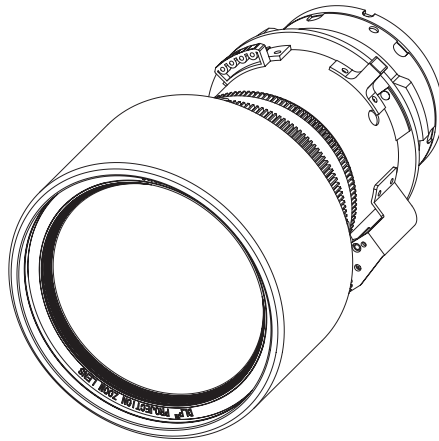


Panasonic®

Operating Instructions

Zoom Lens **Commercial Use**

Model No. **ET-DLE170**



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:

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.
- In addition, turn off the power and switch off the main power when you are away from the 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 an object, or malfunction of the 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

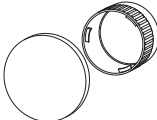
PT-RZ970 / PT-RW930 / PT-RX110 / PT-RZ770 / PT-RW730 / PT-RZ660 / PT-RW620 /
PT-RZ670 / PT-RW630 / PT-DZ870 / PT-DW830 / PT-DX100 / PT-DZ780 / PT-DW750 / PT-DX820

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.

Supplied Accessories

Make sure that the following has been provided.

Part name	Appearance (quantity)
Lens cover	 <p>(The product is delivered with a lens cap attached.)</p> <p>1 each</p>

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

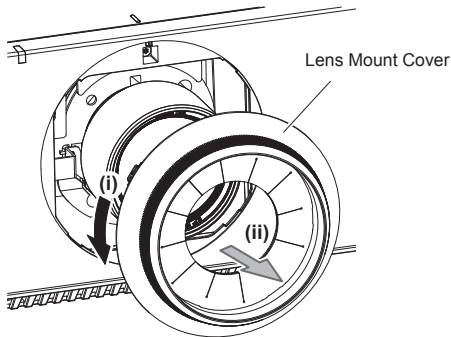
- Make sure that the projector power supply is switched off before attaching or detaching the projection lens.
- After removing the projection lens, store it safely away from vibration or impacts.
- Do not touch the electric contact points of the projection lens with your fingers. Dust and dirt on the contacts may cause contact malfunctions.
- 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 lens.
Do not use fluffy cloths containing oil, water or dust for cleaning. The material in the lens is easily damaged, so do not apply excessive pressure when wiping it.

Attaching the Lens / Detaching the Lens (continued)

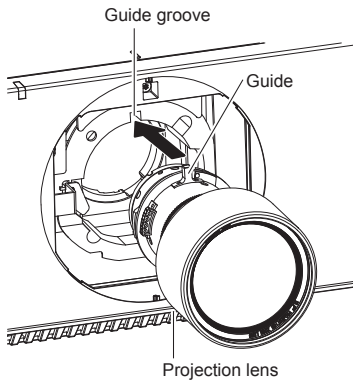
Attaching the Lens

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.

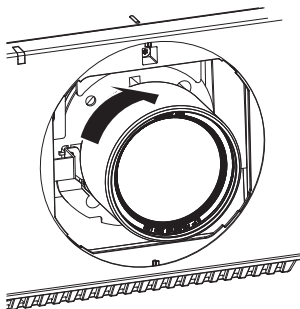


- 1) **Remove the Lens Mount Cover, and align the projection lens guide to the guide groove of the projector and insert to the end.**

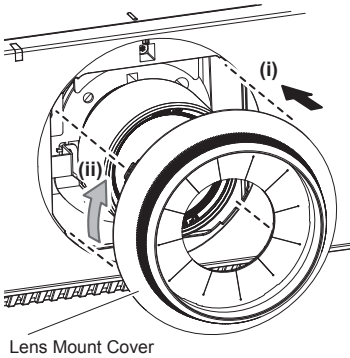


- 2) **Turn the projection lens clockwise until it clicks.**

- Turn the projection lens counterclockwise to confirm that it does not come out.



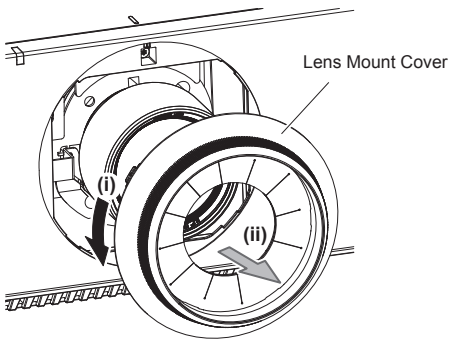
Attaching the Lens / Detaching the Lens (continued)



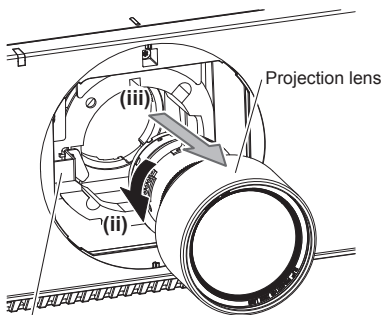
3) Attach the Lens Mount Cover.

- Align the Lens Mount Cover and the projector at the dashed line positions in the figure to attach, and turn the Lens Mount Cover clockwise to fix it to the projector.

Detaching the Lens



1) Turn the Lens Mount Cover counterclockwise and remove.



2) While pressing the lens release button, turn the projection lens counterclockwise to the end and remove.

Attention

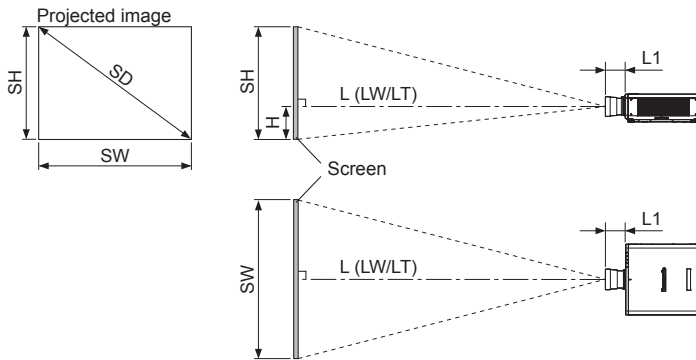
- Store the removed projection lens where it will be free from vibration and impact.

(i) Lens release button

Projection relationships

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

Dimensional relationship diagram



(Unit: m)

Projection lens Model No.	Dimension for L1 (approximate value)
PT-RZ970 / PT-RW930 / PT-RX110 / PT-RZ770 / PT-RW730 / PT-RZ660 / PT-RW620 / PT-RZ670 / PT-RW630 / PT-DZ870 / PT-DW830 / PT-DX100	0.043
PT-DZ780 / PT-DW750 / PT-DX820	0.023

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		Image height
H		Distance from the lens center to the lower edge of the projected image
SW		Image width
SD		Projected image size

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.

Attention

- To prevent blocking of the intake and exhaust vents, maintain clearances from walls and objects of at least 1 000 mm (3'3") for the exhaust vent and at least 500 mm (1'8") for the intake vent.
- Avoid setting up in places which are subject to sudden temperature changes, such as near an air conditioner or lighting equipment (studio lamps, etc.).

Projection relationships (continued)

■ 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.

PT-RZ970 / PT-RW930 / PT-RX110 / PT-RZ770 / PT-RW730 / PT-RZ660 / PT-RW620 / PT-RZ670 / PT-RW630 / PT-DZ870 / PT-DW830 / PT-DX100 / PT-DZ780 / PT-DW750 / PT-DX820

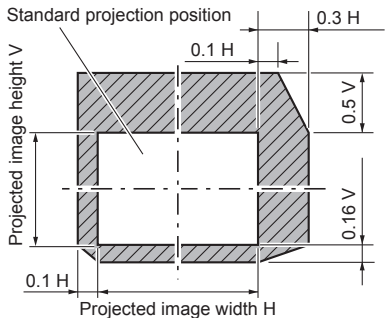
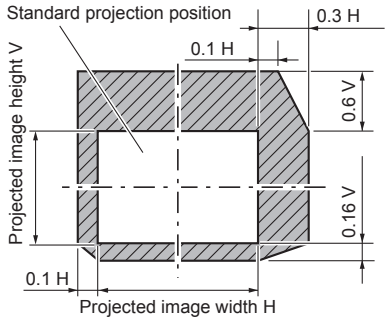
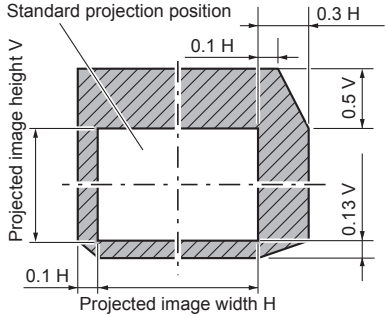
Adjustment range by the lens position shift (optical shift)

Perform the lens position shift within the adjustment range.

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

This is because the movement of the lens is restricted to protect the optical parts.

Projection position can be adjusted with the optical axis shift based on the home position in the respective range.

<p>PT-RZ970 / PT-RZ670 / PT-DZ780</p>	 <p>Standard projection position</p> <p>Projected image height V</p> <p>Projected image width H</p> <p>0.1 H</p> <p>0.1 H</p> <p>0.3 H</p> <p>0.5 V</p> <p>0.16 V</p>
<p>PT-RW930 / PT-RW630 / PT-DW750</p>	 <p>Standard projection position</p> <p>Projected image height V</p> <p>Projected image width H</p> <p>0.1 H</p> <p>0.1 H</p> <p>0.3 H</p> <p>0.6 V</p> <p>0.16 V</p>
<p>PT-RX110 / PT-DX820</p>	 <p>Standard projection position</p> <p>Projected image height V</p> <p>Projected image width H</p> <p>0.1 H</p> <p>0.1 H</p> <p>0.3 H</p> <p>0.5 V</p> <p>0.13 V</p>

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

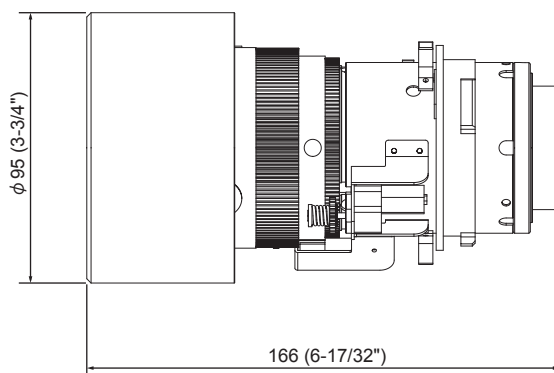
<p>PT-DZ870</p>	<p>Standard projection position</p> <p>Projection screen height V</p> <p>Projection screen width H</p> <p>$0.1 H$</p> <p>$0.5 V$</p>
<p>PT-DW830</p>	<p>Standard projection position</p> <p>Projection screen height V</p> <p>Projection screen width H</p> <p>$0.1 H$</p> <p>$0.6 V$</p>
<p>PT-DX100</p>	<p>Standard projection position</p> <p>Projection screen height V</p> <p>Projection screen width H</p> <p>$0.1 H$</p> <p>$0.5 V$</p>

Specifications

F value	1.7 - 1.9
Focal Length (f)	25.6 mm (1") - 35.7 mm (1-13/32")
Dimensions	Width 95 mm (3-3/4") Height 95 mm (3-3/4") Depth 166 mm (6-17/32")
Net Weight	Approx. 0.9 kg (2 lb)

Dimensions

(Unit: mm)



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

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

Information on Disposal in other Countries outside the European Union

This symbol is only valid in the European Union.

If you wish to discard this product, please contact your local authorities or dealer and ask for the correct method of disposal.

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 yasayla belirlenmiş olan uygun toplama merkezlerine teslim ediniz.

Bu atıkların doğru işlenmesiyle, 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 yasayla belirlenmiş olan cezalara sebebiyet verebilir.

Panasonic Corporation

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

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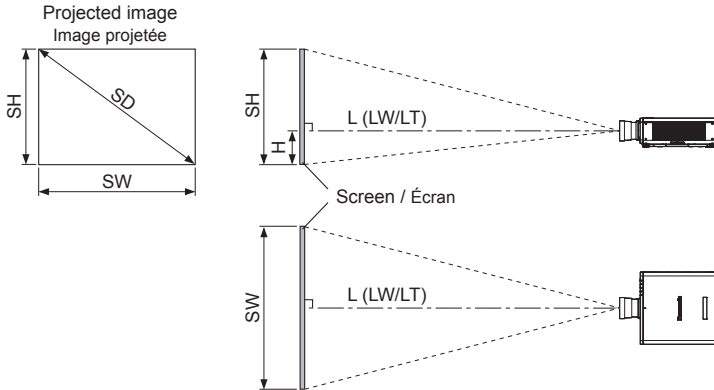
HS0716AM1047 -PS

Printed in Japan

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.



L		Projection distance / Distance de projection
	LW	Minimum distance / Distance minimale
	LT	Maximum distance / Distance maximale
SH		Image height / Hauteur d'image
H		Distance from the lens center to the lower edge of the projected image Distance du centre de l'objectif au bord inférieur de l'image projetée
SW		Image width / Largeur d'image
SD		Projected image size / Taille de l'image projetée

- 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.
In addition, be sure to check the diagonal screen size SD (m), and use the "Projection distance formulas" (👁️ Appendix page 6) to determine the projection distance (L).

Remarque

- Lorsque vous utilisez des modèles de projecteur différents des modèles suivants, consultez "Installation" dans le mode d'emploi du projecteur.
De plus, assurez-vous de vérifier la taille de l'écran en diagonale SD (m) et d'utiliser la "Formules de distance de projection" (👁️ Annexe page 6) pour déterminer la distance de projection (L).

Projectors / Projecteurs

PT-RZ970 / PT-RW930 / PT-RX110 / PT-RZ770 / PT-RW730 / PT-RZ660 / PT-RW620 / PT-RZ670 / PT-RW630 / PT-DZ870 / PT-DW830 / PT-DX100 / PT-DZ780 / PT-DW750 / PT-DX820
--

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-RZ970 / PT-RZ770 / PT-RZ660 / PT-RZ670 / PT-DZ780**

(Unit / Unités : m)

When the screen aspect ratio is 16:10 Lorsque le rapport d'aspect de l'écran est 16:10					
SD	SH	SW	L		H
			LW	LT	
1.27 (50")	0.673	1.077	1.82	2.57	0 - 0.44
1.52 (60")	0.808	1.292	2.20	3.10	0 - 0.53
1.78 (70")	0.942	1.508	2.58	3.63	0 - 0.62
2.03 (80")	1.077	1.723	2.95	4.16	0 - 0.71
2.29 (90")	1.212	1.939	3.33	4.69	0 - 0.80
2.54 (100")	1.346	2.154	3.71	5.21	0 - 0.89
3.05 (120")	1.615	2.585	4.47	6.27	0 - 1.07
3.81 (150")	2.019	3.231	5.60	7.86	0 - 1.33
5.08 (200")	2.692	4.308	7.50	10.50	0 - 1.78
6.35 (250")	3.365	5.385	9.39	13.14	0 - 2.22
7.62 (300")	4.039	6.462	11.28	15.79	0 - 2.67
8.89 (350")	4.712	7.539	13.18	18.43	0 - 3.11
10.16 (400")	5.385	8.616	15.07	21.07	0 - 3.55
12.70 (500")	6.731	10.770	18.86	26.36	0 - 4.44
15.24 (600")	8.077	12.923	22.64	31.65	0 - 5.33

● **PT-DZ870**

(Unit / Unités : m)

When the screen aspect ratio is 16:10 Lorsque le rapport d' aspect de l'écran est 16:10					
SD	SH	SW	L		H
			LW	LT	
1.27 (50")	0.673	1.077	1.82	2.57	0 - 0.34
1.52 (60")	0.808	1.292	2.20	3.10	0 - 0.40
1.78 (70")	0.942	1.508	2.58	3.63	0 - 0.47
2.03 (80")	1.077	1.723	2.95	4.16	0 - 0.54
2.29 (90")	1.212	1.939	3.33	4.69	0 - 0.61
2.54 (100")	1.346	2.154	3.71	5.21	0 - 0.67
3.05 (120")	1.615	2.585	4.47	6.27	0 - 0.81
3.81 (150")	2.019	3.231	5.60	7.86	0 - 1.01
5.08 (200")	2.692	4.308	7.50	10.50	0 - 1.35
6.35 (250")	3.365	5.385	9.39	13.14	0 - 1.68
7.62 (300")	4.039	6.462	11.28	15.79	0 - 2.02
8.89 (350")	4.712	7.539	13.18	18.43	0 - 2.36
10.16 (400")	5.385	8.616	15.07	21.07	0 - 2.69
12.70 (500")	6.731	10.770	18.86	26.36	0 - 3.37
15.24 (600")	8.077	12.923	22.64	31.65	0 - 4.04

● **PT-RW930 / PT-RW730 / PT-RW620 / PT-RW630 / PT-DW750**

(Unit / Unités : m)

When the screen aspect ratio is 16:10 Lorsque le rapport d' aspect de l'écran est 16:10					
SD	SH	SW	L		H
			LW	LT	
1.27 (50")	0.673	1.077	1.91	2.70	-0.07 - 0.44
1.52 (60")	0.808	1.292	2.31	3.26	-0.08 - 0.53
1.78 (70")	0.942	1.508	2.71	3.81	-0.09 - 0.62
2.03 (80")	1.077	1.723	3.11	4.37	-0.11 - 0.71
2.29 (90")	1.212	1.939	3.50	4.92	-0.12 - 0.80
2.54 (100")	1.346	2.154	3.90	5.48	-0.13 - 0.89
3.05 (120")	1.615	2.585	4.70	6.59	-0.16 - 1.07
3.81 (150")	2.019	3.231	5.89	8.25	-0.20 - 1.33
5.08 (200")	2.692	4.308	7.88	11.03	-0.27 - 1.78
6.35 (250")	3.365	5.385	9.86	13.81	-0.34 - 2.22
7.62 (300")	4.039	6.462	11.85	16.58	-0.40 - 2.67
8.89 (350")	4.712	7.539	13.84	19.36	-0.47 - 3.11
10.16 (400")	5.385	8.616	15.83	22.13	-0.54 - 3.55
12.70 (500")	6.731	10.770	19.80	27.68	-0.67 - 4.44
15.24 (600")	8.077	12.923	23.78	33.23	-0.81 - 5.33

● **PT-DW830**

(Unit / Unités : m)

When the screen aspect ratio is 16:10 Lorsque le rapport d' aspect de l'écran est 16:10					
SD	SH	SW	L		H
			LW	LT	
1.27 (50")	0.673	1.077	1.91	2.70	-0.07 - 0.34
1.52 (60")	0.808	1.292	2.31	3.26	-0.08 - 0.40
1.78 (70")	0.942	1.508	2.71	3.81	-0.09 - 0.47
2.03 (80")	1.077	1.723	3.11	4.37	-0.11 - 0.54
2.29 (90")	1.212	1.939	3.50	4.92	-0.12 - 0.61
2.54 (100")	1.346	2.154	3.90	5.48	-0.13 - 0.67
3.05 (120")	1.615	2.585	4.70	6.59	-0.16 - 0.81
3.81 (150")	2.019	3.231	5.89	8.25	-0.20 - 1.01
5.08 (200")	2.692	4.308	7.88	11.03	-0.27 - 1.35
6.35 (250")	3.365	5.385	9.86	13.81	-0.34 - 1.68
7.62 (300")	4.039	6.462	11.85	16.58	-0.40 - 2.02
8.89 (350")	4.712	7.539	13.84	19.36	-0.47 - 2.36
10.16 (400")	5.385	8.616	15.83	22.13	-0.54 - 2.69
12.70 (500")	6.731	10.770	19.80	27.68	-0.67 - 3.37
15.24 (600")	8.077	12.923	23.78	33.23	-0.81 - 4.04

● **PT-RX110 / PT-DX820**

(Unit / Unités : m)

When the screen aspect ratio is 4:3 Lorsque le rapport d' aspect de l'écran est 4:3					
SD	SH	SW	L		H
			LW	LT	
1.27 (50")	0.762	1.016	1.78	2.51	0 - 0.48
1.52 (60")	0.914	1.219	2.15	3.03	0 - 0.58
1.78 (70")	1.067	1.422	2.52	3.55	0 - 0.67
2.03 (80")	1.219	1.626	2.89	4.06	0 - 0.77
2.29 (90")	1.372	1.829	3.26	4.58	0 - 0.86
2.54 (100")	1.524	2.032	3.63	5.10	0 - 0.96
3.05 (120")	1.829	2.438	4.37	6.13	0 - 1.15
3.81 (150")	2.286	3.048	5.48	7.68	0 - 1.44
5.08 (200")	3.048	4.064	7.33	10.26	0 - 1.92
6.35 (250")	3.810	5.080	9.18	12.85	0 - 2.40
7.62 (300")	4.572	6.096	11.03	15.43	0 - 2.88
8.89 (350")	5.334	7.112	12.88	18.02	0 - 3.36
10.16 (400")	6.096	8.128	14.73	20.60	0 - 3.84
12.70 (500")	7.620	10.160	18.43	25.77	0 - 4.80
15.24 (600")	9.144	12.192	22.13	30.94	0 - 5.76

● **PT-DX100**

(Unit / Unités : m)

When the screen aspect ratio is 4:3 Lorsque le rapport d' aspect de l'écran est 4:3					
SD	SH	SW	L		H
			LW	LT	
1.27 (50")	0.762	1.016	1.78	2.51	0 - 0.38
1.52 (60")	0.914	1.219	2.15	3.03	0 - 0.46
1.78 (70")	1.067	1.422	2.52	3.55	0 - 0.53
2.03 (80")	1.219	1.626	2.89	4.06	0 - 0.61
2.29 (90")	1.372	1.829	3.26	4.58	0 - 0.69
2.54 (100")	1.524	2.032	3.63	5.10	0 - 0.76
3.05 (120")	1.829	2.438	4.37	6.13	0 - 0.91
3.81 (150")	2.286	3.048	5.48	7.68	0 - 1.14
5.08 (200")	3.048	4.064	7.33	10.26	0 - 1.52
6.35 (250")	3.810	5.080	9.18	12.85	0 - 1.91
7.62 (300")	4.572	6.096	11.03	15.43	0 - 2.29
8.89 (350")	5.334	7.112	12.88	18.02	0 - 2.67
10.16 (400")	6.096	8.128	14.73	20.60	0 - 3.05
12.70 (500")	7.620	10.160	18.43	25.77	0 - 3.81
15.24 (600")	9.144	12.192	22.13	30.94	0 - 4.57

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 2.03 m (80").

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 2,03 m (80").

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).

- Projection distance formulas
- Formules de distance de projection

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-RZ970 / PT-RZ770 / PT-RZ660 / PT-RZ670 / PT-DZ870 / PT-DZ780** (Unit / Unités : m)

	L	
	LW	LT
When the screen aspect ratio is 16:10 Lorsque le rapport d'aspect de l'écran est 16:10	=1.4906 × SD - 0.0746	=2.0814 × SD - 0.0725
When the screen aspect ratio is 16:9 Lorsque le rapport d'aspect de l'écran est 16:9	=1.5320 × SD - 0.0746	=2.1393 × SD - 0.0725
When the screen aspect ratio is 4:3 Lorsque le rapport d'aspect de l'écran est 4:3	=1.6874 × SD - 0.0746	=2.3563 × SD - 0.0725

- **PT-RW930 / PT-RW730 / PT-RW620 / PT-RW630 / PT-DW830 / PT-DW750** (Unit / Unités : m)

	L	
	LW	LT
When the screen aspect ratio is 16:10 Lorsque le rapport d'aspect de l'écran est 16:10	=1.5651 × SD - 0.0746	=2.1855 × SD - 0.0725
When the screen aspect ratio is 16:9 Lorsque le rapport d'aspect de l'écran est 16:9	=1.6086 × SD - 0.0746	=2.2462 × SD - 0.0725
When the screen aspect ratio is 4:3 Lorsque le rapport d'aspect de l'écran est 4:3	=1.7715 × SD - 0.0746	=2.4736 × SD - 0.0725

- **PT-RX110 / PT-DX100 / PT-DX820** (Unit / Unités : m)

	L	
	LW	LT
When the screen aspect ratio is 16:9 Lorsque le rapport d'aspect de l'écran est 16:9	=1.5875 × SD - 0.0746	=2.2167 × SD - 0.0725
When the screen aspect ratio is 4:3 Lorsque le rapport d'aspect de l'écran est 4:3	=1.4571 × SD - 0.0746	=2.0346 × SD - 0.0725

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