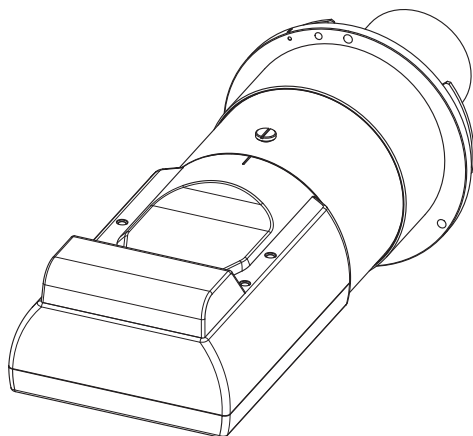


Panasonic®

Operating Instructions

Fixed-focus Lens **Commercial Use**

Model No. **ET-D75LE95**



ENGLISH

FRANÇAIS

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.

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WARNING:

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 without removing the power plug may result in electrical shock.

Do not place objects near the light projecting surface.

- This surface produces intense light. Failure to heed this warning could result in fire or burn injuries.

CAUTION:

Do not use the lens with the protective film and lens cover left on.

- If left on, the heat generated during projection could melt them resulting in projector deformation and damage, and personnel attempting to remove them could suffer burn injuries.

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.

Note

- This product cannot be used if an optional frame (ET-PFD510 / ET-PFD310) is attached and used with the projector.

Information for users in the European Union

Importer's name and address within the European Union
Panasonic Marketing Europe GmbH
Panasonic Testing Centre
Winsbergring 15, 22525 Hamburg, Germany

Before Use

Supported projectors

PT-RZ31K / PT-RS30K / PT-RQ13K / PT-RZ12K / PT-RS11K / PT-DZ21K2 / PT-DS20K2 / PT-DW17K2 / PT-DZ16K2 / PT-DZ13K / PT-DS12K / PT-DW11K / PT-DZ10K

Note

- Models other than the above may also be supported. Refer to the operating instructions of the projector you are using.
- In this document, the alphabet letters at the end of the projector part numbers are omitted.

Supplied Accessories

Make sure that the following has been provided. Numbers enclosed in < > show the number of accessories.

Lens cover <1>

(The product is delivered with a lens cover attached.)



Attaching the Lens / Detaching the Lens

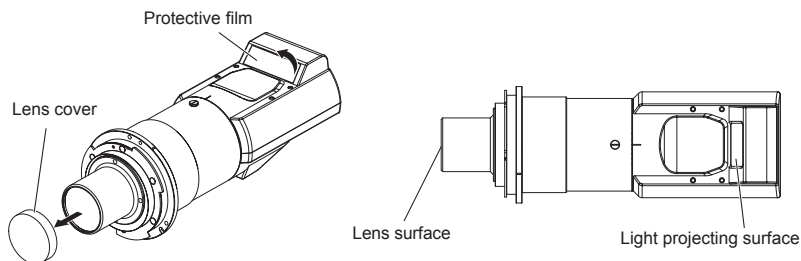
Before replacing the projection lens

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.
- Before attaching the fixed-focus lens, remove the protective film from the light projecting surface and the lens cover from the lens.



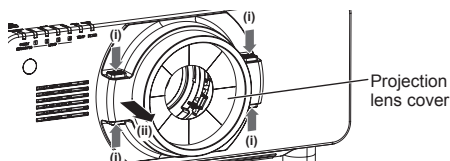
- Be sure not to touch the light projecting surface or the surface of the lens. Any fingerprints or smudges on these surfaces will be magnified and lower the quality of the image displayed on the screen.
- The light projecting surface and lens are made of glass. The lens could be damaged if brought into contact with or rubbed against hard objects. Handle the lens carefully.
- Use a clean, soft and dry cloth to wipe away any dirt or dust that has adhered to the light projecting surface or lens. Do not use fluffy cloths containing oil, water or dust for cleaning.
- When the fixed-focus lens is removed from the projector, place it with the light projecting surface facing upwards.

Attaching the Lens / Detaching the Lens (continued)

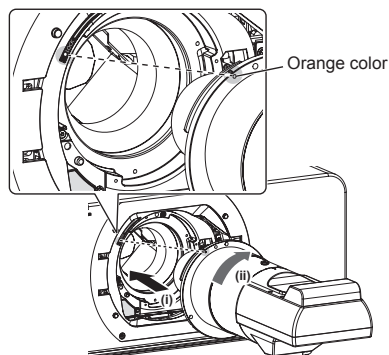
Attaching the Lens

The illustration for this procedure uses PT-DZ21K2 as an example.

1) Remove the projection lens cover.*1



2) Align the mark on the projection lens (orange color) with the mark on the projector (O on the left side of the LOCK) and insert; then rotate in a clockwise direction until it makes a "click" sound.



3) Secure the projection lens with the lens drop prevention screw included with the projector.

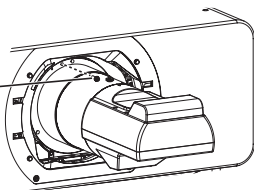
- Secure it in the screw hole (location shown in the figure to the left) on the right side of the projection lens mark (orange color) using a Phillips screwdriver.

4) Attach the projection lens cover.*1

Attention

- Gently turn the projection lens counterclockwise to check that it will not fall out.

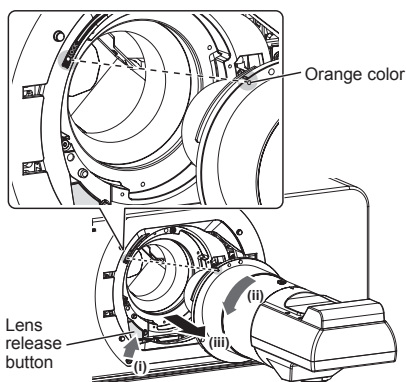
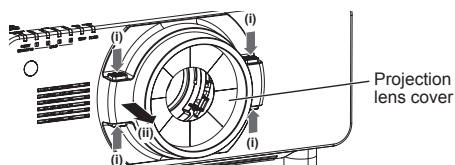
Lens drop prevention screw



*1: Only when using a projector that has a projection lens cover. In addition, there are cases where the attachment method or removal method of the projection lens cover differs from the procedure (illustration) described above depending on the model being used. For details, see "Attaching/removing the projection lens (optional)" in the operating instructions for the projector you are using.

Attaching the Lens / Detaching the Lens (continued)

Detaching the Lens



The illustration for this procedure uses PT-DZ21K2 as an example.

- 1) **Remove the projection lens cover.*1**
- 2) **Remove the lens drop prevention screw.**

- Remove the first screw on the right side of the projection lens mark (orange color) using a Phillips screwdriver.

- 3) **Turn the projection lens counterclockwise while holding down the lens release button to take it off.**
 - Turn counterclockwise until the projection lens mark (orange color) is aligned with the mark on the projector (O on left side of the LOCK).
- 4) **Attach the projection lens cover.*1**

Attention

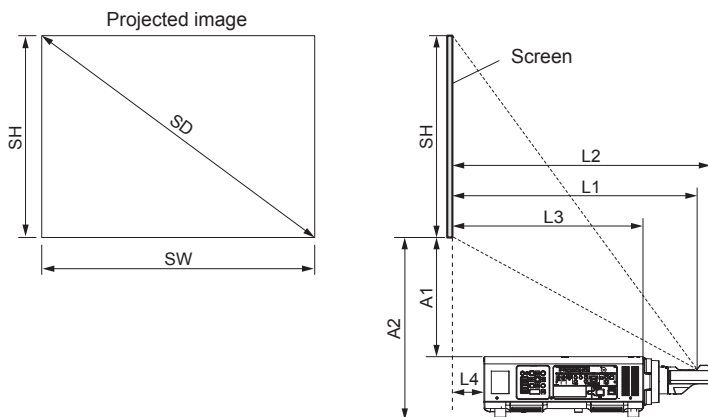
- Store the projection lens that was removed while avoiding vibration and impact.
- Store the lens drop prevention screw that was removed and do not lose it.
- Attach the supplied lens cover before storing the lens.

*1: Only when using a projector that has a projection lens cover. In addition, there are cases where the attachment method or removal method of the projection lens cover differs from the procedure (illustration) described above depending on the model being used. For details, see "Attaching/removing the projection lens (optional)" in the operating instructions for the projector you are using.

Projection relationships

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

■ Dimensional relationship diagram



Note

- The indications of this illustration are premised on aligning the projected image size and position to the full screen.
- This illustration is not drawn to scale.

SH	Projected image height	L3	Screen to projector front end
SW	Projected image width	L4	Screen to projector rear end
SD	Diagonal length of the projected image	A1	Bottom edge of the screen to the top of the projector
L1	Projection distance (from screen to mirror reflective surface*)	A2	Bottom edge of the screen to the bottom of the projector
L2	Screen to lens front end		

* The mirror reflective surface is inside the fixed-focus lens, and is not visible from the outside.

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.
- After setting the lens position using the function on the projector, the lens position can be adjusted within the adjustment range described in "Adjustment range by the lens position shift (optical shift)" (►Page 12). Then dimensions A1 and A2 will change according to lens shift amount.
- Dimension L4 is the distance from the projector rear panel to the screen.
- Dimension A2 is the distance from the bottom edge of the screen to the bottom of the adjustable projector legs (with the legs fully screwed in).

Attention

- Dimension L4 is not the distance from the projector rear panel to a wall, but the distance from the projector rear panel to the screen. Provide at least 500 mm (19-11/16") of ventilation space between the projector rear panel and a wall or other object.

When placing the projector in a confined space, a ventilation and/or air conditioning system is required.

Exhaust heat may accumulate when the ventilation is not sufficient triggering the protection circuit of the projector.

Projection relationships (continued)

■ Dimensional relationship

- When using one of PT-RZ31K / PT-RS30K / PT-RQ13K / PT-RZ12K / PT-RS11K / PT-DZ21K2 / PT-DS20K2 / PT-DW17K2 / PT-DZ16K2 / PT-DZ13K / PT-DS12K / PT-DW11K / PT-DZ10K

For details on projection distance (L1), and A1, A2, L2, L3 and L4 values, refer to "Projected image size and Projection distance" or "Projection distance formulas" in the Appendix.

- When using a projector other than one listed above

Please see "Setting up" in the operating instructions for the projector you are using.

■ Keystone distortion correction

When attaching this lens for use, regardless of the projector model, set up the projector so that the projected image is rectangular and the back of the projector and the screen are parallel.

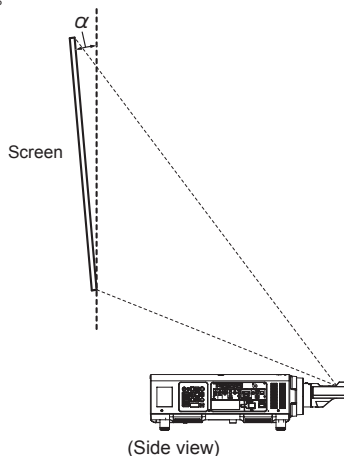
In addition, depending on the projector used, keystone distortion correction may be feasible after setup.

- When using one of PT-RZ31K / PT-RS30K / PT-RQ13K / PT-RZ12K / PT-RS11K / PT-DZ21K2 / PT-DS20K2 / PT-DW17K2 / PT-DZ16K2 / PT-DZ13K / PT-DS12K / PT-DZ10K

For keystone distortion in the vertical direction generated within the angle range below, select [MAIN MENU] → [POSITION] → [GEOMETRY] → [KEystone] → [VERTICAL KEystone] to perform correction.

Keystone distortion in the vertical direction greater than this angle and keystone distortion in the horizontal direction can be corrected but the projected image overall will no longer be in focus.

Correction feasible angle (α): 0 - 5°



- When using PT-DW11K

If keystone distortion in vertical direction or horizontal direction is corrected, the projected image overall will no longer be in focus. Set up the projector so that the projected image is rectangular and the back of the projector and the screen are parallel.

- When using a projector other than one listed above

Please see "Setting up" in the operating instructions for the projector you are using.

Lens position setup and focus adjustment

Lens position setup

Automatically return the lens to standard position using the projector.

The menu screens shown in these operating instructions are only provided as examples. Actual menu screens may vary with the specific model.

- When using PT-RZ31K / PT-RS30K / PT-RQ13K / PT-RZ12K / PT-RS11K / PT-DZ21K2 / PT-DS20K2 / PT-DW17K2 / PT-DZ16K2



- 1) Turn on the projector, and start projection.
- 2) Press the <DEFAULT> button on the remote control while the shift adjustment screen is displayed.

- The [HOME POSITION] screen is displayed.

- 3) Press ◀▶ to switch the item.

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

[NORMAL]	Moves the lens to the home position. Select this item when replacing or removing the projection lens. Select this item when the Fixed-focus Lens (Model No.: ET-D75LE50) is used for projection.
[D75LE95] or [D75LE90]*1	Moves the lens to the ET-D75LE95 lens standard position. Select this item when the Fixed-focus Lens (Model No.: ET-D75LE95) is used for projection.

*1: The items displayed will differ depending on the projector model.

- 4) Press the <ENTER> button.

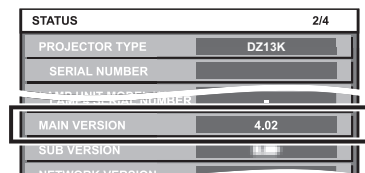
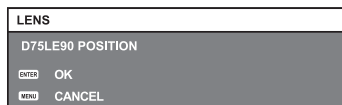
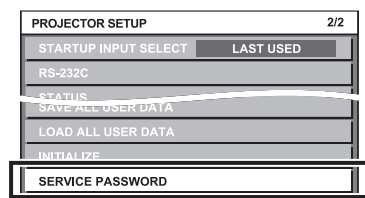
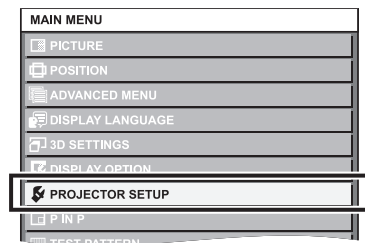
- [PROGRESS] is displayed in the [HOME POSITION] screen, and the lens position returns to the home position or the lens standard position.

Note

- Complete the operation within approximately 5 seconds after the [HOME POSITION] screen is displayed. The [HOME POSITION] screen will disappear after time limit.
- The home position of the lens is used when the lens is being replaced or when the projector is being stored, and it is not the optical center of the screen.
- You can also display the [HOME POSITION] screen by pressing the <LENS> button on the control panel or the <SHIFT> button on the remote control for at least three seconds.

Lens position setup and focus adjustment (continued)

- When using PT-DZ13K / PT-DS12K / PT-DW11K / PT-DZ10K



- 1) Turn on the projector to start the projection.
- 2) Press the <MENU> button to open the [MAIN MENU] screen. Then select [PROJECTOR SETUP] and press the <ENTER> button.
- 3) Select [SERVICE PASSWORD] in the [PROJECTOR SETUP] menu and press the <ENTER> button.
- 4) In the [SERVICE PASSWORD] entry screen, enter "7590" using the numeric buttons on the remote control and then press the <ENTER> button.
 - The [D75LE90 POSITION] screen appears.
- 5) Press the <ENTER> button in the [D75LE90 POSITION] screen.

- [PROGRESS] is displayed on the [D75LE90 POSITION] screen and lens position moves to the standard position for the ET-D75LE95.

Note

- When using the PT-DZ13K / PT-DS12K / PT-DW11K / PT-DZ10K, the [MAIN VERSION] of the projector firmware must be the version described below. Check the [MAIN VERSION] of the firmware on the [STATUS] screen and upgrade the firmware version of the projector as needed. *1

Projector	Main version
PT-DZ13K / PT-DS12K / PT-DW11K / PT-DZ10K	4.04 or higher

[STATUS] screen is displayed by selecting [Main Menu] → [PROJECTOR SETUP] → [STATUS] or by pressing the <STATUS> button on the remote control.

*1: See software download page on Panasonic website (<https://panasonic.net/cns/projector/pass/>). You must be a registered PASS user to use the site described above.

PASS: Panasonic Professional Display and Projector Technical Support Website

Note

- The lens position set here may not match the intended standard position exactly.
- The lens position set with this procedure will be used as the standard position. The lens position can be adjusted within the adjustment range described in "Adjustment range by the lens position shift (optical shift)" (Page 12), even after shifting to the standard position.
- Depending on the (OSD) display position on the menu screen, there are cases where the projected light is obstructed and a part of the menu is not displayed on the screen. In this case, open [MAIN MENU] → [DISPLAY OPTIONS] → [ON-SCREEN DISPLAY] → [OSD POSITION] and change settings so that the whole OSD menu can be seen.

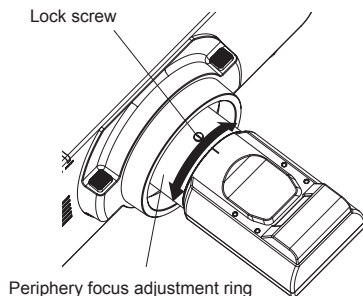
Lens position setup and focus adjustment (continued)

Focus Adjustment Function

After setting the lens position, adjust the focus.

The focal balance between the center and periphery of the projected image changes depending on the size of the projected image. The lens is equipped with a focus balance adjustment function for the screen periphery.

■ Adjusting the Focus



- 1) **Focus the center of the screen by operating the projector unit.**
- 2) **Loosen the lock screw and turn the periphery focus adjustment ring by hand as shown in the figure to the left to adjust the peripheral focus on the screen.**
- 3) **Again check focus at the center of the screen and use the projector controls to make fine adjustments.**
- 4) **Tighten the lock screw.**
 - The periphery focus adjustment ring is locked.

Note

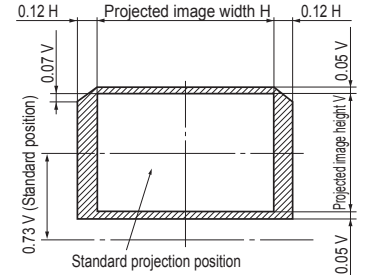
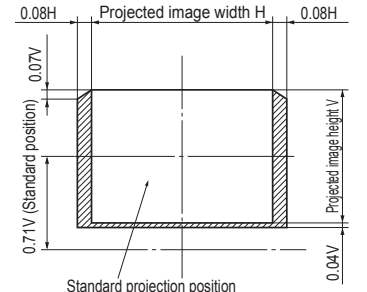
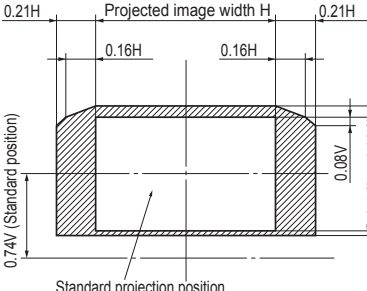
- The projected image sizes (inches) shown on the periphery focus adjustment ring are approximate guides.

Adjustment range by the lens position shift (optical shift)

Even after setting the lens position using "Lens position setup" noted on pages 9 and 10, the projection position can be adjusted within respective ranges using the optical axis shift function on the projector based on the projected image position for this lens position.

Perform the lens position shift within the adjustment range.

The focus may change when the lens position is shifted out of the adjustment range.

PT-RZ31K / PT-RZ12K	 Diagram showing the projected image width H and height V for PT-RZ31K / PT-RZ12K. The standard projection position is indicated. The adjustment range for width is $0.12H$ on both sides. The adjustment range for height is $0.07V$ on the top and $0.05V$ on the bottom. The total height is $0.73V$ (Standard position).
PT-RS30K / PT-RS11K	 Diagram showing the projected image width H and height V for PT-RS30K / PT-RS11K. The standard projection position is indicated. The adjustment range for width is $0.08H$ on both sides. The adjustment range for height is $0.07V$ on the top and $0.04V$ on the bottom. The total height is $0.71V$ (Standard position).
PT-RQ13K	 Diagram showing the projected image width H and height V for PT-RQ13K. The standard projection position is indicated. The adjustment range for width is $0.21H$ on both sides. The adjustment range for height is $0.16H$ on the top and $0.08V$ on the bottom. The total height is $0.74V$ (Standard position).

Adjustment range by the lens position shift (optical shift) (continued)

PT-DZ21K2 / PT-DZ13K / PT-DZ10K	0.12H Projected image width H 0.12H 0.07V Projected image height V 0.74V (Standard position) Standard projection position
PT-DZ16K2	0.19H Projected image width H 0.19H 0.06H 0.06H 0.08V Projected image height V 0.75V (Standard position) Standard projection position
PT-DS20K2 / PT-DS12K	0.08H Projected image width H 0.08H 0.07V Projected image height V 0.71V (Standard position) Standard projection position
PT-DW17K2 / PT-DW11K	0.30H Projected image width H 0.30H 0.16H 0.16H 0.09V Projected image height V 0.78V (Standard position) Standard projection position

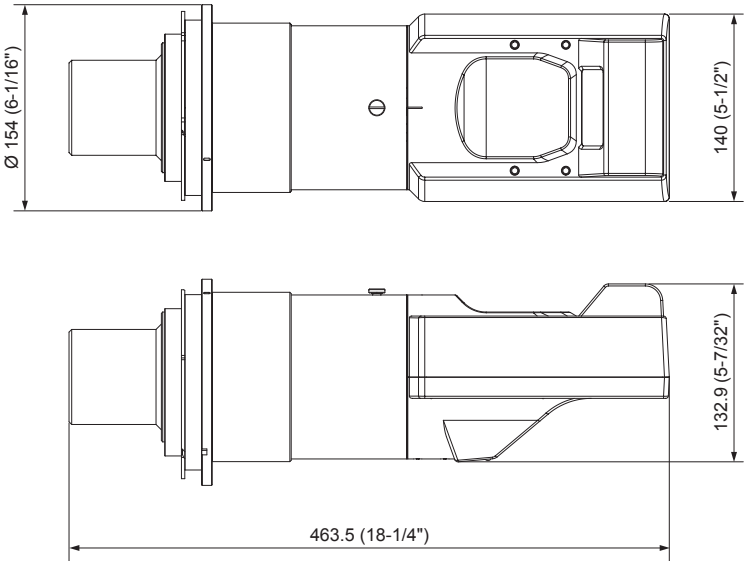
- When using a projector other than one listed above
Please see "Projecting" in the operating instructions for the projector you are using.

Specifications

F value	2.5
Focal Length (f)	7.5 mm (9/32")
Dimensions	Width 154 mm (6-1/16") Height 154 mm (6-1/16") Depth 463.5 mm (18-1/4")
Net Weight	Approx. 5.7 kg (12.57 lb)

Dimensions

(Unit: mm)



Panasonic Corporation

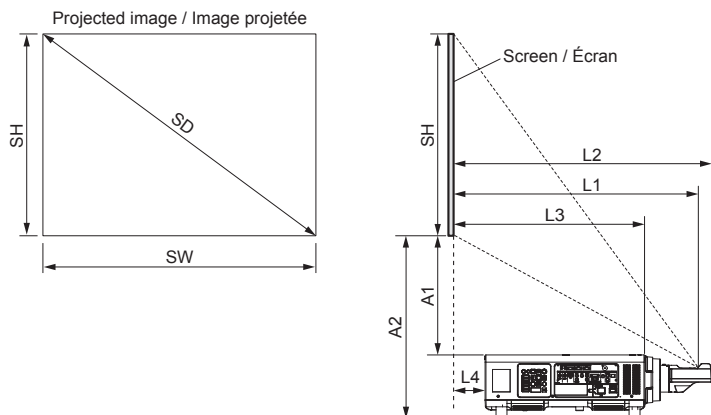
Web Site : <https://panasonic.net/cns/projector/>
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Appendix / Annexe

■ Dimensional relationship ■ Relations dimensionnelles

The dimensional relationship between the screen and the projector is shown below.
Les relations dimensionnelles entre l'écran et le projecteur sont indiquées ci-dessous.



SH	Projected image height / Hauteur de l'image projetée
SW	Projected image width / Largeur de l'image projetée
SD	Diagonal length of the projected image / Diagonale de la zone de projection
L1	Projection distance (from screen to mirror reflective surface*) Distance de projection (de l'écran à la surface réfléchissante du miroir*)
L2	Screen to lens front end / De l'écran à l'extrémité avant de l'objectif
L3	Screen to projector front end / De l'écran à l'extrémité avant du projecteur
L4	Screen to projector rear end / De l'écran à l'extrémité arrière du projecteur
A1	Bottom edge of the screen to the top of the projector / Du bord inférieur de l'écran au sommet du projecteur
A2	Bottom edge of the screen to the bottom of the projector / Du bord inférieur de l'écran à la base du projecteur

* The mirror reflective surface is inside the fixed-focus lens, and is not visible from the outside.

* La surface réfléchissante du miroir se trouve à l'intérieur de l'objectif à focale fixe, et n'est pas visible de l'extérieur.

● Projected image size and Projection distance ● Taille de l'image projetée et Distance de projection

Note

- When using projector models other than the following, refer to "Setting up" in the operating instructions of the projector.

Remarque

- Lorsque vous utilisez des modèles de projecteur différents des modèles suivants, consultez "Installation" dans le mode d'emploi du projecteur.

Projectors / Projecteurs

PT-RZ31K / PT-RS30K / PT-RQ13K / PT-RZ12K / PT-RS11K / PT-DZ21K2 / PT-DS20K2 / PT-DW17K2 / PT-DZ16K2 / PT-DZ13K / PT-DS12K / PT-DW11K / PT-DZ10K

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.

● PT-RZ31K

(Unit / Unités : m)

When the screen aspect ratio is 16:10 (Throw ratio : [0.36:1]) Lorsque le rapport d'aspect de l'écran est 16:10 (Rapport de projection : [0.36:1])					
SD	SH	SW	L1	L4	A1
3.05 (120")	1.615	2.585	0.94	-0.39	0.17-0.33
3.81 (150")	2.019	3.231	1.18	-0.16	0.24-0.44
5.08 (200")	2.692	4.308	1.56	0.23	0.37-0.63
6.35 (250")	3.365	5.385	1.95	0.61	0.49-0.82
7.62 (300")	4.039	6.462	2.33	1.00	0.62-1.02
8.89 (350")	4.712	7.539	2.72	1.38	0.74-1.21
10.16 (400")	5.385	8.616	3.10	1.77	0.86-1.40
12.70 (500")	6.731	10.770	3.87	2.54	1.11-1.78
15.24 (600")	8.077	12.923	4.64	3.31	1.36-2.16

When the screen aspect ratio is 16:9 (Throw ratio : [0.36:1]) Lorsque le rapport d'aspect de l'écran est 16:9 (Rapport de projection : [0.36:1])					
SD	SH	SW	L1	L4	A1
3.05 (120")	1.494	2.657	0.97	-0.36	0.18-0.43
3.81 (150")	1.868	3.321	1.21	-0.13	0.26-0.56
5.08 (200")	2.491	4.428	1.60	0.27	0.38-0.79
6.35 (250")	3.113	5.535	2.00	0.67	0.51-1.02
7.62 (300")	3.736	6.641	2.39	1.06	0.64-1.25
8.89 (350")	4.358	7.748	2.79	1.46	0.77-1.49
10.16 (400")	4.981	8.855	3.19	1.85	0.89-1.72
12.70 (500")	6.226	11.069	3.98	2.64	1.15-2.18
15.24 (600")	7.472	13.283	4.77	3.44	1.40-2.64

When the screen aspect ratio is 4:3 (Throw ratio : [0.44:1]) Lorsque le rapport d'aspect de l'écran est 4:3 (Rapport de projection : [0.44:1])					
SD	SH	SW	L1	L4	A1
3.05 (120")	1.829	2.438	1.07	-0.27	0.21-0.39
3.81 (150")	2.286	3.048	1.33	0.00	0.29-0.52
5.08 (200")	3.048	4.064	1.76	0.43	0.43-0.74
6.35 (250")	3.810	5.080	2.20	0.87	0.57-0.95
7.62 (300")	4.572	6.096	2.64	1.30	0.71-1.17
8.89 (350")	5.334	7.112	3.07	1.74	0.85-1.38
10.16 (400")	6.096	8.128	3.51	2.17	0.99-1.60
12.70 (500")	7.620	10.160	4.38	3.05	1.27-2.03
15.24 (600")	9.144	12.192	5.25	3.92	1.55-2.46

● PT-RS30K

(Unit / Unités : m)

When the screen aspect ratio is 4:3 (Throw ratio : [0.39:1]) Lorsque le rapport d'aspect de l'écran est 4:3 (Rapport de projection : [0.39:1])					
SD	SH	SW	L1	L4	A1
3.05 (120")	1.829	2.438	0.96	-0.37	0.18-0.25
3.81 (150")	2.286	3.048	1.20	-0.13	0.25-0.34
5.08 (200")	3.048	4.064	1.59	0.26	0.38-0.50
6.35 (250")	3.810	5.080	1.99	0.65	0.50-0.66
7.62 (300")	4.572	6.096	2.38	1.05	0.63-0.81
8.89 (350")	5.334	7.112	2.77	1.44	0.76-0.97
10.16 (400")	6.096	8.128	3.17	1.83	0.88-1.13
12.70 (500")	7.620	10.160	3.95	2.62	1.14-1.44
15.24 (600")	9.144	12.192	4.74	3.41	1.39-1.76

When the screen aspect ratio is 16:9 (Throw ratio : [0.39:1]) Lorsque le rapport d'aspect de l'écran est 16:9 (Rapport de projection : [0.39:1])					
SD	SH	SW	L1	L4	A1
3.05 (120")	1.494	2.657	1.05	-0.28	0.20-0.53
3.81 (150")	1.868	3.321	1.31	-0.03	0.29-0.70
5.08 (200")	2.491	4.428	1.73	0.40	0.43-0.97
6.35 (250")	3.113	5.535	2.16	0.83	0.56-1.25
7.62 (300")	3.736	6.641	2.59	1.26	0.70-1.52
8.89 (350")	4.358	7.748	3.02	1.69	0.84-1.79
10.16 (400")	4.981	8.855	3.45	2.11	0.98-2.07
12.70 (500")	6.226	11.069	4.30	2.97	1.25-2.62
15.24 (600")	7.472	13.283	5.16	3.83	1.53-3.17

When the screen aspect ratio is 16:10 (Throw ratio : [0.39:1]) Lorsque le rapport d'aspect de l'écran est 16:10 (Rapport de projection : [0.39:1])					
SD	SH	SW	L1	L4	A1
3.05 (120")	1.615	2.585	1.01	-0.01	0.19-0.42
3.81 (150")	2.019	3.231	1.26	0.24	0.27-0.56
5.08 (200")	2.692	4.308	1.67	0.65	0.41-0.79
6.35 (250")	3.365	5.385	2.08	1.07	0.54-1.01
7.62 (300")	4.039	6.462	2.50	1.48	0.67-1.24
8.89 (350")	4.712	7.539	2.91	1.89	0.81-1.47
10.16 (400")	5.385	8.616	3.32	2.30	0.94-1.70
12.70 (500")	6.731	10.770	4.15	3.13	1.21-2.15
15.24 (600")	8.077	12.923	4.97	3.95	1.47-2.61

When the screen aspect ratio is 16:9 (Throw ratio : [0.39:1]) Lorsque le rapport d'aspect de l'écran est 16:9 (Rapport de projection : [0.39:1])					
SD	SH	SW	L1	L4	A1
3.05 (120")	1.494	2.657	1.04	0.02	0.20-0.52
3.81 (150")	1.868	3.321	1.29	0.28	0.28-0.68
5.08 (200")	2.491	4.428	1.72	0.70	0.42-0.95
6.35 (250")	3.113	5.535	2.14	1.12	0.56-1.22
7.62 (300")	3.736	6.641	2.56	1.55	0.69-1.49
8.89 (350")	4.358	7.748	2.99	1.97	0.83-1.76
10.16 (400")	4.981	8.855	3.41	2.39	0.97-2.02
12.70 (500")	6.226	11.069	4.26	3.24	1.24-2.56
15.24 (600")	7.472	13.283	5.11	4.09	1.52-3.10

When the screen aspect ratio is 4:3 (Throw ratio : [0.47:1]) Lorsque le rapport d'aspect de l'écran est 4:3 (Rapport de projection : [0.47:1])					
SD	SH	SW	L1	L4	A1
3.05 (120")	1.829	2.438	1.14	0.12	0.23-0.49
3.81 (150")	2.286	3.048	1.42	0.40	0.33-0.65
5.08 (200")	3.048	4.064	1.89	0.87	0.48-0.91
6.35 (250")	3.810	5.080	2.36	1.34	0.63-1.16
7.62 (300")	4.572	6.096	2.82	1.81	0.78-1.42
8.89 (350")	5.334	7.112	3.29	2.27	0.93-1.68
10.16 (400")	6.096	8.128	3.76	2.74	1.08-1.94
12.70 (500")	7.620	10.160	4.69	3.67	1.38-2.46
15.24 (600")	9.144	12.192	5.62	4.61	1.68-2.97

When the screen aspect ratio is 16:10 (Throw ratio : [0.36:1])

Lorsque le rapport d'aspect de l'écran est 16:10 (Rapport de projection : [0.36:1])

SD	SH	SW	L1	L4	A1
3.05 (120")	1.615	2.585	0.94	-0.07	0.17-0.33
3.81 (150")	2.019	3.231	1.18	0.16	0.24-0.44
5.08 (200")	2.692	4.308	1.56	0.54	0.37-0.63
6.35 (250")	3.365	5.385	1.95	0.93	0.49-0.82
7.62 (300")	4.039	6.462	2.33	1.31	0.62-1.02
8.89 (350")	4.712	7.539	2.72	1.70	0.74-1.21
10.16 (400")	5.385	8.616	3.10	2.08	0.86-1.40
12.70 (500")	6.731	10.770	3.87	2.85	1.11-1.78
15.24 (600")	8.077	12.923	4.64	3.62	1.36-2.16

When the screen aspect ratio is 16:9 (Throw ratio : [0.36:1])

Lorsque le rapport d'aspect de l'écran est 16:9 (Rapport de projection : [0.36:1])

SD	SH	SW	L1	L4	A1
3.05 (120")	1.494	2.657	0.97	-0.05	0.18-0.43
3.81 (150")	1.868	3.321	1.21	0.19	0.26-0.56
5.08 (200")	2.491	4.428	1.60	0.59	0.38-0.79
6.35 (250")	3.113	5.535	2.00	0.98	0.51-1.02
7.62 (300")	3.736	6.641	2.39	1.38	0.64-1.25
8.89 (350")	4.358	7.748	2.79	1.77	0.77-1.49
10.16 (400")	4.981	8.855	3.19	2.17	0.89-1.72
12.70 (500")	6.226	11.069	3.98	2.96	1.15-2.18
15.24 (600")	7.472	13.283	4.77	3.75	1.40-2.64

When the screen aspect ratio is 4:3 (Throw ratio : [0.44:1])

Lorsque le rapport d'aspect de l'écran est 4:3 (Rapport de projection : [0.44:1])

SD	SH	SW	L1	L4	A1
3.05 (120")	1.829	2.438	1.07	0.05	0.21-0.39
3.81 (150")	2.286	3.048	1.33	0.31	0.29-0.52
5.08 (200")	3.048	4.064	1.76	0.75	0.43-0.74
6.35 (250")	3.810	5.080	2.20	1.18	0.57-0.95
7.62 (300")	4.572	6.096	2.64	1.62	0.71-1.17
8.89 (350")	5.334	7.112	3.07	2.05	0.85-1.38
10.16 (400")	6.096	8.128	3.51	2.49	0.99-1.60
12.70 (500")	7.620	10.160	4.38	3.36	1.27-2.03
15.24 (600")	9.144	12.192	5.25	4.23	1.55-2.46

When the screen aspect ratio is 4:3 (Throw ratio : [0.39:1]) Lorsque le rapport d'aspect de l'écran est 4:3 (Rapport de projection : [0.39:1])					
SD	SH	SW	L1	L4	A1
3.05 (120")	1.829	2.438	0.96	-0.05	0.18-0.25
3.81 (150")	2.286	3.048	1.20	0.18	0.25-0.34
5.08 (200")	3.048	4.064	1.59	0.58	0.38-0.50
6.35 (250")	3.810	5.080	1.99	0.97	0.50-0.66
7.62 (300")	4.572	6.096	2.38	1.36	0.63-0.81
8.89 (350")	5.334	7.112	2.77	1.76	0.76-0.97
10.16 (400")	6.096	8.128	3.17	2.15	0.88-1.13
12.70 (500")	7.620	10.160	3.95	2.94	1.14-1.44
15.24 (600")	9.144	12.192	4.74	3.72	1.39-1.76

When the screen aspect ratio is 16:9 (Throw ratio : [0.39:1]) Lorsque le rapport d'aspect de l'écran est 16:9 (Rapport de projection : [0.39:1])					
SD	SH	SW	L1	L4	A1
3.05 (120")	1.494	2.657	1.05	0.03	0.20-0.53
3.81 (150")	1.868	3.321	1.31	0.29	0.29-0.70
5.08 (200")	2.491	4.428	1.73	0.72	0.43-0.97
6.35 (250")	3.113	5.535	2.16	1.15	0.56-1.25
7.62 (300")	3.736	6.641	2.59	1.57	0.70-1.52
8.89 (350")	4.358	7.748	3.02	2.00	0.84-1.79
10.16 (400")	4.981	8.855	3.45	2.43	0.98-2.07
12.70 (500")	6.226	11.069	4.30	3.29	1.25-2.62
15.24 (600")	7.472	13.283	5.16	4.14	1.53-3.17

●PT-DZ21K2 / PT-DZ13K / PT-DZ10K

(Unit / Unités : m)

When the screen aspect ratio is 16:10 (Throw ratio : [0.36:1]) Lorsque le rapport d'aspect de l'écran est 16:10 (Rapport de projection : [0.36:1])							
SD	SH	SW	L1	L4		A1	
				PT-DZ21K2	PT-DZ13K / PT-DZ10K	PT-DZ21K2	PT-DZ13K / PT-DZ10K
3.05 (120")	1.615	2.585	0.94	-0.08	0.11	0.14-0.34	0.15-0.36
3.81 (150")	2.019	3.231	1.18	0.15	0.34	0.20-0.46	0.21-0.47
5.08 (200")	2.692	4.308	1.56	0.54	0.73	0.30-0.65	0.32-0.66
6.35 (250")	3.365	5.385	1.95	0.92	1.11	0.40-0.84	0.42-0.85
7.62 (300")	4.039	6.462	2.33	1.31	1.50	0.51-1.03	0.52-1.04
8.89 (350")	4.712	7.539	2.72	1.69	1.88	0.61-1.22	0.63-1.23
10.16 (400")	5.385	8.616	3.10	2.08	2.27	0.72-1.41	0.73-1.42
12.70 (500")	6.731	10.770	3.87	2.85	3.04	0.92-1.79	0.94-1.81
15.24 (600")	8.077	12.923	4.64	3.62	3.81	1.13-2.17	1.14-2.19

When the screen aspect ratio is 16:9 (Throw ratio : [0.36:1]) Lorsque le rapport d'aspect de l'écran est 16:9 (Rapport de projection : [0.36:1])							
SD	SH	SW	L1	L4		A1	
				PT-DZ21K2	PT-DZ13K / PT-DZ10K	PT-DZ21K2	PT-DZ13K / PT-DZ10K
3.05 (120")	1.494	2.657	0.97	-0.05	0.14	0.14-0.44	0.16-0.45
3.81 (150")	1.868	3.321	1.21	0.19	0.38	0.21-0.58	0.22-0.59
5.08 (200")	2.491	4.428	1.60	0.58	0.77	0.31-0.81	0.33-0.82
6.35 (250")	3.113	5.535	2.00	0.98	1.17	0.42-1.04	0.44-1.05
7.62 (300")	3.736	6.641	2.39	1.37	1.56	0.53-1.27	0.54-1.28
8.89 (350")	4.358	7.748	2.79	1.77	1.96	0.64-1.50	0.65-1.51
10.16 (400")	4.981	8.855	3.19	2.16	2.35	0.74-1.73	0.76-1.74
12.70 (500")	6.226	11.069	3.98	2.96	3.15	0.96-2.19	0.97-2.20
15.24 (600")	7.472	13.283	4.77	3.75	3.94	1.17-2.65	1.19-2.66

When the screen aspect ratio is 4:3 (Throw ratio : [0.44:1]) Lorsque le rapport d'aspect de l'écran est 4:3 (Rapport de projection : [0.44:1])							
SD	SH	SW	L1	L4		A1	
				PT-DZ21K2	PT-DZ13K / PT-DZ10K	PT-DZ21K2	PT-DZ13K / PT-DZ10K
3.05 (120")	1.829	2.438	1.07	0.06	0.25	0.17-0.40	0.18-0.42
3.81 (150")	2.286	3.048	1.33	0.32	0.51	0.24-0.53	0.25-0.55
5.08 (200")	3.048	4.064	1.76	0.76	0.95	0.36-0.75	0.37-0.76
6.35 (250")	3.810	5.080	2.20	1.19	1.38	0.47-0.96	0.49-0.98
7.62 (300")	4.572	6.096	2.64	1.63	1.82	0.59-1.18	0.60-1.19
8.89 (350")	5.334	7.112	3.07	2.06	2.25	0.71-1.40	0.72-1.41
10.16 (400")	6.096	8.128	3.51	2.50	2.69	0.83-1.61	0.84-1.63
12.70 (500")	7.620	10.160	4.38	3.37	3.56	1.06-2.04	1.07-2.06
15.24 (600")	9.144	12.192	5.25	4.24	4.43	1.29-2.47	1.31-2.49

When the screen aspect ratio is 16:9 (Throw ratio : [0.36:1]) Lorsque le rapport d'aspect de l'écran est 16:9 (Rapport de projection : [0.36:1])					
SD	SH	SW	L1	L4	A1
3.05 (120")	1.494	2.657	0.97	-0.05	0.14-0.44
3.81 (150")	1.868	3.321	1.21	0.19	0.21-0.58
5.08 (200")	2.491	4.428	1.60	0.58	0.31-0.81
6.35 (250")	3.113	5.535	2.00	0.98	0.42-1.04
7.62 (300")	3.736	6.641	2.39	1.37	0.53-1.27
8.89 (350")	4.358	7.748	2.79	1.77	0.64-1.50
10.16 (400")	4.981	8.855	3.19	2.16	0.74-1.73
12.70 (500")	6.226	11.069	3.98	2.96	0.96-2.19
15.24 (600")	7.472	13.283	4.77	3.75	1.17-2.65

When the screen aspect ratio is 4:3 (Throw ratio : [0.48:1]) Lorsque le rapport d'aspect de l'écran est 4:3 (Rapport de projection : [0.48:1])					
SD	SH	SW	L1	L4	A1
3.05 (120")	1.829	2.438	1.18	0.16	0.20-0.56
3.81 (150")	2.286	3.048	1.47	0.45	0.28-0.73
5.08 (200")	3.048	4.064	1.96	0.94	0.41-1.01
6.35 (250")	3.810	5.080	2.44	1.42	0.54-1.30
7.62 (300")	4.572	6.096	2.93	1.90	0.67-1.58
8.89 (350")	5.334	7.112	3.41	2.39	0.80-1.86
10.16 (400")	6.096	8.128	3.89	2.87	0.94-2.14
12.70 (500")	7.620	10.160	4.86	3.84	1.20-2.71
15.24 (600")	9.144	12.192	5.83	4.81	1.46-3.27

When the screen aspect ratio is 4:3 (Throw ratio : [0.39:1])

Lorsque le rapport d'aspect de l'écran est 4:3 (Rapport de projection : [0.39:1])

SD	SH	SW	L1	L4		A1	
				PT-DS20K2	PT-DS12K	PT-DS20K2	PT-DS12K
3.05 (120")	1.829	2.438	0.96	-0.06	0.13	0.14-0.26	0.15-0.28
3.81 (150")	2.286	3.048	1.20	0.18	0.37	0.20-0.36	0.22-0.37
5.08 (200")	3.048	4.064	1.59	0.57	0.76	0.31-0.51	0.32-0.53
6.35 (250")	3.810	5.080	1.99	0.96	1.15	0.42-0.67	0.43-0.69
7.62 (300")	4.572	6.096	2.38	1.36	1.55	0.52-0.83	0.54-0.84
8.89 (350")	5.334	7.112	2.77	1.75	1.94	0.63-0.99	0.64-1.00
10.16 (400")	6.096	8.128	3.17	2.14	2.33	0.73-1.14	0.75-1.16
12.70 (500")	7.620	10.160	3.95	2.93	3.12	0.95-1.46	0.96-1.47
15.24 (600")	9.144	12.192	4.74	3.72	3.91	1.16-1.77	1.17-1.78

When the screen aspect ratio is 16:9 (Throw ratio : [0.39:1])

Lorsque le rapport d'aspect de l'écran est 16:9 (Rapport de projection : [0.39:1])

SD	SH	SW	L1	L4		A1	
				PT-DS20K2	PT-DS12K	PT-DS20K2	PT-DS12K
3.05 (120")	1.494	2.657	1.05	0.03	0.22	0.16-0.55	0.18-0.56
3.81 (150")	1.868	3.321	1.31	0.28	0.47	0.23-0.71	0.25-0.72
5.08 (200")	2.491	4.428	1.73	0.71	0.90	0.35-0.98	0.36-1.00
6.35 (250")	3.113	5.535	2.16	1.14	1.33	0.47-1.26	0.48-1.27
7.62 (300")	3.736	6.641	2.59	1.57	1.76	0.58-1.53	0.60-1.55
8.89 (350")	4.358	7.748	3.02	2.00	2.19	0.70-1.81	0.71-1.82
10.16 (400")	4.981	8.855	3.45	2.43	2.62	0.81-2.08	0.83-2.10
12.70 (500")	6.226	11.069	4.30	3.28	3.47	1.04-2.63	1.06-2.65
15.24 (600")	7.472	13.283	5.16	4.14	4.33	1.28-3.18	1.29-3.20

● PT-DW17K2 / PT-DW11K

(Unit / Unités : m)

When the screen aspect ratio is 16:9 (Throw ratio : [0.40:1]) Lorsque le rapport d'aspect de l'écran est 16:9 (Rapport de projection : [0.40:1])							
SD	SH	SW	L1	L4		A1	
				PT-DW17K2	PT-DW11K	PT-DW17K2	PT-DW11K
3.05 (120")	1.494	2.657	1.07	0.05	0.24	0.17–0.58	0.18–0.60
3.81 (150")	1.868	3.321	1.34	0.32	0.51	0.24–0.76	0.26–0.77
5.08 (200")	2.491	4.428	1.78	0.75	0.94	0.36–1.05	0.37–1.06
6.35 (250")	3.113	5.535	2.22	1.19	1.38	0.48–1.34	0.49–1.35
7.62 (300")	3.736	6.641	2.66	1.63	1.82	0.60–1.63	0.61–1.64
8.89 (350")	4.358	7.748	3.09	2.07	2.26	0.71–1.92	0.73–1.93
10.16 (400")	4.981	8.855	3.53	2.51	2.70	0.83–2.21	0.85–2.22
12.70 (500")	6.226	11.069	4.41	3.39	3.58	1.07–2.79	1.08–2.80
15.24 (600")	7.472	13.283	5.29	4.27	4.46	1.31–3.37	1.32–3.38

When the screen aspect ratio is 4:3 (Throw ratio : [0.54:1]) Lorsque le rapport d'aspect de l'écran est 4:3 (Rapport de projection : [0.54:1])							
SD	SH	SW	L1	L4		A1	
				PT-DW17K2	PT-DW11K	PT-DW17K2	PT-DW11K
3.05 (120")	1.829	2.438	1.31	0.29	0.48	0.23–0.74	0.25–0.75
3.81 (150")	2.286	3.048	1.63	0.61	0.80	0.32–0.95	0.33–0.97
5.08 (200")	3.048	4.064	2.17	1.15	1.34	0.47–1.31	0.48–1.32
6.35 (250")	3.810	5.080	2.71	1.69	1.88	0.61–1.66	0.62–1.68
7.62 (300")	4.572	6.096	3.25	2.22	2.41	0.76–2.02	0.77–2.03
8.89 (350")	5.334	7.112	3.78	2.76	2.95	0.90–2.37	0.91–2.39
10.16 (400")	6.096	8.128	4.32	3.30	3.49	1.04–2.73	1.06–2.74
12.70 (500")	7.620	10.160	5.40	4.37	4.56	1.33–3.44	1.35–3.45
15.24 (600")	9.144	12.192	6.47	5.45	5.64	1.62–4.15	1.64–4.16

Note

- The listed projection distances involve an error of $\pm 5\%$.
- "GEOMETRY" and "VERTICAL KEYSTONE" tend to correct the projected image to a size that is smaller than regular size.
- Throw ratio is based on the value during projection onto a 3.81 m (150") screen.

Remarque

- Les distances de projection dans la liste implique une erreur de $\pm 5\%$.
- Le "GÉOMÉTRIE" et la "TRAPEZE VERTICAL" ont tendance à corriger l'image projetée à une taille inférieure à la taille normale.
- Le rapport de projection (throw) se base sur la valeur pendant la projection sur un écran de 3,81 m (150").

- Projection distance formulas
- Formules de distance de projection

If you are using a projection screen size not listed in these Operating Instructions, measure the diagonal screen size SD (m). Then use the calculation methods provided to determine projection distance (L1) and the distance from the top of the projector to the bottom edge of the screen (A1).

Establishing dimensions L1 and A1 allows you to calculate all other dimensions.

Note that the values obtained in the following calculations are approximations.

Si vous utilisez une taille d'écran de projection n'apparaissant pas dans la liste de ce mode d'emploi, mesurez la taille de l'écran en diagonale SD (m). Utilisez ensuite les méthodes de calcul fournies pour déterminer la distance de projection (L1) et la distance du sommet du projecteur au bord inférieur de l'écran (A1).

Établir les dimensions L1 et A1 vous permet de calculer toutes les autres dimensions.

Notez que les valeurs obtenues dans les calculs suivants sont des approximations.

- PT-RZ31K

(Unit / Unités : m)

Aspect ratio Rapport d'aspect	L1	A1	
		Min. / Mini	Max. / Maxi
16 : 10	= $0.303 \times SD + 0.020$	= $0.184 \times SH - 0.128$	= $0.283 \times SH - 0.128$
16 : 9	= $0.312 \times SD + 0.020$	= $0.205 \times SH - 0.128$	= $0.370 \times SH - 0.128$
4 : 3	= $0.343 \times SD + 0.020$	= $0.184 \times SH - 0.128$	= $0.283 \times SH - 0.128$

- PT-RS30K

Aspect ratio Rapport d'aspect	L1	A1	
		Min. / Mini	Max. / Maxi
4 : 3	= $0.310 \times SD + 0.020$	= $0.166 \times SH - 0.128$	= $0.206 \times SH - 0.128$
16 : 9	= $0.337 \times SD + 0.020$	= $0.222 \times SH - 0.128$	= $0.441 \times SH - 0.128$

- PT-RQ13K

Aspect ratio Rapport d'aspect	L1	A1	
		Min. / Mini	Max. / Maxi
16 : 10	= $0.325 \times SD + 0.020$	= $0.198 \times SH - 0.128$	= $0.339 \times SH - 0.128$
16 : 9	= $0.334 \times SD + 0.020$	= $0.220 \times SH - 0.128$	= $0.432 \times SH - 0.128$
4 : 3	= $0.368 \times SD + 0.020$	= $0.198 \times SH - 0.128$	= $0.339 \times SH - 0.128$

- PT-RZ12K

Aspect ratio Rapport d'aspect	L1	A1	
		Min. / Mini	Max. / Maxi
16 : 10	= $0.303 \times SD + 0.020$	= $0.184 \times SH - 0.128$	= $0.283 \times SH - 0.128$
16 : 9	= $0.312 \times SD + 0.020$	= $0.205 \times SH - 0.128$	= $0.370 \times SH - 0.128$
4 : 3	= $0.343 \times SD + 0.020$	= $0.184 \times SH - 0.128$	= $0.283 \times SH - 0.128$

- PT-RS11K

Aspect ratio Rapport d'aspect	L1	A1	
		Min. / Mini	Max. / Maxi
4 : 3	= $0.310 \times SD + 0.020$	= $0.166 \times SH - 0.128$	= $0.206 \times SH - 0.128$
16 : 9	= $0.337 \times SD + 0.020$	= $0.222 \times SH - 0.128$	= $0.441 \times SH - 0.128$

● PT-DZ21K2 / PT-DZ13K / PT-DZ10K

(Unit / Unités : m)

	Aspect ratio Rapport d'aspect	L1	A1	
			Min. / Mini	Max. / Maxi
PT-DZ21K2	16 : 10	$= 0.303 \times SD + 0.020$	$= 0.154 \times SH - 0.114$	$= 0.283 \times SH - 0.114$
PT-DZ13K / PT-DZ10K			$= 0.154 \times SH - 0.100$	$= 0.283 \times SH - 0.100$
PT-DZ21K2	16 : 9	$= 0.312 \times SD + 0.020$	$= 0.172 \times SH - 0.114$	$= 0.370 \times SH - 0.114$
PT-DZ13K / PT-DZ10K			$= 0.172 \times SH - 0.100$	$= 0.370 \times SH - 0.100$
PT-DZ21K2	4 : 3	$= 0.343 \times SD + 0.020$	$= 0.154 \times SH - 0.114$	$= 0.283 \times SH - 0.114$
PT-DZ13K / PT-DZ10K			$= 0.154 \times SH - 0.100$	$= 0.283 \times SH - 0.100$

● PT-DZ16K2

Aspect ratio Rapport d'aspect	L1	A1	
		Min. / Mini	Max. / Maxi
16 : 9	$= 0.312 \times SD + 0.020$	$= 0.172 \times SH - 0.114$	$= 0.370 \times SH - 0.114$
4 : 3	$= 0.381 \times SD + 0.020$	$= 0.172 \times SH - 0.114$	$= 0.370 \times SH - 0.114$

● PT-DS20K2 / PT-DS12K

	Aspect ratio Rapport d'aspect	L1	A1	
			Min. / Mini	Max. / Maxi
PT-DS20K2	4 : 3	$= 0.310 \times SD + 0.020$	$= 0.139 \times SH - 0.114$	$= 0.206 \times SH - 0.114$
PT-DS12K			$= 0.206 \times SH - 0.100$	
PT-DS20K2	16 : 9	$= 0.337 \times SD + 0.020$	$= 0.186 \times SH - 0.114$	$= 0.441 \times SH - 0.114$
PT-DS12K			$= 0.186 \times SH - 0.100$	$= 0.441 \times SH - 0.100$

● PT-DW17K2 / PT-DW11K

	Aspect ratio Rapport d'aspect	L1	A1	
			Min. / Mini	Max. / Maxi
PT-DW17K2	16 : 9	$= 0.346 \times SD + 0.020$	$= 0.190 \times SH - 0.114$	$= 0.466 \times SH - 0.114$
PT-DW11K			$= 0.190 \times SH - 0.100$	$= 0.466 \times SH - 0.100$
PT-DW17K2	4 : 3	$= 0.423 \times SD + 0.020$	$= 0.190 \times SH - 0.114$	$= 0.466 \times SH - 0.114$
PT-DW11K			$= 0.190 \times SH - 0.100$	$= 0.466 \times SH - 0.100$

● **Calculation method for L2, L3, L4 and A2**
Méthode de calcul pour L2, L3, L4 et A2

(Unit / Unités : m)

	L2	L3	L4	A2
PT-RZ31K / PT-RS30K	$= L1 + 0.0287$	$= L1 - 0.262$	$= L1 - 1.332$	$= A1 + 0.419$
PT-RQ13K / PT-RZ12K / PT-RS11K	$= L1 + 0.0287$	$= L1 - 0.292$	$= L1 - 1.017$	$= A1 + 0.324$
PT-DZ21K2 / PT-DS20K2 / PT-DW17K2 / PT-DZ16K2			$= L1 - 1.022$	$= A1 + 0.291$
PT-DZ13K / PT-DS12K / PT-DW11K / PT-DZ10K			$= L1 - 0.832$	$= A1 + 0.200$

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