Fixed-Focus Lens

ET-D75LE90

This fixed-focus lens is designed for use with Panasonic's applicable projectors.
This lens is an ultra-short focal length lens which uses a mirror.

NOTE: The lens cannot be used by itself. It must be mounted onto the specified Panasonic DLP™ projector.

Specifications

F value: 2.5

Focal length (f): 7.5 mm

Lens shift: Capable (Adjustment range is limited. Lens shift is possible with models other than the PT-DS20K/DS20K2/DS12K/RS11K.)

	Vertical shift	Horizontal shift
PT-DZ21K/DZ21K2/DZ13K/DZ10K/RZ12K	up: 5% down: 0%	left: 6%; right: 6%
PT-DZ16K/DZ16K2	up: 13% down: 0%	left: 12%; right: 14%
PT-DW17K/DW17K2/DW11K	up: 18% down: 0%	left: 13%; right: 27%

Dimensions (W × H × D): 448.5mm × ø154 mm (17-21/32 × ø6-1/16 inches)

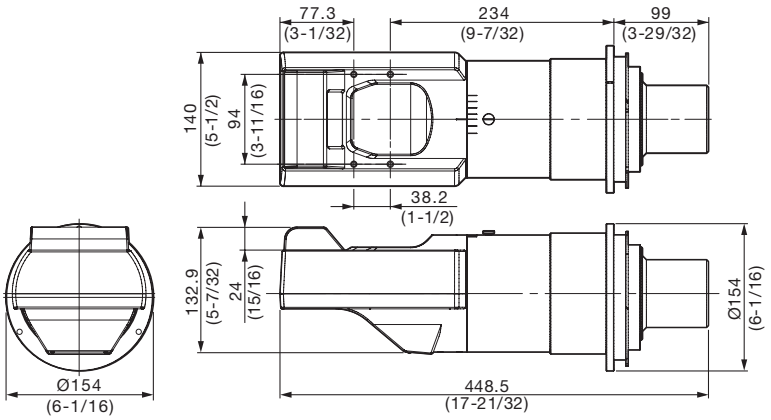
Weight: Approx 6.5 kg (14.3 lbs)

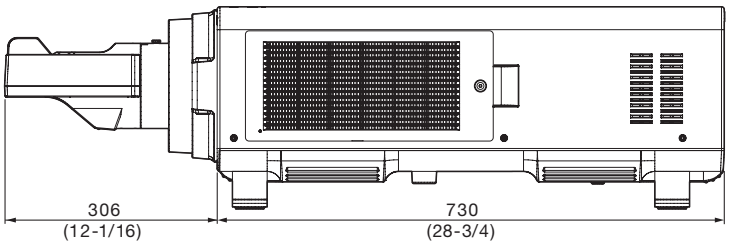
Applicable projector: [Group A]
PT-DZ21K/DZ21K2/DS20K/DS20K2/DW17K/DW17K2/DZ16K/DZ16K2

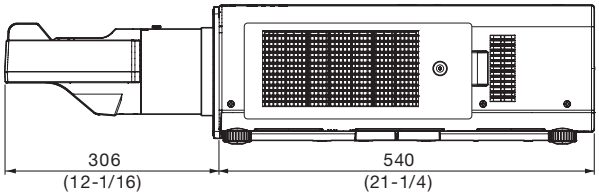
[Group B]
PT-DZ13K/DS12K/DW11K/DZ10K/DZ8700/DZ110K/DS8500/DS1100K/DW8300/DW90K

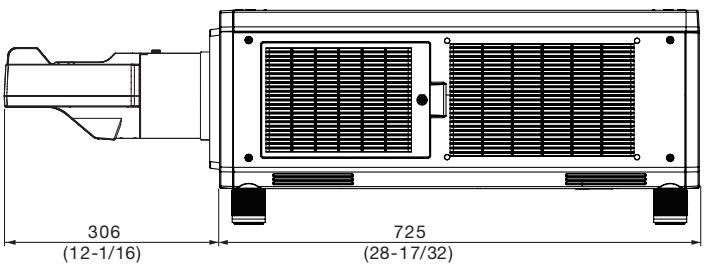
[Group C]
PT-RZ12K/RS11K

Dimensions









unit : mm (inch)

NOTE: This illustration is not drawn to scale.

DLP is a trademark of Texas Instruments. Weights and dimensions shown are approximate. Specifications subject to change without notice.

ET-D75LE90 Projection Distance Table

DZ21K/DZ21K2

16 : 10 (WUXGA ; 1920 × 1200)

Unit : meters

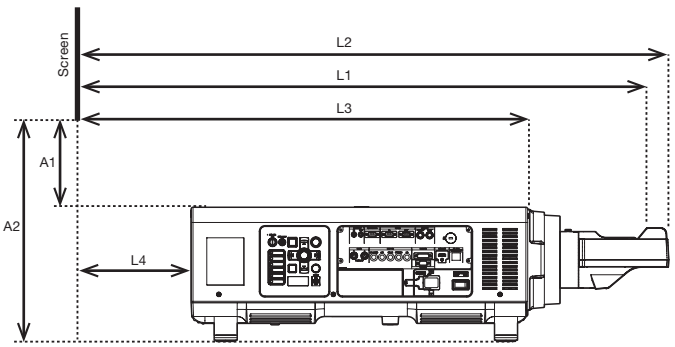
Ultra-short focal length lens ET-D75LE90
Close-up system dimensions

Throw ratio				0.36:1						
Diagonal image size (Inches)	Diagonal image size (m)	Height (SH)	Width (SW)	Projection distance (From mirror reflective surface to screen) (L1)	From tip of lens to screen (L2)	From front of set to screen (L3)	From rear of set to screen (L4)	From top of set to bottom edge of screen (A1)		From bottom of set to bottom edge of screen (A2)	
								Min	Max	Min	Max
120	3.05	1.62	2.59	0.94	0.97	0.67	-0.06	0.26	0.34	0.55	0.63
150	3.81	2.02	3.23	1.18	1.20	0.90	0.17	0.35	0.46	0.64	0.75
200	5.08	2.69	4.31	1.56	1.59	1.28	0.55	0.50	0.65	0.79	0.94
250	6.35	3.37	5.39	1.95	1.97	1.67	0.94	0.66	0.84	0.95	1.13
300	7.62	4.04	6.46	2.33	2.36	2.05	1.32	0.81	1.03	1.10	1.32
350	8.89	4.71	7.54	2.72	2.74	2.44	1.71	0.97	1.22	1.26	1.51
400	10.16	5.39	8.62	3.10	3.13	2.82	2.09	1.12	1.41	1.41	1.70
500	12.70	6.73	10.77	3.87	3.90	3.59	2.86	1.43	1.79	1.72	2.08
600	15.24	8.08	12.92	4.64	4.67	4.36	3.63	1.74	2.17	2.03	2.46

Unit : feet

Ultra-short focal length lens ET-D75LE90
Close-up system dimensions

Throw ratio				0.36:1						
Diagonal image size (Inches)	Diagonal image size (m)	Height (SH)	Width (SW)	Projection distance (From mirror reflective surface to screen) (L1)	From tip of lens to screen (L2)	From front of set to screen (L3)	From rear of set to screen (L4)	From top of set to bottom edge of screen (A1)		From bottom of set to bottom edge of screen (A2)	
								Min	Max	Min	Max
120	3.05	5.3	8.5	3.1	3.2	2.2	-0.2	0.9	1.1	1.8	2.1
150	3.81	6.6	10.6	3.9	4.0	2.9	0.6	1.1	1.5	2.1	2.5
200	5.08	8.8	14.1	5.1	5.2	4.2	1.8	1.6	2.1	2.6	3.1
250	6.35	11.0	17.7	6.4	6.5	5.5	3.1	2.2	2.8	3.1	3.7
300	7.62	13.3	21.2	7.6	7.7	6.7	4.3	2.7	3.4	3.6	4.3
350	8.89	15.5	24.7	8.9	9.0	8.0	5.6	3.2	4.0	4.1	5.0
400	10.16	17.7	28.3	10.2	10.3	9.3	6.9	3.7	4.6	4.6	5.6
500	12.70	22.1	35.3	12.7	12.8	11.8	9.4	4.7	5.9	5.6	6.8
600	15.24	26.5	42.4	15.2	15.3	14.3	11.9	5.7	7.1	6.7	8.1



L1: Projection distance
(from screen to mirror reflective surface)
L2: From screen to tip of lens
L3: From screen to front of set
L4: From screen to rear of set
A1: From bottom edge of screen to top of set
A2: From bottom edge of screen to bottom of set

Projection Distance Calculation Table

Screen aspect ratio 16:10

Projection distance calculation formula

L1 (m) =0.0077 x Diagonal image size (inches) + 0.02

Calculation formula for distance from top of set to bottom edge of screen

DZ21K/DZ21K2	Min. A1 (m) =0.000229 x SH - 0.114 Max. A1 (m) =0.000283 x SH - 0.114

ET-D75LE90 Projection Distance Table

RZ12K

16 : 10 (WUXGA ; 1920 × 1200)

Unit : meters

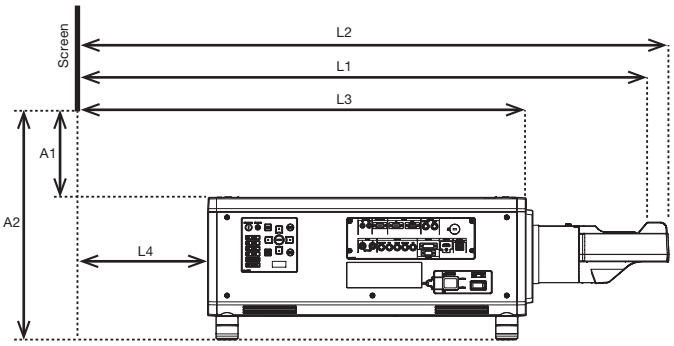
Ultra-short focal length lens ET-D75LE90
Close-up system dimensions

Throw ratio				0.36:1						
Diagonal image size (Inches)	Diagonal image size (m)	Height (SH)	Width (SW)	Projection distance (From mirror reflective surface to screen) (L1)	From tip of lens to screen (L2)	From front of set to screen (L3)	From rear of set to screen (L4)	From top of set to bottom edge of screen (A1)		From bottom of set to bottom edge of screen (A2)	
								Min	Max	Min	Max
120	3.05	1.62	2.58	0.94	0.97	0.67	-0.06	0.24	0.33	0.57	0.65
150	3.81	2.02	3.23	1.18	1.20	0.90	0.17	0.33	0.44	0.66	0.77
200	5.08	2.69	4.31	1.56	1.59	1.28	0.56	0.49	0.63	0.81	0.96
250	6.35	3.37	5.38	1.95	1.97	1.67	0.94	0.64	0.82	0.97	1.15
300	7.62	4.04	6.46	2.33	2.36	2.05	1.33	0.80	1.01	1.12	1.34
350	8.89	4.71	7.54	2.72	2.74	2.44	1.71	0.95	1.21	1.27	1.53
400	10.16	5.38	8.62	3.10	3.13	2.82	2.10	1.11	1.40	1.43	1.72
500	12.70	6.73	10.77	3.87	3.90	3.59	2.87	1.41	1.78	1.74	2.10
600	15.24	8.08	12.92	4.64	4.67	4.36	3.64	1.72	2.16	2.05	2.48

Unit : feet

Ultra-short focal length lens ET-D75LE90
Close-up system dimensions

Throw ratio				0.36:1						
Diagonal image size (Inches)	Diagonal image size (m)	Height (SH)	Width (SW)	Projection distance (From mirror reflective surface to screen) (L1)	From tip of lens to screen (L2)	From front of set to screen (L3)	From rear of set to screen (L4)	From top of set to bottom edge of screen (A1)		From bottom of set to bottom edge of screen (A2)	
								Min	Max	Min	Max
120	3.05	5.3	8.5	3.1	3.2	2.2	-0.2	0.8	1.1	1.9	2.1
150	3.81	6.6	10.6	3.9	3.9	2.9	0.6	1.1	1.5	2.2	2.5
200	5.08	8.8	14.1	5.1	5.2	4.2	1.8	1.6	2.1	2.7	3.1
250	6.35	11.0	17.7	6.4	6.5	5.5	3.1	2.1	2.7	3.2	3.8
300	7.62	13.2	21.2	7.6	7.7	6.7	4.4	2.6	3.3	3.7	4.4
350	8.89	15.5	24.7	8.9	9.0	8.0	5.6	3.1	4.0	4.2	5.0
400	10.16	17.7	28.3	10.2	10.3	9.3	6.9	3.6	4.6	4.7	5.6
500	12.70	22.1	35.3	12.7	12.8	11.8	9.4	4.6	5.8	5.7	6.9
600	15.24	26.5	42.4	15.2	15.3	14.3	11.9	5.6	7.1	6.7	8.1



L1: Projection distance
(from screen to mirror reflective surface)
L2: From screen to tip of lens
L3: From screen to front of set
L4: From screen to rear of set
A1: From bottom edge of screen to top of set
A2: From bottom edge of screen to bottom of set

Projection Distance Calculation Table

Screen aspect ratio 16:10

Projection distance calculation formula

L1 (m) =0.0077 x Diagonal image size (inches) + 0.02

Calculation formula for distance from top of set to bottom edge of screen

RZ12K	Min. A1 (m) =0.000229 x SH - 0.128 Max. A1 (m) =0.000283 x SH - 0.128

ET-D75LE90 Projection Distance Table

DZ13K/DZ10K

16 : 10 (WUXGA ; 1920 × 1200)

Unit : meters

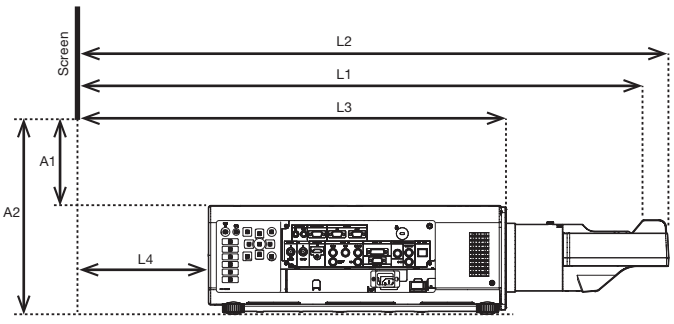
Ultra-short focal length lens ET-D75LE90
Close-up system dimensions

Throw ratio				0.36:1						
Diagonal image size (Inches)	Diagonal image size (m)	Height (SH)	Width (SW)	Projection distance (From mirror reflective surface to screen) (L1)	From tip of lens to screen (L2)	From front of set to screen (L3)	From rear of set to screen (L4)	From top of set to bottom edge of screen (A1)		From bottom of set to bottom edge of screen (A2)	
								Min	Max	Min	Max
120	3.05	1.62	2.59	0.94	0.97	0.67	0.13	0.27	0.36	0.47	0.56
150	3.81	2.02	3.23	1.18	1.20	0.90	0.36	0.36	0.47	0.56	0.67
200	5.08	2.69	4.31	1.56	1.59	1.28	0.74	0.52	0.66	0.72	0.86
250	6.35	3.37	5.39	1.95	1.97	1.67	1.13	0.67	0.85	0.87	1.05
300	7.62	4.04	6.46	2.33	2.36	2.05	1.51	0.83	1.04	1.03	1.24
350	8.89	4.71	7.54	2.72	2.74	2.44	1.90	0.98	1.23	1.18	1.43
400	10.16	5.39	8.62	3.10	3.13	2.82	2.28	1.13	1.42	1.33	1.62
500	12.70	6.73	10.77	3.87	3.90	3.59	3.05	1.44	1.81	1.64	2.01
600	15.24	8.08	12.92	4.64	4.67	4.36	3.82	1.75	2.19	1.95	2.39

Unit : feet

Ultra-short focal length lens ET-D75LE90
Close-up system dimensions

Throw ratio				0.36:1						
Diagonal image size (Inches)	Diagonal image size (m)	Height (SH)	Width (SW)	Projection distance (From mirror reflective surface to screen) (L1)	From tip of lens to screen (L2)	From front of set to screen (L3)	From rear of set to screen (L4)	From top of set to bottom edge of screen (A1)		From bottom of set to bottom edge of screen (A2)	
								Min	Max	Min	Max
120	3.05	5.3	8.5	3.1	3.2	2.2	0.4	0.9	1.2	1.5	1.8
150	3.81	6.6	10.6	3.9	4.0	2.9	1.2	1.2	1.5	1.8	2.2
200	5.08	8.8	14.1	5.1	5.2	4.2	2.4	1.7	2.2	2.4	2.8
250	6.35	11.0	17.7	6.4	6.5	5.5	3.7	2.2	2.8	2.9	3.5
300	7.62	13.3	21.2	7.6	7.7	6.7	5.0	2.7	3.4	3.4	4.1
350	8.89	15.5	24.7	8.9	9.0	8.0	6.2	3.2	4.0	3.9	4.7
400	10.16	17.7	28.3	10.2	10.3	9.3	7.5	3.7	4.7	4.4	5.3
500	12.70	22.1	35.3	12.7	12.8	11.8	10.0	4.7	5.9	5.4	6.6
600	15.24	26.5	42.4	15.2	15.3	14.3	12.5	5.7	7.2	6.4	7.8



L1: Projection distance
(from screen to mirror reflective surface)
L2: From screen to tip of lens
L3: From screen to front of set
L4: From screen to rear of set
A1: From bottom edge of screen to top of set
A2: From bottom edge of screen to bottom of set

Projection Distance Calculation Table

Screen aspect ratio 16:10

Projection distance calculation formula

L1 (m) =0.0077 x Diagonal image size (inches) + 0.02

Calculation formula for distance from top of set to bottom edge of screen

DZ13K/DZ10K	Min. A1 (m) =0.000229 x SH - 0.100 Max. A1 (m) =0.000283 x SH - 0.100

ET-D75LE90 Projection Distance Table

DZ16K/DZ16K2

16 : 9 (WXGA ; 1920 × 1080)

Unit : meters

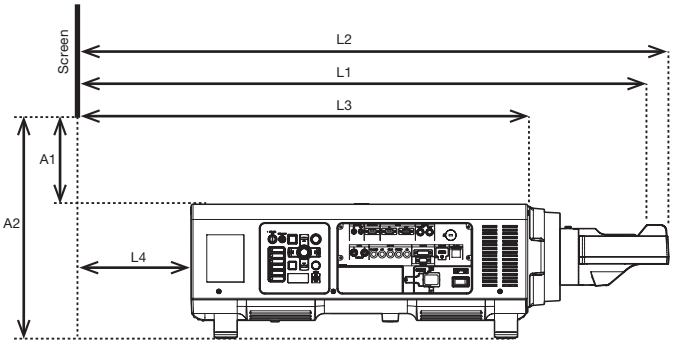
Ultra-short focal length lens ET-D75LE90
Close-up system dimensions

Throw ratio				0.36:1							
Diagonal image size (Inches)	Diagonal image size (m)	Height (SH)	Width (SW)	Projection distance (From mirror reflective surface to screen) (L1)	From tip of lens to screen (L2)	From front of set to screen (L3)	From rear of set to screen (L4)	From top of set to bottom edge of screen (A1)		From bottom of set to bottom edge of screen (A2)	
								Min	Max	Min	Max
120	3.05	1.49	2.66	0.97	1.00	0.69	-0.04	0.27	0.44	0.56	0.73
150	3.81	1.87	3.32	1.21	1.24	0.93	0.20	0.36	0.58	0.65	0.87
200	5.08	2.49	4.43	1.60	1.63	1.33	0.60	0.52	0.81	0.81	1.10
250	6.35	3.11	5.54	2.00	2.03	1.72	0.99	0.68	1.04	0.97	1.33
300	7.62	3.74	6.64	2.39	2.42	2.12	1.39	0.83	1.27	1.13	1.56
350	8.89	4.36	7.75	2.79	2.82	2.51	1.78	0.99	1.50	1.28	1.79
400	10.16	4.98	8.86	3.19	3.21	2.91	2.18	1.15	1.73	1.44	2.02
500	12.70	6.23	11.07	3.98	4.01	3.70	2.97	1.47	2.19	1.76	2.48
600	15.24	7.47	13.28	4.77	4.80	4.49	3.76	1.78	2.65	2.08	2.94

Unit : feet

Ultra-short focal length lens ET-D75LE90
Close-up system dimensions

Throw ratio				0.36:1							
Diagonal image size (Inches)	Diagonal image size (m)	Height (SH)	Width (SW)	Projection distance (From mirror reflective surface to screen) (L1)	From tip of lens to screen (L2)	From front of set to screen (L3)	From rear of set to screen (L4)	From top of set to bottom edge of screen (A1)		From bottom of set to bottom edge of screen (A2)	
								Min	Max	Min	Max
120	3.05	4.9	8.7	3.2	3.3	2.3	-0.1	0.9	1.4	1.8	2.4
150	3.81	6.1	10.9	4.0	4.1	3.1	0.7	1.2	1.9	2.1	2.8
200	5.08	8.2	14.5	5.3	5.4	4.3	2.0	1.7	2.6	2.7	3.6
250	6.35	10.2	18.2	6.6	6.7	5.6	3.3	2.2	3.4	3.2	4.4
300	7.62	12.3	21.8	7.9	7.9	6.9	4.6	2.7	4.2	3.7	5.1
350	8.89	14.3	25.4	9.2	9.2	8.2	5.8	3.3	4.9	4.2	5.9
400	10.16	16.3	29.1	10.5	10.5	9.5	7.1	3.8	5.7	4.7	6.6
500	12.70	20.4	36.3	13.0	13.1	12.1	9.7	4.8	7.2	5.8	8.1
600	15.24	24.5	43.6	15.6	15.7	14.7	12.3	5.9	8.7	6.8	9.7



L1: Projection distance
(from screen to mirror reflective surface)
L2: From screen to tip of lens
L3: From screen to front of set
L4: From screen to rear of set
A1: From bottom edge of screen to top of set
A2: From bottom edge of screen to bottom of set

Projection Distance Calculation Table

Screen aspect ratio 16:9

Projection distance calculation formula

L1 (m) =0.007914 x Diagonal image size (inches) + 0.02

Calculation formula for distance from top of set to bottom edge of screen

DZ16K/DZ16K2	Min. A1 (m) =0.000254 x SH - 0.114 Max. A1 (m) =0.00037 x SH - 0.114

ET-D75LE90 Projection Distance Table

DW17K/DW17K2

16 : 9 (WXGA ; 1366 × 768)

Unit : meters

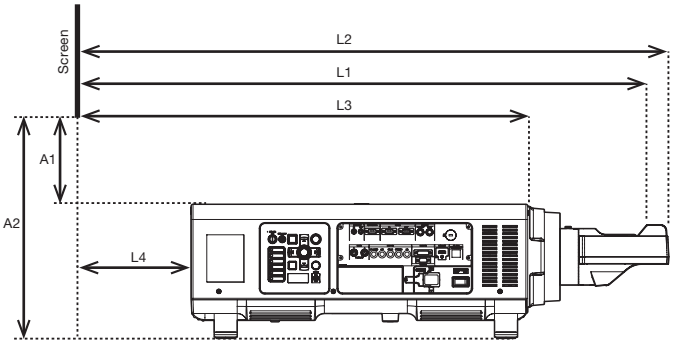
Ultra-short focal length lens ET-D75LE90
Close-up system dimensions

Throw ratio				0.40:1							
Diagonal image size (Inches)	Diagonal image size (m)	Height (SH)	Width (SW)	Projection distance (From mirror reflective surface to screen) (L1)	From tip of lens to screen (L2)	From front of set to screen (L3)	From rear of set to screen (L4)	From top of set to bottom edge of screen (A1)		From bottom of set to bottom edge of screen (A2)	
								Min	Max	Min	Max
120	3.05	1.49	2.66	1.07	1.10	0.80	0.07	0.31	0.58	0.60	0.87
150	3.81	1.87	3.32	1.34	1.37	1.06	0.33	0.41	0.76	0.70	1.05
200	5.08	2.49	4.43	1.78	1.81	1.50	0.77	0.59	1.05	0.88	1.34
250	6.35	3.11	5.54	2.22	2.24	1.94	1.21	0.76	1.34	1.06	1.63
300	7.62	3.74	6.64	2.66	2.68	2.38	1.65	0.94	1.63	1.23	1.92
350	8.89	4.36	7.75	3.09	3.12	2.82	2.09	1.12	1.92	1.41	2.21
400	10.16	4.98	8.86	3.53	3.56	3.26	2.53	1.29	2.21	1.58	2.50
500	12.70	6.23	11.07	4.41	4.44	4.13	3.40	1.64	2.79	1.93	3.08
600	15.24	7.47	13.28	5.29	5.32	5.01	4.28	1.99	3.37	2.28	3.66

Unit : feet

Ultra-short focal length lens ET-D75LE90
Close-up system dimensions

Throw ratio				0.40:1							
Diagonal image size (Inches)	Diagonal image size (m)	Height (SH)	Width (SW)	Projection distance (From mirror reflective surface to screen) (L1)	From tip of lens to screen (L2)	From front of set to screen (L3)	From rear of set to screen (L4)	From top of set to bottom edge of screen (A1)		From bottom of set to bottom edge of screen (A2)	
								Min	Max	Min	Max
120	3.05	4.9	8.7	3.5	3.6	2.6	0.2	1.0	1.9	2.0	2.9
150	3.81	6.1	10.9	4.4	4.5	3.5	1.1	1.4	2.5	2.3	3.4
200	5.08	8.2	14.5	5.8	5.9	4.9	2.5	1.9	3.4	2.9	4.4
250	6.35	10.2	18.2	7.3	7.4	6.4	4.0	2.5	4.4	3.5	5.3
300	7.62	12.3	21.8	8.7	8.8	7.8	5.4	3.1	5.3	4.0	6.3
350	8.89	14.3	25.4	10.2	10.2	9.2	6.8	3.7	6.3	4.6	7.2
400	10.16	16.3	29.1	11.6	11.7	10.7	8.3	4.2	7.2	5.2	8.2
500	12.70	20.4	36.3	14.5	14.6	13.6	11.2	5.4	9.1	6.3	10.1
600	15.24	24.5	43.6	17.4	17.4	16.4	14.0	6.5	11.0	7.5	12.0



L1: Projection distance
(from screen to mirror reflective surface)
L2: From screen to tip of lens
L3: From screen to front of set
L4: From screen to rear of set
A1: From bottom edge of screen to top of set
A2: From bottom edge of screen to bottom of set

Projection Distance Calculation Table

Screen aspect ratio 16:9

Projection distance calculation formula

L1 (m) =0.008783 x Diagonal image size (inches) + 0.02

Calculation formula for distance from top of set to bottom edge of screen

DW17K/DW17K2	Min. A1 (m) =0.000282 x SH - 0.114 Max. A1 (m) =0.000466 x SH - 0.114

ET-D75LE90 Projection Distance Table

DW11K

16 : 9 (WXGA ; 1366 × 768)

Unit : meters

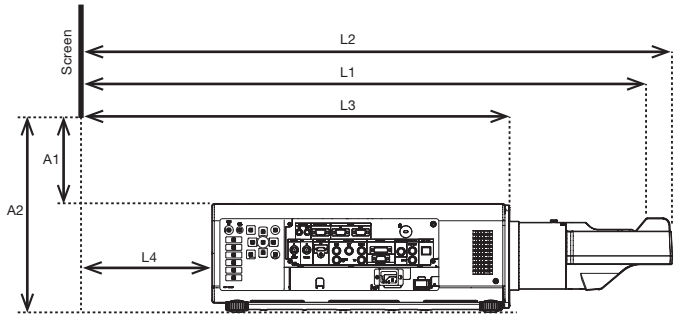
Ultra-short focal length lens ET-D75LE90
Close-up system dimensions

Throw ratio				0.40:1							
Diagonal image size (Inches)	Diagonal image size (m)	Height (SH)	Width (SW)	Projection distance (From mirror reflective surface to screen) (L1)	From tip of lens to screen (L2)	From front of set to screen (L3)	From rear of set to screen (L4)	From top of set to bottom edge of screen (A1)		From bottom of set to bottom edge of screen (A2)	
								Min	Max	Min	Max
120	3.05	1.49	2.66	1.07	1.10	0.80	0.26	0.32	0.60	0.52	0.80
150	3.81	1.87	3.32	1.34	1.37	1.06	0.52	0.43	0.77	0.63	0.97
200	5.08	2.49	4.43	1.78	1.81	1.50	0.96	0.60	1.06	0.80	1.26
250	6.35	3.11	5.54	2.22	2.24	1.94	1.40	0.78	1.35	0.98	1.55
300	7.62	3.74	6.64	2.66	2.68	2.38	1.84	0.95	1.64	1.15	1.84
350	8.89	4.36	7.75	3.09	3.12	2.82	2.28	1.13	1.93	1.33	2.13
400	10.16	4.98	8.86	3.53	3.56	3.26	2.72	1.31	2.22	1.51	2.42
500	12.70	6.23	11.07	4.41	4.44	4.13	3.59	1.66	2.80	1.86	3.00
600	15.24	7.47	13.28	5.29	5.32	5.01	4.47	2.01	3.38	2.21	3.58

Unit : feet

Ultra-short focal length lens ET-D75LE90
Close-up system dimensions

Throw ratio				0.40:1							
Diagonal image size (Inches)	Diagonal image size (m)	Height (SH)	Width (SW)	Projection distance (From mirror reflective surface to screen) (L1)	From tip of lens to screen (L2)	From front of set to screen (L3)	From rear of set to screen (L4)	From top of set to bottom edge of screen (A1)		From bottom of set to bottom edge of screen (A2)	
								Min	Max	Min	Max
120	3.05	4.9	8.7	3.5	3.6	2.6	0.8	1.1	2.0	1.7	2.6
150	3.81	6.1	10.9	4.4	4.5	3.5	1.7	1.4	2.5	2.1	3.2
200	5.08	8.2	14.5	5.8	5.9	4.9	3.1	2.0	3.5	2.6	4.1
250	6.35	10.2	18.2	7.3	7.4	6.4	4.6	2.6	4.4	3.2	5.1
300	7.62	12.3	21.8	8.7	8.8	7.8	6.0	3.1	5.4	3.8	6.0
350	8.89	14.3	25.4	10.2	10.2	9.2	7.5	3.7	6.3	4.4	7.0
400	10.16	16.3	29.1	11.6	11.7	10.7	8.9	4.3	7.3	4.9	7.9
500	12.70	20.4	36.3	14.5	14.6	13.6	11.8	5.4	9.2	6.1	9.8
600	15.24	24.5	43.6	17.4	17.4	16.4	14.7	6.6	11.1	7.2	11.8



L1: Projection distance
(from screen to mirror reflective surface)
L2: From screen to tip of lens
L3: From screen to front of set
L4: From screen to rear of set
A1: From bottom edge of screen to top of set
A2: From bottom edge of screen to bottom of set

Projection Distance Calculation Table

Screen aspect ratio 16:9

Projection distance calculation formula

L1 (m) =0.008783 x Diagonal image size (inches) + 0.02

Calculation formula for distance from top of set to bottom edge of screen

DW11K	Min. A1 (m) =0.000282 x SH - 0.100 Max. A1 (m) =0.000466 x SH - 0.100

Fixed-Focus Lens

ET-D75LE90

ET-D75LE90 Projection Distance Table

DS20K/DS20K2

4 : 3 (SXGA ; 1400 × 1050)

Unit : meters

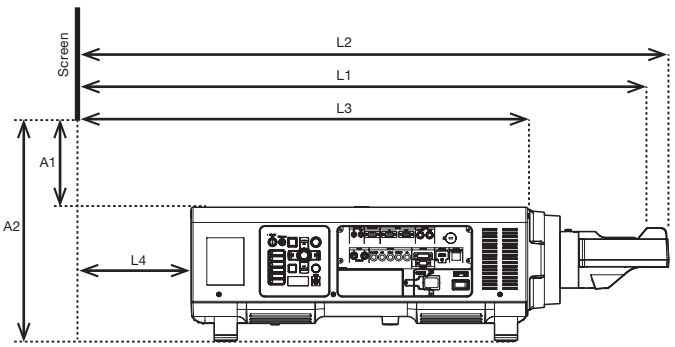
Ultra-short focal length lens ET-D75LE90
Close-up system dimensions

Throw ratio			0.39:1						
Diagonal image size (Inches)	Diagonal image size (m)	Height (SH)	Width (SW)	Projection distance (From mirror reflective surface to screen) (L1)	From tip of lens to screen (L2)	From front of set to screen (L3)	From rear of set to screen (L4)	From top of set to bottom edge of screen (A1)	From bottom of set to bottom edge of screen (A2)
120	3.05	1.83	2.44	0.96	0.99	0.69	-0.04	0.26	0.55
150	3.81	2.29	3.05	1.20	1.23	0.92	0.19	0.36	0.65
200	5.08	3.05	4.06	1.59	1.62	1.32	0.59	0.51	0.81
250	6.35	3.81	5.08	1.99	2.02	1.71	0.98	0.67	0.96
300	7.62	4.57	6.10	2.38	2.41	2.10	1.37	0.83	1.12
350	8.89	5.33	7.11	2.77	2.80	2.50	1.77	0.99	1.28
400	10.16	6.10	8.13	3.17	3.20	2.89	2.16	1.14	1.43
500	12.70	7.62	10.16	3.95	3.98	3.68	2.95	1.46	1.75
600	15.24	9.14	12.19	4.74	4.77	4.46	3.73	1.77	2.06

Unit : feet

Ultra-short focal length lens ET-D75LE90
Close-up system dimensions

Throw ratio			0.39:1						
Diagonal image size (Inches)	Diagonal image size (m)	Height (SH)	Width (SW)	Projection distance (From mirror reflective surface to screen) (L1)	From tip of lens to screen (L2)	From front of set to screen (L3)	From rear of set to screen (L4)	From top of set to bottom edge of screen (A1)	From bottom of set to bottom edge of screen (A2)
120	3.05	6.0	8.0	3.2	3.3	2.3	-0.1	0.9	1.8
150	3.81	7.5	10.0	3.9	4.0	3.0	0.6	1.2	2.1
200	5.08	10.0	13.3	5.2	5.3	4.3	1.9	1.7	2.6
250	6.35	12.5	16.7	6.5	6.6	5.6	3.2	2.2	3.2
300	7.62	15.0	20.0	7.8	7.9	6.9	4.5	2.7	3.7
350	8.89	17.5	23.3	9.1	9.2	8.2	5.8	3.2	4.2
400	10.16	20.0	26.7	10.4	10.5	9.5	7.1	3.7	4.7
500	12.70	25.0	33.3	13.0	13.1	12.1	9.7	4.8	5.7
600	15.24	30.0	40.0	15.5	15.6	14.6	12.2	5.8	6.8



L1: Projection distance
(from screen to mirror reflective surface)
L2: From screen to tip of lens
L3: From screen to front of set
L4: From screen to rear of set
A1: From bottom edge of screen to top of set
A2: From bottom edge of screen to bottom of set

Projection Distance Calculation Table

Screen aspect ratio 4:3

Projection distance calculation formula

L1 (m) =0.007865 x Diagonal image size (inches) + 0.02

Calculation formula for distance from top of set to bottom edge of screen

DS20K/DS20K2	A1 (m) =0.000206 x SH - 0.114

Fixed-Focus Lens

ET-D75LE90

ET-D75LE90 Projection Distance Table

DS12K

4 : 3 (SXGA ; 1400 × 1050)

Unit : meters

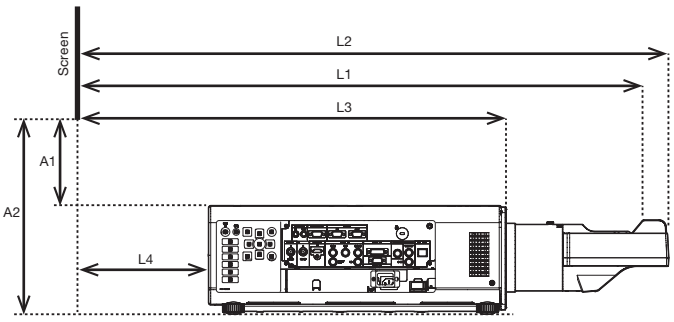
Ultra-short focal length lens ET-D75LE90
Close-up system dimensions

Throw ratio			0.39:1						
Diagonal image size (Inches)	Diagonal image size (m)	Height (SH)	Width (SW)	Projection distance (From mirror reflective surface to screen) (L1)	From tip of lens to screen (L2)	From front of set to screen (L3)	From rear of set to screen (L4)	From top of set to bottom edge of screen (A1)	From bottom of set to bottom edge of screen (A2)
120	3.05	1.83	2.44	0.96	0.99	0.69	0.15	0.28	0.48
150	3.81	2.29	3.05	1.20	1.23	0.92	0.38	0.37	0.57
200	5.08	3.05	4.06	1.59	1.62	1.32	0.78	0.53	0.73
250	6.35	3.81	5.08	1.99	2.02	1.71	1.17	0.68	0.88
300	7.62	4.57	6.10	2.38	2.41	2.10	1.56	0.84	1.04
350	8.89	5.33	7.11	2.77	2.80	2.50	1.96	1.00	1.20
400	10.16	6.10	8.13	3.17	3.20	2.89	2.35	1.16	1.36
500	12.70	7.62	10.16	3.95	3.98	3.68	3.14	1.47	1.67
600	15.24	9.14	12.19	4.74	4.77	4.46	3.92	1.78	1.98

Unit : feet

Ultra-short focal length lens ET-D75LE90
Close-up system dimensions

Throw ratio			0.39:1						
Diagonal image size (Inches)	Diagonal image size (m)	Height (SH)	Width (SW)	Projection distance (From mirror reflective surface to screen) (L1)	From tip of lens to screen (L2)	From front of set to screen (L3)	From rear of set to screen (L4)	From top of set to bottom edge of screen (A1)	From bottom of set to bottom edge of screen (A2)
120	3.05	6.0	8.0	3.2	3.3	2.3	0.5	0.9	1.6
150	3.81	7.5	10.0	3.9	4.0	3.0	1.3	1.2	1.9
200	5.08	10.0	13.3	5.2	5.3	4.3	2.5	1.7	2.4
250	6.35	12.5	16.7	6.5	6.6	5.6	3.8	2.2	2.9
300	7.62	15.0	20.0	7.8	7.9	6.9	5.1	2.8	3.4
350	8.89	17.5	23.3	9.1	9.2	8.2	6.4	3.3	3.9
400	10.16	20.0	26.7	10.4	10.5	9.5	7.7	3.8	4.4
500	12.70	25.0	33.3	13.0	13.1	12.1	10.3	4.8	5.5
600	15.24	30.0	40.0	15.5	15.6	14.6	12.9	5.9	6.5



L1: Projection distance
(from screen to mirror reflective surface)
L2: From screen to tip of lens
L3: From screen to front of set
L4: From screen to rear of set
A1: From bottom edge of screen to top of set
A2: From bottom edge of screen to bottom of set

Projection Distance Calculation Table

Screen aspect ratio 4:3

Projection distance calculation formula

L1 (m) =0.007865 x Diagonal image size (inches) + 0.02

Calculation formula for distance from top of set to bottom edge of screen

DS12K	A1 (m) =0.000206 x SH - 0.100

Fixed-Focus Lens

ET-D75LE90

ET-D75LE90 Projection Distance Table

RS11K

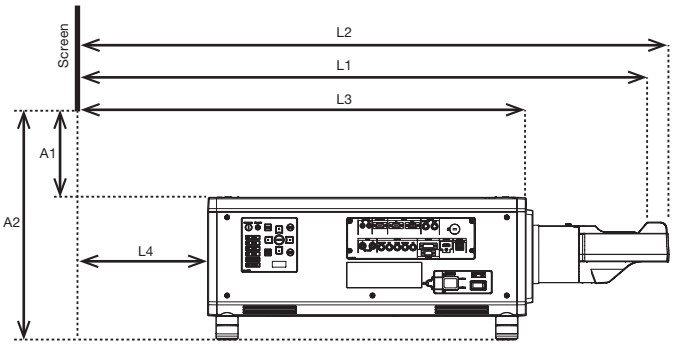
4 : 3 (SXGA ; 1400 × 1050)

Unit : meters

					Ultra-short focal length lens ET-D75LE90 Close-up system dimensions				
Throw ratio				0.39:1					
Diagonal image size (Inches)	Diagonal image size (m)	Height (SH)	Width (SW)	Projection distance (From mirror reflective surface to screen) (L1)	From tip of lens to screen (L2)	From front of set to screen (L3)	From rear of set to screen (L4)	From top of set to bottom edge of screen (A1)	From bottom of set to bottom edge of screen (A2)
120	3.05	1.83	2.44	0.96	0.99	0.69	-0.04	0.25	0.57
150	3.81	2.29	3.05	1.20	1.23	0.92	0.20	0.34	0.67
200	5.08	3.05	4.06	1.59	1.62	1.32	0.59	0.50	0.82
250	6.35	3.81	5.08	1.99	2.01	1.71	0.98	0.66	0.98
300	7.62	4.57	6.10	2.38	2.41	2.10	1.38	0.81	1.14
350	8.89	5.33	7.11	2.77	2.80	2.50	1.77	0.97	1.29
400	10.16	6.10	8.13	3.17	3.19	2.89	2.16	1.13	1.45
500	12.70	7.62	10.16	3.95	3.98	3.68	2.95	1.44	1.77
600	15.24	9.14	12.19	4.74	4.77	4.46	3.74	1.76	2.08

Unit : feet

					Ultra-short focal length lens ET-D75LE90 Close-up system dimensions				
Throw ratio				0.39:1					
Diagonal image size (Inches)	Diagonal image size (m)	Height (SH)	Width (SW)	Projection distance (From mirror reflective surface to screen) (L1)	From tip of lens to screen (L2)	From front of set to screen (L3)	From rear of set to screen (L4)	From top of set to bottom edge of screen (A1)	From bottom of set to bottom edge of screen (A2)
120	3.05	6.0	8.0	3.2	3.3	2.3	-0.1	0.8	1.9
150	3.81	7.5	10.0	3.9	4.0	3.0	0.6	1.1	2.2
200	5.08	10.0	13.3	5.2	5.3	4.3	1.9	1.6	2.7
250	6.35	12.5	16.7	6.5	6.6	5.6	3.2	2.2	3.2
300	7.62	15.0	20.0	7.8	7.9	6.9	4.5	2.7	3.7
350	8.89	17.5	23.3	9.1	9.2	8.2	5.8	3.2	4.2
400	10.16	20.0	26.7	10.4	10.5	9.5	7.1	3.7	4.8
500	12.70	25.0	33.3	13.0	13.1	12.1	9.7	4.7	5.8
600	15.24	30.0	40.0	15.5	15.6	14.6	12.3	5.8	6.8



L1: Projection distance
(from screen to mirror reflective surface)
L2: From screen to tip of lens
L3: From screen to front of set
L4: From screen to rear of set
A1: From bottom edge of screen to top of set
A2: From bottom edge of screen to bottom of set

Projection Distance Calculation Table

Screen aspect ratio 4:3

Projection distance calculation formula

L1 (m) =0.007865 x Diagonal image size (inches) + 0.02

Calculation formula for distance from top of set to bottom edge of screen

RS11K	A1 (m) =0.000206 x SH - 0.128