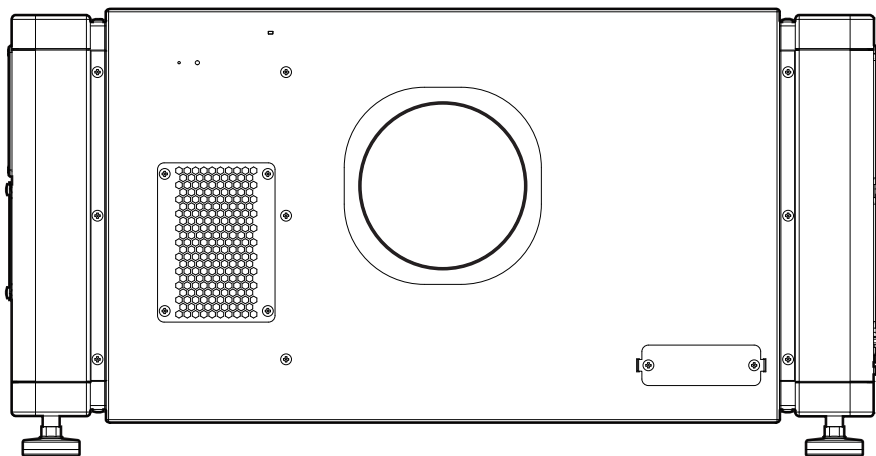# JVC

INSTRUCTIONS

D-ILA
PROJECTOR

DLA-VS4010
DLA-VS4810

D-ILA® BLU-Escent

Thank you for purchasing this JVC product.
Please study this instruction manual carefully before starting to operate the unit, in order to use the unit correctly.
We take no responsibility for any problems resulting from misuse of this unit by operating this equipment other than instructed in this manual.

For Customer use :
Enter below the model No. and the serial No. which are located on the back of the cabinet. Retain this information for future reference.

Model No.

Serial No.

B5A-2460-10

Safety Precautions

IMPORTANT INFORMATION

WARNING:
TO PREVENT FIRE OR SHOCK HAZARDS, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

WARNING:
THIS APPARATUS MUST BE EARTHED.

CAUTION:
To reduce the risk of electric shock, do not remove cover. Refer servicing to qualified service personnel.

This projector is equipped with a 3-blade grounding type plug to satisfy FCC rule. If you are unable to insert the plug into the outlet, contact your electrician.

FCC INFORMATION (U.S.A. only)

CAUTION:
Changes or modification not approved by JVC could void the user's authority to operate the equipment.

NOTE:
This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

MACHINE NOISE INFORMATION (Germany only)

Changes Machine Noise Information Ordinance 3. GSGV, January 18, 1991: The sound pressure level at the operator position is equal or less than 70 dB (A) according to ISO 7779.

About the installation place
Do not install the projector in a place that cannot support its weight securely.
If the installation place is not sturdy enough, the projector could fall or overturn, possibly causing personal injury.

IMPORTANT SAFEGUARDS

Electrical energy can perform many useful functions. This unit has been engineered and manufactured to assure your personal safety. But IMPROPER USE CAN RESULT IN POTENTIAL ELECTRICAL SHOCK OR FIRE HAZARD. In order not to defeat the safeguards incorporated into this product, observe the following basic rules for its installation, use and service. Please read these Important Safeguards carefully before use.

- All the safety and operating instructions should be read before the product is operated.
- The safety and operating instructions should be retained for future reference.
- All warnings on the product and in the operating instructions should be adhered to.
- All operating instructions should be followed.
- Place the projector near a wall outlet where the plug can be easily unplugged.
- Unplug this product from the wall outlet before cleaning.
- Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
- Do not use attachments not recommended by the product manufacturer as they may be hazardous.
- Do not use this product near water. Do not use immediately after moving from a low temperature to high temperature, as this causes condensation, which may result in fire, electric shock, or other hazards.
- Do not place this product on an unstable cart, stand, or table. The product may fall, causing serious injury to a child or adult, and serious damage to the product. The product should be mounted according to the manufacturer's instructions, and should use a mount recommended by the manufacturer.
- When the product is used on a cart, care should be taken to avoid quick stops, excessive force, and uneven surfaces which may cause the product and cart to overturn, damaging equipment or causing possible injury to the operator.

PORTABLE CART WARNING
(symbol provided by RETAC)

S3126A

- Slots and openings in the cabinet are provided for ventilation. These ensure reliable operation of the product and protect it from overheating. These openings must not be blocked or covered. (The openings should never be blocked by placing the product on bed, sofa, rug, or similar surface. It should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided and the manufacturer's instructions have been adhered to.) For proper ventilation, separate the product from other equipment, which may prevent ventilation and keep a distance.

- This product should be operated only with the type of power source indicated on the label. If you are not sure of the type of power supply to your home, consult your product dealer or local power company.
- This product is equipped with a three-wire plug. This plug will fit only into a grounded power outlet. If you are unable to insert the plug into the outlet, contact your electrician to install the proper outlet. Do not defeat the safety purpose of the grounded plug.
- The lens for this product is optional. Do not attach the power cord when the lens is not attached. Turning on the power when no lens is attached may result in fire, electric shock, or other hazards.
- Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them. Pay particular attention to cords at doors, plugs, receptacles, and the point where they exit from the product.
- For added protection of this product during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the cable system. This will prevent damage to the product due to lightning and power line surges.
- Do not overload wall outlets, extension cords, or convenience receptacles on other equipment as this can result in a risk of fire or electric shock.
- Never push objects of any kind into this product through openings as they may touch dangerous voltage points or short out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.
- Do not attempt to service this product yourself as opening or removing covers may expose you to dangerous voltages and other hazards. Refer all service to qualified service personnel.
- Unplug this product from the wall outlet and refer service to qualified service personnel under the following conditions:
  a) When the power supply cord or plug is damaged.
  b) If liquid has been spilled, or objects have fallen on the product.
  c) If the product has been exposed to rain or water.
  d) If the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the Operation Manual, as an improper adjustment of controls may result in damage and will often require extensive work by a qualified technician to restore the product to normal operation.
  e) If the product has been dropped or damaged in any way.
  f) When the product exhibits a distinct change in performance, this indicates a need for service.

- When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or with same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.
- Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.
- The product should be placed more than one foot away from heat sources such as radiators, heat registers, stoves, and other products (including amplifiers) that produce heat.
- When connecting other products such as VCR's, and DVD players, you should turn off the power of this product for protection against electric shock.
- Do not place combustibles behind the cooling fan. For example, cloth, paper, matches, aerosol cans or gas lighters that present special hazards when over heated.
- Do not look into the projection lens while the illumination lamp is turned on. Exposure of your eyes to the strong light can result in impaired eyesight.
- Do not look into the inside of this unit through vents ventilation holes), etc. Do not look at the illumination lamp directly by opening the cabinet while the illumination lamp is turned on. The illumination lamp also contains ultraviolet rays and the light is so powerful that your eyesight can be impaired.
- Do not drop, hit, or damage the light-source lamp lamp unit) in any way. It may cause the light-source lamp to break and lead to injuries. Do not use a damaged light source lamp. If the light-source lamp is broken, ask your dealer to repair it. Fragments from a broken light-source lamp may cause injuries.
- The light-source lamp used in this projector is a high pressure lamp. Be careful when disposing of the lightsource lamp. If anything is unclear, please consult your dealer.
- Do not ceiling-mount the projector to a place which tends to vibrate; otherwise, the attaching fixture of the projector could be broken by the vibration, possibly causing it to fall or overturn, which could lead to personal injury.
- Use only the accessory cord designed for this product to prevent shock.

---

* DO NOT allow any unqualified person to install the unit.

Be sure to ask your dealer to install the unit (e.g.attaching it to the ceiling) since special technical knowledge and skills are required for installation. If installation is performed by an unqualified person, it may cause personal injury or electrical shock.

POWER CONNECTION

For USA and Canada only
Use only the following power cord.

Power cord

The power supply voltage rating of this product is
AC100V – AC240V. Use only the power cord
designated by our dealer to ensure Safety and EMC.
Ensure that the power cable used for the projector is
the correct type for the AC outlet in your country.
Consult your product dealer.

Power cord
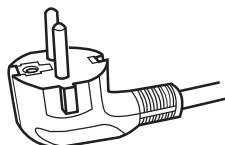
For European continent countries

WARNING:
Do not cut off the main plug from this equipment.

If the plug fitted is not suitable for the power points
in your home or the cable is too short to reach a
power point, then obtain an appropriate safety
approved extension lead or adapter or consult your
dealer. If nonetheless the mains plug is cut off,
dispose of the plug immediately, to avoid a possible
shock hazard by inadvertent connection to the main
supply. If a new main plug has to be fitted, then
follow the instruction given below.

WARNING:
THIS APPARATUS MUST BE EARTHED.

IMPORTANT (Europe only):
The wires in the mains lead on this product are
colored in accordance with the following cord:

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

As these colors may not correspond with the
colored making identifying the terminals in your
plug, proceed as follows:
The wire which is colored green-and-yellow must be
connected to the terminal which is marked M with
the letter E or the safety earth or colored green or
green-and-yellow. The wire which is colored blue
must be connected to the terminal which is marked
with the letter N or colored black.
The wire which is colored brown must be connected
to the terminal which is marked with the letter L or
colored red.

EMC Supplement

- This equipment is in conformity with the provisions
  and protection requirements of the corresponding
  European Directives.
  This equipment is designed for professional rojector
  appliances and can be used in the following
  environments.
  • Controlled EMC environment (for example
    purpose built broadcasting or recording studio),
    and the rural outdoors environment (far away from
    railways, transmitters, overhead power lines, etc).

In order to keep the best performance and
furthermore for electromagnetic compatibility we
recommend to use the cables not exceeding the
following length:

Cables		Length
Power cord	Power supply cord	3.3 m
DVI (X4) Cable	Shielded cable	5.0 m
USB Cable	Shielded cable	2.0 m
LAN Cable	Shielded cable	2.0 m
RS-232C Cable	Shielded cable	1.6 m

• The inrush current of this apparatus is 11.945
  amperes.

WARNING:
This equipment is compliant with Class A of CISPR 32.
In residential environment this equipment may cause
radio interference.

Dear Customer,
This apparatus is in conformance with the valid
European directives and standards regarding
electromagnetic compatibility and electrical safety.
European representative of
JVC KENWOOD Corporation is:
JVCKENWOOD Deutschland GmbH
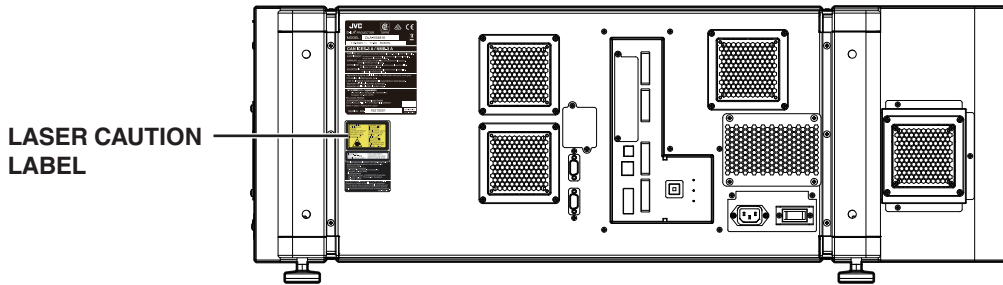Konrad-Adenauer-Allee 1-11,
61118 Bad Vilbel,
GERMANY

For the customers In the U.S.A. and Canada

CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.
This Projector is classified as a CLASS 2 LASER PRODUCT.
This CLASS 2 LASER PRODUCT label and Caution label is located on the Rear Side surface of the projector.

LASER RADIATION
DO NOT STARE
INTO THE BEAM
CLASS 2 LASER PRODUCT
WAVE LENGTH:455nm
MAX OUTPUT:49.2mW
IEC/EN60825-1:2007

RAYONNEMENT LASER
NE PAS REGARDER
DANS LE FAISCEAU
PRODUIT LASER DE CLASSE 2
LONGUEUR D'ONDE:455nm
SORTIE MAX:49,2mW
RADIACIÓN LÁSER
NO MIRE DIRECTAMENTE
AL HAZ DE LUS
CLASE 2 PRODUCTO LASER
LONGITUD DE ONDA:455nm
SALIDA MAX:49,2mW

Location information of the labels

LASER CAUTION LABEL

WARNING

LASER RADIATION
DO NOT STARE INTO THE BEAM
CLASS 2 LASER PRODUCT

CAUTION

Do not look into the lens while in use.

Light source specifications
30 W Laser diodes ×12
Wavelength 450 - 460 nm
Maximum output is 49.2 W

Beam divergence angle from lens of this unit

Wide : α=25.9°
Tele : α=15.4°

α

Laser emission port

5
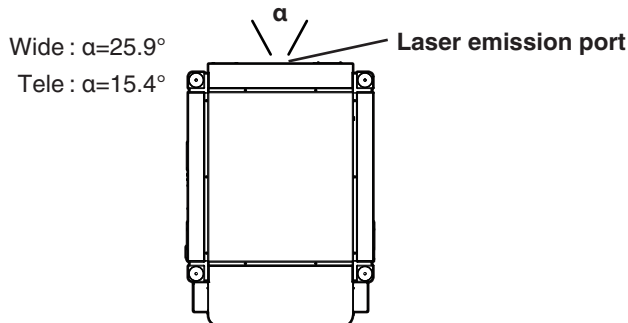
For the customers In other countries

CLASS 1 LASER PRODUCT

LASER CAUTION LABEL

IEC60825-1:2014	CLASS1 LASER PRODUCT
クラス 1 レーザー製品	LASERPRODUKT DER KLASSE 1
PRODUIT LASER DE CLASSE 1	PRODUCTO LÁSER DE CLASE 1

WARNING

Do not look into the lens while in use.

CAUTION

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

Location information of the labels

LASER CAUTION LABEL
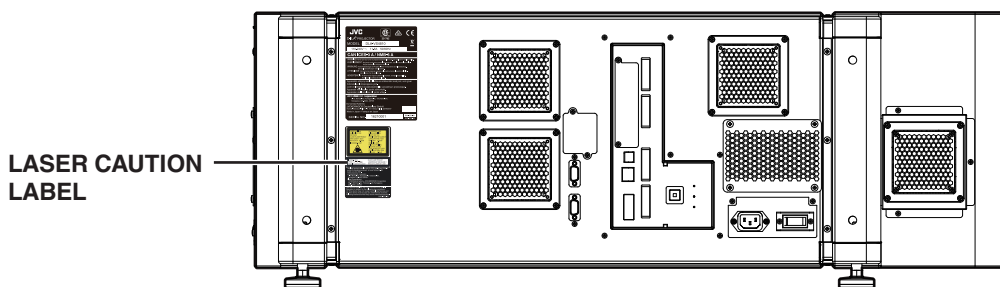
IEC62471-5

RG LABEL

警告 : 光線を見ないでください RG2   B4B-0070-00
Caution   : Do not stare into the beam, RG2
Attention   : Ne pas regarder dans le faisceau, RG2
Vorsicht   : Schauen Sie nicht direkt in den Lichtstrahl, RG2
PRECAUCIÓN : No mire directamente al haz de luz, RG2
ATTENZIONE : Non fissare il fascio luminoso, RG2
Let op   : Kijk niet in de lichtstraal, RG2
Осторожно. : Не допускайте попадание луча в глаза, RG2

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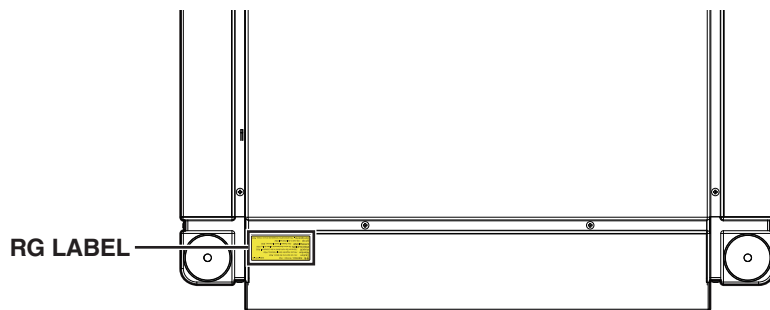
As with any bright light source, do not stare into the beam, RG2 IEC 62471-5:2015

Information for Users on Disposal of Old Equipment and Batteries

Products   **Battery**

[European Union only]

These symbols indicate that equipment with these symbols should not be disposed of as general household waste. If you want to dispose of the product or battery, please consider the collection systems or facilities for appropriate recycling.

Notice: The sign Pb below the symbol for batteries indicates that this battery contains lead.

Informations relatives à l'élimination des appareils et des piles usagés, à l'intention des utilisateurs

Produits   **Pile**

[Union européenne seulement]

Si ces symboles figurent sur les produits, cela signifie qu'ils ne doivent pas être jetés comme déchets ménagers. Si vous voulez jeter ce produit ou cette pile, veuillez considérer le système de collecte des déchets ou les centres de recyclage appropriés.

Notification: La symbole Pb en dessous du symbole des piles indique que cette pile contient du plomb.

Información para los usuarios sobre la eliminación de baterías/pilas usadas

Productos   **Baterías/pilas**

[Sólo Unión Europea]

Estos símbolos indican que el equipo con estos símbolos no debe desecharse con la basura doméstica. Si desea desechar el producto o batería/pila, acuda a los sistemas o centros de recogida para que los reciclen debidamente.

Atención: La indicación Pb debajo del símbolo de batería/pila indica que ésta contiene plomo.

Benutzerinformationen zur Entsorgung alter Geräte und Batterien

Produkte   **Batterie**

[Nur Europäische Union]

Diese Symbole zeigen an, dass derartig gekennzeichnete Geräte nicht als normaler Haushaltsabfall entsorgt werden dürfen. Wenden Sie sich zur Entsorgung des Produkts oder der Batterie an die hierfür vorgesehenen Sammelstellen oder Einrichtungen, damit eine fachgerechte Wiederverwertung möglich ist.

Hinweis: Das Zeichen Pb unterhalb des Batteriesymbols gibt an, dass diese Batterie Blei enthält.

Informazioni per gli utenti sullo smaltimento delle apparecchiature e batterie obsolete

Prodotti   **Batteria**

[Solo per l'Unione Europea]

Questi simboli indicano che le apparecchiature a cui sono relativi non devono essere smaltite tra i rifiuti domestici generici. Se si desidera smaltire questo prodotto o questa batteria, prendere in considerazione i sistem i o le strutture di raccolta appropriati per il riciclaggio corretto.

Nota: Il simbolo Pb sotto il simbolo delle batter ie indica che questa batteria contiene piombo.

Informatie voor gebruikers over het verwijderen van oude apparatuur en batterijen

Producten   **Batterij**

[Alleen Europese Unie]

Deze symbolen geven aan dat apparatuur met dit symbool niet mag worden weggegooid als algemeen huishoudelijk afval. Als u het product of de batterij wilt weggooien, kunt u inzamelsystemen of faciliteiten voor een geschikte recycling gebruiken.

Opmerking: Het teken Pb onder het batterijsymbool geeft aan dat deze batterij lood bevat.

Contents

Accessories

Power cord (for USA)
(about. 3.3 m)
.... 1 piece
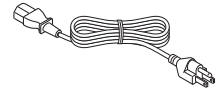
Power cord (for EU)
(about. 3.3 m)
.... 1 piece
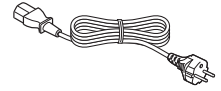
Plug Holder .... 1 piece

• Other items include the instruction manual, warranty, and other printed materials.

Content of this manual

• Personal computers or computers are expressed as computers or PCs in this manual.

• Contents of this manual are the copyright of JVC. All rights reserved.Unauthorized reproduction and duplication of this manual, in whole or in part, without the permission of JVC is strictly prohibited.

• The names of other companies' products that appear in this manual are the trademark or registered trademark of the respective companies.Symbols such as ™, ®, and © are omitted in this manual.

• Designs, specifications, and other details described in this manual may be modified for improvement without prior notice.

Names and Functions of Parts

Front/Right, Left and Rear Side
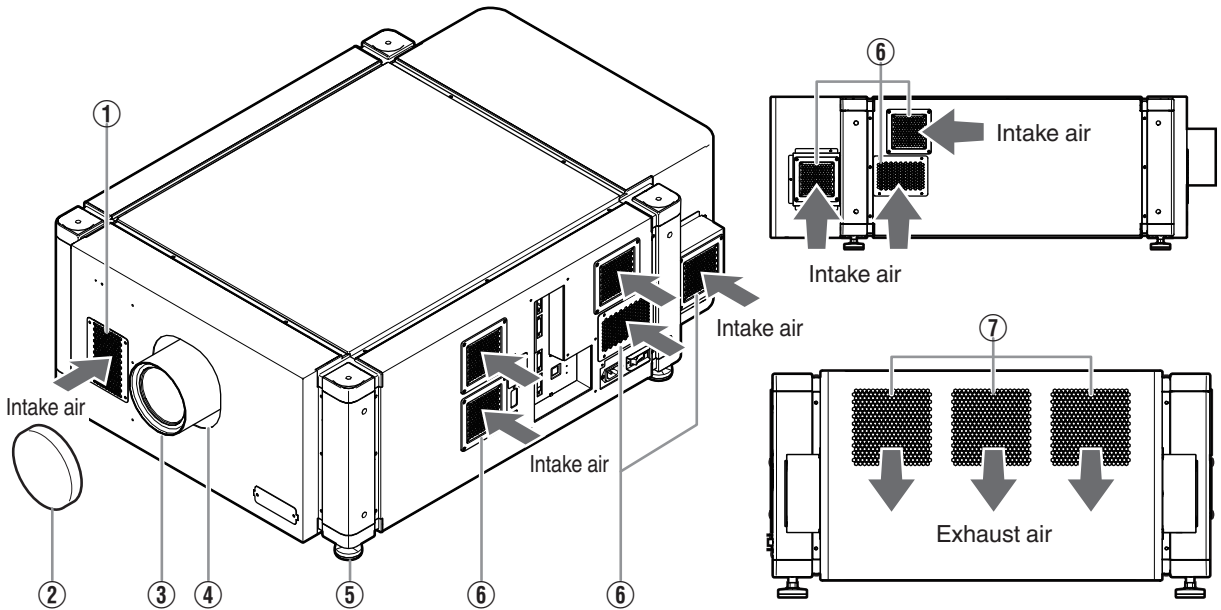
① Air Inlet/Filter

The air inlets absorb air to cool the interior of the projector. A filter is mounted inside the projector to remove dirt in the air that enters through the inlets. Clean the filter regularly. (P. 57)

• Do not block the air inlets with papers, cloth, or soft cushions. Doing so may cause heat to trap inside the projector and result in fire or malfunction.

② Lens Cap (included with the optional lens)

Fit the cap on the lens when this projector is not in use to prevent the lens from becoming dirty.

• Do not project images with the lens cap attached. The lens cap may be deformed due to the heat, or the projector may malfunction.

③ Projection Lens (optional)

Zoom lens or short focal length lens is optional. (P. 60)

Remove the lens cap before projection.

④ Lens Mounting Bracket

Mount the optional projection lens.

⑤ Adjustable Feet (x4)

Adjust the feet until the projector is level. The adjustable range is 20 mm for each. (P. 12)

### ⑥ Air Inlet/Filter (Right Side: x5, Left Side: x3)

The air inlets absorb air to cool the interior of the projector. A filter is mounted inside the projector to remove dirt in the air that enters through the inlets. Clean the filter regularly. (P. 57)

⑦ Vent Hole

Warm air exits from the hole after cooling the projector.

• Do not block the vent holes with papers, cloth, or soft cushions. Doing so may cause heat to trap inside the projector and result in fire or malfunction.

9

Right Side
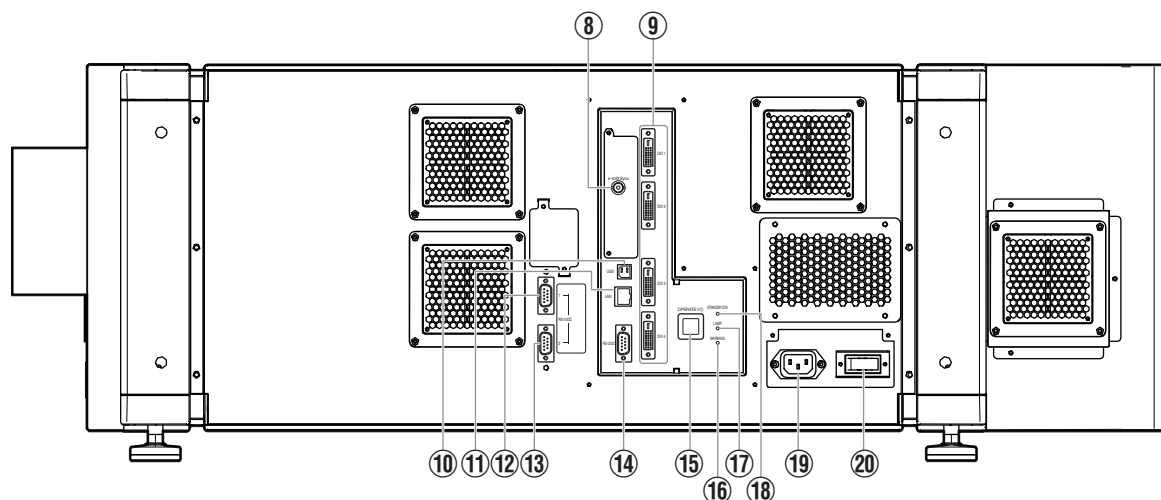
⑧ [e-shift Sync] Terminal (DLA-VS4810 only)

This is the input terminal for e-shift sync signals.

⑨ [DVI 1 to 4] Terminal

This is an input terminal for video signals. Connect it to the video output terminal of the computer. (P. 19, 21)

⑩ [USB] Terminal

Enables control of this projector by connecting it to a computer.

⑪ [LAN] Terminal

Enables control of this projector using a computer that is connected to the network.

⑫ [RS-232C 1] Terminal

⑬ [RS-232C 2] Terminal

⑭ [RS-232C] Terminal

This is the RS-232C interface-specific terminal. This projector can be controlled by connecting it to a computer using a RS-232C cable.

⑮ [OPERATE I/⏻] Button

Pressing this button for one second or longer when in the standby mode (main power supply is ON) turns on the power of the projector unit. Pressing it for one second or longer when the power is ON switches the projector to the standby mode.

⑯ [WARNING] Indicator

This indicator lights up in red when abnormality occurs on this projector.

• For details, refer to "Warnings Using Indicators"P. 53.

⑰ [LAMP] Indicator

This indicator lights up in yellow when the lifetime of the LD block exceeds 19,000 hours.

• For details, refer to "Warnings Using Indicators"P. 53.

• A message on the LD block lifespan appears when the lifetime of the LD block has exceeded 20,000 hours. (P. 52)

⑱ [STANDBY/ON] Indicator

Lit (Red) : When in the standby mode.

Lit (Green) : When power is supplied.

Blinking (Red) : When cooling down (cool down mode). (P. 31)

Blinking (Green) : When the projected image is temporarily hidden. (P. 32)

• For details, refer to "Warnings Using Indicators"P. 53.

⑲ AC Power Input Terminal

Connect the supplied cord to this terminal.

⑳ Main Power Supply Switch

Use this to turn ON/OFF the main power supply of the projector unit.

✎ MEMO

• A stand-BY condition is indicated by the symbol ⏻.

• Power ON condition is indicated by the symbol I.

• Power OFF condition is indicated by the symbol O.

Installation

Please read the following carefully when installing this unit.

Optional Projection Lens

Mount the optional projection lens (P. 60). For details on mounting the lens, please consult your authorized dealer.

Minimum Space Required

Do not use a cover that may enclose this unit or block the air inlets/vent holes. Allow sufficient space around this unit. When this unit is enclosed in a space with dimensions as indicated below, ventilate accordingly so that the internal and external temperatures are the same.
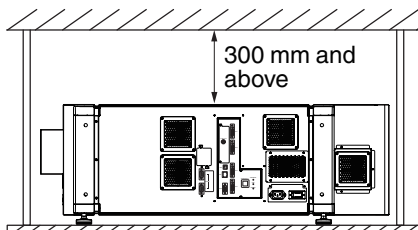
When using one set of projector

300 mm

300 mm

600 mm — 600 mm

600 mm
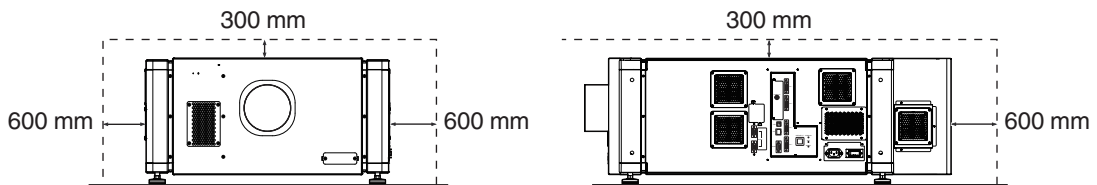
When using two sets of projectors side by side

300 mm

300 mm

600 mm

640 mm

600 mm

1300 mm
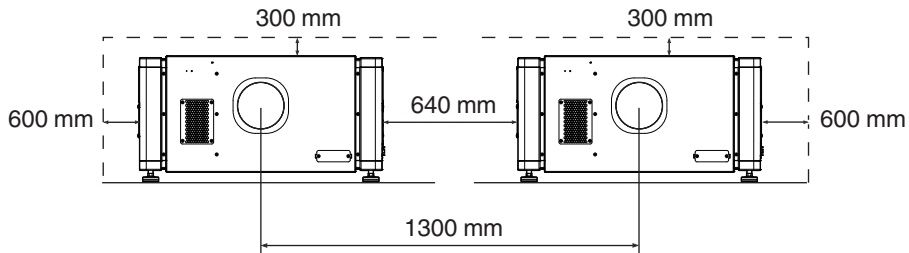
When the projector is suspended

300 mm and above

✎ MEMO

- To prevent the projector from falling or toppling, it is recommended that the holder be fastened to the unit using bolts.
- To mount the projector to the ceiling, mount a special shelf to the ceiling, followed by installing the unit on the shelf. For safety and maintenance purposes, equipment that eases adjustment to a suitable height for maintenance is required.
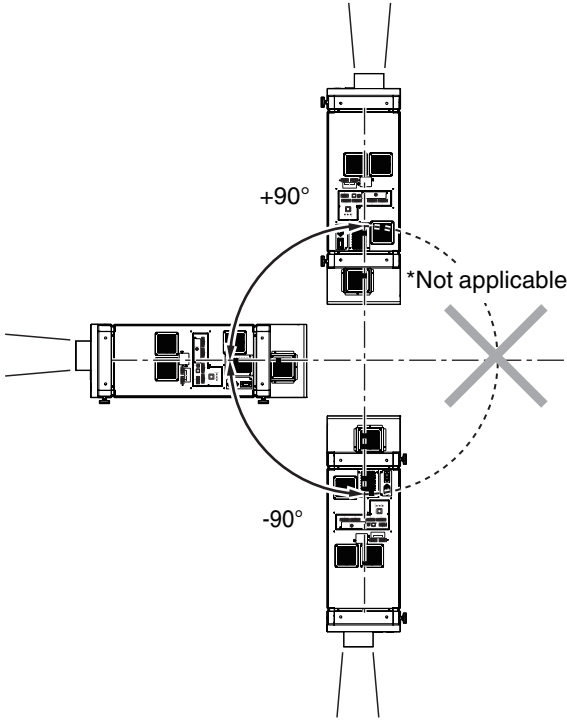
📢 CAUTION

- Special expertise and techniques are required for mounting this unit. Be sure to ask your dealer or a specialist to perform mounting.

Projector Installation Angle

You can install this projector between ±90° both vertically and horizontally.

### Vertical Angle

+90°

*Not applicable

-90°

CAUTION

- Special expertise and techniques are required for mounting this unit. Be sure to ask your dealer or a specialist to perform mounting.
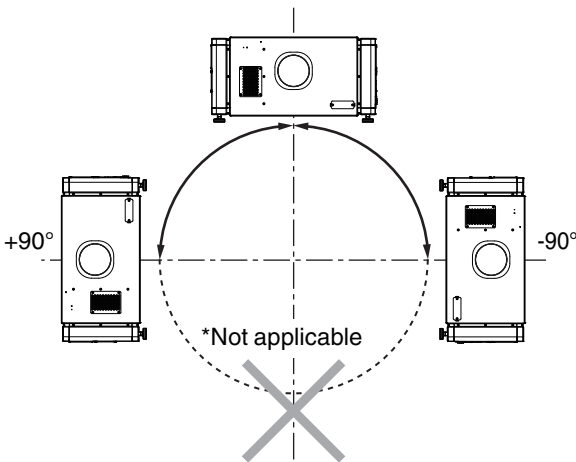- The projector cannot be installed upside down.

Adjusting the Inclination

Adjust the horizontal angle of the projector.

Lift the projector and turn the nut of the adjustable foot with a spanner in the direction indicated by the arrow to extend or retract the foot. The adjustable range is 20 mm.

Extend   Retract

Horizontal Angle

+90°   -90°
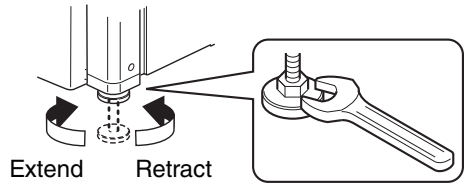
*Not applicable

Installing the Projector and Screen

It is recommended that this projector be installed at right angle to the screen.

When a zoom lens (optional) is in use, you can make use of the lens shift feature of this projector to shift the projection screen vertically between 0% to ±50%, and horizontally between 0% to ±25%.

When a short focal length lens (optional) is in use, you can shift the projection screen position vertically between 0% to ±15%, and horizontally between 0% to ±5%.

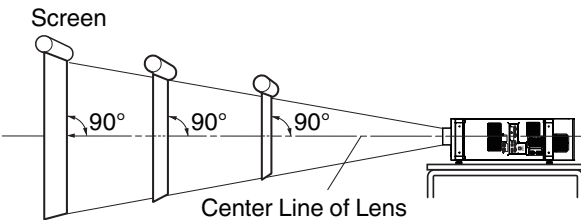Below are some examples on the layout when a zoom lens is used.

When shift amount in the upward direction is +50 %

Install the projector such that the lower end of the projection screen is at the same height as the center of the lens.
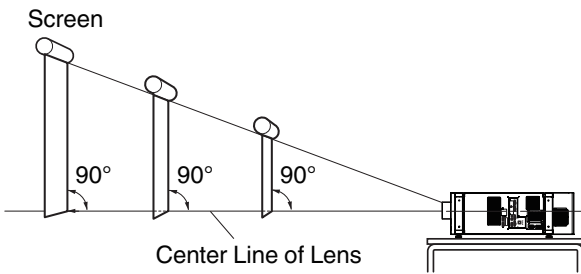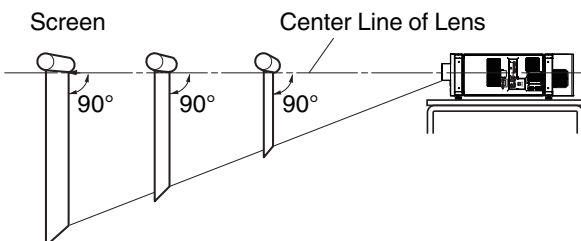

When shift amount in the upward/downward direction is 0 %

Install the projector such that the center of the projection screen is at the same height as the center of the lens.
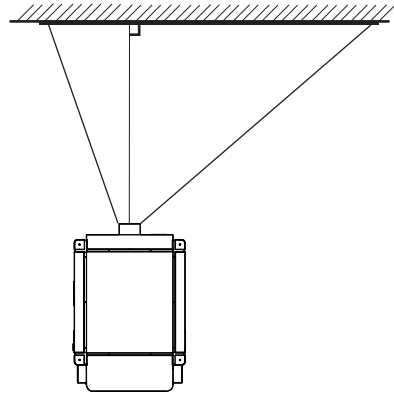

When shift amount in the downward direction is -50 %

Install the projector such that the upper end of the projection screen is at the same height as the center of the lens.

When shift amount in the right direction is +25 %

Install the projector such that the center of the lens is aligned with the 1/4 position from the left edge of the screen.

When shift amount in the left/right direction is 0 %

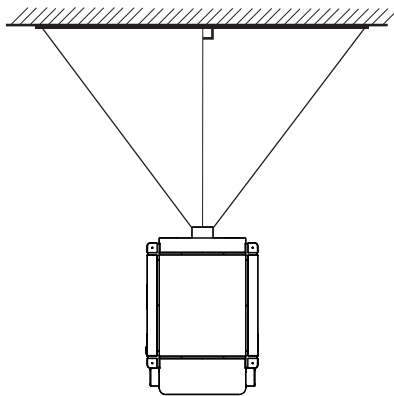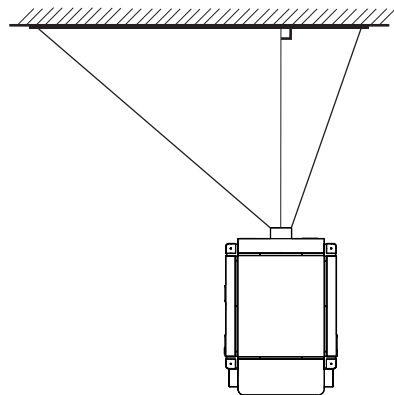Install the projector such that the center of the lens is aligned with the center of the screen.
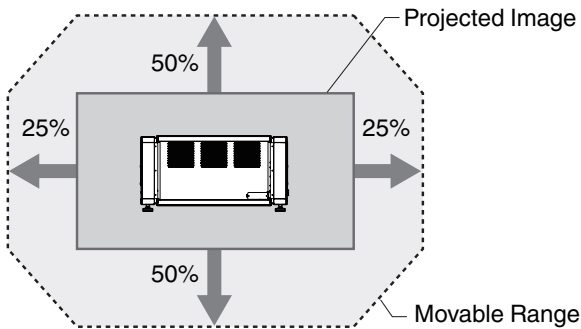

When shift amount in the left direction is -25 %

Install the projector such that the center of the lens is aligned with the 1/4 position from the right edge of the screen.
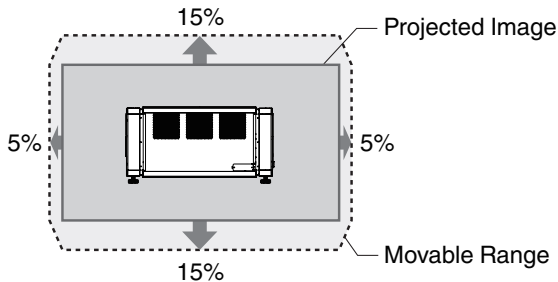

Connection and Installation

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Movable Range of Projected Image

GL-MS4015SZ Zoom lens
GL-MS4016SZ Zoom lens
GL-MS4021SZ Zoom lens

GL-MS4011S Short focal length lens

✎ MEMO

- When using the lens shift feature, do not exceed the range (shift amount) as shown above. If the shift amount exceeds the range as shown, shadows will appear on the projected image.

Lens Fixation Mechanism

A screw for securing the lens mechanism is attached in the factory shipment to prevent damage of the equipment during transportation. If the lens does not move horizontally or vertically when you operate "Shift" in the "Lens" menu, this could be because the screw has not been removed. When this occurs, please consult your authorized dealer.

Overlaying projected images (when zoom lens is in use)

Projecting images by stacking projectors

The lens shift feature enables you to use up to three stacked projectors at the same time.

Stacking the projectors enhances the brightness level, and helps to project images that are sufficiently bright even when the venue is relatively big or bright.
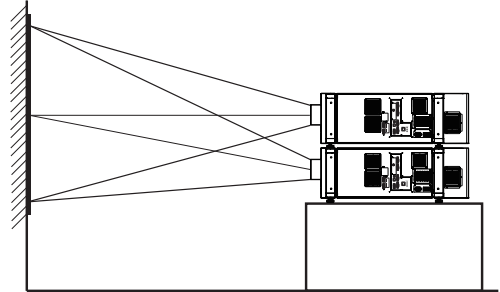
☝ CAUTION

- When the projectors are stacked together during use, ensure that the installation site is sufficiently strong and there is proper air cooling around the projectors. Take the necessary measures to prevent the projectors from toppling or falling off so as to ensure safety during emergency situations, such as earthquakes, and to prevent accidents from occurring.
  For details, please consult your authorized dealer.

Projecting images by arranging projectors side by side

The lens shift feature enables you to use up to two projectors that are arranged side by side.

Arranging two projectors side by side enhances the brightness level, and helps to project images that are sufficiently bright even when the venue is relatively big or bright.
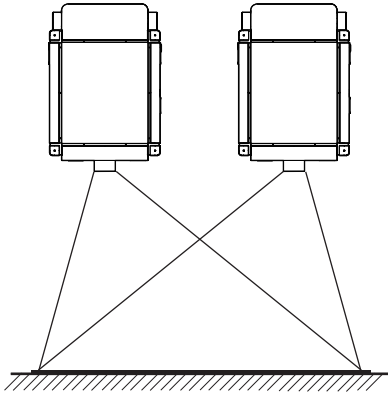
When projecting images by arranging the projectors side by side, adjust the shift amount of both projectors accordingly to superimpose the images.

✄ CAUTION

• When using the projectors by arranging them side by side, ensure that the installation site is sufficiently strong and there is proper air cooling around the projectors.
For details, please consult your authorized dealer.

✎ MEMO

• When light passes through the glass, the quantity of light decreases. Make sure that the glass of the projection booth is not more than one piece.
• Do not use glass if possible.
• When projecting light on an inclined glass surface, adjust the glass angle as well as installation angle of this unit accordingly to prevent impact on the image due to diffuse reflection.

Connection and Installation

Screen Size and Projection Distance

Adjust the distance from the lens to the screen to achieve your desired screen size.

GL-MS4015SZ / GL-MS4016SZ / GL-MS4021SZ Zoom lens

Projection Screen Size (Diagonal Length)	Image Width	Projection distance					
		GL-MS4015SZ		GL-MS4016SZ		GL-MS4021SZ	
		Tele End	Wide End	Tele End	Wide End	Tele End	Wide End
50" (Approx. 1.27 m)	1.10 m	-	-	1.97 m	1.58 m	-	-
60" (Approx. 1.53 m)	1.31 m	-	-	2.37 m	1.92 m	-	-
70" (Approx. 1.79 m)	1.54 m	-	-	2.78 m	2.25 m	-	-
80" (Approx. 2.03 m)	1.75 m	3.19 m	2.58 m	3.19 m	2.58 m	6.38 m	3.72 m
90" (Approx. 2.29 m)	1.97 m	3.60 m	2.91 m	3.60 m	2.91 m	7.19 m	4.24 m
100" (Approx. 2.54 m)	2.19 m	4.01 m	3.25 m	4.01 m	3.25 m	8.01 m	4.71 m
110" (Approx. 2.79 m)	2.41 m	4.42 m	3.58 m	4.42 m	3.58 m	8.82 m	5.17 m
120" (Approx. 3.05 m)	2.63 m	4.83 m	3.91 m	4.83 m	3.91 m	9.63 m	5.64 m
130" (Approx. 3.30 m)	2.85 m	5.24 m	4.25 m	5.24 m	4.25 m	10.44 m	6.11 m
140" (Approx. 3.56 m)	3.07 m	5.65 m	4.58 m	5.65 m	4.58 m	11.25 m	6.57 m
150" (Approx. 3.81 m)	3.29 m	6.06 m	4.91 m	6.06 m	4.91 m	12.06 m	7.04 m
160" (Approx. 4.06 m)	3.51 m	6.46 m	5.25 m	6.46 m	5.25 m	12.87 m	7.50 m
170" (Approx. 4.32 m)	3.73 m	6.87 m	5.58 m	6.87 m	5.58 m	13.68 m	7.97 m
180" (Approx. 4.57 m)	3.94 m	7.28 m	5.91 m	-	5.91 m	14.49 m	8.44 m
190" (Approx. 4.83 m)	4.16 m	7.69 m	6.24 m	-	6.24 m	15.30 m	8.90 m
200" (Approx. 5.08 m)	4.38 m	8.10 m	6.58 m	-	6.58 m	16.12 m	9.44 m
210" (Approx. 5.33 m)	4.60 m	8.51 m	6.91 m	-	6.91 m	16.93 m	9.83 m
220" (Approx. 5.59 m)	4.82 m	8.92 m	7.24 m	-	-	17.74 m	10.30 m
230" (Approx. 5.84 m)	5.04 m	9.33 m	7.58 m	-	-	18.55 m	10.77 m
240" (Approx. 6.10 m)	5.26 m	9.74 m	7.91 m	-	-	19.36 m	11.23 m
250" (Approx. 6.35 m)	5.48 m	10.15 m	8.24 m	-	-	20.17 m	11.70 m
260" (Approx. 6.60 m)	5.70 m	10.55 m	8.58 m	-	-	20.98 m	12.16 m
270" (Approx. 6.86 m)	5.92 m	10.96 m	8.91 m	-	-	21.79 m	12.63 m
280" (Approx. 7.11 m)	6.14 m	11.37 m	9.24 m	-	-	22.60 m	13.10 m
290" (Approx. 7.37 m)	6.36 m	11.78 m	9.57 m	-	-	23.41 m	13.56 m
300" (Approx. 7.62 m)	6.57 m	12.19 m	9.91 m	-	-	24.23 m	14.03 m

✎ MEMO

• The distance indicated in the table is an estimated value when an image with a resolution of 4096×2400 is projected. Please use them as reference during installation.

GL-MS4011S Short focal length lens

Projection Screen Size (Diagonal Length)	Image Width	Projection distance
50" (Approx. 1.27 m)	1.10 m	1.16 m
60" (Approx. 1.52 m)	1.31 m	1.41 m
70" (Approx. 1.78 m)	1.53 m	1.66 m
80" (Approx. 2.03 m)	1.75 m	1.91 m
90" (Approx. 2.29 m)	1.97 m	2.16 m
100" (Approx. 2.54 m)	2.19 m	2.41 m
110" (Approx. 2.79 m)	2.41 m	2.66 m
120" (Approx. 3.05 m)	2.63 m	2.91m
130" (Approx. 3.30 m)	2.85 m	3.17 m
140" (Approx. 3.56 m)	3.07 m	3.42 m
150" (Approx. 3.81 m)	3.29 m	3.67 m
160" (Approx. 4.06 m)	3.51 m	3.92 m
170" (Approx. 4.32 m)	3.73 m	4.17 m
180" (Approx. 4.57 m)	3.94 m	4.42 m
190" (Approx. 4.83 m)	4.16 m	4.67 m
200" (Approx. 5.08 m)	4.38 m	4.92 m
210" (Approx. 5.33 m)	4.60 m	5.17 m
220" (Approx. 5.59 m)	4.82 m	5.43 m
230" (Approx. 5.84 m)	5.04 m	5.68 m
240" (Approx. 6.10 m)	5.26 m	5.93 m
250" (Approx. 6.35 m)	5.48 m	6.18 m

Connection and Installation

✎ MEMO

• The distance indicated in the table is an estimated value when an image with a resolution of 4096×2400 is projected. Please use them as reference during installation.

Connecting Video Signals of the Computer

Connection During Single-Screen Mode Display

The single-screen mode displays signals (up to four signals) from a computer as a single video image.
To select to the single-screen mode, set "Display Mode" in the "Setting" menu to "Single". (P. 38)

Possible Input Signals and Projected Image

Computer			Projector Terminal for Connection	Output Status		Displayed Projector Image
Resolution	Channel	Link Status				
4096×2400	2ch	Dual	DVI 1, DVI 3	2 Stripes	2048×2400	4096×2400 * (8192×4800)
	4ch	Single	DVI 1 to DVI 4	Cross	2048×1200	
				4 Stripes	1024×2400	
4096×2160	2ch	Dual	DVI 1, DVI 3	2 Stripes	2048×2160	4096×2160 * (8192×4320)
	4ch	Single	DVI 1 to DVI 4	Cross	2040×1080	
				4 Stripes	1024×2160	
3840×2400	2ch	Dual	DVI 1, DVI 3	2 Stripes	1920×2400	3840×2400 * (7680×4800)
	4ch	Single	DVI 1 to DVI 4	Cross	1920×1200	
				4 Stripes	960×2400	
3840×2160	2ch	Dual	DVI 1, DVI 3	2 Stripes	1920×2160	3840×2160 * (7680×4320)
	4ch	Single	DVI 1 to DVI 4	Cross	1920×1080	
				4 Stripes	960×2160	
2048×1200	1ch	Single	DVI 1	Normal	2048×1200	4096×2400
2048×1080	1ch	Single	DVI 1	Normal	2048×1080	4096×2160
1920×1200	1ch	Single	DVI 1	Normal	1920×1200	3840×2400
1920×1080	1ch	Single	DVI 1	Normal	1920×1080	3840×2160
1600×1200	1ch	Single	DVI 1	Normal	1600×1200	3200×2400
1280×1024	1ch	Single	DVI 1	Normal	1280×1024	2560×2048
1024×768	1ch	Single	DVI 1	Normal	1024×768	2048×1536
800×600	1ch	Single	DVI 1	Normal	800×600	1600×1200
640×480	1ch	Single	DVI 1	Normal	640×480	1280×960

* (DLA-VS4810) An 8K image is displayed when e-shift sync signal is input.

✎ MEMO

- This projector converts the frame rate to 60 Hz regardless of the synchronizing signal frequency at the computer's end.
- If the resolution of the PC is 2048×1200 or lower, images are displayed upon doubling the number of the vertical and horizontal pixels.
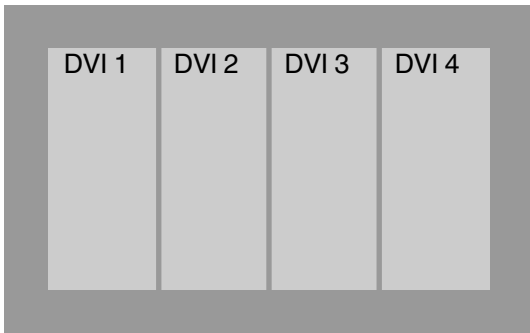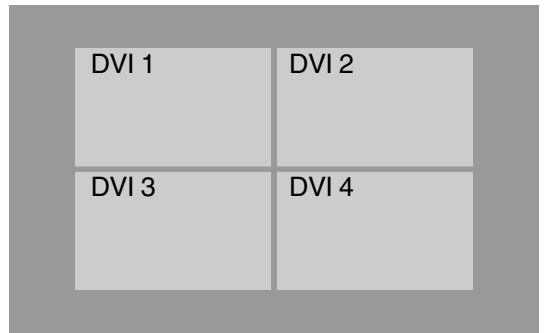
Normal

DVI 1

2 Stripes

DVI 1	DVI 3

4 Stripes

DVI 1	DVI 2	DVI 3	DVI 4

Cross

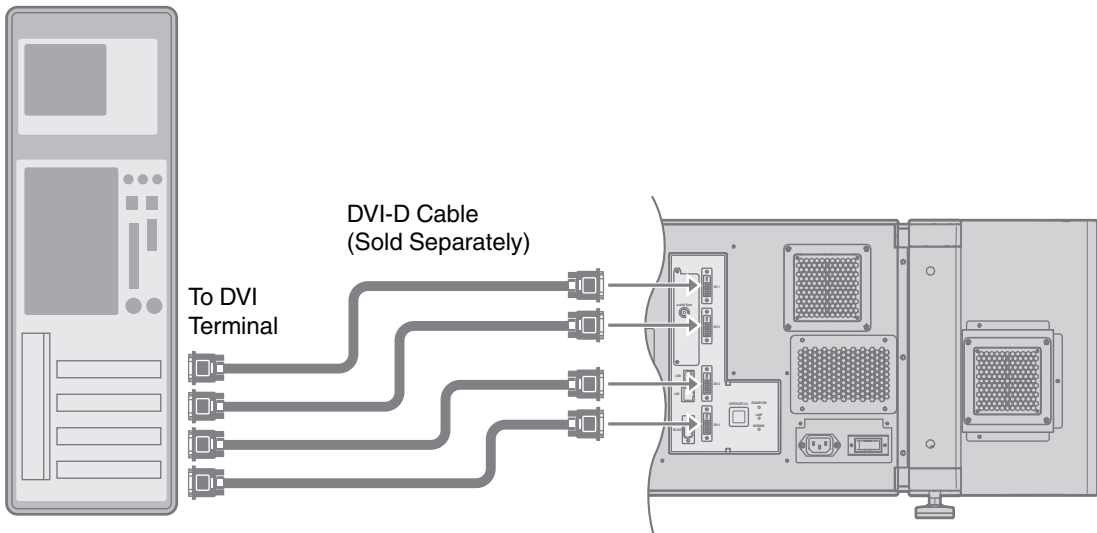| DVI 1	DVI 2
DVI 3	DVI 4
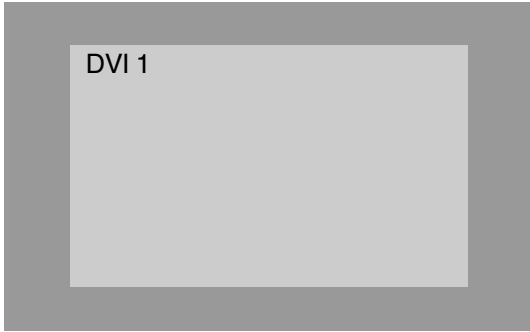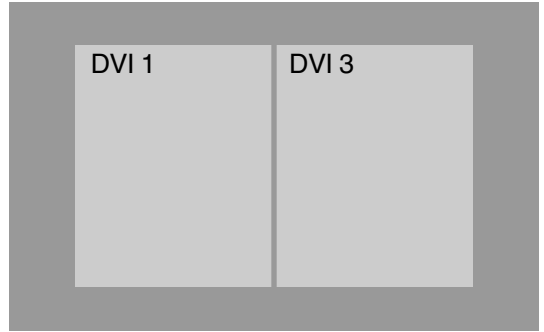
Connection During Single-Screen Mode Display

Below is the connection example for four-channel signals from the computer.

For two-channel signals from the computer, connect to the [DVI 1] and [DVI 3] terminals of this projector.

Desktop Computer

DVI-D Cable
(Sold Separately)

To DVI
Terminal

✎ MEMO

- Depending on your DVI-D cable, the signal may attenuate and the image become unstable.
- Use of DVI-D cables compliant with the DDWG standard is recommended.

Connection During Two-Screen/Four-Screen Mode Display

The two-screen/four-screen mode enables simultaneous display of signals from two or four computers.

To select the two-screen mode, set "Display Mode" in the "Setting" menu to "Double". To select the four-screen mode, set "Display Mode" to "Cross". (P. 38)

## Possible Input Signals and Projected Image

Computer			Output Status	
Resolution	Channel	Link Status		
2048×1200	1ch	Single	Normal	2048×1200
2048×1080	1ch	Single	Normal	2048×1080
1920×1200	1ch	Single	Normal	1920×1200
1920×1080	1ch	Single	Normal	1920×1080
1600×1200	1ch	Single	Normal	1600×1200
1280×1024	1ch	Single	Normal	1280×1024
1024×768	1ch	Single	Normal	1024×768
800×600	1ch	Single	Normal	800×600
640×480	1ch	Single	Normal	640×480

✎ MEMO

• This projector converts the frame rate to 60 Hz regardless of the synchronizing signal frequency at the computer's end.

• The respective signals are displayed at the center of the split screen.

• When in the two-screen mode, the screen appears blue (or black depending on the setting) when there is no input.
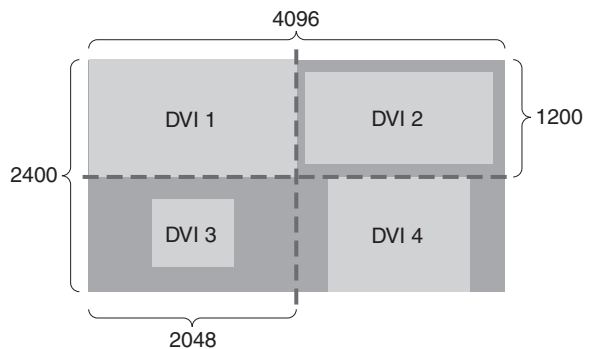
Two-Screen Mode
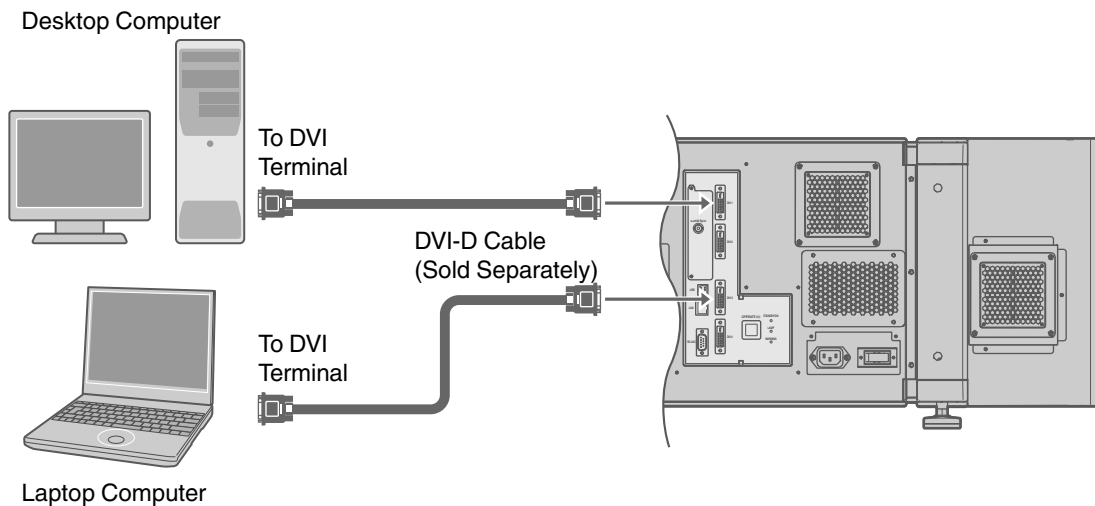
(Example) DVI 1: 1920×1080,
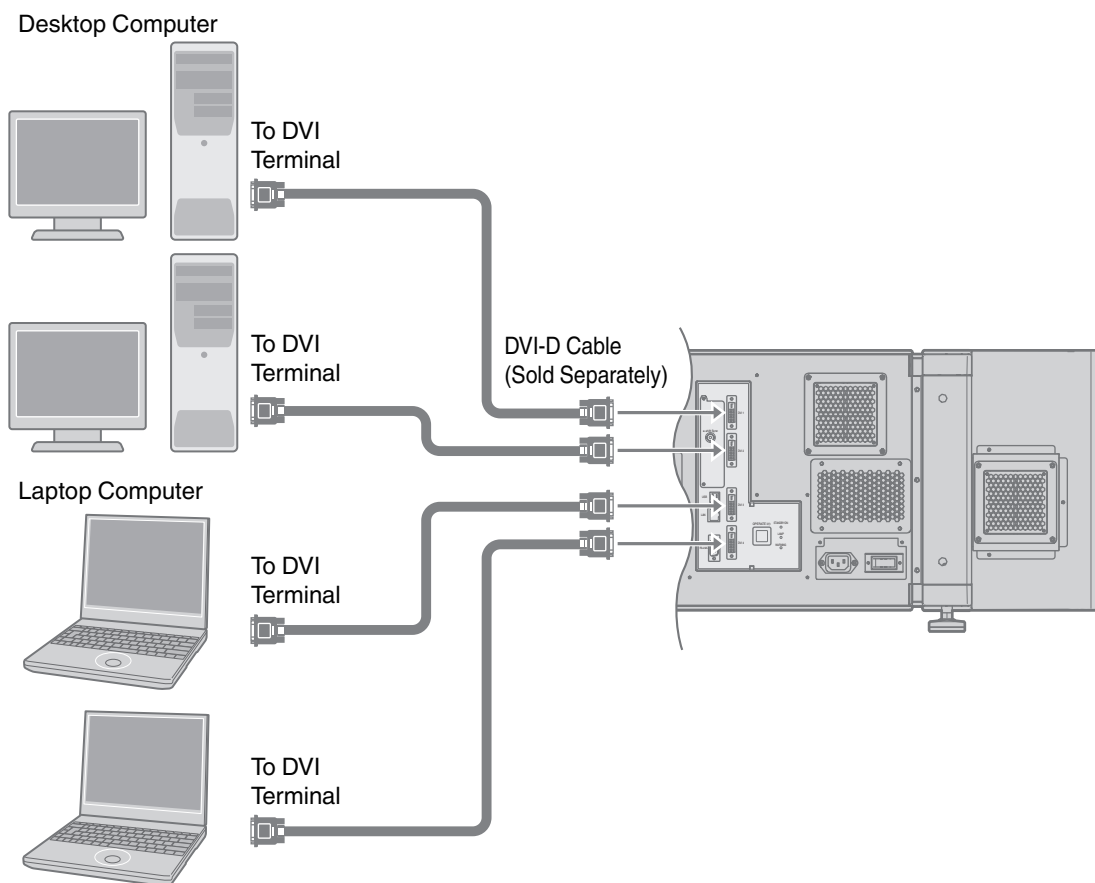DVI 3: 1920×1080
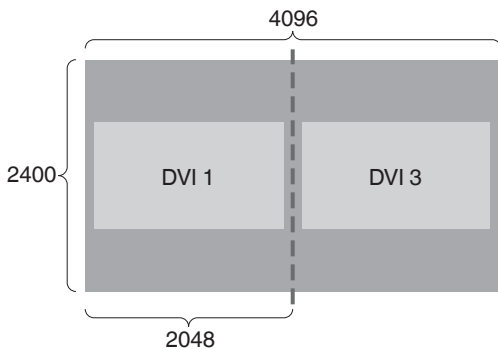
Four-Screen Mode

(Example) DVI 1: 2048×1200, DVI 2: 1920×1080,
DVI 3: 1024×768, DVI 4: 1600×1200

Connection and Installation

Connection Example During Two-Screen Mode

Desktop Computer

To DVI
Terminal

DVI-D Cable
(Sold Separately)

To DVI
Terminal

Laptop Computer

Connection Example During Four-Screen Mode

Desktop Computer

To DVI
Terminal

To DVI
Terminal

DVI-D Cable
(Sold Separately)

Laptop Computer

To DVI
Terminal

To DVI
Terminal

✎ MEMO

- Depending on your DVI-D cable, the signal may attenuate and the image become unstable.
- Use of DVI-D cables compliant with the DDWG standard is recommended.

Connection Using a LAN Cable

Connect this projector, the computer for controlling this projector, and the switching hub using LAN cables, followed by configuring the network.

Connection Example

When assigning a static IP address

You can acquire the IP address from the controlling computer simply by configuring a network that consists of this projector, the controlling computer, and switching hub. Please refer to technical books on networks for details.

Switching Hub

To Network Terminal   To LAN Terminal
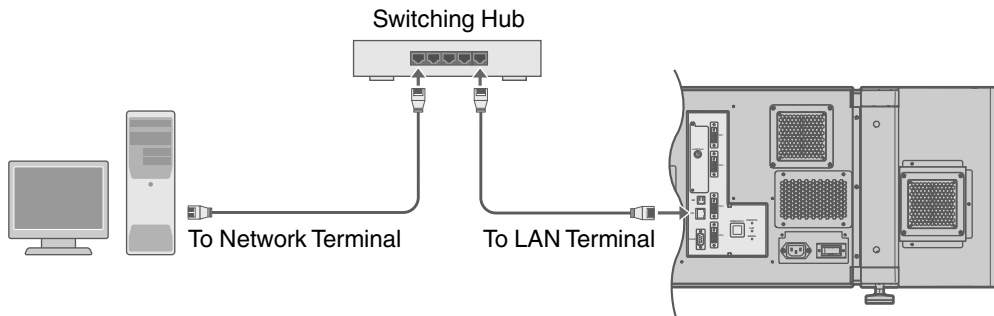
✎ MEMO

• Make use of Cat. 5 (equivalent or higher) straight 100Base-TX LAN cables.

📢 CAUTION

• When connecting this projector and the controlling computer for this projector using other network, be sure to consult the network administrator of the network in use or refer to technical books on networks.

When assigning IP address from the DHCP server

Router
(DHCP Server)   LAN

WAN   LAN1 LAN2 LAN3 LAN4

To Network Terminal   To LAN Terminal
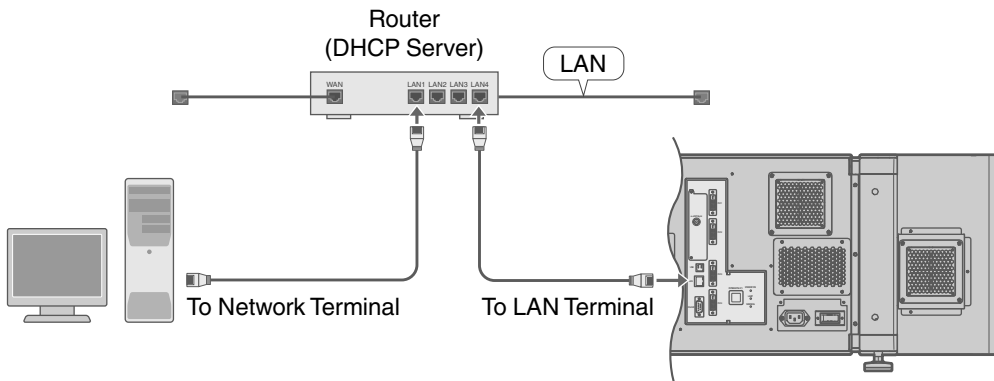
✎ MEMO

• Make use of Cat. 5 (equivalent or higher) 100Base-TX LAN cables.

Network Settings

Specifications of PC for Controlling this Projector

| OS	Windows 7 (32-bit, 64-bit), Windows 8 (32-bit, 64-bit), Windows 10 (32-bit, 64-bit)
Browser	Internet Explorer 10, Internet Explorer 11, Google Chrome, Firefox

✎ MEMO

• Windows is either registered trademark or trademark of Microsoft Corporation in the United States and/or other countries.

📢 CAUTION

• The PC specifications above are reference values for the application software to run smoothly, and are not intended to guarantee their operation.
Note that the applications may not run smoothly depending on the condition of use of the respective users even when the system requirements are satisfied.

Network Settings

Turning On the Main Power

1 Check to ensure that this projector, computer, and switching hub are properly connected

2 Connect the power cord to the power input terminal of this projector

Power Cord
(Supplied)
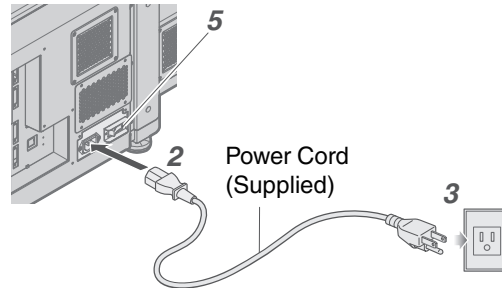
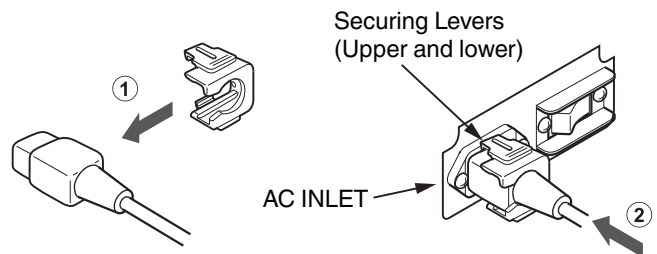## 📢 CAUTION

• Do not connect the power cord when a lens (optional) is not attached.

You can secure the power cord to this projector.

① Attach the plug holder to the power cord.

② Insert the plug holder into the projector until the upper and lower securing levers are locked.

Securing Levers
(Upper and lower)

AC INLET

3 Insert plug into the power outlet on the wall

4 Remove the lens cap

5 Turn on the main power of the projector to set to [**I**]

• The [STANDBY/ON], [LAMP] and [WARNING] indicators light up for about 45 seconds. Thereafter, only the [STANDBY/ON] indicator lights up in red.

✏ MEMO

• The default IP address of all DLA-VS4010 / DLA-VS4810 is "192.168.0.2". If multiple units of DLA-VS4010 / DLA-VS4810 are used on the same network, do not turn on the main power of more than one projector unit at the same time. Doing so will result in duplication of the IP address, and thereby preventing proper access.

• When using multiple units of DLA-VS4010 / DLA-VS4810, turn on the main power of the second unit and configure accordingly only after configuration of the first unit is complete. Configure subsequent units using the same procedure.

• When duplication occurs in the IP address, make sure that only one unit of DLA-VS4010 / DLA-VS4810 is connected on the same network (turn off the main power of the other DLA-VS4010 / DLA-VS4810 units). Allow a time interval of at least 10 minutes before accessing. If access fails, turn off the power of all network equipments on the same network, followed by turning them on again.

IP Address Settings

Set the IP address for this projector. There are 2 methods to set the IP address.

• Assigning a static IP address
• Assigning IP Address from the DHCP Server

Assigning a static IP address

The "IP Address Setting" of this projector is set to "STATIC IP" (the DHCP client function is OFF) by default.

Upon turning on the power, this projector starts running with the following IP address.
IP Address : 192.168.0.2
Subnet Mask : 255.255.255.0
Default Gateway : 192.168.0.254

IP address setting at the computer

Set the computer to an IP address that enables communication with this projector.

1 Click "Start" and select "Control Panel"

2 Double click "Network Connections"

3 Right-click on "Local Area" and select "Properties"
  • Check to ensure that the "Client for Microsoft Networks" and "Internet Protocol(TCP/IP)" check boxes are selected.

4 Select "Internet Protocol(TCP/IP)" and click "Properties"

5 Set the IP address
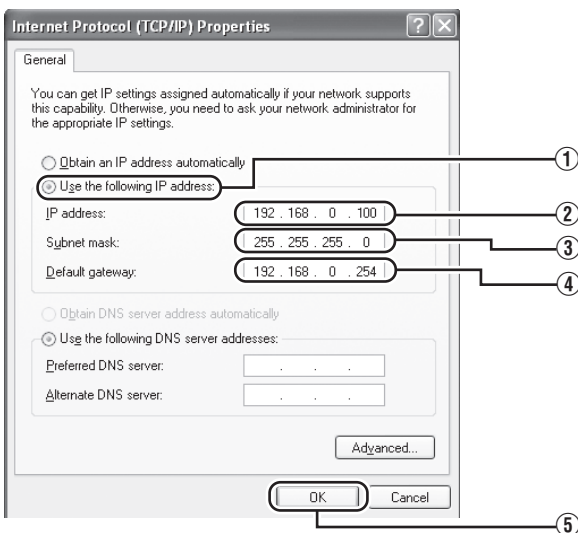
① Select "Use the following IP address"

② Set "IP address"

(For example, use 192.168.0.100 when DLA-VS4010 / DLA-VS4810 is in its default settings)

MEMO

  • Make sure that you take note of the original IP address before altering.
  • When setting, ensure that a duplicate IP address is not used within the same network environment.

③ Set "Subnet mask"

Set to a value that is appropriate for the setting operation. Clarify with the network administrator if you have any queries.

(Use 255.255.255.0 when the camera is in its default settings)

④ When a "Default gateway" is present, make use of the IP address (e.g., 192.168.0.254)

⑤ Click "OK"

**6** Click "OK" on the "Local Area Connection Properties" screen

When using Internet Explorer

1 Launch the Internet Explorer on the computer

2 Check if the proxy has been set in the "LAN Setting" of the Internet Explorer

① Click "Tools" and select "Internet Options"

② Click "Connections" and click "LAN Setting"

③ Check if the check for "Use a proxy server for your LAN" has been selected

   • If the check mark has been selected, deselect it.
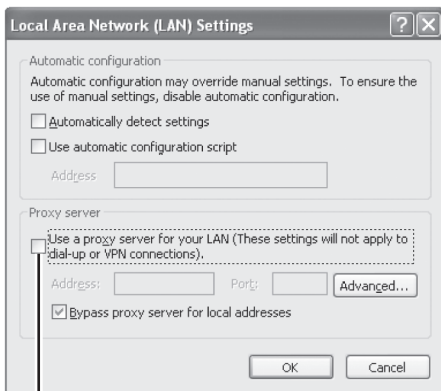
Deselct the check

3 Check if the "Active scripting" of the Internet Explorer is disabled

① Click "Tools" and select "Internet Options"

② Click in the order of "Security" → "Trusted Sites" → "Sites"

③ Deselect the check "Required server verification (https:) for all sites in this zone"

④ Enter "http://192.168.0.2" under "Add this web site to the zone" and click "Add"

⑤ Click "OK"

⑥ Select "Trusted Sites" and click "Custom Level"

⑦ Check if the check for "Active scripting" under "Scripting" has been selected
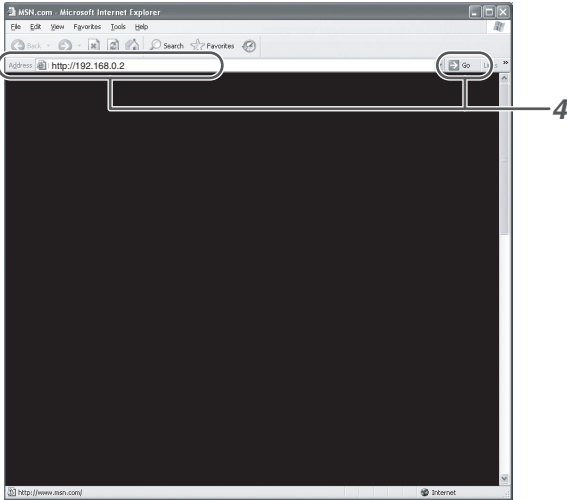
   • If the check mark has been deselected, select it.

Select "Enable"

Network Settings

26
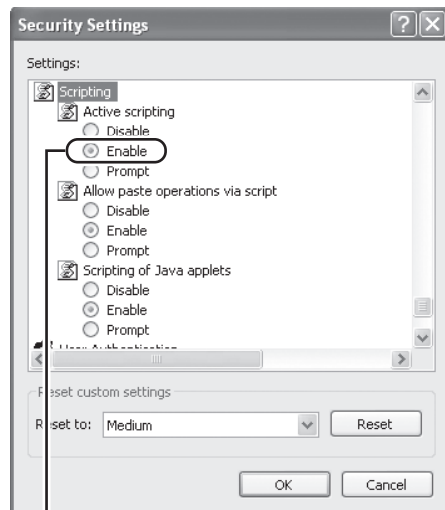
4 Enter "http://192.168.0.2" in the address field of the Internet Explorer, and click "Go"
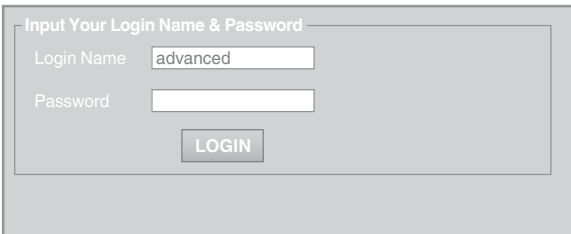
- A login screen for this projector appears.

MEMO

- When "LAN Setting" in Internet Explorer is set to "Use a proxy server for your LAN" it may not be possible to designate addresses directly. Change the proxy settings.
- If a "Security Warning" screen appears, click "OK" and continue.

5 Enter "advanced" in "Login Name"

6 Click "LOGIN"

- The "Main" menu for this projector appears.

MEMO

- You can alter the user name and password in the "Admin.Network" menu. Specify a user name and password of not more than eight single-byte alphanumeric characters. (P. 43)
- If you have forgotten the password, please consult your authorized dealer.

7 Click "Admin.Network" in the "Main" menu
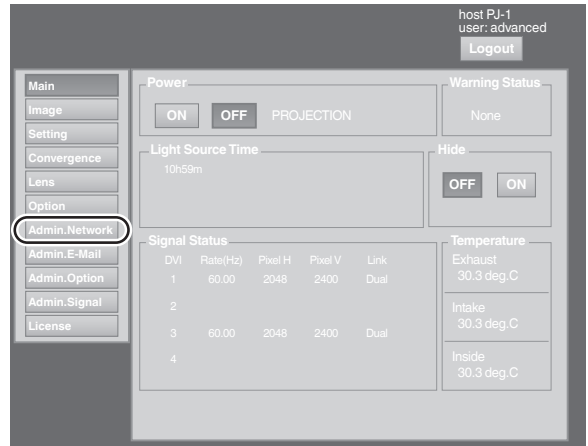
8 Set the IP address for this projector

① Select "STATIC IP" in "DHCP Client"

② Enter the values for "IP Address", "Subnet Mask" and "Default Gateway"

③ Click "SET"

MEMO

- Access from computers may not be successful as this projector's IP address has been changed. Set and change the computer's IP address when accessing this projector.

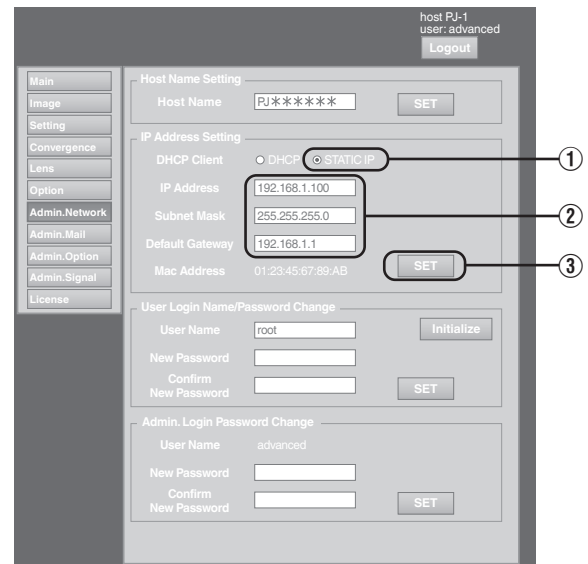## Assigning IP Address from the DHCP Server

The IP address is automatically assigned by the DHCP server.

1 After connecting, turn on the main power

- Refer to P. 22 on the details of connection.
- Refer to P. 24 on procedures to turn on the main power.

2 Set the "DHCP Client" setting of this projector to "DHCP"

- The "DHCP Client" of this projector is set to "STATIC IP" (the DHCP client function is OFF) by default. When assigning an IP address from the DHCP server, access this projector from the computer to alter the settings. For details on the setting procedures, refer to "Setting (Changing) the IP address of this projector"P. 26.

✎ MEMO

- Please consult the network administrator on the IP address assigned to this projector.
- When "DHCP Client" is set to "DHCP", and if the projector is started up in a LAN where a DHCP server does not exist, the projector will start up using the default IP address instead.

📢 CAUTION

- Configure the DHCP server such that the same IP address is assigned to the "Mac Address" of this projector by the DHCP server at all times. Connection may fail if the above setting is not performed.

Connecting this projector and the computer using a USB cable

You can connect this projector and the controlling computer using a USB cable.

- You need to install a driver in order to connect the projector and computer using a USB cable.

✎ MEMO

- For details on the installation of the USB driver, please consult your authorized dealer.

Using the Mail Delivery Feature

This feature enables delivery of mail (error message) to the preset e-mail address when error occurs inside this projector unit.

Connection Example (When DHCP Server is Used)

To Internet Connection — ADSL modem, etc. — DHCP Server — LAN

To LAN Terminal
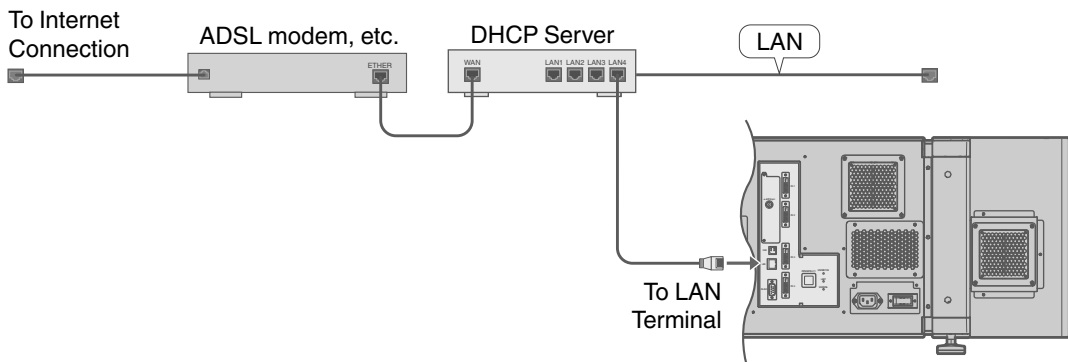
Projecting Image

If setting for this projector is not completed, refer to "User Settings Menu"P. 34 upon turning on the power and configure the settings accordingly.

Once the basic settings are configured, this projector can be used by simply performing the following operation procedures.

- Remove the lens cap.
- Connect this projector to the computer. (P. 19, 21)
- Connect the LAN cable. (P. 22)

1 Set this projector to the standby mode, and display the "Main" menu

- Refer to "Turning On the Main Power"P. 24, and steps 4 to 6 of "Assigning a static IP address"P. 25.
- The [STANDBY/ON] indicator lights up in red.

2 Click the "ON" button under the "Power" item of the "Main" menu to project the image

- The power of this projector turns on, and formatting is done taking a few minutes. A gray image will be displayed during formatting. The projected image appears once formatting ends.
- The [STANDBY/ON] indicator lights up in green.
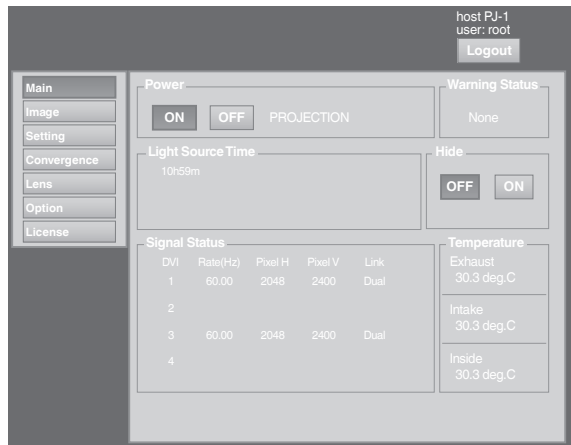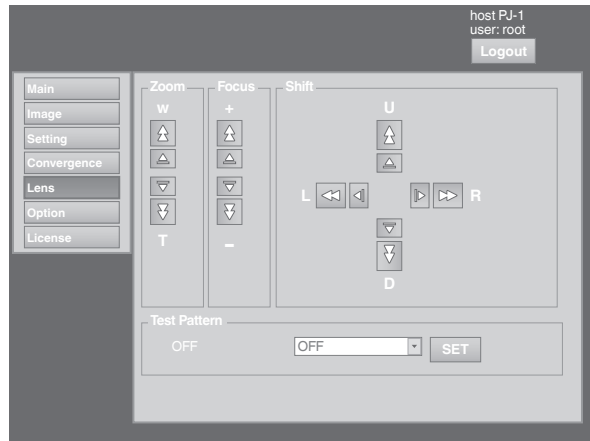

MEMO

- You can also turn on the power by pressing the [OPERATE I/⏻] button on the projector unit for more than one second.
- The image may flicker for a few seconds immediately after projection starts. This is not a malfunction.
- After the LD block lights up, it takes more than 1 minute for the brightness of the video image on the screen to stabilize.

Operation and Settings

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3 Adjust the zoom ratio (screen size) (when zoom lens is in use)

You can adjust the focus using the "Zoom" item of the "Lens" menu.


To enlarge the screen size:

Press the "W" (Wide) end of "Zoom"

To reduce the screen size:

Press the "T" (Tele) end of "Zoom"

✎ MEMO

• The screen size changes each time you click on the inner buttons (△ / ▽). (Fine control)

The outer buttons (⌂ / ⌄) change the screen size when they are depressed. (Coarse control)

4 Adjust the position of the projection screen

You can adjust the focus using the "Shift" item of the "Lens" menu.

To shift the image upward:

Press the "U" end of "Shift"

To shift the image downward:

Press the "D" end of "Shift"

To shift the image rightward:

Press the "R" end of "Shift"

To shift the image leftward:

Press the "L" end of "Shift"

✎ MEMO

• When a zoom lens is used, the adjustment range for lens shift is between 0 % to ±50 % in the vertical direction, and between 0 % to ±25 % in the horizontal direction (during single-screen display).

• When a short focal length lens is used, the adjustment range for lens shift is between 0 % to ±15 % in the vertical direction, and between 0 % to ±5 % in the horizontal direction (during single-screen display). (P. 14)

• The position changes each time you click on the inner buttons (△ / ▽). (Fine control)

• The image shifts when the outer buttons (⌂ / ⌄) are depressed. (Coarse control)

• The lens shift feature does not function if the lens mechanism is secured ("Lens Fixation Mechanism"P. 14)

5 Adjust the focus

You can adjust the focus using the "Focus" item of the "Lens" menu.

To move the focus point closer:
Press the "+" (Near) end of "Focus"

To move the focus point away:
Press the "-" (Far) end of "Focus"

✎ MEMO

• The focus changes each time you click on the inner buttons (△ / ▽). (Fine control)

The outer buttons (△ / ▽) change the focus when they are depressed. (Coarse control)

6 Select a screen mode for projection

You can specify the screen mode using "Display Mode" of the "Setting" menu. (P. 38)
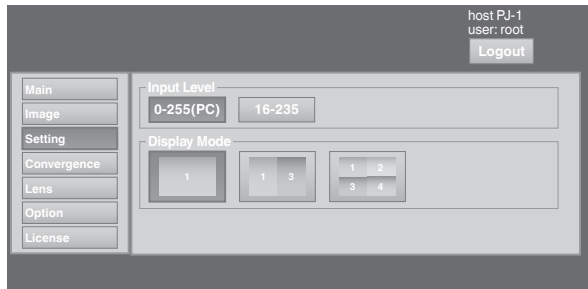
✎ MEMO

• The projected image varies according to the mode of connection. (P. 19, 21)

7 Click the "OFF" button under the "Power" item of the "Main" menu to end the projection

• The projector switches to the cool down mode, and the [STANDBY/ON] indicator appears blinking in red.
• A gray image will be displayed for a maximum duration of 2 minutes during the ending process only after several hours of image projection. Thereafter, the LD block starts to cool down.
• After exiting the cool down mode, the projector switches automatically to the standby mode, and the [STANDBY/ON] indicator lights up in red.
• You can also turn off the power by pressing the [OPERATE I/⏻] button on the projector unit for more than one second.

Cool down mode

Cool down mode is a function that cools down the LD block for about 10 seconds after projection ends (ending process).

• When the projector is in the cool down mode, the [STANDBY/ON] indicator appears blinking in red.
• Do not shut down the main power supply or unplug the power cord when in the cool down mode. Also, do not block the air inlets and vent holes. Doing so may shorten the lamp life and cause a malfunction.

Operation and Settings

Turn the main power at the rear of the projector unit to off [**O**]

- The [STANDBY/ON] indicator on the projector unit goes off.

📢 CAUTION

- Do not turn off the main power supply switch when in the cool down mode. Doing so may shorten the lamp life and cause a malfunction.
- Upon using, attach the lens cap to prevent soiling of the lens.
- When the projector is not to be used for a long time, disconnect the power plug.

Useful Features During Projection

Hiding the projected image temporarily

The projected image can be hidden by clicking the "ON" button under the "Hide" item of the "Main" menu or "Image" menu.

- When the image is not displayed, pressing "OFF" under the "Hide" item to display the hidden image.
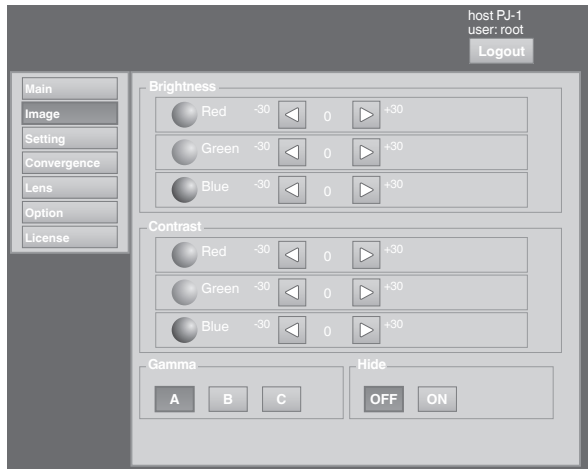
✎ MEMO

When the image is hidden, the [STANDBY/ON] indicator appears blinking in green.

Displaying the Menu

<div style="border:1px solid;display:inline-block;padding:2px">1</div> Enter the IP address assigned in the address field of the Internet Explorer, and click "Go" (P. 27)

- Example: When IP address assigned is "192.168.0.2", enter "http://192.168.0.2".
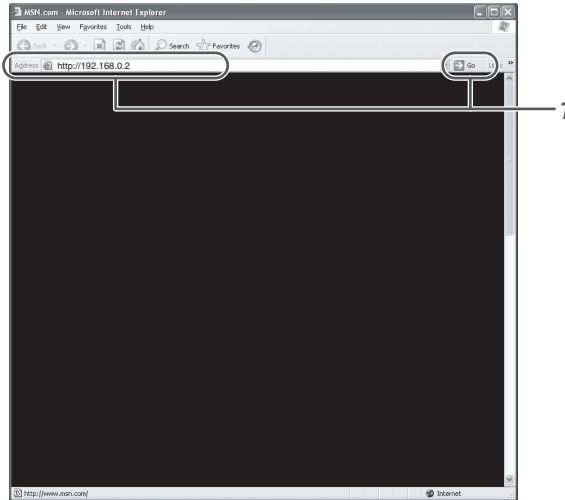
✎ MEMO

- When "LAN Setting" in Internet Explorer is set to "Use a proxy server for your LAN" it may not be possible to designate addresses directly. Change the proxy settings.
- If a "Security Warning" screen appears, click "OK" and continue.

<div style="border:1px solid;display:inline-block;padding:2px">2</div> Enter the login name and the password in the "Login Name" and "Password" fields respectively

✎ MEMO

- If you have forgotten the password, please consult your authorized dealer.

<div style="border:1px solid;display:inline-block;padding:2px">3</div> Click "LOGIN"

- The "Main" menu for this projector appears.

✎ MEMO

- You can alter the user name and password in the "Admin.Network" menu. Specify a user name and password of not more than eight single-byte alphanumeric characters. (P. 43)

Operation and Settings

User Settings Menu

After installation and connection are complete, perform the necessary adjustment and setting.
Operate the menus using the computer's browser to make adjustments and configure settings.

User Settings Menu Structure

Page Menu Name	Page Display Item	Simplified Description of Item
(1) Main	Power	Power ON/OFF operation
	Warning Status	Error code display
	Light Source Time	LD block information display
	Signal Status	Input signal information display
	Temperature	Projector's interior temperature display
	Hide	Mute operation
(2) Image	Brightness	Brightness adjustment
	Contrast	Contrast adjustment
	Gamma	Gamma setting
	Hide	Mute operation
(3) Setting	Input Level	Input level setting
	Display Mode	Display method setting
(4) Convergence	Red	Pixel position adjustment
	Blue	Pixel position adjustment
	Test Pattern	Test pattern setting
(5) Lens	Zoom	Zoom adjustment
	Focus	Focus adjustment
	Shift	Image position adjustment
	Test Pattern	Test pattern setting
(6) Option	Flip	Image inversion setting
	Light Source Power	LD block power setting
	Back Color	Background color setting
	Message Display	Message display setting
	Test Pattern	Test pattern setting

(1) Main Menu

This menu displays the ON/OFF status of the power supply and information on signals input to the projector.
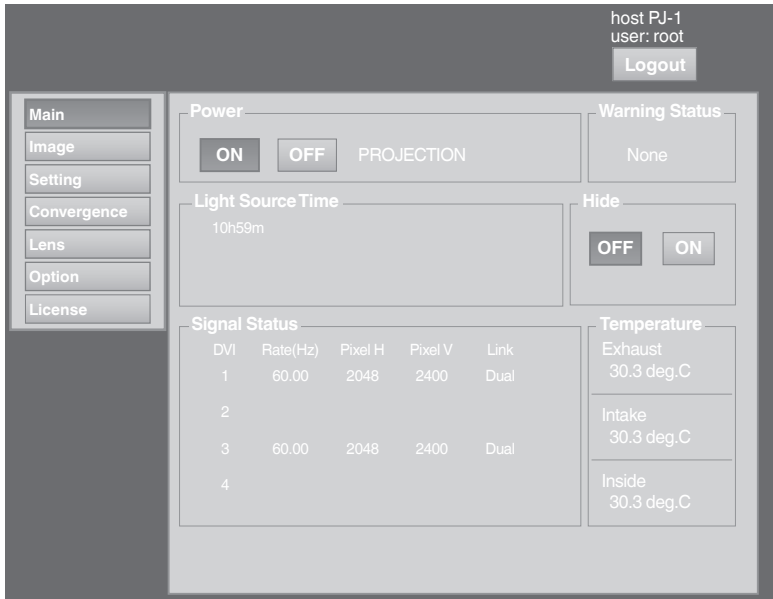
✎ MEMO

• When the power of this unit is off (main power is on), the "Main", "Image", "Setting", "Convergence", "Lens" and "Option" menus will be grayed out and will not be selectable.

Item	Setting Value	Description
Power	ON OFF	Turns on/off the LD block. ON : Turns on the LD block. OFF : Turns off the LD block. ✎ MEMO • The following operating modes of the projector are displayed to the right of the "OFF" button. STANDBY : Standby (OFF) PROJECTION : LD block illuminated (ON) FAN ENABLE : FAN Enable (OFF → ON) DEVICE ENABLE : Elemental Device Enable (OFF → ON) COOLING : Cooling (OFF) EMERGENCY : Error Occurred (Cooling not performed) EMERGENCY COOLING : Error Occurred (Cooling performed) • When in the standby mode, clicking the "ON" button each time switches the mode in the sequence of "STANDBY" → "DEVICE ENABLE" → "FAN ENABLE" → "PROJECTION". • Clicking the "OFF" button when the power is on switches the projector to the cooling mode. The power of the projector cannot be turned on during the cooling process (10 seconds).

Operation and Settings

● indicates the factory default.

Item	Setting Value	Description
Warning Status	-	Displays the latest error number. ✎ MEMO • For details on the error code and description, please refer to "Warning Status"P. 54. • "None" is displayed when no error is detected.
Light Source Time	-	Displays the lifetime of the LD block.

Signal Status
   DVI
   Rate(Hz)
   Pixel H
   Pixel V
   Link
	-
	
	 -
	
	 -
	 -
	 -
		Displays information on the input signals.
		 DVI : Displays the DVI input terminal number.
		 Rate(Hz) : Displays the vertical frequency.
		 Pixel H : Displays the horizontal resolution.
		 Pixel V : Displays the vertical resolution.
		 Link : Displays the link status of the DVI terminal.
		
		 ✎ MEMO
		
		 • This item is not displayed when there is no signal input.
		 • The text color of "Rate(Hz)" (vertical frequency) turns red in the case of interlaced signal. And the text turns white in the case of progressive signal.

Temperature
   Exhaust
   Intake
   Inside
	
	 -
	 -
	 -
		Displays the interior temperature of the projector.
		 Exhaust : Temperature at the vent holes
		 Intake : Temperature at the air inlets
		 Inside : Internal temperature
		
		 ✎ MEMO
		
		 • The color of the text turns red if the temperature becomes abnormal.
		 • The text appears white at normal temperature.

Hide	● OFF ON	Enables temporary hiding of the image. OFF : Do not hide image. ON : Hide image. ✎ MEMO • When the image is hidden, the [STANDBY/ON] indicator appears blinking in green.

(2) Image Menu

This menu is used for adjusting the image quality.

● indicates the factory default.

Item	Setting Value	Description
Brightness 　Red 　Green 　Blue	 -30 to +30 (Default Value: 0) -30 to +30 (Default Value: 0) -30 to +30 (Default Value: 0)	For adjusting the brightness of the red, green, and blue colors.
Contrast 　Red 　Green 　Blue	 -30 to +30 (Default Value: 0) -30 to +30 (Default Value: 0) -30 to +30 (Default Value: 0)	For adjusting the contrast of the red, green, and blue colors.
Gamma	● A 　B 　C	For specifying the tone characteristics of the image. A　　: Sets gamma to "2.2". B　　: Sets gamma to "1.8". C　　: Sets gamma to "2.6".
Hide	● OFF 　ON	Enables temporary hiding of the image. OFF　: Do not hide image. ON　　: Hide image. ✏ MEMO • When the image is hidden, the [STANDBY/ON] indicator appears blinking in green.

Operation and Settings

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(3) Setting Menu

This menu is used for specifying the input level of the terminal and the display mode.

Single   Double   Cross

● indicates the factory default.

Item	Setting Value	Description
Input Level	● 0-255(PC) 16-235	For specifying the input level of the video signals. 0-255(PC) : Set to this value under normal circumstances. (Signal level 0 to 255) 16-235 : For specifying when the signal level is between 16 and 235.
Display Mode	● Single Double Cross	For specifying the display mode of the projection screen. Single : Displays input signals on a single screen. Double : Displays two different input signals on two screens. The left screen displays images of the [DVI 1] terminal, and the right screen displays images of the [DVI 3] terminal. Cross : Displays four different input signals on four screens. The top left screen displays images of the [DVI 1] terminal, the top right screen displays images of the [DVI 2] terminal, the bottom left screen displays images of the [DVI 3] terminal, while the bottom right screen displays images of the [DVI 4] terminal. ✎ MEMO • Please refer to "Connecting Video Signals of the Computer" for details. (P. 18 to 21)

(4) Convergence Menu

This menu is used for correcting color shifts in the optical system.

● indicates the factory default.

Item	Setting Value	Description
Red	-	For adjusting the horizontal/vertical position of red and blue colors on the image.
Blue	-	**✎ MEMO** • The green color value is fixed. • The outer buttons are used for adjustment in units of 1/4 pixels, and the inner buttons in units of 1/10 pixels. • When the image is flipped horizontally or vertically, the horizontal and vertical directions are reversed. • Use images with a clear outline (such as Color Cross Hatch patterns available in this projector) for adjustment. **📢 CAUTION** • When the movement exceeds the limit, the color of the button turns red.
Test Pattern	● OFF Color Bars Color Cross Hatch Cross Hatch Staircase Ramp Flat	For projecting the test pattern. OFF : Do not display the test pattern. Color Bars : Displays the color bar. Color Cross Hatch : Displays the color cross hatch pattern. Cross Hatch : Displays the cross hatch pattern. Staircase : Displays the staircase (white color). Ramp : Displays the ramp pattern (white color). Flat : Displays the flat pattern (white color).

Operation and Settings

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(5) Lens Menu

This menu is used for adjusting the projection lens.

Item	Setting Value	Description
Zoom	-	For adjusting the zoom ratio (screen size). ✎ MEMO • The zoom position changes each time the inner button is clicked. The zoom position changes when the outer button is depressed. 📢 CAUTION • Due to backlash, the response may not be immediate.
Focus	-	For adjusting the focus position. ✎ MEMO • The zoom position changes each time the inner button is clicked. The zoom position changes when the outer button is depressed. 📢 CAUTION • Due to backlash, the response may not be immediate.
Shift	-	For adjusting the horizontal and vertical positions of the projection screen. ✎ MEMO • The zoom position changes each time the inner button is clicked. The zoom position changes when the outer button is depressed. 📢 CAUTION • When the movement exceeds the limit, the color of the button turns red. • Due to backlash, the response may not be immediate.
Test Pattern	-	For projecting the test pattern. ✎ MEMO • Same as "Test Pattern" in the "Convergence" Menu. (P. 39)

Operation and Settings

(6) Option Menu

This menu is used for specifying the settings for screen display method, LD block brightness and others.

● indicates the factory default.

Item	Setting Value	Description

Flip
  Horz.
 	
  Vert.
	ON
	● OFF
	ON
	● OFF
		For specifying settings if images are vertically or horizontally flipped when they are projected from the opposite side of the screen, or when mirrors are used for projection.
		ON : Flips image horizontally.
		OFF : Do not flip image horizontally.
		ON : Flips image vertically.
		OFF : Do not flip image vertically.

Light Source Power	● Mode1 Mode2	For switching the brightness of the LD block to "Mode1" or "Mode2". Mode1 : Brightness (high) Mode2 : Brightness (low)
Back Color	● Blue Black	For specifying the background color during message display or when projection fails, such as when there is no input signal. Blue : Sets the screen to blue color. Black : Sets the screen to black color.
Message Display	ON ● OFF	For specifying whether to display the message. ON : Displays message. OFF : Does not display messages. 📢 CAUTION • When "OFF" is set, the "No Input", "Out of Range" and "Lamp Time Over" messages will not be displayed on the screen.
Test Pattern	-	For projecting the test pattern. ✎ MEMO • Same as "Test Pattern" in the "Convergence" Menu. (P. 39)

Operation and Settings

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Administrator Settings Menu

After installation and connection are complete, perform the necessary adjustment and setting.

Operate the menus using the computer's browser to make adjustments and configure settings.

Administrator Settings Menu Structure

For details on page menu (1) to (6), refer to "User Settings Menu" (P. 34 to 41).

Page Menu Name	Page Display Item	Simplified Description of Item
(1) Main	Power	Power ON/OFF operation
	Warning Status	Error code display
	Light Source Time	LD block information display
	Signal Status	Input signal information display
	Temperature	Projector's interior temperature display
	Hide	Mute operation
(2) Image	Brightness	Brightness adjustment
	Contrast	Contrast adjustment
	Gamma	Gamma setting
	Hide	Mute operation
(3) Setting	Input Level	Input level setting
	Display Mode	Display method setting
(4) Convergence	Red	Pixel position adjustment
	Blue	Pixel position adjustment
	Test Pattern	Test pattern setting
(5) Lens	Zoom	Zoom adjustment
	Focus	Focus adjustment
	Shift	Image position adjustment
	Test Pattern	Test pattern setting
(6) Option	Flip	Image inversion setting
	Light Source Power	LD block power setting
	Back Color	Background color setting
	Message Display	Message display setting
	Test Pattern	Test pattern setting
(7) Admin.Network	Host Name Setting	Host name setting
	IP Address Setting	IP address setting
	User Login Password Change	User login setting
	Admin. Login Password Change	Administrator login setting
(8) Admin.E-mail	E-Mail Setting	E-mail setting
	Test Mail	Test e-mail setting
(9) Admin.Option	Color Depth	Color balance setting
	Frame Lock	Frame synchronization setting
	Mecha. Shutter	Mechanical shutter setting
	High Altitude	High altitude mode setting
	Light Source Time Reset	Resetting the lifetime of LD block
(10) Admin.Signal	Force Signal	Input/output signal setting
	Display Mode	Display method setting
	Signal Status	Input signal information display
	EDID	EDID information rewrite

Operation and Settings

(7) Admin.Network Menu

For configuring the network settings.

host PJ-1
user: advanced
Logout

| Main |
| Image |
| Setting |
| Convergence |
| Lens |
| Option |
| Admin.Network |
| Admin.Mail |
| Admin.Option |
| Admin.Signal |
| License |

Host Name Setting

Host Name   PJ ✱✱✱✱✱✱   SET

IP Address Setting

DHCP Client   ○ DHCP   ⊙ STATIC IP

IP Address   192.168.1.100

Subnet Mask   255.255.255.0

Default Gateway   192.168.1.1

Mac Address   01:23:45:67:89:AB   SET

User Login Name/Password Change

User Name   root   Initialize

New Password

Confirm New Password   SET

Admin. Login Password Change

User Name   advanced

New Password

Confirm New Password   SET

● indicates the factory default.

Item	Setting Value	Description
Host Name Setting Host Name	- (Default Value: PJ******)	For specifying the host name. ✎ MEMO • You can change it to a random name. You can input up to 8 characters using single-byte alphanumeric characters and "-". • "******" of the default value displays the lower 3 bytes of the MAC address of this projector.
IP Address Setting DHCP Client IP Address Subnet Mask Default Gateway Mac Address	DHCP ● STATIC IP (Default Value: 192.168.0.2) (Default Value: 255.255.255.0) (Default Value: 192.168.0.254) -	For configuring the network settings. DHCP : Select this to acquire the IP address from the DHCP server automatically. STATIC IP : Select this to configure the IP address manually. IP Address : Specify the IP address. Subnet Mask : Specify the subnet mask. Default Gateway : Specify the default gateway. Mac Address : Displays the MAC address. (Cannot be specified)
User Login Name/ Password Change User Name New Password Confirm New Password Initialize	root - - -	For changing the login name and password. User Name : For changing the login name. New Password : For changing the login password. Confirm New : Re-enter the new password. (For Password confirmation) Initialize : For resetting the username/ password. ✎ MEMO • You can change it to a random name. You can input up to 8 characters using single-byte alphanumeric characters and "!". • If you have forgotten the password, please consult your authorized dealer.
Admin. Login Password Change User Name New Password Confirm New Password Initialize	advanced - - -	For changing the administrator's password. User Name : Cannot be changed.(fixed) New Password : For changing the login password. Confirm New : Re-enter the new password. (For Password confirmation) Initialize : For resetting the password. ✎ MEMO • You can change it to a random name. You can input up to 8 characters using single-byte alphanumeric characters and "!". • If you have forgotten the password, please consult your authorized dealer.

(8) Admin.E-mail Menu

This menu is for configuring the mail settings, which sends out an error message to the computer of the preset address when an abnormality occurs within this projector.

Error message sent from this projector

(Example) When error occurs at the DD-RB board

Sender

****** (setting value for "E-Mail Sender")

Mail title

4KPJU2 report mail

Message

Error Code 32 "Trouble with DD-RB circuit board."
System Time 106 h 57 m
Light Source Time 41 h 57 m
Exhaust Temp. 42 deg.C
Inside Temp. 40 deg.C
Intake Temp. 24 deg.C

✎ MEMO

• For details on the Error Code, refer to "Warning Status" P. 54.

● indicates the factory default.

Item	Setting Value	Description
E-Mail Setting		For configuring the e-mail feature.
E-Mail	ON ● OFF	ON : Use the mail feature. OFF : Do not use the mail feature.
E-Mail Sender	- (Default Value: lower 3 bytes of the MAC address)	For specifying the destination e-mail address of this projector.

E-Mail Address	-
	(Default Value: user@localhost)
		For specifying the destination e-mail address.
		
		✎ MEMO
		  • Specify an address up to a maximum of 64 characters.
		  • Make use of single-byte alphanumeric characters and "-"."."_"@".

SMTP Server Address	-
	(Default Value: 1.1.1.1)
		For specifying the address of the outgoing mail server (SMTP).
		
		✎ MEMO
		  • Specify an address up to a maximum of 15 characters.
		  • Make use of numbers and ".".

E-Mail Auth.	ON ● OFF	ON : Enable the e-mail authentication feature. OFF : Disable the e-mail authentication feature.
Auth. Type	● PLAIN LOGIN CRAM-MD5	For configuring the e-mail authentication type. PLAIN : Set e-mail authentication to "PLAIN". LOGIN : Set e-mail authentication to "LOGIN". CRAM-MD5 : Set e-mail authentication to "CRAM-MD5".

Auth. User Account	-	For configuring the account name during e-mail authentication.
		
		✎ MEMO
		  • Specify an address up to a maximum of 31 characters.
		  • Make use of single-byte alphanumeric characters and "-".

Auth. Password	-	For configuring the password during e-mail authentication.
		
		✎ MEMO
		  • Specify an address up to a maximum of 31 characters.
		  • Make use of single-byte alphanumeric characters and "-".

Port No.	● 25 465 587	For configuring the SMTP server port number when using the e-mail authentication feature.
Set	-	The details of the configuration will be saved.
Test Mail	-	When the "SEND" button is clicked, the test mail with the contents configured in the "E-Mail Setting" will be sent.

(9) Admin.Option Menu

This menu is used for specifying the image and option settings as well as resetting the lifetime of the LD block.
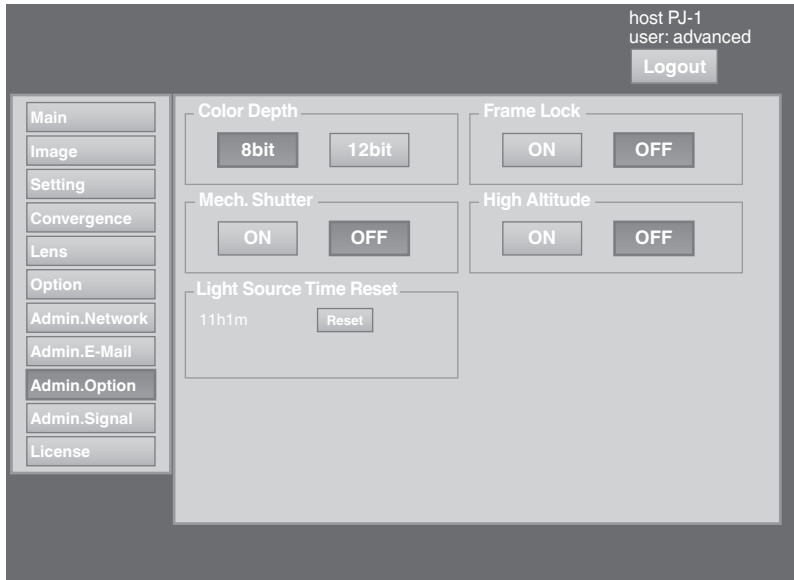
● indicates the factory default.

Item	Setting Value	Description
Color Depth	● 8bit 12bit	For configuring the color balance.
Frame Lock	● ON OFF	For configuring the frame synchronization of each DVI input.
Mech. Shutter	ON ● OFF	For configuring to ON/OFF the Mech. Shutter (model number: PK-VS4MS, optional, sold separately). Click "ON" to operate the Mecha Shutter.
High Altitude	ON ● OFF	Configure to "ON" when using at high altitude (above 1,500 m).
Light Source Time Reset	-	Resets the lifetime of the LD block.

(10) Admin.Signal Menu

This menu is for configuring settings such as display format, and for rewriting EDID.

Single　　Double　　Cross

● indicates the factory default.

Item	Setting Value	Description
Force Signal	● OFF 4096×2400, None, Dual 4096×2400, None, Single 2048×2400, 2Stripe, Dual 2048×2400, 2Stripe, Single 2048×1200, Cross, Dual 2048×1200, Cross, Single 1024×2400, 4Stripe, Dual 1024×2400, 4Stripe, Single	For forcibly configuring the output signal. Make use of this setting when there is no display due to configuration changes at the input source. ✎ MEMO • Some portions of the image may not be displayed and the image may become noisy. OFF : Turns off the display by force. 4096×2400, None, Dual : Displays a normal screen using dual link. 4096×2400, None, Single : Displays a normal screen using single link. 2048×2400, 2Stripe, Dual : Displays a 2 stripes screen using dual link. 2048×2400, 2Stripe, Single : Displays a 2 stripes screen using single link. 2048×1200, Cross, Dual : Displays a cross screen using dual link. 2048×1200, Cross, Single : Displays a cross screen using single link. 1024×2400, 4Stripe, Dual : Displays a 4 stripes screen using dual link. 1024×2400, 4Stripe, Single : Displays a 4 stripes screen using single link.

Operation and Settings

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● indicates the factory default.

Item	Setting Value	Description
Signal Status DVI Rate(Hz) Pixel H Pixel V Link	- - - - -	Displays information on the input signals. Same as "Signal Status" in the User Menu. DVI : Displays the DVI input terminal number. Rate(Hz) : Displays the vertical frequency. Pixel H : Displays the horizontal resolution. Pixel V : Displays the vertical resolution. Link : Displays the link status of the DVI terminal. ✎ MEMO • This item is not displayed when there is no signal input. • The text color of "Rate(Hz)" (vertical frequency) turns red in the case of interlaced signal. And the text turns white in the case of progressive signal.
Display Mode	● Single Double Cross	For specifying the display mode of the projection screen. Same configuration as "Display Mode" in the User Menu. Single : Displays input signals on a single screen. Double : Displays two different input signals on two screens. The left screen displays images of the [DVI 1] terminal, and the right screen displays images of the [DVI 3] terminal. Cross : Displays four different input signals on four screens. The top left screen displays images of the [DVI 1] terminal, the top right screen displays images of the [DVI 2] terminal, the bottom left screen displays images of the [DVI 3] terminal, while the bottom right screen displays images of the [DVI 4] terminal. ✎ MEMO • Please refer to "Connecting Video Signals of the Computer" for details. (P. 18 to 21)
EDID	-	For rewriting EDID. Click the "Browse" button and select an EDID file. Click the "SET" button to start writing. Write "OK" will be displayed for each channel. "NG (number)" is displayed when writing fails. Error Code 1 : System error 7 : Unable to execute due to power off 8 : Unable to rewrite due to DVI cable connection 📢 CAUTION • Do not turn off the power during rewrite. • The EDID file capacity is within 256 byte. • Rewriting to individual channel is not available. • It is not possible to move on to other pages during rewrite. ✎ MEMO • EDID: Extended Display Information Data A data to describe the specifications (resolution, model number, etc.) of the projector. The compatible transmitting device will output the optimum video signal based on this data.

Operation and Settings

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Troubleshooting

Check the following points before sending this product for repair.

The following phenomena are not malfunctions.

If there is no abnormality on the screen when the phenomena below appear, they are not malfunctions.

- The top or front part as well as the rear of the projector unit is hot
- A creaking sound is heard from the projector
- Device noise is heard from the interior of the projector
- There is color bleeding on the screen

When the projector fails to run properly due to external noises, perform the following operations.

① Check to ensure that the power is shut down. Unplug the power cord, and insert again.

② Turn on the power of the projector

A sound maybe heard when the lamp burn out. However, this is not a hazard.

D-ILA devices are manufactured using extremely high-precision technology. However, some of the pixels may not lit up or remain permanently lit up.

Symptom	Probable Cause	Corrective Action	Reference Page
Power is not supplied	• Is the power cord disconnected?	• Insert the power cord (plug) properly.	P. 24
	• Is the main power supply switched turned on?	• Turn on the main power supply switch of the projector unit.	P. 24
	• Is the LD block in the cool down mode?	• Turn on the power again after the cool down mode ends.	P. 31
	• Is the LD block protection function triggered? (This function is triggered when the power shuts down such as during power failures.)	• Wait until the temperature of the LD block drops. (Turn on the main power supply switch to run the fan to cool down the LD block.) Turn on the projector after about 10 seconds.	-
Image is dark	• Is the LD block near exhaustion?	• Check the "Light Source Time" in the "Main" menu. When the LD block is near exhaustion, please consult your authorized dealer.	P. 36
Projector works when the power is turned on, but stops abruptly after a few minutes	• Are the air inlets and vent holes blocked?	• Turn off the main power supply switch, and remove the blockage. After removing, turn on the power again.	P. 9 to 11, P. 32
	• Is the temperature of the room high?	• Set the temperature of the room or the surrounding temperature of this projector to an appropriate level.	P. 60
	• Are the filters dirty?	• Clean the filters.	P. 57

Others

Video image does not appear	• Is the lens cap removed?	• Remove the lens cap.	P. 9
	• Are devices properly connected?	• Connect the devices correctly.	P. 19, 21
	• Is the power of the connected devices turned on?	• Turn on the power of the connected devices.	-
	• Are correct signals being output from the connected devices?	• Configure the connected devices correctly.	-
	• Are the signals of the connected devices possible input signals?	• Check to ensure that they are possible input signals, and input compatible signals accordingly.	P. 18, 18
	• Is the image temporarily hidden?	• Set "Hide" of the "Main" menu or "Image" menu to "OFF" to display the image.	P. 32, 36, 37
Video image is blur	• Is the projector out of focus?	• Adjust the focus using "Focus" of the "Lens" menu.	P. 31, 40
	• Is the projection distance too short or too long?	• Set it to a correct distance.	P. 16, 17
Image is unusually dark or bright	• Is the brightness level properly adjusted?	• Adjust accordingly using "Brightness" of the "Image" menu. • Adjust "Light Source Power" in the "Option" menu.	P. 37 P. 41
Coloring of the image is poor or distorted	• Is the contrast level properly adjusted?	• Adjust accordingly using "Contrast" of the "Image" menu.	P. 37
	• Are the signals of the connected devices possible input signals?	• Check to ensure that they are possible input signals, and input compatible signals accordingly.	P. 18, 20
	• Is the input cable correctly connected?	• Connect the input cable correctly.	P. 19, 21
Projection position on the screen has shifted	• Has the setup position of the projector been shifted?	• Check the setup position of the projector.	-
Image disappears suddenly	• Are the video signals correctly input?	• Check the signals and connection.	P. 18 to 21
Images do not appear on the two-screen mode display	• Are the [DVI 1] and [DVI 3] terminals connected for input?	• To display images in the two-screen mode, connect the [DVI 1] and [DVI 3] terminals. The left screen displays images of the [DVI 1] terminal, and the right screen displays images of the [DVI 3] terminal.	P. 20, 21
Images do not appear immediately after power is turned on	• Formatting is in progress.	• Please wait for a maximum duration of 3 minutes for the formatting progress to end.	P. 29
The screen does not darken immediately when the projection has ended	• The ending process is in progress.	• Please wait for a maximum duration of 2 minutes for the ending progress to complete after several hours of image projection.	P. 31
The MENU is not displayed correctly	• It may be affected by your Web browser cache (temporary file storage).	• Delete all Web browser cache (temporary file storage).	-

Others

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What to do when these messages are displayed

Messages are displayed when the LD block is exhausted or when a signal that is not usable is input.

Message
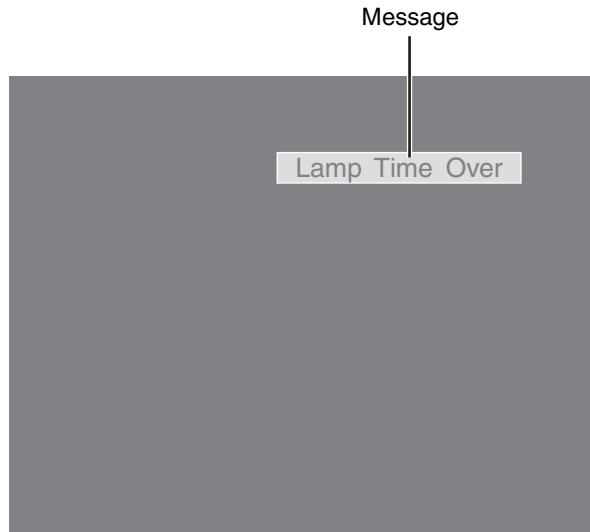
Lamp Time Over

Message	Cause (Details)
Lamp Time Over	• Displayed when the lifetime of the LD block has exceeded 20,000 hours. The message is displayed for 3 minutes during each projection. → For details, please consult your authorized dealer.
Out of Range	• When there is input of video signals that cannot be used with this unit → Input video signals that can be used.
No Input	• When no device is connected to the input terminal • When the input terminal is connected but there is no signal → Input the video signals.

✎ MEMO

• The messages will not be displayed under factory default conditions.
• Set "Message Display" in the "Option" menu to "ON". (P. 41)

Others

Warnings Using Indicators

The lifetime of the LD block and warning mode are indicated by the indicators.

For indicator displays during normal operation, refer to the note below.

No.	Indicator			Description
	STANDBY/ON	LAMP	WARNING	
1	*1	Light On (Yellow)	-	When the lifetime of the LD block has exceeded 19,000 hours
2				When the lifetime of the LD block has exceeded 20,000 hours (Message display is also available. (P. 52))
3	*2	Blinking (Yellow)	Light On (Red)	When the LD block does not light up and projection fails
4				When the LD block goes off during projection
5	*2	-	Light On (Red)	When the ambient temperature of the LD block is high
6				When the external temperature is unusually high
7				When the internal temperature is unusually high
8				When an abnormality has occurred in the cooling fan
9				When error occurs in the circuit operation

*1   The indicator lights up in red when in the standby mode, and in green when in the operating mode.

*2   The indicator lights up in red when in the warning mode, and blinks in red when in the cool down mode.

Measures when the warning mode appears

When the projector switches to the warning mode (Nos. 3 to 9), projection stops automatically, and the cooling fan runs for about 10 seconds.

After the cooling fan stops running, turn off the main power supply switch, and remove the power plug from the outlet.

Perform the following checks and take the corresponding measures.

No.	Check	Measure
3	• Check whether the projector has been subject to shock during operation.	• Turn on the power again.
4		
5	• Check whether the air inlets are blocked by objects. • Check to ensure that the external temperature of the projector is normal.	• Allow some time for the projector to cool down.
6		
7		
8		
9		

If the warning indication is displayed again, turn off the main power supply switch after the cooling fan stops running. Then pull out the power plug from the power outlet. Call your authorized dealer for repair.

Others

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- Indicator display during normal condition.

Indicator			Description
STANDBY/ON	LAMP	WARNING	
Light On (Red)	-	-	When in the standby mode.
Light On (Green)	-	-	When power is supplied (operating mode).
Blinking (Red)	-	-	When cooling down (cool down mode). (P. 31)
Blinking (Green)	-	-	When the projected image is temporarily hidden. (P. 32)

Warning Status

The latest error code (Warning Status) appears in the "Main" menu when an abnormality occurs in the projector.
Error details are as follows:

Error Code	Meaning
2	The lifetime of the LD block has exceeded 20,000 hours.
8	Abnormally high temperature in the projector.
9	Abnormally high temperature around the intake vent.
A	Abnormally high ambient temperature around the lamp.
15	The safety switch is activated.
30	Trouble with CPU circuit board.
31	Trouble with MAIN circuit board.
32	Trouble with DD-RB circuit board.
33	Trouble with DD-G circuit board.
34	Trouble with SUB CPU circuit board.
41	Cooling fan for the illumination system (PCS) has stopped.
42	Cooling fan for the circuit power has stopped.
43	Cooling fan for the DD circuit board has stopped.
44	Cooling fan for the MAIN circuit board has stopped.
46	Cooling fan for the PFC power has stopped.
48	Cooling fan for the DD RB has stopped.
4A	Exhaust fan for the LD Driver has stopped.
4B	Cooling fan for the LD Bank1 has stopped.
4C	Cooling fan for the LD Bank2 has stopped.
50	Trouble with mechanical shutter.

Others

RS-232C Interface

You can control this projector via a computer by connecting the computer to this unit using a RS-232C cross cable (D-sub 9 pins).
The commands to control this unit and the response data format against the received commands are explained here.
For details, please consult your authorized dealer.
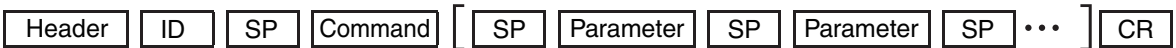
Communication Specifications

Communication specifications for this unit are as follows:

Transfer Rate	19200 bps
Data Length	8 bit
Parity	None
Stop Bit	1 bit
Flow Control	None

Command Format

Command Data Format (PC→Projector)

When sending a control command to this unit, use the following data format:

| Header | ID | SP | Command | [SP | Parameter | SP | Parameter | SP | •••] | CR |

Header	: Designates the head of data and the data type.
	"!" (21h): Assigns command to the projector (Command)
	"?" (3Fh): Query to the projector (Asking command)
ID	: "1": Identification number of the projector (Factory setting is "1")
SP	: Designates the delimiter between ID and command, command and parameter, as well as parameter and parameter. (20h)
CR	: Designates the terminal of the data. (0Dh)

* [ ] is not necessary for Asking command.

Response Data Format (Projector→PC)

Upon executing a control command, this unit sends back response data to the computer in this format.

| Header | ID | SP | Normal Termination Status | [SP | Parameter | SP | Parameter | SP | •••] | CR |

Header	: Designates the head of the response data.
	"@" (40h): Fetches data from the projector
ID	: "1": Identification number of the projector (Factory setting is "1")
SP	: Designates the delimiter between ID and normal termination status, normal termination status and parameter, as well as parameter and parameter. (20h)
Normal Termination Status	: "0" (30h)
CR	: Designates the terminal of the data. (0Dh)

* [ ] is not applicable when sending commands to the projector.

Others

55

Parameters used for the data format

The following 2 types of parameters are used for command and response data:

(1) ON/OFF (2) Special Parameter

Each parameter is as follows:

(1) ON/OFF

Shows the status (ON or OFF) of the unit, such as POWER and HIDE.

Character	Hex	Meaning
0	30	OFF
1	31	ON

(2) Special parameters

Operation mode parameters

Character	Hex	Meaning
0	30	Standby state
1	31	Power ON state
2	32	Cooling state
3	33	Emergency cooling state
4	34	Emergency state

DHCP client parameters

Character	Hex	Meaning
0	30	DHCP
1	31	STATIC IP

IP address parameters

Display the IP address using the dot ("." (2HE)) delimiter.

Example: "192.168.0.10"

External control command table

Function	Command	Setting		Asking		Data Type	
		Power On	ELSE	Power On	ELSE	ON/OFF	Special Parameter
Power	U0F	O (OFF)	O (ON)	-	-	O	-
Hide	U00	O	-	O	-	O	-
Operation Mode	UA0	-	-	O	O	-	Standby...
DHCP Client	UD2	O	O	O	O	-	DHCP...
IP Address	UD3	O	O	O	O	-	192.168. ...
Network Restart	UDC	O	O	O	O	-	"0" Fixed

✎ MEMO

• After configuring "DHCP Client" and "IP Address", execute "Network Restart".

Maintenance

Turn off the power of the projector unit, and unplug the power cord when cleaning or replacing the filter.

Cleaning and Replacing the Filter

Clean the filter regularly. If the filter is soiled, air intake efficiency may deteriorate, thus resulting in malfunction of the product.
Replace with a new one if the filter fails to remove dust thoroughly or if it is damaged. Failure to do so may cause dust to enter the projector and shadows to appear on the projected image.

If dirt has entered this product or if you need to purchase the filter, please consult the authorized dealer from which this product is purchased or any nearby JVC servicing center.
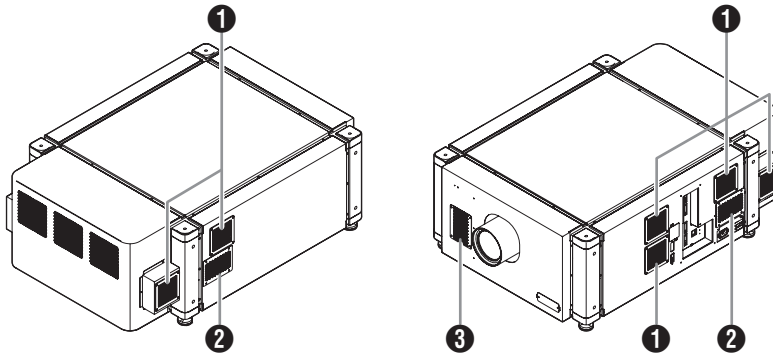
❶

Sponge

Filter Cover

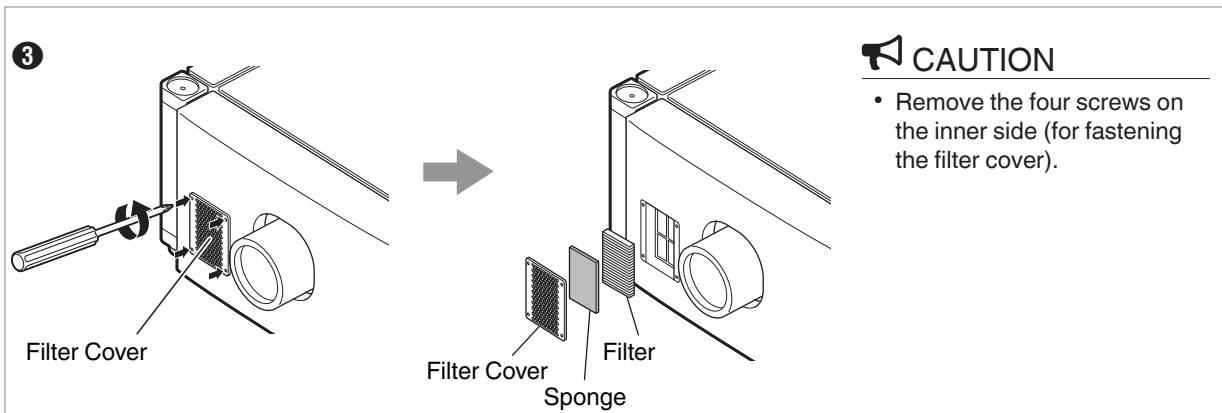### 📢 CAUTION

- Remove the four screws on the inner side (for fastening the filter cover).

❷

Sponge

Filter Cover

📢 CAUTION

- Remove the four screws on the inner side (for fastening the filter cover).

Others

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❸

CAUTION

• Remove the four screws on the inner side (for fastening the filter cover).

Filter Cover

Filter Cover   Filter
          Sponge

1 Remove the filter cover

The filter is located at the front side of the projector unit.

2 Remove the sponge and filter

Hold the center of the filter using your fingers, and pull the filter toward you to remove it.

3 Clean the sponge and filter

Remove any dirt or dust using a vacuum cleaner.

CAUTION

• Do not clean using a flammable air duster. This may cause fire.

4 Mount the sponge and filter

Mount the filter and sponge to the projector using the reverse removed procedure.
Finally, check to ensure that the filter cover is firmly mounted.

MEMO

• Mount the filter correctly. Failure to do so may cause the projector to malfunction.
• The projector may stop operating if a damaged filter or filter panel is used. In this case, replace the filter or filter panel with a new one.

Others

Routine Servicing

Clean dirt on the cabinet

Do this with a soft cloth. In case of heavy soiling, soak a cloth in neutral detergent diluted with water, wring dry and wipe, followed by wiping again using a dry cloth.

Pay attention to the following to prevent the cabinet from deteriorating in condition, getting damaged, or the paint from coming off.

- Do not wipe with a stiff cloth
- Do not wipe with force
- Do not wipe with thinner or benzene
- Do not spray volatile chemicals like insecticide
- Do not allow prolonged contact with rubber or plastic products

Remove dirt that is attached to the vent holes

Do this using a vacuum cleaner. Wipe using a cloth if a vacuum cleaner cannot be used. Leaving dust attached may prevent adjustment of the internal temperature and result in malfunction of the projector.

Clean dirt on the lens

Do this using commercial blowers or lens cleaning papers (for cleaning glasses and cameras).

Do not use fluid-type cleaning agents. This may lead to peeling of the surface coating film.

Lens surface is fragile. Avoid rubbing or knocking it.

Specifications

General

Power supply	AC 110 to 240 V, 50 Hz/60 Hz
Power consumption	1250 W (Standby mode: 7 W)
Current consumption	11.5 A max (AC 110 to 240 V)
Calorific power	4500 kJ/h (1076 kcal/h)
Air capacity	Intake: Approx. 6 m^3/min Exhaust: Approx. 6 m^3/min
Allowable operating temperature range	10°C to 35°C
Allowable operating humidity range	20% to 80% (non-condensation)
Allowable storage temperature range	-5°C to 60°C
Installation height	Operation guarantee: 2000 m and below Performance guarantee: 1500 m and below
Dimensions	660 mm x 342 mm x 934 mm (Width x Height x Depth) (Excluding lens and small protrusions)
Mass	DLA-VS4010: 73.5 kg (Excluding lens) DLA-VS4810: 74.5 kg (Excluding lens)

Optical System

Projection method	D-ILA analog drive system × 3
D-ILA element *1*2	1.27" (4096×2400 pixels) × 3 pcs (total no. of pixels: 29,491,200 pixels)
Projection Lens (optional)	GL-MS4015SZ (1.50:1 to 1.84:1 zoom lens) GL-MS4016SZ (1.50:1 to 1.84:1 zoom lens) GL-MS4021SZ (2.15:1 to 3.65:1 zoom lens) GL-MS4011S (1:1.1 Short focal length lens)
Light-source Lamp	Laser diode
Screen size	80" to 300" (zoom lens) 50" to 250" (short focal length lens)
Projection distance	Approx. 2.6 m to 12 m (zoom lens) Approx. 1.2 m to 6 m (short focal length lens)

Terminal

Video input	DVI-D (dual link) 24 pins (supports 12-bit extended input) × 4 (supports HDCP*3)
LAN	RJ45 × 1
USB	Type B (Slave) × 1
RS-232C	D-sub 9 pins (male) x 3
e-shift Sync (DLA-VS4810 only)	BNC (male) × 1 (3.3 V CMOS input level, high impedance)

Others

Optional Items

Projection lens
  GL-MS4015SZ
  • 1.50:1 to 1.84:1 1.22x zoom lens (80" to 300")
  GL-MS4016SZ
  • 1.50:1 to 1.84:1 1.22x zoom lens (50" to 210")
  GL-MS4021SZ
  • 2.15:1 to 3.65:1 1.69x zoom lens (80" to 300")
  GL-MS4011S
  • 1:1.1 short focal length lens (50" to 250")

Replacement filter/sponge (front)
  LC43010-003A (Filter)
  LC43030-003A (Sponge)

Replacement sponge (right/left side)
  LC43030-002A
  J3K-0072-00

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*1   D-ILA is the abbreviation for Direct Drive Image Light Amplifier.

*2   D-ILA devices are manufactured using extremely high-precision technology with a pixel effectiveness of 99.99%. Only 0.01% or less of the pixels are either missing or would remain permanently lit.

*3   HDCP is the abbreviation for High-bandwidth Digital Content Protection system. Images from the DVI input terminal may not be displayed due to HDCP specification changes.

• The open source software is embedded in this product. For more information, please go to:
http://www3.jvckenwood.com/english/download/lnx/07jvc-pj/

• Design and specifications are subject to change without prior notice.

• Please note that some of the pictures and illustrations may have been abridged, enlarged or contextualized in order to aid comprehension. Images may differ from the actual product.
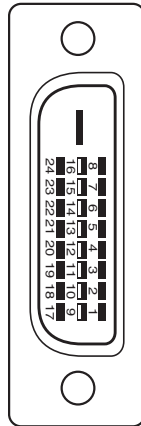
Others

Pin Arrangement

• RS-232C Terminal
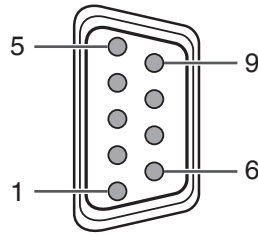
Pin No.	Signal	Action	Signal Direction
2	RxD	Incoming Data	PC → This Projector
3	TxD	Outgoing Data	This Projector → PC
5	GND	Signal Ground	-
1, 4, 6-9	NC	-	-

• DVI-D Terminal

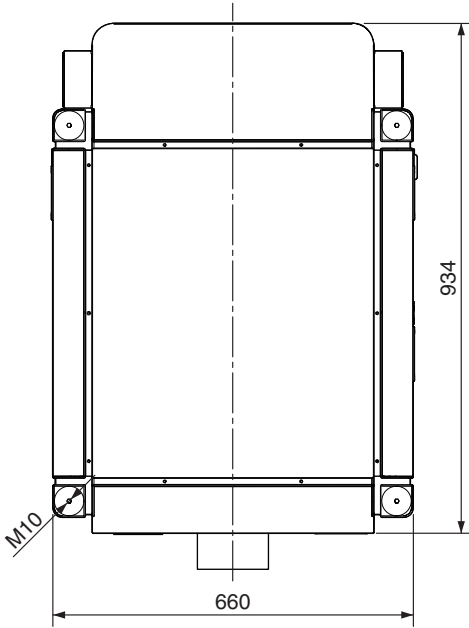| Pin No.	Signal	Pin No.	Signal
1	TMDS Data 2-	13	TMDS Data 3+
2	TMDS Data 2+	14	TMDS +5 V Power Supply
3	TMDS Data 2/4 Shield	15	Earth (+5 V)
4	TMDS Data 4-	16	Hot Plug Detection
5	TMDS Data 4+	17	TMDS Data 0-
6	DDC Clock	18	TMDS Data 0+
7	DDC Data	19	TMDS Data 0/5 Shield
8	NC	20	TMDS Data 5-
9	TMDS Data 1-	21	TMDS Data 5+
10	TMDS Data 1+	22	TMDS Clock Shield
11	TMDS Data 1/3 Shield	23	TMDS Clock +
12	TMDS Data 3-	24	TMDS Clock -

TMDS = Transition Minimized Differential Signaling
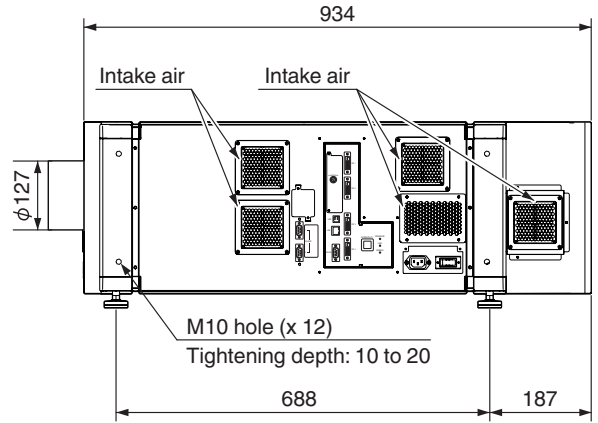
DDC = Display Data Channel

Others

Dimensional Outline Drawing

(Unit: mm)

Top Surface

934

M10

660

Side

934

Intake air   Intake air

ϕ127

M10 hole (x 12)
Tightening depth: 10 to 20

688   187

Front

676.5

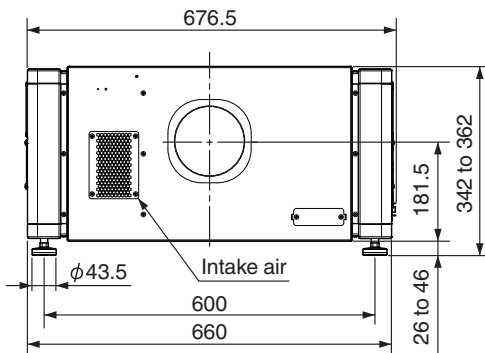342 to 362

181.5
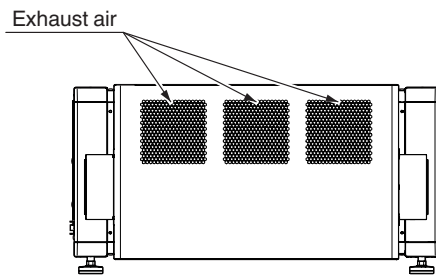
Intake air

ϕ43.5

600

660

26 to 46

Rear Surface

Exhaust air

⚠ CAUTION

- Using screws with dimensions other than those specified in the above diagram may cause the projector to drop or malfunction.

JVC