

YMO7 Short Throw Lens

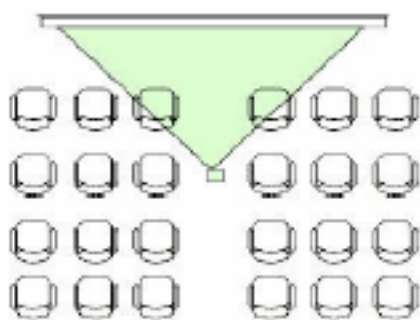
When is a short throw lens used?

A short throw lens creates big images in tight spaces by projecting the largest possible image from a short distance.

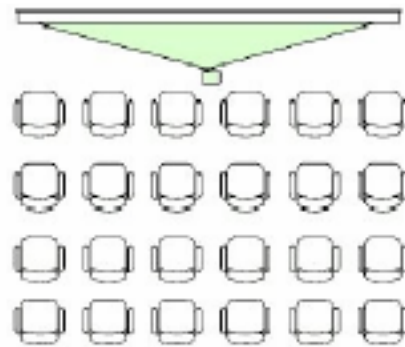
This is very convenient feature as it allows the projector to be placed at a close distance from the screen, and the projector itself does not become a physical obstacle in the room.

Optoma projectors can cast a 72-inch diagonal image from just eight (8) feet away from the screen with a short throw lens. The short throw lens is supported by the EP758/9, EP780, EP747, EP739H, EP770, EP773, and H57/ H27.

(See Tables 1 & 2 for a complete guide to Optoma Short Throw Lens projection distances.)



Typical projector throw



With Optoma Short throw lens

Environments for a short throw lens:

- Small Home Theater Room Settings
- Classrooms
- Smaller Meeting / Conference Rooms
- Trade Show Booths

Optoma's short throw lens, item number YMO7, provides a larger image from the same projection distance – up to 20% bigger. It easily attaches to existing projector lens.

Fitting

The screw thread on the zoom lens needs to be exposed by unclipping the plastic cover. This is the **light grey** ring on the very end of the lens. Grasp it **horizontally** and pull away from the lens.

Make sure the projector lens is clean. Wipe with a lens cleaning cloth, if required. Make sure the short-throw adapter is clean.

Line up the adapter lens carefully with the standard lens, the threaded part facing towards the projector. Bring it closer until the threads touch. Turn carefully to screw the adapter on (holding the projector lens **<silver ring>** to stop it from turning) ensuring it is not cross-threaded. It should screw on with minimal effort. If not, the thread is crossed, damaged or dirty and you should check it.

If it threads smoothly, continue to screw it on - about 3 whole turns, until there is slight resistance.

Table 1

Normal calculation without Short throw lens of EP780, EP759, EP773, EP739H, EP770, EP747 Projection Distance 1.2 - 12m (4:3 Aspect Ratio)						
Projection Distance (m)	Max. Horizontal Image Size (m)	Min. Horizontal Image Size (m)	Max. Screen Height (m)	Min. Screen Height (m)	Max Diagonal Image Size (m)	Max Diagonal Image Size (inch)
1.20	0.60	0.50	0.45	0.38	0.75	29.55
2.00	1.00	0.83	0.75	0.63	1.25	49.26
2.50	1.25	1.04	0.94	0.78	1.56	61.57
3.00	1.50	1.25	1.13	0.94	1.88	73.89
4.00	2.00	1.67	1.50	1.25	2.50	98.51
5.00	2.50	2.08	1.88	1.57	3.13	123.14
6.00	3.00	2.50	2.26	1.88	3.75	147.77
7.00	3.50	2.92	2.63	2.19	4.38	172.40
8.00	4.00	3.33	3.01	2.51	5.00	197.03
9.00	4.50	3.75	3.38	2.82	5.63	221.66
10.00	5.00	4.17	3.76	3.13	6.26	246.29
11.00	5.50	4.58	4.14	3.45	6.88	270.91
12.00	6.00	5.00	4.51	3.76	7.51	295.54
For guide purposes only. Throw ratio are from 2.0-2.4:1						

Table 2

Calculation with Short throw lens of EP780, EP759, EP773, EP739H, EP770, EP747 Projection Distance 1.2 - 12m (4:3 Aspect Ratio)						
Projection Distance (m)	Max. Horizontal Image Size (m)	Min. Horizontal Image Size (m)	Max. Screen Height (m)	Min. Screen Height (m)	Max Diagonal Image Size (m)	Max Diagonal Image Size (inch)
1.20	0.72	0.60	0.54	0.45	0.90	35.47
2.00	1.20	1.00	0.90	0.75	1.50	59.11
2.50	1.50	1.25	1.13	0.94	1.88	73.89
3.00	1.80	1.50	1.35	1.13	2.25	88.66
4.00	2.40	2.00	1.80	1.50	3.00	118.22
5.00	3.00	2.50	2.26	1.88	3.75	147.77
6.00	3.60	3.00	2.71	2.26	4.50	177.33
7.00	4.20	3.50	3.16	2.63	5.25	206.88
8.00	4.80	4.00	3.61	3.01	6.01	236.43
9.00	5.40	4.50	4.06	3.38	6.76	265.99
10.00	6.00	5.00	4.51	3.76	7.51	295.54
11.00	6.60	5.50	4.96	4.14	8.26	325.10
12.00	7.20	6.00	5.41	4.51	9.01	354.65
For guide purposes only. Throw ratio are from 1.66-2.0:1						