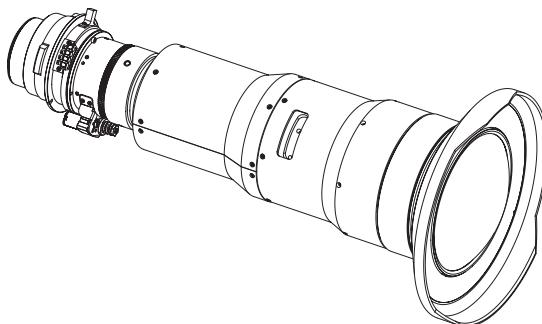


# Panasonic®

## Operating Instructions

Zoom lens **Commercial Use**

Model No. **ET-DLE020**



**ENGLISH**

**FRANÇAIS**

**日本語**

Thank you for purchasing this Panasonic product.

- To ensure correct use of this lens, please read the operating instructions supplied with the lens and the projector carefully.
- **Before using this product, be sure to read “Read this first!” (►Page 3).**
- Please save this manual for future use.

# Contents

<b>Read this first!</b>	3
<b>Before Use</b>	4
<b>Preparation</b>	6
Before replacing the projection lens	6
Attaching the Lens	6
Using the Lens Fixed Attachment for Portrait Installation	9
Moving the Lens to the Home Position	11
Lens Shift Adjustment	13
Detaching the Lens	15
Focus Adjustment	16
<b>Projection relationships</b>	19
<b>Lens shift ranges</b>	21
<b>Specifications</b>	23
<b>Dimensions</b>	23
<b>Projected image size and Projection distance</b>	Appendix / Annexe / 付録 1

The "Appendix" can be found after the Japanese language section (日本語).

# Read this first!

Always follow these precautions

## **WARNING:**

**Do not look at or place your skin into the light emitted from the lens while the projector is being used.**

Doing so can cause burns or loss of sight.

- Strong light is emitted from the projector's lens. Do not look at or place your hands directly into this light.
- Turn off the power when moving away from the projection lens or projector.

**Do not project an image with the lens cover attached.**

- Doing so can cause fire.

## **CAUTION:**

**Before replacing the projection lens, be sure to turn off the power and disconnect the power plug from the wall outlet.**

- Unexpected projection of light may cause injury to eyes.
- Replacing the projection lens without removing the power plug may result in electric shock.

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

Doing so can cause damage and burns to clothing.

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

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

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

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

**Do not open the desiccant bag. Do not eat the contents.**

Inadvertently ingesting desiccant could be harmful.

- If the desiccant gets into your eyes or mouth, immediately rinse with plenty of water and seek medical attention.
- Keep desiccant out of the reach of children.

# Before Use

## ■ Supported projectors

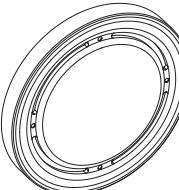
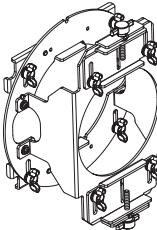
PT-RCQ10 / PT-RCQ80 / PT-RZ120 / PT-RZ970 / PT-RW930 / PT-RX110 / PT-RZ870 /  
PT-RZ770 / PT-RW730 / PT-RZ660 / PT-RW620

### Note

- This manual omits the alphabets at the end of projector model numbers.
- Models other than the above may also be supported. Refer to the operating instructions of the projector you are using.
- Even if the projector you are using is an applicable model, use of this projection lens may not be possible depending on the main version of the firmware.  
If main version of the firmware is the version number shown below, update to the latest firmware before use.
  - PT-RZ120: Earlier than 2.00
  - PT-RZ970 / PT-RW930 / PT-RX110: Earlier than 2.14
  - PT-RZ870: Earlier than 1.02
  - PT-RZ770 / PT-RW730 / PT-RZ660 / PT-RW620: Earlier than 1.16
- For details on the update procedure, refer to the latest firmware information on the website (<https://panasonic.net/cns/projector/pass/>).
- The main version of the firmware can be checked in the [STATUS] screen.

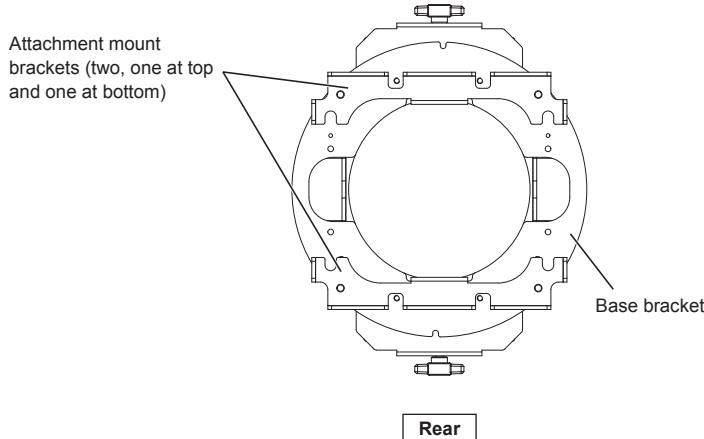
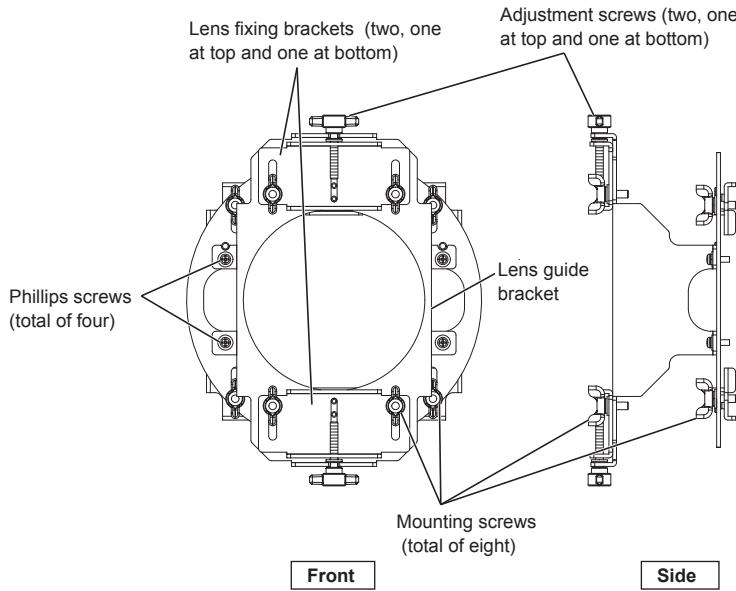
## ■ Supplied Accessories

Make sure that the following has been provided.

Part name	Appearance	
Lens cover	 	(The product is delivered with a lens cover attached.) 1 each
Lens fixed attachment		x1

## Before Use (continued)

### ■ Names of lens fixed attachment parts



# Preparation

## Before replacing the projection lens

Return the projection lens to the home position before replacing or removing it.

For details on how to return the lens to the home position, refer to the operating instructions of the projector.

### Attention

- Make sure that the projector power supply is switched off before attaching or detaching the projection lens.
- After removing the projection lens, store it safely away from vibration or impacts.
- Do not touch the electric contact points of the projection lens with your fingers. Dust and dirt on the contacts may cause contact malfunctions, while static electricity may damage the unit.
- Do not touch the surface of the lens with bare hands. Finger prints and dirt on the surface of the lens will be magnified by the lens and lower the quality of the projected image. Place the supplied lens cover on the zoom lens when the projector is not in use.
- The lens is made of glass. The lens could be damaged if brought into contact with or rubbed against hard objects. Handle the lens carefully.
- Use a clean, soft and dry cloth to wipe away dust and dirt from the projection lens. Do not use fluffy cloths containing oil, water or dust for cleaning. The lens is easily damaged, so do not apply excessive pressure when wiping it.

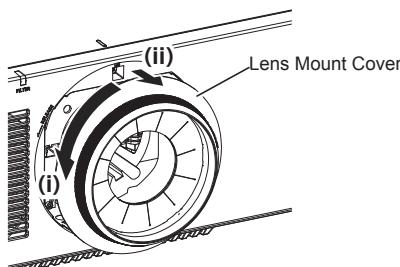
## Attaching the Lens

Attach this lens together with the lens fixed attachment.

### Attention

- Before attaching the Projection Lens, remove the lens hole cover (only lens options models) and the two lens covers attached to the Projection Lens.

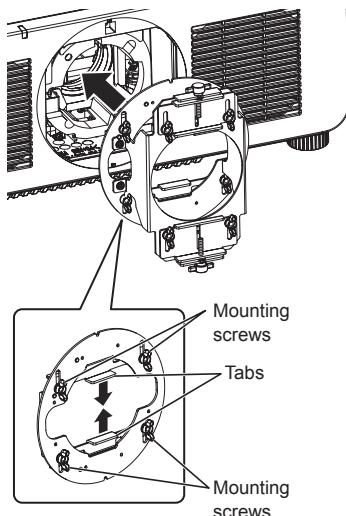
The illustrations in this procedure depict use of the PT-RZ970 series as an example.



- 1) (i) Turn the lens mount cover counterclockwise, and (ii) remove it.

- Store the removed lens mount cover in a safe place so that it will not be lost.

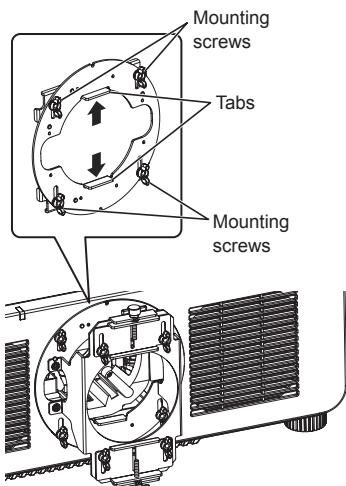
## Preparation (continued)



2) Loosen the mounting screws in four places on the attachment mount bracket.

- Provide a gap of about 2 mm between the attachment mount bracket and base bracket.

3) Pull together the tabs at the top and bottom of the attachment mount bracket and align the lens fixed attachment with the circular recesses in the front panel of the projector.

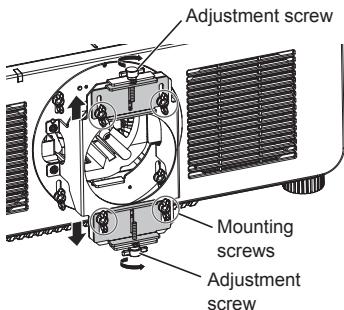


4) Push the tabs of the attachment mount bracket against the recesses in the base bracket and then tighten the mounting screws in four places.

### Attention

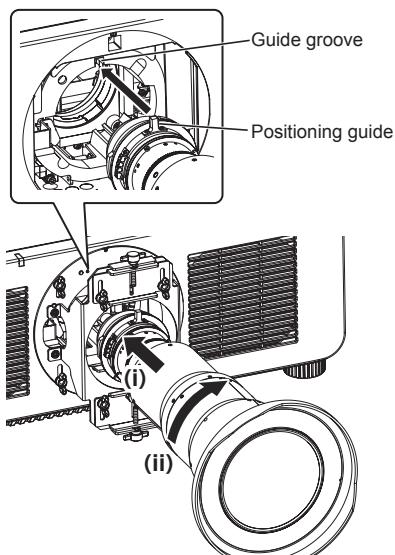
- Push the tabs so that they are parallel against the recesses.

## Preparation (continued)



5) Loosen the lens fixing bracket mounting screws in four places.

6) Turn the adjustment screws to fix the lens fixing brackets in place at the top and bottom, respectively.

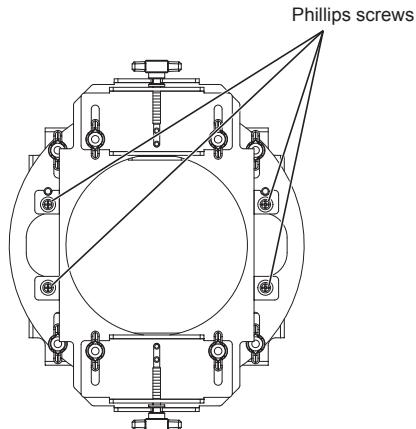


7) Align the positioning guide on the lens with the guide groove on the projector and insert the lens all the way into the projector (i), and then turn the lens clockwise until it clicks into place (ii).

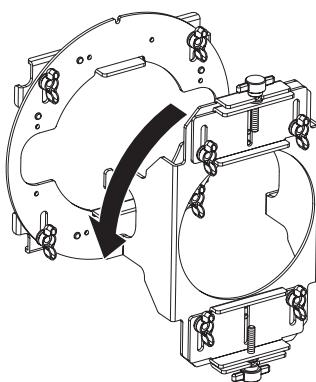
## Preparation (continued)

### Using the Lens Fixed Attachment for Portrait Installation

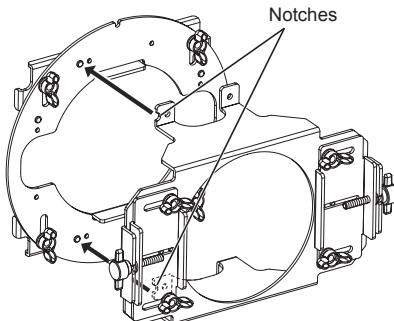
To use this lens for portrait installation, you need to reattach the lens fixed attachment differently.



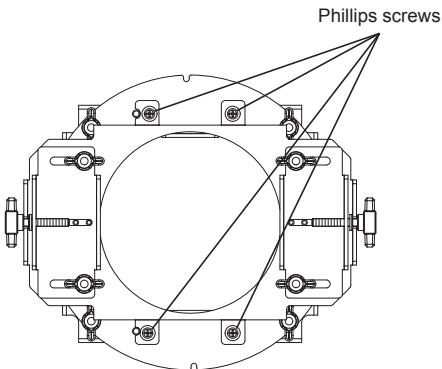
- 1) Remove the Phillips screws in four places with a Phillips screwdriver and then separate the base bracket and lens guide bracket.



- 2) Rotate the lens guide bracket  $90^\circ$  and align attach it so that the notches are aligned with the protrusions of the base bracket.



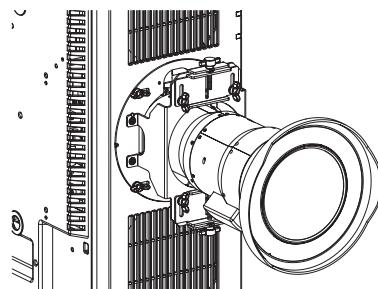
## Preparation (continued)



- 3) Fix the lens guide bracket and base bracket with Phillips screws in four places.

### Note

- The base plate attachment procedure is the same as before you reattached the lens fixed attachment differently.  
The lens fixing brackets are positioned at the top and bottom for portrait installation.

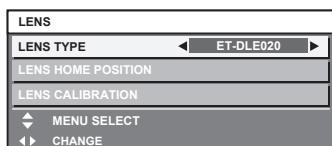
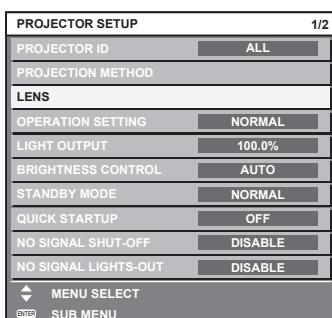
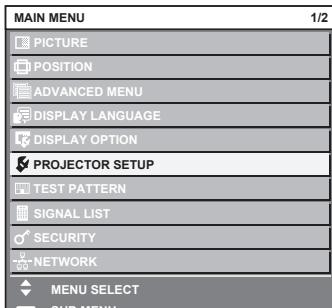


# Preparation (continued)

## Moving the Lens to the Home Position

- When using PT-RCQ10 / PT-RCQ80 / PT-RZ120

When aligning the orientation of the projected image and moving the lens to the home position, perform the operation with the following procedure.



### 1) Turn on the projector to start the projection.

- The top, bottom, left, and right of the projected image will be inverted until you perform step 5).

### 2) Press the <MENU> button to display the [MAIN MENU] screen.

### 3) Select [PROJECTOR SETUP] in the main menu and then press the <ENTER> button.

### 4) Select [LENS] in the [PROJECTOR SETUP] menu and then press the <ENTER> button.

- The [LENS] screen appears.

### 5) Select [LENS TYPE] on the [LENS] screen and then use the ▲▼ buttons to select [ET-DLE020].

- Each press of the ▲▼ buttons switches the item to [NORMAL], [ET-DLE035] or [ET-DLE020].

### 6) Select [LENS HOME POSITION] on the [LENS] screen and then press the <ENTER> button.

- A confirmation screen appears.

### 7) Use the ▲▼ buttons to select [OK] and then press the <ENTER> button.

- [PROGRESS] is displayed on the [HOME POSITION] screen and the lens moves to the home position for the ET-DLE020.

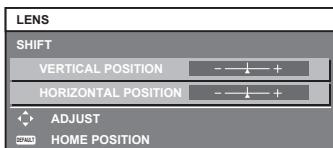
#### Note

- If [LENS TYPE] is incorrectly set to other than [ET-DLE020], the lens will not move to the correct home position.

## Preparation (continued)

- When using one of PT-RZ970 / PT-RW930 / PT-RX110 / PT-RZ870 / PT-RZ770 / PT-RW730 / PT-RZ660 / PT-RW620

When aligning the orientation of the projected image and moving the lens to the home position, perform the operation with the following procedure.



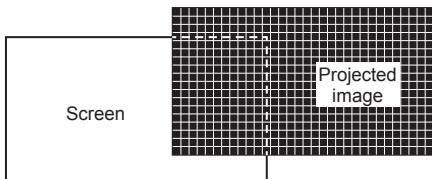
- 1) Turn on the projector to start the projection.**
  - The top, bottom, left, and right of the projected image will be inverted until you perform step 4).
- 2) Press the <SHIFT> button on the remote control.**
  - The shift adjustment screen appears.
- 3) Press the <DEFAULT> button on the remote control while the shift adjustment screen is displayed.**
  - The [HOME POSITION] screen appears.
- 4) Use the <▶> buttons to select [ET-DLE020].**
  - Each press of the <▶> buttons switches the item to [NORMAL], [ET-DLE030] or [ET-DLE020].
- 5) Press the <ENTER> button.**
  - [PROGRESS] is displayed on the [HOME POSITION] screen and the lens moves to the home position for the ET-DLE020.

### Note

- If [HOME POSITION] is incorrectly set to other than [ET-DLE020], the lens will not move to the correct home position.

## Preparation (continued)

### Lens Shift Adjustment

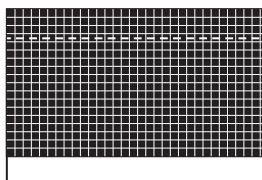


#### 1) Display the internal test pattern screen.

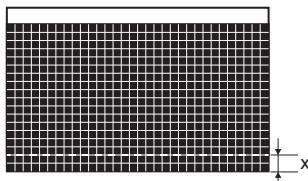
- Press the <TEST PATTERN> button on the remote control and use the  $\blacktriangleleft$  buttons to select the corresponding test pattern in the following table.

#### Test pattern list

Model Name	Test Pattern
PT-RCQ10 / PT-RCQ80 / PT-RZ120	Cross hatch
PT-RZ970 / PT-RW930 / PT-RZ870 / PT-RZ770 / PT-RW730 / PT-RX110 / PT-RZ660 / PT-RW620	Focus



#### 2) Perform the left/right shift operation with the remote control to move the projected image to the position of the screen.

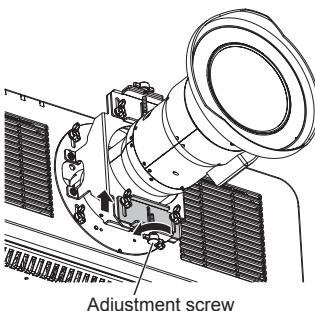


#### 3) Perform the up/down shift operation with the remote control to move the lower edge of the projected image so that it is target number of rows "x" in the following table below the lower edge of the screen.

#### Movement target amount list

Model Name	x
PT-RCQ10 / PT-RCQ80 / PT-RZ120 / PT-RZ970 / PT-RZ870 / PT-RZ770 / PT-RZ660	1.5
PT-RW930 / PT-RX110 / PT-RW730 / PT-RW620	1

## Preparation (continued)



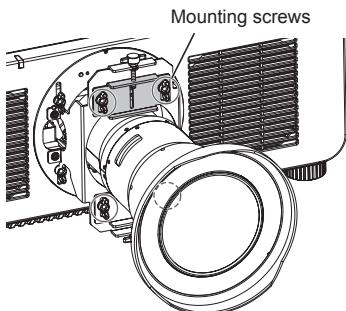
- 4) Turn the adjustment screw at the bottom of the lens fixed attachment to move the lower edge of the projected image to lower edge of the screen.

### Attention

- Do not perform the shift operation while the lens fixed attachment is fixed in place.

### Note

- If the target amount is significantly exceeded, the projected image may no longer be in focus on the screen.



- 5) Tighten the mounting screws in four places on the lens fixing brackets to fix the lens fixing brackets in place.

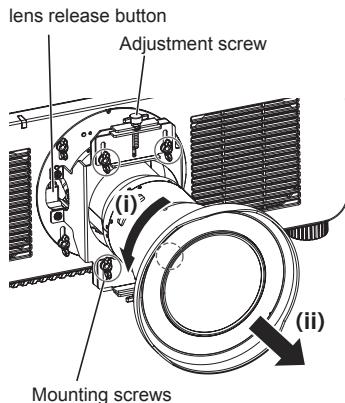
### Note

- After lifting up the lens, finely adjustment the position within the ranges of 32 dots horizontally and 16 dots vertically.

## Preparation (continued)

### Detaching the Lens

The illustrations in this procedure depict use of the PT-RZ970 series as an example.



- 1) Loosen the mounting screws in four places on the lens fixing brackets to the extent that the adjustment screws can be turned.**
- 2) Turn the adjustment screws to fix the lens fixing brackets in place at the top and bottom, respectively.**
- 3) Press the lens release button.**
  - A click will be heard.
- 4) (i) Turn the zoom lens counterclockwise, and (ii) remove it.**

#### Attention

- Before using a projection lens other than the ET-DLE020, be sure to remove the lens fixed attachment.
- Store the lens fixed attachment in a safe place so that it will not be lost.

## Preparation (continued)

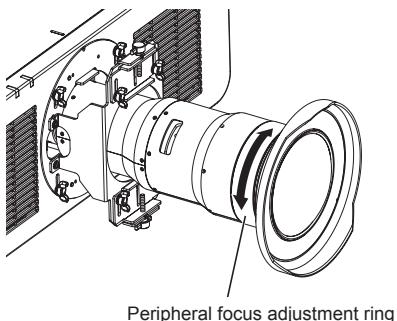
### Focus Adjustment

The focus balance of the center of the projected image and that of the peripheral areas differs depending on the size of the image.

This lens is equipped with a function for adjusting the peripheral focus balance.

#### ■ Adjusting the focus

The illustrations in this procedure depict use of the PT-RZ970 series as an example.



- 1) Operate the projector to align the focus of the center of the image.
- 2) Manually turn the peripheral focus adjustment ring as shown on the left, and align the focus of the peripheral areas of the image.

#### Attention

- The projected images sizes indicated on the peripheral focus adjustment ring are approximate guides.

#### ■ When out of focus

The peripheral areas or center of the projected image may be out of focus depending on the combination of this lens and the projector. In that case, adjust the flange back and align the focus as described in the following procedure. The flange back is the distance from the lens mount reference surface (flange) to the mirror surface of the DLP chip.  
Tool to use: Hexagonal wrench (diagonal 1.5 mm)

#### Attention

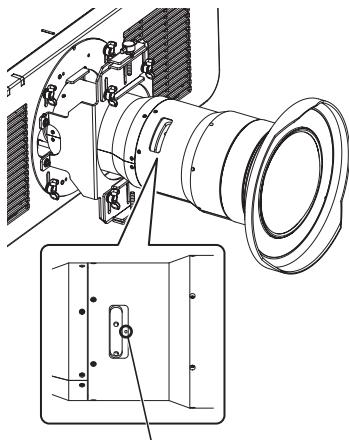
- When adjusting the flange back, take care that the projected light does not shine into your eyes.

## Preparation (continued)

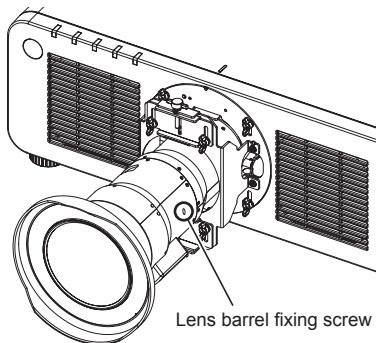
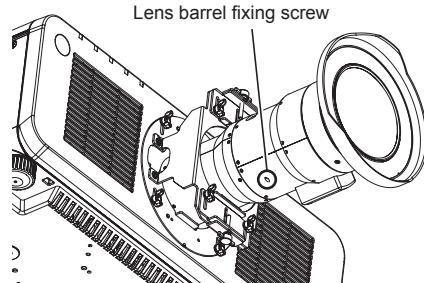
- 1) Display the internal test pattern screen.
  - For the test pattern to display, refer to "Test pattern list" (►page 13).
- 2) Press and hold down the ▼ or ◀ button for zoom adjustment on the projector until the projected image size become the smallest.
- 3) Press and hold down the ▼ or ◀ button for focus adjustment on the projector until the focus adjustment operation stops.
- 4) Press the <SHUTTER> button to enable the shutter function (shutter: closed).
- 5) Loosen the lens barrel fixing screws (3 places) on the side surface of the projection lens by turning them approximately twice in the counterclockwise direction with a hexagonal wrench.
  - Insert the hexagonal wrench perpendicular to the lens barrel and then turn the lens barrel fixing screws.

### Note

- Do not turn the lens barrel fixing screws too much because they will come out if they become too loose.



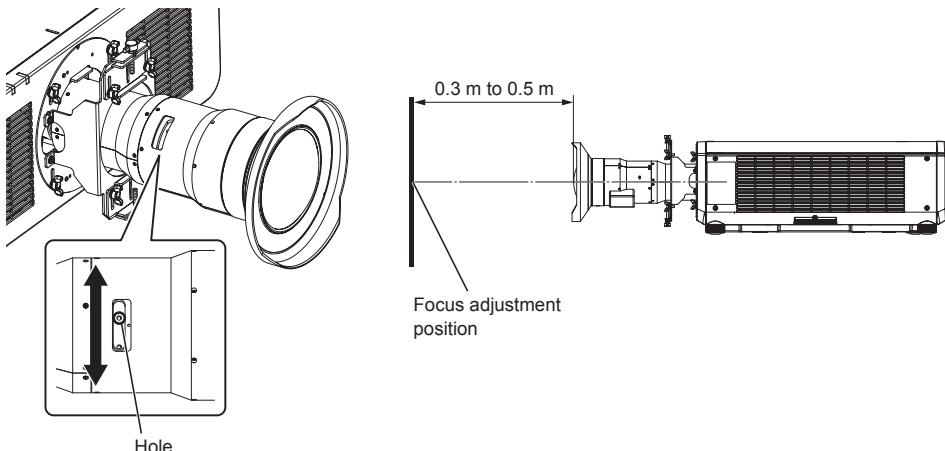
Lens barrel fixing screw



Lens barrel fixing screw

## Preparation (continued)

- 6) Press the <SHUTTER> button to disable the shutter function (shutter: open)
- 7) Insert the hexagonal wrench into the hole that can be seen from the projection lens side surface and turn the internal lens barrel slowly in the direction of the arrow to align the focus.
  - Align the focus at a position on the optical axis that is 0.3 m to 0.5 m from the front of the projection lens.



- 8) Press the <SHUTTER> button to enable the shutter function (shutter: closed).
- 9) Tighten the lens barrel fixing screws (3 places) on the side surface of the projection lens by turning them approximately twice in the clockwise direction with a hexagonal wrench.

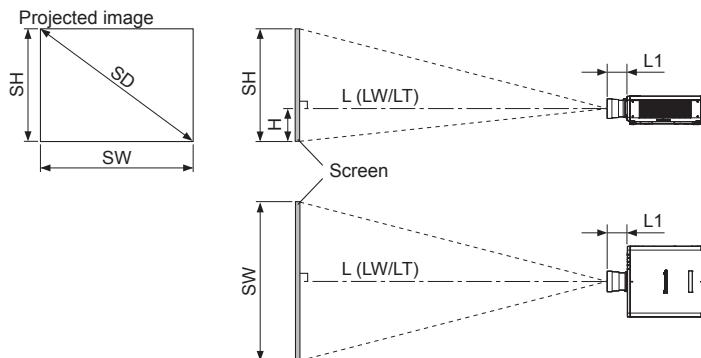
### Note

- Do not tighten the lens barrel fixing screws firmly.
- 10) Press the <SHUTTER> button to disable the shutter function (shutter: open)
  - 11) Operate the projector to align the focus of the center of the image.
  - 12) Manually turn the peripheral focus adjustment ring to align the focus of the peripheral areas of the image.

# Projection relationships

The dimensional relationship between the screen and the projector is shown below.

## ■ Dimensional relationship diagram



### Note

- This diagram assumes that the size and position of the projected image will be adjusted so that the image fills the entire screen.
- This illustration is not drawn to scale.

L	Projection distance
LW	Minimum distance
LT	Maximum distance
L1	Lens protrusion dimension
SH	Projected image height
H	Distance from the lens center to the lower edge of the projected image
SW	Projected image width
SD	Projected image size

(Unit: m)

Projector model	Dimension for L1 (approximate value)
PT-RCQ10 / PT-RCQ80 / PT-RZ120 / PT-RZ970 / PT-RW930 / PT-RX110 / PT-RZ870 / PT-RZ770 / PT-RW730 / PT-RZ660 / PT-RW620	0.269

### Note

- The illustrations of projectors in this manual are for informational purposes only and do not represent a specific projector model. Configurations may vary with the model.
- Some of the alphabet letters at the end of projector model numbers may be omitted in this manual.

## Projection relationships (continued)

### Attention

- To prevent obstruction of the intake and exhaust vents, install the projector with a clearance at least 500 mm (1 ft. 7 in.) from walls and objects.  
If you are installing the projector in a sealed space, be sure to provide additional air conditioning equipment and ventilation equipment. Insufficient ventilation will result in an accumulation of heat and may activate the projector's protection circuit.
- Avoid setting up in places which are subject to sudden temperature changes, such as near an air conditioner or lighting equipment (studio lamps, etc.).

### Dimensional relationship

For details on the projection distance (L), refer to "Projected image size and Projection distance" and "Projection distance formulas" in the Appendix.

### Note

- For details on "Projected image size and Projection distance" for projector models other than the following, refer to "Setting up" in the operating instructions of the projector.
- Some of the alphabet letters at the end of projector model numbers may be omitted in this manual.

PT-RCQ10 / PT-RCQ80 / PT-RZ120 / PT-RZ970 / PT-RW930 / PT-RX110 / PT-RZ870 /  
PT-RZ770 / PT-RW730 / PT-RZ660 / PT-RW620

# Lens shift ranges

If you perform lens calibration after attaching the projection lens, the projection lens moves to the home position after calibration is complete.

Using the position of the projected image at the home position (i.e., the standard projection position) as a basis, you can use the lens shift adjustment function on the projector to adjust the position of the projected image within the respective lens shift ranges.

Perform lens shift adjustment within the ranges shown in the following illustrations.

Moving the lens outside of the adjustment ranges may alter the focus. This occurs due to limitations in lens movement that are intended to protect the optical components.

The following illustrations depict lens shift ranges for floor installations of the projector.

PT-RCQ10 / PT-RCQ80 / PT-RZ120 / PT-RZ970 / PT-RZ870 / PT-RZ770 / PT-RZ660	<p>Origin position of the lens mount Standard projection position Projected image height V Projected image width H</p>
PT-RW930 / PT-RW730 / PT-RW620	<p>Origin position of the lens mount Standard projection position Projected image height V Projected image width H</p>
PT-RX110	<p>Origin position of the lens mount Standard projection position Projected image height V Projected image width H</p>

## Lens shift ranges (continued)

### Note

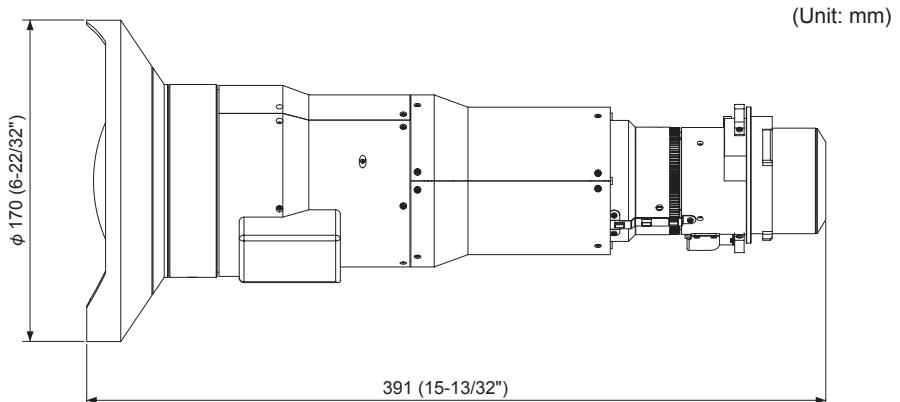
- The home position of the projector a point of origin position for the lens shift (i.e., vertical and horizontal positions of the lens) based on the results of lens calibration. It is not the optical center position of the screen.
- For details on “Lens shift range” for projector models other than the following, refer to “Projecting” in the operating instructions of the projector.
- Some of the alphabet letters at the end of projector model numbers may be omitted in this manual.

PT-RCQ10 / PT-RCQ80 / PT-RZ120 / PT-RZ970 / PT-RW930 / PT-RX110 / PT-RZ870 /  
PT-RZ770 / PT-RW730 / PT-RZ660 / PT-RW620

# Specifications

F value	2.00
Focal Length (f)	4.1 mm (5/32") - 4.4 mm (3/16")
Dimensions	Width 170 mm (6-22/32") Height 170 mm (6-22/32") Depth 391 mm (15-13/32")
Net Weight	Approx. 3.2 kg (7.1 lb)

# Dimensions



English	Italiano
<p><b>Manufactured by:</b> Panasonic Connect Co., Ltd. 4-1-62 Minoshima, Hakata-ku, Fukuoka 812-8531, Japan</p> <p><b>Importer:</b> Panasonic Connect Europe GmbH</p> <p><b>Authorized Representative in EU:</b> Panasonic Testing Centre Winsbergring 15, 22525 Hamburg, Germany</p> <p><b>Importer for UK;</b> Panasonic Connect UK, a branch of Panasonic Connect Europe GmbH, Maxis 2, Western Road, Bracknell, Berkshire, RG12 1RT</p> 	<p><b>Fabbricato da:</b> Panasonic Connect Co., Ltd. 4-1-62 Minoshima, Hakata-ku, Fukuoka 812-8531, Giappone</p> <p><b>Importatore:</b> Panasonic Connect Europe GmbH</p> <p><b>Rappresentante autorizzato nell'UE:</b> Panasonic Testing Centre Winsbergring 15, 22525 Amburgo, Germania</p>

Français	Български
<p><b>Fabriqué par:</b> Panasonic Connect Co., Ltd. 4-1-62 Minoshima, Hakata-ku, Fukuoka 812-8531, Japon</p> <p><b>Importateur :</b> Panasonic Connect Europe GmbH</p> <p><b>Représentant autorisé dans l'UE :</b> Panasonic Testing Centre Winsbergring 15, 22525 Hambourg, Allemagne</p>	<p><b>Производител:</b> Panasonic Connect Co., Ltd. 4-1-62 Minoshima, Hakata-ku, Fukuoka 812-8531, Япония</p> <p><b>Вносител:</b> Panasonic Connect Europe GmbH</p> <p><b>Упълномощен представител в ЕС:</b> Panasonic Testing Centre Winsbergring 15, 22525 Hamburg, Германия</p>

Español	Čeština
<p><b>Fabricado por:</b> Panasonic Connect Co., Ltd. 4-1-62 Minoshima, Hakata-ku, Fukuoka 812-8531, Japón</p> <p><b>Importador:</b> Panasonic Connect Europe GmbH</p> <p><b>Representante Autorizado para la UE:</b> Panasonic Testing Centre Winsbergring 15, 22525 Hamburgo, Alemania</p>	<p><b>Vyrobil:</b> Panasonic Connect Co., Ltd. 4-1-62 Minoshima, Hakata-ku, Fukuoka 812-8531, Japonsko</p> <p><b>Dovozce:</b> Panasonic Connect Europe GmbH</p> <p><b>Oprávněný zástupce v EU:</b> Panasonic Testing Centre Winsbergring 15, 22525 Hamburk, Německo</p>

Deutsch	Dansk
<p><b>Hergestellt von:</b> Panasonic Connect Co., Ltd. 4-1-62 Minoshima, Hakata-ku, Fukuoka 812-8531, Japan</p> <p><b>Importeur:</b> Panasonic Connect Europe GmbH</p> <p><b>Vertretungsberechtigter in der EU:</b> Panasonic Testing Centre Winsbergring 15, 22525 Hamburg, Deutschland</p>	<p><b>Fremstillet af:</b> Panasonic Connect Co., Ltd. 4-1-62 Minoshima, Hakata-ku, Fukuoka 812-8531, Japan</p> <p><b>Importør:</b> Panasonic Connect Europe GmbH</p> <p><b>Autoriseret repræsentant i EU:</b> Panasonic Testing Centre Winsbergring 15, 22525 Hamburg, Tyskland</p>

Eesti	Lietuvių
<p><b>Tootja:</b> Panasonic Connect Co., Ltd. 4-1-62 Minoshima, Hakata-ku, Fukuoka 812-8531, Jaapan</p> <p><b>Maaletooja:</b> Panasonic Connect Europe GmbH</p> <p><b>Voolitatud esindaja ELis:</b> Panasonic Testing Centre Winsbergring 15, 22525 Hamburg, Saksamaa</p>	<p><b>Gamintojas:</b> Panasonic Connect Co., Ltd. 4-1-62 Minoshima, Hakata-ku, Fukuoka 812-8531, Japonija</p> <p><b>Importuotojas:</b> Panasonic Connect Europe GmbH</p> <p><b>Igaliotasis atstovas ES:</b> Panasonic Testing Centre Winsbergring 15, 22525 Hamburgas, Vokietija</p>

Ελληνικά	Magyar
<p><b>Κατασκευάστηκε από:</b> Panasonic Connect Co., Ltd. 4-1-62 Minoshima, Hakata-ku, Fukuoka 812-8531, Ιαπωνία</p> <p><b>Εισαγωγέας:</b> Panasonic Connect Europe GmbH</p> <p><b>Εξουσιοδοτημένος αντιπρόσωπος στην ΕΕ:</b> Panasonic Testing Centre Winsbergring 15, 22525 Hamburg, Γερμανία</p>	<p><b>Gyártotta:</b> Panasonic Connect Co., Ltd. 4-1-62 Minoshima, Hakata-ku, Fukuoka 812-8531, Japán</p> <p><b>Importőr:</b> Panasonic Connect Europe GmbH</p> <p><b>Hivatalos képviselő az EU-ban:</b> Panasonic Testing Centre Winsbergring 15, 22525 Hamburg, Németország</p>

Hrvatski	Nederlands
<p><b>Proizvodi:</b> Panasonic Connect Co., Ltd. 4-1-62 Minoshima, Hakata-ku, Fukuoka 812-8531, Japan</p> <p><b>Uvoznik:</b> Panasonic Connect Europe GmbH</p> <p><b>Ovlašteni zastupnik u EU-u:</b> Panasonic Testing Centre Winsbergring 15, 22525 Hamburg, Njemačka</p>	<p><b>Geproduceerd door:</b> Panasonic Connect Co., Ltd. 4-1-62 Minoshima, Hakata-ku, Fukuoka 812-8531, Japan</p> <p><b>Importeur:</b> Panasonic Connect Europe GmbH</p> <p><b>Bevoegde vertegenwoordiger in de EU:</b> Panasonic Testing Centre Winsbergring 15, 22525 Hamburg, Duitsland</p>

Latviešu	Norsk
<p><b>Rāzotājs:</b> Panasonic Connect Co., Ltd. 4-1-62 Minoshima, Hakata-ku, Fukuoka 812-8531, Japāna</p> <p><b>Importētājs:</b> Panasonic Connect Europe GmbH</p> <p><b>Oficiālais pārstāvis ES:</b> Panasonic Testing Centre Winsbergring 15, 22525 Hamburg, Vācija</p>	<p><b>Produsert av:</b> Panasonic Connect Co., Ltd. 4-1-62 Minoshima, Hakata-ku, Fukuoka 812-8531, Japan</p> <p><b>Importør:</b> Panasonic Connect Europe GmbH</p> <p><b>Autorisert representant i EU:</b> Panasonic Testing Centre Winsbergring 15, 22525 Hamburg, Tyskland</p>

<b>Polski</b>	<b>Slovenščina</b>
<p><b>Wyprodukowano przez:</b> Panasonic Connect Co., Ltd. 4-1-62 Minoshima, Hakata-ku, Fukuoka 812-8531, Japonia</p> <p><b>Importer:</b> Panasonic Connect Europe GmbH</p> <p><b>Upoważniony przedstawiciel w UE:</b> Panasonic Testing Centre Winsbergring 15, 22525 Hamburg, Niemcy</p>	<p><b>Proizvaja:</b> Panasonic Connect Co., Ltd. 4-1-62 Minoshima, Hakata-ku, Fukuoka 812-8531, Japonska</p> <p><b>Uvoznik:</b> Panasonic Connect Europe GmbH</p> <p><b>Pooblaženi zastopnik v EU:</b> Panasonic Testing Centre Winsbergring 15, 22525 Hamburg, Nemčija</p>
<b>Português</b>	<b>Türkçe</b>
<p><b>Fabricado por:</b> Panasonic Connect Co., Ltd. 4-1-62 Minoshima, Hakata-ku, Fukuoka 812-8531, Japão</p> <p><b>Importador:</b> Panasonic Connect Europe GmbH</p> <p><b>Representante Autorizado na UE:</b> Panasonic Testing Centre Winsbergring 15, 22525 Hamburgo, Alemanha</p>	<p><b>Tarafından Üretilmiştir:</b> Panasonic Connect Co., Ltd. 4-1-62 Minoshima, Hakata-ku, Fukuoka 812-8531, Japonya</p> <p><b>İthalatçı:</b> Panasonic Connect Europe GmbH</p> <p><b>AB Yetkili Temsilcisi:</b> Panasonic Testing Centre Winsbergring 15, 22525 Hamburg, Almanya</p>
<b>Română</b>	<b>Suomi</b>
<p><b>Fabricat de:</b> Panasonic Connect Co., Ltd. 4-1-62 Minoshima, Hakata-ku, Fukuoka 812-8531, Japonia</p> <p><b>Importator:</b> Panasonic Connect Europe GmbH</p> <p><b>Reprezentant autorizat în UE:</b> Panasonic Testing Centre Winsbergring 15, 22525 Hamburg, Germania</p>	<p><b>Valmistaja:</b> Panasonic Connect Co., Ltd. 4-1-62 Minoshima, Hakata-ku, Fukuoka 812-8531, Japani</p> <p><b>Maahantuaja:</b> Panasonic Connect Europe GmbH</p> <p><b>Valtuutettu edustaja EU:ssa:</b> Panasonic Testing Centre Winsbergring 15, 22525 Hampuri, Saksa</p>
<b>Slovenčina</b>	<b>Svenska</b>
<p><b>Výrobca:</b> Panasonic Connect Co., Ltd. 4-1-62 Minoshima, Hakata-ku, Fukuoka 812-8531, Japonsko</p> <p><b>Dovozca:</b> Panasonic Connect Europe GmbH</p> <p><b>Autorizovaný zástupca v EÚ:</b> Panasonic Testing Centre Winsbergring 15, 22525 Hamburg, Nemecko</p>	<p><b>Tillverkad av:</b> Panasonic Connect Co., Ltd. 4-1-62 Minoshima, Hakata-ku, Fukuoka 812-8531, Japan</p> <p><b>Importör:</b> Panasonic Connect Europe GmbH</p> <p><b>Auktoriserad representant i EU:</b> Panasonic Testing Centre Winsbergring 15, 22525 Hamburg, Tyskland</p>

# **MEMO**

---

### **Disposal of Old Equipment**

#### **Only for European Union and countries with recycling systems**



This symbol on the products, packaging, and/or accompanying documents means that used electrical and electronic products must not be mixed with general household waste. For proper treatment, recovery and recycling of old products, please take them to applicable collection points in accordance with your national legislation.

By disposing of them correctly, you will help to save valuable resources and prevent any potential negative effects on human health and the environment.

For more information about collection and recycling, please contact your local authority.

Penalties may be applicable for incorrect disposal of this waste, in accordance with national legislation.

### **Product Information (for Turkey only)**



AEEE Yönetmeliğine Uygundur.

Eski Ekipman ve Bataryaların İşlenmesi.

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

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

Eski ürünlerin toplanması ve geri kazanılması için bu atıklar lütfen yasaya belirlenmiş olan uygun toplama merkezlerine teslim ediniz.

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

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

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

---

## **Panasonic Connect Co., Ltd.**

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

© Panasonic Connect Co., Ltd. 2022

---

## **Panasonic Connect North America**

Two Riverfront Plaza, Newark, NJ 07102

TEL: (877) 803 - 8492

---

## **Panasonic Canada Inc.**

5770 Ambler Drive, Mississauga, Ontario L4W 2T3

TEL: (905) 624 - 5010

SS0919AM2042 -PS

**Printed in Japan**

# Appendix / Annexe / 付録

## ■ Projected image size and Projection distance ■ Taille de l'image projetée et Distance de projection ■ 投写画面サイズと投写距離

- When the screen aspect ratio is 16:10
- Lorsque le rapport d'aspect de l'écran est 16:10
- アスペクト比 16:10

(Unit / Unités / 単位 : m)

PT-RCQ10 / PT-RCQ80 / PT-RZ120 / PT-RZ970 / PT-RZ870 / PT-RZ770 / PT-RZ660

Throw ratio / Rapport de projection / スローレシオ : [0.280 - 0.299:1]

SD	SH	SW	LW	LT	H
2.54 (100")	1.346	2.154	0.59	0.64	0.00 - 0.89
3.05 (120")	1.615	2.585	0.72	0.77	0.00 - 1.07
3.81 (150")	2.019	3.231	0.90	0.97	0.00 - 1.33
5.08 (200")	2.692	4.308	1.21	1.30	0.00 - 1.78
6.35 (250")	3.365	5.385	1.52	1.63	0.00 - 2.22
7.62 (300")	4.039	6.462	1.83	1.96	0.00 - 2.67
8.89 (350")	4.712	7.539	2.14	2.29	0.00 - 3.11
10.16 (400")	5.385	8.616	2.45	2.63	0.00 - 3.55

PT-RW930 / PT-RW730 / PT-RW620

Throw ratio / Rapport de projection / スローレシオ : [0.294 - 0.314:1]

SD	SH	SW	LW	LT	H
2.54 (100")	1.346	2.154	0.62	0.67	-0.07 - 1.17
3.05 (120")	1.615	2.585	0.75	0.81	-0.08 - 1.41
3.81 (150")	2.019	3.231	0.95	1.02	-0.10 - 1.76
5.08 (200")	2.692	4.308	1.27	1.37	-0.13 - 2.34
6.35 (250")	3.365	5.385	1.60	1.71	-0.17 - 2.93
7.62 (300")	4.039	6.462	1.92	2.06	-0.20 - 3.51
8.89 (350")	4.712	7.539	2.25	2.41	-0.24 - 4.10
10.16 (400")	5.385	8.616	2.57	2.76	-0.27 - 4.68

## Appendix / Annexe / 付録 (continued / suite / つづき)

- When the screen aspect ratio is 16:9
- Lorsque le rapport d'aspect de l'écran est 16:9
- アスペクト比 16:9

(Unit / Unités / 単位 : m)

PT-RCQ10 / PT-RCQ80 / PT-RZ120 / PT-RZ970 / PT-RZ870 / PT-RZ770 / PT-RZ660

Throw ratio / Rapport de projection / スローレシオ : [0.280 - 0.299:1]

SD	SH	SW	LW	LT	H
2.54 (100")	1.245	2.214	0.61	0.65	-0.12 - 0.91
3.05 (120")	1.494	2.657	0.74	0.79	-0.15 - 1.10
3.81 (150")	1.868	3.321	0.93	0.99	-0.19 - 1.37
5.08 (200")	2.491	4.428	1.25	1.34	-0.25 - 1.83
6.35 (250")	3.113	5.535	1.56	1.68	-0.31 - 2.28
7.62 (300")	3.736	6.641	1.88	2.02	-0.37 - 2.74
8.89 (350")	4.358	7.748	2.20	2.36	-0.44 - 3.20
10.16 (400")	4.981	8.855	2.52	2.70	-0.50 - 3.65

PT-RW930 / PT-RW730 / PT-RW620

Throw ratio / Rapport de projection / スローレシオ : [0.294 - 0.314:1]

SD	SH	SW	LW	LT	H
2.54 (100")	1.245	2.214	0.64	0.69	-0.21 - 1.20
3.05 (120")	1.494	2.657	0.78	0.83	-0.25 - 1.44
3.81 (150")	1.868	3.321	0.98	1.05	-0.31 - 1.81
5.08 (200")	2.491	4.428	1.31	1.40	-0.42 - 2.41
6.35 (250")	3.113	5.535	1.64	1.76	-0.52 - 3.01
7.62 (300")	3.736	6.641	1.98	2.12	-0.62 - 3.61
8.89 (350")	4.358	7.748	2.31	2.48	-0.73 - 4.21
10.16 (400")	4.981	8.855	2.65	2.84	-0.83 - 4.82

PT-RX110

Throw ratio / Rapport de projection / スローレシオ : [0.290 - 0.310:1]

SD	SH	SW	LW	LT	H
2.54 (100")	1.245	2.214	0.63	0.68	0.22 - 1.25
3.05 (120")	1.494	2.657	0.76	0.82	0.26 - 1.49
3.81 (150")	1.868	3.321	0.96	1.03	0.32 - 1.87
5.08 (200")	2.491	4.428	1.29	1.39	0.43 - 2.49
6.35 (250")	3.113	5.535	1.62	1.74	0.54 - 3.11
7.62 (300")	3.736	6.641	1.95	2.09	0.65 - 3.74
8.89 (350")	4.358	7.748	2.28	2.44	0.76 - 4.36
10.16 (400")	4.981	8.855	2.61	2.80	0.86 - 4.98

## Appendix / Annexe / 付録 (continued / suite / つづき)

- When the screen aspect ratio is 4:3
- Lorsque le rapport d'aspect de l'écran est 4:3
- アスペクト比 4:3

(Unit / Unités / 単位 : m)

PT-RCQ10 / PT-RCQ80 / PT-RZ120 / PT-RZ970 / PT-RZ870 / PT-RZ770 / PT-RZ660

Throw ratio / Rapport de projection / スローレシオ : [0.337 - 0.360:1]

SD	SH	SW	LW	LT	H
2.54 (100")	1.524	2.032	0.67	0.72	0.00 - 1.01
3.05 (120")	1.829	2.438	0.81	0.87	0.00 - 1.21
3.81 (150")	2.286	3.048	1.03	1.10	0.00 - 1.51
5.08 (200")	3.048	4.064	1.38	1.47	0.00 - 2.01
6.35 (250")	3.810	5.080	1.73	1.85	0.00 - 2.51
7.62 (300")	4.572	6.096	2.08	2.23	0.00 - 3.02
8.89 (350")	5.334	7.112	2.43	2.60	0.00 - 3.52
10.16 (400")	6.096	8.128	2.78	2.98	0.00 - 4.02

PT-RW930 / PT-RW730 / PT-RW620

Throw ratio / Rapport de projection / スローレシオ : [0.354 - 0.378:1]

SD	SH	SW	LW	LT	H
2.54 (100")	1.524	2.032	0.71	0.76	-0.08 - 1.33
3.05 (120")	1.829	2.438	0.86	0.92	-0.09 - 1.59
3.81 (150")	2.286	3.048	1.08	1.15	-0.11 - 1.99
5.08 (200")	3.048	4.064	1.44	1.55	-0.15 - 2.65
6.35 (250")	3.810	5.080	1.81	1.94	-0.19 - 3.31
7.62 (300")	4.572	6.096	2.18	2.34	-0.23 - 3.98
8.89 (350")	5.334	7.112	2.55	2.73	-0.27 - 4.64
10.16 (400")	6.096	8.128	2.92	3.12	-0.30 - 5.30

PT-RX110

Throw ratio / Rapport de projection / スローレシオ : [0.290 - 0.309:1]

SD	SH	SW	LW	LT	H
2.54 (100")	1.524	2.032	0.58	0.62	0.18 - 1.14
3.05 (120")	1.829	2.438	0.70	0.75	0.22 - 1.37
3.81 (150")	2.286	3.048	0.88	0.94	0.27 - 1.71
5.08 (200")	3.048	4.064	1.18	1.27	0.37 - 2.29
6.35 (250")	3.810	5.080	1.49	1.59	0.46 - 2.86
7.62 (300")	4.572	6.096	1.79	1.92	0.55 - 3.43
8.89 (350")	5.334	7.112	2.09	2.24	0.64 - 4.00
10.16 (400")	6.096	8.128	2.39	2.57	0.73 - 4.57

## Appendix / Annexe / 付録 (continued / suite / つづき)

### Note

- A ±5 % error in listed projection distances may occur.  
In addition, when [KEYSTONE] is used, distance is corrected to become smaller than the specified screen size.
- The throw ratio is based on the value during projection with the projected image size of 3.81 m (150").
- The periods used in the numbers in the tables are decimal points.

### Remarque

- Une erreur de ±5 % dans des distances de projection énumérées peut se produire.  
En outre, lorsque [CORRECTION DE TRAPÈZE] est utilisé, la distance est corrigée pour devenir inférieure à la taille d'écran spécifiée.
- Le rapport de projection est basé sur la valeur en cours de projection avec une taille de l'image projetée de 3,81 m (150").
- Les points utilisés dans les nombres dans les tableaux sont des points décimaux.

### お知らせ

- 記載の投写距離は±5%以下の範囲内で誤差が発生します。  
また、[台形補正] 使用時は、所定の画面サイズよりも小さくなる方向で補正されます。
- スローレシオは、投写画面サイズ 150 型投写時の値を基準にしています。

Setting-up dimensions which are not given in the above table can be calculated using the formulas below. Check the projected image size SD (m) and use the following formula to determine projection distance (L).

La configuration des dimensions qui ne sont pas données dans le tableau ci-dessus peut être calculée à l'aide des formules suivantes. Vérifiez la taille de l'image projetée SD (m) et utilisez la formule suivante pour déterminer la distance de projection (L).

上記の表以外の投写寸法は次の計算式で求めることができます。画面対角サイズ SD (m) をご確認のうえ、それぞれの計算式で投写距離 (L) を求めてください。

## Appendix / Annexe / 付録 (continued / suite / つづき)

- Projection distance formulas
- Formules de distance de projection
- 投写距離計算式

The dimensions of the following table contain a slight error.

Periods are used to represent decimal points in the calculation formulas in the following table.

Les dimensions du tableau suivant peuvent présenter un léger écart.

Les points sont utilisés pour indiquer les décimales dans les formules de calcul dans le tableau suivant.

次の表内の寸法は若干の誤差があります。

(Unit / Unités / 単位 : m)

		L	
		LW	LT
PT-RCQ10 / PT-RCQ80 / PT-RZ120 / PT-RZ970 / PT-RZ870 / PT-RZ770 / PT-RZ660	When the screen aspect ratio is 16:10 Lorsque le rapport d'aspect de l'écran est 16:10 アスペクト比 16:10 のとき	=0.2438 × SD-0.0266	=0.2612 × SD-0.0279
	When the screen aspect ratio is 16:9 Lorsque le rapport d'aspect de l'écran est 16:9 アスペクト比 16:9 のとき	=0.2506 × SD-0.0266	=0.2684 × SD-0.0279
	When the screen aspect ratio is 4:3 Lorsque le rapport d'aspect de l'écran est 4:3 アスペクト比 4:3 のとき	=0.2760 × SD-0.0266	=0.2957 × SD-0.0279
PT-RW930 / PT-RW730 / PT-RW620	When the screen aspect ratio is 16:10 Lorsque le rapport d'aspect de l'écran est 16:10 アスペクト比 16:10 のとき	=0.2560 × SD-0.0266	=0.2742 × SD-0.0279
	When the screen aspect ratio is 16:9 Lorsque le rapport d'aspect de l'écran est 16:9 アスペクト比 16:9 のとき	=0.2631 × SD-0.0266	=0.2819 × SD-0.0279
	When the screen aspect ratio is 4:3 Lorsque le rapport d'aspect de l'écran est 4:3 アスペクト比 4:3 のとき	=0.2896 × SD-0.0266	=0.3102 × SD-0.0279
PT-RX110	When the screen aspect ratio is 16:9 Lorsque le rapport d'aspect de l'écran est 16:9 アスペクト比 16:9 のとき	=0.2597 × SD-0.0266	=0.2782 × SD-0.0279
	When the screen aspect ratio is 4:3 Lorsque le rapport d'aspect de l'écran est 4:3 アスペクト比 4:3 のとき	=0.2383 × SD-0.0266	=0.2553 × SD-0.0279

---

## Panasonic Connect Co., Ltd.

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

---

### Panasonic Connect North America

Two Riverfront Plaza, Newark, NJ 07102

TEL: (877) 803 - 8492

### Panasonic Canada Inc.

5770 Ambler Drive, Mississauga, Ontario L4W 2T3

TEL: (905) 624 - 5010

---

## パナソニック コネクト株式会社

〒 571-8503 大阪府門真市松葉町2番15号 電話 ☎ 0120-872-601