

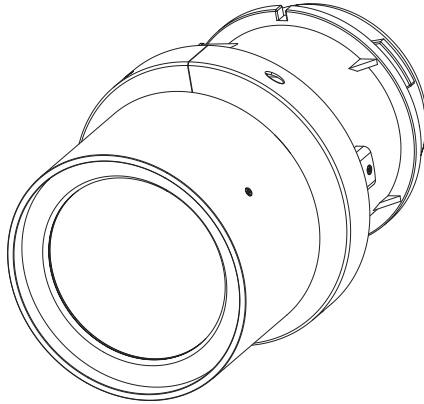
# Panasonic®

## Operating Instructions

Zoom Lens **Commercial Use**

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Model No. **ET-ELS20**



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.

**Do not allow children to reach the spacer.**

- The spacers can cause personal injury if swallowed.
- If the spacers are swallowed, seek medical advice immediately.

## 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

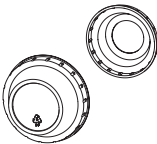

PT-MZ880 / PT-MZ780 / PT-MZ680 / PT-MZ770 / PT-MZ670 / PT-MZ570 / PT-MW730 / PT-MW630 / PT-MW530 / PT-EZ770 / PT-EZ580 / PT-EW730 / PT-EW640 / PT-EW540 / PT-EX800 / PT-EX610 / PT-EX510

### 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>
Spacer (T0SAS0001--)	 <p>(Colors: black, cream, clear)</p> <p>4 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 and Detaching the Lens

For details on attaching and detaching the projection lens, refer to the operating instructions of the projector.

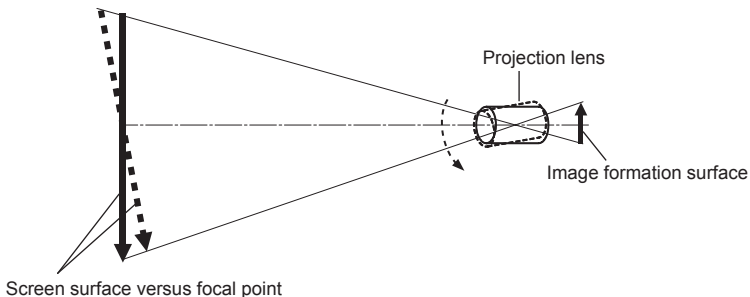
# Making Adjustments

## Correcting the Focus

When the projection lens is attached to the projector and images are being projected onto the screen, the peripheral focus may be out of focus in some localized areas. In such cases, use the supplied spacers to correct the focus of these areas, and perform adjustments so that the entire image is even.

### ■ Relationship between lens orientation and screen focus

If the projection lens is tilted with respect to the plane of the screen, uneven focus will result. For example, when the front side of the lens (screen side) is tilted downward as shown in the figure below (direction of the dotted arrow), the upper part of the screen will be tilted backward and the lower part of the screen will be tilted forward.



### ■ Procedure for correcting the focus

#### Attention

- Turn off the projector before removing the projection lens.

#### Note

- Focus correction requires some technical skill. Be sure to have a person with knowledge of projectors or a service technician to perform adjustments.
- This adjustment is not supported on the PT-MZ880 / PT-MZ780 / PT-MZ680.

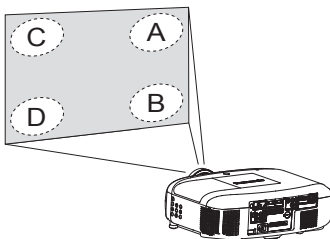


Fig. 1

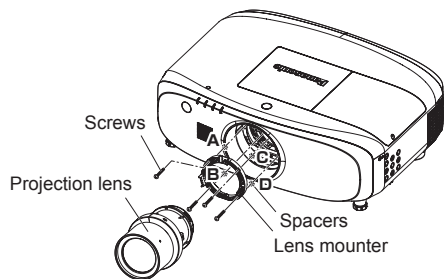





Fig. 2

- 1) Install the projector in the installation location, and turn it on to project an image.
- 2) Move the lens to its home position.
- 3) Operate the projector to shift the focus of the entire projected image toward the front of the screen.

## Making Adjustments (continued)

- 4) Operate the projector to shift the focus toward the screen a little bit at a time until one of the areas A to D in Fig. 1 just comes into focus on the screen, and then stop.
  - In this state, the “just focus points” of the unfocused areas are positioned just in front of the screen. The distance between this position and the screen is the correction distance.
- 5) Insert the spacers between the body of the projector and the lens mounter, as shown in Fig. 2.
  - Remove the lens mounter from the projector, and insert the spacers in the positions that correspond to the unfocused areas.
  - The “just focus points” of the areas for which you inserted spacers will be corrected toward the rear of the screen.
  - Make sure the adhesive surfaces of the spacers face the lens mounter when inserting them.
  - The correction distance is determined by the thickness and quantity of spacers inserted. Insert spacers according to the correction distance.  
(The unit for correction distances derived from the formulas in the following table is millimeters.)

Spacer	Color	Thickness	Correction distance during projected image size SD (m)
	Clear	0.1 mm	$SD \times SD \times 51.5$
	Black	0.2 mm	$SD \times SD \times 103$
	Cream	0.3 mm	$SD \times SD \times 154.5$

Correction distance guide: When the projected image size is 1.52 m (60 in.), the corrected distance when one 0.1 mm thick spacer is inserted is 120 mm.

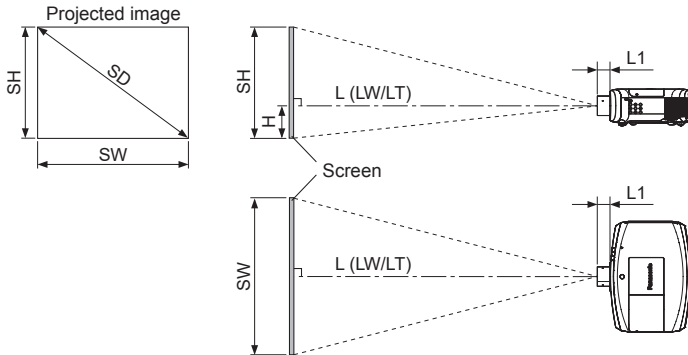
### Attention

- Installing the lens mounter, be careful not to put wiring between the lens mounter and the projector unit.

# 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

### ● Dimension for L1 (approximate values)

(Unit: m)

Projector model	Dimension for L1 (approximate value)
PT-MZ880 / PT-MZ780 / PT-MZ680	0.002
PT-MZ770 / PT-MZ670 / PT-MZ570 / PT-MW730 / PT-MW630 / PT-MW530	0.015
PT-EZ770 / PT-EZ580 / PT-EW730 / PT-EW640 / PT-EW540 / PT-EX800 / PT-EX610 / PT-EX510	0.059

### 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.

## Projection relationships (continued)

### 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.).

### ■ 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 PT-MZ880 / PT-MZ780 / PT-MZ680 / PT-MZ770 / PT-MZ670 / PT-MZ570 / PT-MW730 / PT-MW630 / PT-MW530 / PT-EZ770 / PT-EZ580 / PT-EW730 / PT-EW640 / PT-EW540 / PT-EX800 / PT-EX610 / PT-EX510, refer to “Setting up” in the operating instructions of the projector.

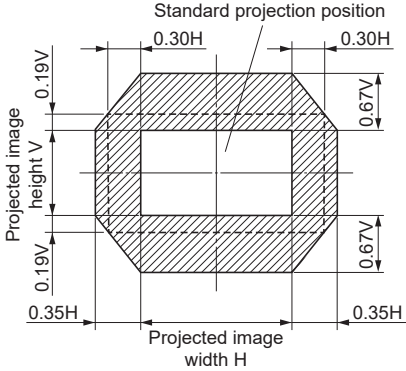
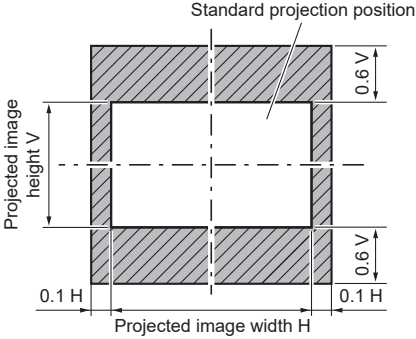
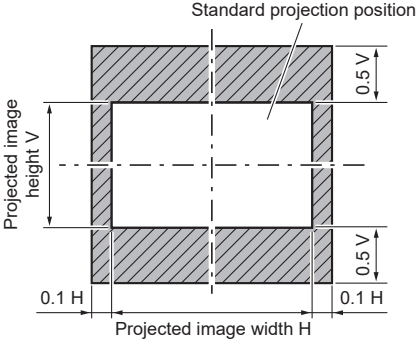
# Adjustment range by the lens position shift (optical shift)

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.

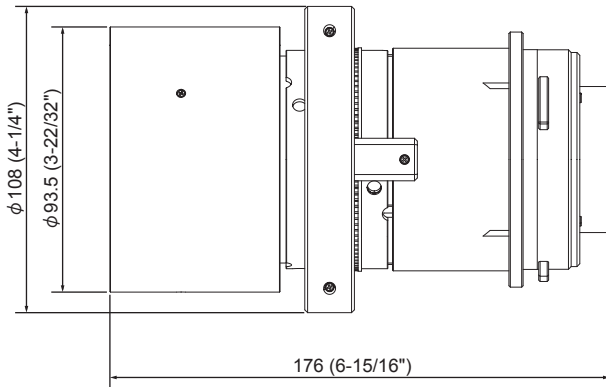
<p>PT-MZ880 / PT-MZ780 / PT-MZ680 / PT-MZ770 / PT-MZ670 / PT-MZ570 / PT-MW730 / PT-MW630 / PT-MW530</p>	 <p>Standard projection position</p> <p>Projected image height V</p> <p>Projected image width H</p> <p>0.30H</p> <p>0.30H</p> <p>0.19V</p> <p>0.19V</p> <p>0.67V</p> <p>0.67V</p> <p>0.35H</p> <p>0.35H</p>
<p>PT-EZ770 / PT-EW730 / PT-EZ580 / PT-EW640 / PT-EW540</p>	 <p>Standard projection position</p> <p>Projected image height V</p> <p>Projected image width H</p> <p>0.6 V</p> <p>0.6 V</p> <p>0.1 H</p> <p>0.1 H</p>
<p>PT-EX800 / PT-EX610 / PT-EX510</p>	 <p>Standard projection position</p> <p>Projected image height V</p> <p>Projected image width H</p> <p>0.5 V</p> <p>0.5 V</p> <p>0.1 H</p> <p>0.1 H</p>

# Specifications

F value	1.7 - 2.3
Focal Length (f)	26.9 mm (1-1/16") - 45.4 mm (1-25/32")
Dimensions	Width 108 mm (4-1/4") Height 108 mm (4-1/4") Depth 176 mm (6-15/16")
Net Weight	Approx. 0.9 kg (2 lb)

# Dimensions

(Unit: mm)



## English

**Manufactured by:**

Panasonic Connect Co., Ltd.  
4-1-62 Minoshima, Hakata-ku, Fukuoka 812-8531,  
Japan

**Importer:**

Panasonic Connect Europe GmbH

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**Importör:**

Panasonic Connect Europe GmbH

**Auktoriserad representant i EU:**

Panasonic Testing Centre  
Winsbergring 15, 22525 Hamburg, Tyskland

# MEMO

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### 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 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.

### Environment care information for users in China



This symbol is only valid in China.

# Panasonic Connect Co., Ltd.

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

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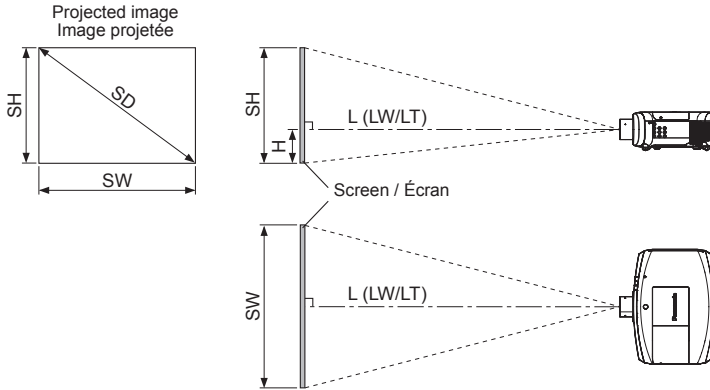
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Printed in Japan

# 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		Projected image height / Hauteur de l'image projetée
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		Projected image width / Largeur de l'image projetée
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 10) 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 10) pour déterminer la distance de projection (L).

#### Projectors / Projecteurs

PT-MZ880 / PT-MZ780 / PT-MZ680 / PT-MZ770 / PT-MZ670 / PT-MZ570 / PT-MW730 / PT-MW630 / PT-MW530 / PT-EZ770 / PT-EZ580 / PT-EW730 / PT-EW640 / PT-EW540 / PT-EX800 / PT-EX610 / PT-EX510

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-MZ880 / PT-MZ780 / PT-MZ680 / PT-MZ770 / PT-MZ670 / PT-MZ570**

(Unit / Unités : m)

When the screen aspect ratio is 16:10 (Throw ratio : [1.61 - 2.76:1])

Lorsque le rapport d'aspect de l'écran est 16:10 (Rapport de projection : [1.61 - 2.76:1])

SD	SH	SW	L		H
			LW	LT	
1.02 (40")	0.538	0.862	1.36	2.35	-0.09 - 0.63
1.27 (50")	0.673	1.077	1.71	2.95	-0.11 - 0.79
1.52 (60")	0.808	1.292	2.06	3.55	-0.14 - 0.95
1.78 (70")	0.942	1.508	2.42	4.15	-0.16 - 1.10
2.03 (80")	1.077	1.723	2.77	4.76	-0.18 - 1.26
2.29 (90")	1.212	1.939	3.12	5.36	-0.21 - 1.42
2.54 (100")	1.346	2.154	3.48	5.96	-0.23 - 1.58
3.05 (120")	1.615	2.585	4.18	7.16	-0.27 - 1.89
3.81 (150")	2.019	3.231	5.24	8.96	-0.34 - 2.36
5.08 (200")	2.692	4.308	7.01	11.96	-0.46 - 3.15
6.35 (250")	3.365	5.385	8.77	14.96	-0.57 - 3.94
7.62 (300")	4.039	6.462	10.54	17.97	-0.69 - 4.73
8.89 (350")	4.712	7.539	12.30	20.97	-0.80 - 5.51
10.16 (400")	5.385	8.616	14.07	23.97	-0.92 - 6.30

(Unit / Unités : m)

When the screen aspect ratio is 16:9 (Throw ratio : [1.61 - 2.76:1]) Lorsque le rapport d'aspect de l'écran est 16:9 (Rapport de projection : [1.61 - 2.76:1])					
SD	SH	SW	L		H
			LW	LT	
1.02 (40")	0.498	0.886	1.40	2.42	-0.12 - 0.62
1.27 (50")	0.623	1.107	1.76	3.04	-0.15 - 0.77
1.52 (60")	0.747	1.328	2.12	3.65	-0.18 - 0.93
1.78 (70")	0.872	1.550	2.49	4.27	-0.21 - 1.08
2.03 (80")	0.996	1.771	2.85	4.89	-0.24 - 1.24
2.29 (90")	1.121	1.992	3.21	5.51	-0.27 - 1.39
2.54 (100")	1.245	2.214	3.57	6.12	-0.30 - 1.55
3.05 (120")	1.494	2.657	4.30	7.36	-0.37 - 1.86
3.81 (150")	1.868	3.321	5.39	9.21	-0.46 - 2.32
5.08 (200")	2.491	4.428	7.20	12.29	-0.61 - 3.10
6.35 (250")	3.113	5.535	9.02	15.38	-0.76 - 3.87
7.62 (300")	3.736	6.641	10.83	18.47	-0.91 - 4.65
8.89 (350")	4.358	7.748	12.65	21.55	-1.07 - 5.42
10.16 (400")	4.981	8.855	14.46	24.64	-1.22 - 6.20

(Unit / Unités : m)

When the screen aspect ratio is 4:3 (Throw ratio : [1.93 - 3.32:1]) Lorsque le rapport d'aspect de l'écran est 4:3 (Rapport de projection : [1.93 - 3.32:1])					
SD	SH	SW	L		H
			LW	LT	
1.02 (40")	0.610	0.813	1.54	2.67	-0.10 - 0.71
1.27 (50")	0.762	1.016	1.94	3.35	-0.13 - 0.89
1.52 (60")	0.914	1.219	2.34	4.03	-0.16 - 1.07
1.78 (70")	1.067	1.422	2.74	4.71	-0.18 - 1.25
2.03 (80")	1.219	1.626	3.14	5.39	-0.21 - 1.43
2.29 (90")	1.372	1.829	3.54	6.07	-0.23 - 1.60
2.54 (100")	1.524	2.032	3.94	6.75	-0.26 - 1.78
3.05 (120")	1.829	2.438	4.74	8.11	-0.31 - 2.14
3.81 (150")	2.286	3.048	5.94	10.15	-0.39 - 2.67
5.08 (200")	3.048	4.064	7.94	13.55	-0.52 - 3.57
6.35 (250")	3.810	5.080	9.94	16.95	-0.65 - 4.46
7.62 (300")	4.572	6.096	11.94	20.34	-0.78 - 5.35
8.89 (350")	5.334	7.112	13.93	23.74	-0.91 - 6.24
10.16 (400")	6.096	8.128	15.93	27.14	-1.04 - 7.13

● PT-MW730 / PT-MW630 / PT-MW530

(Unit / Unités : m)

When the screen aspect ratio is 16:10 (Throw ratio : [1.63 - 2.79:1]) Lorsque le rapport d'aspect de l'écran est 16:10 (Rapport de projection : [1.63 - 2.79:1])					
SD	SH	SW	L		H
			LW	LT	
1.02 (40")	0.538	0.862	1.38	2.38	-0.09 - 0.63
1.27 (50")	0.673	1.077	1.74	2.99	-0.11 - 0.79
1.52 (60")	0.808	1.292	2.09	3.60	-0.14 - 0.95
1.78 (70")	0.942	1.508	2.45	4.21	-0.16 - 1.10
2.03 (80")	1.077	1.723	2.81	4.82	-0.18 - 1.26
2.29 (90")	1.212	1.939	3.16	5.42	-0.21 - 1.42
2.54 (100")	1.346	2.154	3.52	6.03	-0.23 - 1.58
3.05 (120")	1.615	2.585	4.24	7.25	-0.27 - 1.89
3.81 (150")	2.019	3.231	5.31	9.07	-0.34 - 2.36
5.08 (200")	2.692	4.308	7.09	12.11	-0.46 - 3.15
6.35 (250")	3.365	5.385	8.88	15.15	-0.57 - 3.94
7.62 (300")	4.039	6.462	10.66	18.20	-0.69 - 4.73
8.89 (350")	4.712	7.539	12.45	21.24	-0.80 - 5.51
10.16 (400")	5.385	8.616	14.24	24.28	-0.92 - 6.30

(Unit / Unités : m)

When the screen aspect ratio is 16:9 (Throw ratio : [1.63 - 2.80:1]) Lorsque le rapport d'aspect de l'écran est 16:9 (Rapport de projection : [1.63 - 2.80:1])					
SD	SH	SW	L		H
			LW	LT	
1.02 (40")	0.498	0.886	1.42	2.45	-0.12 - 0.62
1.27 (50")	0.623	1.107	1.79	3.08	-0.15 - 0.77
1.52 (60")	0.747	1.328	2.15	3.70	-0.18 - 0.93
1.78 (70")	0.872	1.550	2.52	4.33	-0.21 - 1.08
2.03 (80")	0.996	1.771	2.89	4.95	-0.24 - 1.24
2.29 (90")	1.121	1.992	3.25	5.58	-0.27 - 1.39
2.54 (100")	1.245	2.214	3.62	6.20	-0.30 - 1.55
3.05 (120")	1.494	2.657	4.35	7.45	-0.37 - 1.86
3.81 (150")	1.868	3.321	5.46	9.33	-0.46 - 2.32
5.08 (200")	2.491	4.428	7.29	12.45	-0.61 - 3.10
6.35 (250")	3.113	5.535	9.13	15.58	-0.76 - 3.87
7.62 (300")	3.736	6.641	10.96	18.70	-0.91 - 4.65
8.89 (350")	4.358	7.748	12.80	21.83	-1.07 - 5.42
10.16 (400")	4.981	8.855	14.63	24.95	-1.22 - 6.20

(Unit / Unités : m)

When the screen aspect ratio is 4:3 (Throw ratio : [1.96 - 3.36:1]) Lorsque le rapport d'aspect de l'écran est 4:3 (Rapport de projection : [1.96 - 3.36:1])					
SD	SH	SW	L		H
			LW	LT	
1.02 (40")	0.610	0.813	1.57	2.70	-0.10 - 0.71
1.27 (50")	0.762	1.016	1.97	3.39	-0.13 - 0.89
1.52 (60")	0.914	1.219	2.38	4.08	-0.16 - 1.07
1.78 (70")	1.067	1.422	2.78	4.77	-0.18 - 1.25
2.03 (80")	1.219	1.626	3.18	5.46	-0.21 - 1.43
2.29 (90")	1.372	1.829	3.59	6.15	-0.23 - 1.60
2.54 (100")	1.524	2.032	3.99	6.84	-0.26 - 1.78
3.05 (120")	1.829	2.438	4.80	8.21	-0.31 - 2.14
3.81 (150")	2.286	3.048	6.01	10.28	-0.39 - 2.67
5.08 (200")	3.048	4.064	8.04	13.72	-0.52 - 3.57
6.35 (250")	3.810	5.080	10.06	17.16	-0.65 - 4.46
7.62 (300")	4.572	6.096	12.08	20.61	-0.78 - 5.35
8.89 (350")	5.334	7.112	14.10	24.05	-0.91 - 6.24
10.16 (400")	6.096	8.128	16.12	27.49	-1.04 - 7.13

## ● PT-EZ770 / PT-EZ580

(Unit / Unités : m)

When the screen aspect ratio is 16:10 (Throw ratio : [1.61 - 2.76:1]) Lorsque le rapport d'aspect de l'écran est 16:10 (Rapport de projection : [1.61 - 2.76:1])					
SD	SH	SW	L		H
			LW	LT	
1.02 (40")	0.538	0.862	1.36	2.35	-0.05 - 0.59
1.27 (50")	0.673	1.077	1.71	2.95	-0.07 - 0.74
1.52 (60")	0.808	1.292	2.06	3.55	-0.08 - 0.89
1.78 (70")	0.942	1.508	2.42	4.15	-0.09 - 1.04
2.03 (80")	1.077	1.723	2.77	4.76	-0.11 - 1.18
2.29 (90")	1.212	1.939	3.12	5.36	-0.12 - 1.33
2.54 (100")	1.346	2.154	3.48	5.96	-0.13 - 1.48
3.05 (120")	1.615	2.585	4.18	7.16	-0.16 - 1.78
3.81 (150")	2.019	3.231	5.24	8.96	-0.20 - 2.22
5.08 (200")	2.692	4.308	7.01	11.96	-0.27 - 2.96
6.35 (250")	3.365	5.385	8.77	14.96	-0.34 - 3.70
7.62 (300")	4.039	6.462	10.54	17.97	-0.40 - 4.44
8.89 (350")	4.712	7.539	12.30	20.97	-0.47 - 5.18
10.16 (400")	5.385	8.616	14.07	23.97	-0.54 - 5.92

(Unit / Unités : m)

When the screen aspect ratio is 16:9 (Throw ratio : [1.61 - 2.76:1]) Lorsque le rapport d'aspect de l'écran est 16:9 (Rapport de projection : [1.61 - 2.76:1])					
SD	SH	SW	L		H
			LW	LT	
1.02 (40")	0.498	0.886	1.40	2.42	-0.05 - 0.55
1.27 (50")	0.623	1.107	1.76	3.04	-0.06 - 0.68
1.52 (60")	0.747	1.328	2.12	3.65	-0.07 - 0.82
1.78 (70")	0.872	1.550	2.49	4.27	-0.09 - 0.96
2.03 (80")	0.996	1.771	2.85	4.89	-0.10 - 1.10
2.29 (90")	1.121	1.992	3.21	5.51	-0.11 - 1.23
2.54 (100")	1.245	2.214	3.57	6.12	-0.12 - 1.37
3.05 (120")	1.494	2.657	4.30	7.36	-0.15 - 1.64
3.81 (150")	1.868	3.321	5.39	9.21	-0.19 - 2.05
5.08 (200")	2.491	4.428	7.20	12.29	-0.25 - 2.74
6.35 (250")	3.113	5.535	9.02	15.38	-0.31 - 3.42
7.62 (300")	3.736	6.641	10.83	18.47	-0.37 - 4.11
8.89 (350")	4.358	7.748	12.65	21.55	-0.44 - 4.79
10.16 (400")	4.981	8.855	14.46	24.64	-0.50 - 5.48

(Unit / Unités : m)

When the screen aspect ratio is 4:3 (Throw ratio : [1.93 - 3.32:1]) Lorsque le rapport d'aspect de l'écran est 4:3 (Rapport de projection : [1.93 - 3.32:1])					
SD	SH	SW	L		H
			LW	LT	
1.02 (40")	0.610	0.813	1.54	2.67	-0.06 - 0.67
1.27 (50")	0.762	1.016	1.94	3.35	-0.08 - 0.84
1.52 (60")	0.914	1.219	2.34	4.03	-0.09 - 1.01
1.78 (70")	1.067	1.422	2.74	4.71	-0.11 - 1.17
2.03 (80")	1.219	1.626	3.14	5.39	-0.12 - 1.34
2.29 (90")	1.372	1.829	3.54	6.07	-0.14 - 1.51
2.54 (100")	1.524	2.032	3.94	6.75	-0.15 - 1.68
3.05 (120")	1.829	2.438	4.74	8.11	-0.18 - 2.01
3.81 (150")	2.286	3.048	5.94	10.15	-0.23 - 2.51
5.08 (200")	3.048	4.064	7.94	13.55	-0.30 - 3.35
6.35 (250")	3.810	5.080	9.94	16.95	-0.38 - 4.19
7.62 (300")	4.572	6.096	11.94	20.34	-0.46 - 5.03
8.89 (350")	5.334	7.112	13.93	23.74	-0.53 - 5.87
10.16 (400")	6.096	8.128	15.93	27.14	-0.61 - 6.71

● PT-EW730 / PT-EW640 / PT-EW540

(Unit / Unités : m)

When the screen aspect ratio is 16:10 (Throw ratio : [1.63 - 2.79:1]) Lorsque le rapport d'aspect de l'écran est 16:10 (Rapport de projection : [1.63 - 2.79:1])					
SD	SH	SW	L		H
			LW	LT	
1.02 (40")	0.538	0.862	1.38	2.38	-0.05 - 0.59
1.27 (50")	0.673	1.077	1.74	2.99	-0.07 - 0.74
1.52 (60")	0.808	1.292	2.09	3.60	-0.08 - 0.89
1.78 (70")	0.942	1.508	2.45	4.21	-0.09 - 1.04
2.03 (80")	1.077	1.723	2.81	4.82	-0.11 - 1.18
2.29 (90")	1.212	1.939	3.16	5.42	-0.12 - 1.33
2.54 (100")	1.346	2.154	3.52	6.03	-0.13 - 1.48
3.05 (120")	1.615	2.585	4.24	7.25	-0.16 - 1.78
3.81 (150")	2.019	3.231	5.31	9.07	-0.20 - 2.22
5.08 (200")	2.692	4.308	7.09	12.11	-0.27 - 2.96
6.35 (250")	3.365	5.385	8.88	15.15	-0.34 - 3.70
7.62 (300")	4.039	6.462	10.66	18.20	-0.40 - 4.44
8.89 (350")	4.712	7.539	12.45	21.24	-0.47 - 5.18
10.16 (400")	5.385	8.616	14.24	24.28	-0.54 - 5.92

(Unit / Unités : m)

When the screen aspect ratio is 16:9 (Throw ratio : [1.63 - 2.80:1]) Lorsque le rapport d'aspect de l'écran est 16:9 (Rapport de projection : [1.63 - 2.80:1])					
SD	SH	SW	L		H
			LW	LT	
1.02 (40")	0.498	0.886	1.42	2.45	-0.05 - 0.55
1.27 (50")	0.623	1.107	1.79	3.08	-0.06 - 0.68
1.52 (60")	0.747	1.328	2.15	3.70	-0.07 - 0.82
1.78 (70")	0.872	1.550	2.52	4.33	-0.09 - 0.96
2.03 (80")	0.996	1.771	2.89	4.95	-0.10 - 1.10
2.29 (90")	1.121	1.992	3.25	5.58	-0.11 - 1.23
2.54 (100")	1.245	2.214	3.62	6.20	-0.12 - 1.37
3.05 (120")	1.494	2.657	4.35	7.45	-0.15 - 1.64
3.81 (150")	1.868	3.321	5.46	9.33	-0.19 - 2.05
5.08 (200")	2.491	4.428	7.29	12.45	-0.25 - 2.74
6.35 (250")	3.113	5.535	9.13	15.58	-0.31 - 3.42
7.62 (300")	3.736	6.641	10.96	18.70	-0.37 - 4.11
8.89 (350")	4.358	7.748	12.80	21.83	-0.44 - 4.79
10.16 (400")	4.981	8.855	14.63	24.95	-0.50 - 5.48

(Unit / Unités : m)

When the screen aspect ratio is 4:3 (Throw ratio : [1.96 - 3.36:1]) Lorsque le rapport d'aspect de l'écran est 4:3 (Rapport de projection : [1.96 - 3.36:1])					
SD	SH	SW	L		H
			LW	LT	
1.02 (40")	0.610	0.813	1.57	2.70	-0.06 - 0.67
1.27 (50")	0.762	1.016	1.97	3.39	-0.08 - 0.84
1.52 (60")	0.914	1.219	2.38	4.08	-0.09 - 1.01
1.78 (70")	1.067	1.422	2.78	4.77	-0.11 - 1.17
2.03 (80")	1.219	1.626	3.18	5.46	-0.12 - 1.34
2.29 (90")	1.372	1.829	3.59	6.15	-0.14 - 1.51
2.54 (100")	1.524	2.032	3.99	6.84	-0.15 - 1.68
3.05 (120")	1.829	2.438	4.80	8.21	-0.18 - 2.01
3.81 (150")	2.286	3.048	6.01	10.28	-0.23 - 2.51
5.08 (200")	3.048	4.064	8.04	13.72	-0.30 - 3.35
6.35 (250")	3.810	5.080	10.06	17.16	-0.38 - 4.19
7.62 (300")	4.572	6.096	12.08	20.61	-0.46 - 5.03
8.89 (350")	5.334	7.112	14.10	24.05	-0.53 - 5.87
10.16 (400")	6.096	8.128	16.12	27.49	-0.61 - 6.71

## ● PT-EX800 / PT-EX610 / PT-EX510

(Unit / Unités : m)

When the screen aspect ratio is 4:3 (Throw ratio : [1.63 - 2.81:1]) Lorsque le rapport d'aspect de l'écran est 4:3 (Rapport de projection : [1.63 - 2.81:1])					
SD	SH	SW	L		H
			LW	LT	
1.02 (40")	0.610	0.813	1.30	2.26	0.00 - 0.61
1.27 (50")	0.762	1.016	1.64	2.83	0.00 - 0.76
1.52 (60")	0.914	1.219	1.98	3.41	0.00 - 0.91
1.78 (70")	1.067	1.422	2.32	3.98	0.00 - 1.07
2.03 (80")	1.219	1.626	2.66	4.56	0.00 - 1.22
2.29 (90")	1.372	1.829	3.00	5.14	0.00 - 1.37
2.54 (100")	1.524	2.032	3.33	5.71	0.00 - 1.52
3.05 (120")	1.829	2.438	4.01	6.86	0.00 - 1.83
3.81 (150")	2.286	3.048	5.03	8.59	0.00 - 2.29
5.08 (200")	3.048	4.064	6.72	11.47	0.00 - 3.05
6.35 (250")	3.810	5.080	8.42	14.35	0.00 - 3.81
7.62 (300")	4.572	6.096	10.11	17.23	0.00 - 4.57
8.89 (350")	5.334	7.112	11.81	20.11	0.00 - 5.33
10.16 (400")	6.096	8.128	13.50	22.99	0.00 - 6.10

When the screen aspect ratio is 16:9 (Throw ratio : [1.64 - 2.81:1]) Lorsque le rapport d'aspect de l'écran est 16:9 (Rapport de projection : [1.64 - 2.81:1])					
SD	SH	SW	L		H
			LW	LT	
1.02 (40")	0.498	0.886	1.42	2.46	-0.08 - 0.58
1.27 (50")	0.623	1.107	1.79	3.09	-0.10 - 0.73
1.52 (60")	0.747	1.328	2.16	3.72	-0.12 - 0.87
1.78 (70")	0.872	1.550	2.53	4.34	-0.15 - 1.02
2.03 (80")	0.996	1.771	2.90	4.97	-0.17 - 1.16
2.29 (90")	1.121	1.992	3.27	5.60	-0.19 - 1.31
2.54 (100")	1.245	2.214	3.64	6.23	-0.21 - 1.45
3.05 (120")	1.494	2.657	4.38	7.48	-0.25 - 1.74
3.81 (150")	1.868	3.321	5.48	9.37	-0.31 - 2.18
5.08 (200")	2.491	4.428	7.33	12.50	-0.42 - 2.91
6.35 (250")	3.113	5.535	9.18	15.64	-0.52 - 3.63
7.62 (300")	3.736	6.641	11.02	18.78	-0.62 - 4.36
8.89 (350")	4.358	7.748	12.87	21.92	-0.73 - 5.08
10.16 (400")	4.981	8.855	14.72	25.05	-0.83 - 5.81

**Note**

- A  $\pm 5$  % 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  $\pm 5$  % 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-MZ880 / PT-MZ780 / PT-MZ680 / PT-MZ770 / PT-MZ670 / PT-MZ570** (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	= 1.3900 x SD - 0.0549	= 2.3640 x SD - 0.0482
When the screen aspect ratio is 16:9 Lorsque le rapport d'aspect de l'écran est 16:9	= 1.4286 x SD - 0.0549	= 2.4297 x SD - 0.0482
When the screen aspect ratio is 4:3 Lorsque le rapport d'aspect de l'écran est 4:3	= 1.5736 x SD - 0.0549	= 2.6763 x SD - 0.0482

● **PT-MW730 / PT-MW630 / PT-MW530** (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	= 1.4062 x SD - 0.0504	= 2.3944 x SD - 0.0497
When the screen aspect ratio is 16:9 Lorsque le rapport d'aspect de l'écran est 16:9	= 1.4452 x SD - 0.0504	= 2.4609 x SD - 0.0497
When the screen aspect ratio is 4:3 Lorsque le rapport d'aspect de l'écran est 4:3	= 1.5919 x SD - 0.0504	= 2.7106 x SD - 0.0497

● **PT-EZ770 / PT-EZ580** (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	= 1.3900 x SD - 0.0549	= 2.3640 x SD - 0.0482
When the screen aspect ratio is 16:9 Lorsque le rapport d'aspect de l'écran est 16:9	= 1.4286 x SD - 0.0549	= 2.4297 x SD - 0.0482
When the screen aspect ratio is 4:3 Lorsque le rapport d'aspect de l'écran est 4:3	= 1.5736 x SD - 0.0549	= 2.6763 x SD - 0.0482

● **PT-EW730 / PT-EW640 / PT-EW540**

(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	= 1.4062 x SD - 0.0504	= 2.3944 x SD - 0.0497
When the screen aspect ratio is 16:9 Lorsque le rapport d'aspect de l'écran est 16:9	= 1.4452 x SD - 0.0504	= 2.4609 x SD - 0.0497
When the screen aspect ratio is 4:3 Lorsque le rapport d'aspect de l'écran est 4:3	= 1.5919 x SD - 0.0504	= 2.7106 x SD - 0.0497

● **PT-EX800 / PT-EX610 / PT-EX510**

(Unit / Unités : m)

	L	
	LW	LT
When the screen aspect ratio is 4:3 Lorsque le rapport d'aspect de l'écran est 4:3	= 1.3346 x SD - 0.0553	= 2.2677 x SD - 0.0480
When the screen aspect ratio is 16:9 Lorsque le rapport d'aspect de l'écran est 16:9	= 1.4541 x SD - 0.0553	= 2.4707 x SD - 0.0480

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