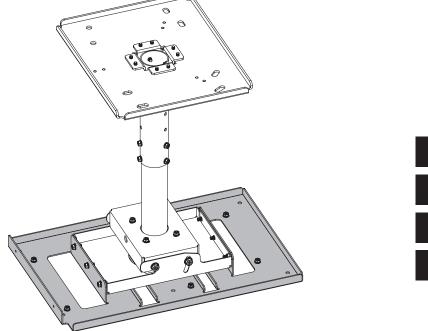
Panasonic

Installation Instructions

Projector Mount Bracket

Model No. ET-PKD521B



ENGLISH
FRANÇAIS
DEUTSCH
日本語

* The figure above shows this product combined with the separately sold ET-PKD520H Ceiling Mount Bracket (for High Ceilings).

Thank you for purchasing this Panasonic product.

- To customers
 - The "Installation Instructions" is intended for use by installation personnel. Be sure to employ certified personnel to perform the installation.

After installation, have the installation personnel return these "Installation Instructions" to you, and save it for future use. When moving or removing the projector, give this manual to the certified personnel and have them perform the procedure.

- To installation personnel
 - Read the "Installation Instructions" thoroughly and then perform the operation correctly and safely. Be sure to read through the section entitled "Read this first!" (page 3) before proceeding with the installation. After installation, return these "Installation Instructions" to the customer.



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WARNING:

Installation work should only be carried out by the certified personnel.

- If this product is not installed correctly, serious accidents may result.
- Follow the instructions specified in "Installation" of this manual, and perform secure installation.

Install the ceiling mount bracket in accordance with the structure and materials of the installation location.

• If a mistake is made in the installation procedure, the ceiling mount bracket may fall down and an injury may result.

Mounting must be carried out by two or more persons.

• When installing the projector in an overhead location, for example, in a high ceiling, at least two persons will be required to handle the installation.

Make sure that your footing is safe and secure during installation.

• If your footing is not secure, you may trip or fall down, and an injury may result.

Do not loosen or remove the unit screws and bolts unnecessarily.

• The projector may fall down and an injury may result.

Do not install in a location that is not strong enough.

• If the installation location is not strong enough, the unit may fall down and damage to the projector or an injury may result.

Do not install the ceiling mount bracket in humid or dusty locations or in locations where the ceiling mount bracket may be exposed to oily smoke, steam, or excessive heat.

• Failure to obey may result in fire or electric shock. In addition, oil will cause the plastic to deteriorate, which may result in a drop hazard.

Do not allow children to reach the supplied screws and metal fittings.

- These items can cause personal injury if swallowed.
- If swallowed, seek medical help immediately.

Do not disassemble or modify the projector mount bracket.

• The projector may be damaged or fall down, and an injury may result.

CAUTION:

Install only the designated projector.

Install only using the designated method.

• Failure to obey may result in dropping, damage to the projector, or injury.

Do not install the ceiling mount bracket in a place which may impede projector ventilation.

If this is not observed, fire may result.

Do not hang from or hang objects on the projector or ceiling mount bracket.

• The projector may fall and cause injury.

Use only the specified ceiling mount bracket (for high ceilings or for low ceilings).

• Failure to obey may result in dropping, damage to the projector, or injury.

Always use the supplied parts when performing installation.

• Otherwise, this may cause damaged projector to fall and cause injury.

Install the mounting screws and power cable in such a way that they will not make contact with the inside metals of the ceiling.

- Electric shocks may result from contact with any metal objects inside the ceiling.
- Panasonic Connect Co., Ltd. disclaims all liability for any accidents or any damage caused by the installation of the ceiling mount bracket using methods that are not described in these Installation Instructions or methods that do not use the parts specified in these Instructions.
- If products are no longer being used, they should be dismantled and removed by the certified personnel as soon as possible.

Product components

This is a projector mount bracket for installing projectors.

Use this together with the ceiling mount bracket for high ceilings or low ceilings (sold separately).

Supported ceiling mount brackets and projectors

Ceiling Mount Bracket

ET-PKD520H / ET-PKD520S

Projector

PT-RQ25K / PT-RQ18K / PT-RZ24K / PT-RZ17K / PT-RQ22K / PT-RZ21K / PT-RS20K / PT-RZ16K / PT-RQ13K / PT-RZ12K / PT-RS11K

Note

 Models other than the above may also be supported. Refer to the operating instructions for your projector or the following website.

https://panasonic.net/cns/projector/

Structural components

Check that the package contains the following parts. The number enclosed in < > is the quantity.

Check that the package contains the following parts. The r	turnber enclosed in < 2 is the qualitity.
Projector mount bracket <1>	This is used to install the projector itself. The bracket has a function for adjusting horizontal tilt.
Hex head bolt, captive washer <6> (M6 × 16)	These are used to mount the bracket onto the projector.
Hex head bolt, captive washer <4> (M10 × 40)	
Wire rope <4> Approx. 2.0 mm (3/32") wire diameter, 800 mm (31-1/2") length	Prevents the projector from falling.

- Tightening torque for the screws are M6: 4±0.5 N•m, M10: 20±1 N•m.
- When tightening up the screws, use a tool such as a torque screwdriver or torque wrench. Do not use electric screwdrivers or impact screwdrivers.

Attention

- Dispose of the packaging materials properly after taking the product out of it.
- Store small parts in an appropriate manner, and keep them away from small children.

Standard installation dimensions

<When using a lens other than the ET-D3LEW200 Zoom lens, the ET-D3LEU100 / ET-D75LE95 / ET-D75LE90 Fixed-focus lens, or ET-D3LEF70 Fisheye lens>

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

Establish the dimensions after assessing the area possible for installation.

The zoom function of the lens allows you to adjust the projection distance. Fine adjust while checking the projected image.

When any of the following lens is attached, the dimensional relationship between the screen and the projector will differ from that of other lens.

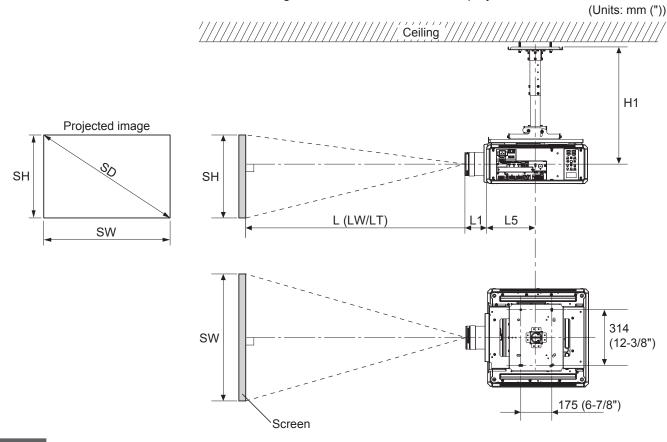
- Zoom lens (model number: ET-D3LEW200)
- Fixed-focus lens (model number: ET-D3LEU100 / ET-D75LE95 / ET-D75LE90)
- Fisheye lens (model number: ET-D3LEF70)

For details, refer to the following.

- "<When using the ET-D3LEU100 Fixed-focus lens / ET-D3LEW200 Zoom lens>" (→ page 12)
- "<When using the ET-D75LE95 / ET-D75LE90 Fixed-focus lens>" (→ page 15)
- "<When using the ET-D3LEF70 Fisheye lens>" (→ page 18)

Dimensional reationship diagram

• The illustration shows the ET-PKD520H ceiling mount bracket mounted on a projector.



Note

- This illustration assumes that the projector will be installed so that the projected image fills the screen and is properly aligned with it.
- This drawing is not in exact scale.

SH	Image height	L1	Lens protrusion dimension (from front of set to tip of lens)
SW	Image width	L5	From front center of the attachment plate to front of projector
SD	Projected image size	H1	From lens center to attachment plate (includes the thickness of
L	Projection distance	П	the attachment plate)

Attention

- Install the projector at a sufficient distance from the surrounding walls and objects so that the air intake and
 exhaust ports of the projector are not blocked. For details on the distance, refer to the operating instructions for
 your projector.
- Avoid setting up in places which are subject to sudden temperature changes, such as near an air conditioner or lighting equipment (studio lamps, etc.).

Note

- When [GEOMETRY] is used, correction is performed in the direction that results in a screen smaller than the specified screen size.
- The illustrations of projectors in this manual are for informational purposes only and do not represent a specific model. Configurations may vary with the model.

Dimensional relationship

H1 and L5 values
 (Unit: m)

		PT-RQ25K / RQ18K / RZ24K / RZ17K	PT-RQ22K / RZ21K / RS20K / RZ16K / RQ13K / RZ12K / RS11K
ET-PKD520H H1		0.540 - 0.660	0.562 - 0.682
		0.275	0.298
ET-PKD520S		0.226	0.248
E1-PKD5205	L5	0.275	0.298

● L1 values (Unit: m)

	PT-RQ25K / RQ18K / RZ24K / RZ17K	PT-RQ22K / RZ21K / RS20K / RZ16K
ET-D3LEW10	0.211	0.210
ET-D75LE10	0.126	0.125
ET-D75LES20/ET-D75LE20	0.122	0.121
ET-D3LET30	0.179	0.178
ET-D75LE30	0.122	0.121
ET-D3LET40	0.135	0.135
ET-D75LE40	0.124	0.124
ET-D75LEW50/ET-D75LE50	0.204	0.203
ET-D3LEW60/ET-D75LE6	0.213	0.212
ET-D3LET80/ET-D75LE8	0.263	0.262

(Unit: m)

	PT-RQ13K / RZ12K / RS11K
ET-D75LE6	0.212
ET-D75LE8	0.262
ET-D75LE10	0.125
ET-D75LE20	0.121
ET-D75LE30	0.121
ET-D75LE40	0.124
ET-D75LEW50/ET-D75LE50	0.203

• Formulas for calculating projection distance by projection lens

Check the projected image size SD (m) and use the following formula to determine projection distance.

(Values obtained by the calculation formulas in the tables below contain a slight error.)

When calculating a projection distance using image size designation (value in inches), multiply the value in inches by 0.0254 and substitute it into SD in the formula for calculating the projection distance.

Note

• The throw ratios are based on values during projection of 3.81 m (150") projected image size.

PT-RQ25K / RQ18K / RZ24K / RZ17K

(Unit: m)

Projection Throw ratio		A a m a a t matic	Projection distance (L) formula		
Lens	inrow ratio	Aspect ratio	Min. (LW)	Max. (LT)	
	1.11 – 1.32 : 1	16:10	= 0.9574 × SD - 0.0566	= 1.1471 × SD - 0.0736	
ET-D3LEW60/ ET-D75LE6	1.11 – 1.33 : 1	16:9	= 0.9841 × SD - 0.0566	= 1.1790 × SD - 0.0736	
	1.34 – 1.59 : 1	4:3	= 1.0839 × SD - 0.0566	= 1.2986 × SD - 0.0736	
	1.50 0.07 . 1	16:10	= 1.3063 × SD - 0.0867	= 1.7852 × SD - 0.1025	
ET-D3LEW10	1.52 – 2.07 : 1	16:9	= 1.3426 × SD - 0.0867	= 1.8348 × SD - 0.1025	
	1.83 – 2.49 : 1	4:3	= 1.4788 × SD - 0.0867	= 2.0209 × SD - 0.1025	
	1.56 – 2.01 : 1	16:10	= 1.3423 × SD - 0.0857	= 1.7349 × SD - 0.1085	
ET-D75LE10	1.50 – 2.01 . 1	16:9	= 1.3796 × SD - 0.0857	= 1.7831 × SD - 0.1085	
	1.88 – 2.41 : 1	4:3	= 1.5196 × SD - 0.0857	= 1.9641 × SD - 0.1085	
ET D=51 5000/	2.00 – 2.90 : 1	16:10	= 1.7174 × SD - 0.0832	= 2.4954 × SD - 0.1162	
ET-D75LES20/ ET-D75LE20	2.01 – 2.90 : 1	16:9	= 1.7651 × SD - 0.0832	= 2.5648 × SD - 0.1162	
21 5702220	2.41 – 3.49 : 1	4:3	= 1.9442 × SD - 0.0832	= 2.8250 × SD - 0.1162	
	2.88 – 5.61 : 1	16:10	= 2.4730 × SD - 0.1261	= 4.8101 × SD - 0.1892	
ET-D3LET30 2.8	2.00 - 5.01 . 1	16:9	= 2.5418 × SD - 0.1261	= 4.9438 × SD - 0.1892	
	3.46 - 6.74 : 1	4:3	= 2.7997 × SD - 0.1261	= 5.4454 × SD - 0.1892	
	2.89 – 5.61 : 1	16:10	= 2.4776 × SD - 0.1131	= 4.8050 × SD - 0.1765	
ET-D75LE30	2.09 - 3.01 . 1	16:9	= 2.5465 × SD - 0.1131	= 4.9386 × SD - 0.1765	
	3.47 - 6.74 : 1	4:3	$= 2.8048 \times SD - 0.1131$	= 5.4396 × SD - 0.1765	
	5.54 – 8.90 : 1	16:10	= 4.7403 × SD - 0.1673	= 7.5996 × SD - 0.1846	
ET-D3LET40	5.54 – 6.90 . 1	16:9	= 4.8721 × SD - 0.1673	= 7.8109 × SD - 0.1846	
	6.66 - 10.7 : 1	4:3	= 5.3664 × SD - 0.1673	= 8.6033 × SD - 0.1846	
	5.55 – 8.86 : 1	16:10	$= 4.7439 \times SD - 0.1577$	= 7.5632 × SD - 0.1615	
ET-D75LE40	5.55 – 8.87 : 1	16:9	= 4.8758 × SD - 0.1577	= 7.7735 × SD - 0.1615	
	6.67 – 10.6 : 1	4:3	= 5.3704 × SD - 0.1577	= 8.5622 × SD - 0.1615	
ET DOLETOO!	8.83 – 16.6 : 1	16:10	= 7.5832 × SD - 0.3862	= 14.2081 × SD - 0.3598	
ET-D3LET80/ ET-D75LE8	0.03 - 10.0 . 1	16:9	= 7.7940 × SD - 0.3862	= 14.6031 × SD - 0.3598	
	10.6 – 19.9 : 1	4:3	= 8.5848 × SD - 0.3862	= 16.0846 × SD - 0.3598	
ET DZEL EMES!	0.838 : 1	16:10	= 0.7286 × S	D - 0.0713	
ET-D75LEW50/ ET-D75LE50	0.030 . 1	16:9	= 0.7488 × S	D – 0.0713	
	1.01 : 1	4:3	= 0.8248 × S	D – 0.0713	

PT-RQ22K (Unit: m)

(Cinc.)				
Projection Throw ratio	Acrost ratio	Projection distance (L) formula		
Throw ratio	Aspect ratio	Min. (LW)	Max. (LT)	
100 110.1	16:10	= 0.8549 × SD - 0.0566	= 1.0242 × SD - 0.0736	
1.00 - 1.16 . 1	16:9	= 0.8786 × SD - 0.0566	= 1.0527 × SD - 0.0736	
1.20 – 1.42 : 1	4:3	= 0.9679 × SD - 0.0566	= 1.1596 × SD - 0.0736	
1 25 1 04 : 1	16:10	= 1.1663 × SD - 0.0867	= 1.5939 × SD - 0.1025	
1.35 - 1.84 : 1	16:9	= 1.1988 × SD - 0.0867	= 1.6382 × SD - 0.1025	
1.63 – 2.22 : 1	4:3	= 1.3205 × SD - 0.0867	= 1.8046 × SD - 0.1025	
1 20 1 70 : 1	16:10	= 1.1985 × SD - 0.0857	= 1.5490 × SD - 0.1085	
1.39 – 1.79 . 1	16:9	= 1.2318 × SD - 0.0857	= 1.5921 × SD - 0.1085	
1.67 – 2.15 : 1	4:3	= 1.3569 × SD - 0.0857	= 1.7538 × SD - 0.1085	
170 250:1	16:10	= 1.5334 × SD - 0.0832	= 2.2280 × SD - 0.1162	
1.79 – 2.59 : 1	16:9	= 1.5760 × SD - 0.0832	= 2.2900 × SD - 0.1162	
2.15 – 3.11 : 1	4:3	= 1.7361 × SD - 0.0832	= 2.5226 × SD - 0.1162	
	1.35 - 1.84 : 1 1.63 - 2.22 : 1 1.39 - 1.79 : 1 1.67 - 2.15 : 1 1.79 - 2.59 : 1	1.00 - 1.18 : 1 1.20 - 1.42 : 1 1.35 - 1.84 : 1 1.63 - 2.22 : 1 1.39 - 1.79 : 1 1.67 - 2.15 : 1 1.79 - 2.59 : 1 16:10 16:9 16:10 16:9 16:10 16:9	Throw ratio Aspect ratio Min. (LW) $1.00 - 1.18:1$ $16:10$ $= 0.8549 \times SD - 0.0566$ $1.20 - 1.42:1$ $4:3$ $= 0.9679 \times SD - 0.0566$ $1.35 - 1.84:1$ $16:10$ $= 1.1663 \times SD - 0.0867$ $1.63 - 2.22:1$ $4:3$ $= 1.1988 \times SD - 0.0867$ $1.39 - 1.79:1$ $16:10$ $= 1.1985 \times SD - 0.0857$ $1.67 - 2.15:1$ $4:3$ $= 1.2318 \times SD - 0.0857$ $1.79 - 2.59:1$ $16:10$ $= 1.5334 \times SD - 0.0832$ $16:9$ $= 1.5760 \times SD - 0.0832$	

(continued)

Projection	Throw rotio	A am a at matic	Projection dista	ance (L) formula
Lens	Throw ratio	Aspect ratio	Min. (LW)	Max. (LT)
	2.57 – 5.00 : 1	16:10	= 2.2081 × SD - 0.1261	= 4.2947 × SD - 0.1892
ET-D3LET30	2.57 - 5.00 : 1	16:9	= 2.2695 × SD - 0.1261	= 4.4141 × SD - 0.1892
	3.09 - 6.01 : 1	4:3	= 2.5000 × SD - 0.1261	= 4.8624 × SD - 0.1892
	3.59 F.00 · 1	16:10	= 2.2121 × SD - 0.1131	= 4.2901 × SD - 0.1765
ET-D75LE30	2.58 – 5.00 : 1	16:9	= 2.2736 × SD - 0.1131	= 4.4094 × SD - 0.1765
	3.10 - 6.01 : 1	4:3	= 2.5046 × SD - 0.1131	= 4.8573 × SD - 0.1765
	4.94 – 7.94 : 1	16:10	= 4.2324 × SD - 0.1673	= 6.7853 × SD - 0.1846
ET-D3LET40	4.95 – 7.94 : 1	16:9	= 4.3501 × SD - 0.1673	= 6.9740 × SD - 0.1846
	5.94 – 9.54 : 1	4:3	= 4.7919 × SD - 0.1673	= 7.6823 × SD - 0.1846
	4.05 7.04 . 4	16:10	= 4.2356 × SD - 0.1577	= 6.7529 × SD - 0.1615
ET-D75LE40	4.95 – 7.91 : 1	16:9	= 4.3534 × SD - 0.1577	= 6.9406 × SD - 0.1615
	5.95 – 9.50 : 1	4:3	= 4.7955 × SD - 0.1577	= 7.6456 × SD - 0.1615
	7.07 44.0 . 4	16:10	= 6.7707 × SD - 0.3862	= 12.6858 × SD - 0.3598
ET-D3LET80/ ET-D75LE8	7.87 – 14.8 : 1	16:9	= 6.9590 × SD - 0.3862	= 13.0385 × SD - 0.3598
LI-DISEE	9.46 – 17.8 : 1	4:3	= 7.6658 × SD - 0.3862	= 14.3627 × SD - 0.3598
	0.740 . 4	16:10	= 0.6505 × SD - 0.0713	
ET-D75LEW50/ ET-D75LE50	0.746 : 1	16:9	= 0.6686 × S	D - 0.0713
21 2732230	0.898 : 1		= 0.7365 × SD - 0.0713	

PT-RQ13K (Unit: m)

Projection	Throw ratio		Projection dista	ance (L) formula
Lens	Tillow ratio	Aspect ratio	Min. (LW)	Max. (LT)
	1.0 – 1.2 : 1	16 : 10	= 0.8549 × SD - 0.0566	= 1.0242 × SD - 0.0736
ET-D75LE6	1.0 - 1.2 . 1	16 : 9	$= 0.8786 \times SD - 0.0566$	= 1.0527 × SD - 0.0736
	1.2 – 1.4 : 1	4:3	$= 0.9679 \times SD - 0.0566$	= 1.1596 × SD - 0.0736
	1.4 – 1.8 : 1	16 : 10	= 1.1985 × SD - 0.0857	= 1.5490 × SD - 0.1085
ET-D75LE10	1.4 - 1.0 . 1	16 : 9	= 1.2318 × SD - 0.0857	= 1.5921 × SD - 0.1085
	1.7 – 2.2 : 1	4:3	= 1.3569 × SD - 0.0857	= 1.7538 × SD - 0.1085
	10 26.1	16 : 10	= 1.5334 × SD - 0.0832	= 2.2280 × SD - 0.1162
ET-D75LE20	1.8 – 2.6 : 1	16 : 9	= 1.5760 × SD - 0.0832	= 2.2900 × SD - 0.1162
	2.1 – 3.1 : 1	4:3	= 1.7361 × SD - 0.0832	= 2.5226 × SD - 0.1162
ET-D75LE30	2.6 – 5.0 : 1	16 : 10	= 2.2121 × SD - 0.1131	= 4.2901 × SD - 0.1765
	2.0 - 5.0 . 1	16 : 9	= 2.2736 × SD - 0.1131	= 4.4094 × SD - 0.1765
	3.1 – 6.0 : 1	4:3	= 2.5046 × SD - 0.1131	= 4.8573 × SD - 0.1765
	4.9 – 7.9 : 1	16 : 10	= 4.2356 × SD - 0.1577	= 6.7529 × SD - 0.1615
ET-D75LE40	4.9 – 7.9 . 1	16 : 9	$= 4.3534 \times SD - 0.1577$	= 6.9406 × SD - 0.1615
	5.9 – 9.5 : 1	4:3	$= 4.7955 \times SD - 0.1577$	= 7.6456 × SD - 0.1615
	7.9 – 13.8 : 1	16 : 10	$= 6.7707 \times SD - 0.3862$	= 12.6858 × SD - 0.3598
ET-D75LE8	7.9 – 13.6 . 1	16 : 9	$= 6.9590 \times SD - 0.3862$	= 13.0385 × SD - 0.3598
	9.5 – 13.8 : 1	4:3	$= 7.6658 \times SD - 0.3862$	= 14.3627 × SD - 0.3598
ET DZELEWEO/	0.7 : 1	16 : 10	= 0.6505 × S	D - 0.0713
ET-D75LEW50/ ET-D75LE50	0.7 . 1	16 : 9	= 0.6686 × SD - 0.0713	
LI DIOLLO	0.9 : 1	4:3	= 0.7365 × S	D - 0.0713

PT-RZ21K / RZ16K (Unit: m)

Projection Throw ratio			Projection distance (L) formula		
Lens	Throw ratio	Aspect ratio	Min. (LW)	Max. (LT)	
	0.004 440 4	16:10	= 0.7979 × SD - 0.0566	= 0.9559 × SD - 0.0736	
ET-D3LEW60/ ET-D75LE6	0.924 – 1.10 : 1	16:9	= 0.8201 × SD - 0.0566	= 0.9825 × SD - 0.0736	
LI-DISLLO	1.12 – 1.32 : 1	4:3	= 0.9032 × SD - 0.0566	= 1.0822 × SD - 0.0736	
	1.00 1.70 1	16:10	= 1.0886 × SD - 0.0867	= 1.4876 × SD - 0.1025	
ET-D3LEW10	1.26 – 1.72 : 1	16:9	= 1.1188 × SD - 0.0867	= 1.5290 × SD - 0.1025	
	1.52 – 2.07 : 1	4:3	= 1.2324 × SD - 0.0867	= 1.6841 × SD - 0.1025	
	1 20 1 67 . 1	16:10	= 1.1186 × SD - 0.0857	= 1.4458 × SD - 0.1085	
ET-D75LE10	1.30 – 1.67 : 1	16:9	= 1.1497 × SD - 0.0857	= 1.4860 × SD - 0.1085	
	1.56 – 2.01 : 1	4:3	= 1.2663 × SD - 0.0857	= 1.6367 × SD - 0.1085	
	1.67 – 2.41 : 1	16:10	= 1.4312 × SD - 0.0832	= 2.0795 × SD - 0.1162	
ET-D75LES20/ ET-D75LE20	1.07 - 2.41 . 1	16:9	= 1.4709 × SD - 0.0832	= 2.1373 × SD - 0.1162	
LI BIOLLEO	2.00 – 2.90 : 1	4:3	= 1.6202 × SD - 0.0832	= 2.3542 × SD - 0.1162	
	2.40 4.66 : 1	16:10	= 2.0609 × SD - 0.1261	= 4.0084 × SD - 0.1892	
ET-D3LET30 2.40	2.40 – 4.66 : 1	16:9	= 2.1182 × SD - 0.1261	= 4.1198 × SD - 0.1892	
	2.88 – 5.61 : 1	4:3	= 2.3331 × SD - 0.1261	= 4.5378 × SD - 0.1892	
	2.40 - 4.66 : 1	16:10	= 2.0647 × SD - 0.1131	= 4.0041 × SD - 0.1765	
ET-D75LE30	2.41 – 4.66 : 1	16:9	= 2.1221 × SD - 0.1131	= 4.1155 × SD - 0.1765	
	2.89 – 5.60 : 1	4:3	= 2.3374 × SD - 0.1131	= 4.5330 × SD - 0.1765	
	4.61 – 7.41 : 1	16:10	= 3.9505 × SD - 0.1673	= 6.3330 × SD - 0.1846	
ET-D3LET40	4.01 - 7.41 . 1	16:9	= 4.0601 × SD - 0.1673	= 6.5091 × SD - 0.1846	
	5.54 - 8.90 : 1	4:3	= 4.4720 × SD - 0.1673	= 7.1694 × SD - 0.1846	
	4.62 – 7.38 : 1	16:10	= 3.9532 × SD - 0.1577	= 6.3027 × SD - 0.1615	
ET-D75LE40	4.02 - 7.38 . 1	16:9	= 4.0631 × SD - 0.1577	= 6.4779 × SD - 0.1615	
	5.55 – 8.86 : 1	4:3	= 4.4754 × SD - 0.1577	= 7.1351 × SD - 0.1615	
ET DOLETCO	7.34 – 13.8 : 1	16:10	= 6.3193 × SD - 0.3862	= 11.8400 × SD - 0.3598	
ET-D3LET80/ ET-D75LE8	1.34 - 13.0 : 1	16:9	= 6.4950 × SD - 0.3862	= 12.1692 × SD - 0.3598	
	8.82 – 16.6 : 1	4:3	= 7.1540 × SD - 0.3862	= 13.4039 × SD - 0.3598	
ET DEL EMES	0.694 : 1	16:10	= 0.6072 × S	SD - 0.0713	
ET-D75LEW50/ ET-D75LE50	0.695 : 1	16:9	= 0.6240 × S	SD - 0.0713	
E1-D/SLESU	0.836 : 1	4:3	= 0.6873 × SD - 0.0713		

PT-RZ12K (Unit: m)

Projection Throw ratio		Aspest ratio	Projection distance (L) formula	
Lens	Throw ratio	Aspect ratio	Min. (LW)	Max. (LT)
	0.924 – 1.10 : 1	16 : 10	= 0.7979 × SD - 0.0566	= 0.9559 × SD - 0.0736
ET-D75LE6	0.924 - 1.10 . 1	16 : 9	= 0.8201 × SD - 0.0566	= 0.9825 × SD - 0.0736
	1.12 – 1.32 : 1	4:3	= 0.9032 × SD - 0.0566	= 1.0822 × SD - 0.0736
	1 20 1 67 . 1	16 : 10	= 1.1186 × SD - 0.0857	= 1.4458 × SD - 0.1085
ET-D75LE10	1.30 – 1.67 : 1	16 : 9	= 1.1497 × SD - 0.0857	= 1.4860 × SD - 0.1085
	1.56 – 2.01 : 1	4:3	= 1.2663 × SD - 0.0857	= 1.6367 × SD - 0.1085
	1.67 – 2.41 : 1	16 : 10	= 1.4312 × SD - 0.0832	= 2.0795 × SD - 0.1162
ET-D75LE20	1.07 - 2.41 . 1	16 : 9	= 1.4709 × SD - 0.0832	= 2.1373 × SD - 0.1162
	2.00 – 2.90 : 1	4:3	= 1.6202 × SD - 0.0832	= 2.3542 × SD - 0.1162
	2.40 - 4.66 : 1	16 : 10	= 2.0647 × SD - 0.1131	= 4.0041 × SD - 0.1765
ET-D75LE30	2.41 – 4.66 : 1	16 : 9	= 2.1221 × SD - 0.1131	= 4.1155 × SD - 0.1765
	2.89 – 5.60 : 1	4:3	$= 2.3374 \times SD - 0.1131$	= 4.5330 × SD - 0.1765
	4.62 – 7.38 : 1	16 : 10	$= 3.9532 \times SD - 0.1577$	= 6.3027 × SD - 0.1615
ET-D75LE40	4.02 - 7.30 . 1	16 : 9	= 4.0631 × SD - 0.1577	= 6.4779 × SD - 0.1615
	5.55 – 8.86 : 1	4:3	= 4.4754 × SD - 0.1577	= 7.1351 × SD - 0.1615
	7.34 – 13.8 : 1	16 : 10	= 6.3193 × SD - 0.3862	= 11.8400 × SD - 0.3598
ET-D75LE8	7.34 - 13.6 . 1	16 : 9	= 6.4950 × SD - 0.3862	= 12.1692 × SD - 0.3598
	8.82 – 16.6 : 1	4:3	= 7.1540 × SD - 0.3862	= 13.4039 × SD - 0.3598
	0.694 : 1		= 0.6072 × S	D - 0.0713
ET-D75LE50	0.695 : 1	16 : 9	= 0.6240 × SD - 0.0713	
	0.836 : 1	4:3	= 0.6873 × S	D - 0.0713

PT-RS20K (Unit: m)

Projection	Throw ratio	Aspest ratio	Projection distance (L) formula		
Lens	Throw ratio	Aspect ratio	Min. (LW)	Max. (LT)	
ET-D3LEW60/	1.01 – 1.19 : 1	4:3	= 0.8150 × SD - 0.0566	= 0.9764 × SD - 0.0736	
ET-D75LE6	1.01 – 1.19 . 1	16:9	$= 0.8877 \times SD - 0.0566$	= 1.0636 × SD - 0.0736	
ET-D3LEW10	1.37 – 1.86 : 1	4:3	= 1.1119 × SD - 0.0867	= 1.5195 × SD - 0.1025	
E1-D3LEVVIO	1.37 - 1.00 . 1	16:9	= 1.2112 × SD - 0.0867	= 1.6552 × SD - 0.1025	
ET-D75LE10	1.41 – 1.81 : 1	4:3	= 1.1425 × SD - 0.0857	= 1.4767 × SD - 0.1085	
E1-D/5LE10	1.41 - 1.01 . 1	16:9	= 1.2446 × SD - 0.0857	= 1.6086 × SD - 0.1085	
ET-D75LES20/	1.80 – 2.61 : 1	4:3	= 1.4618 × SD - 0.0832	= 2.1241 × SD - 0.1162	
ET-D75LE20	1.81 – 2.61 : 1	16:9	= 1.5924 × SD - 0.0832	= 2.3137 × SD - 0.1162	
ET-D3LET30	2.59 - 5.05 : 1	4:3	= 2.1050 × SD - 0.1261	= 4.0943 × SD - 0.1892	
E1-D3LE130	2.60 - 5.06 : 1	16:9	= 2.2930 × SD - 0.1261	= 4.4599 × SD - 0.1892	
ET-D75LE30	2.60 - 5.05 : 1	4:3	= 2.1089 × SD - 0.1131	= 4.0899 × SD - 0.1765	
E1-D/5LE30	2.61 - 5.05 : 1	16:9	= 2.2972 × SD - 0.1131	= 4.4552 × SD - 0.1765	
ET-D3LET40	4.99 - 8.02 : 1	4:3	= 4.0349 × SD - 0.1673	= 6.4687 × SD - 0.1846	
E1-D3LE140	5.00 - 8.02 : 1	16:9	= 4.3952 × SD - 0.1673	= 7.0463 × SD - 0.1846	
ET-D75LE40	5.00 7.00 · 1	4:3	= 4.0379 × SD - 0.1577	= 6.4377 × SD - 0.1615	
E1-D/5LE40	5.00 – 7.99 : 1	16:9	= 4.3985 × SD - 0.1577	= 7.0126 × SD - 0.1615	
ET-D3LET80/	7.95 – 14.9 : 1	4:3	= 6.4547 × SD - 0.3862	= 12.0937 × SD - 0.3598	
ET-D75LE8	7.96 – 15.0 : 1	16:9	= 7.0312 × SD - 0.3862	= 13.1737 × SD - 0.3598	
ET-D75LEW50/	0.752 : 1	4:3	= 0.6202 × S	D – 0.0713	
ET-D75LE50 0.754 : 1 16:9 = 0.6755 × SD - 0.0713		D - 0.0713			

PT-RS11K (Unit: m)

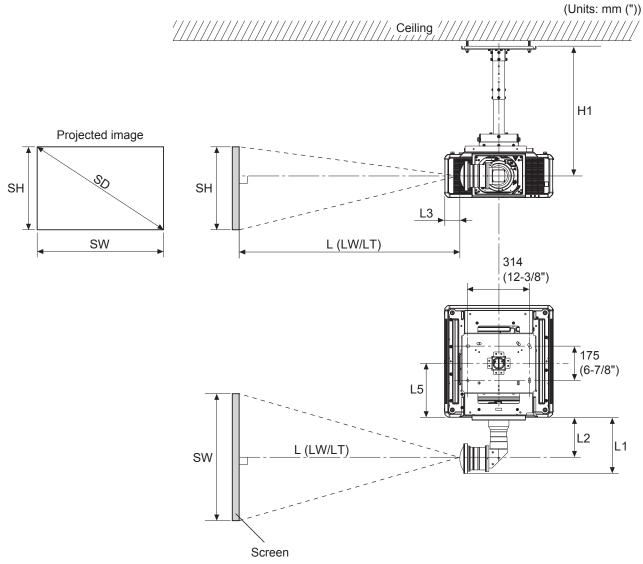
Projection Throw ratio		Aspest ratio	Projection distance (L) formula		
Lens	Throw ratio	Aspect ratio	Min. (LW)	Max. (LT)	
ET-D75LE6	1.01 – 1.19 : 1	4:3	= 0.8150 × SD - 0.0566	= 0.9764 × SD - 0.0736	
E1-D/3LE0	1.01 - 1.19 . 1	16 : 9	= 0.8877 × SD - 0.0566	= 1.0636 × SD - 0.0736	
ET-D75LE10	1.41 – 1.81 : 1	4:3	= 1.1425 × SD - 0.0857	= 1.4767 × SD - 0.1085	
EI-D/SLEIU	1.41 - 1.01 . 1	16 : 9	= 1.2446 × SD - 0.0857	= 1.6086 × SD - 0.1085	
ET-D75LE20	1.80 – 2.61 : 1	4:3	= 1.4618 × SD - 0.0832	= 2.1241 × SD - 0.1162	
E1-D/5LE20	1.81 – 2.61 : 1	16 : 9	= 1.5924 × SD - 0.0832	= 2.3137 × SD - 0.1162	
ET-D75LE30	2.60 - 5.05 : 1	4:3	= 2.1089 × SD - 0.1131	= 4.0899 × SD - 0.1765	
E1-D/5LE30	2.61 – 5.05 : 1	16 : 9	= 2.2972 × SD - 0.1131	= 4.4552 × SD - 0.1765	
ET-D75LE40	5.00 – 7.99 : 1	4:3	= 4.0379 × SD - 0.1577	= 6.4377 × SD - 0.1615	
E1-D/5LE40	5.00 - 7.99 . 1	16 : 9	= 4.3985 × SD - 0.1577	= 7.0126 × SD - 0.1615	
ET-D75LE8	7.95 – 14.9 : 1	4:3	= 6.4547 × SD - 0.3862	= 12.0937 × SD - 0.3598	
E1-D/SLE0	7.96 – 15.0 : 1	16 : 9	= 7.0312 × SD - 0.3862	= 13.1737 × SD - 0.3598	
ET-D75LE50	0.752 : 1	4:3	= 0.6202 × S	D - 0.0713	
E1-D/SLESU	0.754 : 1	16 : 9	= 0.6755 × SD - 0.0713		

<When using the ET-D3LEU100 Fixed-focus lens / ET-D3LEW200 Zoom lens>

The dimensional relationship between the screen and the projector is shown below. Establish the dimensions after assessing the area possible for installation.

■ Dimensional reationship diagram

• The illustration shows the ET-PKD520H ceiling mount bracket mounted on a projector.



Note

- This illustration assumes that the projector will be installed so that the projected image fills the screen and is properly aligned with it.
- This drawing is not in exact scale.
- The PT-RQ13K / RZ12K / RS11K is not supported by the ET-D3LEW200.

SH	Image height	L1	Lens protrusion dimension (from front of set to tip of lens)
SW	Image width	L2	From front of projector to center of lens
SD	Projected image size	L3	From side of projector to center of lens
L	Projection distance	L5	From front center of the attachment plate to front of projector
		H1	From lens center to attachment plate (includes the thickness of the attachment plate)

Attention

- Install the projector at a sufficient distance from the surrounding walls and objects so that the air intake and exhaust ports of the projector are not blocked. For details on the distance, refer to the operating instructions for your projector.
- Avoid setting up in places which are subject to sudden temperature changes, such as near an air conditioner
 or lighting equipment (studio lamps, etc.).

Note

- When [GEOMETRY] is used, correction is performed in the direction that results in a screen smaller than the specified screen size.
- The illustrations of projectors in this manual are for informational purposes only and do not represent a specific model. Configurations may vary with the model.

■ Dimensional relationship

● H1 and L5 values (Unit: m)

		PT-RQ25K / RQ18K / RZ24K / RZ17K	PT-RQ22K / RZ21K / RS20K / RZ16K / RQ13K / RZ12K / RS11K
ET-PKD520H	H1	0.540 - 0.660	0.562 - 0.682
E1-PKD320FI	L5	0.275	0.298
ET-PKD520S	H1	0.226	0.248
E1-FKD3203	L5	0.275	0.298

● L1 values (Unit: m)

	PT-RQ25K / RQ18K / RZ24K / RZ17K	PT-RQ22K / RZ21K / RS20K / RZ16K	PT-RQ13K / RZ12K / RS11K
ET-D3LEU100	0.286	0.285	0.285
ET-D3LEW200	0.352	0.351	-

● L2 values (Unit: m)

	PT-RQ25K / RQ18K / RZ24K / RZ17K	PT-RQ22K / RZ21K / RS20K / RZ16K	PT-RQ13K / RZ12K / RS11K
ET-D3LEU100	0.210	0.209	0.209
ET-D3LEW200	0.255	0.255	-

● L3 values (Unit: m)

	PT-RQ25K / RQ18K / RZ24K / RZ17K	PT-RQ22K / RZ21K / RS20K / RZ16K	PT-RQ13K / RZ12K / RS11K
ET-D3LEU100	0.077	0.101	0.091
ET-D3LEW200	0.102	0.126	-

• Formulas for calculating projection distance by projection lens

Check the projected image size SD (m) and use the following formula to determine projection distance.

(Values obtained by the calculation formulas in the tables below contain a slight error.)

When calculating a projection distance using image size designation (value in inches), multiply the value in inches by 0.0254 and substitute it into SD in the formula for calculating the projection distance.

Note

• The throw ratios are based on values during projection of 3.81 m (150") projected image size.

ET-D3LEU100 (Unit: m)

Projector	Throw ratio	Aspect ratio	Projection distance (L) formula
PT-RQ25K /	0.447 : 1	16:10	= 0.3917 × SD - 0.0664
PT-RQ18K / PT-RZ24K /	0.447 . 1	16:9	= 0.4025 × SD - 0.0664
PT-RZ17K	0.538 : 1	4:3	= 0.4434 × SD - 0.0664
PT-RQ22K / PT-RQ13K	0.397 : 1	16:10	= 0.3497 × SD - 0.0664
	0.398 : 1	16:9	= 0.3594 × SD - 0.0664
1 1 1 TOO TOTO	0.479 : 1	4:3	= 0.3959 × SD - 0.0664
PT-RZ21K /	PT-R721K / 0.070 - 4	16:10	= 0.3264 × SD - 0.0664
PT-RZ16K /	0.370 : 1	16:9	= 0.3355 × SD - 0.0664
PT-RZ12K	0.446 : 1	4:3	= 0.3695 × SD - 0.0664
PT-RS20K / PT-RS11K	0.402 : 1	16:9	= 0.3631 × SD - 0.0664
	0.401 : 1	4:3	= 0.3334 × SD - 0.0664

ET-D3LEW200 (Unit: m)

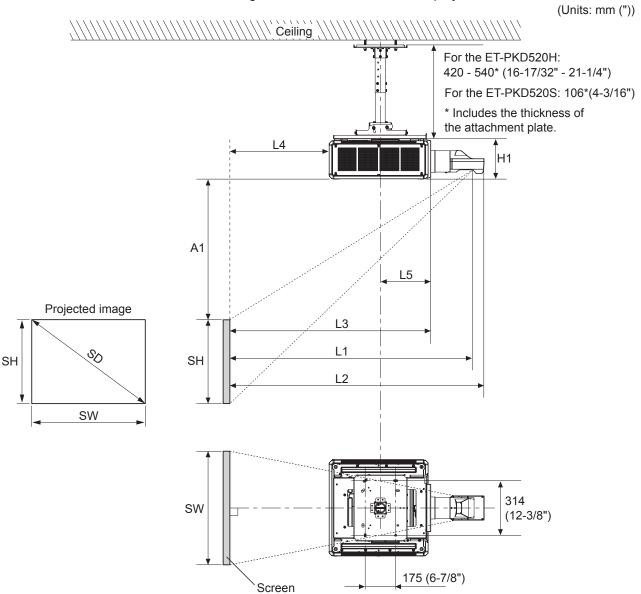
Projector Throw ratio A		Aspest ratio	Projection distance (L) formula	
Projector	Tillow ratio	Aspect ratio	Min. (LW)	Max. (LT)
PT-RQ25K /	0.779 – 1.025 : 1	16:10	= 0.6798 × SD - 0.1001	= 0.8910 × SD - 0.1076
PT-RQ18K / PT-RZ24K /	0.780 - 1.026 : 1	16:9	= 0.6987 × SD - 0.1001	= 0.9158 × SD - 0.1076
PT-RZ17K	0.938 – 1.23 : 1	4:3	= 0.7696 × SD - 0.1001	= 1.0087 × SD - 0.1076
	0.693 - 0.913 : 1	16:10	= 0.6070 × SD - 0.1001	= 0.7956 × SD - 0.1076
PT-RQ22K	0.694 - 0.913 : 1	16:9	= 0.6239 × SD - 0.1001	= 0.8177 × SD - 0.1076
	0.835 – 1.09 : 1	4:3	= 0.6872 × SD - 0.1001	= 0.9007 × SD - 0.1076
	0.645 - 0.850 : 1	16:10	= 0.5665 × SD - 0.1001	= 0.7425 × SD - 0.1076
PT-RZ21K / PT-RZ16K	0.646 - 0.851 : 1	16:9	= 0.5823 × SD - 0.1001	= 0.7632 × SD - 0.1076
	0.778 – 1.02 : 1	4:3	= 0.6414 × SD - 0.1001	= 0.8406 × SD - 0.1076
DT DC20K	0.701 - 0.923 : 1	16:9	= 0.6303 × SD - 0.1001	= 0.8262 × SD - 0.1076
PT-RS20K	0.699 - 0.921 : 1	4:3	= 0.5787 × SD - 0.1001	= 0.7584 × SD - 0.1076

<When using the ET-D75LE95 / ET-D75LE90 Fixed-focus lens>

The dimensional relationship between the screen and the projector is shown below. Establish the dimensions after assessing the area possible for installation.

■ Dimensional relationship diagram

• The illustration shows the ET-PKD520H ceiling mount bracket mounted on a projector.



Note

- This illustration assumes that the projector will be installed so that the projected image fills the screen and is properly aligned with it.
- This drawing is not in exact scale.
- The PT-RQ25K / RQ18K / RZ24K / RZ17K is not supported by the ET-D75LE90.

SH	Image height	L4	From screen to rear of projector
SW	Image width	L5	From center of attachment plate to front of projector
SD	Projected image size	A1	From top edge of screen to top of projector
L1	Projection distance (from screen to mirror reflective surface*)	H1	From bottom of set (the surface in contact with this product) to top of projector
L2	From screen to tip of lens		
L3	From screen to front of projector		

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

Attention

- Install the projector at a sufficient distance from the surrounding walls and objects so that the air intake and
 exhaust ports of the projector are not blocked. For details on the distance, refer to the operating instructions for
 your projector.
- Avoid setting up in places which are subject to sudden temperature changes, such as near an air conditioner or lighting equipment (studio lamps, etc.).
- 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. Depending on your projector, however, keystone distortion
 correction via the [GEOMETRY] function may be possible, even after setup. For details, refer to "Setting up" in
 the operating instructions of the projector.

Note

- Dimension L4 is not the distance from the projector rear panel to the wall, but the distance from the projector rear panel to the screen.
- When [GEOMETRY] is used, correction is performed in the direction that results in a screen smaller than the specified screen size.
- The illustrations of projectors in this manual are for informational purposes only and do not represent a specific model. Configurations may vary with the model.

Dimensional relationship

● H1 and L5 values (Unit: m)

	PT-RQ25K / RQ18K / RZ24K / RZ17K	PT-RQ22K / RZ21K / RS20K / RZ16K / RQ13K / RZ12K / RS11K
H1	0.230	0.270
L5	0.275	0.298

L1, A1 calculation formula

Check the projected image size SD (m) and use each formula to determine projection distance (L1) and top of set to top edge of screen (A1).

By determining L1 and A1, you can calculate all other dimensions.

(Values obtained by the calculation formulas contain a slight error.)

When calculating a projection distance using image size designation (value in inches), multiply the value in inches by 0.0254 and substitute it into SD in the formula for calculating the projection distance.

PT-RQ25K / RQ18K (Unit: m)

		Aspect ratio 16 : 10 (Throw ratio [0.39 : 1])	Aspect ratio 16 : 9 (Throw ratio [0.39 : 1])	Aspect ratio 4 : 3 (Throw ratio [0.47 : 1])
	L1	$= 0.364 \times SD + 0.020$	= 0.374 × SD + 0.020	= 0.412 × SD + 0.020
A1	Min.	= 0.214 × SH - 0.110	= 0.293 × SH - 0.110	= 0.214 × SH - 0.110
AI	Max.	= 0.430 × SH - 0.110	= 0.533 × SH - 0.110	= 0.430 × SH – 0.110

PT-RQ22K / RQ13K (Unit: m)

			Aspect ratio 16 : 10 (Throw ratio [0.39 : 1])	Aspect ratio 16 : 9 (Throw ratio [0.39 : 1])	Aspect ratio 4 : 3 (Throw ratio [0.47 : 1])
	L1		$= 0.325 \times SD + 0.020$	$= 0.334 \times SD + 0.020$	= 0.368 × SD + 0.020
	A1	Min.	= 0.245 × SH - 0.128	= 0.272 × SH - 0.128	= 0.245 × SH – 0.128
	AI	Max.	= 0.339 × SH - 0.128	= 0.432 × SH - 0.128	= 0.339 × SH – 0.128

PT-RZ24K / RZ17K (Unit: m)

		Aspect ratio 16 : 10 (Throw ratio [0.36 : 1])	Aspect ratio 16 : 9 (Throw ratio [0.36 : 1])	Aspect ratio 4 : 3 (Throw ratio [0.44 : 1])
L1		= 0.364 × SD + 0.020	= 0.374 × SD + 0.020	= 0.412 × SD + 0.020
۸1	Min. = 0.214 × SH – 0.110		= 0.293 × SH - 0.110	= 0.214 × SH – 0.110
A1	Max.	= 0.430 × SH - 0.110	= 0.533 × SH - 0.110	= 0.430 × SH - 0.110

PT-RZ21K / RZ16K / RZ12K

(Unit: m)

		Aspect ratio 16 : 10 (Throw ratio [0.36 : 1])	Aspect ratio 16 : 9 (Throw ratio [0.36 : 1])	Aspect ratio 4 : 3 (Throw ratio [0.44 : 1])
	L1	$= 0.303 \times SD + 0.020$	= 0.312 × SD + 0.020	= 0.343 × SD + 0.020
A1	Min.	= 0.229 × SH - 0.128	= 0.254 × SH - 0.128	= 0.229 × SH – 0.128
AI	Max.	= 0.283 × SH - 0.128	= 0.370 × SH - 0.128	= 0.283 × SH – 0.128

PT-RS20K / RS11K (Unit: m)

		Aspect ratio 4 : 3 (Throw ratio [0.39 : 1])	Aspect ratio 16 : 9 (Throw ratio [0.39 : 1])
L	L1	$= 0.310 \times SD + 0.020$	$= 0.337 \times SD + 0.020$
A1	Min.	= 0.206 × SH – 0.128	= 0.275 × SH – 0.128
	Max.	= U.200 × SH = U.128	= 0.441 × SH - 0.128

• L2, L3, and L4 calculation formula

(Unit: m)

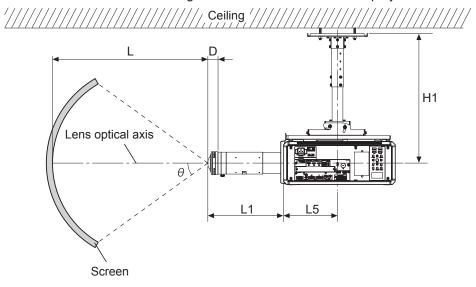
	PT-RQ25K / RQ18K / RZ24K / RZ17K	PT-RQ22K / RZ21K / RS20K / RZ16K / RQ13K / RZ12 RS11K	
	ET-D75LE95	ET-D75LE95	ET-D75LE90
L2	= L1 + 0.029	= L1 + 0.029	= L1 + 0.029
L3	= L1 - 0.293	= L1 - 0.292	= L1 - 0.277
L4	= L1 - 0.863	= L1 - 1.017	= L1 - 1.002

<When using the ET-D3LEF70 Fisheye lens>

The dimensional relationship between the screen and the projector is shown below. Establish the dimensions after assessing the area possible for installation.

■ Dimensional reationship diagram

• The illustration shows the ET-PKD520H ceiling mount bracket mounted on a projector.



Note

- This illustration assumes that the projector will be installed so that the projected image fills the screen and is properly aligned with it.
- This drawing is not in exact scale.

θ	Projected angle	L	Projection distance
L1	Lens protrusion dimension (from front of set to tip of lens) From front center of the attachment plate to front of projector		Exit pupil position
L5			From lens center to attachment plate (includes the thickness of the attachment plate)

Attention

- Install the projector at a sufficient distance from the surrounding walls and objects so that the air intake and exhaust ports of the projector are not blocked. For details on the distance, refer to the operating instructions for your projector.
- 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

• H1 and L5 values (Unit: m)

		PT-RQ25K / RQ18K / RZ24K / RZ17K	PT-RQ22K / RZ21K / RS20K / RZ16K / RQ13K / RZ12K / RS11K
ET-PKD520H	H1	0.540 - 0.660	0.562 - 0.682
E1-PND520H	L5	0.275	0.298
ET DVDE200	H1	0.226	0.248
ET-PKD520S	L5	0.275	0.298

Calculation formula of L and L1 values and D

(Unit: m)

	PT-RQ25K / RQ18K / RZ24K / RZ17K	PT-RQ22K / RZ21K / RS20K / RZ16K / RQ13K / RZ12K / RS11K
Supported projection distance (L) range	2 – ∞	
Lens protrusion dimension (L1)	0.386	0.385
Exit pupil position (D) formula*1	$= -10^{-8} \times \theta^3 - 3 \times 10^{-7} \times \theta^2$	- 1.73 × 10⁻⁵ × θ + 0.02342

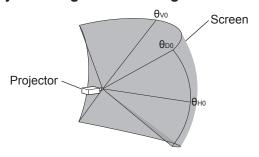
^{*1} The unit of the numerical value that is substituted into θ is degree. The value (m) obtained by this calculation formula contains a slight error.

• D value (approximate value)

(Unit: m)

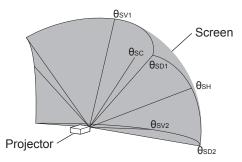
Projected angle (θ) (degrees)	Exit pupil position (D)
10	0.0232
20	0.0229
30	0.0224
40	0.0216
50	0.0206
60	0.0191
70	0.0173
80	0.0150
91.6	0.0116

Projected angle of view diagram



When the lens is centered

Ө но	Maximum horizontal center angle of view
θ_{V0}	Maximum vertical center angle of view
θ _{D0}	Maximum diagonal angle of view



When the lens is shifted to the upward Vmax position

θsc	Center angle of view	
θsv1	Maximum vertical center angle of view	
θsv2	Maximum angle of view on opposing side of vertical center (θsv1)	
θѕн	Maximum horizontal center angle of view	
θsD1	Maximum diagonal angle of view	
θsD2	Maximum angle of view on vertically opposing side of diagonal (θsp1)	

PT-RQ25K / RQ18K / RZ24K / RZ17K

Ө но	θνο	θρο
54.7	34.3	64.5

θsc	θsv1	θsv2	Ө ѕн	θsD1	θsD2
22.0	56.1	12.4	59.0	78.4	56.1

PT-RQ22K / RQ13K

Ө но	θνο	Ө D0	
61.3	38.4	72.3	

θsc	θsv1	θsv2	Ө ѕн	θsD1	θsD2
28.4	66.6	10.0	67.5	90.8	62.1

PT-RZ21K / RZ16K / RZ12K

О Н0	θνο	θрο	
65.7	41.1	77.5	

θsc	θsv1	0sv2	θѕн	θsD1	θsD2
22.3	63.2	19.0	69.3	91.4	68.4

PT-RS20K / RS11K

Ө но	θνο	θдо
60.7	45.5	75.9

θsc	θsv1	θsv2	Ө ѕн	θsD1	θsD2
22.8	68.3	22.8	64.8	91.5	64.8

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.
- The angle of view values indicated in the tables are lens optical axis angles.

Installation

After checking the height, width, and structure of the installation location while referring to "Standard installation dimensions" on pages 5 to 20, determine the appropriate positions for setting up the screen and installing the projector.

- The [GEOMETRY] function cannot be used when projecting images in the simultaneous format with a PT-RQ22K / RQ13K series DLP™ Projector. When installing the unit on a PT-RQ22K / RQ13K series projector and projecting images in the simultaneous format, obey the following to prevent distortion in the projected image.
 - Use a flat screen.
 - Install the projector so that the front side of the projector is parallel to the screen.
 - Install the projector so that the image can be projected within the range of shift adjustment by moving the lens position.

Setting up the screen

Set up the screen according to the specified method in a position which takes into account the projection distance and angle and the type of screen being used.

Screws tightening torques

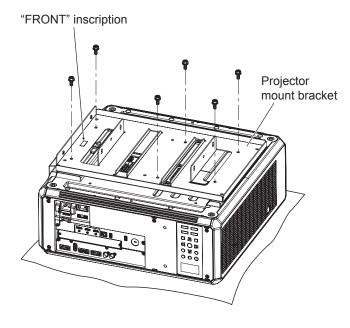
M6.....4±0.5 N•m M10.....20±1 N•m

Use a torque screwdriver or torque wrench to tighten screws and bolts to their specified tightening torques. Do
not use electric screwdrivers or impact screwdrivers.

Installing the bracket to the projector

Attach the projector mount bracket to the projector (sold separately).

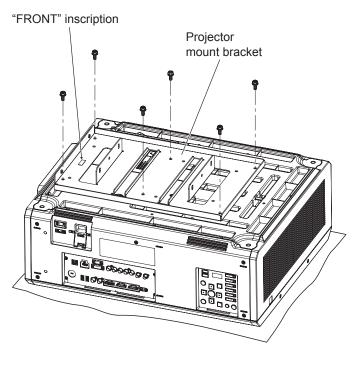
<When PT-RQ25K / RQ18K / RZ24K / RZ17K>



- 1) Place the projector upside-down onto a piece of soft material.
- 2) Firmly secure the projector mount bracket to the bottom of the projector using the six supplied captive washer hex head bolts (M6 × 16) as shown in the figure on the left.

Installation (continued)

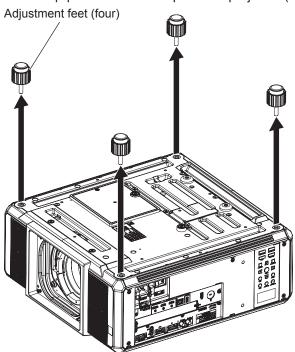
<When PT-RQ22K / RZ21K / RS20K / RZ16K / RQ13K / RZ12K / RS11K>



- 1) Place the projector upside-down onto a piece of soft material.
- 2) Firmly secure the projector mount bracket to the bottom of the projector using the six supplied captive washer hex head bolts (M6 × 16) as shown in the figure on the left.

Attaching the wire rope to the projector

Attach the drop-prevention wire rope to the projector (sold separately).

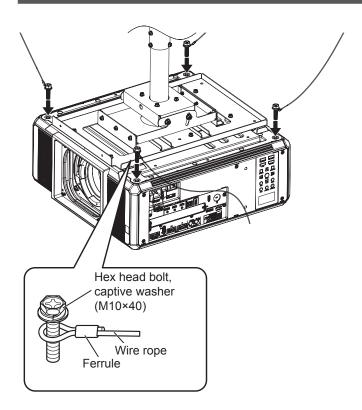


1) Turn the adjustable feet (four) counterclockwise to remove it from the projector.

Attention

 The removed adjustable feet are necessary for floor installations, so be sure to store them safely.

Installation (continued)



2) As shown in the figure on the left, pass the supplied hex head bolts with washers (M10 × 40) through the rings in the supplied wire rope, and secure the bolts to the threaded holes in which the adjustable feet were previously attached.

Attention

- Be sure to use the supplied hex head bolts with washers and wire rope.
- Secure the supplied hex head bolts with washers (M10 × 40) firmly.
- Stretch the wire ropes with the ferrules pointing toward the outside of the projector.
- For information on how to join this product to the ceiling mount bracket (for high ceilings or for low ceilings) (separately sold) and how to attach the wire rope in the ceiling, refer to the installation instructions or other instructions supplied with the ceiling mount bracket (for high ceilings or for low ceilings).

Note

 The illustration shows an installation using the ET-PKD520H ceiling bracket for high ceilings.

Specifications

External dimensions	Width: 350 mm (13-25/32") / Height: 52.5 mm (2-1/16") / Depth: 535 mm (21-1/16")		
Weight	Approx. 4.1 kg (9.04 lbs.)		

