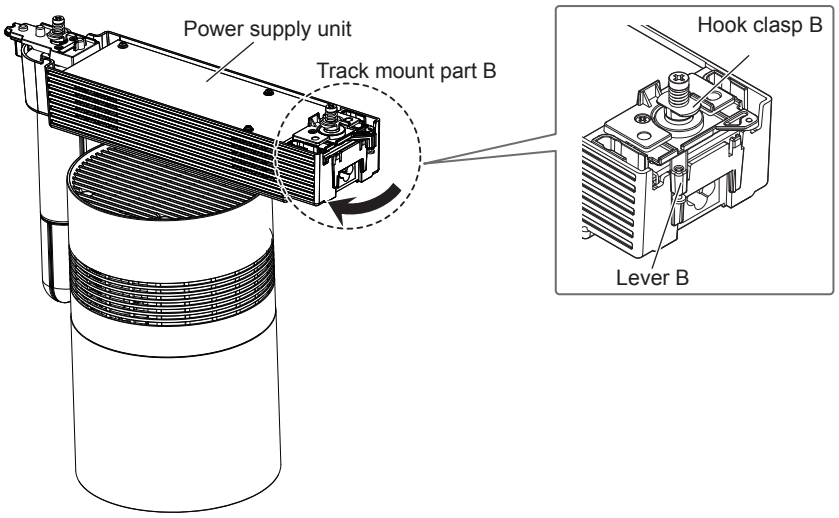
2) Turn the lever A to 90° against the longitudinal direction of the power supply unit.

- Turn the lever A on the track mount part A in the direction of the arrow shown in the figure so that the hook clasp A is at 90° against the longitudinal direction of the power supply unit. Hook clasp A is parallel to the longitudinal direction of the power supply unit.



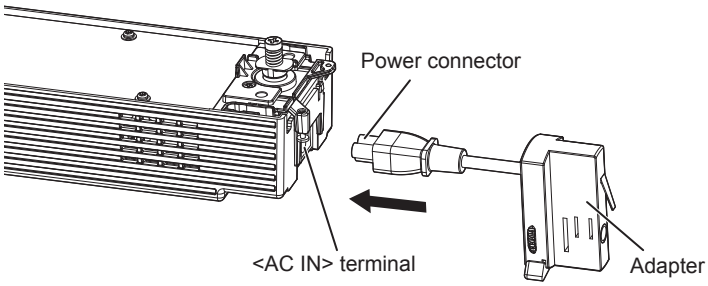
3) Completely turn the lever B to the same direction as the lever A against the power supply unit.

- Turn the lever B on the track mount part B in the direction of the arrow shown in the figure so that the hook clasp B is parallel to the longitudinal direction of the power supply unit.



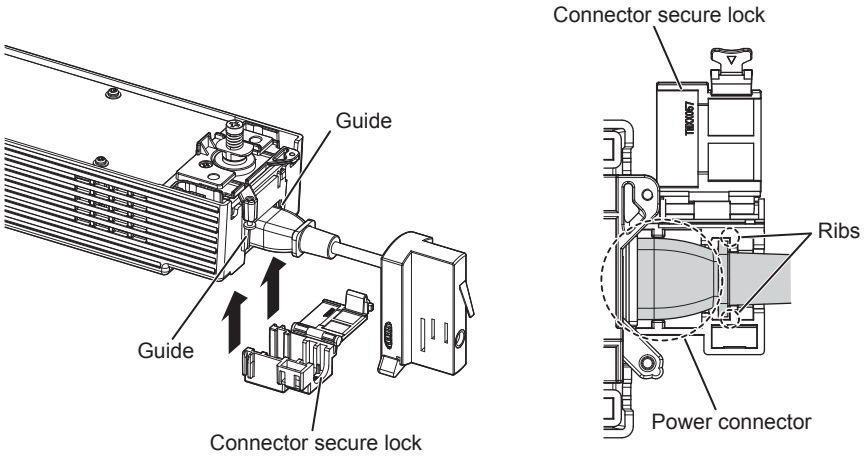
4) Completely insert the power connector of the supplied adapter into the <AC IN> terminal on the power supply unit.

- Check the shapes of the <AC IN> terminal on the power supply unit and the power connector of the adapter, and insert the power connector into the <AC IN> terminal completely.



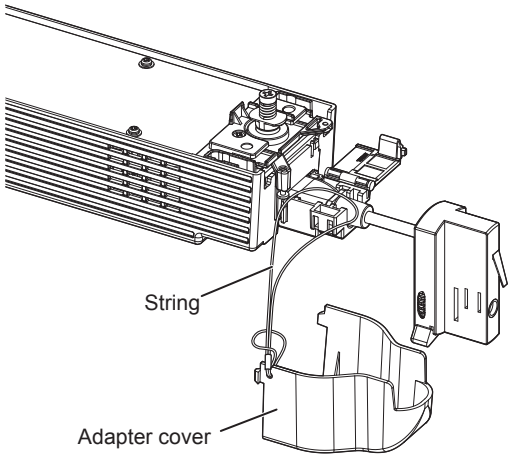
5) Attach the supplied connector secure lock.

- Attach the connector secure lock from under the <AC IN> terminal on the power supply unit along the guides on both sides.
- Confirm that the power connector of the adapter is placed inside the ribs of the connector secure lock (the power supply unit side) as shown in the figure.



6) Put the string of the adapter cover on the connector secure lock.

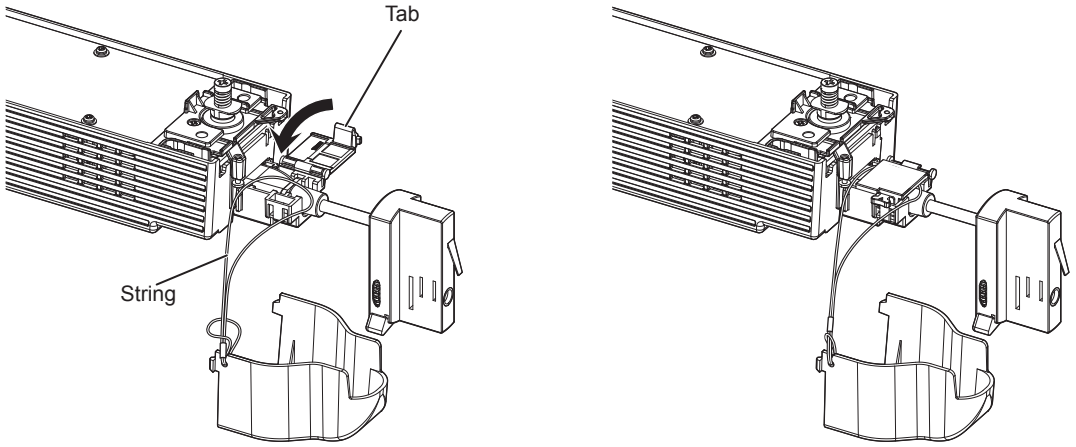
- Put the string already attached to the supplied adapter cover on the connector secure lock as shown in the figure.



7) Fix the connector secure lock.

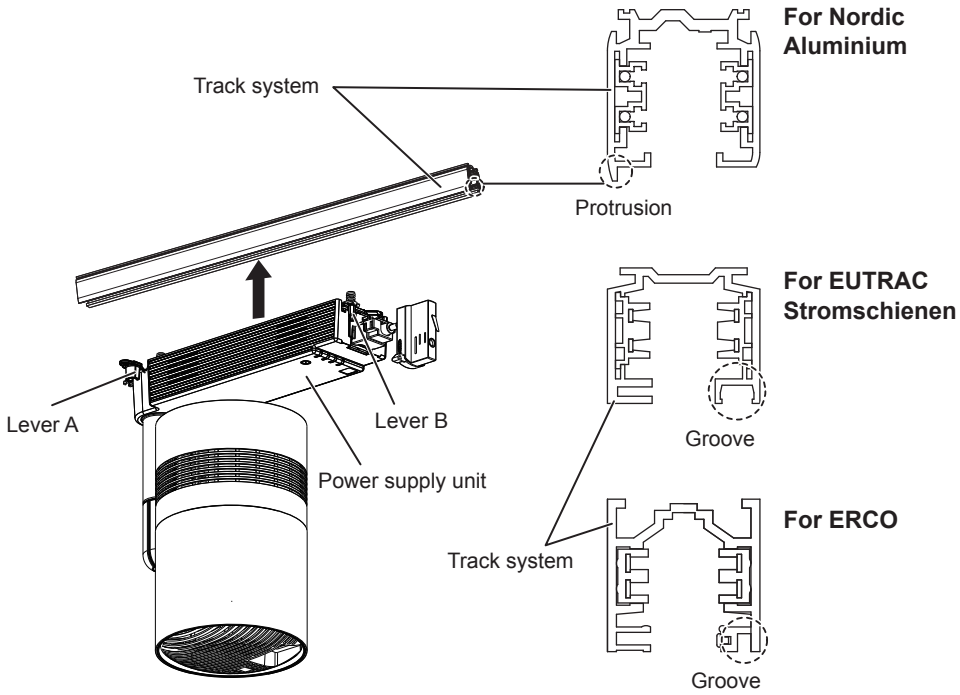
- Push the connector secure lock in until the tab of the connector secure lock clicks with the string put on. Be careful not to get the string caught in the tab.

- The string is used to prevent the adapter cover from falling off. Be sure to use the projector with the string put on the connector secure lock.



8) Align the orientation of the power supply unit to the track system.

- Align the orientation as follows.
  - − When using the track system of Nordic Aluminium, align the side with the levers A/B (projector) to the side with the protrusion (track system).
  - − When using the track system of EUTRAC Stromschienen or ERCO, align the side with the levers A/B (projector) to the side without the groove (the track system).
- For details of the track systems compatible with the projector, refer to “Before mounting” (➡ page 31).



9) Mount the track mount part of the power supply unit to the track system.

- Insert the hook clasps of the track mount parts A/B into the opening of the track system.
- The adapter of the projector cannot be mounted to the position of the tapping screw fixing the track system to the ceiling or beam.

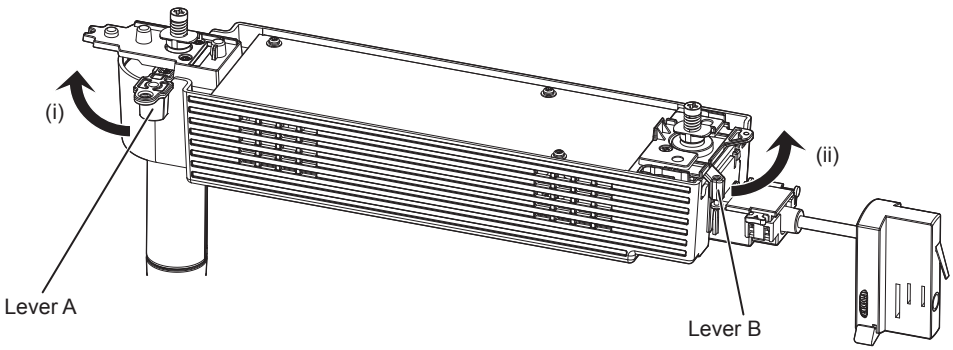
10) Align the lever A parallel to the track system, and completely turn the lever B to the same side.

i) Turn the lever A in the direction of the arrow shown in the figure to align it parallel to the track system.

ii) Completely turn the lever B in the direction of the allow shown in the figure.

- Be sure to operate the lever A first.

- Confirm that both hook clasps A/B are securely housed inside the track system.

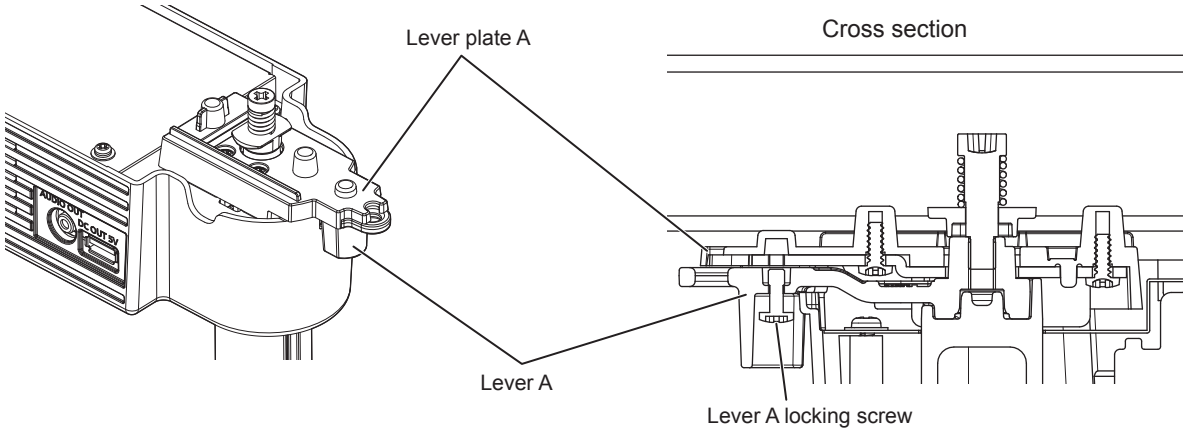


WARNING

When mounting to the track system, turn both levers A/B all the way until they hit the end.
Inadequate mounting to the track system may result in the projector falling off.

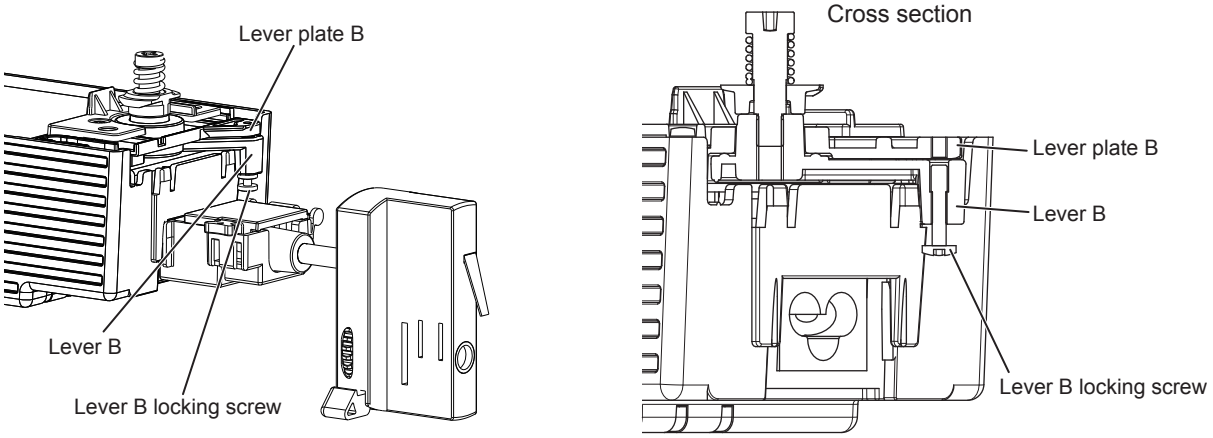
11) Fix the lever A locking screw.

- Tighten the lever A locking screw (M3) using a Phillips screwdriver (ISO No. 2, diameter: 6 mm (1/4")), and fix to the lever plate A.



12) Fix the lever B locking screw.

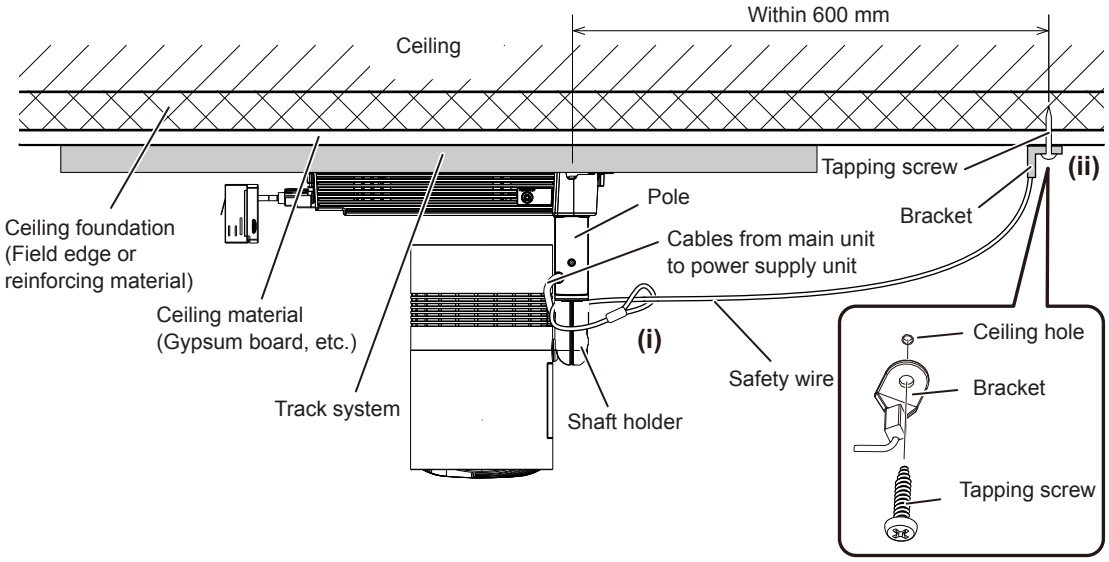
- Tighten the lever B locking screw (M3) using a Phillips screwdriver (ISO No. 2, diameter: 6 mm (1/4")), and fix to the lever plate B.



13) Attach the safety wire.

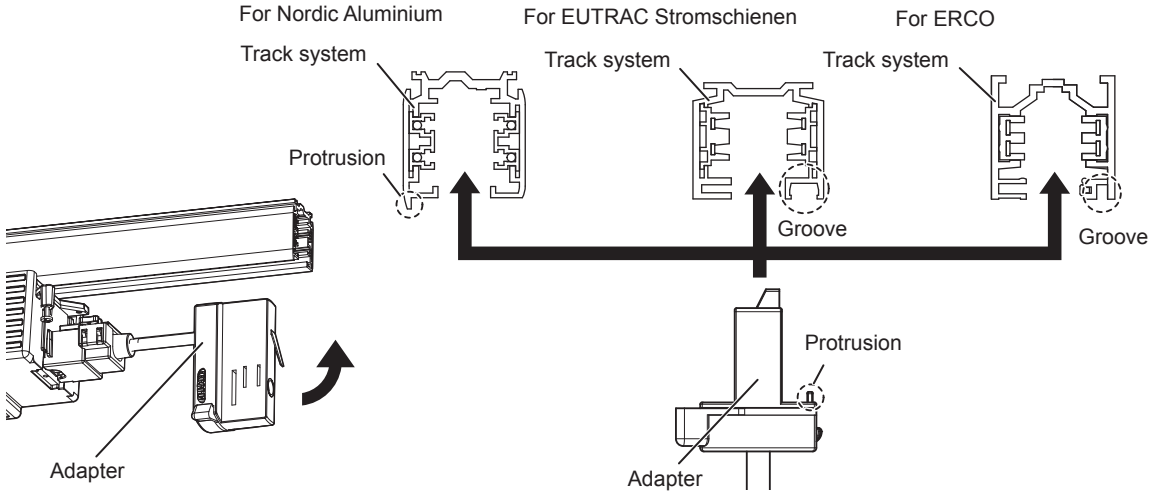
i) Pull one end of the safety wire around the shaft holder and put through the loop as shown in the figure below.

ii) Secure the bracket of the safety wire with commercially available tapping screw (head diameter: Φ3.8 mm (5/32")) to the sturdy ceiling with reinforcing material as shown in the figure below.



14) Align the orientation of the adapter to the track system.

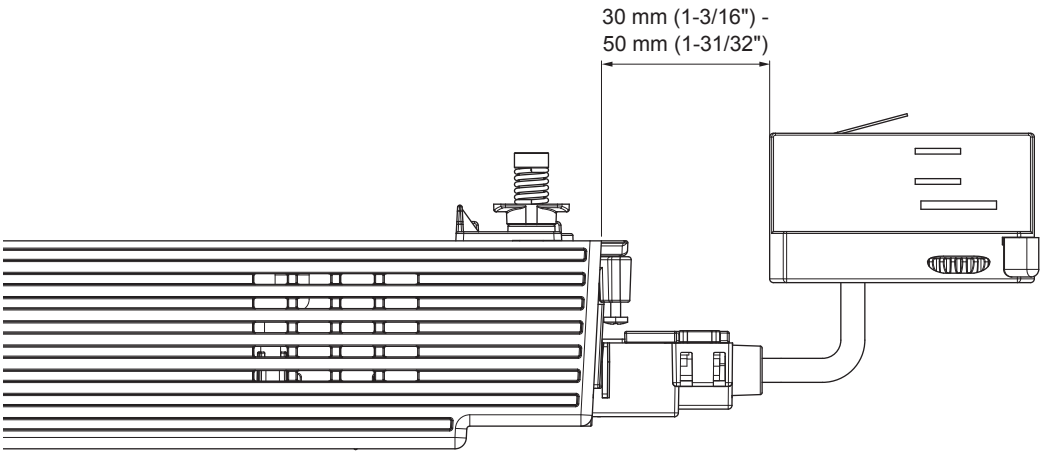
- Hold up the adapter and align the orientation as follows.
  - − When using the track system of Nordic Aluminium, align the side with the protrusion (adapter) to the side without the protrusion (track system).
  - − When using the track system of EUTRAC Stromschienen or ERCO, align the side with the protrusion (adapter) to the side with the groove (track system).



15) Mount the adapter to the track system.

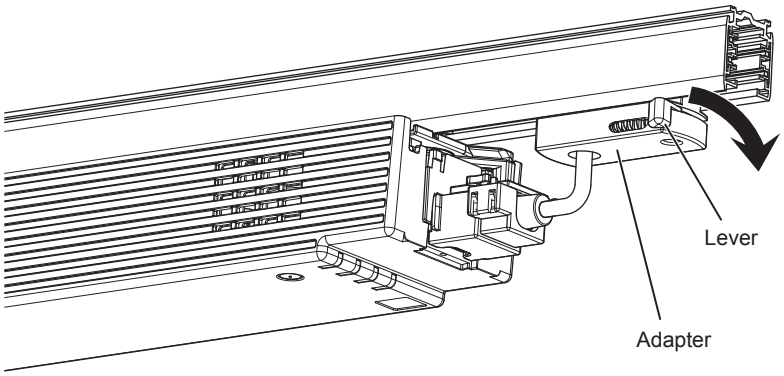
- Insert the adapter into the opening of the track system.
- The adapter of the projector cannot be mounted to the position of the tapping screw fixing the track system to the ceiling or beam.

- Allowing for attaching the adapter cover to be performed in Step **17)**, mount the adapter to the track system using the rough dimension shown in the figure.



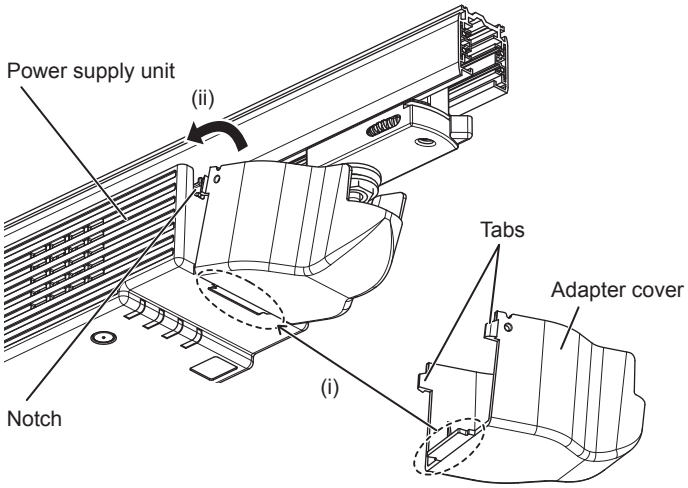
16) Turn the adapter lever to secure the adapter to the track system.

- Completely turn the adapter lever in the direction of the arrow shown in the figure.
- The track system and the projector are electrically connected.



17) Attach the adapter cover.

- While aligning the protrusion at the lower center of the adapter cover to the depression on the power supply unit (i), push both tabs at the upper side of the adapter cover into the notches of the power supply unit until they click (ii). Be careful not to get the string caught in the adapter cover.



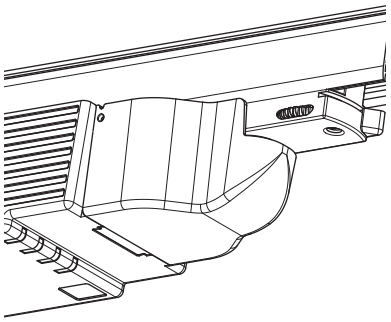


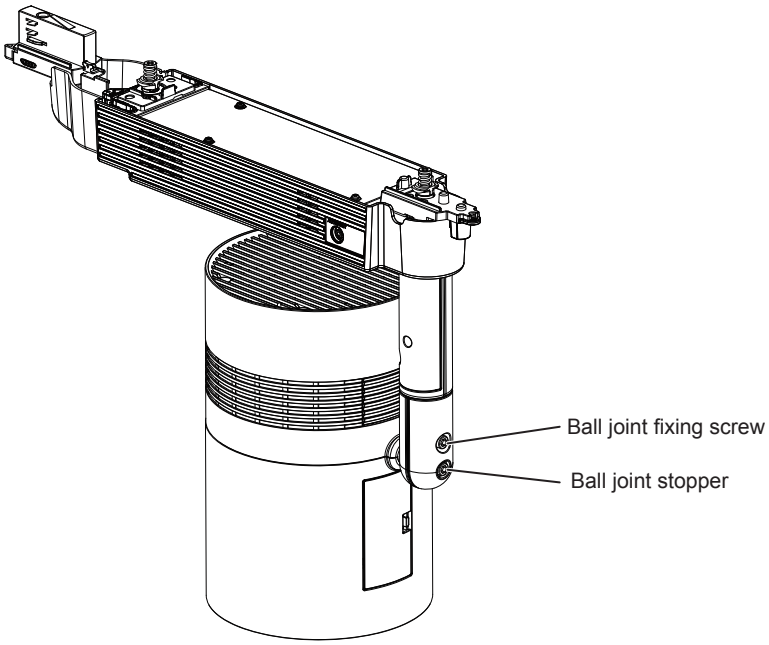
Illustration after the adapter cover has been attached

Adjusting the projection position

After mounting the projector to the track system, adjust the orientation of the main unit to determine the projection position.

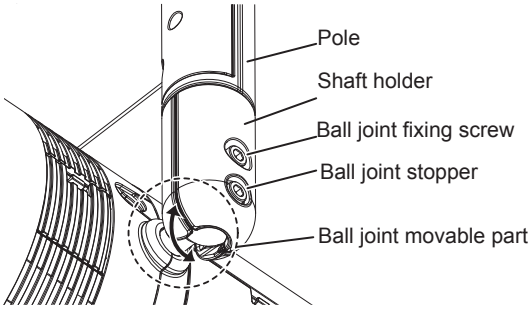
1) Loosen the ball joint fixing screw.

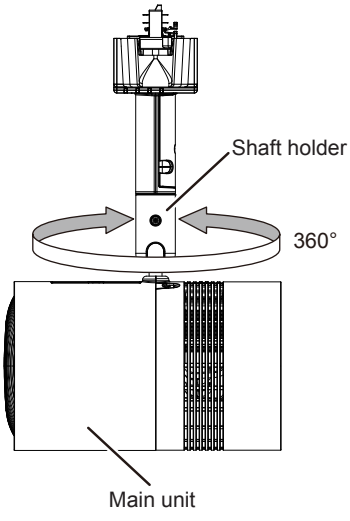
- Loosen the ball joint fixing screw using the supplied Allen wrench (opposite side size 5.0 mm (3/16")).



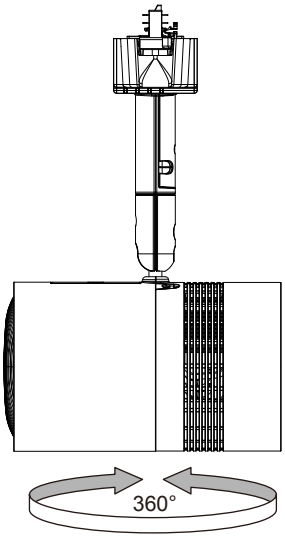
2) Adjust the orientation of the main unit.

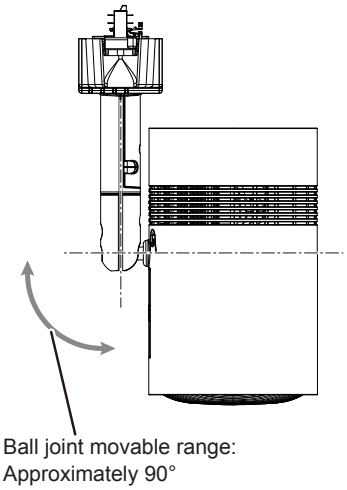
- Rotate the shaft holder and adjust the ball joint movable part to the direction to tilt the main unit, and adjust the orientation of the main unit.





The shaft holder will rotate 360° when the ball joint fixing screw is loosened.
Rotate the shaft holder and move the ball joint movable part to the direction to tilt the main unit.





The ball joint will become free when the ball joint stopper is removed.
The main unit can be rotated 360° or the main unit can be tilted 90° at the ball joint movable part.

3) Tighten the ball joint fixing screw.

- While supporting the main unit, securely tighten the ball joint fixing screw using the supplied Allen wrench (opposite side size 5.0 mm (3/16")).

Attention

- The main unit and the power supply unit are connected with cables, etc. Do not rotate or tilt the main unit more than necessary.
- When adjusting the orientation of the main unit while connected to an external device via connection cable, please be careful not to damage the connection cable.
- Please store the ball joint stopper in an appropriate manner for future use.

Note

- After adjusted roughly, fine adjust the projection position while projecting.
- The ball joint fixing screw and the ball joint stopper are hexagonal socket head fixing screws (M6). Note that the ball joint stopper can be removed if you need and the ball joint fixing screw will come off the projector if it is loosened too much.

Removing the projector from the track system

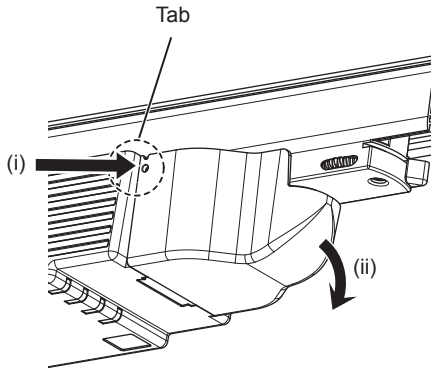
1) Turn off the power of the track system.

WARNING

When removing the projector from the track system, be sure to turn off the power of the track system.
Electric shocks can result.

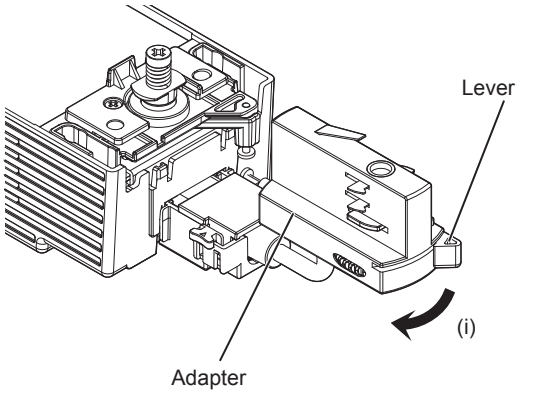
2) Remove the adapter cover.

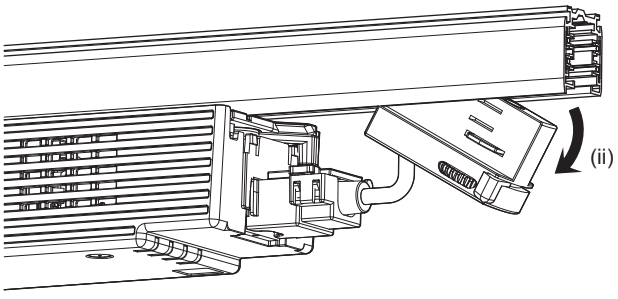
- While pushing both tabs at the upper side of the adapter cover inward (i), pull the cover in the direction of the allow (ii) shown in the figure to remove.



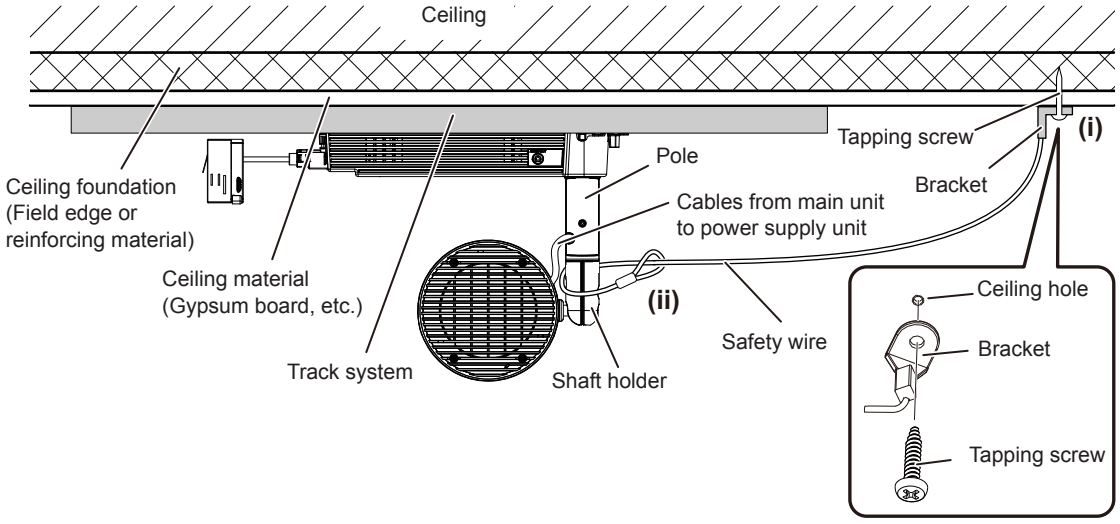
3) Remove the adapter from the track system.

- Completely turn the adapter lever in the direction of the arrow shown in the figure (i), and pull out from the track system while tilting the adapter (ii).



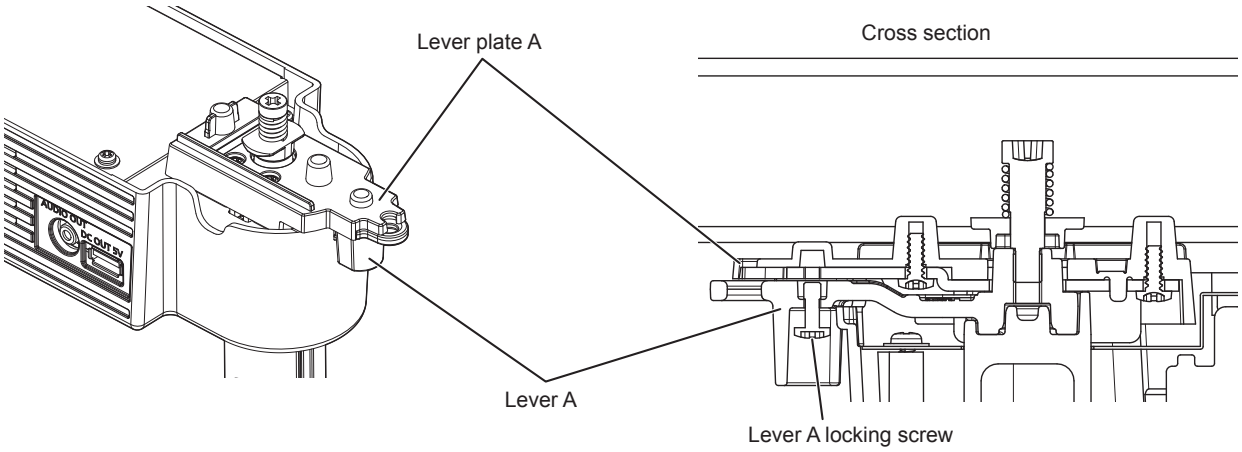


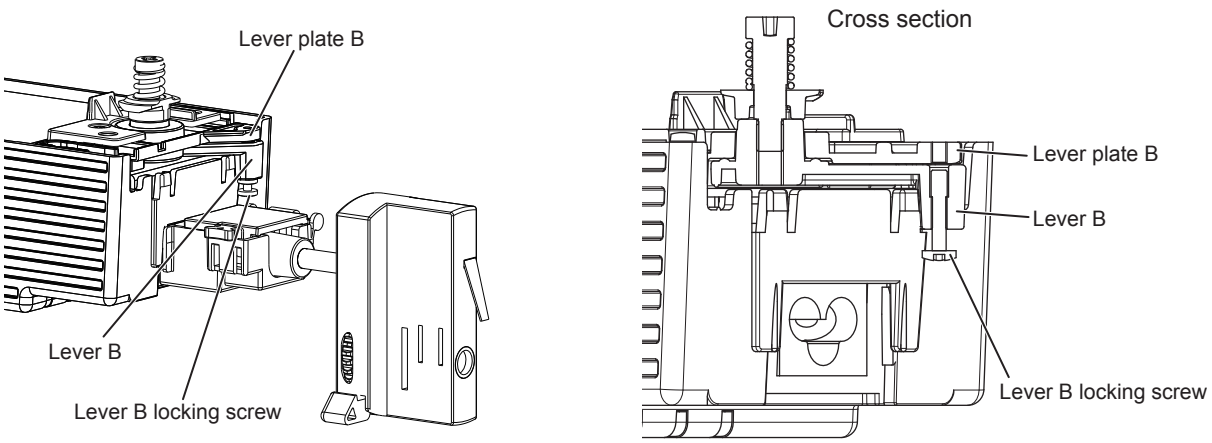
4) Remove the safety wire.



5) Loosen the lever locking screw.

- Turn each lever locking screw (M3) for the levers A/B counterclockwise until they turn freely, using a Phillips screwdriver (ISO No. 2, diameter: 6 mm (1/4")), and release the levers A/B.





6) Support the power supply unit with one hand, turn the lever B 90°, turn the lever A to the same side to direct them 90° against the track system, and then remove the projector from the track system.

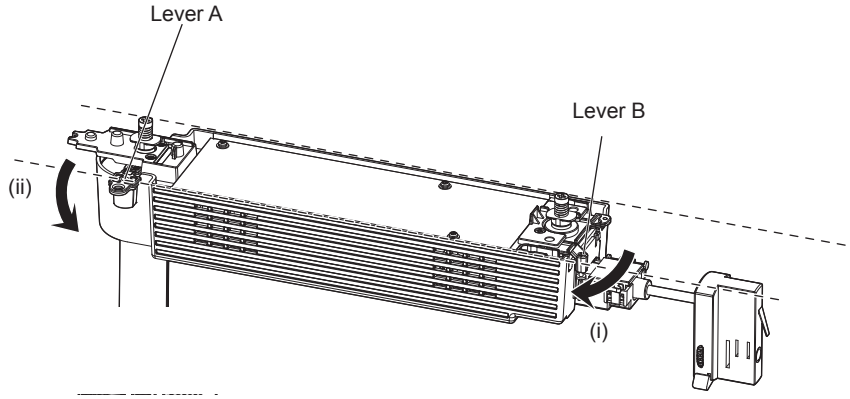
WARNING

Hold the projector with your hand when removing it from the track system.
Release the lever B first when removing the projector from the track system.
Failure to do so may result in the projector falling off and causing damage or deformation, or a serious accident or injury.

i) Completely turn the lever B in the direction of the allow shown in the figure.

ii) Turn the lever A in the direction of the arrow shown in the figure to direct it 90° against the track system.

- Make sure to operate the lever A near the main unit last.



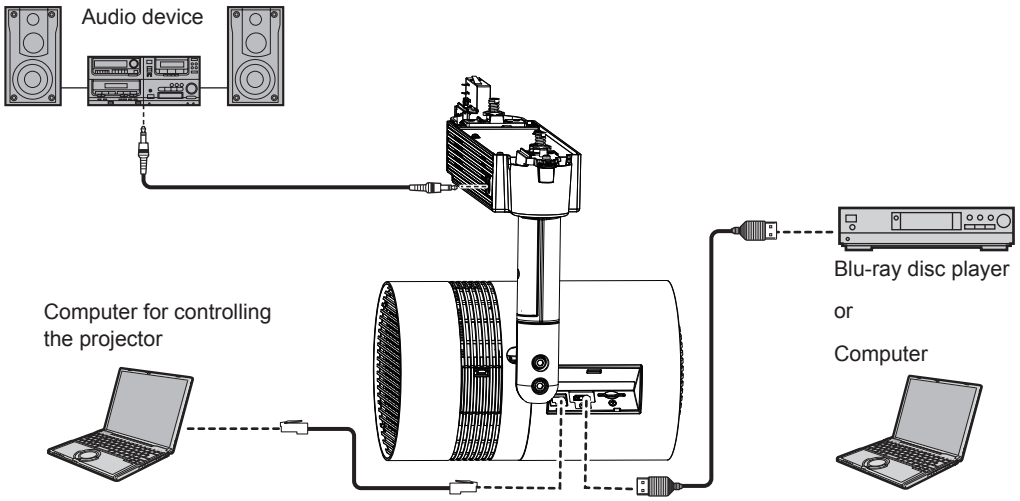
- Confirm that both hook clasps of the track mount parts A/B are removed from the track system, and then remove the projector from the track system.

Connecting

Before connecting

- Before connecting, carefully read the operating instructions for the external device to be connected.
- Turn off the power of all 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 a device to the projector or to the projector body. The longer the cable, the more susceptible to noise it becomes. Since using a cable while it is wound makes it act like an antenna, it is more susceptible to noise.
  - − When connecting cables, connect the earthing end first, then insert the connecting terminal of the connecting device in a straight manner.
- Acquire any connection cable necessary to connect the external device to the system that is neither supplied with the device nor available as an option.
- Some computer models or graphics cards are not compatible with the projector.
- Use a cable compensator when you connect devices to the projector using long cables. Otherwise the image may not display properly.
- Only HDMI signals can be input to the projector. Refer to “List of compatible signals” (➡ page 149) for the types of video signals that can be used with the projector.

Connecting example: External devices



Attention

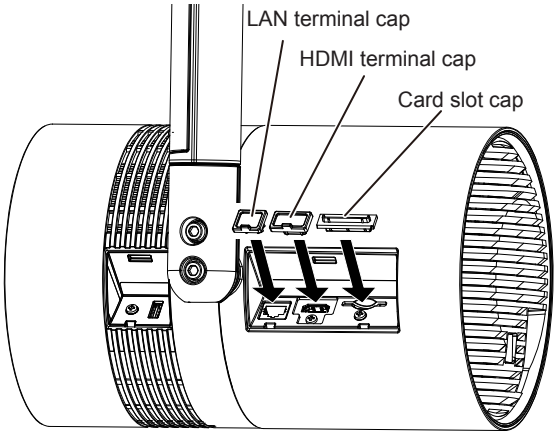
- When connecting the projector to a computer or an external device, use the power cord supplied with each device and commercially available shielded cables.
- When adjusting the orientation of the main unit while connected to an external device via connection cable, please be careful not to damage the connection cable.

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 displayed.
- The <HDMI IN> terminal of the projector can be connected to an external device with a DVI terminal by using an HDMI/DVI conversion cable, but the projector may not project the image properly or function properly with some devices.
- The projector does not support VIERA Link (HDMI).
- 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.

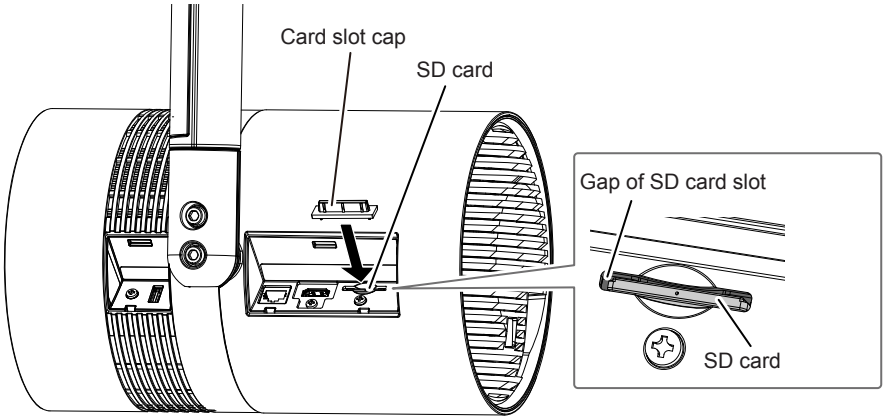
Attaching the caps to the connecting terminals

It is recommended to attach the supplied terminal caps to the <HDMI IN> terminal and the <LAN> terminal where cables are not attached, and the supplied card slot cap to the SD card slot to prevent dust getting into the connecting terminals.
Before attaching the caps, check the shapes of the caps and the places to attach.



Note

- Attach the card slot cap with the opening of the "]" shaped rib facing the projector body. However, the card slot cap can also be attached from the opposite side of the rib opening, but it may be difficult to take it out with the finger.
- The card slot cap can be attached even when an SD card is inserted.
  The direction of attaching the card slot cap will differ as shown below depending on the presence of the SD card. Check the condition of the SD card slot and the direction of the card slot cap before attaching.



- Do not insert with excessive force when attaching the cap. Doing so may damage the terminal or the cap.
  Also, when attaching the card slot cap with the SD card inserted, the SD card will be in ejected state if it is pressed in too much.

Chapter 3 Basic Operations

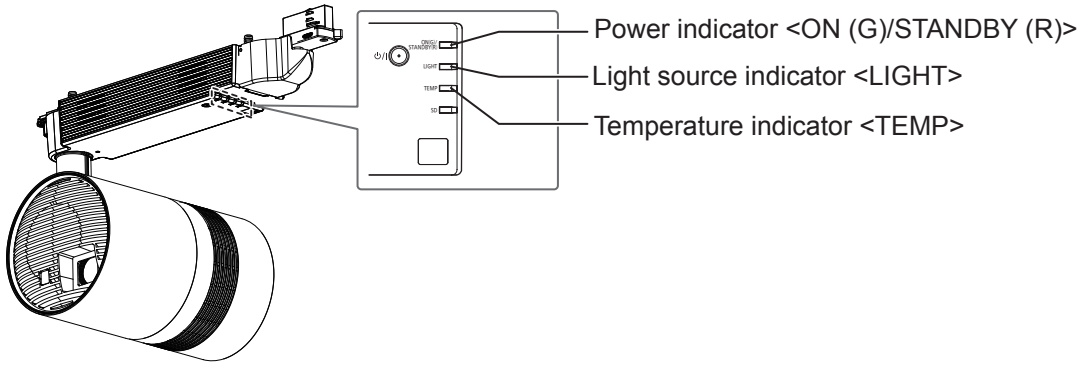
This chapter describes basic operations to start with.

Turning on/off the projector

Power indicator

Indicates the status of the power. Check the status of the power indicator <ON (G)/STANDBY (R)> before operating the projector.

When the light source indicator <LIGHT> and the temperature indicator <TEMP> are lighting or blinking, a problem may have occurred inside the projector. Check the status of the indicator before turning on the projector, and take appropriate steps. (➡ page 134)



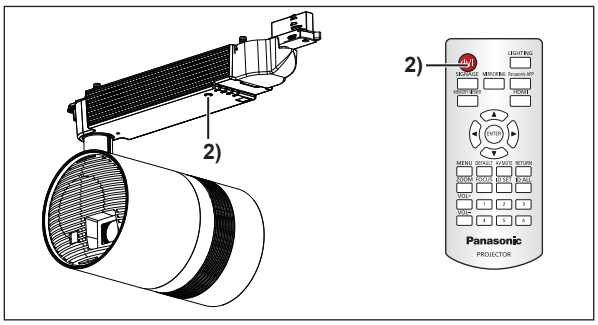
Indicator status		Projector status
Off		The power of the track system is turned off.
Red	Lighting	The power is switched off. (standby mode) [STANDBY MODE] in the [SETUP] menu → [ECO MANAGEMENT] is set to [ECO]. Projection will start when the power <⏻/❙> button is pressed. • The projector may not operate when the temperature indicator <TEMP> is blinking. (➡ page 134)
	Blinking*1	The power is switched off (in standby mode). [STANDBY MODE] in the [SETUP] menu → [ECO MANAGEMENT] is set to [NETWORK]. Projection will start when the power <⏻/❙> button is pressed. • The projector may not operate when the temperature indicator <TEMP> is blinking. (➡ page 134)
	Blinking*2	The power is switched off (in standby mode). [STANDBY MODE] in the [SETUP] menu → [ECO MANAGEMENT] is set to [NORMAL]. Projection will start when the power <⏻/❙> button is pressed. • The projector may not operate when the temperature indicator <TEMP> is blinking. (➡ page 134)
Green	Lighting	Projecting.

*1 The indicator will blink in frequency of lighting 2.75 seconds → off 0.25 seconds → lighting 0.75 seconds → off 0.25 seconds.
*2 The indicator will blink in frequency of lighting 2.75 seconds → off 0.25 seconds.

Note

- The projector consumes power even in standby mode (when the power indicator <ON (G)/STANDBY (R)> is lighting or blinking in red). Refer to “Power consumption” (➡ page 146) for the power consumption.
- The power indicator <ON (G)/STANDBY (R)> blinks in green if a remote control signal is received.
- The power indicator <ON (G)/STANDBY (R)> blinks in green in frequency of lighting 0.8 seconds → off 0.8 seconds while AV mute is in use.
- When the computer (including iPad/iPhone/iPod touch, Android devices) performs a connection check on the projector using the Panasonic image transfer application software, the power indicator <ON (G)/STANDBY (R)> blinks in orange.

Turning on the projector



1) Turn on the power of the track system.

- The power indicator <ON (G)/STANDBY (R)> lights in red, and the projector enters the standby mode.

2) Press the power <⏻/|> button.

- The power indicator <ON (G)/STANDBY (R)> lights in green and the projection is soon started.

Attention

- When turning on the projector, take notice of the people around the projector and ensure the light from the light source will not flash into their eyes.
- The signage playback function of this projector can play still image/movie/audio files in the SD card or switch on/off the projector according to the schedule registered beforehand.
  When using the signage playback function to automatically turn on the projector at the start time set in the schedule, connect the power of the track system at least three minutes before the start time.
  Refer to “Operating Instructions – Content Manager Manual” for the signage playback.

Note

- The initial setting screen is displayed when the projector is turned on for the first time after purchase or when [ALL USER DATA] in the [SETUP] menu → [INITIALIZE] is executed. Refer to “When the initial setting screen is displayed” (➡ page 47).
- If you press the power <⏻/|> button on the remote control to turn on the projector, the signal from the remote control can be reflected off the projection surface to operate, but the operating range may be limited due to light reflection loss or the shape of the projection surface. In such cases, operate with the remote control aimed toward the remote control signal receiver on the projector power supply unit.
- It may take longer for the projection to start when the [SETUP] menu → [ECO MANAGEMENT] → [STANDBY MODE] is set to [ECO] or [NETWORK] when compared set to [NORMAL].
- When the power is turned on or an input signal is switched, you may hear a high-frequency driving sound. This is not a malfunction.
- When turning on the project in a low-temperature place, it may take some time before the projection starts and the color of the displayed image becomes stable. This is not a malfunction.
- When the [SETUP] menu → [INITIAL STARTUP] is set to [LAST MEMORY], and the projection was ended by turning off the power of the track system during projection last time, the power indicator <ON (G)/STANDBY (R)> will light in green and the projection will start a few moments after the power supply of the track system is turned on.

When the initial setting screen is displayed

The initial setting screen is displayed when the projector is turned on for the first time after purchase or when [ALL USER DATA] in the [SETUP] menu → [INITIALIZE] is executed. Set the following according to the circumstances.
In other occasions, you can change the settings by menu operations.
If you press the <RETURN> button while the initial setting screen is displayed, you can go back to the previous screen.

Focus adjustment

Adjust the focus to display the menu screen clearly.
You may also need to adjust the zoom.
Refer to “Adjusting the projection” (➡ page 52) for details.

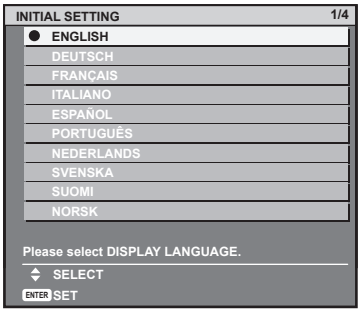
1) Press ▲▼◀▶ on the remote control to adjust the focus.

2) Press the <MENU> button on the remote control to perform rest of the initial setting.

Initial setting (display language)

Select the language to show on the screen.
After completed the initial setting, you can change the display language from the [DISPLAY LANGUAGE] menu.

1) Press ▲▼ on the remote control to select the display language.



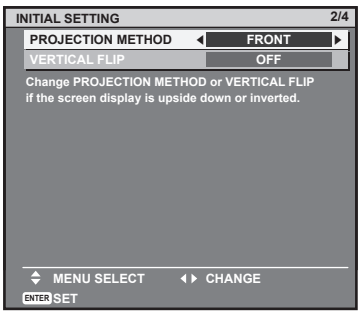
2) Press the <ENTER> button on the remote control to perform next initial setting.

Initial setting (installation setting)

Set [PROJECTION METHOD] and [VERTICAL FLIP] depending on the installation conditions. Refer to “Installation form” (➡ page 28) for details.
Once the initial setting is completed, the settings for each item can be changed from the [SETUP] menu.

1) Press ▲▼ on the remote control to select an item.

2) Press ◀▶ on the remote control to switch the setting.

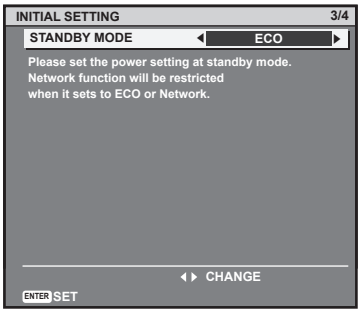


3) Press the <ENTER> button on the remote control to perform next initial setting.

Initial setting (standby mode)

Set the operation mode during the standby. The default setting is [ECO] that keeps power consumption low during standby. If you use the network function during standby, set to [NORMAL]. If you want to keep the power consumption low during standby, and to perform operation of power-on via wired LAN while the Wake on LAN function is in use, set to [NETWORK]. Once the initial setting is completed, setting can be changed from the [SETUP] menu → [ECO MANAGEMENT] → [STANDBY MODE].

1) Press ◀▶ on the remote control to switch the setting.



2) Press the <ENTER> button on the remote control to perform next initial setting.

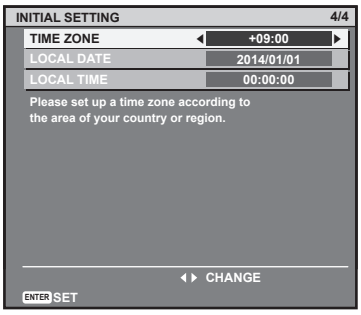
Note

- The above initial setting screen is the one displayed when the projector is turned on for the first time after purchase. When [ALL USER DATA] is executed from the [SETUP] menu → [INITIALIZE], the [STANDBY MODE] setting before the execution is displayed.

Initial setting (time zone)

Set [TIME ZONE] according to the country or region where the projector is used.
Once the initial setting is completed, setting can be changed from the [SETUP] menu → [DATE AND TIME].
The current settings are displayed in the [LOCAL DATE] and the [LOCAL TIME]. If a change is necessary, set with the [SETUP] menu → [DATE AND TIME] after completing the initial setting.

1) Press ◀▶ on the remote control to switch the setting.



2) Press the <ENTER> button on the remote control.

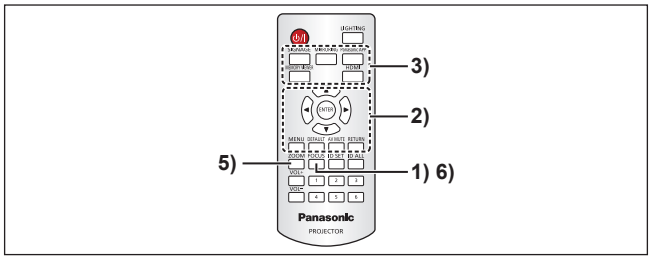
- Confirm the setting value and complete the initial setting.

Note

- In the factory default setting, the time zone of the projector is set to +09:00 (Japan and Korean Standard Time). Change the time zone according to the region where you use the projector.

Making adjustments and selections

It is recommended to adjust the focus after 30 minutes have elapsed projecting.



1) Press the <FOCUS> button on the remote control to roughly adjust the focus of the projection light. (➡ page 52)

2) Set the [SETUP] menu → [PROJECTION METHOD] (➡ page 70) and [VERTICAL FLIP] (➡ page 70) according to the installation condition.

- Refer to “Navigating through the menu” (➡ page 58) for the operation of the menu screen.

3) Press the <HDMI>, <MEMORY VIEWER>, <MIRRORING>, <Panasonic APP>, or <SIGNAGE> button on the remote control to select the input to project. (➡ page 51)

4) Adjust the orientation of the main unit to adjust the projection position. (➡ page 38)

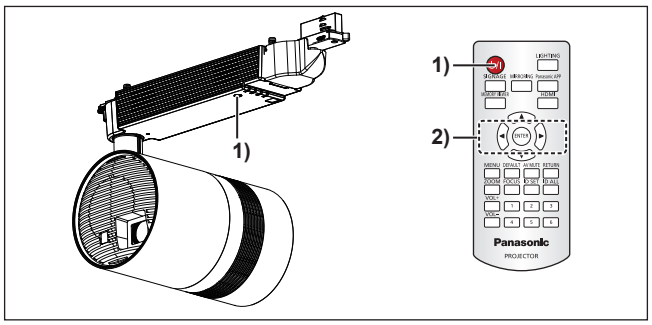
5) Press the <ZOOM> button on the remote control to adjust the projection size. (➡ page 52)

6) Press the <FOCUS> button on the remote control again to adjust the focus.

Note

- The initial setting screen is displayed when the projector is turned on for the first time after purchase or when [ALL USER DATA] in the [SETUP] menu → [INITIALIZE] is executed. Refer to “When the initial setting screen is displayed” (➡ page 47).

Turning off the projector



1) Press the power <⏻/|> button.

- The **[POWER OFF(STANDBY)]** confirmation screen is displayed.

2) Press ◀▶ on the remote control to select [OK], and press the <ENTER> button.
(Or press the power <⏻/|> button again.)

- The projection is finished.

3) Wait for a few seconds until the power indicator <ON (G)/STANDBY (R)> lights in red.

4) Turn off the power of the track system if necessary.

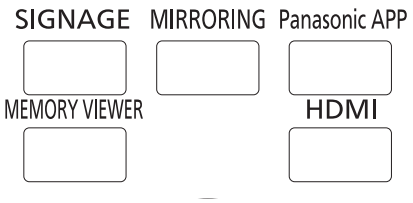
Note

- **Even when the power is turned off by pressing the power <⏻/|> button, the projector consumes power if the power of the track system is turned on.**
  The power consumption during standby can be conserved when the [SETUP] menu → [ECO MANAGEMENT]→ [STANDBY MODE] is set to [ECO].
- The projector can be turned off by turning off the power of the track system during the projection, but the settings and adjustments performed right before turning off the power may not be reflected.
- Do not turn off the power of the track system or eject the SD card while the SD card indicator <SD> is blinking. The projector may not operate properly or the contents of the SD card may get damaged.
- When the [SETUP] menu → [ECO MANAGEMENT] → [STANDBY MODE] is set to [NORMAL], the internal cooling fan may operate even during standby.

Projecting

The projection will start after confirming the connection with the external device (➡ page 43), turning on the power of the track system, and then turning on the projector (➡ page 47). Select the input to project, and adjust the state of the projected image.

Selecting the input



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

1) Press the <HDMI>, <MEMORY VIEWER>, <MIRRORING>, <Panasonic APP>, or <SIGNAGE> button on the remote control to select the input.

- Image of the selected input is projected.

Remote control button	Input	Usage
<HDMI>	HDMI	Switches the input to HDMI. Displays the image input to the <HDMI IN> terminal from the external device.
<MEMORY VIEWER>	Memory Viewer	Switches the input to Memory Viewer. Displays the still image or movie recorded in the SD card using the Memory Viewer function. (➡ page 100)
<MIRRORING>	MIRRORING	Switches the input to MIRRORING. Displays the image transmitted wirelessly from the Intel® WiDi / Intel® Pro WiDi / Miracast compatible terminal.
<Panasonic APP>	Panasonic APPLICATION	Switches the input to Panasonic APPLICATION. Displays the image transferred from the computer (including iPad, iPhone, iPod touch, or Android devices) using the Panasonic image transfer application software.
<SIGNAGE>	Signage	Switches the input to Signage. Plays back and displays the contents such as still image or movie files in the SD card according to the schedule or slideshow setting registered with the Content Manager. For the use of the signage playback function, please refer to the "Operating Instructions – Content Manager Manual". It is also possible to use the signage playback function by setting schedule in the Content Management Software.

Note

- When an audio signal is included in each input, it is output from the <AUDIO OUT> terminal.
- To switch the input to anything other than the HDMI input, it may take seconds to complete the switching. [Please wait...] is displayed on the projection screen when the switching takes time.
- When the <HDMI>, <MEMORY VIEWER>, <MIRRORING>, or <Panasonic APP> button is pressed during signage playback, the signage playback is stopped and switches to respective input.
- Pressing the <SIGNAGE> button while the signage playback is stopped will switch the input to signage, and the signage playback will start or resume.
- Refer to “Operating Instructions – Content Manager Manual” for the signage playback.
- The image transfer application software “Wireless Manager ME6.3” compatible with Windows computers or Mac is contained in the supplied CD-ROM. For the image transfer application software compatible with iPad/iPhone/iPod touch, and Android devices, refer to the following URL **http://panasonic.net/avc/projector/**
- The “Content Management Software” compatible with Windows computers can set schedule used for signage playback. For details, refer to the following URL **http://panasonic.net/avc/projector/**

Adjusting the projection

Adjust focus and zoom.

1) Press the <FOCUS> or <ZOOM> button on the remote control.

- <FOCUS> button: Adjusts focus.
- <ZOOM> button: Adjusts zoom.

2) Select each item and press ▲▼◀▶ to adjust it.

Note

- When a projection position is required to be adjusted, adjust according to the steps described in “Adjusting the projection position” (➡ page 38).
- The operation can be sped up by pressing ▲▼◀▶ for at least one second.
- Only [FOCUS] is shown in yellow so that the displayed menu item can be recognized by color, even when the projector is not focused and displayed characters are unreadable.
- 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 images be projected continuously for at least 30 minutes before the focus is adjusted.

Using SD cards

The SD card slot of the projector supports the SD memory card and the SDHC memory card.

Notes on use

Observe following.

- Do not disassemble or modify.
- Do not apply strong shock, bend, drop, get wet, etc.
- Do not touch the metal contacts with your hands or metal.
- Do not peel off the affixed label or affix new label or seal.
- Do not leave in a place that will become hot (inside a car, under direct sunlight, etc.).
- Do not leave in a place with high humidity or dust.
- Do not leave in a place with extreme temperature difference. Condensation may occur.
- Do not leave in a place where static electricity or electromagnetic radiation is generated.
- Store SD card in an appropriate manner, and keep it away from small children.

Data protection

- To prevent losing important data, set the write protect switch on the SD card to “LOCK” position.
  Turn off the write protect switch when saving or editing a file.

Write protect switch

- Use a felt-tip pen (oil-based) when writing a character in the memo space of the label. Do not use pencil or ballpoint pen. The card may get damaged or the data may be destroyed.
- Manage the contents in the SD card under your responsibility. It is recommended to take a backup of important data on other disc, etc.
- Panasonic assumes no responsibility for loss of data recorded by yourself, or any other direct or indirect damage.
- It is recommended to physically destroy the card with a hammer, etc., when discarding.

Cards that can be used with the projector

SD memory card (2 GB)

(Including the miniSD memory card and the microSD memory card)

SDHC memory card (4 GB, 8 GB, 16 GB, 32 GB)

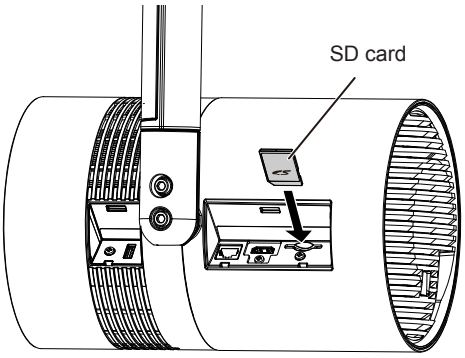
(Including the miniSDHC memory card and the microSDHC memory card)

Note

- Commercially available SD card is supported.
- Use the SD card with high data transfer speed. If the data transfer speed is slow, movie or music recorded in the SD card may not be played back properly or it may take time to display a still image. (Speed class: Class 10 recommended)
- Only the cards formatted in FAT16 or FAT32 can be used.

Inserting an SD card

1) Insert the card securely into the SD card slot with the front of the card facing outward, from the side with cut corner.



Attention

- When using the miniSD memory card or the microSD memory card, always use the dedicated miniSD memory card adapter or the microSD memory card adapter, and insert/eject together with the adapter.
- Take care not to leave the adapter in the SD card slot.
- Do not insert anything other than the SD card, such as metal or foreign object, into the SD card slot.
- Please refrain from frequent insertion and ejection of the SD card in short period of time. Wait for at least five seconds after inserting until ejecting the SD card, and wait for at least five seconds until inserting it again after ejecting. The projector requires approximately five seconds to recognize the insertion or ejection of the SD card.

Ejecting the SD card

1) Confirm that the SD card indicator <SD> is not blinking.

2) Lightly press center of the SD card.

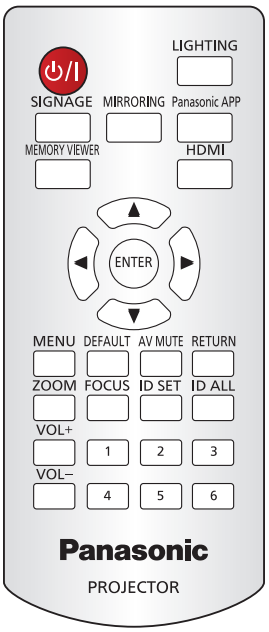
3) Hold onto the slightly ejected SD card and pull it out.

- Note that pulling out the card forcibly while it is inserted will cause a malfunction.

Attention

- Do not perform the following when the projector is accessing the SD card (while the SD card indicator <SD> is blinking).
  - Ejecting the SD card
  - Turning off the power of the track system
  - Applying vibration or shock
- Do not perform the insertion and ejection of the SD card in short period of time. Wait for at least five seconds after inserting until ejecting the SD card, and wait for at least five seconds until inserting it again after ejecting. The projector requires approximately five seconds to recognize the insertion and ejection of the SD card.

Operating with the remote control



Switch on/off spotlight display

Enable/disable the setting items in [PATTERN] menu.

LIGHTING

button

1) Press the <LIGHTING> button.

- The spotlight based on the items set for the user ([USER1] - [USER5]) selected in the **[PATTERN]** individual adjustment screen is displayed.

2) Press the <LIGHTING> button again.

- The spotlight and the frame gradation disappear and the projection returns to the input image.

Note

- When you press the <LIGHTING> button, the setting of the user ([USER1] - [USER5]) in the [PATTERN] detailed setting screen is displayed. Refer to “[LIGHTING] menu” (➡ page 66) for details about the pattern setting.
- If the spotlight and the frame gradation are set to [OFF] in the [PATTERN] detailed setting screen, the spotlight and the frame gradation cannot be displayed when you press the <LIGHTING> button.

Adjusting the volume

The audio output volume can be adjusted.

VOL+

VOL−

button

1) Press the <VOL+> or <VOL–> button.

<VOL+>	Increases the volume.
<VOL–>	Decreases the volume.

Using the AV mute function

The projection and the audio output can be paused temporarily when the projector is not used for specific time such as during break or preparation.

AV MUTE
button

1) **Press the <AV MUTE> button.**
   - The projection and the audio are stopped.
2) **Press the <AV MUTE> button again.**
   - The projection and the audio are resumed.

Note

- The power indicator <ON (G)/STANDBY (R)> blinks in green in frequency of lighting 0.8 seconds → off 0.8 seconds while AV mute is in use.
- The projector has no built-in speakers. Audio is output from the external sound system connected to the <AUDIO OUT> terminal.

Setting the remote control ID numbers

When you use the system with multiple projectors, you can operate all the projectors simultaneously or each projector individually using single remote control, if a unique ID number is assigned to each projector.

After setting the ID number ([1] - [6]) of the projector, set same ID number on the remote control.

The factory default ID number of the projector is set to [ALL]. When using a single projector, press the <ID ALL> button on the remote control. Also, you can control a projector by pressing the <ID ALL> button on the remote control even if you do not know the projector ID.

ID SET ID ALL
button

1) **Press the <ID SET> button on the remote control.**
2) **Within five seconds, press the number (<1> - <6>) buttons to set the one-digit ID number preset on the projector.**
   - If you press the <ID ALL> button, you can control the projectors regardless of the ID number setting of the projector.

Attention

- Since the ID number of the remote control can be set without the projector, do not press the <ID SET> button on the remote control carelessly. If the <ID SET> button is pressed and no number (<1> - <6>) button is pressed within five seconds, the ID number returns to its original value before the <ID SET> button was pressed.
- The ID number set on the remote control will be stored unless it is set again. However, it will be erased if the remote control is left with dead batteries. Set the same ID number again when the batteries are replaced.

Note

- Set the ID number of the projector from the [SETUP] menu → [PROJECTOR ID].

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.

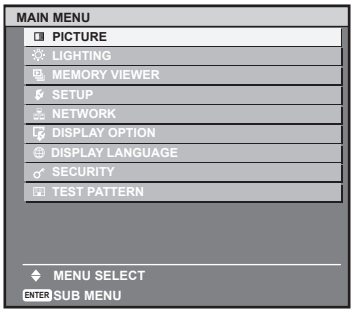
Navigating through the menu

Operating procedure

MENU button

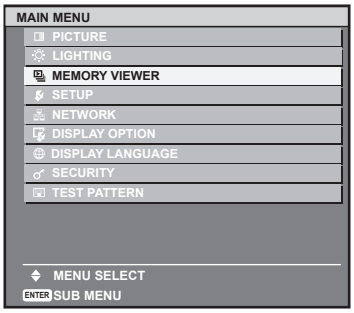
1) Press the <MENU> button on the remote control.

- The **[MAIN MENU]** screen is displayed.



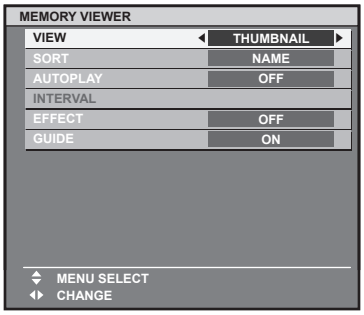
2) Press ▲▼ on the remote control to select a main menu item.

- The selected item is highlighted by yellow cursor.



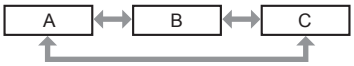
3) Press the <ENTER> button on the remote control.

- The sub-menu items of the selected main menu are displayed.



4) Press ▲▼ on the remote control to select a sub-menu item, and press ◀▶ or the <ENTER> button to change or adjust settings.

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



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

Note

- Pressing the <RETURN> or <MENU> button on the remote control while the menu screen is displayed returns the screen to the upper-level menu.
- Some items may not be allowed to adjust or use depending on the selected signal input to the projector. The menu items that cannot be adjusted or used are shown in gray characters, and they cannot be selected.
- Some items can be adjusted even if signals are not input.
- Individual adjustment screen is cleared automatically if no operation is performed for approximately five seconds.
- For menu items, refer to “Main menu” (➡ page 59) and “Sub-menu” (➡ page 60).

Resetting the adjusted value to the factory default

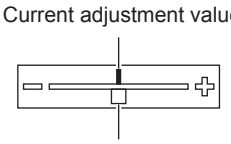
If the <DEFAULT> button on the remote control is pressed, the values adjusted in the menu items are restored to the factory default settings.

DEFAULT button

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

Note

- You cannot reset all the settings to the factory default at a time.
- To reset all the adjusted sub-menu items to the factory defaults at a time, perform the [SETUP] menu → [INITIALIZE] (➡ page 80).
- Some items cannot be reset to the factory default settings even when the <DEFAULT> button on the remote control is pressed. Adjust those items individually.
- The square mark under the bar scale in the individual adjustment screen indicates the factory default value. The position of the square mark varies by the input signal.



Setting the on-screen display to show/hide

If you hold down the <MENU> button on the remote control for at least three seconds, the on-screen setup screen appears and the on-screen display can be set to show/hide.

Main menu

The following nine items are included in the main menu. When a main menu item is selected, the screen changes to a sub-menu selection screen.

Main menu item		Page
	[PICTURE]	62
	[LIGHTING]	66
	[MEMORY VIEWER]	68
	[SETUP]	70
	[NETWORK]	82
	[DISPLAY OPTION]	94

Main menu item		Page
	[DISPLAY LANGUAGE]	96
	[SECURITY]	97
	[TEST PATTERN]	98

Sub-menu

The sub-menu of the selected main menu item is displayed, and you can set and adjust items in the sub-menu.

[PICTURE]

Sub-menu item	Factory default	Page
[PICTURE MODE]	[DYNAMIC]	62
[CONTRAST]	[0]	62
[BRIGHTNESS]	[0]	62
[COLOR]	[0]	62
[TINT]	[0]	63
[COLOR TEMPERATURE]	[MIDDLE]	63
[DIMMER]	[+100]	64
[COLOR MATCHING]	[OFF]	64

[LIGHTING]

Sub-menu item	Factory default	Page
[LIGHTING]	[OFF]	66
[PATTERN]	[USER1]	66

[MEMORY VIEWER]

Sub-menu item	Factory default	Page
[VIEW]	[THUMBNAIL]	68
[SORT]	[NAME]	68
[AUTOPLAY]	[OFF]	68
[INTERVAL]	—	68
[EFFECT]	[OFF]	69
[GUIDE]	[ON]	69

[SETUP]

Sub-menu item	Factory default	Page
[PROJECTOR ID]	[ALL]	70
[PROJECTION METHOD]	[FRONT]	70
[VERTICAL FLIP]	[OFF]	70
[SHIFT]	—	70
[ASPECT]	[NORMAL]	71
[KEYSTONE]	—	72
[SIGNAGE]	—	73
[DIRECT PLAY SETTING]	[MEMORY VIEWER]	73
[ECO MANAGEMENT]	—	74
[INITIAL STARTUP]	[LAST MEMORY]	76
[STARTUP INPUT SELECT]	[LAST USED]	76
[AUDIO SETTING]	—	76

Sub-menu item	Factory default	Page
[DC OUT]	[ON]	77
[STATUS]	—	77
[SCHEDULE]	[OFF]	78
[DATE AND TIME]	—	79
[SAVE ALL USER DATA]	—	80
[LOAD ALL USER DATA]	—	80
[INITIALIZE]	—	80
[SERVICE PASSWORD]	—	81

[NETWORK]

Sub-menu item	Factory default	Page
[PROJECTOR NAME]	[NAME1234]*1	82
[WIRED LAN]	—	82
[WIRELESS LAN]	[M-DIRECT]	83
[NETWORK CONTROL]	—	86
[Panasonic APPLICATION]	—	87
[NETWORK STATUS]	—	88
[Art-Net]	[OFF]	89
[Art-Net STATUS]	—	92
[MIRRORING]	[MODERATOR]	92

*1 Differs depending on the product.

[DISPLAY OPTION]

Sub-menu item	Factory default	Page
[HDMI IN]	—	94
[ON-SCREEN DISPLAY]	—	94
[AV MUTE]	—	95

[DISPLAY LANGUAGE]

Details (➡ page 96)

[SECURITY]

Sub-menu item	Factory default	Page
[SECURITY PASSWORD]	[OFF]	97
[SECURITY PASSWORD CHANGE]	—	97

[TEST PATTERN]

Details (➡ page 98)

[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 58) for the operation of the menu screen.

- After selecting the item, press ▲▼◀▶ to adjust.

[PICTURE MODE]

You can switch to the desired picture mode 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]** individual adjustment screen is displayed.

3) Press ◀▶ to switch the item.

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

[DYNAMIC]	The light output is maximized for use in bright areas.
[NORMAL]	The image becomes suitable for movie-type video contents in general.
[NATURAL]	The image becomes suitable for using in low-light areas.

Note

- The [PICTURE MODE] setting is also reflected in the menu screen.

[CONTRAST]

Adjust the contrast of the colors.

1) Press ▲▼ to select [CONTRAST].

2) Press ◀▶ or the <ENTER> button.

- The **[CONTRAST]** individual adjustment screen is displayed.

3) Press ◀▶ to adjust the level.

Operation	Adjustment	Range of adjustment
Press ▶.	Brightens the screen and makes the color deeper.	–31 - +31
Press ◀.	Darkens the screen and makes the color lighter.	

Attention

- Adjust [BRIGHTNESS] first when you need to adjust the black level.

[BRIGHTNESS]

Adjust the dark (black) part of the projected image.

1) Press ▲▼ to select [BRIGHTNESS].

2) Press ◀▶ or the <ENTER> button.

- The **[BRIGHTNESS]** individual adjustment screen is displayed.

3) Press ◀▶ to adjust the level.

Operation	Adjustment	Range of adjustment
Press ▶.	Increases the brightness of the dark (black) parts of the screen.	–31 - +31
Press ◀.	Reduces the brightness of the dark (black) parts of the screen.	

[COLOR]

Adjust the color saturation of the projected image.

1) Press ▲▼ to select [COLOR].

2) **Press ◀▶ or the <ENTER> button.**
   - The **[COLOR]** individual adjustment screen is displayed.

3) **Press ◀▶ to adjust the level.**

Operation	Adjustment	Range of adjustment
Press ▶.	Deepens colors.	–31 - +31
Press ◀.	Weakens colors.	

[TINT]

Adjust the skin tone in the projected image.

1) **Press ▲▼ to select [TINT].**

2) **Press ◀▶ or the <ENTER> button.**
   - The **[TINT]** individual adjustment screen is displayed.

3) **Press ◀▶ to adjust the level.**

Operation	Adjustment	Range of adjustment
Press ▶.	Adjusts skin tone toward greenish color.	–31 - +31
Press ◀.	Adjusts skin tone toward reddish purple.	

[COLOR TEMPERATURE]

Switch the color temperature if the white areas of the projected image are bluish or reddish.

Adjusting with color temperature

1) **Press ▲▼ to select [COLOR TEMPERATURE].**

2) **Press ◀▶ or the <ENTER> button.**
   - The **[COLOR TEMPERATURE]** individual adjustment screen is displayed.

3) **Press ◀▶ to switch the item.**
   - The items will switch each time you press the button.

[LOW], [MIDDLE], [HIGH]	Select so that the desired color is obtained.
[USER]	Adjusts the white balance. Refer to “Adjusting white balance as desired” (➡ page 63) for details.

Note

- The factory default setting for [COLOR TEMPERATURE] is [MIDDLE].
- The [USER] setting is shared with [User] under [Color] in the Content Manager. Changes to the [USER] setting are also reflected in [User] under [Color] in the Content Manager. For details, please refer to "Operation method of the schedule" → "Color" in the "Operating Instructions – Content Manager Manual".

Adjusting white balance as desired

1) **Press ▲▼ to select [COLOR TEMPERATURE].**

2) **Press ◀▶ or the <ENTER> button.**
   - The **[COLOR TEMPERATURE]** individual adjustment screen is displayed.

3) **Press ◀▶ to select [USER].**

4) **Press the <ENTER> button.**
   - The **[COLOR TEMPERATURE]** screen is displayed.

5) **Press ▲▼ to select [RED], [GREEN], or [BLUE].**

6) **Press ◀▶ to adjust the level.**

Item	Operation	Adjustment	Range of adjustment
[RED]	Press ▶.	Deepens red.	0 - +255 (Factory default is +255)
	Press ◀.	Weakens red.	
[GREEN]	Press ▶.	Deepens green.	
	Press ◀.	Weakens green.	
[BLUE]	Press ▶.	Deepens blue.	
	Press ◀.	Weakens blue.	

Note

- Adjust [COLOR TEMPERATURE] correctly. All colors will not be displayed properly unless adequate adjustment is made. If the adjustment does not look suitable, you can press the <DEFAULT> button on the remote control to return the setting for the selected item only to the factory default setting.
- The setting of [COLOR TEMPERATURE] is not reflected in internal test patterns (➡ page 98). Make sure to set [COLOR TEMPERATURE] while the input signal is projected.

[DIMMER]

Adjust the brightness.

1) Press ▲▼ to select [DIMMER].

2) Press ◀▶ or the <ENTER> button.

- The **[DIMMER]** individual adjustment screen is displayed.

3) Press ◀▶ to adjust the level.

Operation	Adjustment	Range of adjustment
Press ▶.	Makes brighter.	0 - +100 (Factory default is +100)
Press ◀.	Makes darker.	

Note

- Video images may appear reddish depending on the set value.

[COLOR MATCHING]

Correct the color difference between projectors when using multiple projectors simultaneously.

Adjusting color matching as desired

1) Press ▲▼ to select [COLOR MATCHING].

2) Press ◀▶ to switch the item.

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

[OFF]	Color matching adjustment is not carried out.
[3COLORS]	Adjusts the three colors [RED], [GREEN], or [BLUE].
[7COLORS]	Adjusts the seven colors [RED], [GREEN], [BLUE], [CYAN], [MAGENTA], [YELLOW], or [WHITE].
[MEASURED]	Refer to “Adjusting color matching using a colorimeter” (➡ page 65) for details about this mode.

3) Select [3COLORS] or [7COLORS], and press the <ENTER> button.

- The **[3COLORS]** or **[7COLORS]** screen is displayed.

4) Press ▲▼ to select [RED], [GREEN], [BLUE], or [WHITE] ([RED], [GREEN], [BLUE], [CYAN], [MAGENTA], [YELLOW], or [WHITE] when [7COLORS] is selected).

5) Press the <ENTER> button.

- The **[3COLORS:RED]**, **[3COLORS:GREEN]**, **[3COLORS:BLUE]**, or **[3COLORS:WHITE]** screen is displayed.
  When **[7COLORS]** is selected, the **[7COLORS:RED]**, **[7COLORS:GREEN]**, **[7COLORS:BLUE]**, **[7COLORS:CYAN]**, **[7COLORS:MAGENTA]**, **[7COLORS:YELLOW]**, or **[7COLORS:WHITE]** screen is displayed.
- By setting [AUTO TESTPATTERN] to [ON], the test pattern for the selected color is displayed.

6) Press ▲▼ to select [RED], [GREEN], or [BLUE].

- Only [GAIN] can be adjusted when [WHITE] is selected for [3COLORS].

7) Press ◀▶ to adjust.

- The adjustment value will change between 0*1 and 2 048*1.

*1 The limit varies depending on the color to be adjusted.

Note

- Operation when correcting the adjustment color
  When the correction color same as the adjustment color is changed: The luminance of the adjustment color changes.
  When correction color red is changed: Red is added to or subtracted from the adjustment color.
  When correction color green is changed: Green is added to or subtracted from the adjustment color.
  When correction color blue is changed: Blue is added to or subtracted from the adjustment color.
- Since advanced skills are necessary for the adjustment, this adjustment should be carried out by a person who is familiar with the projector or by a service person.
- Pressing the <DEFAULT> button on the remote control will restore the factory default settings for all items.

Adjusting color matching using a colorimeter

Use a colorimeter that can measure chromaticity coordinates and luminance to change the colors of [RED], [GREEN], [BLUE], [CYAN], [MAGENTA], [YELLOW], or [WHITE] to desired colors.

1) Press ▲▼ to select [COLOR MATCHING].

2) Press ◀▶ to select [MEASURED].

3) Press the <ENTER> button.

- The **[MEASURED MODE]** screen is displayed.

4) Press ▲▼ to select [MEASURED DATA].

5) Press the <ENTER> button.

- The **[MEASURED DATA]** screen is displayed.

6) Measure the current luminance (Y) and the chromaticity coordinates (x, y) using the colorimeter.

7) Press ▲▼ to select a color, and press ◀▶ to adjust the setting.

- Set [AUTO TESTPATTERN] to [ON] to display a test pattern of selected colors.

8) Once all the input is completed, press the <MENU> button.

- The **[MEASURED MODE]** screen is displayed.

9) Press ▲▼ to select [TARGET DATA].

10) Press the <ENTER> button.

- The **[TARGET DATA]** screen is displayed.

11) Press ▲▼ to select a color and press ◀▶ to input coordinates for desired colors.

- By setting [AUTO TESTPATTERN] to [ON], the test pattern for the selected color is displayed.

12) Once all the input is completed, press the <MENU> button.

Note

- Colors are not displayed properly when target data is a color outside the region of this projector.
- Set the [AUTO TESTPATTERN] to [ON] to automatically display a test pattern for use in adjusting the selected adjustment colors.
- When using a colorimeter or similar instrument to take measurement, measure the colors displayed in [AUTO TESTPATTERN].
- A difference in the color coordinates of target data and measurement value obtained from an instrument may occur for certain instrument and measurement environment used.

[LIGHTING] menu

On the menu screen, select [LIGHTING] from the main menu, and select an item from the sub-menu.
Refer to "Navigating through the menu" (➡ page 58) for the operation of the menu screen.

- After selecting the item, press ▲▼◀▶ to set.

[LIGHTING]

Enable/disable the setting items in the [PATTERN] menu.

1) Press ▲▼ to select [LIGHTING].

2) Press ◀▶ to switch the item.

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

[OFF]	The spotlight and frame gradation do not appear, and [BACK GROUND] changes to [THROUGH].
[ON]	The spotlight based on the items set in [PATTERN] is displayed.

[PATTERN]

Set the spotlight, background and frame gradation.
You can register the spotlight, background and frame gradation under [PATTERN] for [USER1] to [USER5].

1) Press ▲▼ to select [PATTERN].

2) Press ◀▶.

- The **[PATTERN]** individual adjustment screen is displayed.

3) Press ◀▶ to select [USER1] to [USER5].

4) Press the <ENTER> button.

- The **[PATTERN]** detailed setting screen is displayed.

5) Press ▲▼ to select the item to adjust and press ◀▶ to set the item.

[CIRCULER TYPE]	Set the circuler type of the spotlight.	
	[TYPE1]	Set the circular type to clear edge.
	[TYPE2]	Set the circular type to gradient edge.
[BACK GROUND]	Set the background of the spotlight.	
	[THROUGH]	Set the background of the spotlight to the input image.
	[BLACK]	Set the background of the spotlight to black.
[FRAME GRADATION]	Set the gradation of the outer periphery of the input image.	
	[OFF]	Keep the outer periphery of the input image.
	[ON]	Set the outer periphery of the input image to gradient edge.
[SPOT LIGHT1]	Set each spotlight separately.	
[SPOT LIGHT2]	Set each spotlight to [ON] / [OFF] separately. Up to three spotlights can be displayed at the same time.	
[SPOT LIGHT3]	The position and size of each spotlight can be adjusted.	

Note

- When [BACK GROUND] is set to [BLACK], the resolution is fixed to 1 024 x 768/60p.
- When [BACK GROUND] is set to [BLACK] and the spotlight is displayed by pressing the <LIGHTING> button, no audio is output. In this case, when adjusting the volume by the <VOL+>/<VOL-> buttons, the adjustment value on the adjustment screen changes, but still no audio is output. It is not a malfunction.
- When [BACK GROUND] is set to [THROUGH], the spotlight and frame gradation differ depending on the resolution of the input image. (The spotlight size is smaller under a higher resolution and bigger under a lower resolution.)
- If there is no HDMI signal after switching to HDMI input and [BACK GROUND] is set to [THROUGH], no spotlight appears even when you set [LIGHTING] to [ON].
- When [BACK GROUND] is set to [BLACK], [NO SIGNAL SHUT-OFF] and [NO SIGNAL LIGHTS-OUT] under the [ECO MANAGEMENT] menu do not work even if the no-signal status continues.

Setting the position and size of spotlight

1) Press ▲▼ to select [PATTERN].

2) **Press ◀▶.**
   - The **[PATTERN]** individual adjustment screen is displayed.

3) **Press ◀▶ to select from [USER1] to [USER5].**

4) **Press the <ENTER> button.**
   - The **[PATTERN]** detailed adjustment screen is displayed.

5) **Press ▲▼ to select from [SPOT LIGHT1] to [SPOT LIGHT3].**

6) **Press ◀▶ to select [ON], and press the <ENTER> button.**
   - The **[SPOT LIGHT1]** to **[SPOT LIGHT3]** detailed adjustment screen is displayed.

[POSITION]	Set the display position of the spotlight.
[SIZE]	Set the display size of the spotlight.

Note

- Only the selected spotlight appears even when [LIGHTING] is set to [ON].
- After adjusting the position of the spotlight in [POSITION], the display position of the menu will change.

7) **Press ▲▼ to select [POSITION] or [SIZE], and press the <ENTER> button.**
   - The **[POSITION]** or **[SIZE]** individual adjustment screen is displayed.

8) **Press ▲▼◀▶ to make adjustment.**

Item		Operation	Adjustment	Range of adjustment
[POSITION]	**[X]**	**Press ▶.**	The spotlight moves right.	-20 - +20
		Press ◀.	The spotlight moves left.	
	[Y]	**Press ▲.**	The spotlight moves up.	-13 - +13
		Press ▼.	The spotlight moves down.	
[SIZE]		**Press ▶.**	The spotlight becomes bigger.	[MIN] - [MAX] (7 levels)
		Press ◀.	The spotlight becomes smaller.	

Note

- After setting [PROJECTION METHOD] and [VERTICAL FLIP], make adjustment in the [POSITION] individual adjustment screen to move the spotlight up, down, left or right (as indicated in the above table) to get a proper view of text on the projected image.
- When [BACK GROUND] is set to [THROUGH], the moving interval and size of the spotlight differ depending on the resolution of the input signal. (The spotlight size is smaller under a higher resolution and bigger under a lower resolution.)
- The shape of the spotlight changes based on the setting of [ASPECT] in [SETUP] menu.

[MEMORY VIEWER] menu

On the menu screen, select [MEMORY VIEWER] from the main menu, and select an item from the sub-menu.

Refer to "Navigating through the menu" (➡ page 58) for the operation of the menu screen.

- After selecting the item, press ▲▼◀▶ to set.

Note

- Refer to "Memory Viewer function" (➡ page 100) for how to use the Memory Viewer function.

[VIEW]

Set the display view of the Memory Viewer screen.

1) Press ▲▼ to select [VIEW].

2) Press ◀▶ to switch the item.

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

[THUMBNAIL]	Displays the files in thumbnail view.
[LIST]	Displays the files in list view.

[SORT]

Set the display order of files in the Memory Viewer screen.

1) Press ▲▼ to select [SORT].

2) Press ◀▶ to switch the item.

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

[NAME]	Displays the files in the ascending order by the file name.
[TYPE]	Displays the files by the types of files.
[TIME]	Displays the files in order from the file whose update time is the oldest.

[AUTOPLAY]

Enable/disable automatic playback.

1) Press ▲▼ to select [AUTOPLAY].

2) Press ◀▶ to switch the item.

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

[OFF]	Select this item to disable automatic playback.
[ON]	Select this item to enable automatic playback.

[INTERVAL]

Set display duration of the still image that is being automatically played back.

1) Press ▲▼ to select [INTERVAL].

2) Press ◀▶ to switch the item.

Item	Adjustment
[5S] - [120S]	Sets the display duration of still image. Select an item from [5S], [10S], [15S], [30S], [60S], and [120S].

Note

- When [AUTOPLAY] is set to [OFF], [INTERVAL] cannot be set.
- If you change the [INTERVAL] setting during playback on the Memory Viewer, the change will not be reflected on the projected image that is being played back. Return to the Memory Viewer screen in the thumbnail view or list view and restart playback. Refer to "Memory Viewer function" (➡ page 100) for how to use the Memory Viewer function.

[EFFECT]

Set special effects used when changing the playback screen of still image content.

1) Press ▲▼ to select [EFFECT].

2) Press ◀▶ to switch the item.

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

[OFF]	Does not apply special effects.
[RANDOM]	Applies special effects randomly.
[WIPE LEFT]	Displays the image gradually from the left like wiping.
[WIPE RIGHT]	Displays the image gradually from the right like wiping.
[WIPE DOWN]	Displays the image gradually from the top like wiping.
[SPLIT]	Displays the image gradually from the center toward the left and right like wiping.
[ZOOM OUT]	Displays the image gradually from the center towards the entire image.
[FADE]	Displays the entire image gradually.
[BLIND]	Displays the image gradually like opening vertical blind.
[CHECKER WIPE]	Displays the image gradually from the left to right in checkerboard patterns.
[SLIDE IN]	Displays the next screen as if it slides in from the right to left.
[SLIDE OUT]	Displays the next screen by removing the current screen as if it slides out from the right to left.

Note

- If you change the [EFFECT] setting during playback on the Memory Viewer, the change will not be reflected on the projected image that is being played back. Return to the Memory Viewer screen in the thumbnail view or list view and restart playback. Refer to “Memory Viewer function” (➡ page 100) for how to use the Memory Viewer function.
- The item name and the description for [EFFECT] indicate the operation when [PROJECTION METHOD] and [VERTICAL FLIP] are set so that the character in the projection can correctly be read.

[GUIDE]

Set show/hide of the operation guide on the playback screen and the time bar that visually represents the playback progress of a movie.

1) Press ▲▼ to select [GUIDE].

2) Press ◀▶ to switch the item.

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

[ON]	Select this item to show the operation guide and time bar (only for movie playback) while in full-screen playback.
[OFF]	Select this item to hide the operation guide and time bar.

Note

- When [ON] is set, the operation guide and time bar automatically disappears approximately three seconds after playback starts.

  If the operation guide does not appear while [GUIDE] is set to [ON], press ▲▼◀▶ or the <ENTER> button during playback to display the operation guide.

  If the operation guide does not appear while [GUIDE] is set to [OFF], press ◀▶ during movie playback to display the operation guide.

[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 58) for the operation of the menu screen.

- After selecting the item, press ▲▼◀▶ to set.

[PROJECTOR ID]

The projector has an ID number setting function that can be used when multiple projectors are used side by side to enable simultaneous control or individual control via a single remote control.

1) Press ▲▼ to select [PROJECTOR ID].

2) Press the <ENTER> button.

- The **[PROJECTOR ID]** screen is displayed.

3) Press ▲▼ to select [PROJECTOR ID].

[ALL]	Set this item to control without specifying an ID number.
[1] - [6]	Set this item to specify an individual ID number to be controlled.

4) Press the <ENTER> button.

Note

- The ID number can be set to [ALL], or from [1] to [6].
- To specify an ID number for individual control, the ID number of a remote control must match the ID number of the projector.
- When the ID number is set to [ALL], the projector will operate regardless of the ID number specified during remote control or computer control.
  If multiple projectors are set up side by side with IDs set to [ALL], they cannot be controlled separately from the projectors with other ID numbers.
- Refer to "Setting the remote control ID numbers" (➡ page 56) for how to set the ID number on the remote control.

[PROJECTION METHOD]

Set the projection method in accordance with the installation condition of the projector.
Change the setting if the screen shows horizontally inverted image.

1) Press ▲▼ to select [PROJECTION METHOD].

2) Press ◀▶ to switch the item.

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

[FRONT]	Select this item when projecting from the forward of the projection surface.
[REAR]	Select this item when projecting from the backward of the projection surface to forward (in such a way by using a translucent screen).

[VERTICAL FLIP]

Set the display method according to the conditions of use of the projector such as the installation condition and direction of projection.
Change the setting in such a case when the screen shows vertically flipped image.

1) Press ▲▼ to select [VERTICAL FLIP].

2) Press ◀▶ to select an item.

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

[OFF]	The factory default setting.
[ON]	Select this item when the image is to be projected flipped vertically from the display status set to [OFF].

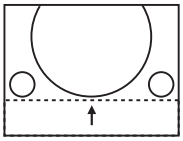
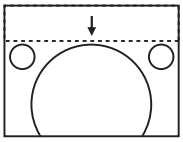
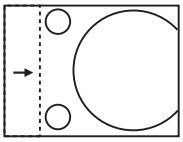
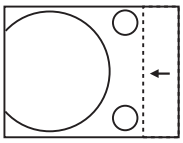
[SHIFT]

Move the image vertically or horizontally if the image projected is shifted even when the relative position of the projector and the screen is installed correctly.

1) **Press ▲▼ to select [SHIFT].**

2) **Press the <ENTER> button.**
   - The **[SHIFT]** screen is displayed.

3) **Press ▲▼◀▶ to adjust the position.**

Orientation	Operation	Adjustment	
Vertical (up and down) adjustment	Press the ▲ button.	The image moves up.	
	Press the ▼ button.	The image moves down.	
Horizontal (right and left) adjustment	Press the ▶ button.	The image moves right.	
	Press the ◀ button.	The image moves left.	

Note

- After setting [PROJECTION METHOD] and [VERTICAL FLIP], make adjustment in the [SHIFT] screen to move the projected image up, down, left, or right to get a proper view of text on the projected image.
- The movable range of [SHIFT] may be restricted depending on the settings of [KEYSTONE] and [ASPECT]. To reset the vertical or horizontal setting values to "0", press the <DEFAULT> button on the remote control.
- The movable range of [KEYSTONE] may be restricted depending on the settings of [SHIFT]. It is recommended to adjust [KEYSTONE] or [ASPECT] before adjusting [SHIFT].

[ASPECT]

Switch the aspect ratio of the image.

1) **Press ▲▼ to select [ASPECT].**

2) **Press ◀▶ or the <ENTER> button.**
   - The **[ASPECT]** individual adjustment screen is displayed.

3) **Press ◀▶ to switch the item.**
   - The items will switch each time you press the button.

[NORMAL]	Displays images without changing the aspect ratio of the input signals.
[FULL]	Displays images in the entire screen range. When the aspect ratio of the input signal differs from that of the screen range, the images are displayed with the input signal converted to the aspect ratio of the screen.

Note

- If an aspect ratio which is different from the aspect ratio for the input signals is selected, the images will appear differently from the originals. Be careful of this when selecting the aspect ratio.
- If using the projector in places such as cafes or hotels to display programs for a commercial purpose or for public presentation, note that adjusting the aspect ratio or using the zoom function to change the screen images may be an infringement of the rights of the original copyright owner for that program under copyright protection laws. Be aware when you use the aspect ratio adjustment function of the projector.
- [FULL] may not be allowed to select for some signals.
- The setting of [ASPECT] is not reflected in internal test patterns (➡ page 98).

[KEYSTONE]

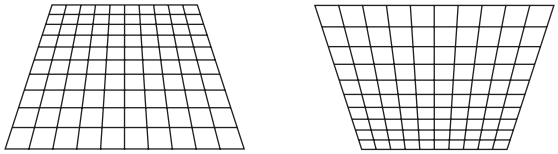
Correct keystone distortion that occurs when the projector main unit (projection lens surface) does not directly face the projection surface.

Setting [HV CORRECTION]

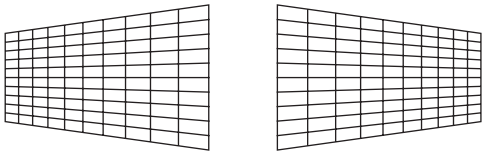
1) **Press ▲▼ to select [KEYSTONE].**
2) **Press the <ENTER> button.**
3) **Press ▲▼ to select [HV CORRECTION].**
4) **Press the <ENTER> button.**
   - The **[HV CORRECTION]** individual adjustment screen is displayed.
5) **Press ▲▼◀▶ to adjust.**

[HV CORRECTION]

[VERTICAL]



[HORIZONTAL]

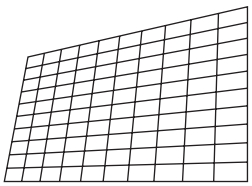


Setting [CORNER CORRECTION]

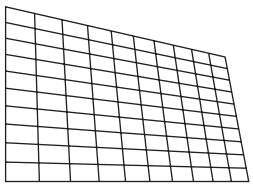
1) **Press ▲▼ to select [KEYSTONE].**
2) **Press the <ENTER> button.**
3) **Press ▲▼ to select [CORNER CORRECTION].**
4) **Press the <ENTER> button.**
   - The **[CORNER CORRECTION]** screen is displayed.
5) **Press ▲▼ to select the item to adjust, and press the <ENTER> button.**
   - The **[CORNER CORRECTION]** individual adjustment screen ([UPPER LEFT], [UPPER RIGHT], [LOWER LEFT], or [LOWER RIGHT]) is displayed.
6) **Press ▲▼◀▶ to adjust.**

[CORNER CORRECTION]

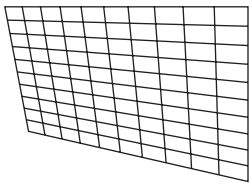
[UPPER LEFT]



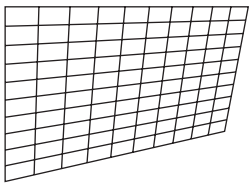
[UPPER RIGHT]



[LOWER LEFT]



[LOWER RIGHT]



Note

- Either one of [HV CORRECTION] or [CORNER CORRECTION] is enabled. When adjusting [HV CORRECTION] or [CORNER CORRECTION] after the other item has been adjusted, the previous setting value will be reset.
- Pressing the <ENTER> button while the [CORNER CORRECTION] individual adjustment screen is displayed will display the individual adjustment screen for the next corner.
- The display position of the [CORNER CORRECTION] individual adjustment screen ([UPPER LEFT], [UPPER RIGHT], [LOWER LEFT], or [LOWER RIGHT]) changes depending on the setting of [PROJECTION METHOD] and [VERTICAL FLIP] to ensure a proper view of the characters in the projected image.
- Correcting up to ±40° for the tilt in the vertical and horizontal directions (maximum value when adjusting only [VERTICAL] or [HORIZONTAL]) are available for [KEYSTONE] adjustment. 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.
- Screen size will also change when [KEYSTONE] is used to perform various adjustments.
- Aspect ratio of the image size may shift depending on the amount of correction or lens zoom value.

- The <DEFAULT> button cannot reset the setting values on the [CORNER CORRECTION] individual adjustment screen.
  - It is recommended to adjust [KEYSTONE] or [ASPECT] before adjusting [SHIFT].

[SIGNAGE]

Set the playback method of contents using the signage playback function.

Setting [PLAY MODE]

Set the mode for signage playback.

1) Press ▲▼ to select [SIGNAGE].

2) Press the <ENTER> button.

- The **[SIGNAGE]** screen is displayed.

3) Press ▲▼ to select [PLAY MODE].

4) Press ◀▶ to switch the item.

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

[SCHEDULE]	Plays back contents (still image/movie/audio files in SD card, changing light source brightness, switching on/off operations) according to the registered schedule.
[SLIDESHOW]	Plays back contents (still image/movie files in SD card) according to the slideshow setting.

Note

- Perform schedule registration and slideshow setting with the Content Manager. Refer to "Operating Instructions – Content Manager Manual" for details.
- Signage playback will not be performed if an SD card is not inserted, no schedule is registered in the SD card, or no slideshow setting exists.
- When operating the Content Manager to start playback of a schedule or slideshow, the [PLAY MODE] setting is automatically switched according to the playback mode.

Setting the restart option

Set the conditions for restarting signage playback (schedule) that has been stopped.

1) Press ▲▼ to select [SIGNAGE].

2) Press the <ENTER> button.

3) Press ▲▼ to select [POWER] or [IMAGE CONTENT].

[POWER]	The signage playback (schedule) restarts and the input switches to the signage when the power is turned off/on as registered in a schedule or the power is controlled with the power <⏻/❙> button on the remote control or a command.
[IMAGE CONTENT]	The signage playback (schedule) restarts and the input switches to the signage at the start time of a image content (still images/movies/external input contents/playlists in SD card) that is set as schedule.

4) Press ◀▶ to select [DISABLE] or [ENABLE].

[DISABLE]	Disables the restart option.
[ENABLE]	Enables the restart option.

Note

- When [PLAY MODE] is set to [SLIDESHOW], [POWER] and [IMAGE CONTENT] in the restart option cannot be selected.
- Signage playback will not be started or restarted if an SD card is not inserted or no schedule is registered in the SD card.
- When registering a schedule to the SD card, signage playback enters standby mode. Even when signage playback has not started, as long as the conditions to enable the restart option are fulfilled, signage playback will be restarted.
- Signage playback can be started or restarted also by pressing the <SIGNAGE> button on the remote control. Pressing the <SIGNAGE> button while signage playback is stopped switches the input to signage and restarts or starts signage playback. In addition, pressing each of the <HDMI>, <MEMORY VIEWER>, <MIRRORING>, or <Panasonic APP> button while in signage playback stops signage playback and switches the input to a corresponding one.

[DIRECT PLAY SETTING]

This function can be used to directly play still images/movie files, etc. which are previously registered from the direct play screen of the remote control or Content Manager.

1) Press ▲▼ to select [DIRECT PLAY SETTING].

2) Press ◀▶ to switch the item.

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

[MEMORY VIEWER]	Enables the direct play function of MEMORY VIEWER.
[Content Manager]	Enables the multiple direct play function. For details, please refer to "Basic operation procedure of multiple direct play" and "Operation method of multiple direct play" in the "Operating Instructions - Content Manager Manual".

[ECO MANAGEMENT]

This function optimizes power according to the operating status to reduce power consumption.

Setting [LIGHT POWER]

1) Press ▲▼ to select [ECO MANAGEMENT].

2) Press the <ENTER> button.

- The **[ECO MANAGEMENT]** screen is displayed.

3) Press ▲▼ to select [LIGHT POWER].

4) Press ◀▶ to switch the item.

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

[NORMAL]	Select this item when high luminance is required.
[ECO]	Select this item when high luminance is not required.

Note

- When [ECO] is set, the power consumption can be saved and operation sound can be reduced compared to when [NORMAL] is set.
- When [ECO] is set, the images may appear different from that when [NORMAL] is set.

Setting [AV MUTE DETECTION]

This function can be used to turn off the light source and lower power consumption while AV mute is in use.

1) Press ▲▼ to select [ECO MANAGEMENT].

2) Press the <ENTER> button.

- The **[ECO MANAGEMENT]** screen is displayed.

3) Press ▲▼ to select [AV MUTE DETECTION].

4) Press ◀▶ to switch the item.

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

[ON]	The light source is turned off during the AV mute mode. When AV mute is cancelled, the audio resumes and the light source is turned on again.
[OFF]	The light source remains on during the AV mute mode.

Note

- While AV mute is cancelled, it may take some time when setting [AV MUTE DETECTION] to [ON] before the image is displayed again.

Setting [NO SIGNAL SHUT-OFF]

This function automatically switches the power of the projector to standby if the input is HDMI, MIRRORING, or Panasonic APPLICATION and there is no input signal for a certain period of time. The time before switching to standby can be set.

1) Press ▲▼ to select [ECO MANAGEMENT].

2) **Press the <ENTER> button.**
   - The **[ECO MANAGEMENT]** screen is displayed.

3) **Press ▲▼ to select [NO SIGNAL SHUT-OFF].**

4) **Press ◀▶ to switch the item.**
   - The items will switch each time you press the button.

[10MIN.] - [90MIN.]	Sets the time in 10-minute intervals.
[DISABLE]	Disables [NO SIGNAL SHUT-OFF].

Note

- The factory default setting for [NO SIGNAL SHUT-OFF] is [10MIN.].

Setting [NO SIGNAL LIGHTS-OUT]

This is a function to automatically turn off the light source of the projector when the input is HDMI, MIRRORING, or Panasonic APPLICATION and there is no input signal for a specific period. The time until the light source is turned off can be set.

1) **Press ▲▼ to select [ECO MANAGEMENT].**

2) **Press the <ENTER> button.**
   - The **[ECO MANAGEMENT]** screen is displayed.

3) **Press ▲▼ to select [NO SIGNAL LIGHTS-OUT].**

4) **Press ◀▶ to switch the item.**
   - The items will switch each time you press the button.

[DISABLE]	Disables [NO SIGNAL LIGHTS-OUT].
[10SEC.] - [5MIN.]	Turns off the light source when there is no input signal for the preset period. Select [10SEC.], [20SEC.], [30SEC.], [1MIN.], [2MIN.], [3MIN.] or [5MIN.].

Note

- The power indicator <ON (G)/STANDBY (R)> will blink slowly in green while the no signal lights-out function is operating and the light source is turned off.
- When [NO SIGNAL LIGHTS-OUT] is set to anything other than [DISABLE], after the light source is turned off by this function, the light source will be turned on again in the following cases:
  - When signal is input
  - When on-screen display, such as menu screen (OSD) or input guide, or a test pattern is displayed
  - When the power <⏻/I> button or the <AV MUTE> button is pressed

Setting [STANDBY MODE]

Set the power consumption during standby.

1) **Press ▲▼ to select [ECO MANAGEMENT].**

2) **Press the <ENTER> button.**
   - The **[ECO MANAGEMENT]** screen is displayed.

3) **Press ▲▼ to select [STANDBY MODE].**

4) **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.
[NETWORK]	Select this item to reduce power consumption during standby, and to operate the projector via wired LAN using the Wake on LAN function.
[NORMAL]	Select this item to use the network function during standby. Or, select this item to synchronize with the NTP server and adjust the date and time of the projector automatically.

Note

- When [ECO] is set, network functions are not available during standby.

- When [ECO] is set, there may be a delay in displaying when the power is turned on, compared to when [NORMAL] is set.
- When [NETWORK] is set, the Wake on LAN function enables the network function available for 60 seconds even during standby.
- When [NORMAL] is set, the internal cooling fan may run during standby.
- The [STANDBY MODE] setting is not reset to the factory default even when [ALL USER DATA] is executed from the [SETUP] menu → [INITIALIZE] (➡ page 80).
- The [STANDBY MODE] setting will be fixed to [NORMAL] and cannot be changed when [SCHEDULE] is set to [ON]. The [STANDBY MODE] setting will not change back when [SCHEDULE] is set to [OFF] in this condition.
- If the following three settings are made, the image may disappear temporarily when synchronizing with the NTP server with the projector powered on or when the power has been turned on.
  - Setting [STANDBY MODE] to [ECO] or [NETWORK]
  - Setting the [SETUP] menu → [DATE AND TIME] → [ADJUST CLOCK] → [NTP SYNCHRONIZATION] to [ON]
    Refer to “Setting the date and time automatically” (➡ page 79) for details.
  - Setting the input to signage

[INITIAL STARTUP]

Set the startup method when the power supply of the track system is turned on.

1) Press ▲▼ to select [INITIAL STARTUP].

2) Press ◀▶ to switch the item.

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

[LAST MEMORY]	Starts up the projector in the status before turning off the power supply of the track system.
[STANDBY]	Starts up the projector in standby.
[ON]	Starts projecting immediately.

[STARTUP INPUT SELECT]

Set the input when the projector is turned on to start projection.

1) Press ▲▼ to select [STARTUP INPUT SELECT].

2) Press ◀▶ to switch the item.

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

[LAST USED]	Keeps the input that has been selected the last time.
[HDMI]	Sets the input to HDMI.
[MIRRORING]	Sets the input to MIRRORING.
[Panasonic APPLICATION]	Sets the input to Panasonic APPLICATION.
[MEMORY VIEWER]	Sets the input to Memory Viewer.
[SIGNAGE]	Sets the input to signage.

Note

- If [POWER] of the restart option is enabled in “Setting the restart option” (➡ page 73) which explains the [SETUP] menu → [SIGNAGE], the input switches to signage regardless of the [STARTUP INPUT SELECT] setting, as the signage playback (schedule) restarts at the same time when the power is turned on.

[AUDIO SETTING]

Set detailed audio functions.

Adjusting the volume

1) Press ▲▼ to select [AUDIO SETTING].

2) Press the <ENTER> button.

- The **[AUDIO SETTING]** screen is displayed.

3) Press ▲▼ to select [VOLUME].

4) Press ◀▶ to adjust the level.

Operation	Adjustment	Range of adjustment
Press ▶.	Increases the volume.	0 - 63
Press ◀.	Decreases the volume.	

Adjusting the right/left audio balance

1) Press ▲▼ to select [AUDIO SETTING].

2) Press the <ENTER> button.

- The **[AUDIO SETTING]** screen is displayed.

3) Press ▲▼ to select [BALANCE].

4) Press ◀▶ to adjust the level.

Operation	Adjustment	Range of adjustment
Press ▶.	Increases the volume on the right.	L16 - R16
Press ◀.	Increases the volume on the left.	

Note

- The projector has no built-in speakers. Audio is output from the external audio device connected to the <AUDIO OUT> terminal.

[DC OUT]

This function can be used to supply power by the <DC OUT> terminal.

1) Press ▲▼ to select [DC OUT].

2) Press ◀▶ to switch the item.

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

[ON]	Power is supplied to an external device connected to the <DC OUT> terminal.
[OFF]	Power is not supplied to an external device connected to the <DC OUT> terminal.

Note

- An [ERROR] message is displayed and power supply is ceased when the power supplied by the connected device exceeds the rated power (DC 5 V, maximum 2 A). When [ERROR] appears, please switch off and on the power of the projector.
- Power supply is ceased in standby mode even when [DC OUT] is set to [ON].

[STATUS]

Display the status of the projector.

1) Press ▲▼ to select [STATUS].

2) Press the <ENTER> button.

- The **[STATUS]** screen is displayed.

3) Press ◀▶ to switch the pages.

- The page will change each time you press the button.

[INPUT]	Displays the currently selected input.
[SIGNAGE]	Displays the status of signage playback.
[SIGNAL NAME]	Displays the input signal name.
[SIGNAL FREQUENCY]	Displays the frequency of the input signal.
[PROJECTOR RUNTIME]	Displays the runtime of the projector.
[LIGHT RUNTIME]	Displays the runtime of the light source.
[INTAKE AIR TEMP.]	Displays the status of the air intake temperature of the projector.
[OPTICS MODULE TEMP.]	Displays the status of the internal temperature of the projector.
[DC OUT]	Displays the power supply status from the <DC OUT> terminal.
[PROJECTOR TYPE]	Displays the type of the projector.
[SERIAL NUMBER]	Displays the serial number of the projector.
[MAIN VERSION]	Displays the main version of the firmware of the projector.
[SUB VERSION]	Displays the sub version of the firmware of the projector.
[NETWORK VERSION]	Displays the network version of the projector.

Note

- The content of status can be sent via E-mail to E-mail addresses (up to two) set in “[E-mail set up] page” (➡ page 122) by pressing the <ENTER> button while the [STATUS] screen is displayed.

[SCHEDULE]

Set the command execution schedule for each day of the week.

Enabling/disabling the schedule function

1) Press ▲▼ to select [SCHEDULE].

2) Press ◀▶ to switch the item.

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

[OFF]	Disables the schedule function.
[ON]	Enables the schedule function. Refer to “How to assign a program” (➡ page 78) or “How to set a program” (➡ page 78) for how to set the schedule.

Note

- The [STANDBY MODE] setting will be fixed to [NORMAL] and cannot be changed when [SCHEDULE] is set to [ON]. The [STANDBY MODE] setting will not change back when [SCHEDULE] is set to [OFF] in this condition.
- When [SCHEDULE] is set to [ON], the schedule of the signage play will stop. The schedule of the signage play will not work even when [SCHEDULE] is set to [OFF] in this condition.

How to assign a program

1) Press ▲▼ to select [SCHEDULE].

2) Press ◀▶ to select [ON], and press the <ENTER> button.

- The **[SCHEDULE]** screen is displayed.

3) Select and assign a program to each day of week.

- Press ▲▼ to select the day of week, and press ◀▶ to select a program number.
- You can set the program from No.1 to No.7. “- - -” indicates that the program number has not been set.

How to set a program

Set up to 16 commands to each program.

1) Press ▲▼ to select [SCHEDULE].

2) Press ◀▶ to select [ON], and press the <ENTER> button.

- The **[SCHEDULE]** screen is displayed.

3) Press ▲▼ to select [PROGRAM EDIT].

4) Press ◀▶ to select a program number, and press the <ENTER> button.

5) Press ▲▼ to select a command number, and press the <ENTER> button.

- You can turn the page using ◀▶.

6) Press ▲▼ to select [TIME], and press the <ENTER> button.

- The projector is in the adjustment mode (the time is blinking).

7) Press ◀▶ to select "hour" or "minute", and press ▲▼ to set a time, and then press the <ENTER> button.

8) Press ▲▼ to select [COMMAND].

9) Press the <ENTER> button.

- The **[COMMAND]** detailed setting screen is displayed.

10) Press ▲▼ to select a [COMMAND].

[COMMAND]	Description
[POWER ON]	Switches on the projector.
[STANDBY]	Enters standby.

- After Step **8)**, you can press ◀▶ to select [COMMAND].

11) Press the <ENTER> button.

- After the command is confirmed, ● is displayed at the left of the selected command.

12) Press the <MENU> button to return to the [PROGRAM EDIT] screen.

13) Press ▲▼ to select [STORE], and press the <ENTER> button.

Note

- To delete a command that has been already set, press the <DEFAULT> button on the remote control while the screen in Step **5)** is displayed.
- The operating time will be the local time. (➡ page 79)
- If an operation is executed with the remote control before the command set in [SCHEDULE] is executed, the command set with the schedule function may not be executed.

[DATE AND TIME]

Set the time zone, date, and time of the built-in clock of the projector.

Setting the time zone

1) Press ▲▼ to select [DATE AND TIME].

2) Press the <ENTER> button.

- The **[DATE AND TIME]** screen is displayed.

3) Press ▲▼ to select [TIME ZONE].

4) Press ◀▶ to switch [TIME ZONE].

Setting the date and time manually

1) Press ▲▼ to select [DATE AND TIME].

2) Press the <ENTER> button.

- The **[DATE AND TIME]** screen is displayed.

3) Press ▲▼ to select [ADJUST CLOCK].

4) Press the <ENTER> button.

- The **[ADJUST CLOCK]** screen is displayed.

5) Press ▲▼ to select an item, and press ◀▶ to set the local date and time.

6) Press ▲▼ to select [APPLY], and press the <ENTER> button.

- The setting of the date and time will be completed.

Setting the date and time automatically

To synchronize with the NTP server and adjust the date and time of the projector automatically, set [NTP SYNCHRONIZATION] to [ON].
NTP server is a device such as a computer which delivers the date and time data by NTP (Network Time Protocol).

1) Press ▲▼ to select [DATE AND TIME].

2) Press the <ENTER> button.

- The **[DATE AND TIME]** screen is displayed.

3) Press ▲▼ to select [ADJUST CLOCK].

4) **Press the <ENTER> button.**
   - The **[ADJUST CLOCK]** screen is displayed.

5) **Press ▲▼ to select [NTP SYNCHRONIZATION], and press ◀▶ to switch to [ON].**

6) **Press ▲▼ to select [APPLY], and press the <ENTER> button.**
   - The setting of the date and time will be completed.

Note

- To set the date and time automatically, the projector must be connected to the network.
- If you set the date and time automatically, set the [SETUP] menu → [ECO MANAGEMENT] → [STANDBY MODE] (➡ page 75) to [NORMAL]. If an item other than [NORMAL] has been set and the input has been set to signage, the image will disappear temporarily when synchronizing with the NTP server with the projector powered on or when the power has been turned on.
- If synchronization with the NTP server fails just after [NTP SYNCHRONIZATION] is turned [ON], or if [NTP SYNCHRONIZATION] is turned [ON] while the NTP server is not set, [NTP SYNCHRONIZATION] will return to [OFF].
- Access the projector via a web browser to set the NTP server. Refer to “[Adjust clock] page” (➡ page 121) for details.
- The projector is equipped with the NTP server function. By using this projector as an NTP server, you can synchronize the time of other projectors in the same network. For example, it is effective when you use multiple projectors of this model and play back the schedule of the Content Manager simultaneously, under the environment where access to an external NTP server is not possible. For the steps to play back a schedule simultaneously, refer to “Playing back the schedule simultaneously in multiple projectors” in the "Operating Instructions – Content Manager Manual".

[SAVE ALL USER DATA]

Save the various setting values as backup to the built-in memory of the projector.

1) **Press ▲▼ to select [SAVE ALL USER DATA].**

2) **Press the <ENTER> button.**
   - The **[SECURITY PASSWORD]** screen is displayed.

3) **Enter a security password and press the <ENTER> button.**

4) **When the confirmation screen is displayed, press ◀▶ to select [OK], and press the <ENTER> button.**

Attention

- Do not turn off the power supply of the track system while data is being saved.

Note

- When [SAVE ALL USER DATA] is executed, it may take approximately 30 seconds to complete saving data. Note that while data is being saved, projection disappears, and all buttons on the remote control and the power <⏻/❙> button on the power supply unit are disabled.

[LOAD ALL USER DATA]

Load the various setting values saved as backup in the built-in memory of the projector.

1) **Press ▲▼ to select [LOAD ALL USER DATA].**

2) **Press the <ENTER> button.**
   - The **[SECURITY PASSWORD]** screen is displayed.

3) **Enter a security password and press the <ENTER> button.**

4) **When the confirmation screen is displayed, press ◀▶ to select [OK], and press the <ENTER> button.**

Note

- The projector will go into the standby mode to reflect the setting values when [LOAD ALL USER DATA] is executed.

[INITIALIZE]

Return various setting values to their factory default settings.

1) **Press ▲▼ to select [INITIALIZE].**

2) **Press the <ENTER> button.**
   - The **[SECURITY PASSWORD]** screen is displayed.

3) **Enter a security password and press the <ENTER> button.**
   - The **[INITIALIZE]** screen is displayed.

4) Press ▲▼ to select an item to initialize.

[ALL USER DATA]	Returns all setting items including [SIGNAGE], [NETWORK], and [E-mail set up] to the factory default settings. The projector enters the standby mode to reflect the setting values.
[NETWORK/E-MAIL]	Returns [SIGNAGE], [NETWORK], and [E-mail set up] to the factory default settings.

5) Press the <ENTER> button.

6) When the confirmation screen is displayed, press ◀▶ to select [OK], and press the <ENTER> button.

- **[PROGRESS]** is displayed while initialization is being performed.

Note

- After [ALL USER DATA] of [INITIALIZE] is executed, first reconnect the power of the track system, and then turn on the projector.

[SERVICE PASSWORD]

This function is used by a service person.

[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 58) for the operation of the menu screen.

- After selecting the item, press ▲▼◀▶ to set.

[PROJECTOR NAME]

Change the name as desired in such a case as the projector needs to be identified on application software.

1) Press ▲▼ to select [PROJECTOR NAME].

2) Press the <ENTER> button.

- The **[PROJECTOR NAME]** screen is displayed.

3) Press ▲▼◀▶ to select a character, and press the <ENTER> button to enter.

- Up to eight characters can be entered.

4) After the projector name has been entered, press ▲▼◀▶ to select [OK], and press the <ENTER> button.

- To cancel the change, press ▲▼◀▶ to select [CANCEL] and then press the <ENTER> button.

Note

- The factory default projector name is "NAMExxxx" (xxxx stands for a four-digit number and varies by each product).

[WIRED LAN]

Configure the settings as necessary before using the wired LAN function.

1) Press ▲▼ to select [WIRED LAN].

2) Press the <ENTER> button.

- The **[WIRED LAN]** screen is displayed.

3) Press ▲▼ to select an item, and change the settings according to the operation instructions of the menu.

[DHCP]	Set to [ON] when obtaining an IP address automatically using a DHCP server. Set to [OFF] when not using a DHCP server.
[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.
[DNS1]	Enter the primary DNS server address when not using a DHCP server.
[DNS2]	Enter the secondary DNS server address when not using a DHCP server.

4) Press ▲▼ to select [STORE], and press the <ENTER> button.

5) When the confirmation screen is displayed, press ◀▶ to select [OK], and press the <ENTER> button.

Note

- When using a DHCP server, confirm that the DHCP server is running.
- Consult your network administrator regarding the IP address, subnet mask, and default gateway.
- When [WIRED LAN] is selected in the [NETWORK] menu → [Art-Net] (➡ page 89), this [WIRED LAN] setting is disabled.
- When [WIRED LAN] is selected and the network address is changed in the [NETWORK] menu → [Art-Net] (➡ page 89), the new address is also used as the address for the [WIRED LAN] setting.
- The following settings are configured as the factory default.

[DHCP]	OFF
[IP ADDRESS]	192.168.10.100
[SUBNET MASK]	255.255.255.0
[DEFAULT GATEWAY]	192.168.10.1
[DNS1]/[DNS2]	None

[WIRELESS LAN]

Set the connection method of wireless LAN.

1) Press ▲▼ to select [WIRELESS LAN].

2) Press ◀▶ to select the connection method.

[SIMPLE]	Direct connection mode that can be compatible with each OS (Windows, Mac OS, iOS and Android, etc.) Use the wireless LAN function via the image transfer application software which supports "Wireless Manager ME6.3", iPad / iPhone / iPod touch and Android devices. Switch the input to [Panasonic APPLICATION], the idle screen will appear. You can confirm the SSID and KEY. The factory default value of the KEY can be changed. For details, refer to the following "Setting [SIMPLE]".
[M-DIRECT]	Select this item to use as a simple access point. The projector and a device such as a computer can be connected in the infrastructure mode without an access point. Wireless LAN connection can be established using “Wireless Manager ME6.3” or Panasonic’s image transfer application software that supports iPad/iPhone/iPod touch, and Android devices. Connection with iPad/iPhone/iPod touch, and Android devices will be easier. Detailed network settings can also be configured according to the network environment in use. Refer to “Setting [M-DIRECT]” (➡ page 84) for details.
[USER]	Detailed network settings can be configured according to the network environment in use. Refer to “Setting [USER]” (➡ page 84) for details.
[DISABLE]	Select this item when you do not use wireless LAN.

Attention

- This device is restricted to indoor use when operated in the 5.15 to 5.35 GHz frequency range (Channels 36 to 64).

Note

- If [SIMPLE] or [M-DIRECT] is set, up to 10 devices can be connected to the projector via wireless LAN.
- Even when [SIMPLE] or [M-DIRECT] is selected in [WIRELESS LAN], the setting will be disabled if the input is MIRRORING.
- When [WIRELESS LAN] is selected in the [NETWORK] menu → [Art-Net] (➡ page 89), this [WIRELESS LAN] setting is disabled.
- If the string of SSID exceeds 16 characters, the SSID is displayed in two lines.
- For details about the operation of "Wireless Manager ME6.3", please refer to "Operating Instructions - Wireless Manager ME6.3".
- Refer to the following URL for the image transfer application software that wirelessly transfers images etc. saved in iPad/iPhone/iPod touch, and Android devices to the projector.
  http://panasonic.net/avc/projector/

Setting [SIMPLE]

Direct connection mode and compatible with each OS (Windows, Mac, iOS, Android, etc.)

1) Press ▲▼ to select [WIRELESS LAN].

2) Press ◀▶ to select [SIMPLE].

3) Press the <ENTER> button.

- The **[WIRELESS LAN]** ([SIMPLE]) screen is displayed.

4) Press the <ENTER> button.

- The **[KEY]** screen is displayed.

5) Press ▲▼◀▶ to enter the key according to the operation instructions of the menu.

[KEY]	Enter 8 to 15-digit alphanumeric characters.

6) Press ▲▼◀▶ to select [OK], and press the <ENTER> button.

7) Press ▲▼ to select [STORE], and press the <ENTER> button.

8) When the confirmation screen is displayed, press ◀▶ to select [OK], and press the <ENTER> button.

■ Default setting of [SIMPLE]

- The following setting is made before the projector leaves the factory.

[KEY]	proj + the last 4 digits of the network ID.

Setting [M-DIRECT]

1) Press ▲▼ to select [WIRELESS LAN].

2) Press ◀▶ to select [M-DIRECT].

3) Press the <ENTER> button.

- The **[WIRELESS LAN]** ([M-DIRECT]) screen is displayed.

4) Press ▲▼ to select each item, and change the settings according to the operation instructions of the menu.

[IP ADDRESS]	Enter the IP address.
[SUBNET MASK]	Enter the subnet mask.
[SSID]	Set SSID to use.
[CHANNEL]	Select the channel to use from 1 to 13, 36, 40, 44, and 48.
[KEY]	Set the key to use. Enter 8 to 63 alphanumeric characters or 64-digit hexadecimal.

5) Press ▲▼ to select [STORE], and press the <ENTER> button.

6) When the confirmation screen is displayed, press ◀▶ to select [OK], and press the <ENTER> button.

Note

- The following settings are configured as the factory default.

[IP ADDRESS]	192.168.12.100
[SUBNET MASK]	255.255.255.0
[SSID]	M-DIRECTxxxx (xxxx stands for the last four-digit number of the network ID.)
[CHANNEL]	1
[KEY]	The same character string as SSID

- The authentication method is fixed to WPA2-PSK and the encryption method is fixed to AES, and they cannot be changed.
- Consult your network administrator before you change the values from the factory default.
- If [KEY] is kept as the factory default value, information leak by a third party may occur. Be sure to change it from the factory default value.
- Since the DHCP server automatically starts up, set the DHCP setting of devices to be wirelessly connected to the projector to on and connect them.
- [KEY] may be displayed as the password of SSID depending on the device.

Setting [USER]

1) Press ▲▼ to select [WIRELESS LAN].

2) Press ◀▶ to select [USER].

3) Press the <ENTER> button.

- The **[WIRELESS LAN]** (SSID Search) screen is displayed.
- The SSID selected is shown at the top and ● is displayed at the left of the selected SSID.
- The encrypted SSID is displayed with the key icon, and the antenna level is indicated by the number of ■.
- When the desired SSID can be found, proceed to Step **4)**.
- When the desired SSID cannot be found, proceed to Step **5)**.

Note

- Up to 20 characters can be displayed for an SSID.
- One search can find up to 50 SSID results (5 pages at most). Press ◀▶ to turn the pages.
- To renew the SSID list displayed, press the <DEFAULT> button on the remote control.

4) Press ▲▼ to select the SSID, and press the <ENTER> button.

- The **[WIRELESS LAN]** ([USER]) screen (1/2) is displayed.
- Proceed to Step **6)**.

Note

- When the SSID with a key icon is selected, proceed to Step **8)**. At this moment, the screen page number (2/2) will not be displayed.

5) Press ▲▼ to select [OTHER], and press the <ENTER> button.

- The **[WIRELESS LAN]** ([USER]) screen (1/2) is displayed.
- When there are many search results and [OTHER] is not displayed on the **[WIRELESS LAN]** (SSID Search) screen, press ▶ until it is found.
- Proceed to Step **6)**.

6) Press ▲▼ to select each item, and change the settings according to the operation instructions of the menu.

[SSID]*1	Enter the same string as the SSID registered to the access point.	
[AUTHENTICATION]	Select the user authentication method used in the network to which the projector is connected.	
	[OPEN]	Select this item when the authentication method of the access point is Open System.
	[SHARED]	Select this item when the authentication method of the access point is Shared Key.
	[WPA-PSK]	Select this item when the authentication method of the access point is WPA-PSK.
	[WPA2-PSK]	Select this item when the authentication method of the access point is WPA2-PSK.
	[WPA-EAP/WPA2-EAP]	Select this item when the authentication method of the access point is WPA-EAP/WPA2-EAP.
	[WPA-EAP]	Select this item when the authentication method of the access point is WPA-EAP.
	[WPA2-EAP]	Select this item when the authentication method of the access point is WPA2-EAP.
[ENCRYPTION]	Select the encryption method used for the communication between the projector and the network.	
	[NONE]	Select this item not to use encryption. It can be selected only when [AUTHENTICATION] is set to [OPEN] or [SHARED].
	[WEP]	Select this item when the encryption method is WEP. It can be selected only when [AUTHENTICATION] is set to [OPEN] or [SHARED].
	[TKIP]	Select this item when the encryption method is TKIP. It can be selected only when [AUTHENTICATION] is set to [WPA-PSK], [WPA2-PSK], [WPA-EAP], or [WPA2-EAP].
	[AES]	Select this item when you use AES for the encryption method. It can be selected only when [AUTHENTICATION] is set to [WPA-PSK], [WPA2-PSK], [WPA-EAP], or [WPA2-EAP].
[DEFAULT KEY]	Set a number from 1 to 4 for the default key. It can be selected only when [AUTHENTICATION] is set to [OPEN] or [SHARED], and the encryption method is [WEP].	
[KEY1] - [KEY4]	Set WEP key to the key number selected in [DEFAULT KEY]. It can be selected only when [AUTHENTICATION] is set to [OPEN] or [SHARED], and the encryption method is [WEP]. You can set a 64-bit or 128-bit WEP key. Enter five single-byte alphanumeric characters (10 digits for hexadecimal) for 64-bit, or enter 13 single-byte alphanumeric characters (26 digits for hexadecimal) for 128-bit.	
[KEY]	Set the key. It can be selected when [AUTHENTICATION] is set to [WPA-PSK] or [WPA2-PSK]. Enter 8 to 63 alphanumeric characters or 64-digit hexadecimal.	
[EAP]	Select the EAP set for RADIUS server. It can be selected when [AUTHENTICATION] is set to [WPA-EAP/WPA2-EAP], [WPA-EAP], or [WPA2-EAP]. The types of EAP that can be selected are as follows. [PEAP(MS-CHAPv2)], [PEAP(GTC)], [EAP-TTLS(MD5)], [EAP-TTLS(MS-CHAPv2)], [EAP-FAST(MS-CHAPv2)], [EAP-FAST(GTC)]	
[USER NAME]	Enter the user name to be used for authentication in single-byte alphanumeric characters (space not included, 64 characters at the maximum). It can be selected when [AUTHENTICATION] is set to [WPA-EAP/WPA2-EAP], [WPA-EAP], or [WPA2-EAP].	
[PASSWORD]	Enter the password to be used for authentication in single-byte alphanumeric characters (64 characters at the maximum). It can be selected when [AUTHENTICATION] is set to [WPA-EAP/WPA2-EAP], [WPA-EAP], or [WPA2-EAP].	

*1 When proceeding from Step **4)**, [SSID] cannot be set.

Note

- Contact the manufacturer of the access point (radio repeating device) in use if wireless LAN connection cannot be established via the access point even after “Setting for projector” (➡ page 109) is executed.
- If you use EAP, settings of the projector need to be configured according to the RADIUS server settings. Consult your network administrator for the RADIUS server settings.
- If you use EAP together with an access point where SSID broadcast is disabled, select [WPA-EAP] or [WPA2-EAP] for authentication method even when the authentication of the access point is WPA-EAP/WPA2-EAP.

7) Press ◀▶ to select [NEXT], and press the <ENTER> button.

- The **[WIRELESS LAN]** ([USER]) screen (2/2) is displayed.

8) Press ▲▼ to select each item, and change the settings according to the operation instructions of the menu.

[DHCP]	Set to [ON] when obtaining an IP address automatically using a DHCP server. Set to [OFF] when not using a DHCP server.
[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.
[DNS1]	Enter the primary DNS server address when not using a DHCP server.
[DNS2]	Enter the secondary DNS server address when not using a DHCP server.

Note

- When you use a DHCP server, confirm that the DHCP server is running.
- Consult your network administrator regarding the IP address, subnet mask, default gateway, and DNS server address.
- Wired LAN and wireless LAN cannot be used in the same segment.

9) Press ▲▼ to select [STORE], and press the <ENTER> button.

- Press ▲▼ to select [RETURN] and then press the <ENTER> button to return to the [WIRELESS LAN] ([USER]) screen (1/2).
- When the SSID with a key icon is selected, [RETURN] will not be displayed.

10) When the confirmation screen is displayed, press ◀▶ to select [OK], and press the <ENTER> button.

Note

- The following settings are configured for [USER] as the factory default.

[DHCP]	OFF
[IP ADDRESS]	192.168.11.100
[SUBNET MASK]	255.255.255.0
[DEFAULT GATEWAY]	192.168.11.1
[DNS1]/[DNS2]	(Blank)
[SSID]	Panasonic Projector
[AUTHENTICATION]	Open
[ENCRYPTION]	None

[NETWORK CONTROL]

Set up the control method of the network.

1) Press ▲▼ to select [NETWORK CONTROL].

2) Press the <ENTER> button.

- The **[NETWORK CONTROL]** screen is displayed.

3) Press ▲▼ to select an item, and press ◀▶ to change the setting.

[WEB CONTROL]	Set to [ON] to control with the web browser.
[PJLink CONTROL]	Set to [ON] to control with the PJLink protocol.
[COMMAND CONTROL]	Set to [ON] when you control the projector using control commands. Refer to “Control commands via LAN” (➡ page 141).
[COMMAND PORT]	Set the port number used for command control.
[Crestron Connected(TM)]	Set to [ON] when you control the projector using Crestron Connected™ of Crestron Electronics, Inc.
[STORE]	Save the current network control settings.

4) Press ▲▼ to select [STORE], and press the <ENTER> button.

5) When the confirmation screen is displayed, press ◀▶ to select [OK], and press the <ENTER> button.

[Panasonic APPLICATION]

Configure the settings of the functions used when devices are connected to the projector via LAN using Panasonic's network application software.

Setting [LIVE MODE CUT IN]

Set whether to accept live mode cut-in by another user during live mode processing (image transfer) by "Wireless Manager ME6.3" or image distribution by "Multi Monitoring & Control Software".

1) Press ▲▼ to select [Panasonic APPLICATION].

2) Press the <ENTER> button.
- The **[Panasonic APPLICATION]** screen is displayed.

3) Press ▲▼ to select [LIVE MODE CUT IN].

4) Press ◀▶ to switch the item.
- The items will switch each time you press the button.

[OFF]	Set this item to prohibit live mode cut-in by "Wireless Manager ME6.3" or image distribution by "Multi Monitoring & Control Software".
[ON]	Set this item to allow live mode cut-in by "Wireless Manager ME6.3" or image distribution by "Multi Monitoring & Control Software".

Note

- If you use "Multi Monitoring & Control Software" and "Wireless Manager ME6.3" at the same time on the same computer, simultaneous image distribution function of "Multi Monitoring & Control Software" may not work properly. To use them at the same time, use each of the software on separate computers.

Setting [MULTI-LIVE]

Switch the display to multi-live mode when images are to be transferred from multiple computers to the projector using "Wireless Manager ME6.3".

Refer to "Operating Instructions - Wireless Manager ME6.3" for details. Multi-live mode can be used with Panasonic's image transfer application software that supports iPad/iPhone/iPod touch, and Android devices. Refer to the following URL for image transfer application software that supports iPad/iPhone/iPod touch, and Android devices.

http://panasonic.net/avc/projector/

1) Press ▲▼ to select [Panasonic APPLICATION].

2) Press the <ENTER> button.
- The **[Panasonic APPLICATION]** screen is displayed.

3) Press ▲▼ to select [MULTI-LIVE], and press the <ENTER> button.
- The projector is switched to multi-live mode.
- The items will switch each time you select [MULTI-LIVE].
- The style switches to 4-screen multi, 4-screen index, and 16-screen index in order.

Setting [PASSWORD]

By setting the projector to require password entry when a device is connected, you can prevent image cut-in due to wrong external connections.

1) Press ▲▼ to select [Panasonic APPLICATION].

2) Press the <ENTER> button.
- The **[Panasonic APPLICATION]** screen is displayed.

3) Press ▲▼ to select [PASSWORD].

4) Press ◀▶ to switch the item.

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

[OFF]	Disables password entry.
[ON]	Enables password entry.

Note

- When you connect a device to the projector using “Wireless Manager ME6.3”, setting [PASSWORD] to [ON] to require password entry is recommended.
- When you use functions of “Multi Monitoring & Control Software” for simultaneous image distribution or deleting distributed images, images cannot be distributed to the projector on which [PASSWORD] is set to [ON]. To use those image distribution functions, set it to [OFF].

Performing [PASSWORD CHANGE]

Set or change the password to connect to the projector.

1) Press ▲▼ to select [Panasonic APPLICATION].

2) Press the <ENTER> button.

- The **[Panasonic APPLICATION]** screen is displayed.

3) Press ▲▼ to select [PASSWORD CHANGE].

4) Press the <ENTER> button.

- The **[PASSWORD CHANGE]** screen is displayed.

5) Press ▲▼◀▶ to select characters, and press the <ENTER> button to enter.

6) Press ▲▼◀▶ to select [OK], and press the <ENTER> button.

- To cancel, select [CANCEL].

Note

- Up to eight characters can be set for a password.
- A password is not set in factory default settings. Since connection without password entry is available even when [PASSWORD] is set to [ON], be sure to set a password in [PASSWORD CHANGE] if you set [PASSWORD] to [ON].
- Change the password periodically and make it hard to guess.

[NETWORK STATUS]

Display the status of the projector network.

1) Press ▲▼ to select [NETWORK STATUS].

2) Press the <ENTER> button.

- The **[NETWORK STATUS]** screen is displayed.

3) Press ◀▶ to switch the pages.

- The page will change each time you press the button.

[PROJECTOR NAME]	Displays the projector name set on the projector. The projector name can be changed to a desired name. (➡ page 82)	
[NETWORK ID]	Displays the network ID (fixed) given to the projector.	
[WIRED LAN]	Displays the network information of the wired LAN set on the projector.	
	[DHCP]	Displays the status of use of DHCP server.
	[IP ADDRESS]	Displays the IP address.
	[SUBNET MASK]	Displays the subnet mask.
	[DEFAULT GATEWAY]	Displays the default gateway.
	[DNS1]	Displays the address of the primary DNS server.
	[DNS2]	Displays the address of the secondary DNS server.
	[MAC ADDRESS]	Displays the MAC address of wired LAN.

[WIRELESS LAN]	Displays the network information of the wireless LAN set on the projector.	
	[ANTENNA LEVEL]	Displays the signal status of wireless LAN.
	[NETWORK]	Displays the connection method of wireless LAN.
	[CHANNEL]	Displays the channel used for wireless LAN.
	[SSID]	Displays the string of SSID.
	[AUTHENTICATION]	Displays the user authentication method.
	[EAP]	Displays the type of EAP.
	[ENCRYPTION]	Displays the encryption method.
	[DEFAULT KEY]	Displays the number of the default key.
	[DHCP]	Displays the status of use of DHCP server.
	[IP ADDRESS]	Displays the IP address.
	[SUBNET MASK]	Displays the subnet mask.
	[DEFAULT GATEWAY]	Displays the default gateway.
	[DNS1]	Displays the address of the primary DNS server.
	[DNS2]	Displays the address of the secondary DNS server.
	[MAC ADDRESS]	Displays the MAC address of wireless LAN.

Note

- When [DISABLE] is selected in the [NETWORK] menu → [WIRELESS LAN] (➡ page 83) and an item other than [WIRELESS LAN] is selected in [Art-Net] (➡ page 89), the wireless LAN page on the [NETWORK STATUS] screen is not displayed.
- If the string of SSID exceeds 16 characters, the SSID will be displayed in two lines.

[Art-Net]

Make settings to use the Art-Net function.

1) Press ▲▼ to select [Art-Net].

2) Press ◀▶ to switch the item.

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

[OFF]	Disables the Art-Net function.
[WIRED LAN]	Uses the Art-Net function with wired LAN connection.
[WIRELESS LAN]	Uses the Art-Net function with wireless LAN connection.

Note

- Refer to “Setting address for [WIRED LAN]” (➡ page 89) or “Setting address for [WIRELESS LAN]” (➡ page 90) for how to set the IP address.
- If [Art-Net] is set to other than [OFF], the [NETWORK] menu → [WIRED LAN] (➡ page 82) or [WIRELESS LAN] (➡ page 83) is disabled.

Setting address for [WIRED LAN]

1) Press ▲▼ to select [Art-Net].

2) Press ◀▶ to select [WIRED LAN].

3) Press the <ENTER> button.

- The **[Art-Net (WIRED LAN)]** screen (1/2) is displayed.

4) Press ▲▼ to select each item, and change the settings according to the operation instructions of the menu.

[NET]	Enter the net setting of the control console to be connected to the projector.
[SUB NET]	Enter the subnet setting of the control console to be connected to the projector.
[UNIVERSE]	Enter the universe setting of the control console to be connected to the projector.
[START ADDRESS]	Enter a start address where the projector processes Art-Net.

5) Press ▲▼ to select [NEXT], and press the <ENTER> button.

- The **[Art-Net (WIRED LAN)]** screen (2/2) is displayed.

6) Press ▲▼ to select [DEVICE IP ADDRESS].

7) Press ◀▶ to switch the item.

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

[2.x.x.x]	Sets the IP address to 2.x.x.x automatically.
[10.x.x.x]	Sets the IP address to 10.x.x.x automatically.
[MANUAL]	Sets the IP address manually.

- When [2.x.x.x] or [10.x.x.x] is selected in Step **7)**, proceed to Step **9)**.

8) Press ▲▼ to select each item, and change the settings according to the operation instructions of the menu.

[DHCP]	Set to [ON] when obtaining an IP address automatically using a DHCP server. Set to [OFF] when not using a DHCP server.
[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.
[DNS1]	Enter the primary DNS server address when not using a DHCP server.
[DNS2]	Enter the secondary DNS server address when not using a DHCP server.

9) Press ▲▼ to select [STORE], and press the <ENTER> button.

- Press ▲▼ to select [RETURN] and then press the <ENTER> button to return to the **[Art-Net (WIRED LAN)]** screen (1/2).

10) When the confirmation screen is displayed, press ◀▶ to select [OK], and press the <ENTER> button.

Note

- When the network address is changed in the [NETWORK] menu → [WIRED LAN] (➡ page 82), the address is reflected in the address for [MANUAL] of this [WIRED LAN] setting.

Setting address for [WIRELESS LAN]

1) Press ▲▼ to select [Art-Net].

2) Press ◀▶ to select [WIRELESS LAN].

3) Press the <ENTER> button.

- The **[Art-Net (WIRELESS LAN)]** screen (1/3) is displayed.

4) Press ▲▼ to select each item, and change the settings according to the operation instructions of the menu.

[NET]	Enter the net setting of the control console to be connected to the projector.
[SUB NET]	Enter the subnet setting of the control console to be connected to the projector.
[UNIVERSE]	Enter the universe setting of the control console to be connected to the projector.
[START ADDRESS]	Enter a start address where the projector processes Art-Net.

5) Press ▲▼ to select [NEXT] and press the <ENTER> button.

- The **[Art-Net (WIRELESS LAN)]** screen (2/3) is displayed.

6) Press ▲▼ to select each item, and change the settings according to the operation instructions of the menu.

[SSID]	Enter the same string as the SSID registered to the access point.	
[AUTHENTICATION]	Select the user authentication method used in the network to which the projector is connected.	
	[OPEN]	Select this item when the authentication method of the access point is Open System.
	[SHARED]	Select this item when the authentication method of the access point is Shared Key.
	[WPA-PSK]	Select this item when the authentication method of the access point is WPA-PSK.
	[WPA2-PSK]	Select this item when the authentication method of the access point is WPA2-PSK.
	[WPA-EAP/WPA2-EAP]	Select this item when the authentication method of the access point is WPA-EAP/WPA2-EAP.
	[WPA-EAP]	Select this item when the authentication method of the access point is WPA-EAP.
	[WPA2-EAP]	Select this item when the authentication method of the access point is WPA2-EAP.
[ENCRYPTION]	Select the encryption method used for the communication between the projector and the network.	
	[NONE]	Select this item not to use encryption. It can be selected only when [AUTHENTICATION] is set to [OPEN] or [SHARED].
	[WEP]	Select this item when the encryption method is WEP. It can be selected only when [AUTHENTICATION] is set to [OPEN] or [SHARED].
	[TKIP]	Select this item when the encryption method is TKIP. It can be selected only when [AUTHENTICATION] is set to [WPA-PSK], [WPA2-PSK], [WPA-EAP], or [WPA2-EAP].
	[AES]	Select this item when you use AES for the encryption method. It can be selected only when [AUTHENTICATION] is set to [WPA-PSK], [WPA2-PSK], [WPA-EAP], or [WPA2-EAP].
[DEFAULT KEY]	Set a number from 1 to 4 for the default key. It can be selected only when [AUTHENTICATION] is set to [OPEN] or [SHARED], and the encryption method is [WEP].	
[KEY1] - [KEY4]	Set WEP key to the key number selected in [DEFAULT KEY]. It can be selected only when [AUTHENTICATION] is set to [OPEN] or [SHARED], and the encryption method is [WEP]. You can set a 64-bit or 128-bit WEP key. Enter five single-byte alphanumeric characters (10 digits for hexadecimal) for 64-bit, or enter 13 single-byte alphanumeric characters (26 digits for hexadecimal) for 128-bit.	
[KEY]	Set the key. It can be selected when [AUTHENTICATION] is set to [WPA-PSK] or [WPA2-PSK]. Enter 8 to 63 alphanumeric characters or 64-digit hexadecimal.	
[EAP]	Select the EAP set for RADIUS server. It can be selected when [AUTHENTICATION] is set to [WPA-EAP/WPA2-EAP], [WPA-EAP], or [WPA2-EAP]. The types of EAP that can be selected are as follows. [PEAP(MS-CHAPv2)], [PEAP(GTC)], [EAP-TTLS(MD5)], [EAP-TTLS(MS-CHAPv2)], [EAP-FAST(MS-CHAPv2)], [EAP-FAST(GTC)]	
[USER NAME]	Enter the user name to be used for authentication in single-byte alphanumeric characters (space not included, 64 characters at the maximum). It can be selected when [AUTHENTICATION] is set to [WPA-EAP/WPA2-EAP], [WPA-EAP], or [WPA2-EAP].	
[PASSWORD]	Enter the password to be used for authentication in single-byte alphanumeric characters (64 characters at the maximum). It can be selected when [AUTHENTICATION] is set to [WPA-EAP/WPA2-EAP], [WPA-EAP], or [WPA2-EAP].	

Note

- If the string of SSID exceeds 16 characters, the SSID is displayed in two lines.

7) Press ▲▼ to select [NEXT], and press the <ENTER> button.

- The **[Art-Net (WIRELESS LAN)]** screen (3/3) is displayed.
- Press ▲▼ to select [RETURN] and then press the <ENTER> button to return to the **[Art-Net (WIRELESS LAN)]** screen (2/3).

8) Press ▲▼ to select [DEVICE IP ADDRESS].

9) Press ◀▶ to switch the item.

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

[2.x.x.x]	Sets the IP address to 2.x.x.x automatically.
[10.x.x.x]	Sets the IP address to 10.x.x.x automatically.
[MANUAL]	Sets the IP address manually.

- When [2.x.x.x] or [10.x.x.x] is selected in Step **9)**, proceed to Step **11)**.

10) Press ▲▼ to select each item, and change the settings according to the operation instructions of the menu.

[DHCP]	Set to [ON] when obtaining an IP address automatically using a DHCP server. Set to [OFF] when not using a DHCP server.
[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.
[DNS1]	Enter the primary DNS server address when not using a DHCP server.
[DNS2]	Enter the secondary DNS server address when not using a DHCP server.

11) Press ▲▼ to select [STORE], and press the <ENTER> button.

- Press ▲▼ to select [RETURN] and then press the <ENTER> button to return to the **[Art-Net (WIRELESS LAN)]** screen (2/3).

12) When the confirmation screen is displayed, press ◀▶ to select [OK], and press the <ENTER> button.

[Art-Net STATUS]

Display the content of control assigned to each channel and the received data of that channel.

1) Press ▲▼ to select [Art-Net STATUS].

2) Press the <ENTER> button.

- The **[Art-Net STATUS]** screen is displayed.

[MIRRORING]

Make detailed settings of the MIRRORING function.
Set the conference mode of Intel® WiDi or Intel® Pro WiDi.

1) Press ▲▼ to select [MIRRORING].

2) Press ◀▶ to switch the item.

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

[MODERATOR]	Select this item when connecting to multiple devices via MIRRORING and setting one of the devices as administrator under the conference mode. You can designate projecting users (presenter).
[MULTI]	Select this item when connecting to multiple devices via MIRRORING.
[OWNER]	Select this item when connecting to a device via MIRRORING and requiring detailed settings.
[SINGLE]	Select this item when connecting to a device via MIRRORING and not requiring [CHANNEL] settings. The connection is sometimes unstable when [SINGLE] is selected. Usually, an item other than [SINGLE] is selected except when connecting to a certain device.

3) Press the <ENTER> button.

- The **[MIRRORING]** detailed adjustment screen is displayed.

4) Press ▲▼ to select each item, and press ◀▶ to change the settings.

[CONNECTION TYPE]	Selects the connection type for the MIRRORING function.	
	[PIN]	A PIN (8-digit number) will be displayed in the idle screen of the MIRRORING function, and then makes connection by entering the PIN on the device.
	[AUTO]	If PIN connection is supported on the device, perform PIN connection. If it is not supported, perform connection without a PIN.
[CHANNEL]	Selects the communication channels used by Intel® WiDi / Intel® Pro WiDi / Miracast.	
[LOWER BANDWIDTH MODE]	Enables / disables the lower bandwidth mode of Intel® WiDi or Intel® Pro WiDi.	
	[OFF]	Disables the lower bandwidth mode.
	[ON]	Enables the lower bandwidth mode. The bit rate will decrease, and the image quality will reduce.
[MOBILE CONNECTION]	Use mobile devices as necessary when the connection is poor. Usually it is not necessary to use mobile connection.	
	[OFF]	Disables mobile connection.
	[ON]	Enables mobile connection.

5) Press ▲▼ to select [STORE], and press the <ENTER> button.

6) When the confirmation screen is displayed, press ◀▶ to select [OK], and press the <ENTER> button.

Note

- For more information about Intel® WiDi or Intel® Pro WiDi conference mode, please refer to the HELP of Intel® WiDi or Intel® Pro WiDi application, or visit the Intel Corporation website.
- When switching from [SINGLE] to other items or from other items to [SINGLE] in the [MIRRORING] setting screen, the device may not be connected. In this case, please eliminate the connection history with the projector at the device.

[DISPLAY OPTION] menu

On the menu screen, select [DISPLAY OPTION] from the main menu, and select an item from the sub-menu.
Refer to "Navigating through the menu" (➡ page 58) for the operation of the menu screen.
- After selecting the item, press ▲▼◀▶ to set.

[HDMI IN]

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

1) Press ▲▼ to select [HDMI IN].

2) Press the <ENTER> button.
- The **[HDMI IN]** screen is displayed.

3) Press ◀▶ to switch the item.
- The items will switch each time you press the button.

[AUTO]	Automatically sets the signal level.
[64-940]	Select this item when the HDMI terminal output of an external device (such as a blu-ray disc player) is connected to the <HDMI IN> terminal.
[0-1023]	Select this item when the DVI terminal output of an external device (such as a computer) is connected to the <HDMI IN> terminal via a conversion cable or similar cable. Select it also when the HDMI terminal output of a computer or other device is connected to the <HDMI IN> terminal.

Note

- The optimal setting varies depending on the output setting of the connected external device. Refer to the operating instructions of the external device regarding the output of the external device.
- The HDMI signal level is displayed for 30 bits of input.

[ON-SCREEN DISPLAY]

Set the on-screen display.

Setting [INPUT GUIDE]

Set whether to display the input guide (currently selected input name, signal name, connection method of wireless LAN, projector name, and network ID) on the projected image when the input is switched.

1) Press ▲▼ to select [ON-SCREEN DISPLAY].

2) Press the <ENTER> button.
- The **[ON-SCREEN DISPLAY]** screen is displayed.

3) Press ▲▼ to select [INPUT GUIDE].

4) Press ◀▶ to switch the item.
- The items will switch each time you press the button.

[ON]	Displays the input guide.
[OFF]	Hides the input guide.

Setting [WARNING MESSAGE]

Set the display/hide of the warning message.

1) Press ▲▼ to select [ON-SCREEN DISPLAY].

2) Press the <ENTER> button.
- The **[ON-SCREEN DISPLAY]** screen is displayed.

3) Press ▲▼ to select [WARNING MESSAGE].

4) Press ◀▶ to switch the item.

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

[ON]	Displays the warning message.
[OFF]	Hides the warning message.

[AV MUTE]

Turn off projection and audio output temporarily when the projector is not used for a certain period of time.

1) Press ▲▼ to select [AV MUTE].

2) Press the <ENTER> button.

- Press the <RETURN> button to release.

Note

- The power indicator <ON (G)/STANDBY (R)> blinks slowly while in the AV mute mode.
- When [ECO MANAGEMENT] → [AV MUTE DETECTION] is enabled, the light source is turned off during the AV mute mode. When AV mute is cancelled, the light source is turned on again.
- When [ECO MANAGEMENT] → [AV MUTE DETECTION] is disabled, the light source remains on during the AV mute mode.

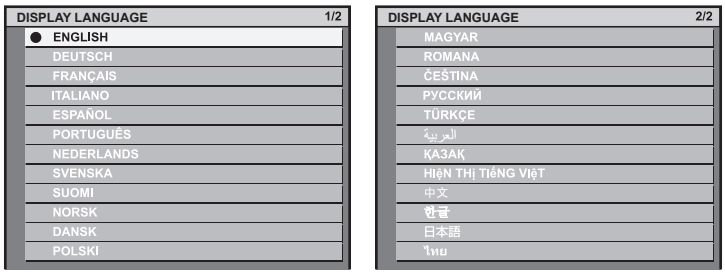
[DISPLAY LANGUAGE] menu

On the menu screen, select [DISPLAY LANGUAGE] from the main menu, and display the sub-menu. Refer to "Navigating through the menu" (➡ page 58) for the operation of the menu screen.

Changing the display language

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

1) Press ▲▼ to select a language, and press the <ENTER> button to set.



- 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, Dutch, Swedish, Finnish, Norwegian, Danish, Polish, Hungarian, Romanian, Czech, Russian, Turkish, Arabic, Kazakh, Vietnamese, Chinese, Korean, Japanese, and Thai.

Note

- The on-screen display language of the projector is set to English by default as well as when [ALL USER DATA] (➡ page 81) in [INITIALIZE] is executed.

[SECURITY] menu

On the menu screen, select [SECURITY] from the main menu, and select an item from the sub-menu. Refer to "Navigating through the menu" (➡ page 58) for the operation of the menu screen.

- When the projector is used for the first time
  Initial password: Press ▲▶▼◀▲▶▼◀ in order, and press the <ENTER> button.
- After selecting the item, press ▲▼◀▶ to set.

Attention

- When you select the [SECURITY] menu and press the <ENTER> button, entering a password is required. Enter the preset password and then continue operations of the [SECURITY] menu.
- When the password has been changed previously, enter the changed password, and press the <ENTER> button.

Note

- The entered password is displayed with * marks on the screen.
- An error message is displayed on the screen when the entered password is incorrect. Re-enter the correct password.

[SECURITY PASSWORD]

Display the **[SECURITY PASSWORD]** screen when the projector is turned on and projection is started from the status that power of the track system was not supplied. If an incorrect password has been entered, operations other than the power <⏻/|> button and the <AV MUTE> button become disabled.

1) Press ▲▼ to select [SECURITY PASSWORD].

2) 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

- [SECURITY PASSWORD] is set to [OFF] at the time of purchase or when [ALL USER DATA] in [INITIALIZE] (➡ page 80) has been performed.
- Change the password periodically that is hard to guess.
- Security password is enabled when [SECURITY PASSWORD] is set to [ON] and the power supply to the projector is disconnected by turning off the power supply of the track system.

[SECURITY PASSWORD CHANGE]

Change the security password.

1) Press ▲▼ to select [SECURITY PASSWORD CHANGE].

2) Press the <ENTER> button.

- The **[SECURITY PASSWORD CHANGE]** screen is displayed.

3) Press ▲▼◀▶ and the number (<1> - <6>) buttons to set the password.

- Up to eight button operations can be set.

4) Press the <ENTER> button.

5) Re-enter the password for the confirmation.

6) Press the <ENTER> button.

Note

- The entered password is displayed with * marks on the screen.
- If the remote control is lost after a security password has been set, initialization of the security password is required. Consult your dealer for the method of initialization.

[TEST PATTERN] menu

On the menu screen, select [TEST PATTERN] from the main menu.
Refer to "Navigating through the menu" (➡ page 58) for the operation of the menu screen.
• Press ◀▶ to switch.

[TEST PATTERN]

Display the test pattern built-in to the projector.
The settings for [COLOR TEMPERATURE], [SHIFT] and [ASPECT] are not reflected in the test pattern.

1) Press ◀▶ to switch the [TEST PATTERN] item.

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

Menu screen + All white	Displays test patterns with the menu screen. Select a test pattern so that it is easy to make various adjustments.
Menu screen + All black	
Menu screen + Color bar (vertical)	
Menu screen + Cross hatch	
Menu screen + Entry screen	Displays the menu screen and input signal. Built-in test patterns are not displayed.

Note

• If the on-screen menu is hidden while the test pattern is displayed, the test pattern is not switched even if ◀▶ are pressed. To switch the test pattern, operate with the on-screen displayed.

Chapter 5 Operations

This chapter describes how to use each function.

Memory Viewer function

Memory Viewer is a function that allows projection of still images or movies stored in an SD card.

Files that can be played back with the Memory Viewer function

The following still image/movie files can be played back on the projector.

	Extension	Format	Restriction
Still image	jpg/jpeg	JPEG	Number of pixels: Maximum 8 000 x 8 000 (For progressive JPEG, maximum 4 096 x 4 096) YUV format: Only YUV444, YUV422, and YUV411 supported Color mode: Only RGB supported
	bmp	Windows Bitmap	Number of pixels: Maximum 2 000 x 2 000 (1-bit, 4-bit, 8-bit, 16-bit, 24-bit, and 32-bit supported) Following formats are not supported. Run-length encoding, Bit fields, Top to bottom, Transparent data

	Extension	Codec		Restriction*1	
		Video	Audio	Video	Audio
Movie	mov	H.264/MPEG-4 AVC Motion JPEG	AAC Linear PCM	Resolution: Maximum 1 920 x 1 080 Minimum 240 x 180 Frame rate: Maximum 30 fps Bit rate: Maximum 40 Mbps	Sample rate: Maximum 48 kHz (For Linear PCM, maximum 16 kHz) Channel: Maximum 2 ch Bit rate: Maximum 384 kbps
	avi	H.264/MPEG-4 AVC Motion JPEG MPEG-4	MPEG-1/2 Audio Layer-3 (MP3) AAC Linear PCM		
	mp4	H.264/MPEG-4 AVC MPEG-4	AAC MPEG-4 AAC-LC		
	mpg/mpeg	MPEG-2	MPEG-1/2 Audio Layer-2		
	wmv	WMV9	WMA		

*1 Following movie files are not supported.
- Files with the video codec of WMV7, WMV8, DivX, or Xvid
- Uncompressed video
- Multi-angle video
- Files with the profile of Advanced Simple Profile @ Level 0 or Advanced Simple Profile @ Level 1

Note

- Some information for still image/movie files can be viewed with a computer where relevant files are accessible.
  Operation example
  - **For Windows computer**
    1. Right-click a file, and click [Properties].
    2. Click the [Details] tab.
  - **For Mac**
    1. Click a file while holding down the “Control” key, and click [Get Info].
    2. Click [More Info].
- File size that can be played back is 2 GB at the maximum.
- Files protected by DRM (Digital Rights Management) cannot be played back.
- The total number of folders/files that can be recognized on the projector is 1 000 at the maximum. If there are 1 001 or more folders/files, an error message is displayed.
- Some files cannot be played back even if the formats are supported.
- Use the SD card with high data transfer speed. If the data transfer speed is slow, movie recorded in the SD card may not be played back properly or it may take time to display a still image. (Speed class: Class 10 recommended)
- Refer to “Cards that can be used with the projector” (➡ page 53) for SD cards that can be used with the projector.

Displaying the Memory Viewer screen

1) Insert an SD card in which still image or movie files are stored to the SD card slot.

- Refer to “Using SD cards” (➡ page 53) for handling of SD cards.

2) Press the <MEMORY VIEWER> button.

- The Memory Viewer screen (thumbnail or list view) is displayed.
- The cursor is placed on the folder list on the left of the screen. (Background color: orange)

Example in thumbnail view

Example in list view

Note

- The display view of the Memory Viewer screen (thumbnail or list view) can be set from the [MEMORY VIEWER] menu → [VIEW] (➡ page 68).

Operating the Memory Viewer screen

This section describes an example of screen operations after the Memory Viewer screen is displayed.

For thumbnail view

1) Press ▲▼ to select a folder, and press the <ENTER> button.

- If there are folders in lower level, they are unfolded and displayed in the folder list on the upper left of the screen.
- The selected folder (cursor position) is highlighted in orange background color.

2) Press the <RETURN> button.

- The cursor moves from the folder list on the left of the screen to the thumbnail view area on the right. (Background color: yellow)

3) Press ▲▼◀▶ to select a file.

- The information on the still image or movie file is displayed in the information area on the lower left of the screen.

4) Press the <ENTER> button.

- Playback starts in the full-screen display.
- Refer to “Playing back still images” (➡ page 103) or “Playing back movies” (➡ page 104) for detailed playback procedure.

5) Press the <RETURN> button to end playback.

- Full-screen display ends and the Memory Viewer screen (thumbnail view) is displayed.
- To subsequently play back another file, perform Steps **1)** to **4)**.

Note

- While the Memory Viewer screen is displayed, every press of the <RETURN> button moves the cursor between the folder list and thumbnail/list view area.
- The display order of thumbnails follows the settings in the [MEMORY VIEWER] menu → [SORT] (➡ page 68).
- Still image/movie files in the specified folder can be played back by pressing the number (<1> - <6>) buttons on the remote control. For the advance setting or operation, refer to “Direct playback” (➡ page 106).

For list view

1) Press ▲▼ to select a folder, and press the <ENTER> button.

- Folders in lower level are unfolded and displayed in the folder list on the upper left of the screen.
- The selected folder (cursor position) is highlighted in orange background color.

2) Press the <RETURN> button.

- The cursor moves from the folder list on the upper left of the screen to the list view area on the right. (Background color: yellow)

3) Press ▲▼ to select a file.

- The thumbnail of the selected still image or movie file is displayed in the area on the lower left of the screen.

4) Press the <ENTER> button.

- Playback starts in the full-screen display.
- Refer to “Playing back still images” (➡ page 103) or “Playing back movies” (➡ page 104) for detailed playback procedure.

5) Press the <RETURN> button to end playback.

- Full-screen display ends and the Memory Viewer screen (list view) is displayed.
- To subsequently play back another file, perform Steps **1)** to **4)**.

Note

- While the Memory Viewer screen is displayed, every press of the <RETURN> button moves the cursor between the folder list and thumbnail/list view area.
- The display order in the list follows the settings in the [MEMORY VIEWER] menu → [SORT] (➡ page 68).
- Still image/movie files in the specified folders can be played back by pressing the number (<1> - <6>) buttons on the remote control. For the advance setting or operation, refer to “Direct playback” (➡ page 106).

Playing back still images

This section describes the procedure using an operation example on the Memory Viewer screen in thumbnail view.
Playback on the Memory Viewer screen in list view can be performed with the same procedure except for the file selection.

Example of display during automatic playback (still image)

When automatic playback is enabled

This section describes the operations when the [MEMORY VIEWER] menu → [AUTOPLAY] (➡ page 68) is set to [ON]. In this case, all still image files in the same folder are played back automatically according to the settings in the [MEMORY VIEWER] menu (➡ page 68) → [INTERVAL] and [EFFECT].

1) Press ▲▼◀▶ to select a file to be projected first from the thumbnails, and press the <ENTER> button.

- Playback starts in the full-screen display.
- Pressing the <ENTER> button during playback pauses automatic playback. Pressing it again resumes playback.
- After playback ends, playback of the next file starts.
- Pressing ▶ during playback skips the file being played back and continues automatic playback from the next file.
- Pressing ◀ during playback returns playback to the previous file and continues automatic playback.
- Pressing ▲ during playback rotates the image 90° clockwise with the aspect ratio maintained.
- Pressing ▼ during playback rotates the image 90° counterclockwise with the aspect ratio maintained.

2) Press the <RETURN> button.

- Automatic playback ends and the Memory Viewer screen (thumbnail view) returns.

When automatic playback is disabled

This section describes the operations when the [MEMORY VIEWER] menu → [AUTOPLAY] (➡ page 68) is set to [OFF]. In this case, files to be projected are selected and played back one by one.

1) Press ▲▼◀▶ to select a file from the thumbnails, and press the <ENTER> button.

- The selected still image is played back in the full-screen display.
- Pressing ▶ plays back the next file.
- Pressing ◀ plays back the previous file.
- Pressing ▲ rotates the image 90° clockwise with the aspect ratio maintained.
- Pressing ▼ rotates the image 90° counterclockwise with the aspect ratio maintained.

2) Press the <RETURN> button.

- Full-screen display ends and the Memory Viewer screen in thumbnail view returns.

Note

- If the number of recording pixels is less than 1 024 x 768, the image is enlarged with the aspect ratio maintained.
- If the number of recording pixels is more than 1 024 x 768, the image is reduced with the aspect ratio maintained.

- The playback order follows the display order set in the [MEMORY VIEWER] menu → [SORT] (➡ page 68).
  Also in the cases where still image and movie files both exist in the same folder, they are played back according to the [SORT] setting.
- The operation guide on the lower part of the playback screen can be hidden by setting the [MEMORY VIEWER] menu → [GUIDE] (➡ page 69) to [OFF].
- When images cannot be played, an error message is displayed.
- When switching the input to [MEMOERY VIEWER] while [AUTOPLAY] is set to [ON], automatic playback starts.

Playing back movies

This section describes the procedure using an operation example on the Memory Viewer screen in thumbnail view.
Playback on the Memory Viewer screen in list view can be performed with the same procedure except for the file selection.

Example of display during fast-forward playback (x10 speed)

When automatic playback is enabled

This section describes the operations when the [MEMORY VIEWER] menu → [AUTOPLAY] (➡ page 68) is set to [ON].
In this case, all movie files in the same folder are played back automatically.

1) Press ▲▼◀▶ to select a file to be projected first from the thumbnails, and press the <ENTER> button.

- Playback starts in the full-screen display.
- Pressing the <ENTER> button during playback pauses playback. Pressing it again resumes playback from the position where the playback has been stopped.
- After playback ends, playback of the next file starts.
- Pressing ▶ during playback performs fast-forward playback. Every press of ▶ increases the speed. (3 levels)
- Pressing ◀ during playback performs rewind playback. Every press of ◀ increases the speed. (3 levels)
- Pressing ▲ plays back the file being played back from the beginning. (cue)
- Pressing ▶ during pause skips the file being played back and starts playback of the next file.
- Pressing ◀ during pause returns playback to the previous file and starts playback.

2) Press the <RETURN> button.

- Automatic playback ends and the Memory Viewer screen (thumbnail view) returns.

When automatic playback is disabled

This section describes the operations when the [MEMORY VIEWER] menu → [AUTOPLAY] (➡ page 68) is set to [OFF].
In this case, files to be projected are selected and played back one by one.

1) Press ▲▼◀▶ to select a file from the thumbnails, and press the <ENTER> button.

- Playback starts in the full-screen display.
- Pressing the <ENTER> button during playback pauses playback. Pressing it again resumes playback from the position where the playback has been stopped.

- After playback ends, playback goes into pause state at the beginning of the file.
- Pressing ▶ during playback performs fast-forward playback. Every press of ▶ increases the speed. (3 levels)
- Pressing ◀ during playback performs rewind playback. Every press of ◀ increases the speed. (3 levels)
- Pressing ▲ plays back the file being played back from the beginning. (cue)
- Pressing ▶ during pause skips the file being played back and starts playback of the next file.
- Pressing ◀ during pause returns playback to the previous file and starts playback.

2) Press the <RETURN> button.

- Full-screen display ends and the Memory Viewer screen in thumbnail view returns.

Note

- If the number of recording pixels is less than 1 024 x 768, the image is enlarged with the aspect ratio maintained.
- If the number of recording pixels is more than 1 024 x 768, the image is reduced with the aspect ratio maintained.
- The playback order follows the display order set in the [MEMORY VIEWER] menu → [SORT] (➡ page 68).
  Also in the cases where still image and movie files both exist in the same folder, they are played back according to the [SORT] setting.
- The time bar of the operation guide on the lower part of the playback screen can be hidden by setting the [MEMORY VIEWER] menu → [GUIDE] (➡ page 69) to [OFF].
- When images cannot be played, an error message is displayed.
- When switching the input to [MEMOERY VIEWER] while [AUTOPLAY] is set to [ON], automatic playback starts.

Resume playback

When automatic playback is disabled (the [MEMORY VIEWER] menu → [AUTOPLAY] (➡ page 68) is set to [OFF]), resume playback can be performed.

Resume playback is a function that stops movie playback in the middle and restarts playback from the position where the movie has been stopped the last time when the same file is to be played back next time.

The following operations resume playback from the position where the last playback has been stopped.

- Stopping movie playback in the middle, going back to the Memory Viewer screen, and then selecting the same movie file again and playing it back
- After playing back other movie or still image files, selecting the previous movie file and playing it back.

Note

- Resume information (information on the position when movie playback is stopped in the middle) is automatically saved at the time when playback is paused by pressing the <ENTER> button during playback or when full-screen display is ended by pressing the <RETURN> button during playback.
- Resume information (information on the position when movie playback is stopped in the middle) of 50 movie files can be saved. After the 51st movie file is played back, resume information will be deleted in order from the oldest.
- When resume playback is performed, some files may not be played back from the correct position where the last playback has been stopped.
- All resume information are deleted if switching the input to other than MIRRORING, removing the SD card, setting to standby status while the [SETUP] menu → [ECO MANAGEMENT] → [STANDBY MODE] (➡ page 75) is set to [ECO] or [NETWORK], the turning off the power supply of the track system.

Playing back still images/movies automatically when the projector is turned on

When the following three conditions are met, playback of still images/movies starts automatically when the projector is turned on.

- Automatic playback is enabled
  - The [MEMORY VIEWER] menu → [AUTOPLAY] (➡ page 68) is set to [ON]
- The input is set to Memory Viewer when the power is turned on to start projection
  - The [SETUP] menu → [STARTUP INPUT SELECT] (➡ page 76) is set to [MEMORY VIEWER]
  - The [SETUP] menu → [STARTUP INPUT SELECT] (➡ page 76) is set to [LAST USED], and the power is turned off with the input set to Memory Viewer
- There are still image/movie files that can be played back with the Memory Viewer function in the root folder of the SD card

Note

- The playback order follows the display order set in the [MEMORY VIEWER] menu → [SORT] (➡ page 68).
  Also in the cases where still image and movie files both exist in the same folder, they are played back according to the [SORT] setting.
- To play back still image/movie files automatically when the power supply of the track system is turned on, perform the following setting and operation.
  - Set the [SETUP] menu → [INITIAL STARTUP] (➡ page 76) to [ON]
  - Set the [SETUP] menu → [INITIAL STARTUP] (➡ page 76) to [LAST MEMORY], and turn off the power supply of the track system while projecting

Direct playback

Still image/movie files in the specified folders of the SD card can be played back by pressing the number (<1> - <6>) buttons on the remote control. This operation is referred to as direct playback.
Also, when operating by a browser remote control of Wireless Manager ME6.3, files can be played back directly by pressing the number (<0> - <9>) buttons.

Saving files for direct playback

To perform direct playback, still image/movie files must be saved in the specified folders in advance. Saving destinations of files are the folders in the root directory (top-most directory) of the SD card. Name the folders (4 characters in single byte) corresponding to the number (<1> - <6>) buttons on the remote control or the number (<0> - <9>) buttons on the browser remote control, as indicated in the following table. If the folder name is different, direct playback cannot be performed.

Number button	<0>	<1>	<2>	<3>	<4>	<5>	<6>	<7>	<8>	<9>
Corresponding folder name	R000	R001	R002	R003	R004	R005	R006	R007	R008	R009

Performing direct playback

1) Insert the SD card into the SD card slot.
- Refer to “Using SD cards” (➡ page 53) for handling of SD cards.

2) Set the [SETUP] menu → [DIRECT PLAY SETTING] (➡ page 74) to [MEMORY VIEWER].

3) Press the <MEMORY VIEWER> button.
- The Memory Viewer screen (thumbnail or list view) is displayed.

4) Press the number (<1> - <6>) buttons on the remote control.
- Still image/movie files in the folder corresponding to the number (<1> - <6>) buttons on the remote control or the number (<0> - <9>) buttons on the browser remote control are played back in the full-screen display.

Note

- When the selected input is not [MEMORY VIEWER], direct play of the Memory Viewer function will not be started.
- If the [MEMORY VIEWER] menu → [AUTOPLAY] (➡ page 68) is set to [ON], still image/movie files in the folder corresponding to the number button are played back in the order set in [MEMORY VIEWER] → [SORT] (➡ page 68).
- If the [MEMORY VIEWER] menu → [AUTOPLAY] (➡ page 68) is set to [OFF], among still image/movie files in the folder corresponding to the number button, the first file in the order set in [MEMORY VIEWER] → [SORT] (➡ page 68) is played back.
- If the number (<1> - <6>) buttons on the remote control are pressed during playback in the full-screen display, current playback stops and the still image/movie files in the folder corresponding to the newly pressed number button are played back.
- Even while the Memory Viewer screen (thumbnail or list view) is displayed or the file is played back in full-screen view, direct playback cannot be performed if the on-screen menu (menu screen) is displayed.
- Even when the number (<1> - <6>) buttons on the remote control are pressed, the operation is disabled if the folder corresponding to the pressed number button does not exist or if the files that can be played back with the Memory Viewer are not saved.
- For the operations during playback, refer to “Playing back still images” (➡ page 103) and “Playing back movies” (➡ page 104).
- For details about the use of the browser remote control, refer to "Operating Instructions - Wireless Manager ME6.3".

Memory Viewer screen descriptions

The icons on the Memory Viewer screen indicate the following.

	An icon to indicate moving to upper level. Select it to move to the upper level.
	An icon to display folders in lower level. Select it to move to the lower level.
	An icon to indicate that the file is still image.
	An icon to indicate that the file is movie.
	An icon to indicate that the extension of the file is supported but it cannot be opened.
	Rotates the still image 90° counterclockwise.
	Rotates the still image 90° clockwise.
	Indicates that fast-forward playback is being performed in approximately x2 speed. (with audio)
	Indicates that fast-forward playback is being performed in approximately x5 speed.
	Indicates that fast-forward playback is being performed in approximately x10 speed.
	Indicates that playback is being paused.
	Indicates that fast-rewind playback is being performed in approximately x2 speed.
	Indicates that fast-rewind playback is being performed in approximately x5 speed.
	Indicates that fast-rewind playback is being performed in approximately x10 speed.

Network connection

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

- **WEB control**

  By accessing the projector from a computer, you can perform setting, adjustment, status display, etc. of the projector. Refer to “Web control function” (➡ page 112) for details.

- **MIRRORING**

  By connecting the projector to a device that supports Intel® WiDi / Intel® Pro WiDi / Miracast via wireless LAN, you can project the image of the device. Refer to “MIRRORING function” (➡ page 131) for details.

- **Panasonic APPLICATION**

  By using image transfer application software “Wireless Manager ME6.3” that supports Windows computers and Mac, and Panasonic’s image transfer application software that supports iPad/iPhone/iPod touch and Android devices, you can transfer images to the projector. The “Multi Monitoring & Control Software”, which monitors and controls multiple projectors connected to the LAN is also supported.

  For details of “Wireless Manager ME6.3” and “Multi Monitoring & Control Software”, refer to the Operating Instructions of them included in the supplied CD-ROM. Refer to the following URL for image transfer application software that supports iPad/iPhone/iPod touch and Android devices.

  http://panasonic.net/avc/projector/

- **Signage playback**

  You can configure the settings for “Signage playback function”, which allows you to project still images and movies stored in an SD card according to registered schedules and slideshow settings. Refer to “Operating Instructions – Content Manager Manual” for details.

  Also, the “Content Management Software” compatible with Windows computers can set schedule used for signage playback. For details, refer to the following URL.

  http://panasonic.net/avc/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 139) for details.

- **Art-Net**

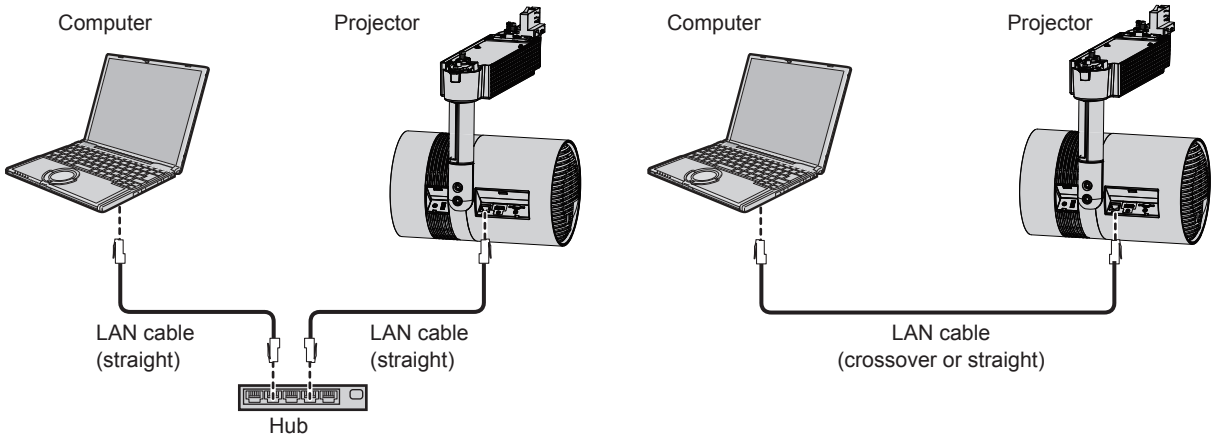
  By using the Art-Net protocol, setting of the projector can be operated by the DMX controller or application software. Refer to “Using Art-Net function” (➡ page 139) for details.

- **Command control**

  By using control commands, you can send inquiries about the operations or status of the projector from a computer. Refer to “Control commands via LAN” (➡ page 141) for details.

When connecting via wired LAN

Connection example



Attention

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

Note

- A LAN cable is required to use the network function via wired LAN.
- Use a straight or crossover LAN cable that is compatible with category 5 or higher. Whether either of straight/crossover cable or both cables can be used differ depending on the system configuration. Consult your network administrator. The projector recognizes the cable type (straight/crossover) automatically.
- Use a LAN cable of 100 m (328'1") or shorter.

Setting for projector

1) Connect the projector and a computer using a LAN cable.

2) Turn on the projector.

3) Press the <MENU> button to open the [NETWORK] menu and configure settings for [WIRED LAN].

- Refer to [WIRED LAN] (➡ page 82) for details.

Note

- Consult your network administrator before connecting to an existing network.
- The following settings are configured as the factory defaults.

[DHCP]	OFF
[IP ADDRESS]	192.168.10.100
[SUBNET MASK]	255.255.255.0
[DEFAULT GATEWAY]	192.168.10.1
[DNS1]/[DNS2]	None

Setting for computer

1) Turn on the computer.

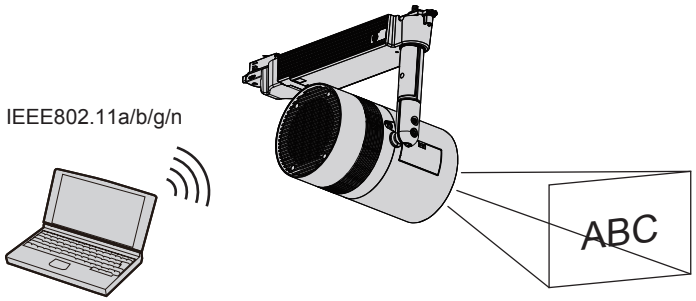
2) Configure network settings following the instructions of your network administrator.

- If the projector is in the factory default settings, configure the network settings of the computer as follows, and then you can use network functions.

[IP ADDRESS]	192.168.10.101
[SUBNET MASK]	255.255.255.0
[DEFAULT GATEWAY]	192.168.10.1

When connecting via wireless LAN

Connection example



Connection example for image transfer

	MIRRORING	Image transfer application software
Illustration of connection	(Example) Displaying copyright-protected contents Projector Intel® WiDi / Intel® Pro WiDi / Miracast compatible device	(Example) Displaying on multiple screens Projector iPad/iPhone/iPod touch, Android device, and computer on which Panasonic's image transfer application software has been installed
Input	MIRRORING	Panasonic APPLICATION
Communication method	IEEE802.11a/n	IEEE802.11b/g/n
Connection method	WPS + Wi-Fi Direct	Panasonic exclusive method + connection by user
Image transmission method	Intel® WiDi / Intel® Pro WiDi / Miracast	Panasonic exclusive method

Setting for projector

1) Turn on the projector.

2) Press the <MENU> button to open the [NETWORK] menu and set [WIRELESS LAN] to either [M-DIRECT] or [USER].

3) Configure the settings of the connection method selected in Step 2).

- Refer to [WIRELESS LAN] (➡ page 83) for details.

Note

- Wireless LAN and wired LAN cannot be used in the same segment.
- If multiple devices are to be connected, set IP addresses that do not overlap.
- Enter SSID correctly in single-byte alphanumeric characters.
- ANY connection is prohibited in a wireless LAN connection.
- This setting is not necessary when connecting MIRRORING. Refer to "MIRRORING function" (➡ page 131) for details.
- The following settings are configured as the factory defaults.

[SIMPLE]	**[KEY]**	proj + the last four digits of the network ID.
[M-DIRECT]	**[IP ADDRESS]**	192.168.12.100
	[SUBNET MASK]	255.255.255.0
	[SSID]	M-DIRECTxxxx (xxxx stands for the last four-digit number of the network ID.)
	[CHANNEL]	1
	[KEY]	The same character string as SSID

[USER]	[SSID]	Panasonic Projector
	[DHCP]	OFF
	[IP ADDRESS]	192.168.11.100
	[SUBNET MASK]	255.255.255.0
	[DEFAULT GATEWAY]	192.168.11.1
	[AUTHENTICATION]	Open
	[ENCRYPTION]	None
	[DNS1]/[DNS2]	None

Setting for computer

1) Turn on the computer.

2) Configure network settings following the instructions of your network administrator.

- If [M-DIRECT] is set on the projector side, set “Obtain an IP address automatically” in the network setting on the computer side.
- If [USER] is set on the projector side, follow the instructions of your network administrator and configure each network setting item of your computer and the projector.

3) Connect the computer to the network set for the projector.

- For Windows computers, click in the task tray (lower right of the computer screen). If [M-DIRECT] is set on the projector, select the same name as SSID set for the projector. If [USER] is set on the projector, select the same name as SSID of your access point.
  For Mac, click in the menu bar (upper right of the computer screen). If [M-DIRECT] is set on the projector, select the same name as SSID set for the projector. If [USER] is are set on the projector, select the same name as SSID of your access point.
- If the projector is in the default settings and [M-DIRECT] is set, [SSID] is [M-DIRECTxxxx] (xxxx stands for the last four-digit number of the network ID).

Note

- If you use wireless LAN connection utility that is standard for your OS, follow the operation procedure of the utility you use to connect to the network.

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
- Fusion RV
- RoomView Server Edition

Note

- “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 http://www.crestron.com
  To download “RoomView Express”, go to the website of Crestron Electronics, Inc. (English only)
  URL http://www.crestron.com/getroomview

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 6.0/7.0/8.0/9.0

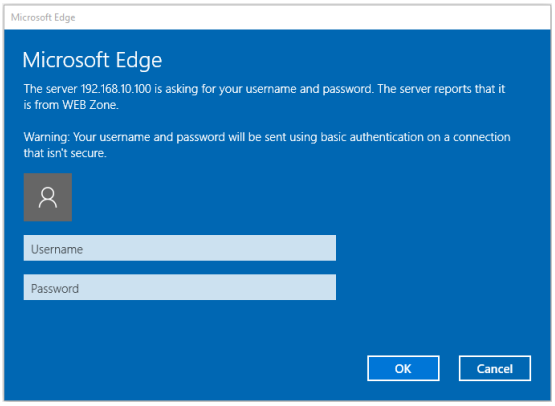
Accessing from the web browser

1) Start up the web browser on the computer.

2) Enter the IP address set on the projector into the URL entry field of the web browser.

3) Enter the user name and the password.

- The factory default setting of the user name is user1 (user rights)/admin1 (administrator rights) and the password is panasonic (lower case).



4) Click the [OK] button.

- The [Projector status] page is displayed.

Note

- If you use a web browser to control the projector, set [WEB CONTROL] to [ON] in [NETWORK CONTROL] (➡ page 86).
- Do not start up multiple web browsers at the same time to make setting or control. Also, do not set or control the projector from multiple computers.
- Change the password first. (➡ page 126)
- Access will be locked for few minutes when an incorrect password is entered three times consecutively.
- Some items on the projector setting page use the Javascript function of the web browser. The projector may not be able to be controlled properly if this function is disabled on the browser settings.
- If the screen for the web control is not displayed, consult your network administrator.
- While updating the screen for the web control, the screen may appear white for a moment, but it is not a malfunction.
- Illustrations of computer screens
  The actual size or indications of the screens may differ from that of this manual depending on the OS or web browser you use.

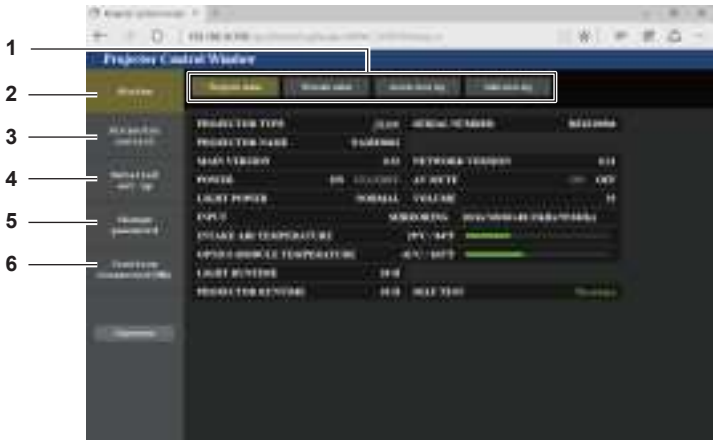
Available functions per account

With the administrator rights, all functions can be used. With the user rights, available functions are restricted. Select an account according to the purpose of use.

The functions with ✓ marks in the columns of administrator/user rights indicate that the operation can be performed by each right.

Item	Function	Administrator rights	User rights	Page
[Status]	[Projector status]	✓	✓	114
	Check error information page	✓	✓	115
	[Network status]	✓	✓	116
	[Access error log]	✓	—	116
	[E-mail error log]	✓	—	116
[Projector control]	[Basic control]	✓	✓	117
	[Advanced control]	✓	✓	118
	[Lighting control]	✓	✓	118
[Detailed set up]	[Network config]	✓	—	119
	[Adjust clock]	✓	—	121
	[Ping test]	✓	—	121
	[ECO management set up]	✓	—	122
	[E-mail set up]	✓	—	122
	[Authentication set up]	✓	—	124
	[Port set up]	✓	—	124
[Change password]	User name for [Administrator]	✓	—	127
	User name for [User]	✓	—	127
	Password for [Administrator]	✓	—	127
	Password for [User]	✓	✓	128
[Crestron Connected(TM)]	Operation	✓	—	128
	[Tools]	✓	—	129
	[Info]	✓	—	129
	[Help]	✓	—	130

Descriptions of items



1 Page tab
Switches pages by clicking this item.

2 [Status]
The status of the projector is displayed by clicking this item.

3 [Projector control]
The [Projector control] page is displayed by clicking this item.

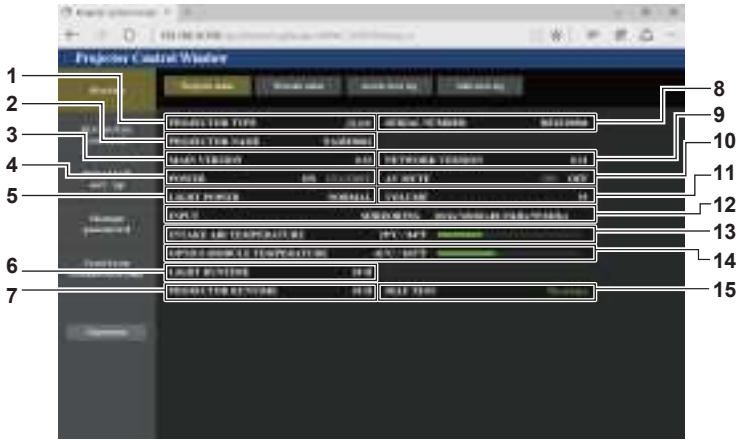
4 [Detailed set up]
The [Detailed set up] page is displayed by clicking this item.

5 [Change password]
The [Change password] page is displayed by clicking this item.

6 [Crestron Connected(TM)]
The operation page of Crestron Connected™ is displayed by clicking this item.

[Projector status] page

Click [Status] → [Projector status].
Display the status of the projector for the following items.



1 [PROJECTOR TYPE]
Displays the type of the projector.

2 [PROJECTOR NAME]
Displays the projector name set for the projector.

3 [MAIN VERSION]
Display the firmware version of the projector.

4 [POWER]
Displays the status of the power.

5 [LIGHT POWER]
Displays the setting status of [LIGHT POWER] (➡ page 74).

6 [LIGHT RUNTIME]
Displays the runtime of the light source.

7 [PROJECTOR RUNTIME]
Displays the runtime of the projector.

8 [SERIAL NUMBER]
Displays the serial number of the projector.

9 [NETWORK VERSION]
Displays the version of the firmware of the network.

10 [AV MUTE]
Displays the AV mute status.

11 [VOLUME]
Displays the volume status.

12 [INPUT]
Displays the current input.

13 [INTAKE AIR TEMPERATURE]
Displays the status of the air intake temperature of the projector.

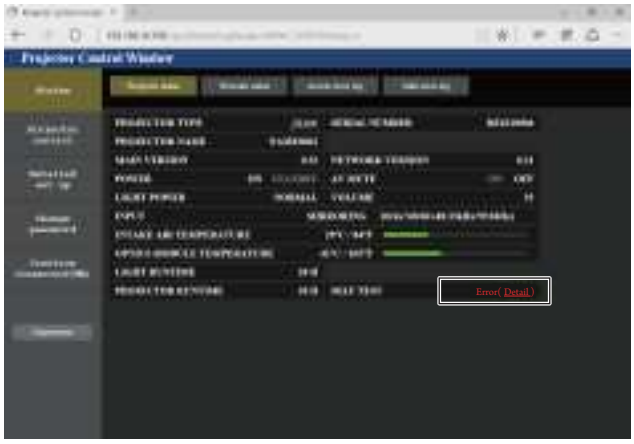
14 [OPTICS MODULE TEMPERATURE]
Displays the status of the internal temperature of the projector.

15 [SELF TEST]
Displays the self-diagnosis information.

Error information page

When [Error (Detail)] or [WARNING (Detail)] appears in the self-diagnosis display of the **[Projector status]** screen, click it to display the error/warning details.

- The projector may go into the standby status to protect the projector depending on the contents of the error.



1 Self-diagnosis result display
Displays the item check results.
[OK]:
Indicates that operation is normal.
[FAILED]:
Indicates that there is a problem.
[WARNING]:
Indicates that there is a warning.

■ [FAILED] items

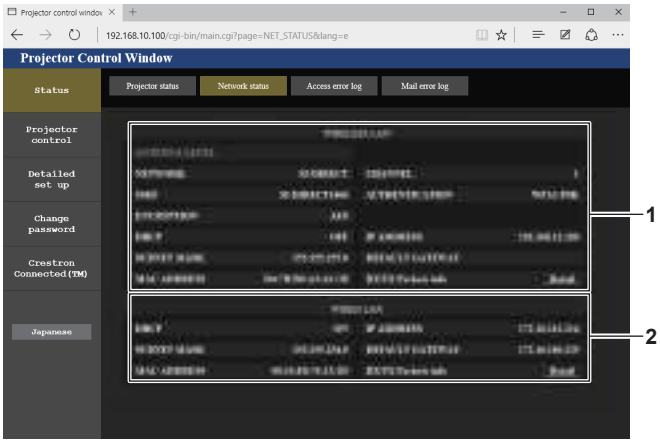
Item	Description
[MAIN CPU BUS]	There is a problem with the microcomputer circuitry. Consult your dealer.
[FAN]	There is a problem with the internal cooling fan or the fan drive circuit. Consult your dealer.
[INTAKE AIR TEMPERATURE]	The intake air temperature is high. The projector may be used in an environment where the temperature is high, such as near a heating appliance.
[OPTICS MODULE TEMPERATURE]	The temperature around the optics module inside the projector is high. The projector may be used in an environment where the temperature is high, such as near a heating appliance.
[LD MODULE TEMPERATURE]	The temperature of the light source is high. The projector is possibly used in an environment where the temperature is high, such as near a heating appliance.
[LOW-TEMPERATURE]	The internal temperature of the projector or ambient temperature is low. Projection cannot be started until the internal temperature of the projector or ambient temperature becomes warm.
[LD STATUS]	The light source failed to turn on or off. Wait for a while until the light source cools off, and then turn on the power.
[INTAKE AIR TEMP.SENSOR]	There is a problem with the intake temperature detection sensor. Consult your dealer.
[OPTICS MODULE TEMP.SENSOR]	There is a problem with the temperature detection sensor around the optics module inside the projector. Consult your dealer.
[LD MODULE TEMP.SENSOR]	There is a problem with the temperature sensor of the light source. Consult your dealer.
[PHOSPHOR WHEEL]	There is a problem with the phosphor wheel or phosphor wheel drive circuit. Consult your dealer.
[COLOR WHEEL]	There is a problem with the color wheel or color wheel drive circuit. Consult your dealer.

■ [WARNING] items

Item	Description
[INTAKE AIR TEMPERATURE]	The intake air temperature is high. The projector may be used in an environment where the temperature is high, such as near a heating appliance.
[OPTICS MODULE TEMPERATURE]	The temperature around the optics module inside the projector is high. The projector may be used in an environment where the temperature is high, such as near a heating appliance.
[LD MODULE TEMPERATURE]	The temperature of the light source is high. The projector is possibly used in an environment where the temperature is high, such as near a heating appliance.
[LOW-TEMPERATURE]	The internal temperature of the projector or ambient temperature is low. Projection cannot be started until the internal temperature of the projector or ambient temperature becomes warm.
[BATTERY]	Replacement of built-in battery is required. Consult your dealer.

[Network status] page

Click [Status] → [Network status].
The current network setting status is displayed.

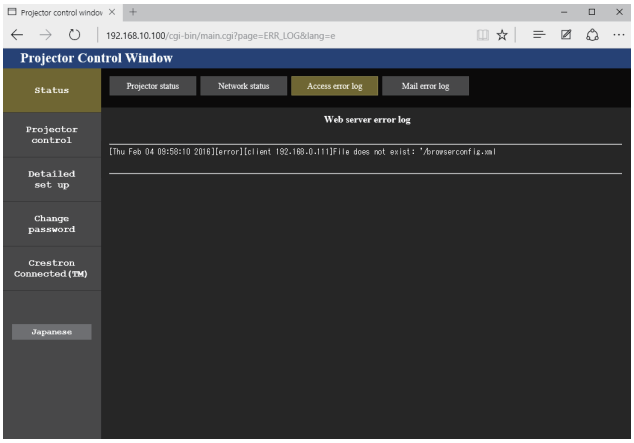


1 [WIRELESS LAN]
Displays the settings of wireless LAN.

2 [WIRED LAN]
Displays the settings of wired LAN.

[Access error log] page

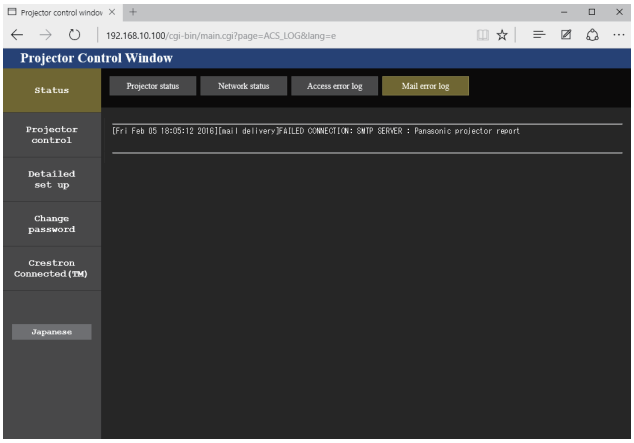
Click [Status] → [Access error log].
The error log on the web server is displayed such as access to the pages that do not exist or access with unauthorized user names or passwords.



[E-mail error log] page

Click [Status] → [E-mail error log].

E-mail error information is displayed if periodic E-mail sending fails.

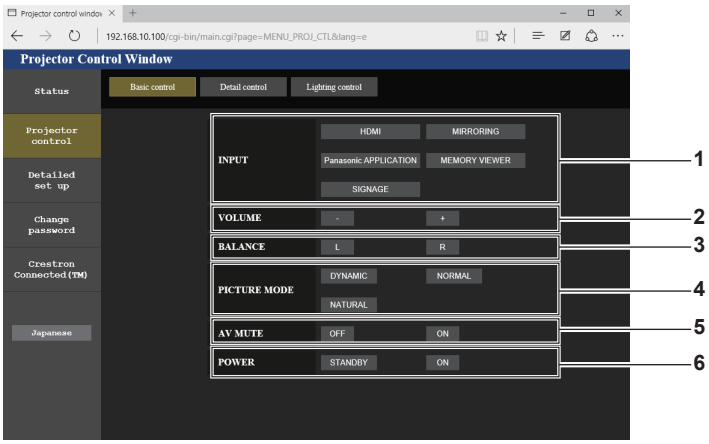


Note

- [Access error log]/[E-mail error log] displays the recent several hundreds of accesses/requests. All information may not be displayed when many accesses/requests are made at a time.
- When information in [Access error log]/[E-mail error log] exceeds a certain amount, they are erased from the oldest.
- Check [Access error log]/[E-mail error log] periodically.

[Basic control] page

Click [Projector control] → [Basic control].



1 [INPUT]
Switches the input.

2 [VOLUME]
Adjusts the volume.

3 [BALANCE]
Adjusts the right/left audio balance.

4 [PICTURE MODE]
Switches the picture mode.

5 [AV MUTE]
Switches AV mute on/off.

6 [POWER]
Switches on/off the power.

Attention

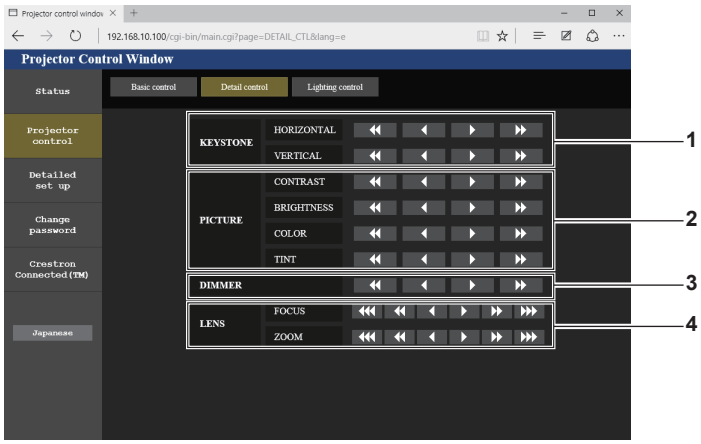
- When you turn on the projector, be careful so that the eyes of people around the projector are not exposed to the sudden light from the light source.
  Or operate the projector only if the eyes of people around the projector are not exposed to the light from the light source even when projection starts suddenly.

Note

- When the [NETWORK] menu → [WIRELESS LAN] (➡ page 83) is set to [M-DIRECT] or [SIMPLE] and web control is performed via wireless LAN, switching to [MEMORY VIEWER] or [MIRRORING} disconnects the wireless LAN and disables later web control operations.
- When the [NETWORK] menu → [WIRELESS LAN] (➡ page 83) is set to [M-DIRECT] or [SIMPLE] and web control is performed via wireless LAN, turning on the power and starting projection with MIRRORING input disconnects the wireless LAN and disables later web control operations.
  - **When the [SETUP] menu → [STARTUP INPUT SELECT] (➡ page 76) is set to [LAST USED]**
    Turn off the power when the input other than MIRRORING is selected.
    If the projector is in standby mode with MIRRORING input, switch the input to other than MIRRORING in the [Basic control] page before turning on the power.
  - **When the [SETUP] menu → [STARTUP INPUT SELECT] (➡ page 76) is set to [MIRRORING]**
    Switch the input to other than MIRRORING using the remote control after projection has been started or set [STARTUP INPUT SELECT] to other than [MIRRORING] beforehand.

[Advanced control] page

Click [Projector control] → [Advanced control].



1 [KEYSTONE]
Corrects horizontal/vertical keystone distortion.

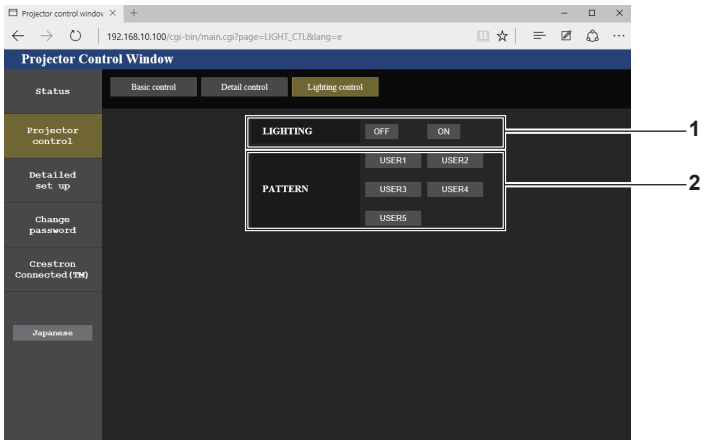
2 [PICTURE]
Adjusts the items of the picture.

3 [DIMMER]
Adjusts the brightness.

4 [LENS]
Adjusts the projection lens (focus/zoom).

[Lighting control] page

Click [Projector control] → [Lighting control].

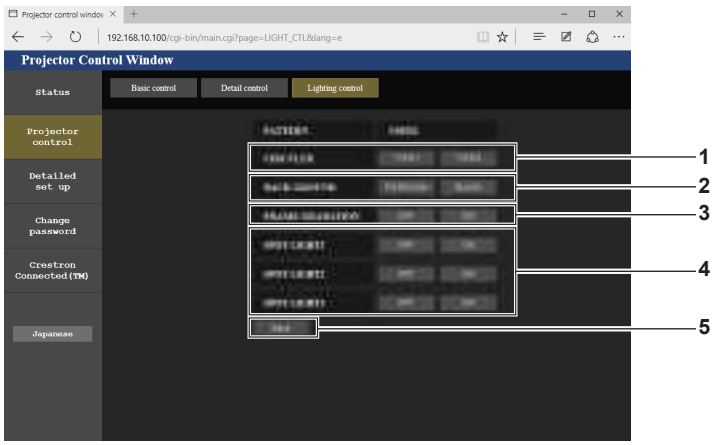


1 [LIGHTING]
Switches to enable/disable the display settings in [PATTERN].

2 [PATTERN]
Switches the pattern of spotlight, background and frame gradation.

Setting [USER1] to [USER5]

After setting [LIGHTING] to [ON] on the [Lighting control] page, select [USER1] to [USER5] in [PATTERN] and change the settings.



1 [CIRCULER TYPE]
Selects the type of the spotlight.

2 [BACK GROUND]
Sets the background of the spotlight.

3 **[FRAME GRADATION]**
Sets the gradation of the outer periphery of the projected image.

4 **[SPOT LIGHT1] to [SPOT LIGHT3]**
Switches on/off each spotlight.

5 **[Back] button**
Returns to the previous screen.

Note

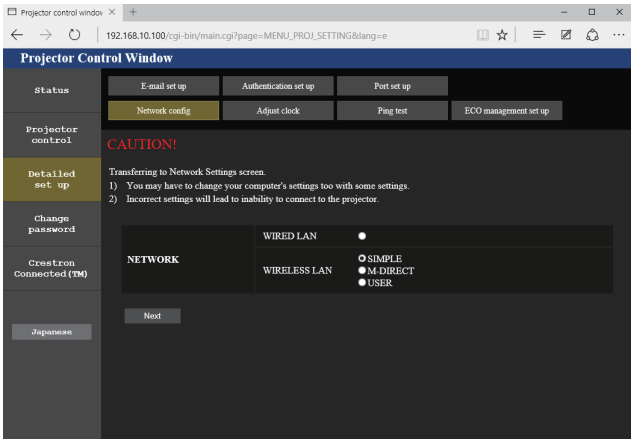
- For details of settings, refer to the [LIGHTING] menu → [PATTERN] of the projector. (➡ page 66)

[Network config] page

Click [Detailed set up] → [Network config].

1) Click [Network config].

- The **[CAUTION!]** screen is displayed.



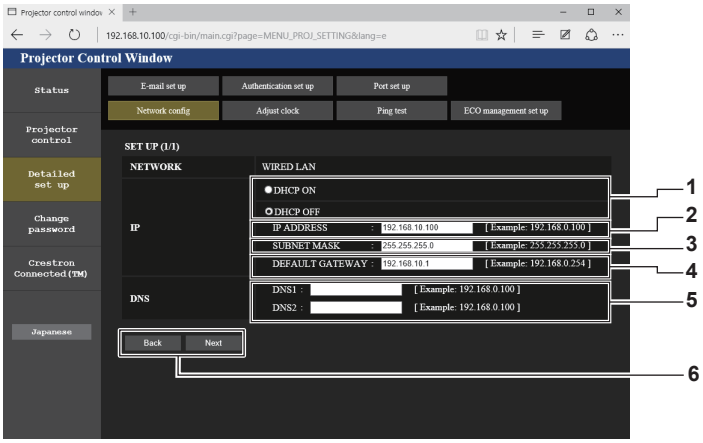
2) Select an item for which you want to change the setting, and click the [Next] button.

- The current settings are displayed.

3) Click the [Change] button.

- The setting change screen is displayed.

Connecting with wired LAN



1 **[DHCP ON], [DHCP OFF]**
To enable the DHCP client function, set [DHCP ON].

2 **[IP ADDRESS]**
Enter the IP address when not using a DHCP server.

3 **[SUBNET MASK]**
Enter the subnet mask when not using a DHCP server.

4 **[DEFAULT GATEWAY]**
Enter the default gateway address when not using a DHCP server.

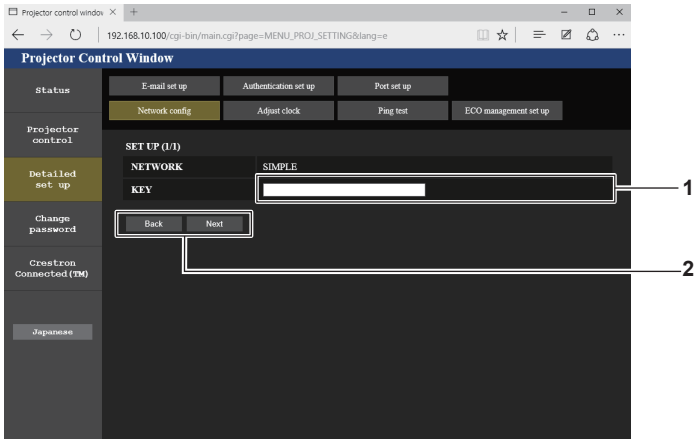
5 **[DNS1], [DNS2]**
Enter the primary DNS/secondary DNS server address when you do not use a DHCP server.
Available characters: Numbers (0 - 9), period (.)
(Example: 192.168.0.253)

6 **[Back] button, [Next] button**
Click the [Back] button to return to the previous screen. Click the [Next] button to display a screen to confirm the settings. Click the [Submit] button to update the settings.

Note

- When you use the “Forward” or “Back” functions of your browser, a warning message “Page has Expired” may appear. In that case, click [Network config] again as the subsequent operations will not be guaranteed.
- Changing LAN settings while connected to the LAN may cause the connection to cut out.

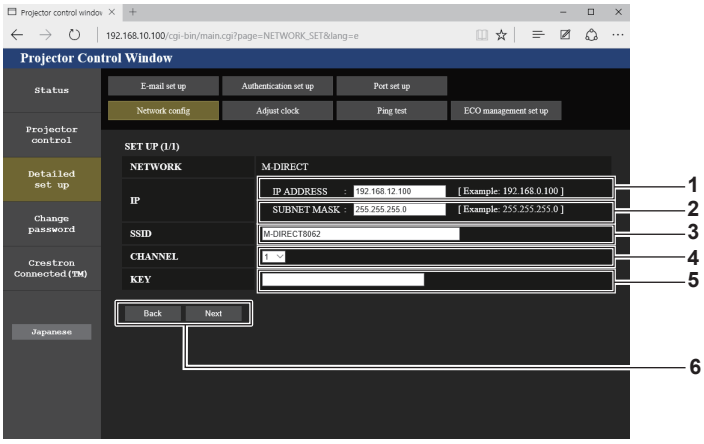
Connecting with wireless LAN (SIMPLE)



1 [KEY]
Set the key to be used with SIMPLE.
Enter 8 to 15 alphanumeric characters.

2 [Back] button, [Next] button
Click the [Back] button to return to the previous screen. Click the [Next] button to display a screen to confirm the settings. Click the [Submit] button to update the settings.

Connecting with wireless LAN (M-DIRECT)



1 [IP ADDRESS]
Enter the IP address.

2 [SUBNET MASK]
Enter the subnet mask.

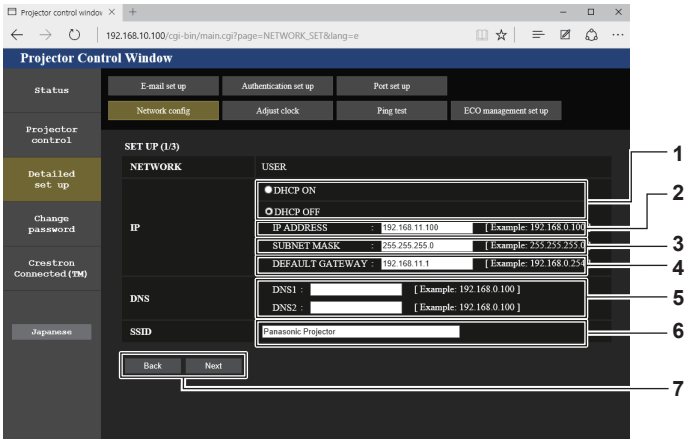
3 [SSID]
Set SSID to be used with M-DIRECT.

4 [CHANNEL]
Set the channel to be used with M-DIRECT.

5 [KEY]
Set the key to be used with M-DIRECT.
Enter 8 to 63 alphanumeric characters or 64-digit hexadecimal.

6 [Back] button, [Next] button
Click the [Back] button to return to the previous screen. Click the [Next] button to display a screen to confirm the settings. Click the [Submit] button to update the settings.

Connecting with wireless LAN (USER)



1 **[DHCP ON], [DHCP OFF]**
To enable the DHCP client function, set [DHCP ON].

2 **[IP ADDRESS]**
Enter the IP address when you do not use a DHCP server.

3 **[SUBNET MASK]**
Enter the subnet mask when you do not use a DHCP server.

4 **[DEFAULT GATEWAY]**
Enter the default gateway address when you do not use a DHCP server.

5 **[DNS1], [DNS2]**
Enter the primary DNS/secondary DNS server address when you do not use a DHCP server.

6 **[SSID]**
Enter the same string as the SSID registered to the access point.

7 **[Back] button, [Next] button**
Click the [Back] button to return to the previous screen. Click the [Next] button to display a screen to confirm the settings. Click the [Submit] button to update the settings.

8 **[AUTHENTICATION]**
Select the user authentication method used in the network to which the projector is connected.

9 **[EAP]**
Select the EAP set for RADIUS server.

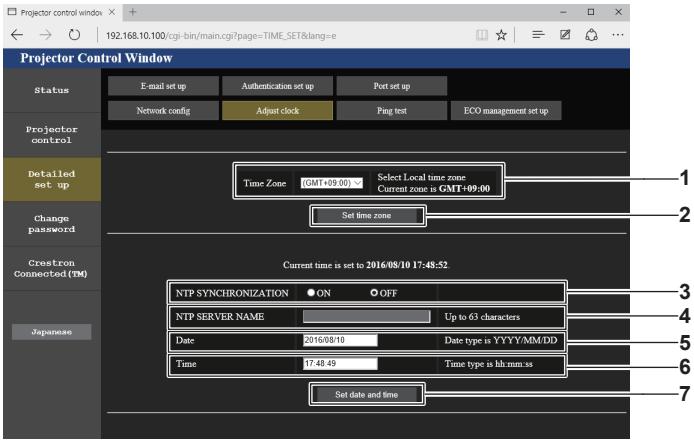
10 **[ENCRYPTION]**
Select the encryption method used for the communication between the projector and the network.

Note

- The contents in the setting screen differ depending on the authentication method of the connected wireless LAN.

[Adjust clock] page

Click [Detailed set up] → [Adjust clock].



1 **[Time Zone]**
Select the time zone.

2 **[Set time zone]**
Updates the time zone setting.

3 **[NTP SYNCHRONIZATION]**
To synchronize with the NTP server and adjust the date and time of the projector automatically, set it to [ON].

4 **[NTP SERVER NAME]**
Enter the IP address or server name of the NTP server when synchronizing with the NTP server.
(To enter the server name, the DNS server needs to be set up.)

5 **[Date]**
Enter the date to be changed.

6 **[Time]**
Enter the time to be changed.

7 **[Set date and time] button**
Updates the date and time settings.

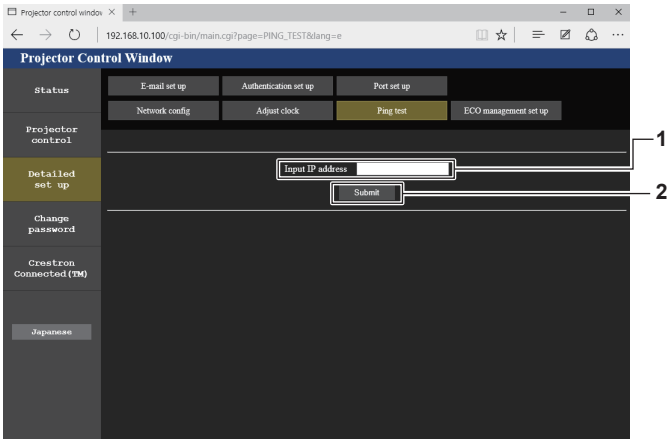
Note

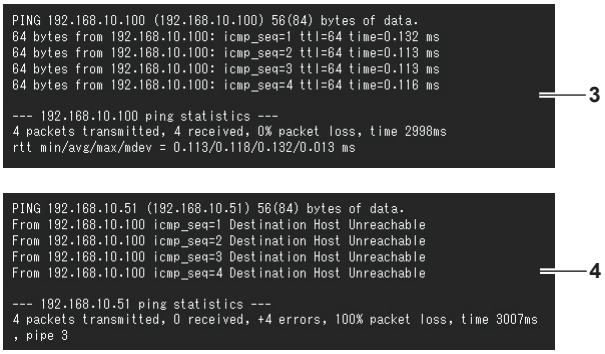
- The battery inside the projector needs to be replaced if the time is reset when the power is turned on. Consult your dealer.

[Ping test] page

Check whether the network is connected to the E-mail server, POP server, DNS server, etc.

Click [Detailed set up] → [Ping test].





1 [Input IP address]
Enter the IP address of the server to be tested.

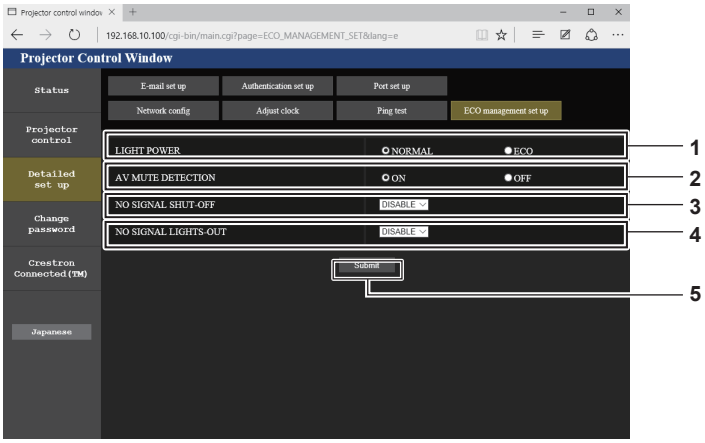
2 [Submit] button
Executes the connection test.

3 Example of display when the connection has succeeded

4 Example of display when the connection has failed

[ECO management set up] page

Settings related to the ECO management function of the projector can be made.
Click [Detailed set up] → [ECO management set up].



1 [LIGHT POWER]
Selects the light source power setting.

2 [AV MUTE DETECTION]
Selects to enable ([ON])/disable ([OFF]) the AV mute detection function.

3 [NO SIGNAL SHUT-OFF]
When [NO SIGNAL SHUT-OFF] is used, select the time until the projector goes into the standby status.

4 [NO SIGNAL LIGHTS-OUT]
When [NO SIGNAL LIGHTS-OUT] is used, select the time until the light source goes out.

5 [Submit] button
Updates the settings.

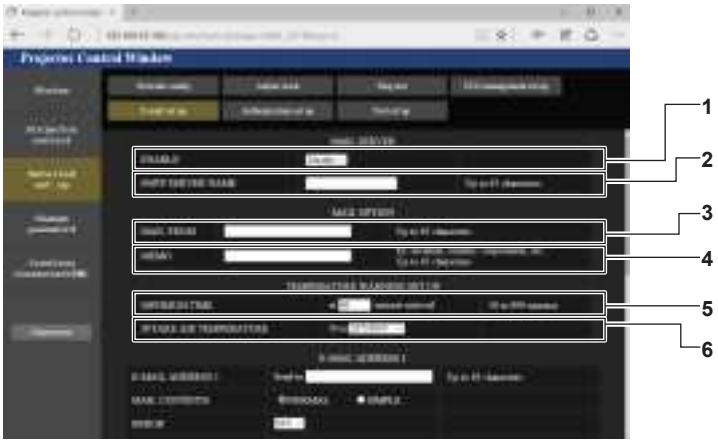
Note

- For details of each setting item, refer to the [SETUP] menu → [ECO MANAGEMENT] (➡ page 74) of the projector.

[E-mail set up] page

When a problem occurs, an E-mail can be sent to the E-mail addresses (up to two) that have been set beforehand.

Click [Detailed set up] → [E-mail set up].



1 [ENABLE]
Select [Enable] to use the E-mail function.

2 [SMTP SERVER NAME]
Enter the IP address or the server name of the E-mail server (SMTP). To enter the server name, the DNS server needs to be set up.

3 [MAIL FROM]
Enter the E-mail address of the projector. (Up to 63 characters in single byte)

4 [MEMO]
Enter information such as the location of the projector that notifies the sender of the E-mail. (Up to 63 characters in single byte)

5 [MINIMUM TIME]
Change the minimum interval for the temperature warning E-mail. The default value is 60 minutes. In this case, another E-mail will not be sent for 60 minutes after sending the temperature warning E-mail even if it reaches the warning temperature.

6 [INTAKE AIR TEMPERATURE]
Change the temperature setting for the temperature warning mail. A temperature warning E-mail is sent when the temperature exceeds this value.

7 [E-MAIL ADDRESS 1]
Enter the E-mail address to send E-mails.

8 Settings of the conditions to send E-mail
Select the conditions to send E-mail.
[MAIL CONTENTS]:
Select either [NORMAL] or [SIMPLE].
[ERROR]:
Sends an E-mail when an error occurred in the self-diagnosis.
[INTAKE AIR TEMPERATURE]:
Sends an E-mail when the air intake temperature has reached the value set at the above field.
[PERIODIC REPORT]:
Place a check mark on this to send an E-mail periodically.
E-mails will be sent on the days of week and time with the check marks.

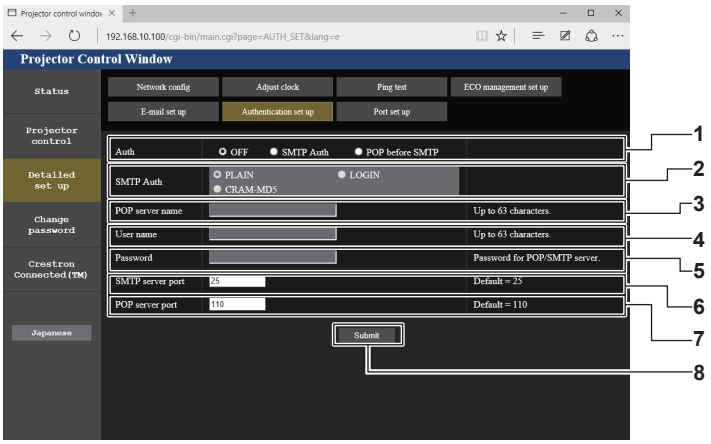
9 [E-MAIL ADDRESS 2]
If you use the second E-mail address, enter the E-mail address to send E-mails.
Leave it blank when you do not use the second E-mail address.

10 Settings of the conditions to send E-mail
Select the conditions to send E-mails to the second E-mail address.
[MAIL CONTENTS]:
Select either [NORMAL] or [SIMPLE].
[ERROR]:
Sends an E-mail when an error occurred in the self-diagnosis.
[INTAKE AIR TEMPERATURE]:
Sends an E-mail when the air intake temperature has reached the value set at the above field.
[PERIODIC REPORT]:
Place a check mark on this to send an E-mail periodically to the second E-mail address.
E-mails will be sent at the days of week and time with the check marks.

11 [Submit] button
Updates the settings.

[Authentication set up] page

Set the authentication items when POP authentication or SMTP authentication is necessary to send an E-mail.
Click [Detailed set up] → [Authentication set up].



1 [Auth]
Select the authentication method specified by your Internet service provider.

2 [SMTP Auth]
Set when the SMTP authentication is selected.

3 [POP server name]
Enter the POP server name.
Allowed characters:
Alphanumerics (A - Z, a - z, 0 - 9)
Minus sign (-) and period (.)

4 [User name]
Enter the user name for the POP server or the SMTP server.

5 [Password]
Enter the password for the POP server or the SMTP server.

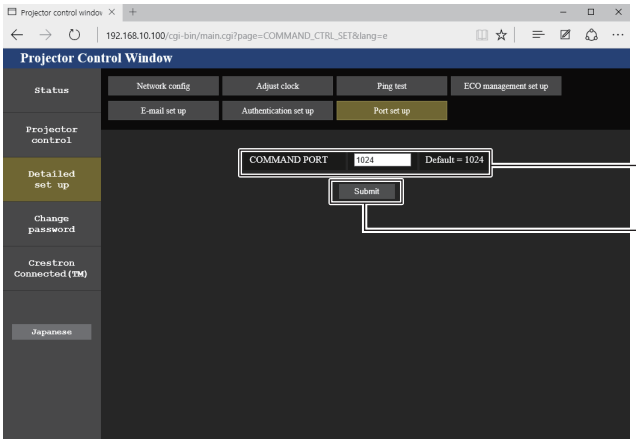
6 [SMTP server port]
Enter the port number of the SMTP server.
(Normally 25)

7 [POP server port]
Enter the port number of the POP server.
(Normally 110)

8 [Submit] button
Updates the settings.

[Port set up] page

Set the port number used for command control.
Click [Detailed set up] → [Port set up].



1 [COMMAND PORT]
Enter the port number used for command control.

2 [Submit] button
Updates the settings.

Contents of E-mail sent

Example of the E-mail sent when E-mail is set

The following E-mail is sent when the E-mail settings have been established.

```
=== Panasonic projector report(CONFIGURE) ===
Projector Type          : JX200GBE
Serial No               : 000000000000

-----  E-mail setup data -----
TEMPERATURE WARNING SETUP
MINIMUM TIME            at [ 60] minutes interval
INTAKE AIR TEMPERATURE  Over [ 32 degC / 89 degF ]

ERROR                   [ ON  ]
INTAKE AIR TEMPERATURE  [ OFF ]
PERIODIC REPORT
Sunday   [ ON ] Monday [ ON ] Tuesday  [ ON ] Wednesday [ ON ]
Thursday [ ON ] Friday [ ON ] Saturday [ ON ]
00:00 [ ON ] 01:00 [ ON ] 02:00 [ ON ] 03:00 [ ON ]
04:00 [ ON ] 05:00 [ ON ] 06:00 [ ON ] 07:00 [ ON ]
08:00 [ ON ] 09:00 [ ON ] 10:00 [ ON ] 11:00 [ ON ]
12:00 [ ON ] 13:00 [ ON ] 14:00 [ ON ] 15:00 [ ON ]
16:00 [ ON ] 17:00 [ ON ] 18:00 [ ON ] 19:00 [ ON ]
20:00 [ ON ] 21:00 [ ON ] 22:00 [ ON ] 23:00 [ ON ]

-----  check system -----
MAIN CPU BUS                  [ OK ]
FAN                           [ OK ]
INTAKE AIR TEMPERATURE        [ OK ]
OPTICS MODULE TEMPERATURE     [ OK ]
LD MODULE TEMPERATURE         [ OK ]
LOW-TEMPERATURE               [ OK ]
LD STATUS                     [ OK ]
INTAKE AIR TEMP.SENSOR        [ OK ]
OPTICS MODULE TEMP.SENSOR     [ OK ]
LD MODULE TEMP.SENSOR         [ OK ]
BATTERY                       [ OK ]
PHOSPHOR WHEEL                [ OK ]
COLOR WHEEL                   [ OK ]
(Error code 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00)

Intake air temperature     : 31 degC /  87 degF
Optics module temperature  : 28 degC /  82 degF
PROJECTOR RUNTIME          30 H
LIGHT RUNTIME              30 H

-------- Current status ---------
MAIN VERSION         1.00
NETWORK VERSION      1.00
SUB VERSION          1.00
POWER STATUS         POWER=ON
INPUT                HDMI
SIGNAL NAME          ---
SIGNAL FREQUENCY     ---kHz / ---Hz

----- Wired Network configuration -----
DHCP Client          OFF
IP address           192.168.10.100
MAC address          00:16:E8:6A:42:7E

----- Wireless Network configuration -----
DHCP Client          OFF
IP address           192.168.12.100
MAC address          C0:D9:62:F5:46:5B

Sat Oct 01 10:15:13 2016

----- Memo -----
```

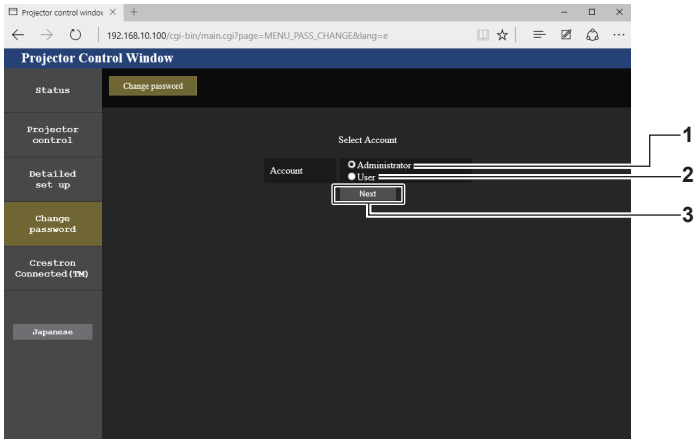
Example of the E-mail sent for an error

The following E-mail is sent when an error has occurred.

```
=== Panasonic projector report(ERROR) ===
Projector Type          : JX200GBE
Serial No               : 000000000000

-----  check system -----
MAIN CPU BUS                  [ OK ]
FAN                           [ OK ]
INTAKE AIR TEMPERATURE        [ OK ]
OPTICS MODULE TEMPERATURE     [ OK ]
LD MODULE TEMPERATURE         [ OK ]
LOW-TEMPERATURE               [ FAILED ]
LD STATUS                     [ FAILED ]
INTAKE AIR TEMP.SENSOR        [ OK ]
OPTICS MODULE TEMP.SENSOR     [ OK ]
LD MODULE TEMP.SENSOR         [ OK ]
BATTERY                       [ OK ]
PHOSPHOR WHEEL                [ OK ]
COLOR WHEEL                   [ OK ]
(Error code 00 00 00 00 00 00 00 00 00 00 00 00 04 00 02 10)

Intake air temperature     : 31 degC /  87 degF
Optics module temperature  : 28 degC /  82 degF
PROJECTOR RUNTIME          30 H
LIGHT RUNTIME              30 H

-------- Current status ---------
MAIN VERSION          1.00
NETWORK VERSION       1.00
SUB VERSION           1.00
POWER STATUS          POWER=ON
INPUT                 HDMI
SIGNAL NAME           ---
SIGNAL FREQUENCY      ---kHz / ---H

----- Wired Network configuration -----
DHCP Client           OFF
IP address            192.168.10.100
MAC address           00:16:E8:6A:42:7E

----- Wireless Network configuration -----
DHCP Client           OFF
IP address            192.168.12.100
MAC address           C0:D9:62:F5:46:5B

Sat Oct 01 10:15:13 2016

----- Memo -----
```

[Change password] page

Click [Change password].

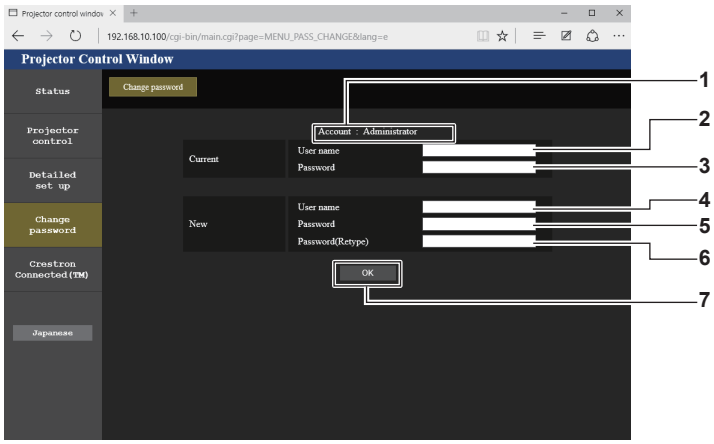


1 [Administrator]
Used to change the setting of the [Administrator].

2 [User]
Used to change the setting of the [User].

3 [Next] button
Used to change the setting of the password.

[Administrator] account



1 [Account]
Displays the account to change.

2 [Current] [User name]
Enter the user name before the change.

3 [Current] [Password]
Enter the current password.

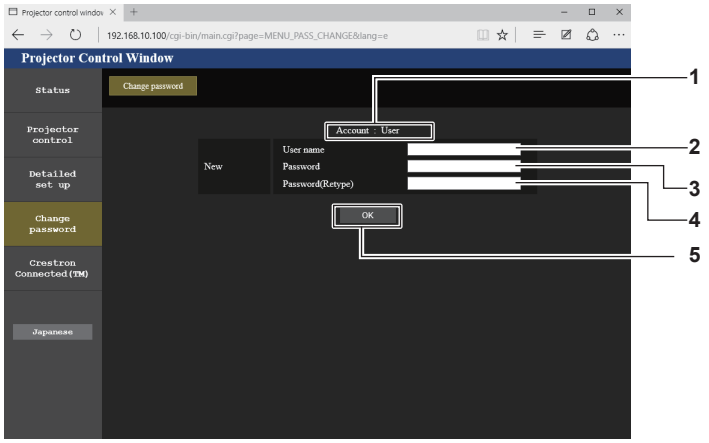
4 [New] [User name]
Enter the desired new user name. (Up to 16 characters in single byte)

5 [New] [Password]
Enter the desired new password. (Up to 16 characters in single byte)

6 [New] [Password(Retype)]
Enter the desired new password again.

7 [OK] button
Determines the change of password.

[User] account



1 [Account]
Displays the account to change.

2 [New] [User name]
Enter the desired new user name. (Up to 16 characters in single byte)

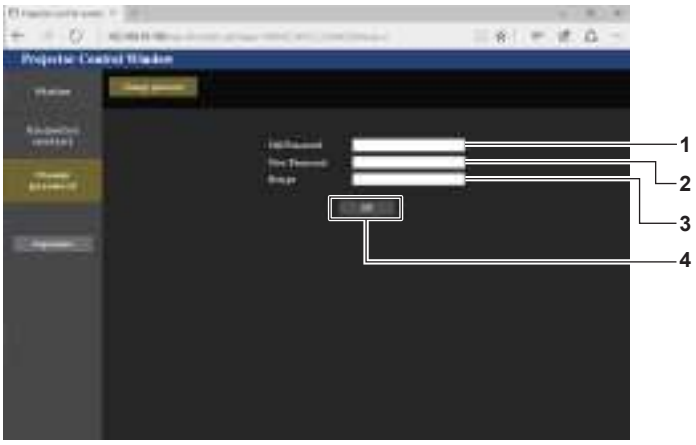
3 [New] [Password]
Enter the desired new password. (Up to 16 characters in single byte)

4 [New] [Password(Retype)]
Enter the desired new password again.

5 [OK] button
Determines the change of password.

[Change password] (For user rights)

Only the change of password is enabled under the user rights.



1 **[Old Password]**
Enter the current password.

2 **[New Password]**
Enter the desired new password. (Up to 16 characters in single byte)

3 **[Retype]**
Enter the desired new password again.

4 **[OK] button**
Determines the change of password.

Note

- To change the account of the administrator, you must enter the [User name] and [Password] in [Current].

[Crestron Connected(TM)] page

The projector can be monitored/controlled with Crestron Connected™.

To start the Crestron Connected™ operation page from the web control screen, you need to access with the administrator rights. (For user rights, the [Crestron Connected(TM)] button is not displayed on the web control screen.)

The operation page of Crestron Connected™ is displayed by clicking [Crestron Connected(TM)].

It is not displayed if Adobe® Flash® Player is not installed on your computer or your web browser does not support Flash. In that case, click [Back] on the operation page to go back to the previous page.

Operation page

1 **[Tools] / [Info] / [Help] tab**
Tabs for switching the setting, information, or help page of the projector.

2 **[POWER] button**
Switches off/on the power.

3 **[VOL DOWN] / [AV MUTE] / [VOL UP] button**
Operates the volume/AV mute. These operations are not available when the projector is turned off.

4 **[Input Select] button**
Controls input selection.
The operation is not available when the projector is turned off.

5 **Menu screen control buttons**
Operates the menu screen.

6 **Image quality adjustment button**
Operates image quality settings.

7 **[Back] button**
Goes back to the previous page.

Attention

- When you turn on the projector, be careful so that the eyes of people around the projector are not exposed to the sudden light from the light source.
  Or operate the projector only if the eyes of people around the projector are not exposed to the light from the light source even when projection starts suddenly.

[Tools] page

Click the [Tools] tab on the operation page.

1 [Control System]
Sets the information required for communicating with the controller to be connected with the projector.

2 [User Password]
Sets the user rights password for the Crestron Connected™ operation page.

3 [Admin Password]
Sets the administrator rights password for the Crestron Connected™ operation page.

4 Network status
Displays the settings of wired LAN.
[DHCP]
Displays the current setting value.
[IpAddress]
Displays the current setting value.
[SubnetMask]
Displays the current setting value.
[DefaultGateway]
Displays the current setting value.
[DNSServer]
Displays the current setting value.

5 [Exit] button
Returns to the operation page.

[Info] page

Click the [Info] tab on the operation page.

1 [Projector Name]
Displays the projector name.

2 [Mac Address]
Displays the MAC address.

3 [Lamp Hours]
Displays the runtime of the light source.

4 [Power Status]
Displays the status of the power.

5 [Source]
Displays the selected image input.

6 [Lamp Mode]
Displays the light source mode.

7 [Error Status]
Displays the error status.

8 [Exit] button
Returns to the operation page.

[Help] page

Click the [Help] tab on the operation page.
The [Help Desk] window is displayed.

1 [Help Desk]
Sends/receives messages to/from an administrator who uses Crestron Connected™.

MIRRORING function

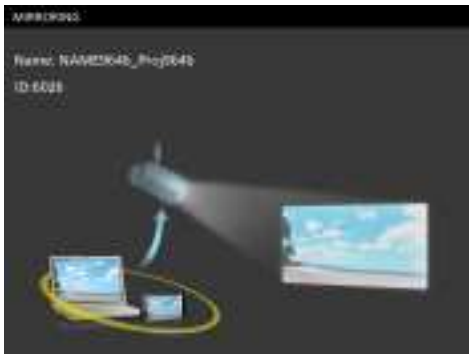
MIRRORING is a function which enables the projector to project the same image as that displayed on a device. This function connects a device compatible with Intel® WiDi / Intel® Pro WiDi / Miracast to the projector via wireless LAN to display the device screen with the projector.

Connecting a Intel® WiDi / Intel® Pro WiDi / Miracast compatible device

1) Press the <MIRRORING> button.

- The input changes to MIRRORING, and the MIRRORING idle screen is displayed.

MIRRORING idle screen

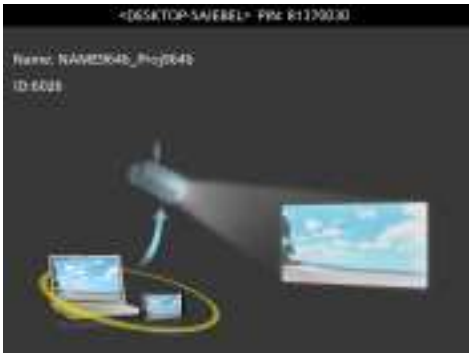


2) Start the Intel® WiDi / Intel® Pro WiDi / Miracast application on the Intel® WiDi / Intel® Pro WiDi / Miracast compatible device.

- Check the projector name and ID of the projector displayed on the MIRRORING idle screen, and then select the relevant device name on the Intel® WiDi / Intel® Pro WiDi / Miracast application.

3) When a PIN (8-digit number) is required from the device, a PIN is displayed on the MIRRORING idle screen.

PIN displayed on the MIRRORING idle screen



4) When using the Intel® WiDi / Intel® Pro WiDi / Miracast application, press the [DUPLICATE] or [EXPAND] button of the application.

Ready to Present screen

- The screen of the connected device is displayed.
- When using the Miracast application, the screen of the connected device will be displayed soon.

Note

- The name and startup method of the Intel® WiDi / Intel® Pro WiDi / Miracast application varies depending on the model.
- For the operation of Intel® WiDi / Intel® Pro WiDi / Miracast application, refer to the operating instructions of your device.

Terminating connection with the Intel® WiDi / Intel® Pro WiDi / Miracast compatible terminal

Terminate connection from the Intel® WiDi / Intel® Pro WiDi / Miracast application on the device. When disconnected, the MIRRORING idle screen is displayed.

If you terminate the connection forcibly such as turning off the device power without going through the disconnection process, it may take some time before the MIRRORING idle screen is displayed.

Note

- Miracast is a standard established by the Wi-Fi Alliance for the wireless transmission of device screens.
- Intel® WiDi and Intel® Pro WiDi are standards developed by Intel Corporation for wireless transmission between devices. They are based on the Miracast standard and integrated with other technologies and functions.
- When the [WIRELESS LAN] (➡ page 83) menu is set to [DISABLE], the MIRRORING function is also disabled.
- When using space in [PROJECTOR NAME], either the MIRRORING idle screen or the projector name displayed in the Intel® WiDi / Intel® Pro WiDi / Miracast compatible devices, the space will be replaced by an underbar (single-byte "_").

Chapter 6 Maintenance

This chapter describes troubleshooting and maintenance methods.

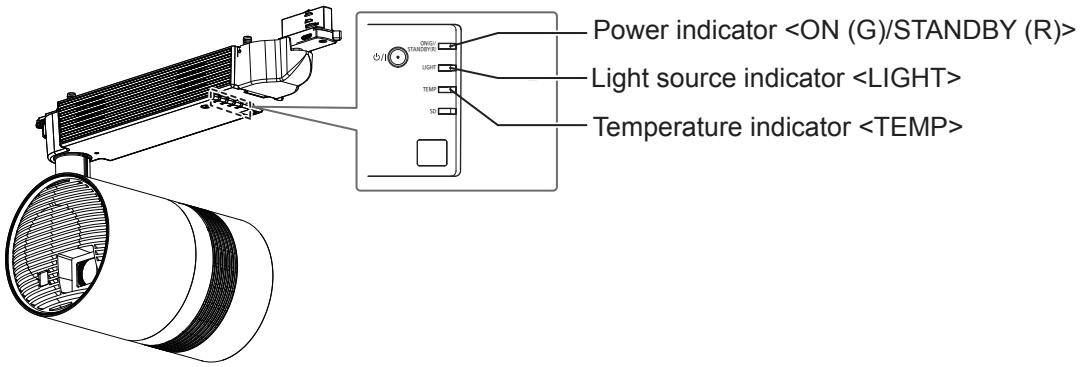
Light source/temperature indicators

When an indicator lights up

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

Attention

- Make sure to turn off the power before performing the procedure.
- Make sure to follow the procedure in “Turning off the projector” (➡ page 50) when switching off the projector.
- Check the status of the power supply with the power indicator <ON (G)/STANDBY (R)>. (➡ page 46)



Light source indicator <LIGHT>

Indicator status	Lighting in red (projecting)	Blinking in red (2 times)	Blinking in red (3 times)
Status	The light source may not light properly.	The light source does not light or is suddenly turned off.	
Cause	—		
Solution	Turn off the power supply of the track system, and then turn on the power again.		

Note

- If the light source indicator <LIGHT> is still lighting or blinking after taking above measures, ask your dealer for repair.
- When the device is projecting and no light is lighting or blinking in red, the light source indicator <LIGHT> will light in green.

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 internal cooling fan is not running.
Cause	• Is the air intake/exhaust port blocked? • Is the room temperature high?		—
Solution	• Remove any objects that are blocking the air intake/exhaust port. • Install the projector in a location with the operating environment temperature between 0 °C (32 °F) and 40 °C (104 °F)*1. • Do not use the projector at high altitudes of 2 700 m (8 858') or higher above sea level.		• Turn off the power supply of the track system, and then consult your dealer.

*1 The operating environment temperature should be between 0 °C (32 °F) and 35 °C (95 °F) when using the projector at elevations between 1 000 m (3 281') and 2 700 m (8 858') above sea level.

Note

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

Inspection and maintenance

Before maintaining the projector

Attention

- Make sure to turn off the power before maintaining the projector. (➡ page 50)
- When switching off the projector, make sure to follow the procedures in “Turning off the projector” (➡ page 50).

WARNING

Be sure to turn off the power of the track system before maintaining the projector.
Electric shocks can result.

Maintenance

Outer case

Wipe off dirt and dust with 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, or household cleaners. Doing so may deteriorate the outer case.
- When using chemically treated dust cloths, follow the instructions written on its packaging.

Projection lens

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

- Do not use a cloth that is fluffy, dusty, or soaked with oil/water.
- Since the lens is fragile, do not use excessive force when wiping the lens.

Attention

- The lens is made of glass. Hitting with a hard object or excessive force when wiping may scratch its surface. Handle with care.

Cleaning inside the projector

In certain environments, such as in dusty locations, dust accumulated around the intake and exhaust ports may degrade ventilation, cooling, and heat venting, and brightness may decrease as a result.
If brightness is noticeably reduced and the light source does not turn on, ask your dealer to clean inside the projector or replace the light source unit.

Inspection

Ask your dealer for inspection by an expert at least once every three years.
If the projector is used for prolonged periods without inspection, it may catch fire, cause an electric shock, or fall.

- For information about inspection costs, consult your dealer.

Attention

- Do not leave the product in place after use. Put it away immediately to prevent it falling in the event of an earthquake, etc.

Troubleshooting

Review the following points. For details, see the corresponding pages.

Problems	Points to be checked	Page
Power does not turn on.	• Is the track system properly installed?	33
	• Is the power supply of the track system turned on?	—
	• After executing [ALL USER DATA] in the [SETUP] menu → [INITIALIZE], is the power supply of the track system turned back on or the plug of the power cord reconnected?	80
	• Is the temperature indicator <TEMP> or the light source indicator <LIGHT> lighting or blinking?	134
No image appears.	• Are connections to external devices correctly performed?	43
	• Is the input selection setting correct?	51, 76
	• Is the [BRIGHTNESS] adjustment setting at a minimum?	62
	• Is the external device that is connected to the projector working properly?	—
	• Is the AV mute function in use?	56
Image is fuzzy.	• Is the lens focus set correctly?	52
	• Is the projection distance appropriate?	30
	• Is the lens dirty?	19
Color is pale or grayish.	• Are [COLOR] and [TINT] adjusted correctly?	62
	• Is the external device connected to the projector adjusted correctly?	43
Remote control does not respond.	• Are the batteries depleted?	—
	• Is the battery polarity (+, –) correct?	26
	• Is there any obstruction between the remote control and the remote control signal receiver of the projector power supply unit?	22
	• Is the remote control being used beyond its effective operation range?	22
	• Are other forms of light, such as fluorescent light, affecting the projection?	22
	• Is the ID number setting operation correct?	56
Video from HDMI compatible device does not appear or it appears jumbled.	• Is the HDMI cable connected securely?	43
	• Turn the power of the projector and the external device off and on.	—
	• Is a signal which is not compatible with the projector being input?	149
No audio is coming from the HDMI compatible device.	• Set audio of the external device to Linear PCM.	—
When spotlight is displayed, no audio is coming from the external device.	• When spotlight is displayed with the [LIGHTING] menu → [PATTERN] → [BACK GROUND] set to [BLACK], no audio is output.	66
Operation noise occurs during standby	• When the [SETUP] menu → [ECO MANAGEMENT] → [STANDBY MODE] is set to [NORMAL], the internal cooling fan may operate even during standby.	75

Attention

- If problems persist even after checking the preceding points, consult your dealer.

FAQ

Refer to the following when you have problems with the wireless LAN connection.

The connection with the wireless LAN is lost.

- Under certain reception conditions, the image may be disrupted. In such a case, try the following.
  - Move the device connected over the wireless LAN closer to the projector.
  - Install the projector away from devices that emit electromagnetic radiation, such as microwave ovens, gaming consoles. If it does not improve, refrain from using other devices that emit electromagnetic radiation.
  - The bandwidth of the wireless may not be sufficient when multiple wireless devices are connected to a single router. Turn off or refrain from using other devices.
  - Where possible, try not use in a location where excessive static electricity is generated.
- When the connection with wireless LAN is not possible, set the [NETWORK] menu → [WIRELESS LAN] (➡ page 83) to [DISABLE], and perform the wireless LAN connection again. The resume process of the wireless module will operate.

Also, when there is a problem with the MIRRORING connection, refer to the following.

Connection with MIRRORING is not possible.

- Is the [NETWORK] menu → [WIRELESS LAN] (➡ page 83) set to [DISABLE]?
- Is the input of the projector set to [MIRRORING]?
- Check the settings of the Intel® WiDi / Intel® Pro WiDi / Miracast compatible device. Refer to the operating instructions of the Intel® WiDi / Intel® Pro WiDi / Miracast compatible device for the connection method with MIRRORING.
- Is there any obstacle between the Intel® WiDi / Intel® Pro WiDi / Miracast compatible device and the projector? Also, is the Intel® WiDi / Intel® Pro WiDi / Miracast compatible device too far away from the projector? Remove the obstacle and bring the Intel® WiDi / Intel® Pro WiDi / Miracast compatible device closer.
- The connection information may be present in the “Paired devices” column of the Intel® WiDi / Intel® Pro WiDi / Miracast compatible device, but it is not possible to reconnect from that screen. Connect instead from the list of connectable devices.
- The devices available for Intel® WiDi / Intel® Pro WiDi / Miracast may not be able to connect properly after recovering from sleep or switching login users. Turn off and on the wireless LAN or restart the device.
- When the device cannot be connected or the list of connectable devices does not appear, it can be improved by switching the [NETWORK] menu → [MIRRORING] to [SINGLE].

The connection is suddenly lost and image is not updated.

- If a problem occurs, such as the MIRRORING standby screen not being displayed, normal sound not being output, or not being able to connect, perform the following to restore.
  - Set [STANDBY MODE] in the [SETUP] menu → [ECO MANAGEMENT] (➡ page 75) to [ECO], and turn off/on the projector. (If it is already set to [ECO], the change of [STANDBY MODE] is not necessary.)
  - Turn off the power, and then turn on the power supply of the track system again.
  - Turn the Intel® WiDi / Intel® Pro WiDi / Miracast compatible device and the projector off and then on again.

Image of MIRRORING is disrupted.

- When the [NETWORK] menu → [WIRELESS LAN] (➡ page 83) is set to [USER], if the radio communication of MIRRORING is affected, the image and audio may be disrupted. In this case, set the [NETWORK] menu → [WIRELESS LAN] to [SIMPLE] or [M-DIRECT].
- Since MIRRORING uses wireless connection, the image may be disrupted depending on the radio environment. In such a case, try the following.
  - Bring the Intel® WiDi / Intel® Pro WiDi / Miracast compatible device closer to the projector.
  - Install the projector away from devices that emit electromagnetic radiation, such as microwave ovens, gaming consoles. If it does not improve, refrain from using other devices that emit electromagnetic radiation.
  - The bandwidth of the wireless may not be sufficient when multiple wireless devices are connected to a single router. Turn off or refrain from using other devices.
  - First cut off the MIRRORING connection, change to a different channel from the [NETWORK] menu → [MIRRORING] → [CHANNEL], and then reconnect MIRRORING after the change and confirm the result.
- The image may be disrupted when there is a problem with the content itself, so check the content.
- The image of the MIRRORING may be disrupted because of the type of Intel® WiDi / Intel® Pro WiDi / Miracast compatible device in use. In this case, the problem is the processing performance or wireless transmission performance of the Intel® WiDi / Intel® Pro WiDi / Miracast compatible device, and not a malfunction of the projector.

The connection was lost when no operation was performed after connecting with MIRRORING.

- The connection may be disconnected after specific time due to the type of Intel® WiDi / Intel® Pro WiDi / Miracast compatible device in use. Check the power save setting, etc., of the device.
- This may be improved by updating the wireless driver or the firmware. Contact the support service of the manufacturer of the device in use.

Other

- Depending on the Intel® WiDi / Intel® Pro WiDi / Miracast compatible device in use, a confirmation screen for reconnection with connection name of “from UNKNOWN” may be displayed. In this case, however, reconnection will not be possible, so select CANCEL.
- Depending on the Intel® WiDi / Intel® Pro WiDi / Miracast compatible device in use, it may be required to remove the device during connecting. In such a case, delete the device following the instruction of the device.

Chapter 7 Appendix

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

Technical information

Using the PJLink protocol

The projector supports PJLink Class 1. This means a computer can use the PJLink protocol to operate the projector or query its status.

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 condition Power on condition		
INPT	Input selection	31 41 42	HDMI MEMORY VIEWER SIGNAGE		
INPT?	Input selection query	51 52	Panasonic APPLICATION MIRRORING		
AVMT	AV mute control	30	AV mute function off		
AVMT?	AV mute function query	31	AV mute function on		
ERST?	Error status query	xxxxxx	1st byte	Indicates fan errors, and returns 0 or 2.	• 0 = No error is detected • 1 = Warning • 2 = Error
			2nd byte	Indicates light source errors, and returns 0 or 2.	
			3rd byte	Indicates temperature errors, and returns 0 - 2.	
			4th byte	Returns 0.	
			5th byte	Returns 0.	
			6th byte	Indicates other errors, and returns 0 - 2.	
LAMP?	Light source status query	xxxxxx	1st - 5th bytes: light source runtime 6th byte: 0 = light source not lighted; 1 = light source lighted		
NAME?	Projector name query	xxxxx	Returns the name set in [PROJECTOR NAME] of [NETWORK].		
INF1?	Manufacturer name query	Panasonic	Returns manufacturer name.		
INF2?	Model name query	JX200GBE/ JX200GWE	Returns model name.		
INF0?	Other information queries	xxxxx	Returns information such as version number.		
CLSS?	Class information query	1	Returns class for PJLink.		

PJLink security authentication

The password used for PJLink is the same as that of the password set for web control.

When using the projector without security authentication, do not set a password for web control.

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

  URL http://pjlink.jbmia.or.jp/english/

Using Art-Net function

Since projector supports the Art-Net function, the projector settings can be performed via the Art-Net protocol on the DMX controller or using application software.

Channel definition

The following table lists the channel definitions used for controlling the projector with the Art-Net function.

Channel	Control details	Performance	Parameter	Default value	Remark
1	Light output adjustment	100 %	0	0	Can be set in 256 steps between 100 % and 0 %.
		…	…		
		0 %	255		
2	Connection selection	No operation	0-7	0	—
		HDMI	8-39		
		Memory Viewer	40-71		
		No operation	72-255		
6	Lens focus	Focus adjustment (-) fast	0-31	128	—
		Focus adjustment (-) moderate	32-63		
		Focus adjustment (-) slow	64-95		
		No operation	96-159		
		Focus adjustment (+) slow	160-191		
		Focus adjustment (+) moderate	192-223		
		Focus adjustment (+) fast	224-255		
7	Lens zoom	Zoom adjustment (-) fast	0-31	128	—
		Zoom adjustment (-) moderate	32-63		
		Zoom adjustment (-) slow	64-95		
		No operation	96-159		
		Zoom adjustment (+) slow	160-191		
		Zoom adjustment (+) moderate	192-223		
		Zoom adjustment (+) fast	224-255		
8	Power supply	Power standby	0-63	128	—
		No operation	64-191		
		Power on	192-255		
11	Enable/disable	Operation not available	0-127	0	When “Operation not available” is set, operations of all channels become unacceptable.
		Operation available	128-255		
13	Memory Viewer	No operation from the <0> button on remote control	0-127	0	Corresponds to the direct playback function of Memory Viewer. The number buttons on remote control mentioned on the left indicate the following. − Number (<1> - <6>) buttons when operating by the supplied remote control − Number (<0> - <9>) buttons when operating by the browser remote control of Wireless Manager ME6.3
		Input from the <0> button on remote control	128-255		
14		No operation from the <1> button on remote control	0-127	0	
		Input from the <1> button on remote control	128-255		
15		No operation from the <2> button on remote control	0-127	0	
		Input from the <2> button on remote control	128-255		
16		No operation from the <3> button on remote control	0-127	0	
		Input from the <3> button on remote control	128-255		
17		No operation from the <4> button on remote control	0-127	0	
		Input from the <4> button on remote control	128-255		
18		No operation from the <5> button on remote control	0-127	0	
		Input from the <5> button on remote control	128-255		

Channel	Control details	Performance	Parameter	Default value	Remark
19	Memory Viewer	No operation from the <6> button on remote control	0-127	0	Corresponds to the direct playback function of Memory Viewer. The number buttons on remote control mentioned on the left indicate the following. − Number (<1> - <6>) buttons when operating by the supplied remote control − Number (<0> - <9>) buttons when operating by the browser remote control of Wireless Manager ME6.3
		Input from the <6> button on remote control	128-255		
20		No operation from the <7> button on remote control	0-127	0	
		Input from the <7> button on remote control	128-255		
21		No operation from the <8> button on remote control	0-127	0	
		Input from the <8> button on remote control	128-255		
22		No operation from the <9> button on remote control	0-127	0	
		Input from the <9> button on remote control	128-255		

Note

- If the projector is operated with the remote control or by the control command while controlling the projector using the Art-Net function, the setting of the DMX controller and the computer application may be different from the projector status. In this case, set “Lock” of channel 11 to “Operation not available” and then set back to “Operation available” so that the controls of all channels are applied to the projector.

Control commands via LAN

When the projector is connected to a computer via a LAN, the computer can use control commands to operate the projector and query its status.

When web control administrator rights password is set (Protect mode)

Connecting method

1) Obtain the IP address and port number (Initial set value = 1024) of the projector and request a connection to the projector.

- Both the IP address and the port number can be obtained from the menu screen of the projector.

IP address	Obtain from the main menu → [NETWORK] → [NETWORK STATUS]
Port number	Obtain from the main menu → [NETWORK] → [NETWORK CONTROL] → [COMMAND PORT]

2) Check the response from the projector.

	Data section	Blank	Mode	Blank	Random number section	Termination symbol
Command example	“NTCONTROL” (ASCII string)	‘ ’ 0x20	‘1’ 0x31	‘ ’ 0x20	“zzzzzzzz” (ASCII code hex number)	(CR) 0x0d
Data length	9 bytes	1 byte	1 byte	1 byte	8 bytes	1 byte

- Mode: 1 = Protect mode

3) Generate a 32-byte hash value from the following data using MD5 algorithm.

- “xxxxxx:yyyyy:zzzzzzzz”

xxxxxx	Administrator rights user name for the web control (default user name is “admin1”)
yyyyy	Password of above administrator rights user (default password is “panasonic”)
zzzzzzzz	8-byte random number obtained in Step **2)**

Command transmission method

Transmit using the following command formats.

■ Transmitted data

	Header			Data section	Termination symbol
Command example	Hash value (Refer to “Connecting method” above)	‘0’ 0x30	‘0’ 0x30	Control command (ASCII string)	(CR) 0x0d
Data length	32 bytes	1 byte	1 byte	Undefined length	1 byte

■ Received data

	Header		Data section	Termination symbol
Command example	‘0’ 0x30	‘0’ 0x30	Control command (ASCII string)	(CR) 0x0d
Data length	1 byte	1 byte	Undefined length	1 byte

■ Error response

	String	Details	Termination symbol
Message	“ERR1”	Undefined control command	(CR) 0x0d
	“ERR2”	Out of parameter range	
	“ERR3”	Busy state or no-acceptable period	
	“ERR4”	Timeout or no-acceptable period	
	“ERR5”	Wrong data length	
	“ERRA”	Password mismatch	
Data length	4 bytes	—	1 byte

When web control administrator rights password is not set (Non-protect mode)

Connecting method

1) Obtain the IP address and port number (Initial set value = 1024) of the projector and request a connection to the projector.

- Both the IP address and the port number can be obtained from the menu screen of the projector.

IP address	Obtain from the main menu → [NETWORK] → [NETWORK STATUS]
Port number	Obtain from the main menu → [NETWORK] → [NETWORK CONTROL] → [COMMAND PORT]

2) Check the response from the projector.

	Data section	Blank	Mode	Termination symbol
Command example	“NTCONTROL” (ASCII string)	‘ ’ 0x20	‘0’ 0x30	(CR) 0x0d
Data length	9 bytes	1 byte	1 byte	1 byte

- Mode: 0 = Non-protect mode

Command transmission method

Transmit using the following command formats.

■ Transmitted data

	Header		Data section	Termination symbol
Command example	‘0’ 0x30	‘0’ 0x30	Control command (ASCII string)	(CR) 0x0d
Data length	1 byte	1 byte	Undefined length	1 byte

■ Received data

	Header		Data section	Termination symbol
Command example	‘0’ 0x30	‘0’ 0x30	Control command (ASCII string)	(CR) 0x0d
Data length	1 byte	1 byte	Undefined length	1 byte

■ Error response

	String	Details	Termination symbol
Message	“ERR1”	Undefined control command	(CR) 0x0d
	“ERR2”	Out of parameter range	
	“ERR3”	Busy state or no-acceptable period	
	“ERR4”	Timeout or no-acceptable period	
	“ERR5”	Wrong data length	
	“ERRA”	Password mismatch	
Data length	4 bytes	—	1 byte

Control command

The following table lists the commands that can be used to control the projector using a computer.

■ Projector control command/query command

Command	Details	Parameter/response string	Remark (parameter)
PON	Power on	—	To check if the power is on, use the “Power supply status query” command.
POF	Power standby	—	
QPW	Power supply status query	000 001	STANDBY status Power on status
IIS	Input/mode selection	HD1 MV1 MC1 PA1 SI1	HDMI MEMORY VIEWER MIRRORING Panasonic APPLICATION SIGNAGE
OLP	Light source power setting	0	NORMAL
QLP	Light source power setting query	1	ECO
QST	Runtime query	00000 - 99999	In hours
OSH	AV mute	0	AV mute function off
QSH	AV mute status query	1	AV mute function on
AUU	Volume up	—	—
AUD	Volume down	—	—

Glossary of network terms

Term	Description
Access point	This is a signal station for relaying signals between the wireless LAN and the computer. A computer connected to the access point can communicate via the network connected to the access point.
AES	Abbreviation for Advanced Encryption Standard. The next-generation encryption method of US government standardized by the National Institute of Standards and Technology (NIST). AES: Advanced Encryption System
Default gateway	This is equipment used to connect to a network using a different network standard from the network in use. It allows the connection between the networks by adjusting for the differences in the communication protocols. The data is sent to the host set in the default gateway when the gateway is not set in the IP address of the destination.
DHCP	Abbreviation for Dynamic Host Configuration Protocol. A protocol to automatically assign an IP address to the connected device. An IP address is automatically assigned to the device connected if a device with the DHCP server function is within the LAN.
EAP	Abbreviation for PPP Extensible Authentication Protocol. An authentication protocol expanding the PPP used during the user authentication by remote access. MD5, TLS, and S/Key are supported as the authentication method. This is the protocol supported by the wireless LAN authentication standard IEEE802.1X, and there are formats such as EAP-TLS/EAP-TTLS/EAPLEAP/EAP-PEAP/EAP-MD5.
EAP-FAST	Abbreviation for EAP-Flexible Authentication via Secure Tunneling. One of the wireless authentication methods supporting the IEEE802.1X. It enhances security by tunneling of the authentication process using a secret key encryption method not requiring a digital authentication, and mutually authenticating the tunnel. Proprietary method of Cisco Systems Inc.
EAP-TTLS	Abbreviation for EAP-Tunneled Transport Layer Security. One of the wireless authentication methods supporting the IEEE802.1X. An authentication server electronic certificate, client will perform mutual authentication by an ID/password. Authentication process will be tunneled. Developed by the Funk Software of US.
GTC (EAP-GTC)	Abbreviation for EAP-Generic Token Card. One of the wireless authentication methods supporting the IEEE802.1X. Authentication is performed using the ID password. A security token is used as the password.
IP address	IP (Internet Protocol) is a protocol to transmit data, and the IP address is the destination (address) when transmitting data on a network. The same IP address cannot be used within the same LAN.
LAN	Abbreviation for Local Area Network. This is a network with a relatively small range such as inside a company.
MAC address	An ID number unique to each network adapter. A unique number is assigned to network adapters throughout the world, and data is sent and received between the adapters based on this. This ID number is a combination of the unique number for the manufacturer managed and assigned by IEEE and the number assigned by each manufacturer to their adapter.
MD5 (EAP-MD5)	Abbreviation for EAP-Message digest algorithm 5. One of the wireless authentication methods supporting the IEEE802.1X. Authentication is performed using the ID password. Password is sent encrypted with the challenge & response format.
Miracast	A standard established by the Wi-Fi Alliance for the wireless transmission of device screens.
MS-CHAPv2 (EAP-MS-CHAPv2)	Abbreviation for EAP-Microsoft Challenge Handshake Authentication Protocol v2. One of the wireless authentication methods supporting the IEEE802.1X. Mutual authentication is performed using one way encryption password.
Open System/open	One of the wireless authentication methods using public key encryption.
PEAP	Abbreviation for EAP-Protected EAP. One of the wireless authentication methods supporting the IEEE802.1X. An authentication server electronic certificate, client will perform mutual authentication by an ID/password.
RADIUS server	RADIUS is an abbreviation of Remote Access Dial In User authentication Service, and it is a protocol used for authentication in a network such as wireless LAN. The authentication server supporting that protocol is called RADIUS server. It is not required to register the user information individually to each device even when there are multiple network devices by using the RADIUS server, allowing the integrated management of many network devices and users.
Shared Key/share	One of the wireless authentication methods using the secret key encryption, and it is a method to authenticate using the encryption key set in the WEP. This is the encryption method using same key for both encryption and decryption, and it is also called as “shared key encryption” or “common key encryption”.
SSID	Abbreviation for Service Set ID. With the wireless LAN, it is necessary to set the identification code called as SSID to differentiate if it is the access point to communicate. It may be displayed as “ESSID” or “Network name” in the wireless LAN adapter depending on the manufacturer.
Subnet mask	The network may manage the large network by dividing it to multiple smaller network called as subnet. In such case, the value to delimit the IP address is called as subnet mask.
TKIP	Abbreviation for Temporal Key Integrity Protocol. This is an encryption protocol with enhanced security protection than the WEP by changing the encryption key every specified time.
WEP	Abbreviation for Wired Equivalent Privacy. This is the method to encrypt the data to communicate. By creating an encryption key and only notifying it to the person to communicate, the communication data will not be decrypted by a third party.

Term	Description
WPA-EAP WPA2-EAP	A standard of encryption method for wireless LAN. This is an encryption method for corporation, and encryption is performed using an external server.
WPA-PSK WPA2-PSK	A standard of encryption method for wireless LAN. This is advanced security than the WEP, and it has functions such as user authentication function and TKIP (encryption protocol) that will automatically change the encryption key every specified time. Also, this authentication method does not need an authentication server.

Specifications

The specifications of the projector are as follows.

Model No.		PT-JX200GBE/PT-JX200GWE
Power supply		100 V - 240 V ~ (100 V - 240 V alternating current), 50 Hz/60 Hz
Power consumption		240 W (2.7 A - 1.1 A)
		In standby mode (when [STANDBY MODE] is set to [ECO]): 0.5 W*1
		In standby mode (when [STANDBY MODE] is set to [NETWORK]): 0.7 W*2
		In standby mode (when [STANDBY MODE] is set to [NORMAL] and the fans are stopping): 12 W
DLP chip	Size	14.0 mm (0.55") (aspect ratio 4:3)
	Display system	1-unit DLP chip, DLP type
	Number of pixels	786 432 pixels (1 024 x 768 dots)
Lens	Electric zoom	1.3 to 2.9:1
	Electric focus	F = 2.0 to 2.7 f = 15.2 mm to 32.7 mm
Light source		Laser diode (Maximum output: 36 W x 2, Wavelength: 452 - 458 nm)
Light output*3		2 000 lm (ANSI)
Contrast ratio*3		1 000:1
Projected image size		0.76 m (30") to 5.08 m (200")
Screen aspect ratio		4:3
Projection method		[FRONT]/[REAR] (On/off of vertical flip can be set with [VERTICAL FLIP])
Card slot		SD card slot*4 x 1 (supports SDHC memory card)
Outer case		Molded plastic
Outer color		PT-JX200GBE: Black, PT-JX200GWE: White
Weight		4.5 kg (9.92 lbs.)
Noise level*3		When [LIGHT POWER] is set to [NORMAL]: 33 dB When [LIGHT POWER] is set to [ECO]: 30 dB
Operating environment	Temperature*5	0 °C (32 °F) to 40 °C (104 °F)
	Humidity	10 % to 80 % (no condensation)
Remote control	Power supply	DC 3 V (AAA/R03 or AAA/LR03 battery x 2)
	Operating range	Within approx. 7 m (22'11") (when operated directly in front of signal receiver)
	Weight	63 g (2.2 ozs.) (including batteries)
	Dimensions	Width: 44 mm (1-23/32"), Height: 105 mm (4-1/8"), Depth: 20.5 mm (13/16")

*1 When the [SETUP] menu → [ECO MANAGEMENT] → [STANDBY MODE] is set to [ECO], the network function (both wireless LAN and wired LAN) cannot be used in standby mode.
*2 When the [SETUP] menu → [ECO MANAGEMENT] → [STANDBY MODE] is set to [NETWORK], the network function while in standby mode is restricted to the projector operations via wired LAN using the Wake on LAN function.
*3 Measurement, measuring conditions and method of notation all comply with ISO/IEC 21118:2012 international standards.
*4 Operations of the Panasonic SD memory card up to capacity of 2 GB and Panasonic SDHC memory card up to capacity of 32 GB are confirmed.
*5 The operating environment temperature should be between 0 °C (32 °F) and 35 °C (95 °F) when using the projector at elevations between 1 000 m (3 281') and 2 700 m (8 858') above sea level.
When using the projector at elevations lower than 1 000 m (3 281') above sea level, and the operating environment temperature becomes 35 °C (95 °F) or higher, the light output may be reduced to protect the projector. When using the projector at elevations between 1 000 m (3 281') and 2 700 m (8 858') above sea level, and the operating environment temperature becomes 30 °C (86 °F) or higher, the light output may be reduced to protect the projector.

■ Applicable scanning frequency/terminal/wireless LAN

Model No.		PT-JX200GBE/PT-JX200GWE
Applicable scanning frequency*1	HDMI signal	525 (480) /60p, 525 (480) /60i, 625 (576) /50p, 625 (576) /50i, 750 (720) /60p, 750 (720) /50p, 1125 (1080) /60p, 1125 (1080) /60i, 1125 (1080) /50p, 1125 (1080) /50i
		640 x 480/60, 800 x 600/56, 800 x 600/60, 1024 x 768/60, 1280 x 1024/60, 1280 x 720/50, 1280 x 720/60, 1280 x 768/50, 1280 x 768/60, 1280 x 800/50, 1280 x 800/60, 1600 x 900/50, 1600 x 900/60
Terminal	<HDMI IN> terminal	1 set, HDMI 19 pins, HDCP compatible Audio signal: Linear PCM (Sampling frequency: 48 kHz/44.1 kHz/32 kHz)
	<AUDIO OUT> terminal	1 set, M3 stereo mini jack (monitor output, stereo compatible) 0 V [rms] to 2.0 V [rms] (variable), output impedance 2.2 kΩ or less
	<LAN> terminal	1 set, RJ-45, for network connection, PJLink compatible, 10Base-T/100Base-TX
	<DC OUT> terminal	USB connector (type A) x 1, for power supply (DC 5 V, maximum 2 A)

Wireless LAN	**Compliance standards**	**MIRRORING mode**	IEEE802.11b/g/n: 2.412 GHz - 2.462 GHz IEEE802.11a/n: 5.180 GHz - 5.240 GHz
		M-DIRECT mode	IEEE802.11b/g/n: 2.412 GHz - 2.472 GHz IEEE802.11a/n: 5.180 GHz - 5.240 GHz
		USER mode	IEEE802.11b/g/n: 2.412 GHz - 2.472 GHz IEEE802.11a/n: 5.180 GHz - 5.240 GHz
	Modulation	DBPSK, DQPSK, CCK, BPSK, QPSK, 16QAM, 64QAM, MIMO	
	Transmission speed	IEEE802.11b: Up to 11 Mbps IEEE802.11g/a: Up to 54 Mbps IEEE802.11n: Up to 300 Mbps	
	Wireless channel	**MIRRORING mode**	IEEE802.11b/g/n: 1~11 channel IEEE802.11a/n: 36 / 40 / 44 / 48 channel
		M-DIRECT mode	IEEE802.11b/g/n: 1~13 channel IEEE802.11a/n: 36 / 40 / 44 / 48 channel
		USER mode	IEEE802.11b/g/n: 1~13 channel IEEE802.11a/n: 36 / 40 / 44 / 48 channel
	Communication distance	Approx. 30 m (98'5") (depends on the usage environment)	
	Security	Infrastructure mode WPA-PSK (TKIP/AES), WPA2-PSK (TKIP/AES), WEP (128 bit/64 bit), WPA-EAP/WPA2-EAP (PEAP [MS-CHAPv2/GTC], EAP-FAST [MS-CHAPv2/GTC], EAP-TTLS [MD5/MS-CHAPv2])	

*1 Refer to “List of compatible signals” (➡ page 149) for details of the types of video signals that can be used with the projector.

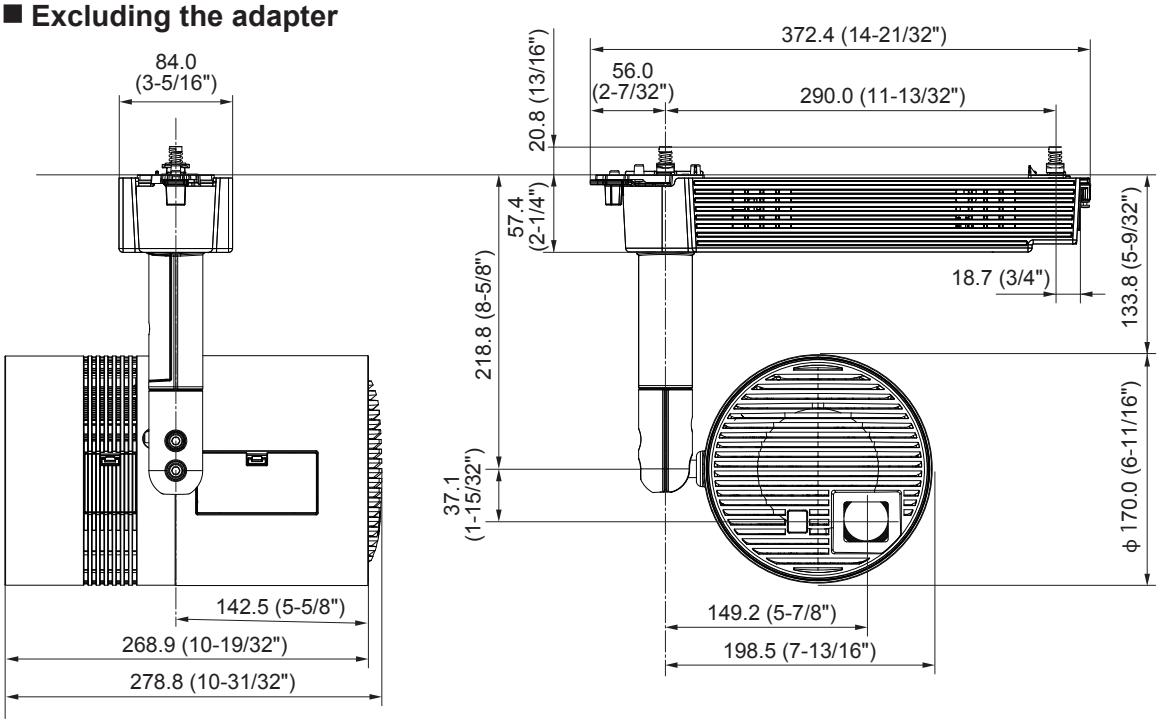
Note

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

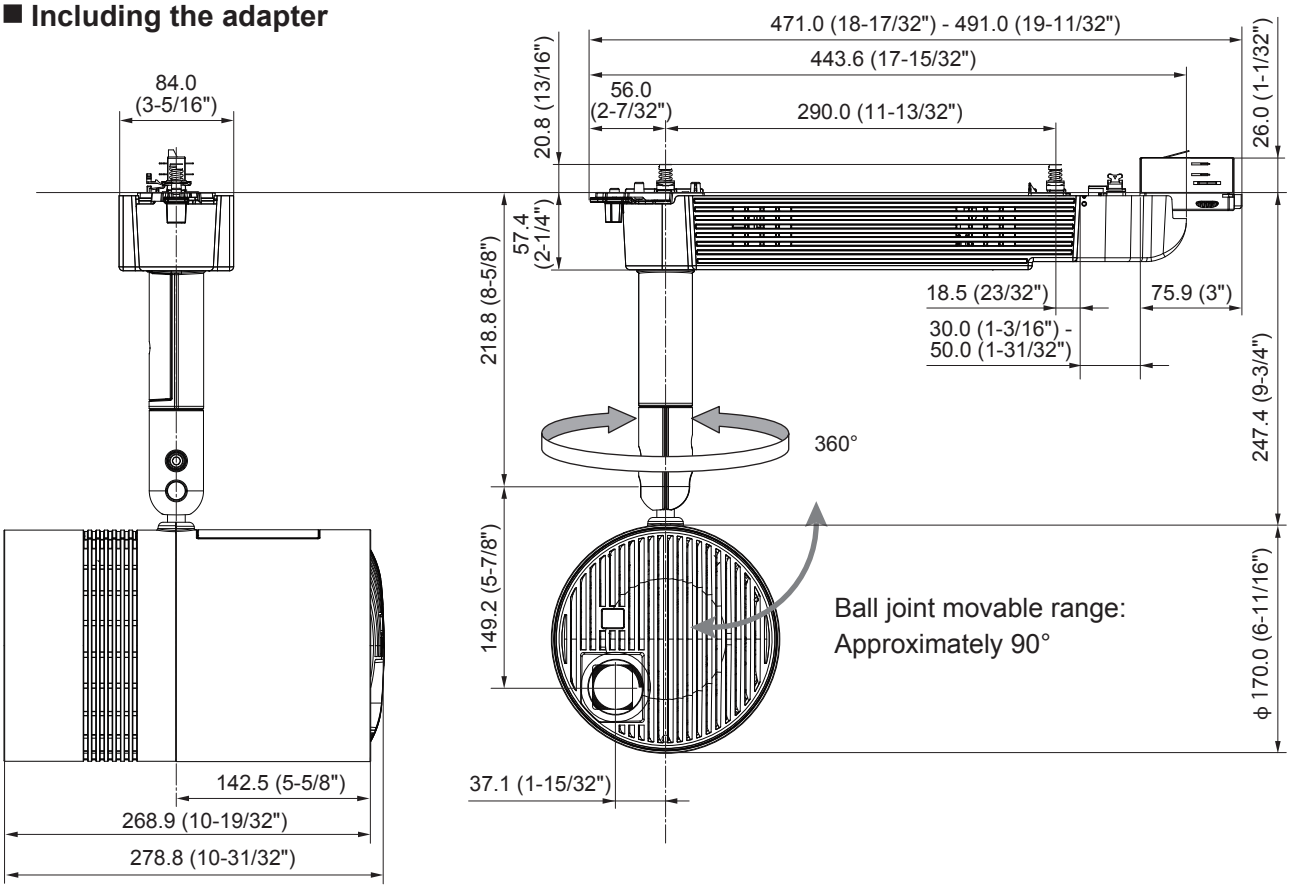
Dimensions

Unit: mm

■ Excluding the adapter



■ Including the adapter



* Actual dimensions may differ depending on the product.

List of compatible signals

The following table specifies the HDMI input video signal that the projector can project.

Mode	Resolution (Dots)	Scanning freq.		Dot clock freq. (MHz)	Plug and play*1
		Horizontal (kHz)	Vertical (Hz)		
525 (480) /60i	1 440(720) x 480	15.7	59.9	27.0	—
625 (576) /50i	1 440(720) x 576	15.6	50.0	27.0	—
525p (480) /60p	720 x 480	31.5	59.9	27.0	✓
625p (576) /50p	720 x 576	31.3	50.0	27.0	✓
750 (720) /60p	1 280 x 720	45.0	60.0	74.3	✓
750 (720) /50p	1 280 x 720	37.5	50.0	74.3	✓
1125 (1080) /60i	1 920 x 1 080	33.8	60.0	74.3	✓
1125 (1080) /50i	1 920 x 1 080	28.1	50.0	74.3	✓
1125 (1080) /60p	1 920 x 1 080	67.5	60.0	148.5	✓
1125 (1080) /50p	1 920 x 1 080	56.3	50.0	148.5	✓
640 x 480	640 x 480	31.5	59.9	25.2	✓
800 x 600	800 x 600	35.2	56.3	36.0	✓
	800 x 600	37.9	60.3	40.0	✓
1024 x 768	1 024 x 768	48.4	60.0	65.0	✓
1280 x 720	1 280 x 720	37.1	49.8	60.5	—
	1 280 x 720	44.8	59.9	74.5	—
1280 x 768	1 280 x 768	39.6	49.9	65.3	—
	1 280 x 768	47.8	59.9	79.5	—
1280 x 800	1 280 x 800	41.3	50.0	68.0	—
	1 280 x 800	49.7	59.8	83.5	✓
1280 x 1024	1 280 x 1 024	64.0	60.0	108.0	—
1600 x 900	1 600 x 900	46.4	49.9	96.5	—
	1 600 x 900	56.0	59.9	118.3	—

*1 Signals with a ✓ in the Plug and play columns are signals described in EDID (extended display identification data) of the projector. A signal, which has no ✓ in the Plug and play columns but has an entry in the Format column, can be input. For signals without a ✓ in the Plug and play columns, there are instances when resolution cannot be selected on the computer even though the projector supports them.

Note

- The picture quality may degrade due to image process depending on the input signal.

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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 municipality. 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.

Panasonic Corporation

Web Site: http://panasonic.net/avc/projector/

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