JVC

INSTRUCTIONS

D-ILA
PROJECTOR

DLA-NZ700
DLA-NZ500
DLA-RS2200
DLA-RS1200

D-ILA®

HDMI
HIGH-DEFINITION MULTIMEDIA INTERFACE

Mobile User Guide

● *https://manual3.jvckenwood.com/projector/mobile/global/*
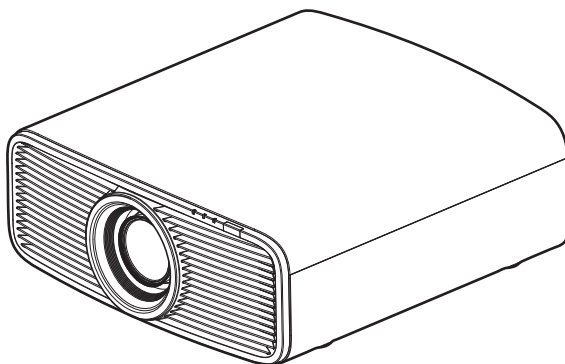
The Mobile User Guide can be viewed on mobile internet devices including smartphones and tablets.

For Customer use :
Enter below the serial No. which is located on the side of the cabinet. Retain this information for future reference.

Model No.	DLA-NZ700BK, DLA-NZ500BK, DLA-NZ700BE, DLA-NZ500BE, DLA-RS2200K, DLA-RS1200K, DLA-RS2200E, DLA-RS1200E
Serial No.	

Not suitable for household room illumination.

Getting Started

Set up

Operate

Adjust/Set

Maintenance

Troubleshooting

Others

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.

NOISE EMISSION DECLARATION
The sound pressure level at the operator position is equal or less than 60dB(A) according to ISO7779.

WARNING
REMOVE THE LENS COVER BEFORE TURNING ON THE PROJECTOR

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

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

Supplier's Declaration of Conformity

Trade Name: **JVC**

Products: **D-ILA Projector**

Model Name: **DLA-NZ700BK, DLA-NZ500BK, DLA-RS2200K, DLA-RS1200K**

Responsible Party: **JVCKENWOOD USA Corporation**

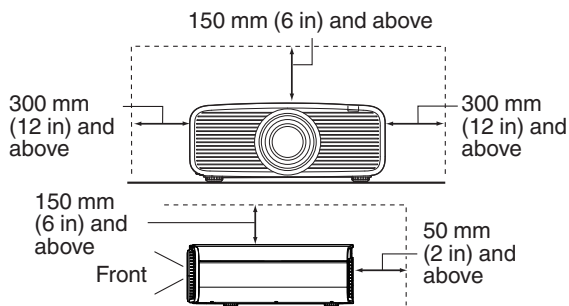**1440 Corporate Drive, Irving, TX 75038**

Telephone number: 678-449-8879

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions;

(1) This device may not cause harmful interference, and
(2) This device must accept any interference received, including interference that may cause undesired operation.

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.)
- To allow better heat dissipation, keep a clearance between this unit and its surrounding as shown below. When this unit is enclosed in a space of dimensions as shown below, use an air-conditioner so that the internal and external temperatures are the same. Overheating can cause damage.

150 mm (6 in) and above

300 mm (12 in) and above

300 mm (12 in) and above

150 mm (6 in) and above

50 mm (2 in) and above

Front

- 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.
- 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 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.
- For health reasons, please take a break of about 5-15 minutes every 30-60 minutes and let your eyes rest.
- Once every three years, please perform an internal test. This unit is provided with replacement parts needed to maintain its function (such as cooling fans). Estimated replacement time of parts can vary greatly depending on frequency of use and the respective environment. For replacement, please consult your dealer, or the nearest authorized JVC service center.
- When fixing the unit to the ceiling, Please note that we do not take any responsibility, even during the warranty period, if the product is damaged due to use of metal fixtures used for fixation to the ceiling other than our own or if the installation environment of said metal fixtures is not appropriate. If the unit is suspended from the ceiling during use, please be careful in regard to the ambient temperature of the unit. If you use a central heating, the temperature close to the ceiling will be higher than normally expected.
- Video images can burn into the electronic component parts. Please do not display screens with still images of high brightness or high contrast, such as found in video games and computer programs. Over a long period of time it might stick to the picture element. There is no problem with the playback of moving images, e.g. normal video footage.
- Install the outlet at an accessible height to unplug from the wall. Or install the circuit breaker at an accessible height to shut down the projector. If you need information, please consult your authorized dealer or specialist.
- Take care not to drop this unit while carrying it. Otherwise, it may cause injuries, or damage this unit.
- Do not project images with the lens cover attached. Otherwise, the lens cover may be deformed due to the heat, or the projector may malfunction.
- Do not place your hand into the opening near the lens while lens shift is in progress. Otherwise, your hand may get caught, resulting in an injury.

- Not using the unit for a long time can lead to malfunction. Please power it on and let it run occasionally. Please avoid using the unit in a room where cigarettes are smoked. It is impossible to clean optical component parts if they are contaminated by nicotine or tar. This might lead to performance degradation.
- When you are connecting the devices, connect the cable after you have turned off the power of each device. Making connection with each device being turned on may cause this unit to malfunction.
- Before connecting the cables, remove any static electricity from your body by touching the wall with the palm of your hand.

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* 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.

- Do not use optical instruments (such as magnifying glass or reflector) viewing the laser output. It may pose an eye hazard.
- When turning on the projector, ensure that no one is looking into the projection lens.
- Do not look into the lens and openings when the light is on. Doing so would have serious effects on the human body.
- Do not detach or attach the projection lens with the power connected.
- Attempting to disassemble, repair or modify the projector yourself may lead to serious safety issues.
- Using a faulty product not only results in electrical shock or fire hazard, it can cause visual impairment.
- When abnormality occur, stop using the projector immediately and send it to your authorized dealer for repair.

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.

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
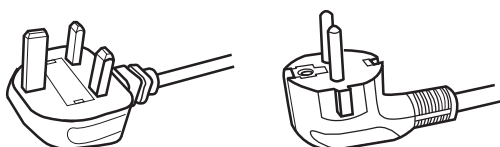
For United Kingdom   For European continent
                       countries

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.

WARNING:
THIS APPARATUS MUST BE EARTHED.

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

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

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
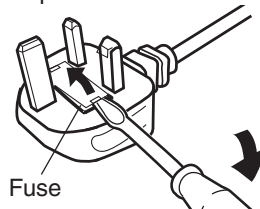colored red.

POWER CONNECTION (United Kingdom only)

HOW TO REPLACE THE FUSE:
When replacing the fuse, be sure to use only a
correctly rated approved type, re-fit the fuse cover.

**IF IN DOUBT —— CONSULT A COMPETENT
ELECTRICIAN.**
Open the fuse compartment with the blade
screwdriver, and replace the fuse.
(* An example is shown in the illustration below.)

Fuse

Battery

Information on Battery into the Remote Controller
The batteries included with this product comply with
EU battery regulations.

Type   : R03(NWC)

Manufacturer : Panasonic Energy Co., Ltd.

Address   : 1-1, matsushita-cho, moriguchi-shi,
                 osaka 570-8511, JAPAN

URL   : https://www.panasonic.com/global/energy/

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.

Informacje dla użytkowników dotyczące utylizacji starego sprzętu i baterii

Produkty **Baterie**

[Tylko dla Unii Europejskiej]

Symbole te wskazują, że sprzętu oznaczonego tymi symbolami nie należy wyrzucać wraz z odpadami domowymi. Jeśli chcesz zutylizować produkt lub baterię, rozważ systemy zbiórki lub urządzenia do odpowiedniego recyklingu.

UWAGA: Znak Pb pod symbolem baterii wskazuje, że ta bateria zawiera ołów.

CLASS 1 LASER PRODUCT
PRODUIT LASER DE CLASSE 1
PRODUCTO LÁSER DE CLASE 1
LASERPRODUKT DER KLASSE 1
PRODOTTO LASER DI CLASSE 1
KLASSE 1 LASERPRODUCT
PRODUKT LASEROWY KLASY 1

LASER CAUTION LABEL
ÉTIQUETTE DE MISE EN GARDE POUR LE LASER
ETIQUETA DE PRECAUCIÓN DEL LÁSER
LASERWARNSCHILD
ETICHETTA DI ATTENZIONE LASER
LASER WAARSCHUWINGSETIKET
ETYKIETA OSTRZEGAWCZA DOTYCZĄCA LASERA

IEC60825-1:2014	PRODUCTO LÁSER DE CLASE 1
CLASS 1 LASER PRODUCT	PRODOTTO LASER DI CLASSE 1
LASER PRODUCT KLASSE 1	LASERPRODUKT DER KLASSE 1
PRODUIT LASER DE CLASSE 1	ЛАЗЕРНАЯ АППАРАТУРА КЛАССА 1
EN50689:2021	
CONSUMER LASER PRODUCT	PRODUCTO LÁSER PARA CONSUMO
LASERPRODUCT VOOR CONSUMENTEN	PRODOTTO LASER DI CONSUMO
PRODUIT LASER GRAND PUBLIC	CONSUMER-LASERPRODUKT

This product complies with EN60825-1:2014+A11:2021.
Ce produit est conforme à la norme EN60825-1:2014+A11:2021.
Este producto cumple con las normas EN60825-1:2014+A11:2021.
Dieses Produkt entspricht EN60825-1:2014+A11:2021.
Questo prodotto è conforme alla norma EN60825-1:2014+A11:2021.
Dit product voldoet aan EN60825-1:2014+A11:2021.
Ten produkt jest zgodny z normą EN60825-1:2014+A11:2021.

This product complies with EN50689:2021.
Ce produit est conforme à la norme EN50689:2021.
Este producto cumple con la norma EN50689:2021.
Dieses Produkt entspricht EN50689:2021.
Questo prodotto è conforme alla norma EN50689:2021.
Dit product voldoet aan EN50689:2021.
Ten produkt jest zgodny z normą EN50689:2021.

This product is designed to project images on a wall or screen.
Ce produit est conçu pour projeter des images sur un mur ou un écran.
Este producto está diseñado para proyectar imágenes en una pared o pantalla.
Dieses Produkt wurde entwickelt, um Bilder auf eine Wand oder eine Leinwand zu projizieren.
Questo prodotto è progettato per proiettare immagini su una parete o uno schermo.
Dit product is ontworpen om beelden op een muur of scherm te projecteren.
Ten produkt jest przeznaczony do projekcji obrazów na ścianie lub ekranie.

WARNING/ATTENTION/ADVERTENCIA/WARNUNG/AVVERTENZA/WAARSCHUWING/UWAGA

Do not look into the lens while in use.

Ne regardez pas dans l'objectif pendant son utilisation.

No mire directamente a la lente mientras está en uso.

Schauen Sie während der Verwendung nicht in die Linse.

Non guardare nell'obiettivo mentre è in uso.

Kijk niet in de lens terwijl deze in gebruik is.

Nie patrz w obiektyw podczas użytkowania.

CAUTION/PRUDENCE/PRECAUCIÓN/ACHTUNG/VOORZICHTIG/UWAGA

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

L'utilisation de commandes ou de réglages ou l'exécution de procédures autres que celles décrites ici pourrait provoquer une exposition à des radiations dangereuses.

El uso de controles o ajustes o la ejecución de procedimientos distintos a los especificados en este documento puede resultar en la exposición peligrosa a la radiación láser.

Die Verwendung von Steuerungen oder Einstellungen oder die Durchführung von anderen als den hier angegebenen Bedienverfahren kann dazu führen, dass Sie gefährlicher Laserstrahlung ausgesetzt werden.

L'uso di controlli, regolazioni o prestazioni di procedure diversi da quelli specificati in questo manuale potrebbe causare una pericolosa esposizione alle radiazioni laser.

Het gebruik van andere instellingen of aanpassingen of de uitvoering van andere procedures dan hierin vermeld, kan leiden tot blootstelling aan gevaarlijke laserstraling.

Używanie elementów sterujących lub regulacji lub wykonywanie procedur innych niż określone w może spowodować narażenie na niebezpieczne promieniowanie laserowe.

Location information of the labels
Informations d'emplacement des étiquettes
Información de la ubicación de las etiquetas
Informationen zur Lage der Etiketten
Informazioni sulla posizione delle etichette
Locatie-informatie van de etiketten
Informacje o lokalizacji etykiet
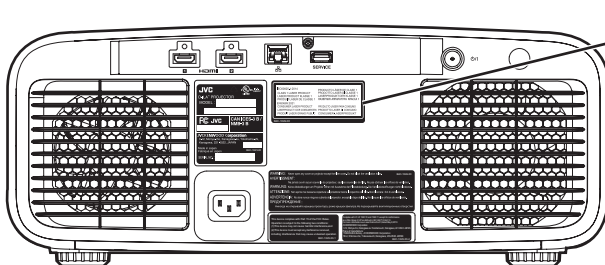
LASER CAUTION LABEL
ÉTIQUETTE DE MISE EN GARDE POUR LE LASER
ETIQUETA DE PRECAUCIÓN DEL LÁSER
LASERWARNSCHILD
ETICHETTA DI ATTENZIONE LASER
LASER WAARSCHUWINGSETIKET
ETYKIETA OSTRZEGAWCZA DOTYCZĄCA LASERA

CAUTION/PRUDENCE/PRECAUCIÓN/ACHTUNG/ATTENZIONE/VOORZICHTIG/UWAGA

- Do not stare into the projector beam at any distance from the projector.
- Ne regardez pas dans le faisceau du projecteur à n'importe quelle distance du projecteur.
- No mire directamente al haz del proyector a ninguna distancia del mismo.
- Blicken Sie nicht direkt in den Lichtstrahl vom Projektor, egal aus welcher Entfernung.
- Non fissare il raggio del proiettore a qualsiasi distanza dal proiettore.
- Kijk niet in de projectorstraal op enige afstand van de projector.
- Nie patrz w wiązkę projektora z jakiejkolwiek odległości od projektora.

- Be careful to beam from lens when using the remote control for starting the projector while in front of the projection lens.
- Faites attention au faisceau de l'objectif lorsque vous utilisez la télécommande pour démarrer le projecteur lorsque vous faites face à l'objectif de projection.
- Tenga cuidado con el haz de la lente cuando utilice el mando a distancia para encender el proyector mientras está frente a la lente de proyección.
- Achten Sie auf die Projektorlinse, wenn Sie die Fernbedienung zum Starten des Projektors verwenden, während Sie sich vor der Projektorlinse befinden.
- Prestare attenzione al raggio proveniente dall'obiettivo quando si usa il telecomando per avviare il proiettore mentre ci si trova davanti all'obiettivo di proiezione.
- Let op de straal van de lens wanneer u de afstandsbediening gebruikt om de projector te starten terwijl u zich voor de projectielens bevindt.
- Podczas używania pilota do uruchamiania projektora przed obiektywem projekcyjnym należy uważać, aby nie wchodzić w światło obiektywu.

- Do not use of optical aids such as binoculars or telescopes inside the beam.
- N'utilisez pas d'instruments optiques tels que des jumelles ou des télescopes à l'intérieur du faisceau.
- No use ayudas ópticas como prismáticos o telescopios dentro del haz.
- Verwenden Sie keine optischen Hilfsmittel wie Ferngläser oder Teleskope innerhalb des Lichtstrahls.
- Non utilizzare dispositivi ottici come binocoli o telescopi all'interno del raggio.
- Gebruik geen optische hulpmiddelen zoals een verrekijker of telelens binnen de straal.
- Nie używaj pomocy optycznych, takich jak lornetki lub lunety, wewnątrz wiązki.

Light source specifications
Spécifications de la source de lumière
Especificaciones de la fuente de luz
Spezifikationen der Lichtquelle
Specifiche della sorgente luminosa
Lichtbron specificaties
Specyfikacje źródła światła

82 W Laser diodes x 1, Wavelength 455nm, Maximum output is 90 W
Diodes laser 82 W x 1, longueur d'onde 455 nm, sortie maximale 90 W
Diodos láser de 82 W x 1, longitud de onda de 455 nm, salida máxima de 90 W
82 W Laserdiode x 1, Wellenlänge 455 nm, maximale Ausgabeleistung 90 W
Diodi laser x 1 82 W, lunghezza d'onda 455 nm, l'uscita massima è 90 W
82 W laserdioden x 1, golflengte 455 nm, maximale uitvoer is 90 W
Diody laserowe 82 W x 1, długość fali 455 nm, maksymalna moc wyjściowa to 90 watów

Beam divergence angle from lens of this unit
Angle de divergence du faisceau de l'objectif de cette unité
Ángulo de divergencia del haz desde la lente de esta unidad
Strahldivergenzwinkel der Linse dieses Geräts
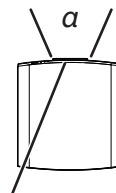**Angolo di divergenza del fascio dall'obiettivo di questa unità**
Straaldivergentiehoek ten opzichte van de lens van dit toestel
Kąt rozbieżności wiązki od obiektywu tego projektora

$\alpha = 28°^{(*1)} - 43°^{(*2)}$

*1:Tele/Télé/Tele/Tele/Teleobiettivo/Tele/Teleobiektyw
*2:Wide/Large/Amplio/Weit/Grandangolo/Breed/Szeroki

Laser emission port
Port d'émission laser
Puerto de emisión láser
Laseraustrittsöffnung
Porta emissione laser
Laseremissie-poort
Miejsce emisji lasera

IEC62471-5

Location information of the mark / Informations d'emplacement du repère / Información de la ubicación de la marca / Informationen zur Lage der Markierung / Informazioni sulla posizione del marchio / Locatie-informatie van de markering / Informacje lokalizacji etykiety
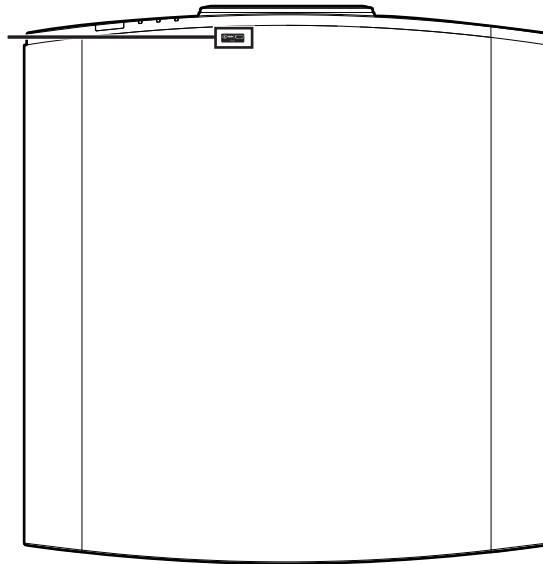
As with any bright light source, do not stare into the beam, RG2 IEC 62471-5:2015

Tout comme pour n'importe quelle source lumineuse brillante, ne regardez pas fixement le faisceau, RG2 IEC 62471-5: 2015

Al igual que con cualquier fuente de luz brillante, no mire directamente al haz, RG2 IEC 62471-5:2015

Wie bei allen hellen Lichtquellen, schauen Sie nicht in den Strahl, RG2 IEC 62471-5:2015

Come con qualsiasi fonte di luce intensa, non fissare il raggio, RG2 IEC 62471-5:2015

Net als bij andere felle lichtbron, kijk niet in de laserstraal, RG2 IEC 62471-5:2015

Jak w przypadku każdego jasnego źródła światła, nie patrz bezpośrednio w kierunku jego wiązki, RG2 IEC 62471-5:2015

Contents

Symbols used in this manual

NZ700 indicates a function that is supported by DLA-NZ700.

NZ500 indicates a function that is supported by DLA-NZ500.

RS2200 indicates a function that is supported by DLA-RS2200.

RS1200 indicates a function that is supported by DLA-RS1200.

Items not marked with any of the above symbols are supported by all models.

The illustrations of the projector unit used in this manual are those of DLA-NZ700.
The appearance of the projector of other models may differ slightly.

Accessories

Check the Accessories

Lens cover .... 1 piece
* It is attached to the main unit at the time of shipment.

Remote control .... 1 piece

AAA-size batteries (for operational check) .... 2 pieces

Power cord (for USA) (about 2 m (about 78.7 in)) .... 1 piece

Power cord (for UK) (about 2 m (about 78.7 in)) .... 1 piece

Power cord (for EU) (about 2 m (about 78.7 in)) .... 1 piece
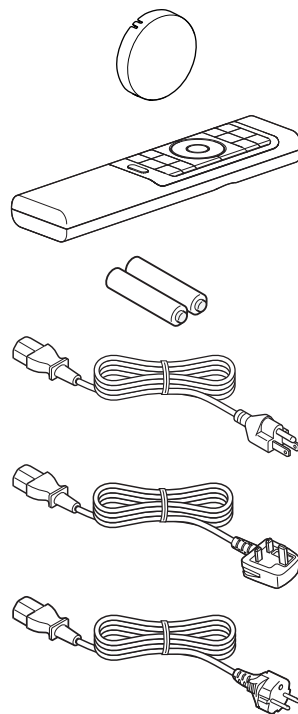
- Quick User Guide, safety precautions, warranty card, and other printed material are also included.
- Be sure to read the "Safety Precautions" before using this projector.

Controls and Features

Main Unit - Front
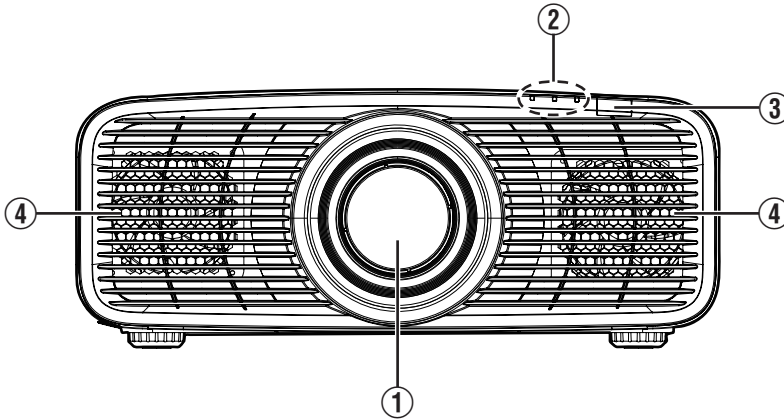
① Lens

This is a projection lens. Do not look through the lens while an image is projected.

② Indicator

Refer to "Indicator Display on the Main Unit" P. 85.

③ Remote Sensor (front)

Please aim the remote control at this area when using it.

* There is also a remote sensor at the rear.

④ Air Inlets

The inlets take in air to cool down the internal temperature.
Do not block the inlet. Do not blow hot air on the inlet. Doing so may cause the unit to malfunction.

Main Unit - Bottom
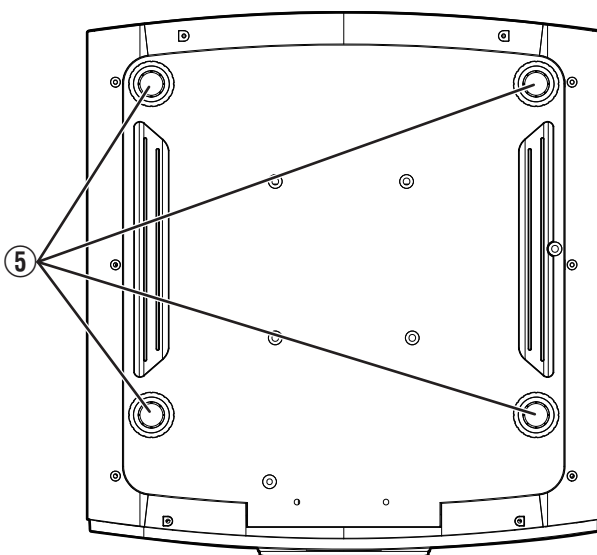
⑤ Feet

The height and angle of the projector can be adjusted by turning the foot. (0 to 10 mm (0 to 0.4 in)) (P. 21)

When the foot is removed, it can be used as the mounting hole for the ceiling mount bracket.

13
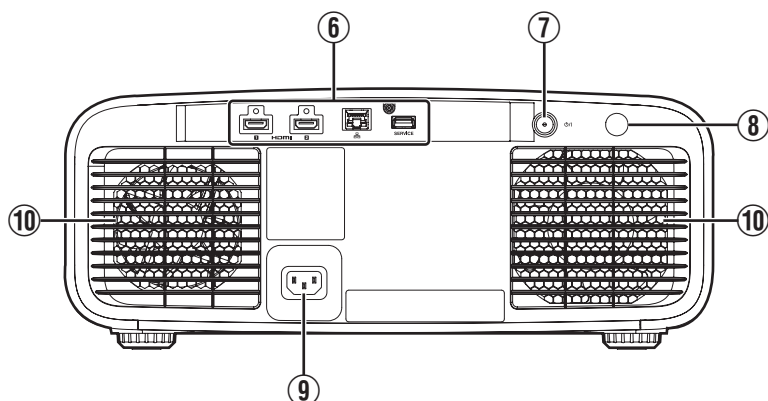
Main Unit - Rear

⑥ Input terminals

For more details, please refer to the "Main Unit -Input Terminals"P. 14 in the diagram below.

⑦ ⏻/| Power Button

Turns "on"/"off" the power. (P. 25)

⑧ Remote Sensor (rear)

Please aim the remote control at this area when using it.

* There is also a remote sensor at the front.

⑨ Power input terminal

Connect the supplied power cord to this terminal.

⑩ Exhaust vent

Warm air is discharged to cool down the internal temperature.
Do not block the vents.

Main Unit - Input Terminals
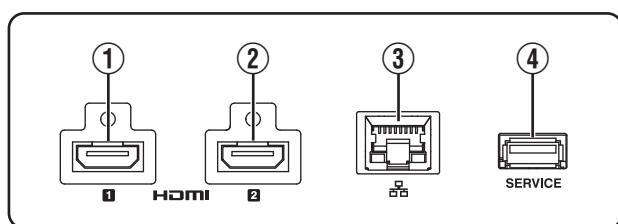
① [HDMI 1] input terminal

② [HDMI 2] input terminal

For connecting to devices that support HDMI output. (P. 22)

③ [LAN] terminal (RJ-45)

The projector can be controlled by connecting it to a PC through the computer network for control commands to be sent to the projector.

④ [SERVICE] terminal

For updating the software or using the backup setting feature via a commercially available USB flash drive.

14
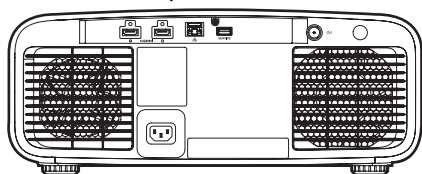
Remote Control
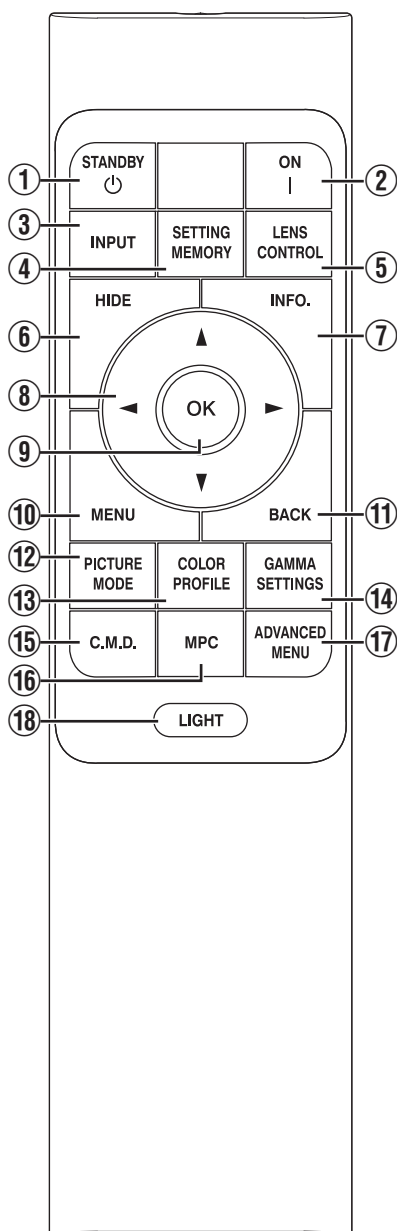
① ⏻ **[STANDBY]**

Turns off the power. (P. 26)

② Ι **[ON]**

Turns on the power. (P. 25)

③ **[INPUT]**

Switches the input to [HDMI 1] or [HDMI 2]. (P. 25)

④ **[SETTING MEMORY]**

Displays the installation mode selection menu.

⑤ **[LENS CONTROL]**

For adjusting focus, zoom, and shift. (P. 27)

• Pressing the button each time switches the setting in the following sequence: "Focus" → "Zoom" → "Shift"...

⑥ **[HIDE]**

Hides the image temporarily. (P. 25)

⑦ **[INFO.]**

Displays the information menu. (P. 67)

⑧ **[▲▼◄►] keys**

For selecting an item.

⑨ **[OK]**

Confirms a selected item.

⑩ **[MENU]**

Displays the menu, or hides the menu if it is displayed.

⑪ **[BACK]**

Returns to the previous menu.

⑫ **[PICTURE MODE]**

Displays the picture mode selection menu. (P. 29)

⑬ **[COLOR PROFILE]**

Displays the color profile selection menu. (P. 30)

⑭ **[GAMMA SETTINGS]**

Displays the gamma setting menu. (P. 48)

⑮ **[C.M.D.]**

Displays the C.M.D. selection menu. (P. 34)

⑯ **[MPC]**

Displays the MPC setting menu. (P. 43)

⑰ **[ADVANCED MENU]**

Press and hold to register the currently displayed menu. If the button is pressed when a menu is registered, the registered menu will be displayed. (P. 17)

⑱ **[LIGHT]**

Illuminates the buttons on the remote control.

Loading Batteries into the Remote Control

Loading the batteries
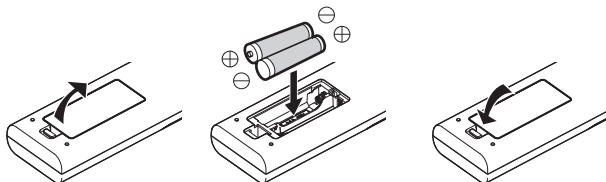
Removing the batteries
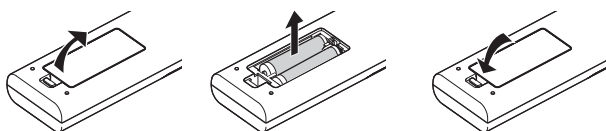
- If the remote control has to be brought closer to the unit to operate, it means that the batteries are wearing out. Replace the batteries with new ones (AAA).
- Insert the batteries according to the ⊕ ⊖ marks. Be sure to insert the ⊖ end first. When removing the battery, do so from the ⊕ end.
- If an error occurs while using the remote control, remove the batteries and wait for five minutes. Load the batteries again and operate the remote control.

✋ CAUTION

- Do not put the remote control in a place with an exposure to direct sun light or high temperature. It may deformed due to heat, or the internal components may be adversely affected resulting in fire hazard.
- Remove the batteries from the remote control when storing the remote control. Storing the remote control for a prolonged period without removing the batteries can cause battery leakage.
- Risk of explosion if battery is replaced by an incorrect type. Dispose of used batteries according to the instructions.
- If you want to dispose of the battery, please consider the collection systems or facilities for appropriate recycling.

Effective Range of Remote Control Unit

When aiming the remote control toward the sensor on this unit (front or rear), ensure that the distance to the sensor is within 7 m (23 ft).
If the remote control fails to work properly, move closer to this unit.
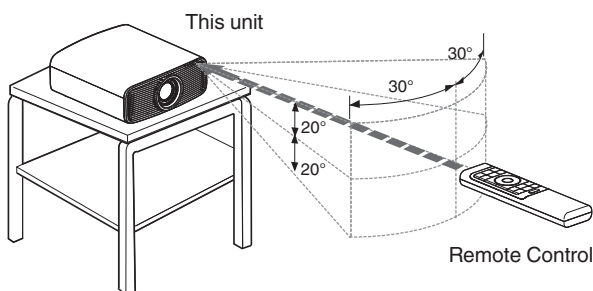
Control through reflection off a screen, etc.

Ensure that the total of distance A (between this unit and the screen) and distance B (between the remote control and the screen) is within 7 m (23 ft).

* As the efficiency of signals reflected from the remote control unit varies with the type of screen used, the operable distance may decrease.


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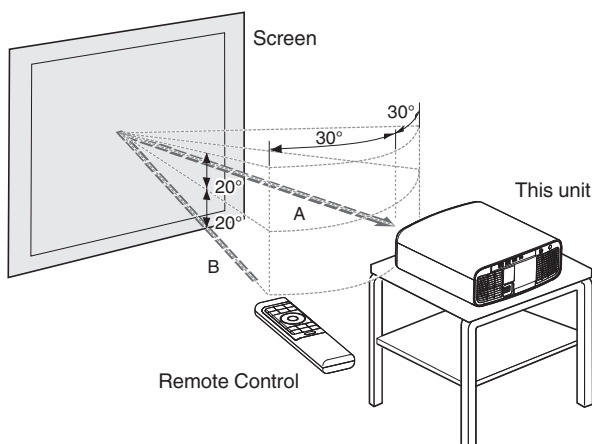
Menu

Pressing the [MENU] button on the remote control displays the menu.

There are three types of settings in the menu ("Picture Settings", "HDMI Settings" and "Installation Settings"). Use "Setting Menu Select" at the top right corner of the screen to switch the menu.

✎ MEMO

- You can press and hold the [ADVANCED MENU] button on the remote control while a menu is being displayed to register the menu to the [ADVANCED MENU] button. Pressing the [ADVANCED MENU] button when a menu is registered will display the registered menu.

Picture Settings Menu
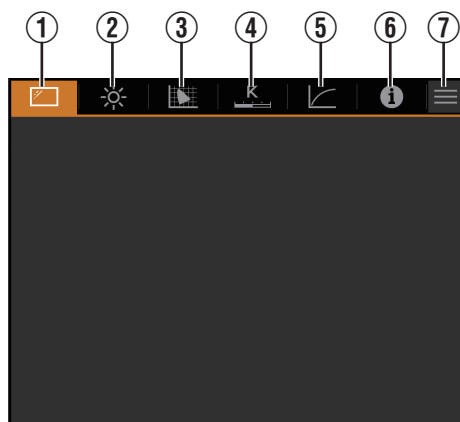
① **Mode Settings**
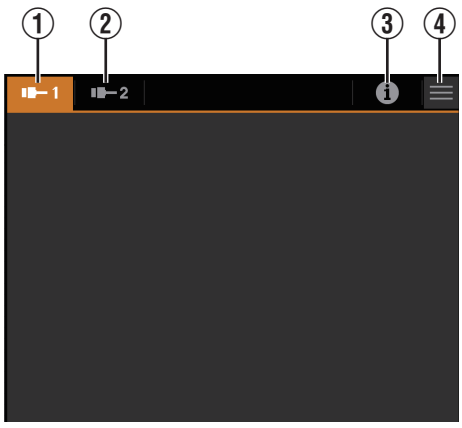

② **Picture Adjust**

③ **Color Profile**

④ **Color Temp.**

⑤ **Gamma**

⑥ **Information**

⑦ **Setting Menu Select**

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HDMI Settings Menu

① **HDMI 1 Settings**

② **HDMI 2 Settings**

③ **Information**

④ **Setting Menu Select**

Installation Settings Menu
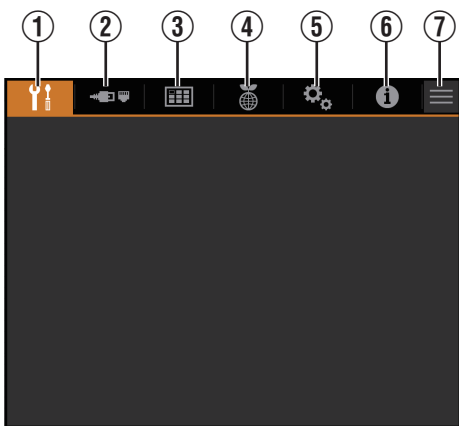
① **Installation Settings**

② **Network Settings**

③ **Display Settings**

④ **ECO Settings**

⑤ **System Settings**

⑥ **Information**

⑦ **Setting Menu Select**

Installing the Projector

Precautions during Installation

Please read the following carefully before installing this unit.

When carrying this unit

Take care not to drop this unit while carrying it. Otherwise, it may cause injuries, or damage this unit.
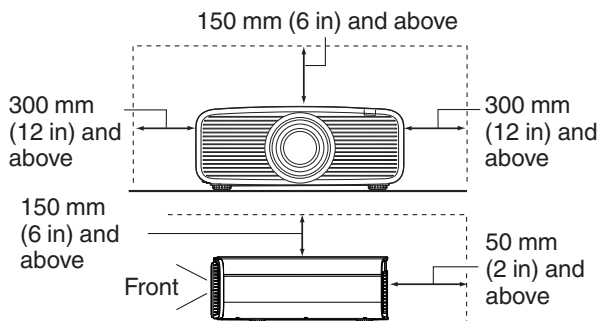
Do not install at the following

This unit is a precision device. Please refrain from installing or using it at the following locations. Otherwise, it may cause fire or malfunction.

- Dusty, wet and humid places
- Places subject to oily smoke or cigarette smoke
- On top of a carpet or bedding, or other soft surfaces
- Places exposed to direct sunlight
- Places with a high or low temperature
- Do not install this unit in a room that is oily or subject to cigarette smoke. Even a small quantity of smoke or oiliness can have a long-term impact on this unit.
- * This unit produces a great amount of heat, and is designed to take in cool air to cool its optical components. Using the unit at the above locations may cause dirt to attach to the light path, thereby resulting in dark images or dull colors.
- * Dirt that sticks to the optical components cannot be removed.

Maintain clearance from the wall, etc.

As the unit discharges a large amount of heat, install it with adequate clearance from the surroundings as shown below.

150 mm (6 in) and above

300 mm (12 in) and above

300 mm (12 in) and above

150 mm (6 in) and above

50 mm (2 in) and above

Front

Leave the front area of the unit (air inlets) unblocked. If there is any obstructing object in the front area of this unit, interior temperature of this unit will get high, affecting the picture quality and performance of this unit, and causing malfunction.

Using the unit

Please refrain from projecting in the following circumstances. Otherwise, it may cause fire or malfunction.

- Projection with the unit stood vertically
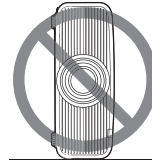
- Projection with the unit inclined at an angle

Angle to horizontal plane: within ±10°

10°   10°
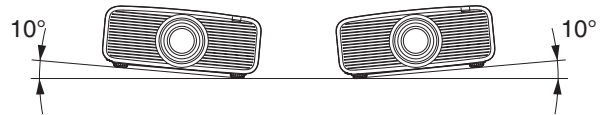
Vertical inclination: within ± 10 °

10°   10°   10°   10°
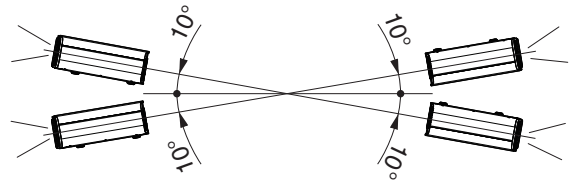
- Malfunction may occur if the angle is not set within the above-mentioned range.

Installing the screen

Install the unit and the screen such that they are perpendicular to each other.

Screen

Front
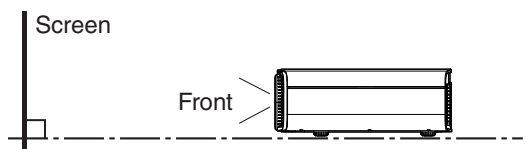
- Please choose a screen material with non-uniform patterns. Uniform patterns such as checks may cause interference patterns to occur.
- In this case, you can change the size of the screen to make the interference patterns less noticeable.

Using the projector at a high altitude

When using this unit at a location that is higher than 900 m (3,000 ft) above sea level (low air pressure), set the "High Altitude Mode" to "On". (P. 65)

Precautions during Mounting

Securing (mounting) the projector
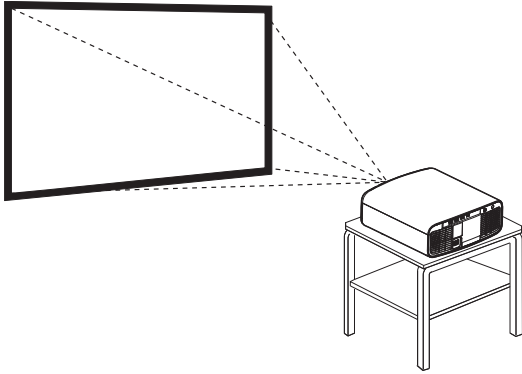
- When this unit is to be mounted to a fixed position for use, install it horizontally.
- Make sure to secure the main unit to prevent accidents such as during an earthquake.

Securing with screws

4 Locations

Remove the four feet at the bottom, and fasten using the screws (M5 screws, 20 to 25 mm (0.8 to 1.0 in)).

* Using screws other than ones mentioned may damage the unit or cause the unit to fall from the mount.

Securing the projector (ceiling mount)

- Be sure to ask your dealer to install the unit for you. Installing the unit on your own may cause the unit to fall resulting in injury.
- Take the necessary actions to prevent the main unit from falling off such as during an earthquake.
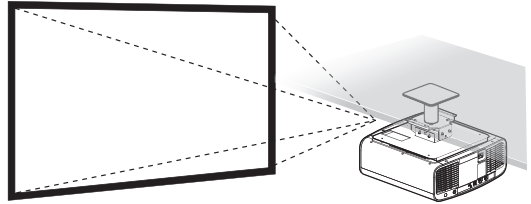- Regardless of the warranty period, JVC is not liable for any product damage caused by mounting the unit with non-JVC ceiling fittings or to an environment that is not suited for ceiling mount.
- When using the unit with it suspended from a ceiling, pay attention to the surrounding temperature. When a heater is in use, the temperature around the ceiling may be higher than expected.
- To attach the unit to the ceiling mount bracket, set the torque between the range of 1.5N m to 2.0N m. Tightening with torque exceeding the above range may cause damage to the unit, which may result the unit to fall.
- Use a projector mount that supports more than the weight of the projector.
- When reusing the ceiling mount bracket of an old model, consult the specialist to check if there are any issues with the surrounding space and increase in weight.
- Install the outlet at an accessible height to unplug from the wall. Or install the circuit breaker at an accessible height to shut down the projector. If you need information, please consult your authorized dealer or specialist.

Adjusting the Position

Adjusting the elevation angle of the projector

The height and inclination of the unit can be adjusted by turning the feet.
Lift the unit and adjust the four feet.

* Do not pull the feet more than 10 mm. Feet may fall off.

4 Locations

Extend ↗ ↘ Contract

Feet
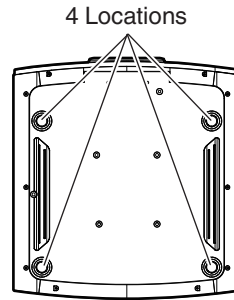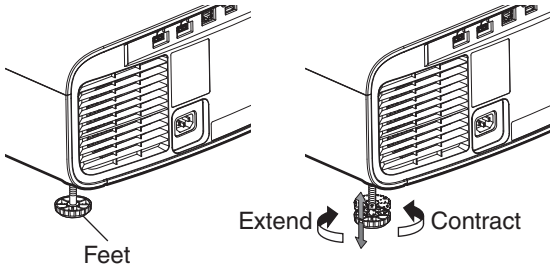
Adjusting the position of the image

By using the lens shift feature of this unit, you can shift the image upward/downward or to the left/right. Set it to your preferred position.

➡ "Adjusting the Lens According to the Projection Position" (P. 27)

Horizontal Position

Vertical Position: 0% (Center)

Up to about 28% of the projected image*
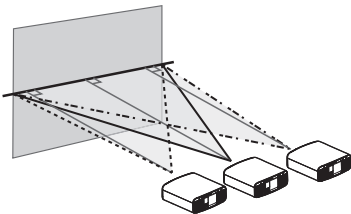
Vertical Position

Horizontal Position: 0 % (Center)

Up to about 70% of the projected image*
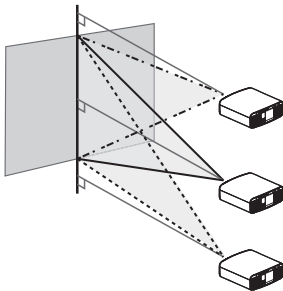
* 16:9 image

Lens Shift Range (16:9)

Amount of vertical shift (%) vs Amount of horizontal shift (%)
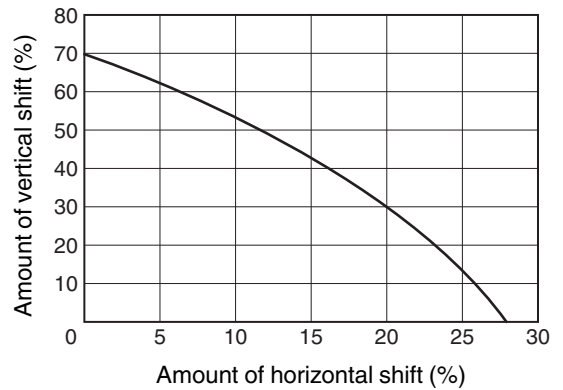
- The maximum vertical shift varies with the amount of horizontal shift. Similarly, the maximum horizontal shift also changes with the amount of vertical shift.

- The values on the graph are intended as a guide. Use them for reference during installation.

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Connecting the Projector

- Do not turn on the power until connection is complete.
- Before connecting the cables, turn off the power of each device. Making connection with each device being turned on may cause this unit to malfunction.
- Before connecting the cables, remove any static electricity from your body by touching the wall with the palm of your hand.
- The connection procedures differ according to the device used. For details, please refer to the instruction manual of the device to be connected.
- This projector is used for projecting images. To output the audio of connected devices, please connect a separate audio output device, such as an amplifier or speaker.
- Projector has no audio pass through or eARC output.
- The images may not be displayed depending on the devices and cables to be connected. When using an HDMI cable (sold separately), make use of one with the Ultra High Speed HDMI Cable certification (supports 48 Gbps).
- Also, please refer to "HDMI Format Setting"P. 53.
- Some cables cannot be connected to this unit due to the size of their connector cover.
- Configuration of a network password is necessary before connecting to the LAN terminal. For details, refer to "Network Password"P. 62.

Connecting to the HDMI Input Terminal (Digital Input)

Connecting via HDMI cable

This Unit

Laptop, etc.

BD/DVD Recorder, etc.

To [HDMI 1] or [HDMI 2] input terminal

HDMI Cable (Sold Separately)

HDMI Output Terminal
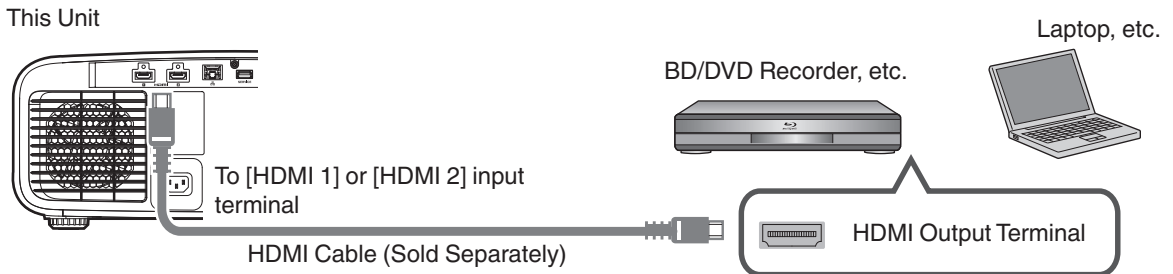
- If noise occurs, move the laptop away from this unit.

Connecting through an AV amplifier

This Unit

BD/DVD Recorder, etc.

Speakers

Streaming devices

To [HDMI 1] or [HDMI 2] input terminal

HDMI Cable (Sold Separately)

HDMI Cable (Sold Separately)

Speaker Cable (Sold Separately)
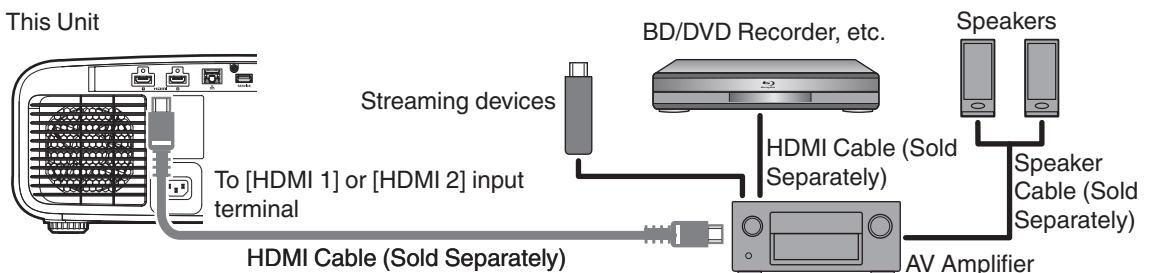
AV Amplifier

- If the source device is connected to the projector through an intermediate device such as an AV amplifier or divider, the video image may not appear depending on the specifications of the intermediate device.
In this case, connect the source device directly to the projector, and check whether the video image is displayed.

Connecting via HDMI-DisplayPort conversion cable

This Unit

Desktop PC, etc.

To [HDMI 1] or
[HDMI 2] input terminal
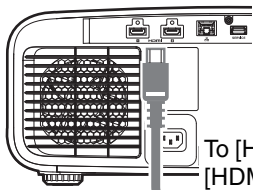
DisplayPort Terminal

HDMI-DisplayPort Conversion Cable (Sold Separately)

- If noise occurs, move the desktop PC away from this unit.
- If the video is not displayed, try to reduce the length of the cable or lower the resolution of the video transmitting equipment.

Connecting to the LAN Terminal

This Unit

Hub

Desktop PC, etc.
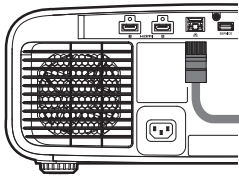
Network

To [LAN] Terminal

Server

Connection Cable
(Sold Separately)

- The network is used to control this unit. It is not used for sending or receiving video signals.
- Please contact your network administrator for information concerning the network connection.
- Configuration of a network password is necessary before connecting to the LAN terminal. (P. 62)
- Set "ECO Mode" to "Off" if LAN communication is performed in the Standby mode. (P. 64)
- For more information on control, please refer to "External Control"P. 74.

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Connecting the Power Cord (Supplied Accessory)
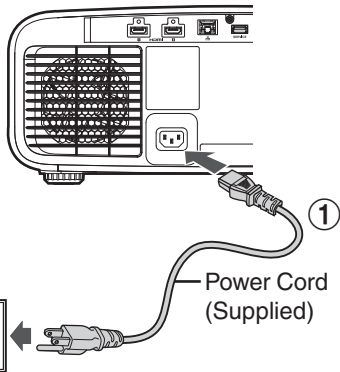
① Connect the power cord supplied to the power input terminal on the main unit

② Insert the supplied power plug into the wall outlet.

Power Cord
(Supplied)

📢 Precautions to prevent fire and electric shock

- When you are not using the projector, please unplug the power cord from the outlet.
- Connect it using only the power cord supplied.
- Do not use a voltage other than the indicated power voltage.
- Do not damage, break or modify the power cord. Do not place a heavy object on the power cord, or heat or pull it. Doing so may damage the power cord.
- Do not unplug the power cord with wet hands.

Viewing Videos
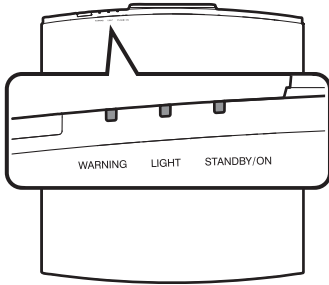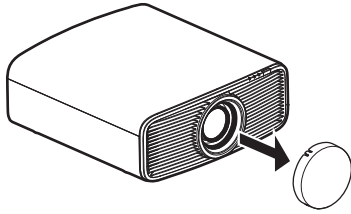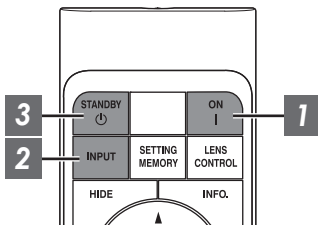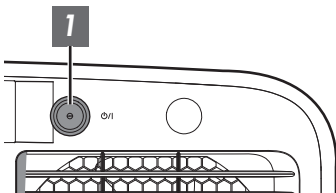
✎ MEMO

- Make sure to remove the lens cover.
- Connect the power cord, and ensure that the "STANDBY/ON" indicator lights up in red.
- During standby in the "ECO Mode", the "STANDBY/ON" indicator does not light up even when the power cord is correctly connected.
  In this case, cancel the standby mode by pressing any button on the remote control unit, or use the ⏻/| button on the projector unit when you are turning on the power.

1 Turn on the power

Remote control: press the | [ON] button

Projector unit: press the ⏻/| button

- The "STANDBY/ON" indicator light switches from red (light off in "ECO Mode") to green (light goes off after the unit starts up).

"STANDBY/ON" lights up (red) In standby state	"STANDBY/ON" lights up (green) When light source is starting up	"STANDBY/ON" light off When in "ECO Mode"
WARNING LIGHT STANDBY/ON	WARNING LIGHT STANDBY/ON	WARNING LIGHT STANDBY/ON

2 Choose the image to project

Remote control: press the [INPUT] button to switch the input

- Play back the selected device to project the image.

To hide the image temporarily

Press the [HIDE] button on the remote control

- The "STANDBY/ON" indicator light starts to blink in green.
- Press the [HIDE] button again to resume display of the image.
- The power cannot be turned off when the image is temporarily hidden.
- The light source is turned off when the "Hide Mode" is set to "On" in the OSD menu.

Remote Control

3	STANDBY ⏻		ON		1
2	INPUT	SETTING MEMORY	LENS CONTROL		
	HIDE		INFO.		

This unit

1

⏻/|

3 Turn off the power

Remote control: press the ⏻ [STANDBY] button

Projector unit: press the ⏻/I button

- While the "Are you sure you want to turn off?" message is displayed, press the button again.
- The light of the LD block goes off, and the "STANDBY/ON" indicator switches from a green light to a red blinking light.
- After the light goes off, the fan will run for approximately 10 seconds to cool down the LD block (Cool-down mode). Do not disconnect the power cable while cooling is in progress.
- Depending on the settings of the projector unit, cooling time may be about 30 seconds longer due to internal processing.
- After cooling is complete, the "STANDBY/ON" indicator switches from a blinking red to a solid red light.

"STANDBY/ON" blinking (red)
In the Cool-down mode

WARNING   LIGHT   STANDBY/ON

"STANDBY/ON" lights up (red)
In standby state

WARNING   LIGHT   STANDBY/ON

⏻ CAUTION

- The power cannot be turned on again while cooling is in progress.
- Pull out the power plug when the unit is not to be used for a prolonged period of time.
- If the indication of indicator differs from the description, refer to "Indicator Display on the Main Unit"P. 85 for details.

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Adjusting the Projector Screen

Adjusting the Lens According to the Projection Position
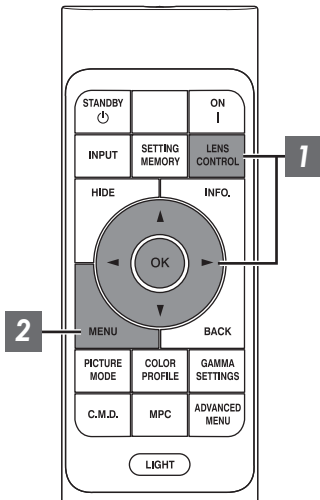
1 Press the [LENS CONTROL] button, and use the [▲▼◀ ▶] keys to adjust Focus, Zoom (screen size), and Shift (screen position)
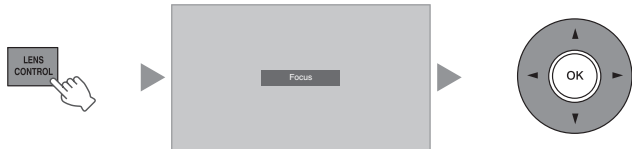
- Pressing the [LENS CONTROL] or [OK] button each time switches the mode in the following sequence: "Focus" → "Zoom" → "Shift" → "Focus"...
- Operation of the lens control feature is disabled when the lens lock is set to "On". (P. 55)
- For more detailed information, please refer to "Lens Control"P. 55.
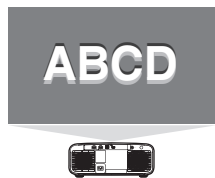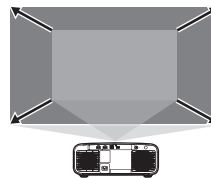
Focus Adjustment   Zoom (Screen Size) Adjustment   Shift (Screen Position) Adjustment
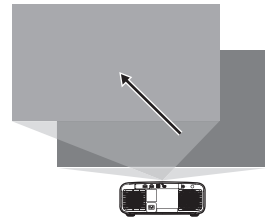
2 Press the [MENU] or [BACK] button to end adjustment

Adjustment Pattern Displayed on the Adjustment Screen

2.35:1

1.33:1 (4:3)

1.78:1 (16:9)

1.89:1 (17:9)
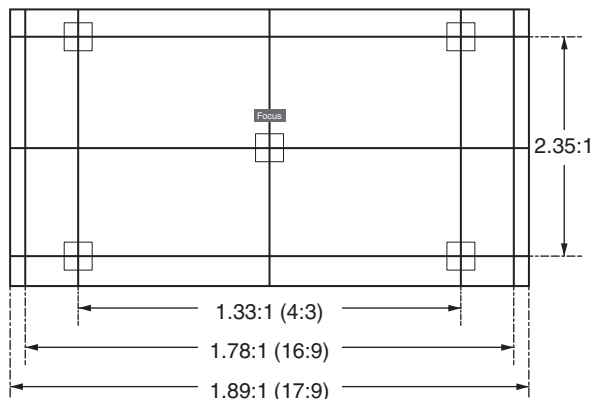
Adjust the display according to the viewing angle of the respective aspect ratios for the adjustment patterns.

* This is not displayed when "Image Pattern" is configured to "Off".

Adjusting the Screen Size (Aspect)

The screen size of the projected image can be adjusted optimally according to the original screen size (aspect) that has been input.

1 Press the [MENU] button to display the menu

2 Select "Installation" → "Aspect" in the menu, then select the setting and press [OK]
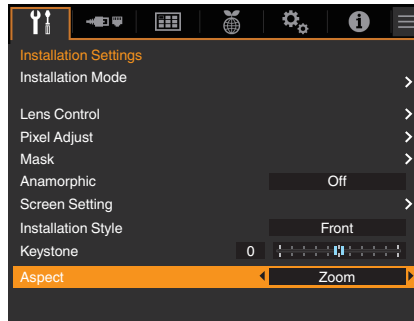
Setting	Description
Zoom	Magnifies the input image horizontally to the maximum while maintaining its aspect ratio for display. Part of the image that runs off the edge vertically will not be displayed.
Auto	Magnifies the input image horizontally or vertically to the maximum while maintaining its aspect ratio for display.
Native	Any image below 1920x1080 and 2048x1080 will be scaled 2 times (verticall and horizontally) the native resolution of the source. Any source above 1920x1080 will be shown without any scaling. *2048x1080 the exception.

3 Press the [MENU] button to exit

   * When "Picture Mode" is configured to "FILMMAKER MODE", "Aspect" is fixed at "Auto".

Example of input image and screen size

Setting Input Image Size	Zoom	Auto	Native
720×480			
1920×1080			

Tuning the Image Quality

Setting the Picture Mode

You can adjust the image quality according to the type of video image you are viewing.
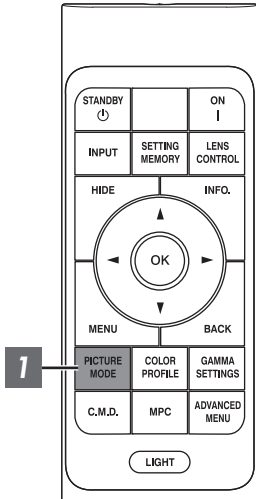
1 Press the [PICTURE MODE] button, use the [▲▼] keys to select "Picture Mode" and press [OK]

- You can also perform the setting by pressing the [MENU] button to display the menu followed by selecting "Picture Settings" → "Mode Settings" → "Picture Mode".

Input Image	Available Picture Modes	Description
SDR	Natural	Image quality that focuses on natural color and gradation reproduction. Suitable for drama footage, etc.
	Cinema	Reproduces the image in vivid colors. Suitable for all movies.
	Vivid	Bright and rich colors with vivid image quality. Suitable for viewing in a slightly bright environment, such as living room.
	FILMMAKER MODE	Picture mode that supports the FILMMAKER MODE™ of the UHD Alliance standard.
	SDR 1, SDR 2	Enables user-defined image quality data to be saved and retrieved.
HDR10+	HDR10+	Picture mode suitable for viewing HDR10+ content. Tone mapping is optimally performed for each scene according to the dynamic metadata to faithfully reproduce HDR video images according to the intentions of the video producer.
HDR10	Frame Adapt HDR 1	Picture mode that analyzes and automatically adjusts the HDR Tone Mapping of each frame in the HDR10 content. Image quality that focuses on natural color and gradation reproduction. Suitable for drama footage, etc.
	Frame Adapt HDR 2	Picture mode that analyzes and automatically adjusts the HDR Tone Mapping of each frame in the HDR10 content. Reproduces the image in vivid colors. Suitable for all movies.
	FILMMAKER MODE	Picture mode that supports the FILMMAKER MODE™ of the UHD Alliance standard.
	HDR 1, HDR 2	Enables user-defined image quality data to be saved and retrieved.
HLG	HLG	Image quality suited for viewing content produced in Hybrid Log-Gamma, a HDR standard for HLG broadcasting.

Adjust/Set

✎ MEMO

You can further configure the detailed settings in "Picture Settings" → "Picture Adjust".

Setting the Color Profile

By setting the "Color Profile" (color space information) according to the "Picture Mode", you can fine-tune the image quality according to the movie you are viewing.

  * When "Picture Mode" is set to "HDR10+", the setting is fixed at BT.2020(Normal).

1 After configuring "Picture Mode" (P. 29), press the [COLOR PROFILE] button, use the [▲▼] keys to select "Color Profile", followed by pressing [OK]

- You can also perform the setting by pressing the [MENU] button to display the menu followed by selecting "Picture Settings" → "Mode Settings" → "Color Profile".
- The selectable "Color Profile" settings vary according to "Picture Mode".

"Color Profile"

Color Profile	Description
Auto	Switches the color profile automatically based on the color gamut information of the input content. [*1]
BT.709	Color space that is suitable for BT.709.
BT.2020(Wide) NZ700 RS2200	Color space that is suitable for BT.2020. The cinema filter is configured to Wide. [*2]
BT.2020(Normal) NZ700 RS2200 BT.2020 NZ500 RS1200	Color space that is suitable for BT.2020. The cinema filter is configured to Normal. [*2]
DCI	Color space that is suitable for DCI.
Video	Color gamut that reproduces video footage such as dramas and live images in bright and vivid colors.
Anime. NZ700 RS2200	Color space that is suitable for CG animation works. Ideal for animated works with bright colors.
Cinema	Cinema-specific color gamut that achieves a balance between increased brightness and color vividness.
Off (Wide) NZ700 RS2200	Disables color space adjustment. The cinema filter is configured to Wide. [*2]
Off (Normal) NZ700 RS2200 Off NZ500 RS1200	Disables color space adjustment. The cinema filter is configured to Normal. [*2]
Vivid	Bright and rich colors. Suitable for viewing in a slightly bright environment, such as living room.
Custom1 to Custom4	For saving the color profile data created using the projector calibration software.

*1   If no signal is input, or the color gamut information included in the input signal is not supported, or a signal that cannot be displayed is input, the "Auto" characters will be displayed in yellow.

*2   Normal cinema filter is a setting that prioritizes brightness and is best suited for video content or movies with an apparent peak.
Wide cinema filter is a setting that prioritizes color reproduction and allows users to enjoy the wide color gamut of HDR. Recommended for all kinds of movie contents. NZ700 RS2200

Adjust/Set

List of selectable "Color Profile" according to "Picture Mode"

Picture Mode	Color Profile
Natural	Auto
	BT.709
	BT.2020(Wide) **NZ700** **RS2200**
	BT.2020(Normal) **NZ700** **RS2200**
	BT.2020 **NZ500** **RS1200**
	DCI
	Video
	Anime. **NZ700** **RS2200**
	Cinema
Cinema	BT.709
	BT.2020(Wide) **NZ700** **RS2200**
	BT.2020(Normal) **NZ700** **RS2200**
	BT.2020 **NZ500** **RS1200**
	DCI
	Video
	Anime. **NZ700** **RS2200**
	Cinema
Frame Adapt HDR 1	BT.2020(Wide) **NZ700** **RS2200**
	BT.2020(Normal) **NZ700** **RS2200**
	BT.2020 **NZ500** **RS1200**
Frame Adapt HDR 2	BT.2020(Wide) **NZ700** **RS2200**
	BT.2020(Normal) **NZ700** **RS2200**
	BT.2020 **NZ500** **RS1200**
Vivid	Vivid
FILMMAKER MODE (SDR Signal Input)	Auto
FILMMAKER MODE (HDR Signal Input)	BT.2020(Wide) **NZ700** **RS2200**
	BT.2020(Normal) **NZ700** **RS2200**
	BT.2020 **NZ500** **RS1200**
HDR10+	BT.2020(Normal) **NZ700** **RS2200**
	BT.2020 **NZ500** **RS1200**
HLG	Auto
	BT.709
	BT.2020(Wide) **NZ700** **RS2200**
	BT.2020(Normal) **NZ700** **RS2200**
	BT.2020 **NZ500** **RS1200**
	DCI

Adjust/Set

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Picture Mode	Color Profile
SDR 1, SDR 2	Auto
	BT.709
	BT.2020(Wide) **NZ700** **RS2200**
	BT.2020(Normal) **NZ700** **RS2200**
	BT.2020 **NZ500** **RS1200**
	DCI
	Video
	Anime. **NZ700** **RS2200**
	Cinema
	Off (Wide) **NZ700** **RS2200**
	Off (Normal) **NZ700** **RS2200**
	Off **NZ500** **RS1200**
	Custom1 to Custom4
HDR 1, HDR 2	Auto
	BT.709
	BT.2020(Wide) **NZ700** **RS2200**
	BT.2020(Normal) **NZ700** **RS2200**
	BT.2020 **NZ500** **RS1200**
	DCI
	Off (Wide) **NZ700** **RS2200**
	Off (Normal) **NZ700** **RS2200**
	Off **NZ500** **RS1200**
	Custom1 to Custom4

* When "Picture Mode" is configured to "HDR10+", "Color Profile" is fixed at BT.2020(Normal) and the color profile function cannot be used.

✎ MEMO

You can further configure the detailed settings in "Picture Settings" → "Color Profile".

Adjusting the Output Value of the Projected Image (Gamma/Tone Mapping)

You can adjust the output value of the projected image with respect to the video signal input.

* This feature is not available when "Picture Mode" is configured to "Frame Adapt HDR 1"/"Frame Adapt HDR 2"/ "FILMMAKER MODE" during HDR signal input.

* This item is not available when "Picture Mode" is set to "HDR10+".

Example of gamma adjustment

The overall image appear brighter with respect to the original image, making the dark areas more visible.
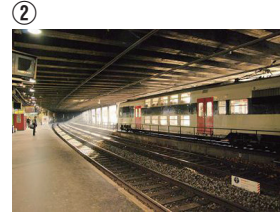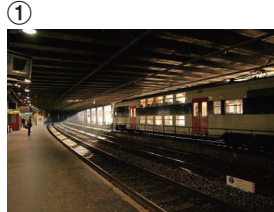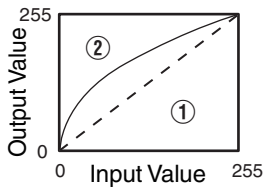
The photos are for illustrative purposes only.

Increases the contrast with respect to the original image, creating a greater sense of depth.
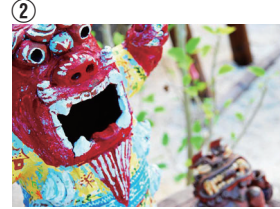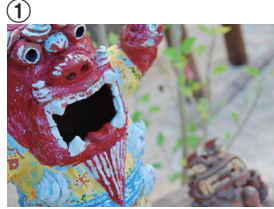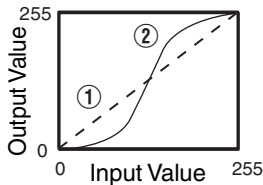
The photos are for illustrative purposes only.

<table>
<tr><td>1</td><td>Press the [MENU] button to display the menu, followed by displaying "Picture Settings" → "Mode Settings"</td></tr>
<tr><td>2</td><td>Select the "Gamma/Tone Mapping" you want to configure from "Gamma/Tone Mapping"
• The selectable "Gamma/Tone Mapping" settings vary according to "Picture Mode".</td></tr>
</table>

"Gamma/Tone Mapping" Settings

Gamma/Tone Mapping	Description
2.2	The gamma is set to "2.2", "2.4" and "2.6" respectively.
2.4	
2.6	
Cinema 1	Places emphasis on the gradation.
Cinema 2	Places emphasis on the contrast.
Vivid	Gamma settings that is suited for viewing when "Picture Mode" is configured to "Vivid".
HDR(Auto)	Automatically corrects "Picture Tone""Dark Level""Bright Level" from Max CLL/Max FALL with "HDR(PQ)" as the base.
HDR(PQ)	Suited for viewing HDR content such as UHD BD (HDR10).
HDR(HLG)	Suited for viewing HDR content such as HDR broadcast.
Custom 1 to Custom 3	Enables fine adjustment of gamma according to preference.

Picture Mode	Gamma/Tone Mapping
Vivid	Vivid, Custom 1 to Custom 3
Cinema Natural SDR 1, SDR 2	2.2
	2.4
	2.6
	Cinema 1
	Cinema 2
	Custom 1 to Custom 3
HLG	HDR(HLG)
	Custom 1 to Custom 3
HDR 1, HDR 2	HDR(PQ)
	Custom 1 to Custom 3

✎ MEMO

You can further configure the detailed settings in "Picture Settings" → "Gamma/Tone Mapping".

Reducing the After-image of Fast-moving Images (C.M.D.)

For reducing the after-image, which occurs in a fast-moving scene.
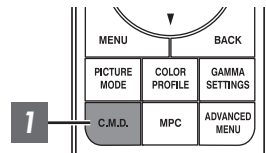
1 Press the [C.M.D.] button, use the [▲▼] keys to select a setting, followed by pressing [OK]

- You can also perform the setting by pressing the [MENU] button to display the menu followed by selecting "Mode Settings"→"Clear Motion Drive".

Setting	Description
Off	Turns off the blur reduction features.
Low	Applies black insertion to reduce blurriness in the video images slightly.
High	Applies black insertion to minimize blurriness in the video images.

* C.M.D. is the abbreviation for Clear Motion Drive.

* This item cannot be set when "Picture Mode" is set to "FILMMAKER MODE" or "HDR10+".

* This item cannot be configured when the input signal is configured to a setting other than 60Hz.

* When "Low" or "High" is selected, the image appears darker than "Off".

Adjust/Set

Adjustments and Settings in the Menu

Pressing the [MENU] button displays the menu.

Press the [▲▼◀▶] keys to select an item, followed by pressing the [OK] button to confirm the selection.

List of Menu Items

HDMI Settings

Adjust/Set

Installation Settings

Adjust/Set

Adjust/Set

Picture Settings

🖌 Mode Settings

Picture Mode

You can adjust the image quality according to the type of video image you are viewing.
➡ "Setting the Picture Mode" (P. 29)

You can further configure the detailed settings in the "Picture Adjust" tab. " ☀ Picture Adjust"P. 44

Color Profile

Configures "Color Profile" according to the preconfigured "Picture Adjust".
➡ "Setting the Color Profile" (P. 30)

You can further configure the detailed settings in the "Color Profile" tab. " 🎞 Color Profile"P. 46

Color Temp.

Configures "Color Temp." according to the preconfigured "Picture Adjust".

You can further configure the detailed settings in the "Color Temp." tab. " K Color Temp."P. 47

• The "Color Temp." settings available for configuration vary according to "Picture Mode".

* When "Color Profile" is set to "Off (Wide)/Off (Normal)", the setting is fixed at "High Bright".

"Color Temp."

Color Temp.	Description
Xenon 1 **NZ700** **RS2200** Xenon 2 **NZ700** **RS2200**	Color temperature that reproduces the characteristics of a xenon lamp used in cinemas. • Xenon 1: A light source color that is emitted by a film projector • Xenon 2: A light source color emitted by a projector used for digital cinema
5500K 6500K 7500K 9300K	Increasing the value enhances the blue tone of the video image, while decreasing the value enhances the red tone.
High Bright	Color temperature that gives priority to brightness.
HDR10+	Color temperature suitable for viewing HDR10+ content.
HDR10	Color temperature suitable for viewing HDR10 content. The default setting is 6500K.
HLG	Color temperature suitable for viewing HLG content. The default setting is 6500K.
Custom 1 to Custom 2	The color temperature of video images can be adjusted manually and saved as one of the three customized settings.

List of selectable "Color Temp." according to "Picture Mode"

Picture Mode	Color Temp.
Natural Vivid SDR 1, SDR 2	5500K
	6500K
	7500K
	9300K
	High Bright
	Custom 1 to Custom 2
Cinema	5500K
	6500K
	7500K
	9300K
	Xenon 1 **NZ700** **RS2200**
	Xenon 2 **NZ700** **RS2200**
	High Bright
	Custom 1 to Custom 2
Frame Adapt HDR 1 Frame Adapt HDR 2 HDR 1, HDR 2	5500K
	6500K
	7500K
	9300K
	High Bright
	HDR10
	Custom 1 to Custom 2
FILMMAKER MODE	6500K
HDR10+	HDR10+
HLG	5500K
	6500K
	7500K
	9300K
	High Bright
	HLG
	Custom 1 to Custom 2

Gamma/Tone Mapping

This item adjusts "Gamma/Tone Mapping" according to the preconfigured "Picture Mode" (output value of the projected video with respect to the video signal input).

➡ "Adjusting the Output Value of the Projected Image (Gamma/Tone Mapping)" (P. 33)

You can further configure the detailed settings in the "Gamma/Tone Mapping" tab. " Gamma/Tone Mapping"P. 48

HDR Settings

For configuring the picture adjustment feature of the HDR video image.

* This setting is not available when the input signal is SDR or HLG.

* This setting is not available during HDR signal input and when "Picture Mode" is configured to "HDR 1" and "HDR 2".

HDR Processing

This is a feature for configuring the method of content analysis in "Tone Mapping".

* When "Picture Mode" is configured to "HDR10+", "HDR Processing" is fixed at "HDR10+". "HDR10+" is used only when the Picture Mode is configured to "HDR10+".

Setting	Description
Frame by Frame	Automatically adjusts the HDR tone mapping after analyzing the peak brightness of each frame.
Scene by Scene	Automatically adjusts the HDR tone mapping after analyzing the peak brightness of each scene.
Static	Configures based on the mastering information (MaxCLL/FALL) of the content and does not make any dynamic adjustment.
HDR10+	Automatically adjusts the brightness for each scene based on the HDR10+ image information. [*2]

HDR Quantizer

This is a feature for adjusting the overall brightness during tone mapping.

When "Picture Mode" is set to "Frame Adapt HDR 1", "Frame Adapt HDR 2" or "FILMMAKER MODE"

Setting	Description
Auto (Normal)	Automatically selects an appropriate tone mapping based on the mastering information (MaxCLL/DML) of the content.
Auto (Wide)	Automatically selects an appropriate tone mapping based on the mastering information (MaxCLL/DML) of the content. A comparison is made with "Auto (Normal)" to switch to the direction that will become brighter.
-2	Displays in a tone map with 600 nits as the clip point.
-1	Displays in a tone map with 400 nits as the clip point.
0	Displays in a tone map with 300 nits as the clip point.
1	Displays in a tone map with 200 nits as the clip point.
2	Displays in a tone map with 150 nits as the clip point.

When "Picture Mode" is set to "HDR10+"

Setting	Description
High	Displays the tone map when the overall brightness is configured to the high level. This is suited for large-sized screens.
Mid	Displays the tone map when the overall brightness is configured to the medium level. This is suited for medium-sized screens.
Low	Displays the tone map when the overall brightness is configured to the low level. This is suited for small-sized screens.

To enjoy HDR10+ content when the Picture Mode is "HDR10+", the following installation conditions are recommended.

	HDR Quantizer: High		HDR Quantizer: Mid		HDR Quantizer: Low	
	Screen Size Diagonal (inch)	Projection Distance (m)	Screen Size Diagonal (inch)	Projection Distance (m)	Screen Size Diagonal (inch)	Projection Distance (m)
NZ700 RS2200	96	2.86	83	2.44	71	2.09
NZ500 RS1200	88	2.69	77	2.28	66	1.93

	HDR Quantizer: High		HDR Quantizer: Mid		HDR Quantizer: Low	
	Screen Size Diagonal (inch)	Projection Distance (inch)	Screen Size Diagonal (inch)	Projection Distance (inch)	Screen Size Diagonal (inch)	Projection Distance (inch)
NZ700 RS2200	96	113	83	96	71	82
NZ500 RS1200	88	106	77	90	66	76

Deep Black

Controls the tonal range of the shadows precisely to enhance the overall contrast of the image.

 * This item is not available when "Picture Mode" is set to "HDR10+".

Setting	Description
On	Turns on the Deep Black feature for a more realistic expression of darkness.
Off	Turns off the Deep Black feature.

This is a feature for adjusting the sharpness of the displayed image. It employs an original algorithm to create a natural impression that is sharper at areas in focus and softer at areas that are not in focus, enabling you to enjoy highly expressive images with a greater sense of depth.

   *1   This item is not available when "Picture Mode" is set to "FILMMAKER MODE".

   *2   "Smoothing" and "Enhance" are not available when "Picture Mode" is configured to "HDR10+".

   *3   "Smoothing" and "Enhance" are not available when "Graphic Mode" is configured to "Off".

Graphic Mode

Switches the MPC setting.
We recommend setting "High" when watching content such as DVDs and Blu-rays, and "Low" for 4K content such as UHD.
If "High" or "Low" enhances the sharpness of the displayed image, we recommend setting "Off".

Setting	Description
Off	The video will not undergo any enhancement processing.
Low	Performs enhancement processing suitable for 4K resolution content (UHD).
High	Performs enhancement processing suitable for 2K or lower resolution content (DVD, Blu-ray).

Enhance

For adjusting the high-frequency areas. Increasing the value enhances the definition for a sharper image quality.

 • Setting range: 0 to 10

Smoothing

For adjusting the low-frequency areas. Increasing the value produces smoother video images.

 • Setting range: 0 (weak) to 10 (strong)

  * If the setting value of "Enhance" is low, the effect may be weakened.

Reset

Resets the MPC settings.

✎ Toggling between the States before and during Adjustment

Pressing the [HIDE] button on the remote control enables you to toggle between the states before adjustment and during adjustment.

For reducing the after-image, which occurs in a fast-moving scene.
   ➡ "Reducing the After-image of Fast-moving Images (C.M.D.)" (P. 34)

Adjust/Set

☼ **Picture Adjust**

You can further configure the detailed settings for "Picture Mode".

Picture Mode

You can adjust the image quality according to the type of video image you are viewing.
➡ "Setting the Picture Mode" (P. 29)

LD Power

Controls the brightness of the light source by controlling the LD current.
• Setting range: 0 to 100

Dynamic CTRL

Expands the dynamic range of video expression through controlling the brightness of the light source based on image analysis.

Setting	Description
Off	Does not control.
Low	Maintains the peak brightness while automatically optimizing laser light source control and video signal. Weaker control than "High".
High	Maintains the peak brightness while automatically optimizing laser light source control and video signal to produce a solid black tone throughout the entire video image.
Balanced	Adjusts both the shadows and highlights moderately while suppressing the peak brightness. Enhances the depth and reality of the scene.

Aperture

For changing the brightness through controlling the aperture.
• Setting range: -15 (stops down) to 0 (opens up)

Contrast

For adjusting the white level point to avoid clipping or over saturation.
• Setting range: -50 (little difference in brightness) to +50 (large difference in brightness)

Brightness

For adjusting the black level point to avoid clipping or over saturation.
• Setting range: -50 (darker) to +50 (brighter)

Color

For adjusting the color saturation of the video image.
• Setting range: -50 (lighter) to +50 (deeper)

Tint

For adjusting the hue of the video image.
• Setting range: -50 (reddish) to +50 (greenish)

Adjust/Set

User Name Edit

You can edit the name of the picture mode "SDR 1"/"SDR 2"/"HDR 1"/"HDR 2".

- Characters that are usable include alphabets (upper or lower case), numeric characters, symbols and blank (space) character. (However, blank (space) cannot be used for the first and last characters.)
- Enter not more than 10 characters.

Selection Cursor

Input Cursor

After entry is complete, select "OK" and press the [OK] button

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Color Profile

You can further configure the detailed settings for "Color Profile".

Color Profile

Configures "Color Profile" according to the preconfigured "Picture Adjust".
  ➡ "Setting the Color Profile" (P. 30)

Color Management

Based on the setting of the selected "Color Profile", you can adjust each of the following colors according to your preference: Red, Magenta, Cyan, Yellow, Green, and Blue.

Setting	Description
On	Enables fine adjustment.
Off	Disables fine adjustment.

Color Selection

For selecting the color to be adjusted ("Red", "Magenta", "Cyan", "Yellow", "Green", "Blue").

Hue

Adjusts the hue (color tone).
• Setting range: -30 to +30

Saturation

Adjusts the color saturation (vividness).
• Setting range: -30 (dull) to +30 (vivid)

Brightness

Adjusts the brightness.
• Setting range: -30 (dark) to +30 (bright)

✎ Toggling between the States before and during Adjustment

Pressing the [HIDE] button on the remote control enables you to toggle between the states before adjustment and during adjustment.

⬛K **Color Temp.**

You can further configure the detailed settings for "Color Temp.".

Color Temp.

Configures "Color Temp." according to the preconfigured "Picture Adjust".
  ➡ "Color Temp." (P. 39)

Correction Value

Configures the color temperature based on which "Gain Red" / "Gain Green" / "Gain Blue" / "Offset Red" / "Offset Green" / "Offset Blue" are adjusted when "Color Temp." is configured to "HDR10""HLG""Custom 1""Custom 2".

• The "Correction Value" settings available for configuration vary according to "Picture Mode".

Gain Red / Gain Green / Gain Blue

Adjusts each color in the bright parts of the video image.

• Setting range: -255 (reduces the red/green/blue tone) to 0 (no adjustment)

Offset Red / Offset Green / Offset Blue

Adjusts each color in the dark areas of the video image.

• Setting range: -50 (reduces the red/green/blue tone) to 0 (no adjustment) to +50 (enhances the red/green/blue tone)

List of selectable "Correction Value" according to "Picture Mode"

Picture Mode	Correction Value
Natural	5500K
Vivid	6500K
Frame Adapt HDR 1, Frame Adapt HDR 2	7500K
SDR 1, SDR 2	9300K
HDR 1, HDR 2 HLG	High Bright
Cinema	5500K
	6500K
	7500K
	9300K
	Xenon 1 **NZ700** **RS2200**
	Xenon 2 **NZ700** **RS2200**
	High Bright

⟋ **Gamma/Tone Mapping**

You can further configure the detailed settings for"Gamma/Tone Mapping".

> * This feature is not available when "Picture Mode" is configured to "Frame Adapt HDR 1"/"Frame Adapt HDR 2"/ "FILMMAKER MODE" during HDR signal input.
> * This item is not available when "Picture Mode" is set to "HDR10+".

Gamma/Tone Mapping

This item adjusts "Gamma/Tone Mapping" according to the preconfigured "Picture Mode" (output value of the projected video with respect to the video signal input).

➡ "Adjusting the Output Value of the Projected Image (Gamma/Tone Mapping)" (P. 33)

Correction Value

For setting the base gamma for the adjustment of "Picture Tone", "Dark Level" and "Bright Level" when one of the "Custom 1" to "Custom 3" settings is selected in Gamma/Tone Mapping.

Color Selection

For selecting the color to be adjusted ("White", "Red", "Green", "Blue") for "Picture Tone", "Dark Level" and "Bright Level".

Picture Tone

Adjusts the overall brightness automatically for a well-balanced result without compromising the gradation of the image.

• Setting range: -16 (darkens image for an underexposed effect) to +16 (brightens image for an overexposed effect)

Dark Level

You can adjust the image quality to produce a sharp contrast in the brightness.

• Setting range: -7 (darkens the shadows) to +7 (brightens the shadows)

Bright Level

You can adjust the image quality to produce a sharp contrast in the brightness.

• Setting range: -7 (darkens the highlights) to +7 (brightens the highlights)

List of selectable "Correction Value" according to "Picture Mode"

Picture Mode	Correction Value
Vivid	Vivid, Import
Cinema Natural SDR 1, SDR 2	1.8
	1.9
	2.0
	2.1
	2.2
	2.3
	2.4
	2.5
	2.6

Picture Mode	Correction Value
Cinema Natural SDR 1, SDR 2	Cinema 1
	Cinema 2
	Import
HLG	HDR(HLG)
	Import
HDR 1, HDR 2	HDR(PQ)
	Import

Adjust/Set

When "Correction Value" is set to "Import"

- By selecting "Import" for "Correction Value", the gamma data created externally can be selected as the base setting value for adjustment.
- The factory setting for "Import" is "2.2".
- You can use the calibration software to customize the gamma data adjustment, and import the created gamma data.

For details, contact your authorized dealer.

✎ Gamma Adjustment
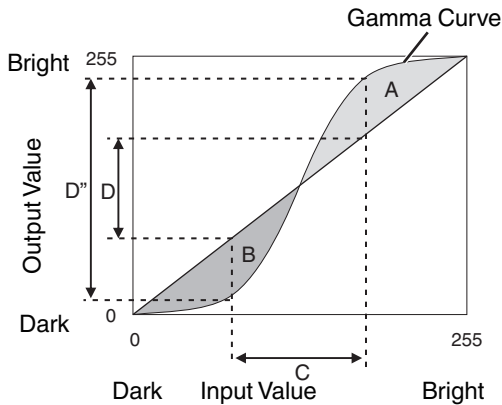
- When the gamma curve is a straight line:
  The brightness and contrast of the video input will be the same as that of the video output.
- Area for which the gamma curve is above the straight line (A):
  Video output appears brighter than the input.
- Area for which the gamma curve is below the straight line (B):
  Video output appears darker than the input.
- Area for which the slope of the gamma curve is steep (midtone) (C):
  The grayscale range of the video output becomes wider, and the contrast increases (D→D').

✎ Using Tone Map Manually during HDR Signal Input

"HDR(PQ)" gamma is the PQ curve adopted by HDR10. Fine adjustments can be made according to the screen size and environment although the default settings for viewing with the projector have been adjusted to allow optimum viewing.

 * Set "Picture Mode" to "HDR 1" or "HDR 2".

Picture tone adjustment method

Picture Tone	0	

When Picture Tone is set to "-" (The entire screen becomes dark.) Screen becomes brighter in the course of viewing	⟷	When Picture Tone is set to "+" (The entire screen becomes brighter.) Screen becomes darker in the course of viewing

Bright/dark area adjustment method

Dark Level	0	

(—) To enhance the contrast	⟷	(+) To make the dark area information more visible

Bright Level	0	

(—) To enhance the gradation of highlight areas	⟷	(+) To enhance the contrast

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For users seeking to obtain a gamma curve that is more faithful to the original PQ curve

This unit has been adjusted to display the projector images on the screen in the optimal quality in the default setting based on the original PQ curve. For users who wish to obtain results more faithful to the original PQ curve, please adjust manually with reference to the values below.

   * Set "Picture Mode" to "HDR 1" or "HDR 2".

When clipping point is 400 nits

Picture Tone	+5
Dark Level	0
Bright Level	+7

When clipping point is 1000 nits

Picture Tone	-7
Dark Level	0
Bright Level	+7

When clipping point is 2000 nits

Picture Tone	-9
Dark Level	0
Bright Level	+7

When clipping point is 4000 nits

Picture Tone	-13
Dark Level	0
Bright Level	+7

   * This product is designed for home use and we do not provide guarantee for commercial uses such as in mastering work.

Adjust/Set

HDMI Settings

📺—1 HDMI 1 Settings / 📺—2 HDMI 2 Settings

Input Level

For setting the dynamic range (gradation) of the video input.
If the image is not displayed properly even after selecting "Auto", select an appropriate setting.

- If the dynamic range is not appropriate, the bright areas become overexposed, and the dark areas become underexposed.

Setting	Description
Auto	Sets the input signal level automatically.
16-235 (Video)	Select this setting if you are inputting video signals (dynamic range: 16 - 235).
0-255 (PC)	Select this setting if you are inputting PC signals (dynamic range: 0 - 255).
16-255 (S.White)	Select this setting when inputting Super White-compatible device signals (dynamic range: 16 - 255).

Color Space

For setting the color space of the input signal.
If the image is not displayed properly even after selecting "Auto", select an appropriate setting.

Setting	Description
Auto	Detects "YCbCr444", "YCbCr422", and "RGB" automatically.
YCbCr444	Select this setting when inputting YCbCr (4:4:4) video signals.
YCbCr422	Select this setting when inputting YCbCr (4:2:2) video signals.
RGB	Select this setting when inputting RGB video signals.

Auto Pic.Mode Select

SDR

For configuring the "Picture Mode" to switch to automatically during input of SDR signal.

Setting	Description
Last Setting	Switches to the "Picture Mode" that was last configured when viewing SDR content.
Natural	Switches the "Picture Mode" automatically to "Natural".
Cinema	Switches the "Picture Mode" automatically to "Cinema".
Vivid	Switches the "Picture Mode" automatically to "Vivid".
SDR 1, SDR 2	Switches the "Picture Mode" automatically to "SDR 1" and "SDR 2".

Adjust/Set

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HDR10

For configuring the "Picture Mode" to switch to automatically during input of HDR10 signal.

Setting	Description
Last Setting	Switches to the "Picture Mode" that was last configured when viewing HDR10 content.
Frame Adapt HDR 1	Switches the "Picture Mode" automatically to "Frame Adapt HDR 1".
Frame Adapt HDR 2	Switches the "Picture Mode" automatically to "Frame Adapt HDR 2".
HDR 1, HDR 2	Switches the "Picture Mode" automatically to "HDR 1" and "HDR 2".

HDR10+

For configuring whether HDR10+ transmission is allowed. To enjoy HDR10+ content, configure to "On".

Setting	Description
On	Allows HDR10+ transmission
Off	Prohibits HDR10+ transmission

FILMMAKER MODE

For configuring whether to switch "Picture Mode" automatically to "FILMMAKER MODE" when FILMMAKER MODE is detected.

Setting	Description
Auto	Automatically switches "Picture Mode" to "FILMMAKER MODE" when FILMMAKER MODE is detected.
Manual	Does not automatically switch "Picture Mode" to "FILMMAKER MODE" when FILMMAKER MODE is detected.

✎ MEMO

• Displays a message asking whether to switch "Picture Mode" automatically when FILMMAKER MODE is detected for the first time. If "No" is selected, "FILMMAKER MODE" will be configured to "Manual". To enable automatic switching, configure "FILMMAKER MODE" to "Auto".

Content Type

For configuring the type of video content used for selecting an image quality mode.

If the image is not displayed properly even after selecting "Auto", select an appropriate setting.

Item	Description
Auto	Switches the video type automatically according to the input video system. After switching automatically, the picture mode switches to the setting preconfigured in "Auto Pic.Mode Select". ("Auto Pic.Mode Select"P. 51)
SDR	Picture mode suitable for viewing SDR content.
HDR10+	Picture mode suitable for viewing HDR10+ content.
HDR10	Picture mode suitable for viewing HDR10 content.
HLG	Picture mode suitable for viewing HLG content.

HDMI Format Setting

For changing the EDID mode of the "HDMI 1/HDMI 2" terminal. Set to "Standard" under normal condition.
The images may not be displayed on some old devices. In this case, try "Option 1" or "Option 2".

 * EDID (Extended Display Identification Data) refers to the information, such as supported resolutions, exchanged between devices.

• Setting values: Standard, Option 1 and Option 2

HDMI Format Settings and Supported Resolution

Supported Resolution	Color Space	Bit Number	HDMI Format Setting		
			Standard	Option 1	Option 2
4K24p 4K30p 4K25p	RGB/YCbCr4:4:4	8 bit	✓	✓	✓
		10, 12 bit	✓	✓	-
	YCbCr4:2:2	12 bit	✓	✓	✓
4K60p 4K50p	YCbCr4:2:0	8 bit	✓	✓	-
		10, 12 bit	✓	✓	-
	RGB/YCbCr4:4:4	8 bit	✓	✓	-
		10, 12 bit	✓	-	-
	YCbCr4:2:2	12 bit	✓	✓	-

Adjust/Set

Installation Settings

⚒ Installation Settings

Installation Mode

Collectively manages the setting values of "Lens Control", "Pixel Adjust", "Mask", "Anamorphic", "Screen Setting", "Installation Style", "Keystone" and "Aspect".

 * The lens position may be shifted slightly with respect to the position that was saved.

Load

Applies the saved settings to the current settings.

• Setting values: Mode 1 to Mode 5

 * The name of the setting value can be changed using "Name Edit".

Save

Saves the current settings.

• Setting values: Mode 1 to Mode 5

 * The name of the setting value can be changed using "Name Edit".

Name Edit

For editing the name of Installation Mode.

• Characters that are usable include alphabets (upper or lower case), numeric characters, symbols and blank (space) character. (However, blank (space) cannot be used for the first and last characters.)

• Enter not more than 10 characters.

Selection Cursor

Input Cursor

After entry is complete, select "OK" and press the [OK] button

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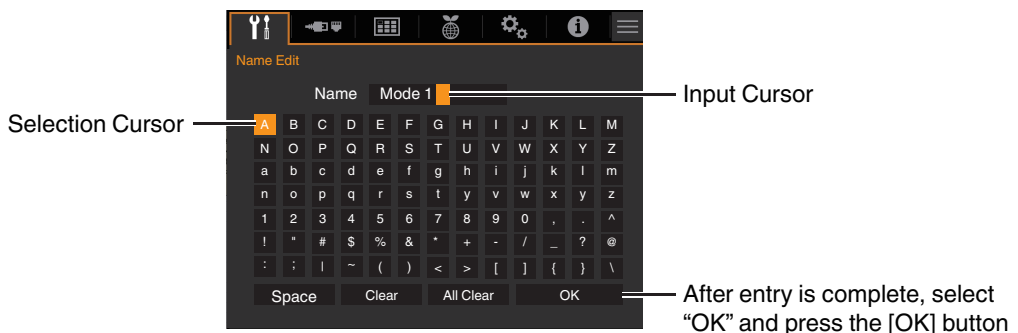
Lens Control

Focus / Zoom / Shift

For adjusting the lens according to the projection position
➡ "Adjusting the Lens According to the Projection Position" (P. 27)

Image Pattern

For setting whether to display the lens adjustment pattern.

Setting	Description
Off	Displays external signals, and does not display the lens adjustment pattern.
On	Displays the lens adjustment pattern.

Lock

For setting whether to lock or unlock the lens.
Setting to "On" to lock the lens allows you to preserve the adjustment status of the lens.

Setting	Description
Off	Does not lock the lens.
On	Locks the lens to prevent any erroneous operation on the adjustments.
	• Even when "On", the lens will be in the mode selected by "Installation Mode".

Lens Center

Returns the lens position to the center.

Adjust/Set

Pixel Adjust

For correcting the phase shifting between each RGB color by adjusting the pixel.

Adjust

For setting the adjustment feature to On or Off.

Adjust Area

Setting	Description
Whole	Adjusts the entire image.
Zone	Enables fine adjustment of each area by dividing the screen evenly into 10 vertical and horizontal zones.

Adjust Color

For selecting the color to adjust ("Red" or "Blue").

Adjust Pattern

Setting	Description
Off	Displays the external signals without displaying the test pattern for adjustment.
On	Displays the test pattern for adjustment.

Adjust Pattern Color

For setting the color of the adjustment pattern displayed during adjustment to "White" or "Yellow / Cyan".

Adjust (Pixel)

When "Adjust Area" is set to "Whole", adjustment can be made by moving in units of one pixel on the screen of the color selected in "Adjust Color".
  ➡ "Whole Adjust (Pixel) Operation Procedure" (P. 57)

• Adjustment cannot be made when "Adjust Area" is set to "Zone".

Setting	Description
H (Horizontal)	Setting range: -2 (moves red/blue to the left) to +2 (moves red/blue to the right)
V (Vertical)	Setting range: -2 (moves red/blue downward) to +2 (moves red/blue upward)

Adjust (Fine)

When "Adjust Area" is configured to "Whole", fine adjustment can be made to the entire screen's pixels by shifting them in one-eighth pixel increments based on the color selected in "Adjust Color".
  ➡ "Whole Adjust (Fine) Operation Procedure" (P. 58)

When "Adjust Area" is set to "Zone", the screen is divided evenly into 10 vertical and horizontal zones, and fine adjustment of each area is possible.
  ➡ "Zone Adjust Operation Procedure" (P. 59)

| Setting	Description
H (Horizontal)	Setting range: -31 (moves red/blue to the left) to +31 (moves red/blue to the right)
V (Vertical)	Setting range: -31 (moves red/blue downward) to +31 (moves red/blue upward)

Reset

Restores all pixel adjustment data to the factory default.

Adjust/Set

✐ Whole Adjust (Pixel) Operation Procedure

For making general adjustments to slight color fringing in the horizontal/vertical directions of the video image.

① Set "Adjust Area" to "Whole"

② Select "Adjust Color" and "Adjust Pattern Color"

③ Select "Adjust (Pixel)", and press the [OK] button

- The Adjustment mode is activated, and the selected adjustment pattern and Adjustment (Pixel) window are displayed.
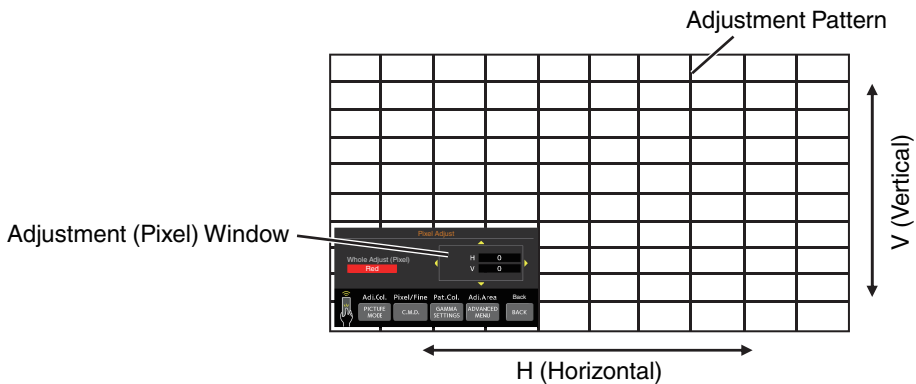
Adjustment Pattern

V (Vertical)

Adjustment (Pixel) Window

H (Horizontal)

④ Use the [▲▼◀▶] keys to move and adjust the vertical and horizontal pixels of the entire zone

- The adjustment setting appears at the center of the Adjustment (Pixel) window.

Pixel Adjustment Setting

Color for Adjustment

Remote Control Operation Guide
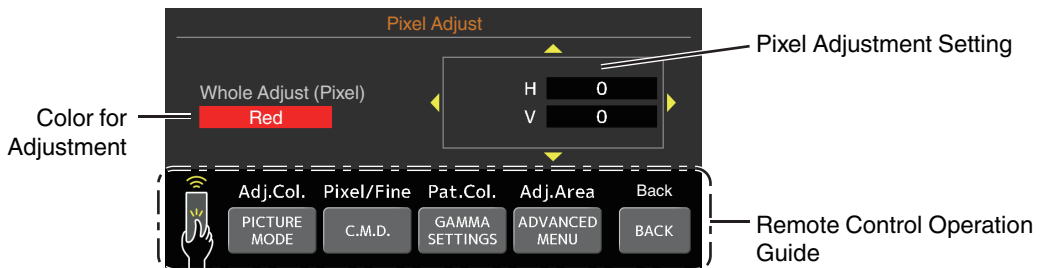
⑤ After adjustment is complete, press the [BACK] button twice to exit the Adjustment mode

Remote Control Operation Guide

Button Name	Function	Description of Operation
[PICTURE MODE]	Adj.Col.	Changes "Adjust Color".
[C.M.D.]	Pixel/Fine	Switches between "Adjust (Pixel)" and "Adjust (Fine)".
		• Switches to "Adjust (Pixel)" when "Adjust Area" is set to "Zone".
[GAMMA SETTINGS]	Pat.Col.	Changes "Adjust Pattern Color".
[ADVANCED MENU]	Adj.Area	Switches "Adjust Area".
		• A zone cursor appears on the adjustment pattern when the "Zone" setting is selected.

Adjust/Set

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✎ Whole Adjust (Fine) Operation Procedure

For making general adjustments on the misalignment of the entire screen using "Adjust (Pixel)", followed by making fine adjustments.

① Set "Adjust Area" to "Whole"

② Select "Adjust Color" and "Adjust Pattern Color"

③ Select Adjust (Fine), and press the [OK] button

- The Adjustment mode is activated, and the selected adjustment pattern and Fine window are displayed.
- The adjustable range may be smaller depending on the pixels being adjusted on the entire screen.

Adjustment Pattern

Fine Window

V (Vertical)
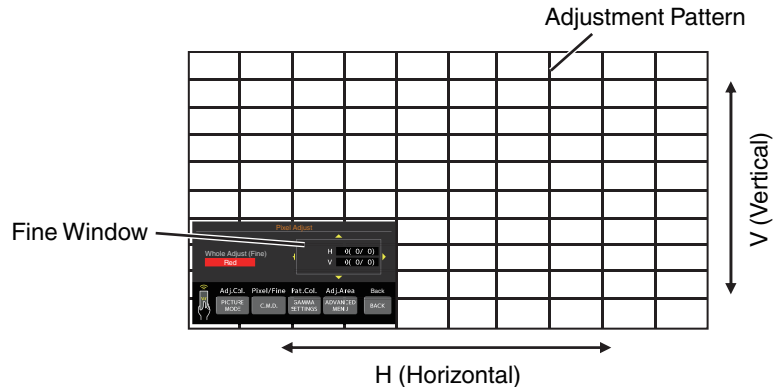
H (Horizontal)

④ Use the [▲▼◀▶] keys to move and adjust the vertical and horizontal pixels of the entire zone

- The adjustment setting appears at the center of the Fine window.

Pixel Adjustment Setting

Color for Adjustment

Remote Control Operation Guide

Adjustment Setting

Indicates the maximum and minimum misalignment value of the entire screen.(Max. / Min.)

⑤ After adjustment is complete, press the [BACK] button twice to exit the Adjustment mode

✎ MEMO

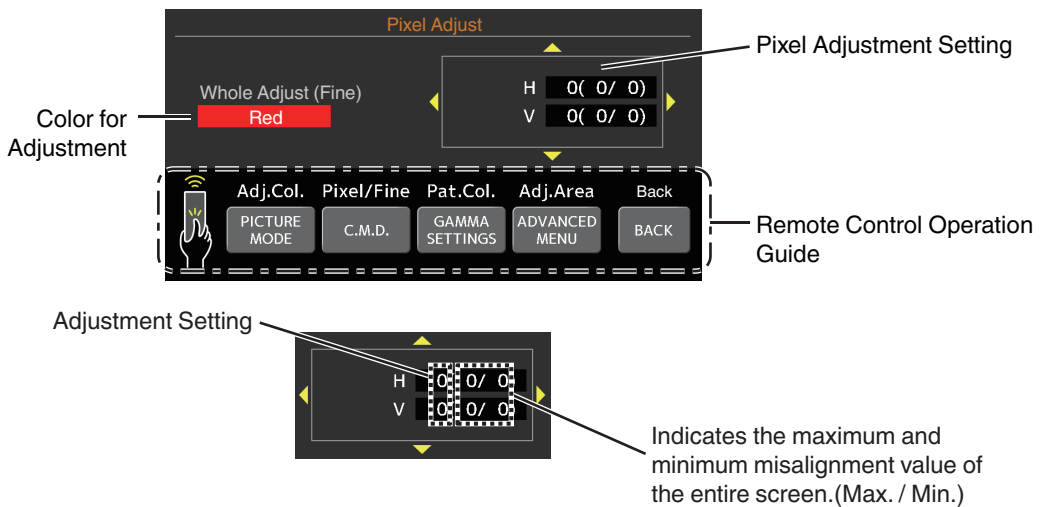- If both the maximum overall screen misalignment of H (horizontal direction) and V (vertical direction) are "31", you cannot select a value that is larger than the displayed setting even when the adjustment setting is lower than the maximum value.
- If the minimum overall screen misalignment is "-31", you cannot select a value that is smaller than the displayed setting even when the adjustment setting is higher than the minimum value.

Adjust/Set

✎ Zone Adjust Operation Procedure

For fine-tuning misalignments on a part of the screen after adjusting the overall screen misalignment using "Adjust (Pixel)" and "Adjust (Fine)".

- The screen can be divided vertically and horizontally into 10 sections for partial adjustments to be made.

① Set "Adjust Area" to "Zone"

② Select "Adjust Color" and "Adjust Pattern Color"

③ Select Adjust (Fine), and press the [OK] button

- The Adjustment mode is activated, and the selected adjustment pattern and Zone Adjustment window are displayed.
- The adjustable range may be smaller depending on the pixels being adjusted on the entire screen.

Adjustment Pattern

Zone Cursor

V (Vertical)

Zone Adjustment Window
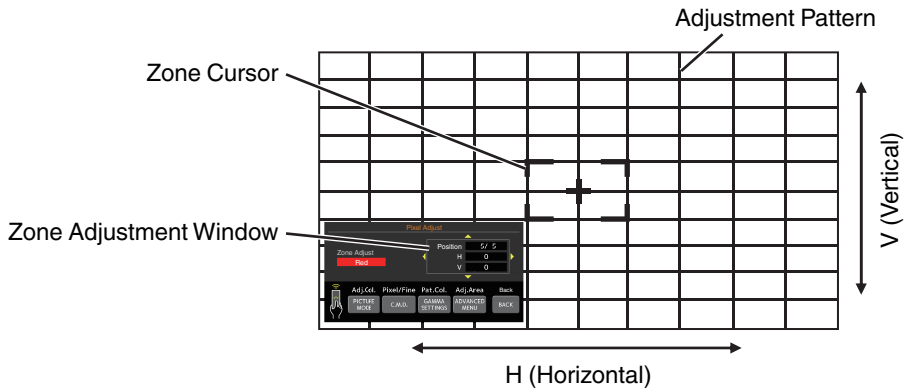
H (Horizontal)

④ Press the [▲▼◀▶] keys to move the cursor to the point to be adjusted

⑤ Press the [OK] button to enter the Adjustment mode

⑥ Use the [▲▼◀▶] keys to move and adjust the vertical and horizontal pixels of the entire zone

- The adjustment setting appears at the center of the Zone Adjustment window.

Pixel Adjustment Setting

Color for Adjustment

Remote Control Operation Guide

Cursor Position

Adjustment Setting

⑦ After adjustment is complete, press the [BACK] button twice to exit the Adjustment mode

Adjust/Set

Mask

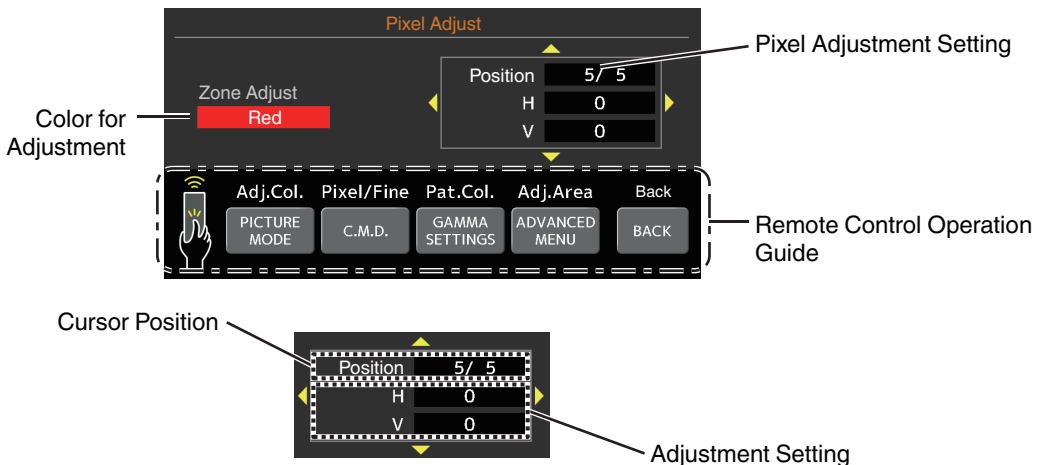For hiding the peripheral area of the image with a mask (black strip).

Setting	Description
Off	Not masked.
On	Hides the ranges specified in "Top", "Bottom", "Left" and "Right" by masking (with black strips).

■ Off   ■ On

Mask: black strip around the periphery

"Top" / "Bottom" / "Left" / "Right"

For specifying the ranges to hide by masking (with black strips).

• Setting range: 0 to 220

Anamorphic

Configure this setting when an anamorphic lens is used.

Setting	Description
Off	Projects the 2.35:1 image without any changes.
A	Projects the 2.35:1 image with it stretched in the vertical direction only using a 3840 pixel width.
B	Projects the 16:9 image with it compressed in the horizontal direction only.
C	This is a mode used exclusively for the DCR lens of Panamorph. Projects the image by stretching 2.35:1 video images in the vertical direction and enlarging them in the horizontal direction to the maximum panel width of 4096 pixels.
D	This is a mode used exclusively for the DCR lens of Panamorph. Projects the 16:9 image with it compressed in the horizontal direction only.

Screen Setting

Screen Adjust

Corrects the color temperature according to the properties of the screen to be used.

Selecting the optimal correction mode enables corrections to be performed to reproduce natural images with balanced colors.

- This feature is not available when "Color Profile" is configured to "Off (Wide)" or "Off (Normal)".

Setting	Description
Off	Does not perform correction
On	Corrects the color temperature according to the properties of the screen configured in "Screen No.".

Screen No.

For configuring the correction mode according to the screen to be used.

- This item cannot be set when "Screen Adjust" is set to "Off".
- For information on the screen and the corresponding correction mode, please visit our website.

https://www.jvc.com/global/projector/screen

MEMO

- You can utilize the optional optical sensor and dedicated projector calibration software to make finer adjustments. For details on the dedicated projector calibration software, please visit our website.

https://www.jvc.com/global/support/

Screen Aspect

For configuring the aspect ratio of the screen for viewing.

Installation Style

For setting to "Front", "Ceiling Mount (F)", "Rear", or "Ceiling Mount (R)" according to the installation status of the projector.

- "Front" or "Ceiling Mount (F)" is set when projector is installed in the front with respect to the screen.
- "Rear" or "Ceiling Mount (R)" is set when projector is installed in the rear with respect to the screen.

Keystone

For correcting any keystone distortion that occurs when the projector is installed at an angle with respect to the screen. Vertical Keystone only.

- Vertical setting range: -7 to 7
- * Increasing the value changes the aspect slightly.
- * Image will reduce in size when keystone is adjusted.
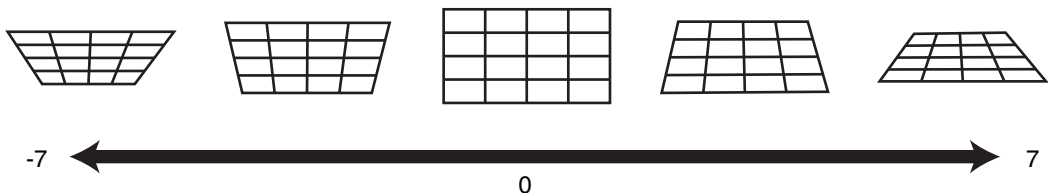
-7 ← 0 → 7

Aspect

The screen size of the projected image can be adjusted optimally according to the original screen size (aspect) that has been input.

➡ "Adjusting the Screen Size (Aspect)" (P. 28)

Adjust/Set

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▄▄▄▄ **Network Settings**

For specifying the settings for external control from a PC or smartphone.

Setting		Description
DHCP Client	On	Obtains the IP address automatically from the DHCP server inside the connected network.
	Off	For configuring the network settings manually.
IP Address		For configuring the IP address.
Subnet Mask		For configuring the subnet mask.
Default Gateway		For configuring the default gateway.
MAC Address		Displays the MAC address of the unit.
Set		Applies the network settings.
Control4 SDDP		Set to "On" to allow Control4 SDDP to detect this unit. When this unit is not connected to an environment under the control of the controller and Control4 SDDP from the Control4 Corporation, set this to "Off".

✎ Glossary of Network Terminology

DHCP	:	Abbreviation for Dynamic Host Configuration Protocol. This is a protocol for the network to assign an IP address automatically to the connected device.
IP Address	:	Numeric characters for identifying the device that is connected to the network.
Subnet Mask	:	Numeric characters that define the bit count used for the network address that is a segment of the IP address.
Default Gateway	:	Server for communicating beyond the network that is divided by the subnet mask.
MAC Address	:	Abbreviation for Media Access Control address. This is a number that is unique to each network adapter. Each of the network adapters is assigned with a unique MAC address.

Network Password

For configuring the password during LAN connection.

- Characters that are usable include alphabets (upper or lower case), numeric characters, and symbols.
- Enter a password with at least 8 characters and not more than 10 characters.

Input Cursor

Selection Cursor

After entry is complete, select "OK" and press the [OK] button

📢 CAUTION

- Configuration of a network password is necessary before connecting to the LAN terminal.
- * Any 3rd party IP control system will have to configure this password into their communication protocol.

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⊞ Display Settings

Back Color

For setting the color of the background to "Blue" or "Black" when there is no signal input.

Menu Position

For setting the display position of the menu.

Signal Display

For setting the display of the input information to "On" or "Off".

Setting	Description
Off	Not displayed.
On	Shows the input terminal for 5 seconds when input is switched.

Logo

For setting the display of logo during startup to "On" or "Off".

Setting	Description
Off	Not displayed.
On	Displays the "D-ILA" logo for 5 seconds during startup.

Language

For setting the display language to "English", "Deutsch", "Español", "Italiano", "Français", "Português", "Nederlands", "Polski", "Norsk", "繁體中文", or "日本語".

⊕ ECO Settings

Off Timer

For setting the duration before the power turns off automatically when the projector is not operated.

• Setting values: "Off", "1 Hour", "2 Hours", "3 Hours" and "4 Hours"

* The setting will be retained even after the Off Timer operation has completed.

ECO Mode

Setting	Description
On	Enables "ECO Mode" to minimize power consumption in the Standby mode.
	• LAN communication cannot be used in the Standby mode.
	• If there is no signal transmission and operation for 15 minutes while an image is projected, the power management switches the equipment automatically into standby mode.
Off	Select this option to control via LAN communication in the Standby mode or if Control4 is to be used.

* If this unit enters into standby while "ECO Mode" is set to "On", all the indicators on the unit including the "STANDBY/ON" indicator are turned off. To turn on the power from this state, use the [STANDBY/ON] button on the unit. Alternatively, press any button on the remote control once to cancel the standby mode then press the [ON] button on the remote control.

Hide Mode

For reducing the power consumption through suppressing the current supply for the LD block when the [HIDE] button is pressed to hide the image temporarily.

Setting	Description
Off	The illumination supply remains on when the [HIDE] button is pressed to hide the image.
On	The illumination supply is turned off when the [HIDE] button is pressed to hide the image.

⚙ System Settings

Remote Code

For changing the remote control code.

Setting	Description
A	Sets the remote control code to "A".
B	Sets the remote control code to "B".

- You need to configure the remote control according to the settings of this unit.

  ① Hold down the [BACK] button

  ② While holding down the [BACK] button, press the [MENU] button for 3 seconds

  ③ The backlight of the remote control should blink 3 times for Mode A and 2 times for Mode B

- If the setting differs between this unit and the remote control, the "STANDBY/ON" indicator blinks in green when receiving the remote control code.

```
   []          []          -☼-
WARNING      LIGHT     STANDBY/ON
                        (Green)
```

High Altitude Mode

For setting the high altitude mode to "On" or "Off".

Set to "On" when using the projector at a location of low atmospheric pressure (higher than 900 m (3,000 ft) above sea level).

Back-up Settings

For exporting or importing the projector settings using a commercially available USB flash drive.

- Current lens control information (focus, zoom, shift) will not be exported or imported.

📢 CAUTION

Take note of the following when using a USB flash drive.

- Use a 1 GB or more, FAT32 format drive.
- Make sure there are no other folders or files.
- Do not turn off the main unit or remove the USB flash drive while it is running. Doing so may cause the projector to malfunction.
- Do not change the file name.

Adjust/Set

Export Settings

For exporting the projector settings to a USB flash drive.

* If there is not enough free space on the USB flash drive, the settings may not be exported.

* Information such as date and time created is not reflected in the file created during export.

📢 CAUTION

• Multiple settings cannot be exported to the same USB flash drive. If the data already exists in the USB flash drive, it will be overwritten.

Import Settings

For retrieving the projector settings from the USB flash drive and applying them to the projector.

* Once the settings have been imported, the projector and all LED indicators will turn off.
To turn on the power again, use the ⏻/❙ button on the unit. Alternatively, press any button on the remote control once to put it to Standby then press the ❙ [ON] button on the remote control.

📢 CAUTION

Importing the settings will overwrite the current settings.

Factory Reset

For restoring the settings of this unit to the factory default. However, the following settings will not be reset.

• Gamma data saved in "Gamma" → "Correction Value" → "Import".

• Color profile data saved in "Color Profile" → "Custom1 to Custom4".

Software Update

For performing a software update.

For the latest information on the software, refer to https://www.jvc.com/global/support/.

Information

ⓘ Information

Setting	Description
Input	Displays the currently selected video input terminal.
Source (Displayed only during video signal input)	Displays the input source.
Resolution (Displayed only during PC signal input)	Displays the image resolution.
H Frequency	Displays the horizontal frequency.
V Frequency	Displays the vertical frequency.
Color Space	Displays the color space and color bit depth of the input video signal. • The color bit depth is not displayed when "YCbCr422" is input. • The color bit depth is displayed when color bit depth information is received from the source device.
Colorimetry	Displays the Colorimetry of the input signal.
HDR	Displays the EOTF information when HDR packet is received. Displays "HDR10+" when HDR10+ packets are received. Displays "FILMMAKER MODE" when FILMMAKER MODE packets are received.
Max CLL/FALL/DML	Displays the mastering information of the content during HDR playback. Max CLL: Maximum Content Light Level Max FALL: Maximum Frame Average Light Level Max DML: Brightness of the master monitor during content production • The information may not be displayed depending on the player and content.
Soft Ver.	Displays the firmware version.
Light Source Time	Displays the laser light source time.

Adjust/Set

Maintaining the Cabinet and Remote Control

- Gently wipe off dirt on the cabinet with a soft cloth.
- If it is extremely dirty, wet a cloth in water, wring dry and use it to wipe off the dirt, followed by wiping again with a dry cloth.
- Pay attention to the following as the cabinet may deteriorate in condition or the paint may come off.
    - Do not wipe with thinner or benzine
    - Do not allow prolonged contact with rubber or plastic products
    - Do not spray volatile chemicals such as insecticide

Maintenance

68

Troubleshooting

Before sending the unit to your authorized dealer for repair, please check the following points.

The following symptoms are not malfunctions.

**You do not need to worry about the following symptoms if there is no abnormality on the screen.**

- A part of the top or front surface of the unit is hot.
- A creaking sound is heard from the unit.
- An operating sound is heard from the inside of the unit.
- Color smear occurs on some screens.

This unit is a digital device. This unit may become unable to operate normally due to external static or noise. Perform the following operations when such malfunctions occur.

① If the unit is in the Standby mode, pull out the power plug, followed by inserting it again

② Press the ⏻/❙ button on the projector unit to turn on the power again

If "High Altitude Mode" is set to "On", the fan spins at a higher speed and produces a sound louder than usual.

Power is not supplied

Check	Action	Refer to
Is the power cord disconnected?	Insert the power cord (plug) firmly.	P. 24
Is the unit in the Cool-down mode?	After exiting the Cool-down mode, turn on the power again.	P. 26
Is this unit in the "ECO Mode"?	Press the ⏻/❙ button on the projector unit or the remote control unit. After the "STANDBY/ON" indicator lights up in red, press the ❙ [ON] button.	P. 64

Power shuts down automatically

Check	Action	Refer to
Has "ECO Mode" been configured?	Set "ECO Mode" to "Off".	P. 64
Has "Off Timer" been configured?	Set "Off Timer" to "Off".	P. 64
Are the air inlets and exhaust vent blocked?	Leave proper clearance when installing the unit.	P. 13, 14, 19

Video image does not appear

Check	Action	Refer to
Is the correct external input selected?	Select the correct external input terminal.	P. 25
Is the power of the AV device or PC turned on?	Turn on the power of the AV device or PC and play the video.	P. 22
Is the AV device or PC properly connected?	Connect the AV device or PC properly.	P. 22
Are the correct signals being output from the AV device or PC?	Set the AV device or PC properly.	P. 22
Is the cable in use an HDMI-certified cable?	Use an Ultra High Speed HDMI Cable (supports 48 Gbps). HDMI cable may be directional and some HDMI cables require external power. Please check the specifications of the cable you are using.	P. 22
Is an intermediate device (AV amplifier, divider, etc.) in use?	Change the sequence of turning on the source device, intermediate device and the projector. And after turning on each device, ensure that the signal output is stable before turning on the next device. If the intermediate device does not support HDR10+, configure the HDR10+ setting under "Auto Pic. Mode Select" to "Off".	P. 51
Is an old source device in use?	Change the resolution setting of the source device. For details on how to change the setting, please refer to the instruction manual of the source device. Also, try the "HDMI Format Setting" mode settings under "Option 1" "Option 2".	P. 53
Is the input signal 2K (2048x1080) 24/25/30/60Hz?	If the input signal is 2K (2048x1080) 24/25/30/50/60Hz, configure "HDMI Format Setting" setting to "Option 1".	P. 53
This may be due to a temporary connection problem.	Turn on the projector and the connected devices (player and AV amplifier) again (ON → OFF → ON).	P. 22

Video image looks unnatural

Colors are unnatural

Check	Action	Refer to
Is the color space of the input signal correctly set?	The color may turn out unnatural when the input signal is different from that in the projector setting. Set the "Color Space" for "HDMI 1 Settings" / "HDMI 2 Settings" correctly.	P. 51
Is the image correctly adjusted?	Adjust "Color" and "Tint" accordingly. Check Picture Settings.	P. 44
Is the AV device or PC properly connected?	Connect the AV device or PC properly.	P. 22

* The video image may appear slightly reddish immediately after starting up. This is not a malfunction.

Video image is fuzzy

Check	Action	Refer to
Is the focus correctly adjusted?	Adjust the focus.	P. 27
Is the unit placed too near or too far away from the screen?	Set the unit at a correct distance from the screen.	P. 80

Video image flickers

Check	Action	Refer to
Has "Dynamic CTRL" been configured?	Set "Dynamic CTRL" to "Off"	P. 44
Has "C.M.D." been configured?	Set "C.M.D." to "Off".	P. 34

Video format changes

Check	Action	Refer to
Is the cable in use an HDMI-certified cable?	Depending on the quality of the cable in use, the signal from the device connected may change to a receivable video format. Make use of an HDMI cable with the Ultra High Speed HDMI Cable certification (supports 48 Gbps).	P. 22

Projected image is dark

Check	Action	Refer to
Is the aperture closed?	Increase the value of the "Aperture" setting.	P. 44
Is the "LD Power" value set too low?	Increase the "LD Power" value.	P. 44
Check Picture Settings.	Select different Picture Mode.	P. 29
Is "Dynamic CTRL" set to a setting other than "Off"?	Set "Dynamic CTRL" to "Off".	P. 44

Video image appears horizontally (vertically) extended

Check	Action	Refer to
Is "Anamorphic" set to a setting other than "Off"?	Set "Anamorphic" to "Off"	P. 60

Moire patterns appear on the screen

Check	Action	Refer to
Does the fabric of the screen have a regular pattern?	Interference fringes may sometimes occur between the fabric pattern and the pixels. Please consult the authorized dealer.	―

Part of the video Image is missing

Check	Action	Refer to
Has screen mask been configured?	Set "Mask" to "Off".	P. 60
Is "Anamorphic" set to a setting other than "Off"?	Set "Anamorphic" to "Off".	P. 60
Is "Aspect" set to a setting other than "Native"?	Set "Aspect" to "Native"	P. 28

Troubleshooting

Remote control does not work

Check	Action	Refer to
Are the batteries correctly installed?	Match the polarities ($\oplus$ $\ominus$) correctly when loading the batteries.	P. 16
Are the batteries exhausted?	Replace with new batteries.	P. 16
Is there an obstructing object between the remote control and remote sensor?	Remove any obstructing object.	P. 16
Is the remote control held too far away from the unit?	Hold the remote control closer to the sensor during use.	P. 16
Is remote control code correctly?	Match the settings of the projector and the remote control. The factory settings are both "A".	P. 65

Noise is heard

Check	Action	Refer to
Is the exhaust vent blocked? Is the unit used near a heater or air-conditioner?	Check the installation condition of the projector. When the surrounding temperature of the projector is high, the fan revolution speed increases to protect the projector unit, hence a louder operating sound.	P. 19
Is the "LD Power" value set too high?	Setting the "LD Power" value too high increases the fan rotation speed, and noise would be louder as a result.	P. 44

Unable to connect to LAN terminal

Check	Action	Refer to
Has a network password been configured?	Configuration of a network password is necessary before connecting to the LAN terminal. Configure the network password.	P. 62
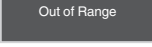
There are small black or colored dots on the screen

The D-ILA device is manufactured using high-precision technologies, but there may be some (less than 0.01%) missing pixels or pixels that remain permanently lit. This is not a malfunction.

Settings are not exported

Check	Action	Refer to
Is there enough free space on the USB flash drive?	Take note of the following when using a USB flash drive. • Use a 1 GB or more, FAT32 format drive. • Make sure there are no other folders or files.	P. 65

When the Following Messages Appear...

Message	Description	Action
No Input	• No device is connected to the input terminal. • The input terminal is connected but there is no signal.	Input the video signals.
Out of Range	The video signal input is not supported on this unit.	Input video signals that can be used. (P. 84)

External Control

The projector can be controlled by connecting it to a PC through the computer network with a LAN cable for control commands to be sent to the projector.

➡ " 🟧 Network Settings" (P. 62)

• Please use it after you have gained proper understanding from professional books or consulting the system administrator.

TCP/IP Connection

Before controlling via LAN, it is necessary to establish connection of the TCP layer by a "3-way handshake", followed by sending out "PJREQ" and receiving "PJACK" within five seconds after the projector sends out "PJ_OK" for connection authentication.
If you are unable to complete sending within five seconds, or when "PJ_NG" or "PJNAK" is received, check the operating status of the projector, followed by performing the steps again starting from establishment of a TCP connection.
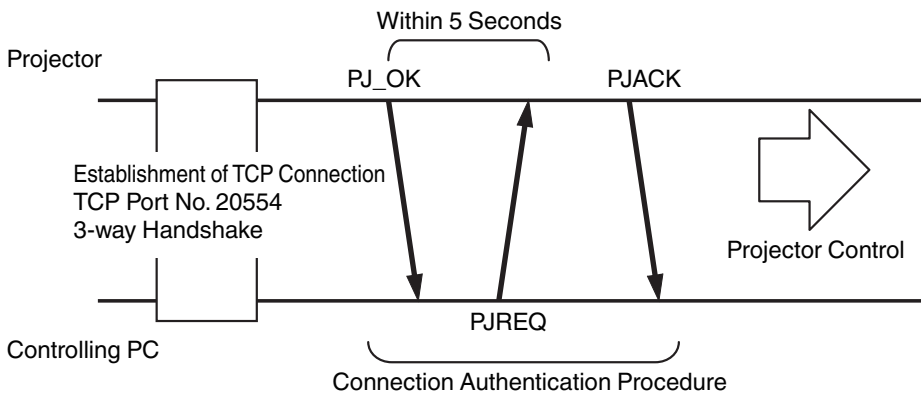
Command Format

The command between this unit and the computer consists of "Header", "Unit ID", "Command", "Data" and "End".

• Header (1 byte), Unit ID (2 bytes), Command (2 bytes), Data (n bytes), End (1 byte)

Header

This binary code indicates the start of communication.

Binary Code	Type	Description
21	Operating command	PC → This unit
3F	Reference command	PC → This unit
40	Response command	This unit → PC
06	ACK	This unit → PC (returns to PC after the command is accepted without error)

Unit ID

This is a code that specifies the unit. The binary code is fixed at "8901".

Command and data

Operating command and data (binary code)

Command	Type	Description
0000	Connection check	Check whether communication is enabled between this unit and the PC during standby.
5057	Power supply	During standby 31: Turns on the power When power is on 30: Turns off the power (Standby mode)
4950	Input	When power is on 36: HDMI 1 37: HDMI 2
5243	Remote control	Sends the same code as the supplied remote control. • "Remote Control Code"P. 76

Reference command and data (binary code)

Command	Type	Description
5057	Power supply	During standby or when power is on 30: Standby mode 31: When power is on 32: In the Cool-down mode 34: When error occurs on this unit
4950	Input	When power is on 36: HDMI 1 37: HDMI 2

End

This code indicates the end of communication. The binary code is fixed at "0A".

Remote Control Code

Binary code is sent during communication.

Remote Control Button Name	Binary Code
STANDBY	37 33 30 36
ON	37 33 30 35
INPUT	37 33 30 38
SETTING MEMORY	37 33 44 34
LENS CONTROL	37 33 33 30
HIDE	37 33 31 44
INFO.	37 33 37 34
▲	37 33 30 31
▼	37 33 30 32
▶	37 33 33 34
◀	37 33 33 36

Remote Control Button Name	Binary Code
OK	37 33 32 46
MENU	37 33 32 45
BACK	37 33 30 33
PICTURE MODE	37 33 46 34
COLOR PROFILE	37 33 38 38
GAMMA SETTINGS	37 33 46 35
C.M.D.	37 33 38 41
MPC	37 33 46 30
ADVANCED MENU	37 33 37 33

Communications Example

Shows the communication examples.

Operating command

Type	Command	Description
Connection check	PC → This unit: 21 89 01 00 00 0A This unit → PC: 06 89 01 00 00 0A	Connection check
Power (On)	PC → This unit: 21 89 01 50 57 31 0A This unit → PC: 06 89 01 50 57 0A	When power is turned on from the Standby mode
Power (Off)	PC → This unit: 21 89 01 50 57 30 0A This unit → PC: 06 89 01 50 57 0A	When power is turned off (Standby mode) from power-on mode
Remote control (MENU)	PC → This unit: 21 89 01 52 43 37 33 32 45 0A This unit → PC: 06 89 01 52 43 0A	When the same operation as pressing the [MENU] button on the remote control is performed

Reference command

Type	Command	Description
Power (On)	PC → This unit: 3F 89 01 50 57 0A This unit → PC: 06 89 01 50 57 0A This unit → PC: 40 89 01 50 57 31 0A	When information on the power-on state is acquired
Input (HDMI 1)	PC → This unit: 3F 89 01 49 50 0A This unit → PC: 06 89 01 49 50 0A This unit → PC: 40 89 01 49 50 36 0A	When information on HDMI 1 input is acquired

Specifications

Product Name		D-ILA Projector
Model Name		DLA-NZ700BK, DLA-NZ700BE, DLA-NZ500BK, DLA-NZ500BE, DLA-NZ500WE, DLA-RS2200K, DLA-RS2200E, DLA-RS1200K, DLA-RS1200E
Display Panel/Size		D-ILA device *1, 2 0.69" 4K D-ILA (4096 x 2160 pixels) x 3
Projection Lens		1.6 x power zoom lens, motorized zoom and focus
Light Source		Laser Diode
Screen Size		Approx. 60" to 200" (Aspect ratio of 16:9)
Brightness		2300 lm NZ700 RS2200 , 2000 lm NZ500 RS1200
Zoom Ratio		x 1.6
Throw Ratio		1.34 to 2.14 (Aspect ratio of 16:9) 1.26 to 2.01 (Aspect ratio of 17:9)
Projection Distance		Refer to P. 80.
Input Compatibility Signal		Refer to P. 84.
Display Resolution		4096 x 2160 pixels
Input Terminal	HDMI Input	Dual, HDMI 19-pin x 2 (HDCP 2.3-compatible) *3
Control Terminal	LAN Terminal	Single, RJ45 jack, 10BASE-T/100BASE-TX
	Service Terminal	SERVICE Single (USB Type A) *4
Power Requirements		AC 100 V to 240 V, 50 Hz/60 Hz
Power Consumption		280 W (during normal standby: 1.5 W *5, during Eco Mode standby: 0.3 W)
Operation Environment		Temperature: 5°C to 35°C; humidity: 20% to 80%; storage temperature: -10°C to 60°C
Installation Altitude		Below 6,561 ft (2,000 m)
Dimensions (Width x Height x Depth)		450 mm x 181 mm x 479 mm (17-23/32 in x 7-5/32 in x 18-7/8 in) (including feet)
Mass		14.8 kg (32.6 lb) NZ700 RS2200 , 14.6 kg (32.2 lb) NZ500 RS1200
Accessories		Refer to P. 12.

*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. The image of the HDMI input terminal may not be displayed in some cases due to changes in the HDCP specifications.

*4   For software update and setting backup features.

*5   The power consumption of this product during networked standby when all wired network ports are connected is 1.5 W.

• 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

This unit has acquired the certification of the "HDR10+" standard set by HDR10 + Technologies, LLC.
Tone mapping is optimally performed for each scene according to the dynamic metadata to faithfully reproduce HDR video images for viewing according to the intentions of the video producer.
HDR10+™ logo is a trademark of HDR10+ Technologies, LLC.

This unit is isf-certified, so calibration can be performed by an isf-certified trainer.
After calibration is performed, an isf mode is added to the Picture mode.

For more details, please refer to the isf website.
http://www.imagingscience.com/

About Trademarks and Copyrights

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FILMMAKER MODE™ logo is a trademark of UHD Alliance, Inc.

UK Product Security and Telecommunications Infrastructure Act 2022 (United Kingdom only)

This product is compliant with the UK Product Security Telecommunications Infrastructure Act 2022.

For relevant compliance statements, please scan the QR code or visit the URL below for further information.

https://uk.jvckenwood.com/product_security/

Screen Size and Projection Distance

Screen Size Diagonal (inch)	Projection Distance (m)									
	17:9 Screen		16:9 Screen		2.35:1 Screen		2.40:1 Screen		4:3 Screen	
	Wide-end	Tele-end	Wide-end	Tele-end	Wide-end	Tele-end	Wide-end	Tele-end	Wide-end	Tele-end
60	1.68	2.72	1.77	2.85	1.87	3.02	1.87	3.03	2.17	3.50
70	1.97	3.18	2.07	3.34	2.19	3.53	2.20	3.54	2.54	4.10
80	2.26	3.63	2.37	3.82	2.51	4.04	2.52	4.05	2.92	4.69
90	2.54	4.10	2.68	4.31	2.83	4.55	2.84	4.56	3.29	5.28
100	2.83	4.56	2.98	4.79	3.15	5.06	3.16	5.08	3.66	5.88
110	3.12	5.02	3.28	5.28	3.47	5.57	3.48	5.59	4.03	6.47
120	3.41	5.48	3.58	5.76	3.79	6.08	3.80	6.10	4.40	7.06
130	3.69	5.94	3.89	6.24	4.11	6.59	4.12	6.62	4.77	7.65
140	3.99	6.40	4.19	6.73	4.43	7.11	4.44	7.13	5.14	8.25
150	4.27	6.86	4.49	7.21	4.75	7.62	4.76	7.64	5.51	8.84
160	4.56	7.32	4.80	7.70	5.07	8.13	5.08	8.16	5.88	9.43
170	4.85	7.78	5.10	8.18	5.39	8.64	5.40	8.67	6.25	10.02
180	5.14	8.24	5.40	8.67	5.71	9.15	5.72	9.18	6.62	10.62
190	5.42	8.71	5.70	9.15	6.03	9.66	6.04	9.69	6.99	11.21
200	5.71	9.17	6.01	9.63	6.34	10.17	6.37	10.21	7.36	11.80

Screen Size Diagonal (inch)	Projection Distance (m)			
	16:9 image on a 2.35:1 aspect screen		16:9 image on a 2.40:1 aspect screen	
	Wide-end	Tele-end	Wide-end	Tele-end
60	1.40	2.27	1.38	2.23
70	1.64	2.66	1.61	2.61
80	1.88	3.04	1.85	2.99
90	2.13	3.43	2.09	3.37
100	2.37	3.82	2.33	3.75
110	2.61	4.20	2.56	4.13
120	2.85	4.59	2.80	4.51
130	3.09	4.98	3.04	4.89
140	3.34	5.36	3.28	5.27
150	3.58	5.75	3.51	5.65
160	3.82	6.14	3.75	6.03
170	4.06	6.52	3.99	6.41
180	4.30	6.91	4.23	6.79
190	4.55	7.30	4.46	7.17
200	4.79	7.68	4.70	7.55

* The values in the projection table may contain ±5% error. If the product is to be used at the Wide-end or the Tele-end, set a margin of about 5%.

Others

Screen Size Diagonal (inch)	Projection Distance (inch)									
	17:9 Screen		16:9 Screen		2.35:1 Screen		2.40:1 Screen		4:3 Screen	
	Wide-end	Tele-end	Wide-end	Tele-end	Wide-end	Tele-end	Wide-end	Tele-end	Wide-end	Tele-end
60	66.1	106.9	69.6	112.4	73.5	118.7	73.8	119.1	85.6	138.0
70	77.5	125.0	81.5	131.4	86.1	138.9	86.4	139.3	100.2	161.3
80	88.8	143.1	93.4	150.5	98.7	159.0	99.1	159.5	114.8	184.6
90	100.1	161.2	105.3	169.6	111.3	179.1	111.7	179.7	129.4	208.0
100	111.4	179.3	117.3	188.6	123.9	199.3	124.3	199.9	144.0	231.3
110	122.8	197.6	129.2	207.7	136.5	219.4	136.9	220.1	158.6	254.6
120	134.2	215.7	141.1	226.8	149.1	239.5	149.6	240.3	173.1	278.0
130	145.4	233.7	153.0	245.8	161.7	259.6	162.2	260.5	187.7	301.3
140	157.0	251.9	165.0	264.9	174.3	279.8	174.8	280.7	202.3	324.7
150	168.3	270.0	176.9	284.0	186.9	299.9	187.5	300.9	216.9	348.0
160	179.5	288.2	188.8	303.0	199.4	320.0	200.1	321.1	231.5	371.3
170	190.9	306.3	200.7	322.1	212.0	340.2	212.7	341.3	246.1	394.7
180	202.3	324.5	212.7	341.2	224.6	360.3	225.4	361.5	260.7	418.0
190	213.5	342.7	224.6	360.2	237.2	380.4	238.0	381.7	275.3	441.3
200	224.9	360.8	236.5	379.3	249.8	400.5	250.6	401.8	289.9	464.7

Screen Size Diagonal (inch)	Projection Distance (inch)			
	16:9 image on a 2.35:1 aspect screen		16:9 image on a 2.40:1 aspect screen	
	Wide-end	Tele-end	Wide-end	Tele-end
60	55.2	89.3	54.1	87.7
70	64.7	104.6	63.5	102.7
80	74.2	119.8	72.9	117.6
90	83.7	135.0	82.2	132.6
100	93.3	150.2	91.6	147.5
110	102.8	165.5	100.9	162.5
120	112.3	180.7	110.3	177.5
130	121.8	195.9	119.6	192.4
140	131.4	211.2	129.0	207.4
150	140.9	226.4	138.3	222.3
160	150.4	241.6	147.7	237.3
170	159.9	256.8	157.1	252.3
180	169.4	272.1	166.4	267.2
190	179.0	287.3	175.8	282.2
200	188.5	302.5	185.1	297.1

* The values in the projection table may contain ±5% error. If the product is to be used at the Wide-end or the Tele-end, set a margin of about 5%.

Others

Types of Possible Input Signals

Video

Digital Video Signal	480p
	576p
	720p 50/60 Hz
	1080p 24/25/30/50/60 Hz
	2K (2048×1080) 24/25/30/50/60 Hz*
	4K (3840×2160) 24/25/30/50/60 Hz
	4K (4096×2160) 24/25/30/50/60 Hz

* If the input signal is 2K (2048x1080) 24/25/30/50/60Hz, configure "HDMI Format Setting" setting to "Option 1". (P. 53)

PC signal (HDMI)

Designation	Resolution	fh [kHz]	fv [Hz]	dot CLK [MHz]	Total No. of Dots [dot]	Total No. of Lines [line]	No. of Effective Dots [dot]	No. of Effective Lines [line]
VGA	640×480	31.469	59.940	25.175	800	525	640	480
SVGA	800×600	37.879	60.317	40.000	1056	628	800	600
UXGA	1600×1200	75.000	60.000	162.000	2160	1250	1600	1200
WUXGA	1920×1200	74.556	59.885	193.250	2592	1245	1920	1200
QXGA	2048×1536	95.446	59.954	267.250	2800	1592	2048	1536
WQHD	2560×1440	88.787	59.951	241.500	2720	1481	2560	1440

* Even when signals can be input, video images may not be projected properly depending on the PC or cable in use. When this occurs, switching to another compatible resolution or changing the cable may help to resolve the problem in some cases.

Others

Indicator Display on the Main Unit

Meaning of the front panel indicators

☼ The indicator is solid.

☼ The indicator appears blinking.
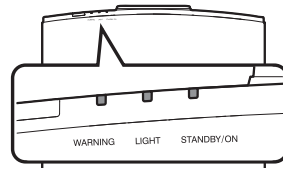
Operation mode display

Displays using the different colors and solid/blinking light of the indicator on the projector unit.

"STANDBY/ON" lights up (red)
・In standby state

WARNING   LIGHT   STANDBY/ON

"STANDBY/ON" blinking (red)
・In the Cool-down mode

WARNING   LIGHT   STANDBY/ON

"STANDBY/ON" lights up (green)
・When light source is starting up

WARNING   LIGHT   STANDBY/ON

"STANDBY/ON" blinking (green)
・When the video image is
  temporarily hidden (HIDE is on)

WARNING   LIGHT   STANDBY/ON

All lights off
・During projection
・When in "ECO Mode"

WARNING   LIGHT   STANDBY/ON

Warning display

You can tell the details of a warning from the (repeated) displays of the "WARNING" and "LIGHT" indicators. The "STANDBY/ON" indicator will light up or appear blinking according to the operation mode of the projector unit. (Please refer to ""Operation mode display"P. 85".)

The Warning mode is activated once the message is displayed. Projection is interrupted and the cooling fan starts running.

The power cannot be turned on again while cooling is in progress. Check the following after cooling is complete.

If the Warning mode is activated again, wait for the cooling fan to stop, followed by pulling out the power plug from the outlet. Then pull out the power plug from the power outlet. Call your authorized dealer for repair.

Indicator Status			Blinking Frequency	Description	Check and Countermeasure
WARNING	LIGHT	STANDBY/ON			
☐ WARNING (Red)	☐ LIGHT	☐ STANDBY/ON Mode Display	x2	Cooling fan stopped abnormally	• Check that nothing is blocking the air inlets. • Check that the external temperature is normal. Countermeasure: Leave the unit unoperated until it cools down. After that, turn on the power again.
			x3	Internal temperature is abnormally high	
			x4	External temperature is too high	
☐ WARNING (Red)	☐ LIGHT (Orange)	☐ STANDBY/ON Mode Display	x1	DD board occurs error	
			x2	Fan motor board occurs error	
			x3	CPU board occurs error	
			x4	Power board occurs error	
☐ WARNING (Red)	☐ LIGHT (Orange)	☐ STANDBY/ON Mode Display	x1	Abnormality in the light source	Request for repair at your authorized dealer or a nearby service center.
			x2		
			x3		
			x4	When the safety switch is activated	
☐ WARNING	☐ LIGHT	☐ STANDBY/ON (Green)	x3	The remote control code differs between this unit and the remote control	Set the remote control code for this unit and the remote control correctly.

Dimensions

(Unit: mm (in))

Top Surface

479 (18-7/8)

450 (17-23/32)

Bottom Surface

337 (13-9/32)

290 (11-7/16)

125 (4-15/16)

49 (1-15/16)

41 (1-5/8)

37 (1-15/32)

Front

111 (4-3/8)   205 (8-3/32)   111 (4-3/8)

170 (6-11/16)

181 (7-5/32)

80 (3-5/32)

40 (1-19/32)

11 (7/16)

Rear Surface

120 (4-3/4)   173 (6-13/16)   125 (4-15/16)

113 (4-15/32)

17 (11/16)

Index

Others

JVC