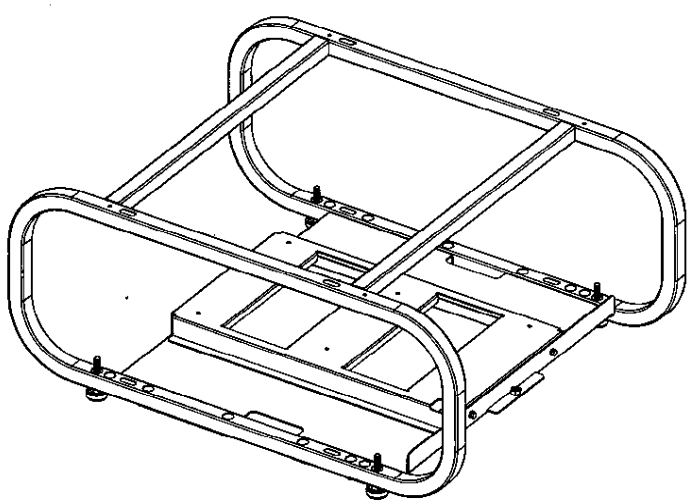
Panasonic®

Operating Instructions

Frame

Model No. ET-PFD510



Thank you for purchasing this Panasonic product.

- Carefully read through these Operating Instructions and the operating instructions of the projector to ensure safe and proper operation.
- **Before using this product, be sure to read "Precautions with regard to safety" (page 3).**
- Please save this manual for future use.

TQZJ436

Contents

Important Safety Notice

Dear Panasonic Customer:

This instruction booklet provides all the necessary operating information that you might require. We hope it will help you to get the most performance out of new product, and that you will be pleased with your Panasonic Projector Frame. The serial number of your product may be found on its back. You should note it in the space provided below and retain this booklet in case service is required.

Model number: **ET-PFD510**

Serial number:

Precautions with regard to safety

■WARNING

Do not install in a place which is not strong enough.

- If the installation location is not strong enough, the ceiling bracket may fall down and an injury may result.

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

- If your footing is not secure, you may fall down or drop the bracket, and an injury may result.

Do not loosen or remove the ceiling mount bracket screws unnecessarily.

- The projector may fall down and injury may result.

Do not set up the projector in humid or dusty places or in places where the projector may come into contact with oily smoke or steam.

- Using the projector under such conditions may result in fire, electric shocks or plastic deterioration. The plastic deterioration may cause the falling down of the projector which is mounted in the ceiling.

Do not place the projector on top of surfaces which are unstable.

- If the projector is placed on top of a surface which is sloped or unstable, it may fall down or tip over, and injury or damage could result.

Do not stack any more than two frames on top of each other.

- The frames may fall and cause injury.

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

- The attached metal fittings and screws can cause personal injury if swallowed.
- If swallowed, seek medical advice immediately.

Mounting and installation must be carried out by two or more persons.

- Once a projector is included, the total weight will exceed 62 kg (136.7 lbs.). Be sure that mounting and installation are carried out by two or more persons.

At least 2 people are required to install the frame.

- The weight of the frame and two projectors is at least 124 kg (273.4 lbs.). For maximum safety, at least 2 people are required to install the frame.

■CAUTION

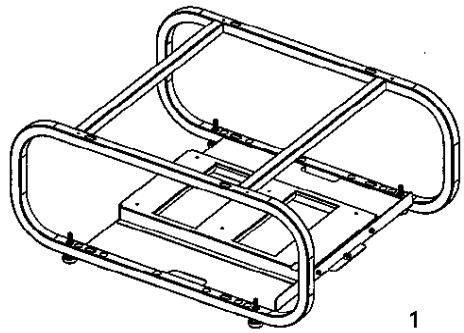
Do not install the frame in a place which may impede projector ventilation.

- If this is not observed, fire may result.

Product description

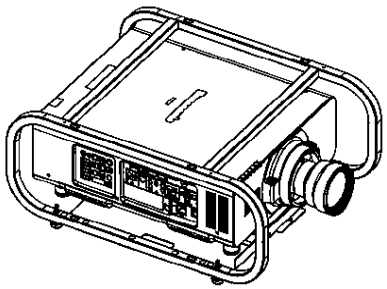
This frame is exclusively for the installation of dual projectors.
The frame is made up of the following components. Before assembling the frame, confirm that all components have been provided.

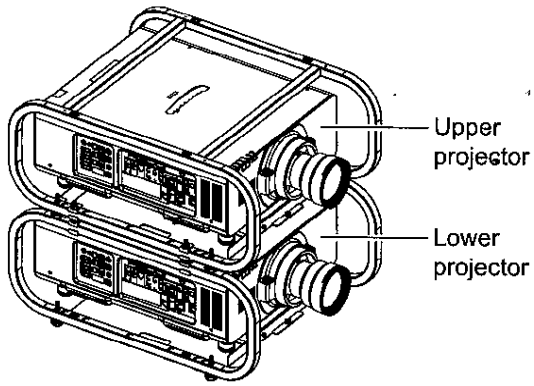
■Structural components

Parts name	Sub-components (number of parts)
Frame	 1
Screws and bolts	 Hexagonal head bolt with washers (M6 × 30).....6 pieces  Hex nuts (M10) ..... 8  Flat washers (M10) ..... 16  Bent washers (M10) ..... 16  Spring washers (M10) ..... 8  Adjustment nuts (M10) ..... 4  Hex head bolts (M10 × 140, for vertical fixing) .....4 pieces

- Store small parts in an appropriate manner, and keep them away from young children.
- The tightening torque for the screws should be 4 ±0.5 N · m for the M6 screws and 20 ±1 N · m for the M10 screws.
- Use a torque driver, torque wrench or similar tool when tightening the bolts and nuts. Do not use electric screwdrivers or impact screwdrivers.

Finished assembly diagram





∗: Example showing one projector stacked on top of another projector.
Another separate frame is required when stacking two frame together.

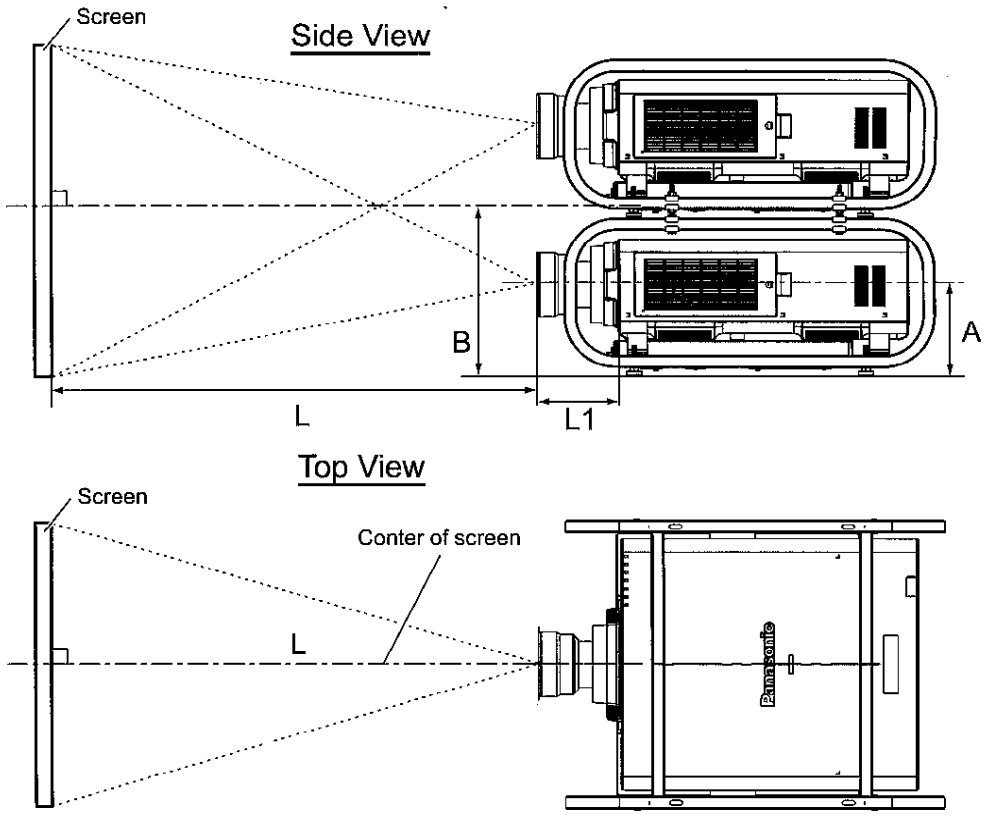
Assembly procedure

(example when two projectors are installed one on top of the other)

1. Preparation	● Prepare the tools. ① Spanner ② Monkey wrench ③ Torque wrench ④ Torque driver (cross-head) ⑤ Soft blanket or other cushioning material on which to lay the projectors ● Check the strength of the setting-up location.
2. Determine the setting-up position	● Select the placement position for the projectors based on the size and location of the screen and the lens (sold separately) to be used. (pages 6 to 9)
3. Install the projectors	● Install the frame for the lower projector and upper projector separately. (pages 10 to 11)
4. Carry out adjustments	● Adjust so that the images projected by the upper and lower projectors converge on the screen. (page 12)

Projection distances

When planning the projector and screen geometry, refer to the following figures and table on the next page for reference. After the projector is roughly positioned, picture size and vertical picture positioning can be finely adjusted with the zoom lens and lens shifting mechanism.



L: Projection distance
A: Distance from center of lower lens to lower frame installation surface is approximately 231.5 mm.
B: Distance from center of upper and lower lens to lower frame is approximately 430 mm.

[Unit : mm]

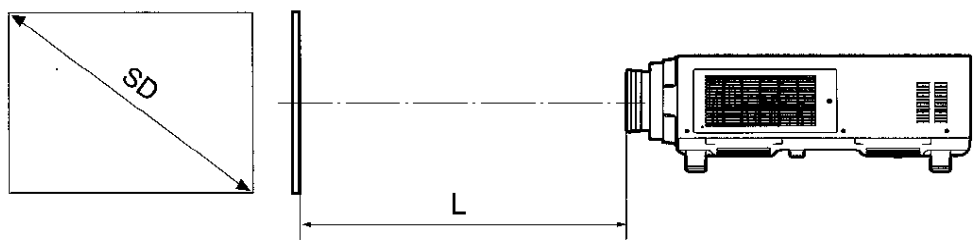
Projection lens number	L
ET-D75LE1	114.4
ET-D75LE2	98.9
ET-D75LE3	102.4
ET-D75LE4	126.3
ET-D75LE5	202.4
ET-D75LE6	211.9
ET-D75LE8	254.4
ET-D75LE10	125
ET-D75LE20	121
ET-D75LE30	121
ET-D75LE40	124
ET-D75LE50	203

Attention

- Install the projector with a space more than 50 cm behind it so as not to interfere with projector ventilation.
- Leave a space of 50 cm on each side of the projector.
- Before proceeding with installation, carefully read through the section "Precautions for use" in the projector's operating instructions.

■Projection distances by the type of projection lens (optional)

Every type of optional projection lens has a different projection distance to achieve the same screen size. Select and purchase a projection lens most suitable to the size of your location and your screen size by referring to the figure below and the following tables of the projection distances by the type of projection lens from the next page.



Projection distances (Continued)

■Projection distance according to the projector lens.

To use a screen size not listed in this manual, check the screen size SD and use the following formula to calculate projection distance.
The unit of the calculation result is m.

Formula to calculate projection distance per projection lens (for PT-DZ21K)

Projection lens		Throw ratio	Aspect ratio	Projection distance (L) formula	
Zoom lens	ET-D75LE1	1.4 to 1.8:1	16:10	Min. (LW)	L = 1.1732 x SD (m) – 0.0760
				Max. (LT)	L = 1.5709 x SD (m) – 0.1004
		1.4 to 1.8:1	16:9	Min. (LW)	L = 1.2087 x SD (m) – 0.0760
				Max. (LT)	L = 1.6142 x SD (m) – 0.1004
		1.6 to 2.2:1	4:3	Min. (LW)	L = 1.3307 x SD (m) – 0.0760
				Max. (LT)	L = 1.7756 x SD (m) – 0.1004
	ET-D75LE2	1.8 to 2.8:1	16:10	Min. (LW)	L = 1.5748 x SD (m) – 0.0795
				Max. (LT)	L = 2.3661 x SD (m) – 0.1064
		1.8 to 2.8:1	16:9	Min. (LW)	L = 1.6220 x SD (m) – 0.0795
				Max. (LT)	L = 2.4291 x SD (m) – 0.1064
		2.2 to 3.3:1	4:3	Min. (LW)	L = 1.7835 x SD (m) – 0.0795
				Max. (LT)	L = 2.6772 x SD (m) – 0.1064
	ET-D75LE3	2.8 to 4.6:1	16:10	Min. (LW)	L = 2.3661 x SD (m) – 0.0958
				Max. (LT)	L = 3.9488 x SD (m) – 0.1216
		2.8 to 4.6:1	16:9	Min. (LW)	L = 2.4291 x SD (m) – 0.0958
				Max. (LT)	L = 4.0591 x SD (m) – 0.1216
		3.3 to 5.5:1	4:3	Min. (LW)	L = 2.6772 x SD (m) – 0.0958
				Max. (LT)	L = 4.4724 x SD (m) – 0.1216
	ET-D75LE4	4.6 to 7.4:1	16:10	Min. (LW)	L = 3.9488 x SD (m) – 0.1158
				Max. (LT)	L = 6.2795 x SD (m) – 0.1013
		4.6 to 7.4:1	16:9	Min. (LW)	L = 4.0591 x SD (m) – 0.1158
				Max. (LT)	L = 6.4528 x SD (m) – 0.1013
		5.6 to 8.9:1	4:3	Min. (LW)	L = 4.4724 x SD (m) – 0.1158
				Max. (LT)	L = 7.1102 x SD (m) – 0.1013
	ET-D75LE8	7.3 to 13.8:1	16:10	Min. (LW)	L = 6.2795 x SD (m) – 0.3862
				Max. (LT)	L = 11.7677 x SD (m) – 0.3598
		7.3 to 13.8:1	16:9	Min. (LW)	L = 6.4567 x SD (m) – 0.3862
				Max. (LT)	L = 12.0945 x SD (m) – 0.3598
		8.8 to 16.5:1	4:3	Min. (LW)	L = 7.1102 x SD (m) – 0.3862
				Max. (LT)	L = 13.3189 x SD (m) – 0.3598
	ET-D75LE6	0.9 to 1.1:1	16:10	Min. (LW)	L = 0.7913 x SD (m) – 0.0566
				Max. (LT)	L = 0.9488 x SD (m) – 0.0736
		0.9 to 1.1:1	16:9	Min. (LW)	L = 0.8150 x SD (m) – 0.0566
				Max. (LT)	L = 0.9764 x SD (m) – 0.0736
		1.1 to 1.3:1	4:3	Min. (LW)	L = 0.8976 x SD (m) – 0.0566
				Max. (LT)	L = 1.0748 x SD (m) – 0.0736
	ET-D75LE10	1.3 to 1.7:1	16:10	Min. (LW)	L = 1.1181 x SD (m) – 0.0857
				Max. (LT)	L = 1.4449 x SD (m) – 0.1085
		1.3 to 1.7:1	16:9	Min. (LW)	L = 1.1496 x SD (m) – 0.0857
				Max. (LT)	L = 1.4843 x SD (m) – 0.1085
		1.6 to 2.0:1	4:3	Min. (LW)	L = 1.2677 x SD (m) – 0.0857
				Max. (LT)	L = 1.6378 x SD (m) – 0.1085
	ET-D75LE20	1.7 to 2.4:1	16:10	Min. (LW)	L = 1.4331 x SD (m) – 0.0832
				Max. (LT)	L = 2.0787 x SD (m) – 0.1162
		1.7 to 2.4:1	16:9	Min. (LW)	L = 1.4724 x SD (m) – 0.0832
				Max. (LT)	L = 2.1378 x SD (m) – 0.1162
		2.0 to 2.9:1	4:3	Min. (LW)	L = 1.6220 x SD (m) – 0.0832
				Max. (LT)	L = 2.3543 x SD (m) – 0.1162
	ET-D75LE30	2.4 to 4.7:1	16:10	Min. (LW)	L = 2.0630 x SD (m) – 0.1131
				Max. (LT)	L = 4.0039 x SD (m) – 0.1765
		2.4 to 4.7:1	16:9	Min. (LW)	L = 2.1220 x SD (m) – 0.1131
				Max. (LT)	L = 4.1142 x SD (m) – 0.1765
		2.9 to 5.6:1	4:3	Min. (LW)	L = 2.3386 x SD (m) – 0.1131
				Max. (LT)	L = 4.5315 x SD (m) – 0.1765

Projection distances (Continued)

Projection lens		Throw ratio	Aspect ratio	Projection distance (L) formula	
Zoom lens	ET-D75LE40	4.6 to 7.4:1	16:10	Min. (LW)	L = 3.9528 x SD (m) – 0.1577
				Max. (LT)	L = 6.3031 x SD (m) – 0.1615
		4.6 to 7.4:1	16:9	Min. (LW)	L = 4.0630 x SD (m) – 0.1577
				Max. (LT)	L = 6.4764 x SD (m) – 0.1615
		5.5 to 8.9:1	4:3	Min. (LW)	L = 4.4764 x SD (m) – 0.1577
				Max. (LT)	L = 7.1339 x SD (m) – 0.1615
Fixed-focus lens	ET-D75LE5	0.7:1	16:10	—	L = 0.6063 x SD (m) – 0.0835
		0.7:1	16:9	—	L = 0.6220 x SD (m) – 0.0835
		0.8:1	4:3	—	L = 0.6850 x SD (m) – 0.0835
	ET-D75LE50	0.7:1	16:10	—	L = 0.6063 x SD (m) – 0.0713
		0.7:1	16:9	—	L = 0.6260 x SD (m) – 0.0713
		0.8:1	4:3	—	L = 0.6890 x SD (m) – 0.0713

Formula to calculate projection distance per projection lens (for PT-DS20K)

Projection lens		Throw ratio	Aspect ratio	Projection distance (L) formula	
Zoom lens	ET-D75LE1	1.5 to 2.0:1	4:3	Min. (LW)	L = 1.2087 x SD (m) – 0.0760
				Max. (LT)	L = 1.6142 x SD (m) – 0.1004
			16:9	Min. (LW)	L = 1.3150 x SD (m) – 0.0760
				Max. (LT)	L = 1.7559 x SD (m) – 0.1004
	ET-D75LE2	2.0 to 3.0:1	4:3	Min. (LW)	L = 1.6220 x SD (m) – 0.0795
				Max. (LT)	L = 2.4291 x SD (m) – 0.1064
			16:9	Min. (LW)	L = 1.7638 x SD (m) – 0.0795
				Max. (LT)	L = 2.6457 x SD (m) – 0.1064
	ET-D75LE3	3.0 to 5.0:1	4:3	Min. (LW)	L = 2.4291 x SD (m) – 0.0958
				Max. (LT)	L = 4.0591 x SD (m) – 0.1216
			16:9	Min. (LW)	L = 2.6457 x SD (m) – 0.0958
				Max. (LT)	L = 4.4213 x SD (m) – 0.1216
	ET-D75LE4	5.0 to 8.0:1	4:3	Min. (LW)	L = 4.0591 x SD (m) – 0.1158
				Max. (LT)	L = 6.4528 x SD (m) – 0.1013
			16:9	Min. (LW)	L = 4.4213 x SD (m) – 0.1158
				Max. (LT)	L = 7.0315 x SD (m) – 0.1013
	ET-D75LE8	7.9 to 15.0:1	4:3	Min. (LW)	L = 6.4567 x SD (m) – 0.3862
				Max. (LT)	L = 12.0945 x SD (m) – 0.3598
		8.0 to 15.0:1	16:9	Min. (LW)	L = 7.0315 x SD (m) – 0.3862
				Max. (LT)	L = 13.1732 x SD (m) – 0.3598
	ET-D75LE6	1.0 to 1.2:1	4:3	Min. (LW)	L = 0.8150 x SD (m) – 0.0566
				Max. (LT)	L = 0.9764 x SD (m) – 0.0736
			16:9	Min. (LW)	L = 0.8858 x SD (m) – 0.0566
				Max. (LT)	L = 1.0630 x SD (m) – 0.0736
	ET-D75LE10	1.4 to 1.8:1	4:3	Min. (LW)	L = 1.1417 x SD (m) – 0.0857
				Max. (LT)	L = 1.4764 x SD (m) – 0.1085
			16:9	Min. (LW)	L = 1.2441 x SD (m) – 0.0857
				Max. (LT)	L = 1.6102 x SD (m) – 0.1085
	ET-D75LE20	1.8 to 2.6:1	4:3	Min. (LW)	L = 1.4606 x SD (m) – 0.0832
				Max. (LT)	L = 2.1260 x SD (m) – 0.1162
			16:9	Min. (LW)	L = 1.5906 x SD (m) – 0.0832
				Max. (LT)	L = 2.3150 x SD (m) – 0.1162
	ET-D75LE30	2.6 to 5.1:1	4:3	Min. (LW)	L = 2.1102 x SD (m) – 0.1131
				Max. (LT)	L = 4.0906 x SD (m) – 0.1765
			16:9	Min. (LW)	L = 2.2953 x SD (m) – 0.1131
				Max. (LT)	L = 4.4567 x SD (m) – 0.1765
	ET-D75LE40	5.0 to 8.0:1	4:3	Min. (LW)	L = 4.0394 x SD (m) – 0.1577
				Max. (LT)	L = 6.4370 x SD (m) – 0.1615
			16:9	Min. (LW)	L = 4.3976 x SD (m) – 0.1577
				Max. (LT)	L = 7.0118 x SD (m) – 0.1615

Projection distances (Continued)

Projection lens		Throw ratio	Aspect ratio	Projection distance (L) formula	
Fixed-focus lens	ET-D75LE5	0.8:1	4:3	—	L = 0.6220 x SD (m) – 0.0835
			16:9	—	L = 0.6772 x SD (m) – 0.0835
	ET-D75LE50	0.8:1	4:3	—	L = 0.6220 x SD (m) – 0.0713
			16:9	—	L = 0.6772 x SD (m) – 0.0713

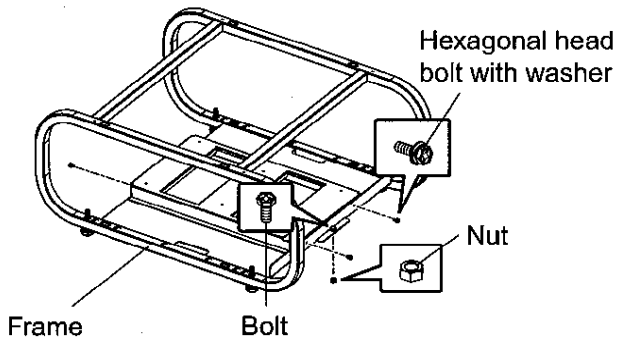
Formula to calculate projection distance per projection lens (for PT-DW17K)

Projection lens		Throw ratio	Aspect ratio	Projection distance (L) formula	
Zoom lens	ET-D75LE1	1.5 to 2.0:1	16:9	Min. (LW)	L = 1.3504 x SD (m) – 0.0760
				Max. (LT)	L = 1.8031 x SD (m) – 0.1004
		2.0 to 2.7:1	4:3	Min. (LW)	L = 1.6496 x SD (m) – 0.0760
				Max. (LT)	L = 2.2047 x SD (m) – 0.1004
	ET-D75LE2	2.1 to 3.1:1	16:9	Min. (LW)	L = 1.8110 x SD (m) – 0.0795
				Max. (LT)	L = 2.7126 x SD (m) – 0.1064
		2.7 to 4.1:1	4:3	Min. (LW)	L = 2.2165 x SD (m) – 0.0795
				Max. (LT)	L = 3.3228 x SD (m) – 0.1064
	ET-D75LE3	3.1 to 5.2:1	16:9	Min. (LW)	L = 2.7126 x SD (m) – 0.0958
				Max. (LT)	L = 4.5315 x SD (m) – 0.1216
		4.1 to 6.9:1	4:3	Min. (LW)	L = 3.3228 x SD (m) – 0.0958
				Max. (LT)	L = 5.5472 x SD (m) – 0.1216
	ET-D75LE4	5.2 to 8.2:1	16:9	Min. (LW)	L = 4.5315 x SD (m) – 0.1158
				Max. (LT)	L = 7.2087 x SD (m) – 0.1013
		6.9 to 11.0:1	4:3	Min. (LW)	L = 5.5472 x SD (m) – 0.1158
				Max. (LT)	L = 8.8228 x SD (m) – 0.1013
	ET-D75LE8	8.2 to 15.4:1	16:9	Min. (LW)	L = 7.2087 x SD (m) – 0.3862
				Max. (LT)	L = 13.5039 x SD (m) – 0.3598
		10.9 to 20.5:1	4:3	Min. (LW)	L = 8.8228 x SD (m) – 0.3862
				Max. (LT)	L = 16.5354 x SD (m) – 0.3598
	ET-D75LE6	1.0 to 1.2:1	16:9	Min. (LW)	L = 0.9094 x SD (m) – 0.0566
				Max. (LT)	L = 1.0906 x SD (m) – 0.0736
		1.4 to 1.6:1	4:3	Min. (LW)	L = 1.1142 x SD (m) – 0.0566
				Max. (LT)	L = 1.3346 x SD (m) – 0.0736
	ET-D75LE10	1.4 to 1.9:1	16:9	Min. (LW)	L = 1.2756 x SD (m) – 0.0857
				Max. (LT)	L = 1.6496 x SD (m) – 0.1085
		1.9 to 2.5:1	4:3	Min. (LW)	L = 1.5630 x SD (m) – 0.0857
				Max. (LT)	L = 2.0197 x SD (m) – 0.1085
	ET-D75LE20	1.8 to 2.7:1	16:9	Min. (LW)	L = 1.6339 x SD (m) – 0.0832
				Max. (LT)	L = 2.3701 x SD (m) – 0.1162
		2.5 to 3.6:1	4:3	Min. (LW)	L = 2.0000 x SD (m) – 0.0832
				Max. (LT)	L = 2.9055 x SD (m) – 0.1162
	ET-D75LE30	2.7 to 5.2:1	16:9	Min. (LW)	L = 2.3543 x SD (m) – 0.1131
				Max. (LT)	L = 4.5669 x SD (m) – 0.1765
		3.6 to 6.9:1	4:3	Min. (LW)	L = 2.8819 x SD (m) – 0.1131
				Max. (LT)	L = 5.5906 x SD (m) – 0.1765
	ET-D75LE40	5.1 to 8.2:1	16:9	Min. (LW)	L = 4.5079 x SD (m) – 0.1577
				Max. (LT)	L = 7.1890 x SD (m) – 0.1615
		6.8 to 10.9:1	4:3	Min. (LW)	L = 5.5197 x SD (m) – 0.1577
				Max. (LT)	L = 8.8031 x SD (m) – 0.1615
Fixed-focus lens	ET-D75LE5	0.8:1	16:9	—	L = 0.6929 x SD (m) – 0.0835
		1.0:1	4:3	—	L = 0.8504 x SD (m) – 0.0835
	ET-D75LE50	0.8:1	16:9	—	L = 0.6929 x SD (m) – 0.0713
		1.0:1	4:3	—	L = 0.8465 x SD (m) – 0.0713

- The values obtained from the above formulas may contain slight errors.
- The throw ratio is based on the value during projection onto a 3 810-mm (150") screen size.
- When GEOMETRY or KEYSTONE adjustment is used, compensation is made so that the screen size becomes smaller than the specified size.

Installing the projector

Installation procedure

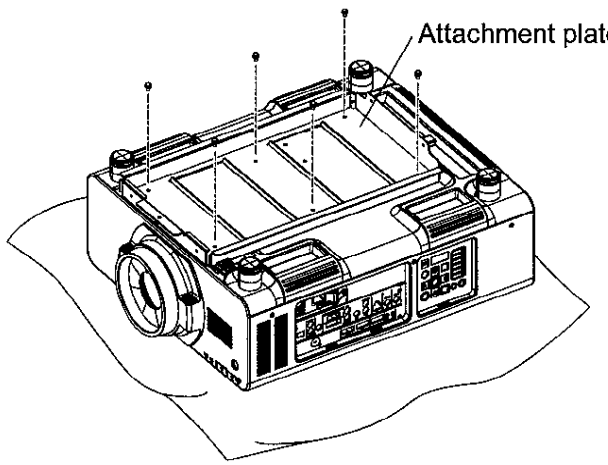


① Remove attachment plate from frame.

※Remove the four hexagonal head bolts with washers (M6 × 16) used to secure the attachment plate at the front and back. Remove the bolt (M6) and nut (M6) attached to the front, and remove the attachment plate from the frame.

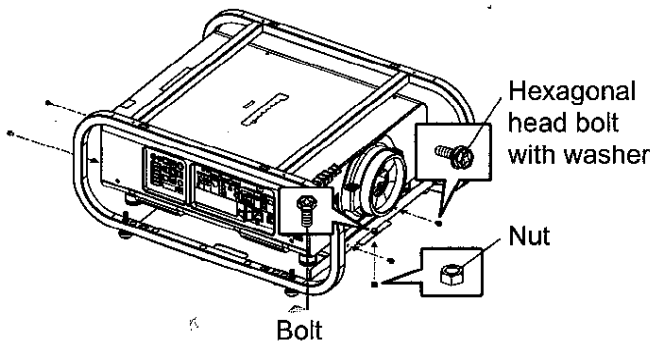
Attention

- The removed screws are needed for re-installation so do not lose them.



② Place the projector with its base facing upwards on a soft cloth.

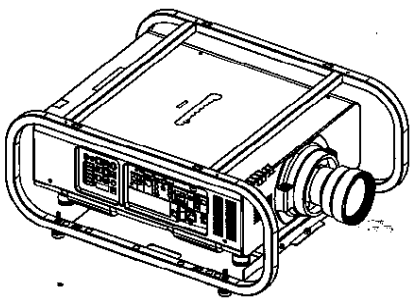
③ Secure the attachment plate to the projector using the six Hex-head bolt (M6 × 30) provided.



④ Place the projector with its bottom face down, and install the frame.
Secure the projector to the frame using the four hexagonal head bolts with washers (M6 × 16), bolt (M6) and nut (M6) which were removed in step ①.

Attention

- When installing the frame and securing it using the bolts, take care not to pinch your hand or fingers.

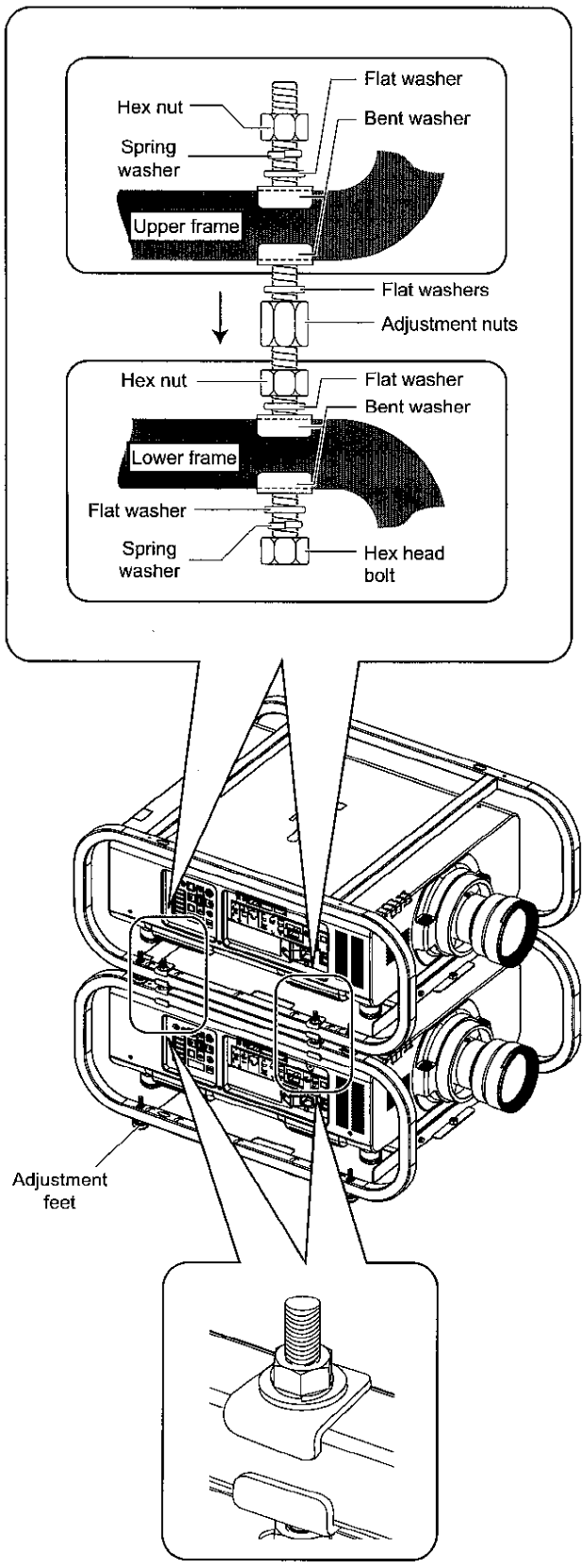


⑤ Attach the projection lens. (For more information on attaching, please refer to [Attaching/removing the projection lens (optional accessory)] in the Operating Instructions manual of the projector.)

Installing the upper projector

Installation procedure

- Another separate frame is required when stacking two frames together.
  Refer to [Installing the projector] for the installation procedure of a frame and a projector. (page 10)



① Check the strength and stability of the installation location. If there are no problems, first adjust the adjustment feet of the lower frame and install the lower projector horizontally.

② Install the hex head bolts (M10 × 140, for vertical fixing) into the four mounting holes in the lower frame with the hex nut, spring washer, flat washer and bent washer. Use the hex nuts to secure the lower frame and the hex head bolts (for vertical fixing).

③ Place the adjustment nuts, flat washer and bent washer onto the hex head bolts (for vertical fixing).

④ Align the four mounting holes in the upper frame for the upper projector with the vertical fixing hex head bolts in the lower frame, and place the upper frame onto the lower frame.

⑤ Secure the projector using the four adjustment nuts so that it is horizontal.

⑥ Place the bent washer, flat washer, spring washer and hex nut (M10) onto the hex head bolts.

⑦ Use the hex nuts (M10) to secure firmly the upper frame and the hex head bolts.

Attention

- The mounting holes in the frames are used only to attach one frame to the other. Do not use them for any other purpose.

WARNING:
Mounting and installation must be carried out by two or more persons.

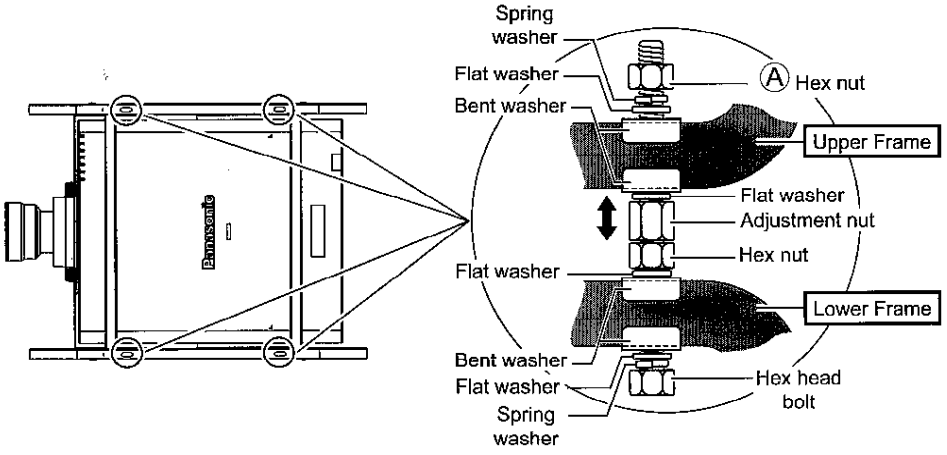
Adjusting the upper projector

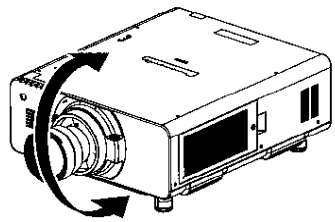
Follow the steps below to adjust the angle of the upper projector so that the image projected on the screen matches that of the lower projector whereby the screen size, position, and focus is already adjusted to the screen. Only the angle of the upper projector is adjustable.

- Referring to the Operating Instructions manual of the projector, project an image on the screen and then use the zoom and focus functions to adjust its size and focus roughly before adjusting the angle.
- Loosen the securing hex nuts Ⓐ of the upper frame and then adjust the adjustment nuts.

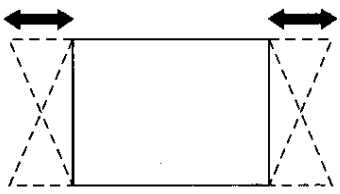
① Adjusting the vertical angle

Turn the four adjustment bolts to adjust the vertical angle and correct the keystone distortion on the projection screen. Make sure to turn the right and left adjustment bolts at the front, and the right and left adjustment bolts at the rear, by the same amount.





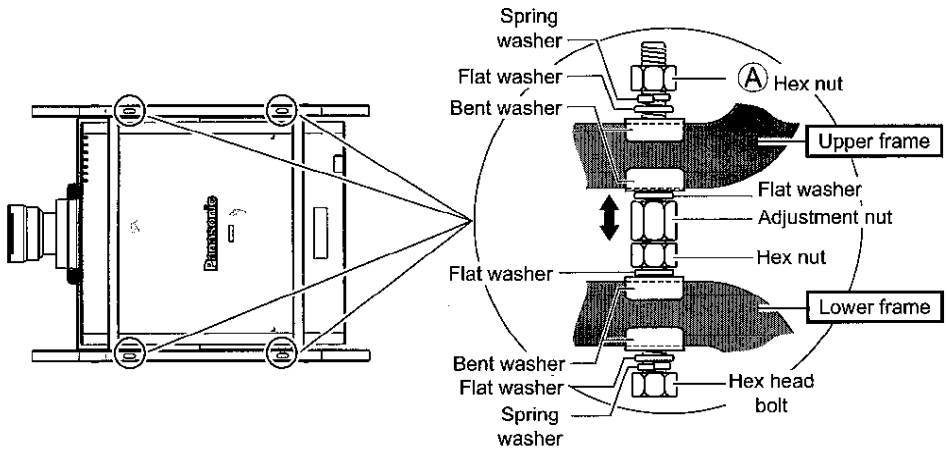
Movement of the projection screen and the vertical angle of the upper projector.
(frame omitted from illustration)

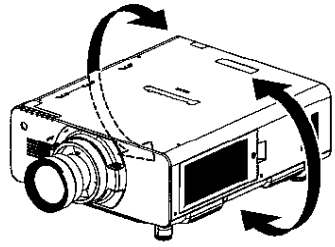


Projection screen

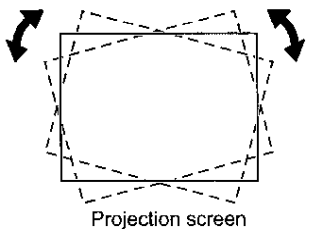
② Adjusting right-left inclination

Turn the four adjustment bolts to adjust the right-left inclination and correct the rotational distortion on the projection screen. Make sure to turn the front and rear adjustment bolts on the right, and the front and rear adjustment bolts on the left, by the same amount.





Movement of the projection screen and the left-right inclination of the upper projector.
(frame omitted from illustration)



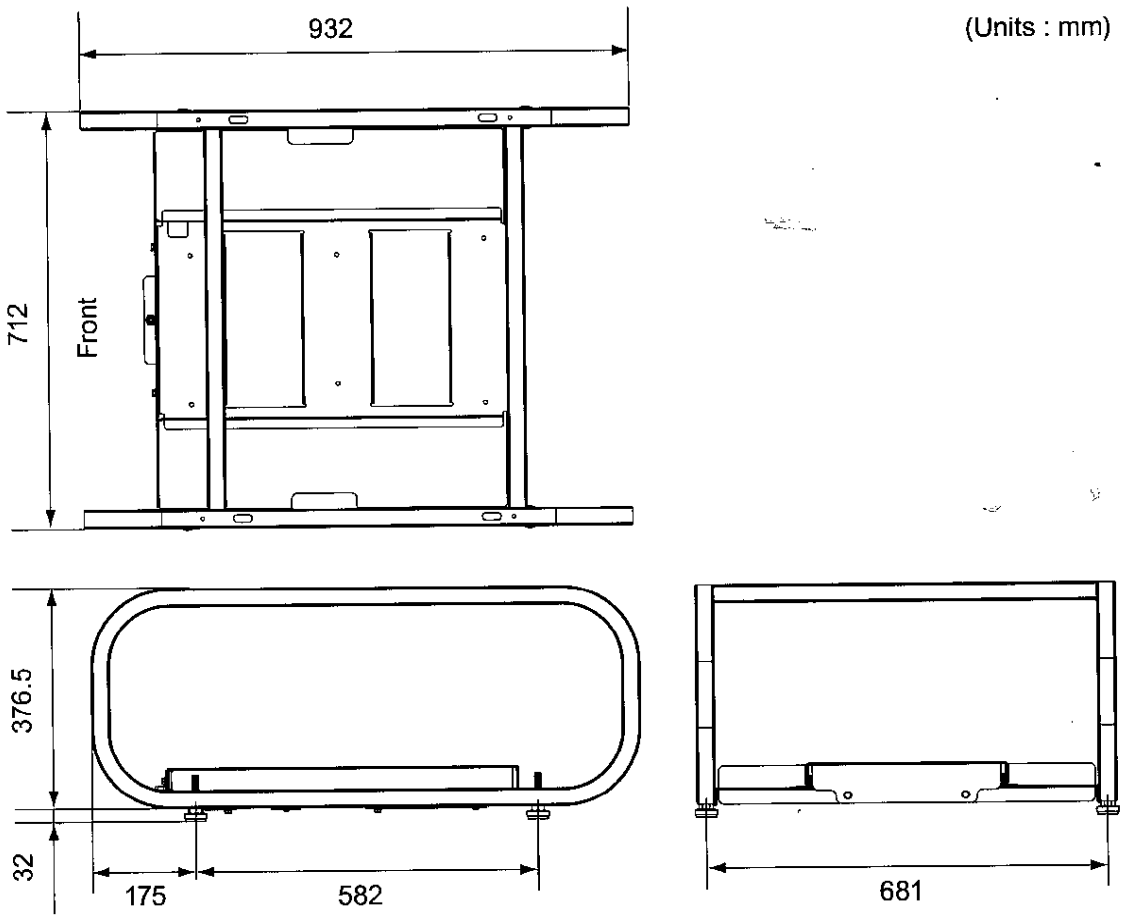
Projection screen

③ Repeat the steps ①, ② to make fine adjustments.

④ When adjustment is complete, tighten the hex nuts to prevent the projector from Ⓐ shifting.

Dimensions

(Units : mm)



Specifications

Adjustable range	Vertical angle correction : ± 1.5 ° Left and right inclination adjustment : ± 1.5 °
Assembled external dimensions	Width 712 mm (28") Height 398.5 mm (15 11/16") Depth 932 mm (36 11/16")
Weight (excluding the projector)	Approx. 19.4 kg (42.8 lbs.)