

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:	2.0
Focal distance (f):	5.3 mm
Throw ratio	WUXGA 0.380:1 for PT-RZ120/RZ970/RZ870/RZ770/RZ660/DZ870/DZ780 (16:10 aspect ratio) WXGA 0.399:1 for PT-RW930/RW730/RW620/DW830/DW750 (16:10 aspect ratio) XGA 0.394:1 for PT-RX110/DX100/DX820 (4:3 aspect ratio)
Dimensions (W × H × D):	132 × 102 × 311 mm (5-3/16 × 4-1/32 × 12-1/4 inches)
Weight:	Approx 1.3 kg (3.1 lbs)
Applicable projector:	[Group A] PT-DZ870K/DZ870LK/DZ870W/DZ870LW/DW830K/DW830LK/DW830W/DW830LW/ DX100K/DX100LK/DX100W/DX100LW [Group B] PT-RZ990B/RZ990W/RZ990LB/RZ990LW/RZ890B/RZ890W/RZ890LB/RZ890LW/ RZ790B/RZ790W/RZ790LB/RZ790LW/RZ690B/RZ690W/RZ690LB/RZ690LW/ RCQ10B/RCQ10W/RCQ10LB/RCQ10LW/RCQ80B/RCQ80W/RCQ80LB/RCQ80LW/ RZ120B/RZ120W/RZ120LB/RZ120LW/RZ970B/RZ970W/RZ970LB/RZ970LW/ RW930B/RW930W/RW930LB/RW930LW/RX110B/RX110W/RX110LB/RX110LW/ RZ870W/RZ870B/RZ870LW/RZ870LB/RZ770B/RZ770W/RZ770LB/RZ770LW/ RW730B/RW730W/RW730LB/RW730LW/RZ660B/RZ660W/RZ660LB/RZ660LW/ RW620B/RW620W/RW620LB/RW620LW/ [Group C] PT-DZ780/DZ780L/DW750/DW750L/DX820/DX820L

**Dimensions**

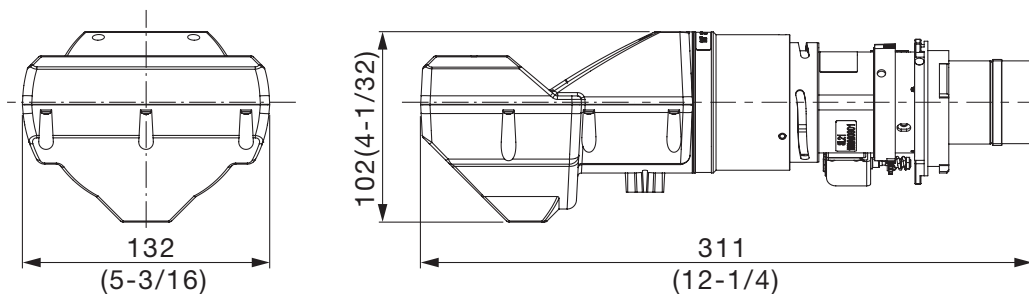
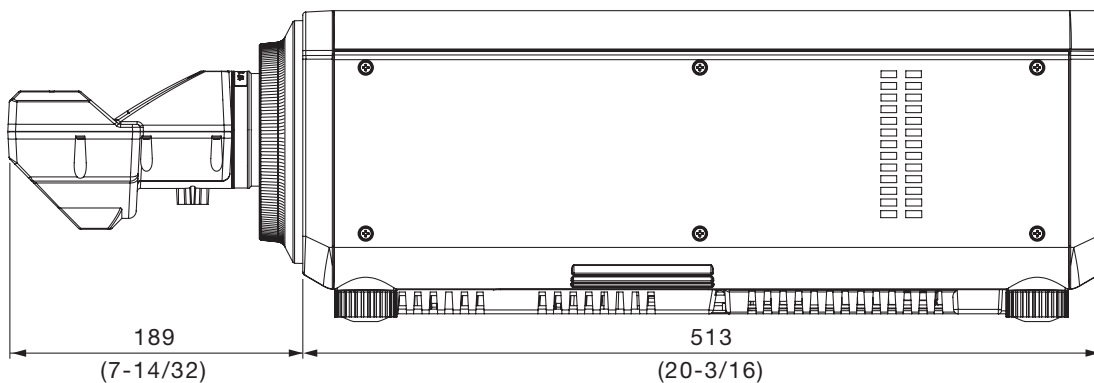


Illustration shows the lens attached to an applicable projector.

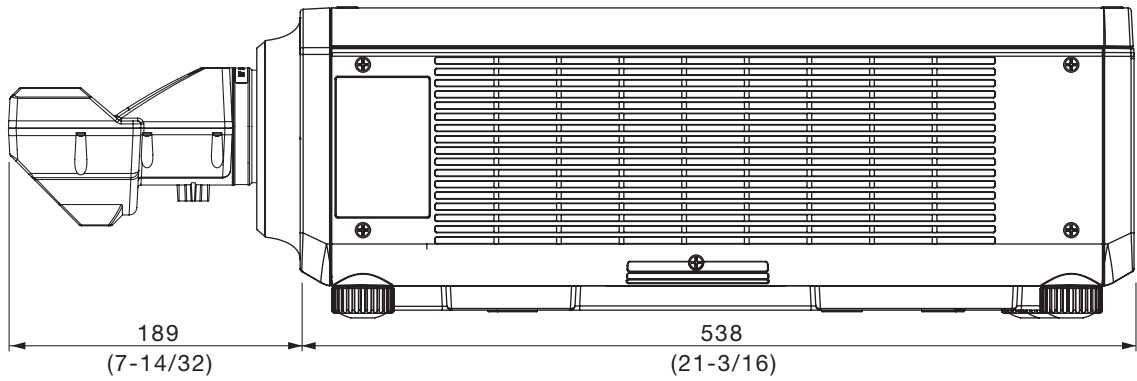
[Group A]



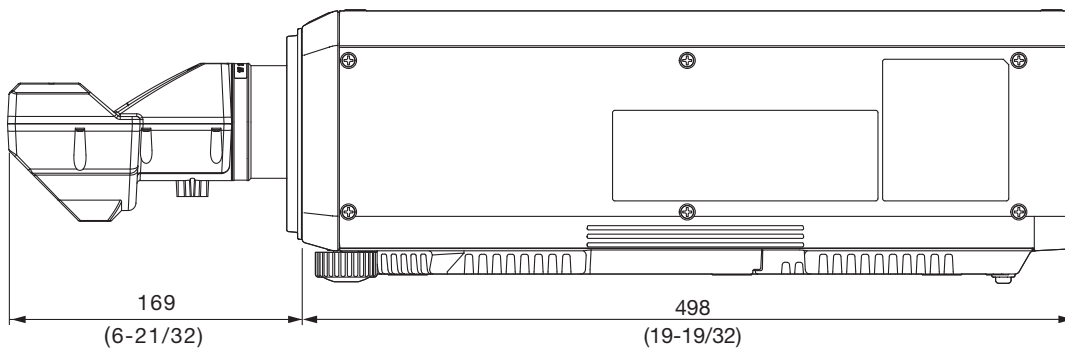
unit : mm (inch)

NOTE: This illustration is not drawn to scale.

[Group B]



[Group C]



unit : mm (inch)  
 NOTE: This illustration is not drawn to scale.

For information on the projection distance, refer to the specifications for the projector to which the lens will be mounted.  
 DLP is a trademark of Texas Instruments. Weights and dimensions shown are approximate. Specifications subject to change without notice.

ET-DLE035 Projection Distance Table

PT-RZ120/RZ970/RZ870/RZ770/RZ660/DZ870/DZ780

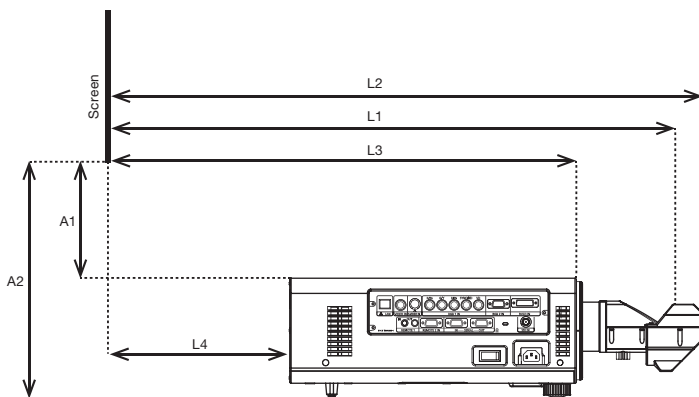
16 : 10 (WUXGA ; 1920 × 1200)

Unit : meters

Ultra-short focal length lens ET-DLE035 Close-up system dimensions													
Throw ratio				0.380:1									
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)	
							RZ120 RZ970 RZ870 RZ770 RZ660	DZ870	DZ780	RZ120 RZ970 RZ870 RZ770 RZ660 DZ870	DZ780	RZ120 RZ970 RZ870 RZ770 RZ660 DZ870	DZ780
100	2.54	1.35	2.15	0.82	0.84	0.65	0.11	0.14	0.17	0.43	0.43	0.63	0.60
120	3.05	1.62	2.59	0.98	1.00	0.82	0.28	0.30	0.34	0.53	0.54	0.73	0.71
150	3.81	2.02	3.23	1.23	1.25	1.06	0.52	0.55	0.58	0.68	0.69	0.88	0.86
200	5.08	2.69	4.31	1.63	1.66	1.47	0.93	0.95	0.99	0.93	0.94	1.13	1.11
250	6.35	3.37	5.39	2.04	2.06	1.87	1.34	1.36	1.40	1.18	1.19	1.38	1.36
300	7.62	4.04	6.46	2.45	2.47	2.28	1.74	1.77	1.80	1.43	1.44	1.63	1.61
350	8.89	4.71	7.54	2.85	2.88	2.69	2.15	2.18	2.21	1.69	1.69	1.89	1.87

Unit : feet

Ultra-short focal length lens ET-DLE035 Close-up system dimensions													
Throw ratio				0.380:1									
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)	
							RZ120 RZ970 RZ870 RZ770 RZ660	DZ870	DZ780	RZ120 RZ970 RZ870 RZ770 RZ660 DZ870	DZ780	RZ120 RZ970 RZ870 RZ770 RZ660 DZ870	DZ780
100	2.54	4.4	7.1	2.7	2.8	2.1	0.4	0.5	0.6	1.4	1.4	2.1	2.0
120	3.05	5.3	8.5	3.2	3.3	2.7	0.9	1.0	1.1	1.7	1.8	2.4	2.3
150	3.81	6.6	10.6	4.0	4.1	3.5	1.7	1.8	1.9	2.2	2.3	2.9	2.8
200	5.08	8.8	14.1	5.4	5.4	4.8	3.0	3.1	3.2	3.1	3.1	3.7	3.6
250	6.35	11.0	17.7	6.7	6.8	6.1	4.4	4.5	4.6	3.9	3.9	4.5	4.5
300	7.62	13.3	21.2	8.0	8.1	7.5	5.7	5.8	6.0	4.7	4.7	5.4	5.3
350	8.89	15.5	24.7	9.4	9.4	8.8	7.1	7.1	7.3	5.5	5.5	6.2	6.1



- 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

$$L1 (m) = 0.3205 \times \text{Diagonal image size} + 0.0047$$

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

RZ120/RZ970/RZ870/RZ770/RZ660/DZ870	A1 (m) = 0.1977 x Diagonal image size - 0.0721
DZ780	A1 (m) = 0.1977 x Diagonal image size - 0.0671

PT-RW930/RW730/RW620/DW830/DW750

16 : 10 (WXGA ; 1280 × 800)

Unit : meters

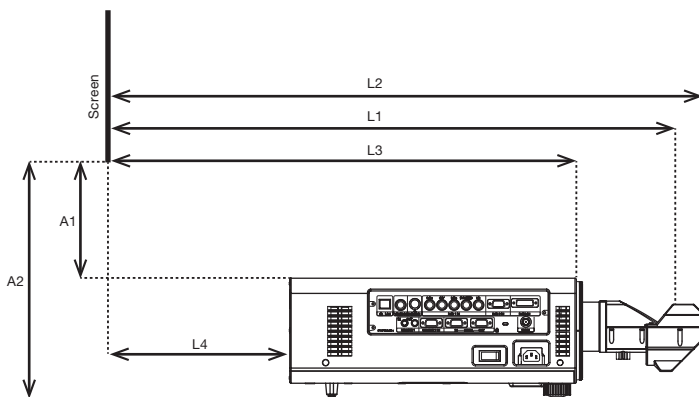
Ultra-short focal length lens ET-DLE035  
Close-up system dimensions

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)	
							RW930 RW730 RW620	DW830	DW750	RW930 RW730 RW620 DW830 DW750	RW930 RW730 RW620 DW830 DW750		
100	2.54	1.35	2.15	0.86	0.88	0.69	0.16	0.18	0.22	0.59	0.79	0.76	
120	3.05	1.62	2.59	1.03	1.05	0.86	0.33	0.35	0.39	0.72	0.92	0.89	
150	3.81	2.02	3.23	1.29	1.31	1.12	0.58	0.61	0.64	0.92	1.12	1.09	
200	5.08	2.69	4.31	1.71	1.74	1.55	1.01	1.04	1.07	1.25	1.45	1.42	
250	6.35	3.37	5.39	2.14	2.16	1.98	1.44	1.46	1.50	1.58	1.78	1.75	
300	7.62	4.04	6.46	2.57	2.59	2.40	1.86	1.89	1.92	1.91	2.11	2.08	
350	8.89	4.71	7.54	3.00	3.02	2.83	2.29	2.32	2.35	2.24	2.44	2.41	

Unit : feet

Ultra-short focal length lens ET-DLE035  
Close-up system dimensions

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)	
							RW930 RW730 RW620	DW830	DW750	RW930 RW730 RW620 DW830 DW750	RW930 RW730 RW620 DW830 DW750		
100	2.54	4.4	7.1	2.8	2.9	2.3	0.5	0.6	0.7	1.9	2.6	2.5	
120	3.05	5.3	8.5	3.4	3.5	2.8	1.1	1.2	1.3	2.4	3.0	2.9	
150	3.81	6.6	10.6	4.2	4.3	3.7	1.9	2.0	2.1	3.0	3.7	3.6	
200	5.08	8.8	14.1	5.6	5.7	5.1	3.3	3.4	3.5	4.1	4.7	4.7	
250	6.35	11.0	17.7	7.0	7.1	6.5	4.7	4.8	4.9	5.2	5.8	5.7	
300	7.62	13.3	21.2	8.4	8.5	7.9	6.1	6.2	6.3	6.3	6.9	6.8	
350	8.89	15.5	24.7	9.8	9.9	9.3	7.5	7.6	7.7	7.3	8.0	7.9	



- 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

$$L1 \text{ (m)} = 0.3365 \times \text{Diagonal image size} + 0.0047$$

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

RW930/RW730/RW620/DW830	A1 (m) = 0.2597 × Diagonal image size - 0.0740
DW750	A1 (m) = 0.2597 × Diagonal image size - 0.0690

PT-RX110/DX100/DX820

4 : 3 (XGA ; 1024 x 768)

Unit : meters

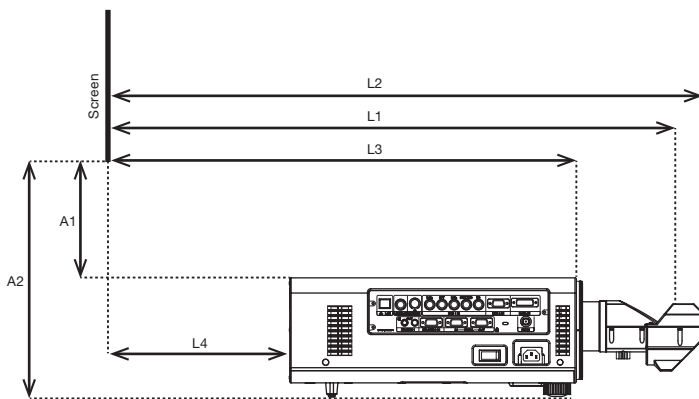
Ultra-short focal length lens ET-DLE035  
Close-up system dimensions

Throw ratio		0.394:1				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)		
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)	RX110 DX100	DX820	RX110 DX100	DX820	RX110 DX100	DX820
100	2.54	1.52	2.03	0.80	0.82	0.63	0.12	0.16	0.41	0.41	0.61	0.59
120	3.05	1.83	2.44	0.96	0.98	0.79	0.28	0.32	0.50	0.51	0.70	0.68
150	3.81	2.29	3.05	1.20	1.22	1.03	0.52	0.55	0.65	0.65	0.85	0.83
200	5.08	3.05	4.06	1.60	1.62	1.43	0.92	0.95	0.88	0.89	1.08	1.06
250	6.35	3.81	5.08	1.99	2.02	1.83	1.32	1.35	1.12	1.13	1.32	1.30
300	7.62	4.57	6.10	2.39	2.42	2.23	1.71	1.75	1.36	1.37	1.56	1.54
350	8.89	5.33	7.11	2.79	2.81	2.62	2.11	2.15	1.60	1.61	1.80	1.78

Unit : feet

Ultra-short focal length lens ET-DLE035  
Close-up system dimensions

Throw ratio		0.394:1				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)		
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)	RX110 DX100	DX820	RX110 DX100	DX820	RX110 DX100	DX820
100	2.54	5.0	6.7	2.6	2.7	2.1	0.4	0.52	1.3	1.3	2.0	1.9
120	3.05	6.0	8.0	3.1	3.2	2.6	0.9	1.0	1.6	1.7	2.3	2.2
150	3.81	7.5	10.0	3.9	4.0	3.4	1.7	1.8	2.1	2.1	2.8	2.7
200	5.08	10.0	13.3	5.2	5.3	4.7	3.0	3.1	2.9	2.9	3.6	3.5
250	6.35	12.5	16.7	6.5	6.6	6.0	4.3	4.4	3.7	3.7	4.3	4.3
300	7.62	15.0	20.0	7.8	7.9	7.3	5.6	5.7	4.5	4.5	5.1	5.1
350	8.89	17.5	23.3	9.2	9.2	8.6	6.9	7.1	5.3	5.3	5.9	5.8



- 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

$$L1 (m) = 0.3133 \times \text{Diagonal image size} + 0.0047$$

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

RX110/DX100	A1 (m) = 0.1881 x Diagonal image size - 0.0715
DX82	A1 (m) = 0.1881 x Diagonal image size - 0.0665