

Safety Cautions

WARNING

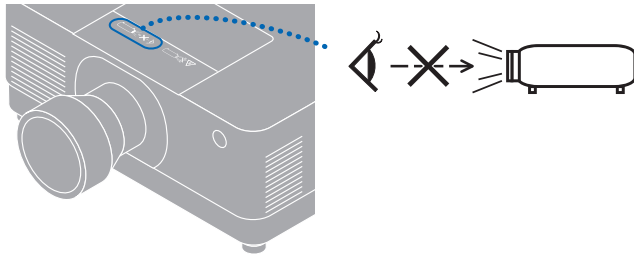
Projected light



PROHIBITED

Projected light and the pictogram/label indicated on the cabinet

- Do not look into the projector's lens.
Strong light that could damage your vision is projected when the projector is operating. Laser energy exposure near aperture may cause burns. Be especially careful when children are around.
- Do not look at the projected light using optical devices (magnifying glasses, reflectors, etc.). Doing so could result in vision impairment.
- Check that there is no one looking at the lens within the projection range before turning on the projector.
- Do not allow children to operate the projector alone. When a child is operating the projector an adult should always be present and watch the child carefully.
- The below pictogram, that is indicated near the lens on the cabinet, describes looking into the projector is prohibited.



Continue to next page

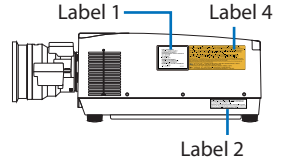
WARNING

• The following labels are stuck on the projector.

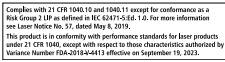
Label 1
Laser explanatory label



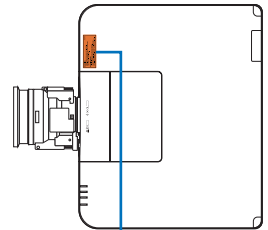
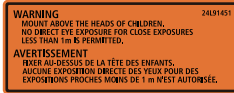
This product complies with EN 50689:2021 except using the lens of NP55ZL and NP56ZL.



Label 2
FDA certification label



Label 3
FDA additional warning label



Label 4
Lens replacement caution label
PA1705UL-W/PA1705UL-B

CAUTION < DO NOT STARE INTO THE BEAM - RG2 > THIS PROJECTOR MAY BECOME RG3 WHEN AN INTERCHANGEABLE LENS WITH THRU RATIO GREATER THAN 2.6 IS INSTALLED. REFER TO THE MANUAL FOR THE LENS LIST AND HAZARD DISTANCE BEFORE OPERATION. < NE PAS REGARDER DANS LE FAISCEAU - RG2 > CE PROJECTEUR PEUT DEVENIR RG3 LORSQU'UN OBJECTIF INTERCHANGEABLE AVEC UN RAPPORT DE PROJECTION SUPÉRIEUR À 2,6 EST INSTALLÉ. AVANT UTILISATION, REPORTEZ-VOUS AU MANUEL POUR TROUVER LA LISTE DES OBJECTIFS ET LA DISTANCE DE DANGER. CES COMBINAISONS DE PROJECTEUR ET D'OBJECTIF SONT DESTINÉES À UN USAGE PROFESSIONNEL UNIQUEMENT ET NE SONT PAS DESTINÉES À UNE UTILISATION GRAND PUBLIC.

VORSICHT < NICHT DIREKT IN DEN STRAHL BLICKEN - RG2 > DIESER PROJECTOR KANN IN DIE GRUPPE RG3 FALLEN, WENN EIN AUSTAUSCHBARES OBJEKTIV MIT EINEM BILDABSTANDSVERHÄLTNIS VON MEHR ALS 2,6 INSTALLIERT WIRD. BEACHTEN SIE VON DEM BETRIEB DAS HANDBUCH FÜR EINE LISTE DER OBJEKTIVE UND ZU DEN GEFÄHRDUNGSGEBIETEN. SOLICHE KOMBINATIONEN AUS PROJECTOR UND OBJEKTIV SIND NUR FÜR DEN PROFESSIONELLEN EINSATZ UND NICHT FÜR ALLGEMEINE VERBRAUCHER BESTIMMT.

ВНИМАНИЕ < НЕ СМОТРИТЕ НА ПУЧ. -RG2 > ЭТОТ ПРОЕКТОР МОЖЕТ СТАТЬ RG3, ЕСЛИ УСТАНОВЛЕН СМЕННЫЙ ОБЪЕКТИВ С КОЭФФИЦИЕНТОМ УВЕЛИЧЕНИЯ БОЛЬШЕ 2,6. ПЕРЕД НАЧАЛОМ РАБОТЫ ОБРАТИТЕСЬ К РУКОВОДСТВУ ПОЛЬЗОВАТЕЛЯ ДЛЯ ОЗНАКОМЛЕНИЯ СО СПИСКОМ ОБЪЕКТИВОВ И ЗНАЧЕНИЕМ БЕЗОПАСНОГО РАСТояНИЯ. ДАННЫЕ КОМБИНАЦИИ ПРОЕКТОРА И ОБЪЕКТИВА ПРЕДНАЗНАЧЕНЫ ТОЛЬКО ДЛЯ ПРОФЕССИОНАЛЬНОГО ИСПОЛЬЗОВАНИЯ И НЕ ПРЕДНАЗНАЧЕНЫ ДЛЯ ИСПОЛЬЗОВАНИЯ ПОТРЕБИТЕЛЕМ.

주의 < 빔 응시 금지 -RG2 > 이 프로젝트는 투사율이 2.6보다 큰 교환식 렌즈가 설치된 경우 RG3이 될 수 있습니다. 사용 전 렌즈 목록 및 위험 거리에 대해서는 설명서를 참조하십시오. 프로젝트와 렌즈의 이러한 조합은 전문가용으로만 사용해야 하며 소비자용으로 사용해서는 안 됩니다.

警告 < 請勿直視光束 -RG2 > 在安裝了投射比大於 2.6 的互換式鏡頭時，本投影機可能變為 RG3。在操作前請參閱手冊瞭解鏡頭列表和危險距離。此投影機和鏡頭的組合僅供專業用途，不供客戶使用。

PA1505UL-W/PA1505UL-B

CAUTION < DO NOT STARE INTO THE BEAM - RG2 > THIS PROJECTOR MAY BECOME RG3 WHEN AN INTERCHANGEABLE LENS WITH THRU RATIO GREATER THAN 2.9 IS INSTALLED. REFER TO THE MANUAL FOR THE LENS LIST AND HAZARD DISTANCE BEFORE OPERATION. SUCH COMBINATIONS OF PROJECTOR AND LENS ARE INTENDED FOR PROFESSIONAL USE ONLY AND ARE NOT INTENDED FOR CONSUMER USE.

ATTENTION < NE PAS REGARDER DANS LE FAISCEAU - RG2 > CE PROJECTEUR PEUT DEVENIR RG3 LORSQU'UN OBJECTIF INTERCHANGEABLE AVEC UN RAPPORT DE PROJECTION SUPÉRIEUR À 2,9 EST INSTALLÉ. AVANT UTILISATION, REPORTEZ-VOUS AU MANUEL POUR TROUVER LA LISTE DES OBJECTIFS ET LA DISTANCE DE DANGER. CES COMBINAISONS DE PROJECTEUR ET D'OBJECTIF SONT DESTINÉES À UN USAGE PROFESSIONNEL UNIQUEMENT ET NE SONT PAS DESTINÉES À UNE UTILISATION GRAND PUBLIC.

VORSICHT < NICHT DIREKT IN DEN STRAHL BLICKEN - RG2 > DIESER PROJECTOR KANN IN DIE GRUPPE RG3 FALLEN, WENN EIN AUSTAUSCHBARES OBJEKTIV MIT EINEM BILDABSTANDSVERHÄLTNIS VON MEHR ALS 2,9 INSTALLIERT WIRD. BEACHTEN SIE VON DEM BETRIEB DAS HANDBUCH FÜR EINE LISTE DER OBJEKTIVE UND ZU DEN GEFÄHRDUNGSGEBIETEN. SOLICHE KOMBINATIONEN AUS PROJECTOR UND OBJEKTIV SIND NUR FÜR DEN PROFESSIONELLEN EINSATZ UND NICHT FÜR ALLGEMEINE VERBRAUCHER BESTIMMT.

ВНИМАНИЕ < НЕ СМОТРИТЕ НА ПУЧ. -RG2 > ЭТОТ ПРОЕКТОР МОЖЕТ СТАТЬ RG3, ЕСЛИ УСТАНОВЛЕН СМЕННЫЙ ОБЪЕКТИВ С КОЭФФИЦИЕНТОМ УВЕЛИЧЕНИЯ БОЛЬШЕ 2,9. ПЕРЕД НАЧАЛОМ РАБОТЫ ОБРАТИТЕСЬ К РУКОВОДСТВУ ПОЛЬЗОВАТЕЛЯ ДЛЯ ОЗНАКОМЛЕНИЯ СО СПИСКОМ ОБЪЕКТИВОВ И ЗНАЧЕНИЕМ БЕЗОПАСНОГО РАСТояНИЯ. ДАННЫЕ КОМБИНАЦИИ ПРОЕКТОРА И ОБЪЕКТИВА ПРЕДНАЗНАЧЕНЫ ТОЛЬКО ДЛЯ ПРОФЕССИОНАЛЬНОГО ИСПОЛЬЗОВАНИЯ И НЕ ПРЕДНАЗНАЧЕНЫ ДЛЯ ИСПОЛЬЗОВАНИЯ ПОТРЕБИТЕЛЕМ.

주의 < 빔 응시 금지 -RG2 > 이 프로젝트는 투사율이 2.9보다 큰 교환식 렌즈가 설치된 경우 RG3이 될 수 있습니다. 사용 전 렌즈 목록 및 위험 거리에 대해서는 설명서를 참조하십시오. 프로젝트와 렌즈의 이러한 조합은 전문가용으로만 사용해야 하며 소비자용으로 사용해서는 안 됩니다.

警告 < 請勿直視光束 -RG2 > 在安裝了投射比大於 2.9 的互換式鏡頭時，本投影機可能變為 RG3。在操作前請參閱手冊瞭解鏡頭列表和危險距離。此投影機和鏡頭的組合僅供專業用途，不供客戶使用。

 **WARNING**

- This projector is classified as either IEC/EN 62471-5:2015 risk group 2 or risk group 3 depending on the lens unit. When classified as risk group 3, this projector is intended for professional use and must be installed by professional installer to ensure safety. See page [xv](#) for risk groups.
- See page [xiv](#) for Laser Safety Caution.

Power supply



REQUIRED

Use a suitable voltage power supply.

- This projector is designed to be used with a 100–240 V AC, 50/60 Hz power supply. Before using the projector, check that the power supply to which the projector is to be connected meets these requirements.
- Use a power outlet as the projector's power supply. Do not connect the projector directly to electrical light wiring. Doing so is dangerous.



REQUIRED

Connecting the power cord to earth

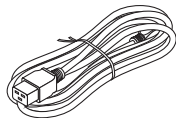
- This equipment is designed to be used in the condition of the power cord connected to earth. If the power cord is not connected to the earth, it may cause electric shock. Please make sure the power cord is connected to the wall outlet directly and earthed properly. Do not use a 2-pin plug converter adapter.
- Be sure to connect the projector and the computer (signal source) to the same earth point. If the projector and the computer (signal source) will be connected to different earth points, fluctuations in the earth potential may cause fire or smoke.



REQUIRED

Handling the power cord

- Please use the power cord supplied with this projector. If the supplied power cord does not satisfy requirements of your country's safety standard, and voltage and current for your region, make sure to use the power cord that conforms to and satisfies them.



- The power cord you use must be approved by and comply with the safety standards of your country. Please refer to the page [38](#) about the power cord specification. For selecting an appropriate power cord, please check rated voltage for your region by yourself.



PROHIBITED

- The power cord included with this projector is exclusively for use with this projector. For safety, do not use it with other devices.

Continue to next page

 **WARNING**



**HAZARDOUS
VOLTAGE**

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



**DO NOT TOUCH
WITH WET
HANDS**

Installation



PROHIBITED

Do not use in places such as those described below.








- Do not use in places such as those described below. Doing so could lead to fire or electric shock.
 - Shaky tables, inclined surfaces or other unstable places
 - Near heating appliances or places with heavy vibrations
 - Outdoors or humid or dusty places
 - Places exposed to oil smoke or steam
 - Near cooking appliances, humidifiers, etc.
 - Do not use in places such as those described below where the projector could get wet. Doing so could lead to fire or electric shock.
 - Do not use in the rain or snow, on a seashore or waterfront, etc.
 - Do not use in a bathroom or shower room.
 - Do not install under equipment that discharges water, such as air conditioners.
 - Do not place vases or potted plants on the projector.
 - Do not place cups, cosmetics or medicines on the projector.
- Should water, etc. get inside the projector, first turn off the projector's power, then unplug the power cord from the power outlet and contact your dealer.










DO NOT WET









**UNPLUG THE
POWER CORD**

 WARNING	
 CAUTION	<p>Installing suspended from the ceiling</p> <ul style="list-style-type: none"> • Consult your dealer for installing the projector on the ceiling. Special skills are required for ceiling installation. DO NOT perform installation work by people other than installers. Doing so may result in the projector falling and causing injury. • We are not liable for any accident or/and damage resulting from improper installation or handling, misuse, modification, or natural disasters. • When installed suspended from the ceiling, etc. do not hang from the projector. The projector could drop and cause injury. • When installing suspended from the ceiling, use a power outlet that is within reach so the power cord can be easily plugged and unplugged.
 REQUIRED  PROHIBITED	<p>Attach the separately sold option cover for tilted installation</p> <ul style="list-style-type: none"> • For tilted installation of the projector, depending on the angle, be sure to attach the separately sold option cover for safety. (→ page xxvi) Using without the option cover violates safety regulations. Also, powering the projector on without the option cover installed could result in a fire. • Do not put bundled cables in the option cover. Doing so may damage the power cord, resulting in a fire.
On use	
 PROHIBITED  UNPLUG THE POWER CORD	<p>Do not place objects inside the projector.</p> <ul style="list-style-type: none"> • Do not insert or drop metal or combustible objects or other foreign materials into the projector from the vents. Doing so could lead to fire or electric shock. Be particularly careful if there are children in the home. Should a foreign object get inside the projector, first turn off the projector's power, then unplug the power cord from the power outlet and contact your dealer.
 UNPLUG THE POWER CORD	<p>Unplug the power cord if the projector malfunctions.</p> <ul style="list-style-type: none"> • Should the projector emit smoke or strange odors or sounds, or if the projector has been dropped or the cabinet broken, turn off the projector's power, then unplug the power cord from the power outlet. It may cause not only fire or electric shock but also serious damage to your eyesight or burns. Contact your dealer for repairs. Never try to repair the projector on your own. Doing so is dangerous.

 WARNING	
 DO NOT DISASSEMBLE	<p>Do not disassemble the projector.</p> <ul style="list-style-type: none"> Do not remove or open the projector's cabinet. Also, do not modify the projector. There are high voltage areas in the projector. It may cause fire, electric shock, or laser light leakage, resulting in serious damage to your eyesight or burns. Have qualified service personnel perform inspection, adjustments and repairs of the interior.
 PROHIBITED  CAUTION FOR HIGH TEMPERATURE	<p>Do not place objects in front of the lens while the projector is operating.</p> <ul style="list-style-type: none"> Do not leave the lens cap on the lens while the projector is operating. The lens cap could get hot and be warped. Do not place objects in front of the lens that obstruct the light while the projector is operating. The object could get hot and be broken or catch fire. The below pictogram indicated on the cabinet means the precaution for avoiding to place objects in front of the projector lens. <div style="text-align: center;">  </div>
 PROHIBITED	<p>When cleaning the projector</p> <ul style="list-style-type: none"> Do not use flammable gas sprays to remove dust from the lens, cabinet, etc. Doing so could lead to fire.
 PROHIBITED	<p>Do not use in high security locations.</p> <ul style="list-style-type: none"> Usage of the product must not be accompanied by fatal risks or dangers that, could lead directly to death, personal injury, severe physical damage or other loss, including nuclear reaction control in nuclear facility, medical life support system, and missile launch control in a weapon system.

 **CAUTION**

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

 **CAUTION**

Installation



REQUIRED

Securing the lens unit with the fall prevention wire

- If the projector is going to be suspended from a ceiling or another high place, secure the lens unit using the fall prevention wire (sold separately). If the lens unit is not secured, it may fall down if it comes loose.

On use



PROHIBITED

Do not use on networks subject to overvoltage.

- Connect the projector's HDBaseT port and LAN port to a network for which there is no risk of overvoltage being applied. Overvoltage applied to the HDBaseT or LAN port could result in electric shock.



REQUIRED

Lens shift, focus and zoom operations

- When shifting the lens or adjusting the focus or zoom, do so from either behind or the side of the projector. If adjustments are performed from the front, your eyes could be exposed to strong light and get injured.
- Keep your hands away from the lens area when performing the lens shift operation. If not, your fingers could get caught in the gap between the cabinet and the lens.

 **CAUTION**



PROHIBITED

Handling batteries

Incorrect usage of batteries can result in leaks or bursting.

- Use the specified batteries only.
- Insert batteries matching the (+) and (-) signs on each battery to the (+) and (-) signs of the battery compartment.
- Do not mix battery brands.
- Do not combine new and old batteries. This can shorten battery life or cause liquid leakage of batteries.
- Remove dead batteries immediately to prevent battery acid from leaking into the battery compartment.

If leaked battery fluid gets on your skin or clothing, rinse immediately and thoroughly. If it gets into your eye, bathe your eye well rather than rubbing and seek medical treatment immediately. Leaked battery fluid that gets into your eye or your clothing may cause a skin irritation or damage your eye.

- If you will not use the remote control for a long time, remove the batteries.
- Leaving a battery in an extremely high temperature surrounding environment, or a battery subject to extremely low air pressure, that can result in an explosion or the leakage of flammable liquid or gas.
- Properly dispose of depleted batteries. Disposal of a battery into water, fire, or a hot oven, or mechanically crushing, cutting, or modifying a battery can result in an explosion.
- Do not short-circuit the batteries.
- Do not charge the batteries. The batteries provided are not rechargeable.
- Contact your dealer or local authorities when disposing of batteries.










PROHIBITED



**CAUTION
FOR HIGH
TEMPERATURE**

About the vents

- Do not obstruct the projector's vents. Also, do not place such soft objects as paper or cloths underneath the projector. Doing so could lead to fire. Leave sufficient space between the place where the projector is installed and its surroundings. (→ page xxix)
- Do not touch the exhaust vent area while projecting or immediately after projecting images. The exhaust vent area may be hot at this time and touching it could cause burns.

 CAUTION	
 PROHIBITED	<p>Moving the projector</p> <ul style="list-style-type: none"> • When carrying the projector, remove the lens unit and carry it with at least two people. Attempting to move the projector alone could result in back pain or other injuries. • When carrying the projector with the lens unit removed, do not touch the mounting area of the lens with your hands. Also, do not put your hand into the recess of the connection terminal. The projector could be damaged or fall down, resulting in injuries. • When moving the projector with the option cover attached, do not hold it by the option cover. The option cover could come loose and the main unit could fall down, causing injuries.
 REQUIRED	<p>Attaching/detaching the lens</p> <ul style="list-style-type: none"> • Turn off the projector and disconnect the power cord before attaching or detaching the lens unit. Failure to do so could result in visual impairment or burns. • Do not attach or detach the lens unit with the projector installed in a high location. The lens unit could fall and cause damage or injury.
 REQUIRED  PROHIBITED	<p>About option cover (separately sold)</p> <ul style="list-style-type: none"> • Be sure to tighten the screws after attaching the option cover. Failure to do so may cause the option cover to come off and fall, resulting in injury or damage to the option cover. • Do not hold the option cover while moving the projector or do not apply excessive force to the option cover. Doing so may damage the option cover, resulting in injury.
 REQUIRED	<p>Avoid locations with extreme temperatures and humidity</p> <ul style="list-style-type: none"> • Failure to do so could lead to fire or electric shock or damage to the projector. The usage environment for this projector is as follows: <ul style="list-style-type: none"> - The operating temperature: 0°C to 45°C / 32°F to 113°F / humidity: 20 to 80% (without condensation) - The storage temperature: -10°C to 50°C / 14°F to 122°F / humidity: 20 to 80% (without condensation)
<p>Inspections and Cleaning</p>	
 REQUIRED	<p>Inspecting the projector and cleaning the inside</p> <ul style="list-style-type: none"> • Consult with your dealer about once per year for cleaning of the inside of the projector. Dust could accumulate inside of the projector if it is not cleaned for extended periods of time, leading to fires or malfunction.

Laser Safety Caution

WARNING

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

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

- The laser module is equipped in this product. Use of controls or adjustments of procedures other than those specified herein may result in hazardous radiation exposure. Laser energy exposure near aperture may cause burns.
- This product is classified as Class 1 of IEC 60825-1:2014.
- For EU and UK, EN 60825-1:2014+A11:2021 and EN 50689:2021 are also conformed. Except using the lens of NP55ZL and NP56ZL.
- Obey the laws and regulations of your country in relation to the installation and management of the device.

For USA

Complies with 21 CFR 1040.10 and 1040.11 except for conformance as a Risk Group 2 LIP as defined in IEC 62471-5:Ed. 1.0. For more information see Laser Notice No. 57, dated May 8, 2019. However, when using the NP55ZL and NP56ZL lenses, the following applies.

This product is in conformity with performance standards for laser products under 21 CFR 1040, except with respect to those characteristics authorized by Variance Number FDA-2018-V-4413 effective on September 19, 2023.

WARNING

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

- Outline of laser emitted from the built-in light module:
 - Wave length: 455 nm
 - Maximum power: 390 W (PA1705UL-W/PA1705UL-B), 346 W (PA1505UL-W/PA1505UL-B)

Light Module

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

Risk groups

This projector is classified as either IEC/EN 62471-5:2015 risk group 2 or risk group 3 depending on the lens unit.

Risk group 2 (RG2)

 **WARNING**

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

Risk group 3 (RG3)

 **WARNING**

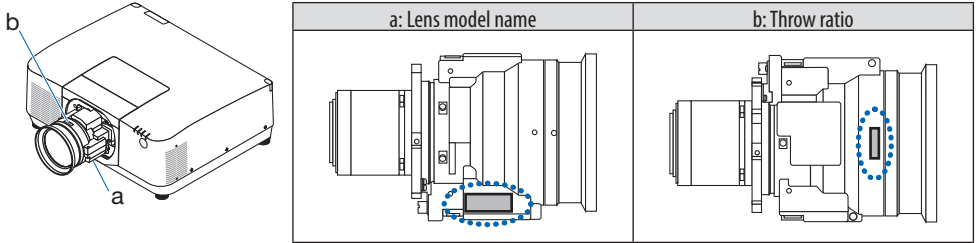
RG3 PRODUCT OF IEC/EN 62471-5:2015

- When classified as RG3, this projector is for professional use and must be installed in location where safety is assured. For this reason, be sure to consult your dealer as installation must be performed by a professional installer. Never try to install the projector by yourself. This may result in visual impairment etc.
- No direct exposure to the beam shall be permitted, RG3 IEC/EN 62471-5:2015.
- Do not look into the projector's lens. Serious damage to your eyes could result.
- Operators shall control access to the beam within the hazard distance or install the product at the height that will prevent exposures of spectators' eyes within the hazard distance.
- When turning on the power, operate from the side or rear of the projector (outside the hazard zone). Also, when turning on the power, make sure no one within the projection range is looking at the lens.

• Check before installing the projector

① Lens model name or throw ratio

The lens model name and throw ratio are listed in the image below.

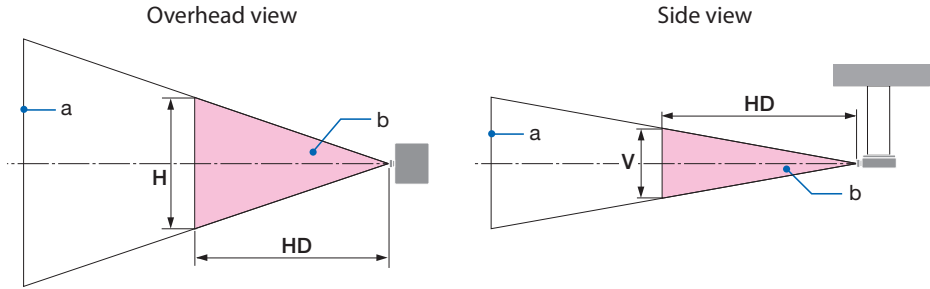


② Combining lens units and risk groups

Lens model name	Throw ratio	PA1705UL-W PA1705UL-B	PA1505UL-W PA1505UL-B
NP51ZL	0.53 - 0.65	RG2	RG2
NP52ZL	0.65 - 0.87		
NP53ZL	0.86 - 1.25		
NP54ZL	1.24 - 2.01	RG3	RG3
NP55ZL	1.98 - 3.95		
NP56ZL	3.95 - 7.51		

• Hazard zone

The below figure describes the radiation zone (hazard zone) of light emitted by the projector that is classified as Risk Group 3 (RG3) of IEC/EN 62471-5:2015.



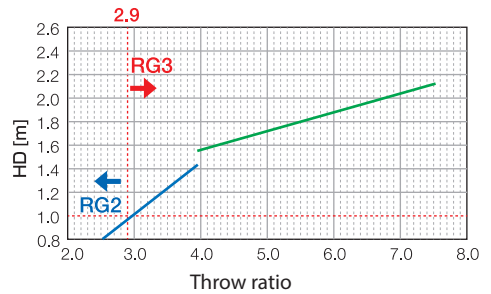
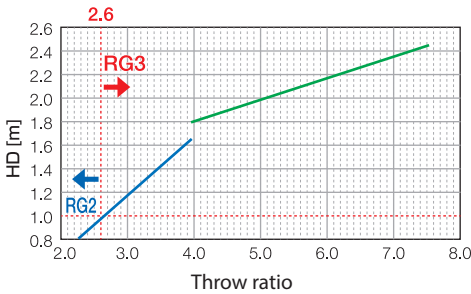
a: Screen / b: Hazard zone

PA1705UL-W/PA1705UL-B

Lens	Throw ratio	Hazard zone (m)		
		HD	H	V
NP55ZL	1.98 (Wide)	-	-	-
	2.60 (Middle)	1.00	0.4	0.3
	3.95 (Tele)	1.65	0.5	0.3
NP56ZL	3.95 (Wide)	1.80	0.4	0.3
	7.51 (Tele)	2.45	0.3	0.2

PA1505UL-W/PA1505UL-B

Lens	Throw ratio	Hazard zone (m)		
		HD	H	V
NP55ZL	1.98 (Wide)	-	-	-
	2.90 (Middle)	1.00	0.4	0.3
	3.95 (Tele)	1.43	0.4	0.3
NP56ZL	3.95 (Wide)	1.55	0.4	0.3
	7.51 (Tele)	2.12	0.3	0.2



— NP55ZL — NP56ZL

Calculation of the throw ratio

Throw ratio = L: Throw distance (m) / W: Screen width (m)

For throw distances and screen widths, refer to “Lens types and throw distance” in the installation manual.

• About the precautionary zone

By providing a precautionary zone or physical barriers, it is possible to prevent human eyes from entering the hazard zone.

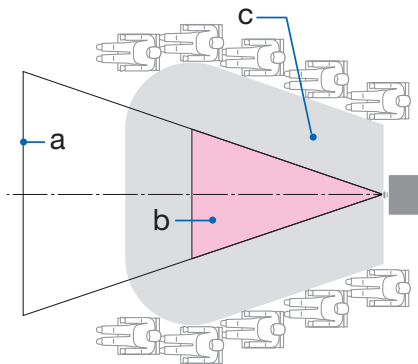
When the manager of the projector (operator) cannot prevent spectators from entering the hazard zone such as in public facilities, it is recommended to secure a space of 1 m or more from the hazard zone as “the precautionary zone” for the safety of the spectators. When installing the projector overhead, it is recommended that the distance between the floor and the hazard zone be at least 3 m in the vertical direction.

In the United States, provide a horizontal distance of 2.5 meters from the hazard zone.

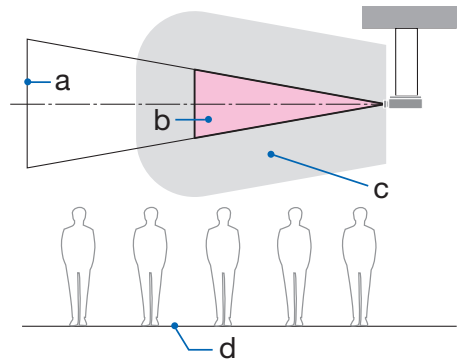
When installthe projector overhead, provide a vertical distance of 3 meters from the floor to the hazard zone.

• Installation example considering the precautionary zone


① Floor or desktop installation example



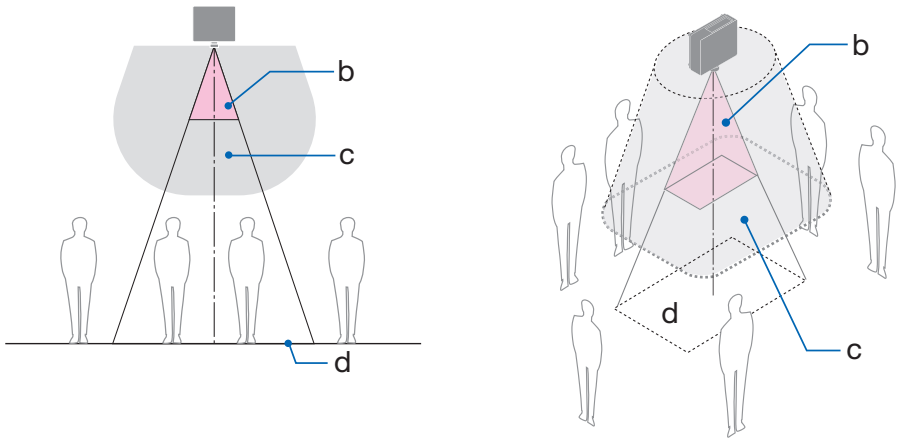
② Ceiling installation example




a: Screen / b: Hazard zone / c: Precautionary zone / d: floor

 <p>CAUTION</p>	<p>If it is expected that spectators will intrude into the hazard zone when installed on the ceiling, it is necessary to prevent spectators from entering that area.</p>
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③ **Example of downward projection installed on the ceiling**



a: Screen / b: Hazard zone / c: Precautionary zone / d: floor

 <p>CAUTION</p>	<p>If the precautionary zone between the floor and the hazard zone cannot be secured, it is necessary to prevent spectators from entering the area around the screen as shown in the figure on the right.</p>
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* If using lens shift, please consider the shift of projected image according to the volume of lens shift. Installation example considering the precautionary zone



Please follow all safety precautions.

Installing the projector

- When planning the layout of the projector, make sure to follow the safety measures listed in the installation Manual.
- In order to avoid danger, either install the device within easy reach of a wall outlet or provide a device like a breaker to disconnect power to the projector in emergency.
- Take safety measures to prevent human eyes from entering the hazard zone.
- Select an appropriate lens for the installation location and secure the safety zone set for each lens.
Ensure that appropriate safety measures have been taken when operating the projector, adjusting the light, etc.
- Check whether the appropriate safety zone for the installed lens has been adequately secured. Periodically check the zone and maintain a record of verifications.

The installer or dealer must instruct the manager (operator) of the projector of the following:

- Educate the manager of the projector (operator) about safety before operating the projector.
- Instruct the manager of the projector (operator) to perform inspections (including safety checks on light emitted by the projector) before powering the projector on.
- Instruct the manager of the projector (operator) to be able to control the projector whenever the projector is powered on in case of an emergency.
- Instruct the manager of the projector (operator) to keep the installation Manual, user's manual and inspection records in an easy-to-reach place.
- Instruct them to determine whether the projector conforms to the standards of each country and region.

Cable information

Use shielded cables or cables attached ferrite cores so as not to interfere with radio and television reception.

FCC Information (for USA only)

WARNING

- The Federal Communications Commission does not allow any modifications or changes to the unit EXCEPT those specified by Sharp NEC Display Solutions of America, Inc. in this manual. Failure to comply with this government regulation could void your right to operate this equipment.
- This equipment has been tested and found to comply with the limits for a class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Supplier's declaration of conformity

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.

U.S.Responsible Party: Sharp NEC Display Solutions of America, Inc.
Address: 3250 Lacey Rd, Ste 500
Downers Grove, IL 60515
Telephone Number: 630-467-3000
Type of Product: Projector
Equipment Classification: Class A Peripheral
Model Number: NP-PA1705UL-W/NP-PA1705UL-B/
NP-PA1505UL-W/NP-PA1505UL-B



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

WARNING:

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

(For Customers in U.K.)

IMPORTANT

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

GREEN-AND-YELLOW:	“Earth”
BLUE:	“Neutral”
BROWN:	“Live”

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

“WARNING: THIS APPARATUS MUST BE EARTHED.”



Disposing of your used product



In the European Union

EU-wide legislation as implemented in each Member State requires that used electrical and electronic products carrying the mark (left) must be disposed of separately from normal household waste. This includes the projector or electrical accessory, such as a power cord. When you dispose of such products, please follow the guidance of your local authority and/or ask the shop where you purchased the product.

After collecting the used products, they are reused and recycled in a proper way. This effort will help us reduce the wastes as well as the negative impact to the human health and the environment at the minimum level.

The mark on the electrical and electronic products only applies to the current European Union Member States.

Outside the European Union

If you wish to dispose of used electrical and electronic products outside the European union, please contact your local authority and ask for the correct method of disposal.



For EU: The crossed-out wheeled bin implies that used batteries should not be put to the general household waste! There is a separate collection system for used batteries, to allow proper treatment and recycling in accordance with legislation.

According to the Regulation (EU)2023/1542, the battery can't be disposed improperly. The battery shall be separated to collect by local service.

(for Germany only)

Machine Noise Information Regulation - 3. GPSGV,

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

Information of the AUDIO OUT mini jack

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

Notes on installation and maintenance

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

- Locations that amplify vibrations and impacts
If installed in places where the vibrations from power sources and the like are conveyed, or in vehicles or on vessels, etc. the projector could be affected by vibrations or shocks that may damage internal parts and lead to malfunction.
- Close to high voltage power lines and power sources
It could disrupt the unit.
- Places where strong magnetic fields are generated
Doing so could lead to malfunction.
- Outdoors and places with humid or dust
Places exposed to oil smoke or steam
Places where corrosive gases are generated
Attached substances such as oil, chemicals and moisture may cause deformation or cracks of the cabinet, corrosion of the metal parts, or malfunction.

To the dealer and the installer

When installing the projector, please see the Installation Manual provided on our web site.

1. To prevent the projector from falling, install it on the ceiling in a way with sufficient strength to withstand the combined weight of the projector and the ceiling mount unit for an extended period of time.
2. When installing the projector on the ceiling, be sure to do so correctly in accordance with the installation Manual for the Ceiling Mount Unit. Be sure to use the fixed metal fittings and to tighten the screws securely.
3. To prevent the projector from falling, use fall prevention wires.
 - Use commercially available metal fittings to join the robust part of a building or construction and the security bar of the projector with the fall prevention wires.
 - Use commercially available metal fittings and fall prevention wires that have sufficient strength to withstand the combined weight of the projector and the ceiling mount unit.
 - Slightly slack off the fall prevention wires so as not to put a load on the projector.
 - Refer to the "Part Names of the Projector" for the location of the security bar. (→ page 6)

Cautions for ensuring the projector's performance

- If intense light like laser beams enters from the lens, it could lead to malfunction.
- Consult your dealer before using in places where much cigarette smoke or dust is present.
- When the same still image is projected for a long period of time with a computer, etc. the pattern of the image may remain on the screen after the projection is stopped, but it will disappear after a while. This happens due to the properties of liquid crystal panels, and is not a malfunction. We recommend using a screensaver on the computer side.
- When the projector is used at high altitudes (places where the atmospheric pressure is low), it may be necessary to replace the optical parts sooner than usual.
- About moving the projector
 - Detach the lens unit once, and be sure to attach the lens cap so as not to scratch the lens. Also, attach a dust protective cap to the projector.
 - Do not subject the projector to vibrations or strong shocks.
The projector could be damaged otherwise.
- Do not use the tilt feet for purposes other than adjusting the projector's tilt.
Improper handling, such as carrying the projector by the tilt feet or using it leaned against a wall, could lead to malfunction.
- The projector does not support stack installation. Do not stack projectors directly on top of each other. Failure to do so may cause damage or failure.
- Do not touch the surface of the projection lens with bare hands.
Fingerprints or dirt on the surface of the projection lens will be enlarged and projected on the screen. Do not touch the surface of the projection lens.
- Do not unplug the power cord from the projector or the power outlet while projecting. Doing so could cause deterioration of the projector's AC IN terminal or power plug contact. To interrupt the AC power supply while images are being projected, use a breaker, etc.
- About handling of the remote control
 - The remote control will not work if the projector's remote signal sensor or the remote control's signal transmitter is exposed to strong light or if there are obstacles between them that obstruct the signals.
 - Operate the remote control from within 20 meters from the projector, pointing it at the projector's remote signal sensor.
 - Do not drop the remote control or handle it improperly.
 - Do not let water or other liquids get on the remote control. Should the remote control get wet, wipe it off immediately.
 - Avoid using in hot and humid places as far as possible.
- Take measures to prevent external light from shining on the screen.
Make sure only the light from the projector shines on the screen. The less external light on the screen, the higher the contrast and the more beautiful the images.
- About screens
Images will not be clear if there is dirt, scratches, discoloration, etc. on your screen. Handle the screen with care, protecting it from volatile substances, scratches and dirt.
- Concerning to all maintenance operations, refer to Installation Manual and follow all instructions properly.

Precautions when installing the projector at an angle

This projector can be installed universally in every angle. When installing the projector at the angles shown below, the separately sold option cover is required to be attached to the projector. For tilted installation of the projector, use a metal fitting with sufficient strength to prevent it from falling.

 WARNING

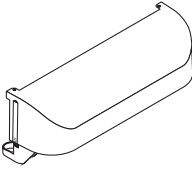

- Using without the option cover violates safety regulations. Also, powering the projector on without the option cover installed could result in a fire.

Model name of option cover

NP13CV-W for PA1705UL-W/PA1505UL-W

NP13CV-B for PA1705UL-B/PA1505UL-B

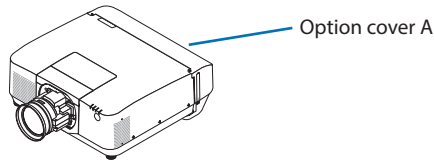
Two covers are packaged with the option cover NP13CV-W and NP13CV-B.

Option cover A: for attaching to the connection terminal area	
Option cover B: for attaching to the exhaust vent	

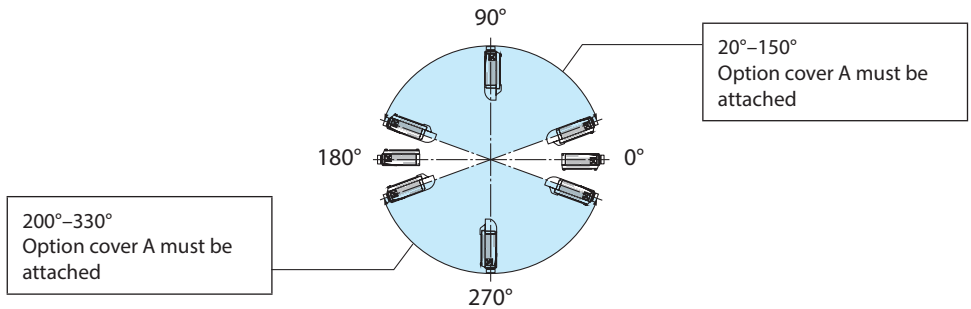
The drawings below show the installation angle required to attach the option cover A and B respectively.

- Both option cover A and B may need to be attached depending on the installation position of the projector.
- Whether the option cover needs to be attached in the current installation position can be checked on the [INFO.] screen of the on-screen menu.

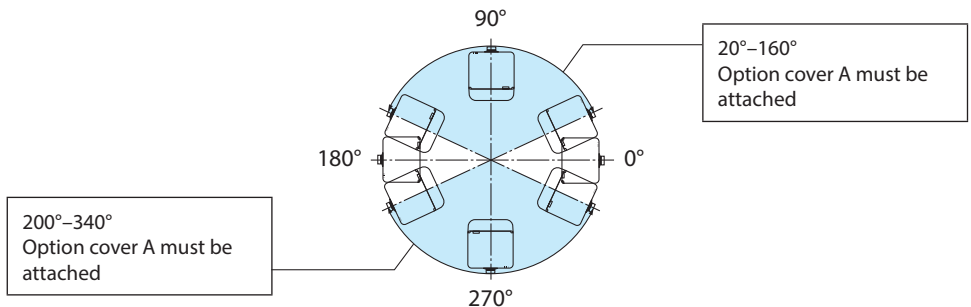
Installation angles required to attach the option cover A



In the direction of back and forth



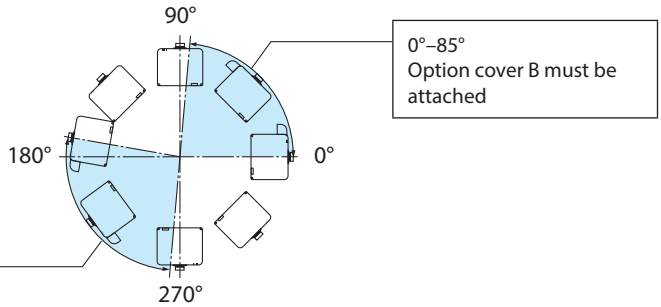
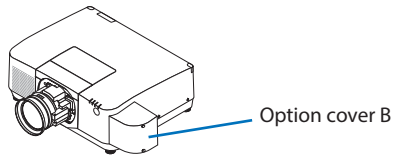
In the direction of left and right



NOTE:

- The drawings show the image of installation angle as a reference. They are slightly different from the actual one.

Installation angles required to attach the option cover B

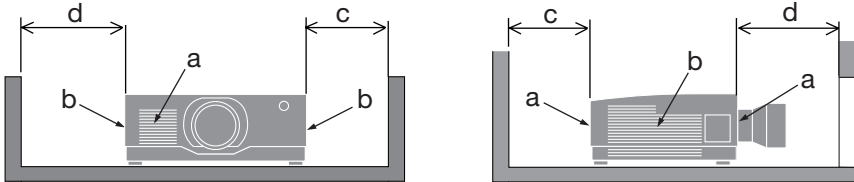


NOTE:

- The drawings show the image of installation angle as a reference. They are slightly different from the actual one.

Clearance for Installing the Projector

- When installing the projector, keep sufficient space around it, as described below. If not, the hot exhaust emitted from the projector may be taken back in. Also, make sure no wind from an air-conditioner hits the projector. The projector's heat control system may detect an abnormality (temperature error) and automatically shut off the power.



a: Intake vent / b: Exhaust vent / c: 20 cm/8" or greater / d: 30 cm/12" or greater

NOTE:

- In the above figure, it is assumed that there is sufficient space above the projector.
 - If the option cover is installed, leave a space of 20 cm/8" between the projector and the option cover.
- When using multiple projectors together for multi-screen projection, provide sufficient space around the projectors for air intake and exhaust. When the intake and exhaust vents are obstructed, the temperature inside the projector will rise and this may result in a malfunction.



About Copyright of original projected pictures:

Please note that using this projector for the purpose of commercial gain or the attraction of public attention in a venue such as a coffee shop or hotel and employing compression or expansion of the screen image with the following functions may raise concern about the infringement of copyrights which are protected by copyright law.

[ASPECT RATIO], [KEYSTONE], Magnifying feature and other similar features.

[AUTO POWER OFF] Function

The factory default setting for [AUTO POWER OFF] is 15 minutes. If no input signal is received and no operation is performed on the projector during 15 minutes, the projector is automatically powered off for saving the power consumption. In order to control the projector by an external device, set the [AUTO POWER OFF] to [OFF].

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