EPSON
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Installation Reference Guide

PowerLite Pro Series
G5150NL / G5350NL

Contents

Product Description

PowerLite Pro G5150NL (V11H273920) / G5350NL (V11H286920)

Type:	3LCD Projector 0.8” Poly Silicon TFT	Brightness:	G5150 – 4000 / 3200 G5350 – 5000 / 4000
Resolution:	XGA - 1024 x 768	Dimensions:	18.5” (W) x 5.96” (H) x 12.26” (D)
Fan Noise:	35dB/29dB (G5150) / 38dB/31dB (G5350)	Weight:	14.5lbs (G5150) /14.8lbs (G5350)
Power Rating:	G5150 – 343W (max) G5350 – 423W (max)	BTU:	G5150 – 1171 BTU/hr G5350 – 1444 BTU/hr

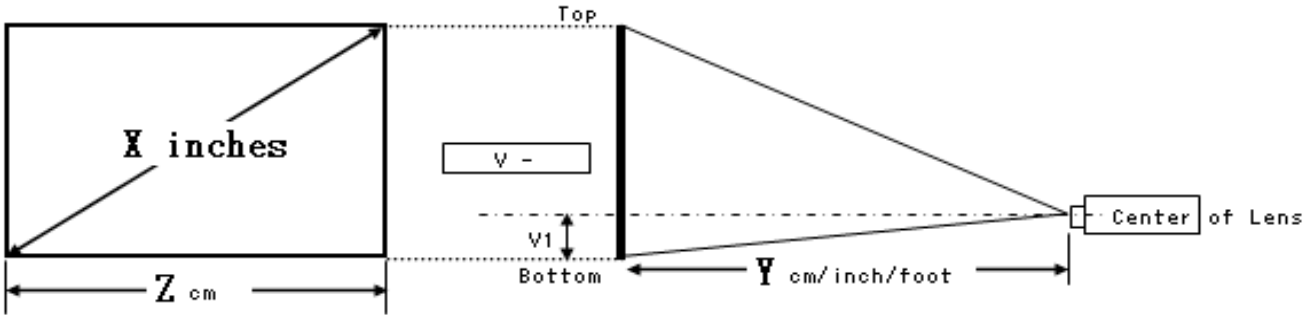
Available Lens

(Part Number)	
V12H004S03	Standard Zoom Lens
V12H004R03	Rear Projection Wide Lens
V12H004M04	Middle Throw Zoom Lens #1
V12H004M05	Middle Throw Zoom Lens #2
V12H004L06	Long Throw Zoom Lens

Lens Specifications

ELPLS03 V12H004S03	Throw Ratio: Screen Sizes Zoom Ratio:	1.3 – 2.4:1 30” – 300” 1 – 1.82:1	Focal Length: F/#:	21.27mm – 37.93mm 1.64 – 2.5
ELPLR03 V12H004R03	Throw Ratio: Screen Sizes Zoom Ratio:	0.78:1 30” – 200”	Focal Length: F/#:	12.76mm 2.03
ELPLM04 V12H004M04	Throw Ratio: Screen Sizes: Zoom Ratio:	2.4 – 3.6:1 40” – 300” 1 – 1.53:1	Focal Length: F/#:	38.07mm – 57.09mm 1.83 – 2.45
ELPLM05 V12H004M05	Throw Ratio: Screen Sizes: Zoom Ratio:	3.5 – 5.4:1 40” – 300 1 – 1.53:1	Focal Length: F/#:	56.95mm – 85.5mm 1.83 – 2.53
ELPLL06 V12H004L06	Throw Ratio: Screen Sizes Zoom Ratio:	5.3 – 7.2:1 40” – 300” 1 – 1.36:1	Focal Length: F/#:	84.91mm – 114.61mm 1.83 – 2.32

Lens Formulas - XGA Models (G5150 / G5350)



Distance Formulas **(4:3)**

ELPLR03	Y	= 0.64X -1.54
	V1	= 0.3X
ELPLS03	Y(wide)	= 1.07X – 1.80
	Y(tele)	= 1.92X – 1.72
	V1	= 0X ~ 0.6X
ELPLM04	Y(wide)	= 1.92X – 3.94
	Y(tele)	= 2.91X – 3.88
	V1	= 0X ~ 0.6X
ELPLM05	Y(wide)	= 2.88X – 6.48
	Y(tele)	= 4.37X – 6.34
	V1	= 0X ~ 0.6X
ELPLL06	Y(wide)	= 4.31X – 6.99
	Y(tele)	= 5.81X – 7.18
	V1	= 0X ~ 0.6X

Definitions (units are in inches)

Y = throw distance
X = diagonal screen size
W = image width
H = image height
V1 = vertical offset

4:3 Formulas	**16:9 Formulas**
W = X / 1.25	**W = X / 1.147375**
W = H x 4/3	**W = H x 9/16**
H = W x 4/3	**H = W x 9/16**

Distance Formulas **(16:9)**

ELPLR03	Y	= 0.69X – 1.67
	V1	= 0.245X
ELPLS03	Y(wide)	= 1.16X – 1.96
	Y(tele)	= 2.09X – 1.87
	V1	= -0.081X ~ 0.572X
ELPLM04	Y(wide)	= 2.09X – 4.30
	Y(tele)	= 3.17X – 4.22
	V1	= -0.081X ~ 0.572X
ELPLM05	Y(wide)	= 3.14X – 7.06
	Y(tele)	= 4.76X – 6.91
	V1	= -0.081X ~ 0.572X
ELPLL06	Y(wide)	= 4.69X – 7.62
	Y(tele)	= 6.33X – 7.83
	V1	= -0.081X ~ 0.572X

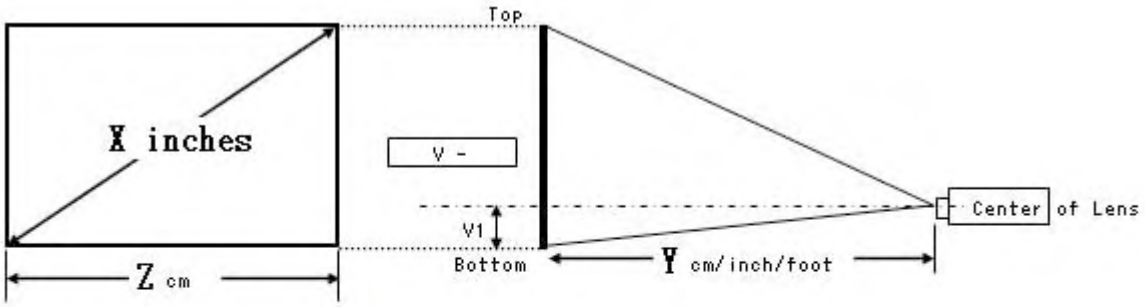
Definitions (units are in inches)

Y = throw distance
X = diagonal screen size
W = image width
H = image height
V1 = vertical offset

4:3 Formulas	**16:9 Formulas**
W = X / 1.25	**W = X / 1.147375**
W = H x 4/3	**W = H x 9/16**
H = W x 4/3	**H = W x 9/16**

** **Note – popular screen sizes are listed in the charts below. If you do not see your screen size in the chart, please use the formulas above** **

Distance Charts – Standard Lens (ELPLS03) - XGA Models (G5150 / G5350)



This chart is for reference. For Exact measurements use **Distance Formula** Calculations.

Aspect	Throw ratio= Y(cm) / Z(cm)	
	Wide	Tele
4 : 3	1.3	2.4
16 : 9	1.3	2.4

This chart is for reference. For Exact measurements use **Distance Formula** Calculations.

4 : 3

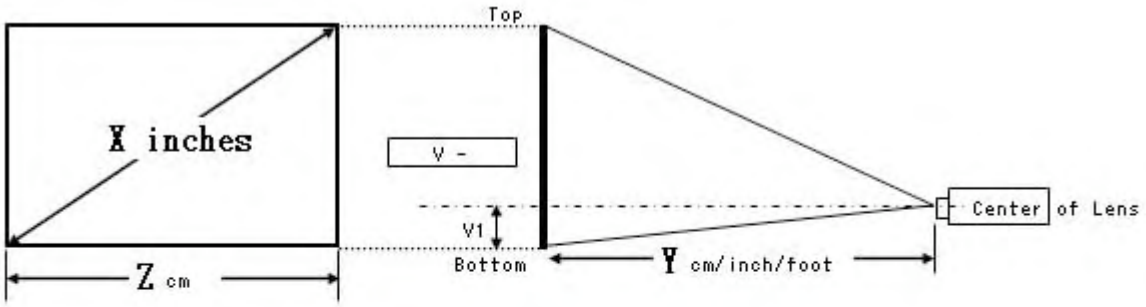
Screen [inch]	Projection distance						V-Offset	
	Wide			Tele			Wide & Tele	
	cm	inch	foot	cm	inch	foot	V1 cm	V1 inch
min 30	77	30	2.5	142	56	4.6	0 ~46	0.0 ~ 18.0
40	104	41	3.4	190	75	6.2	0 ~61	0.0 ~ 24.0
50	131	52	4.3	239	94	7.8	0 ~76	0.0 ~ 30.0
60	158	62	5.2	288	113	9.4	0 ~91	0.0 ~ 36.0
80	212	84	7.0	385	152	12.6	0 ~122	0.0 ~ 48.0
100	266	105	8.7	483	190	15.8	0 ~152	0.0 ~ 60.0
150	402	158	13.2	726	286	23.8	0 ~229	0.0 ~ 90.0
200	537	212	17.6	970	382	31.8	0 ~305	0.0 ~ 120.0
250	673	265	22.1	1213	478	39.8	0 ~381	0.0 ~ 150.0
max 300	808	318	26.5	1457	573	47.8	0 ~457	0.0 ~ 180.0

This chart is for reference. For Exact measurements use **Distance Formula** Calculations.

16 : 9

Screen [inch]	Projection distance						V-Offset	
	Wide			Tele			Wide & Tele	
	cm	inch	foot	cm	inch	foot	V1 cm	V1 inch
min 27.5	77	30	2.5	142	56	4.6	-6 ~40	-2.3 ~ 15.8
30	84	33	2.7	154	61	5.1	-6 ~44	-2.5 ~ 17.2
40	113	45	3.7	207	82	6.8	-8 ~58	-3.3 ~ 22.9
50	143	56	4.7	261	103	8.5	-10 ~73	-4.1 ~ 28.6
60	172	68	5.6	314	123	10.3	-12 ~87	-4.9 ~ 34.3
80	231	91	7.6	420	165	13.8	-17 ~116	-6.5 ~ 45.8
100	290	114	9.5	526	207	17.3	-21 ~145	-8.2 ~ 57.2
150	438	172	14.4	791	311	26.0	-31 ~218	-12.3 ~ 85.8
200	586	231	19.2	1056	416	34.7	-42 ~291	-16.3 ~ 114.4
250	733	289	24.1	1322	520	43.4	-52 ~363	-20.4 ~ 143.0
max 275	808	318	26.5	1457	573	47.8	-57 ~400	-22.5 ~ 157.5

Distance Charts – Rear Projection Wide Lens (ELPLR03) - XGA Models (G5150 / G5350)



This chart is for reference. For Exact measurements use **Distance Formula** Calculations.

Aspect	Throw ratio= Y(cm) / Z(cm)	
	Wide	Tele
4 : 3	0.78	-
16 : 9	0.78	-

This chart is for reference. For Exact measurements use **Distance Formula** Calculations.

4 : 3

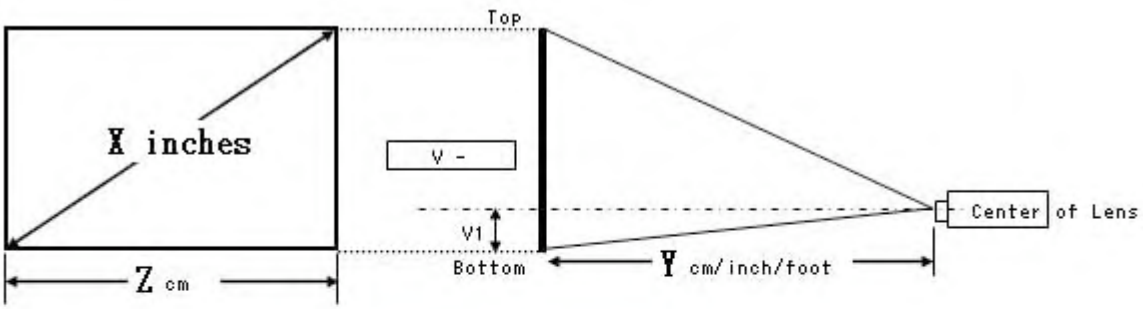
Screen [inch]	Projection distance						V-Offset	
	Wide			Tele			Wide & Tele	
	cm	inch	foot	cm	inch	foot	V1 cm	V1 inch
min 30	45	18	1.5	0	0	0.0	23	9.0
40	61	24	2.0	0	0	0.0	30	12.0
50	77	30	2.5	0	0	0.0	38	15.0
60	93	37	3.1	0	0	0.0	46	18.0
80	126	49	4.1	0	0	0.0	61	24.0
100	158	62	5.2	0	0	0.0	76	30.0
150	239	94	7.8	0	0	0.0	114	45.0
200	320	126	10.5	0	0	0.0	152	60.0
250	401	158	13.2	0	0	0.0	191	75.0
max 200	320	126	10.5	0	0	0.0	152	60.0

This chart is for reference. For Exact measurements use **Distance Formula** Calculations.

16 : 9

Screen [inch]	Projection distance						V-Offset	
	Wide			Tele			Wide & Tele	
	cm	inch	foot	cm	inch	foot	V1 cm	V1 inch
min 27.5	45	18	1.5	0	0	0.0	17	6.8
30	49	19	1.6	0	0	0.0	19	7.4
40	66	26	2.2	0	0	0.0	25	9.8
50	84	33	2.8	0	0	0.0	31	12.3
60	102	40	3.3	0	0	0.0	37	14.7
80	137	54	4.5	0	0	0.0	50	19.6
100	172	68	5.7	0	0	0.0	62	24.5
150	260	103	8.5	0	0	0.0	93	36.8
200	349	137	11.4	0	0	0.0	125	49.0
250	437	172	14.3	0	0	0.0	156	61.3
max 184	320	126	10.5	0	0	0.0	114	45.0

Distance Charts – Mid Throw Lens (ELPLM04) - XGA Models (G5150 / G5350)



This chart is for reference. For Exact measurements use **Distance Formula** Calculations.

Aspect	Throw ratio= Y(cm) / Z(cm)	
	Wide	Tele
4 : 3	2.4	3.6
16 : 9	2.4	3.6

This chart is for reference. For Exact measurements use **Distance Formula** Calculations.

4 : 3

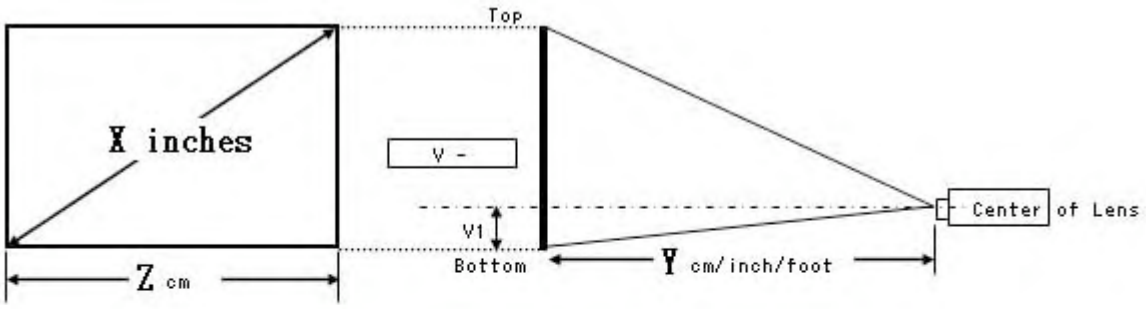
Screen [inch]	Projection distance						V-Offset	
	Wide			Tele			Wide & Tele	
	cm	inch	foot	cm	inch	foot	V1 cm	V1 inch
min 40	185	73	6.1	285	112	9.4	0 ~61	0.0 ~ 24.0
40	185	73	6.1	285	112	9.4	0 ~61	0.0 ~ 24.0
50	234	92	7.7	359	141	11.8	0 ~76	0.0 ~ 30.0
60	283	111	9.3	433	170	14.2	0 ~91	0.0 ~ 36.0
80	380	150	12.5	581	229	19.0	0 ~122	0.0 ~ 48.0
100	478	188	15.7	728	287	23.9	0 ~152	0.0 ~ 60.0
150	722	284	23.7	1097	432	36.0	0 ~229	0.0 ~ 90.0
200	966	380	31.7	1466	577	48.1	0 ~305	0.0 ~ 120.0
250	1210	476	39.7	1835	723	60.2	0 ~381	0.0 ~ 150.0
max 300	1454	572	47.7	2204	868	72.3	0 ~457	0.0 ~ 180.0

This chart is for reference. For Exact measurements use **Distance Formula** Calculations.

16 : 9

Screen [inch]	Projection distance						V-Offset	
	Wide			Tele			Wide & Tele	
	cm	inch	foot	cm	inch	foot	V1 cm	V1 inch
min 36.7	185	73	6.1	285	112	9.4	-8 ~53	-3.0 ~ 21.0
30	149	58	4.9	230	91	7.6	-6 ~44	-2.5 ~ 17.2
40	202	79	6.6	311	122	10.2	-8 ~58	-3.3 ~ 22.9
50	255	100	8.4	391	154	12.8	-10 ~73	-4.1 ~ 28.6
60	308	121	10.1	472	186	15.5	-12 ~87	-4.9 ~ 34.3
80	414	163	13.6	632	249	20.8	-17 ~116	-6.5 ~ 45.8
100	521	205	17.1	793	312	26.0	-21 ~145	-8.2 ~ 57.2
150	787	310	25.8	1195	471	39.2	-31 ~218	-12.3 ~ 85.8
200	1052	414	34.5	1597	629	52.4	-42 ~291	-16.3 ~ 114.4
250	1318	519	43.2	1999	787	65.6	-52 ~363	-20.4 ~ 143.0
max 275	1454	572	47.7	2204	868	72.3	-57 ~400	-22.5 ~ 157.5

Distance Charts – Mid Throw Lens (ELPLM05) - XGA Models (G5150 / G5350)



This chart is for reference. For Exact measurements use **Distance Formula** Calculations.

Aspect	Throw ratio= Y(cm) / Z(cm)	
	Wide	Tele
4 : 3	3.5	5.4
16 : 9	3.5	5.4

This chart is for reference. For Exact measurements use **Distance Formula** Calculations.

4 : 3

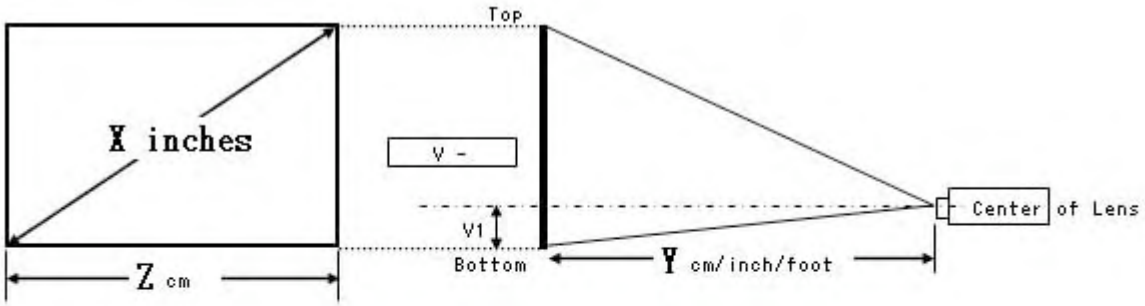
Screen [inch]	Projection distance						V-Offset	
	Wide			Tele			Wide & Tele	
	cm	inch	foot	cm	inch	foot	V1 cm	V1 inch
min 40	276	109	9.1	427	168	14.0	0 ~61	0.0 ~ 24.0
40	276	109	9.1	427	168	14.0	0 ~61	0.0 ~ 24.0
50	350	138	11.5	538	212	17.7	0 ~76	0.0 ~ 30.0
60	423	166	13.9	649	256	21.3	0 ~91	0.0 ~ 36.0
80	569	224	18.7	871	343	28.6	0 ~122	0.0 ~ 48.0
100	716	282	23.5	1093	430	35.9	0 ~152	0.0 ~ 60.0
150	1082	426	35.5	1647	649	54.0	0 ~229	0.0 ~ 90.0
200	1448	570	47.5	2202	867	72.2	0 ~305	0.0 ~ 120.0
250	1814	714	59.5	2756	1085	90.4	0 ~381	0.0 ~ 150.0
max 300	2180	858	71.5	3311	1304	108.6	0 ~457	0.0 ~ 180.0

This chart is for reference. For Exact measurements use **Distance Formula** Calculations.

16 : 9

Screen [inch]	Projection distance						V-Offset	
	Wide			Tele			Wide & Tele	
	cm	inch	foot	cm	inch	foot	V1 cm	V1 inch
min 36.7	276	109	9.1	427	168	14.0	-8 ~53	-3.0 ~ 21.0
30	221	87	7.3	345	136	11.3	-6 ~44	-2.5 ~ 17.2
40	301	119	9.9	466	183	15.3	-8 ~58	-3.3 ~ 22.9
50	381	150	12.5	587	231	19.2	-10 ~73	-4.1 ~ 28.6
60	461	181	15.1	707	278	23.2	-12 ~87	-4.9 ~ 34.3
80	620	244	20.3	949	374	31.1	-17 ~116	-6.5 ~ 45.8
100	780	307	25.6	1191	469	39.1	-21 ~145	-8.2 ~ 57.2
150	1178	464	38.7	1795	707	58.9	-31 ~218	-12.3 ~ 85.8
200	1577	621	51.7	2399	944	78.7	-42 ~291	-16.3 ~ 114.4
250	1976	778	64.8	3003	1182	98.5	-52 ~363	-20.4 ~ 143.0
max 275	2180	858	71.5	3311	1304	108.6	-57 ~400	-22.5 ~ 157.5

Distance Charts – Long Throw Lens (ELPLL06) - XGA Models (G5150 / G5350)



This chart is for reference. For Exact measurements use **Distance Formula** Calculations.

Aspect	Throw ratio= Y(cm) / Z(cm)	
	Wide	Tele
4 : 3	5.3	7.2
16 : 9	5.3	7.2

This chart is for reference. For Exact measurements use **Distance Formula** Calculations.

4 : 3

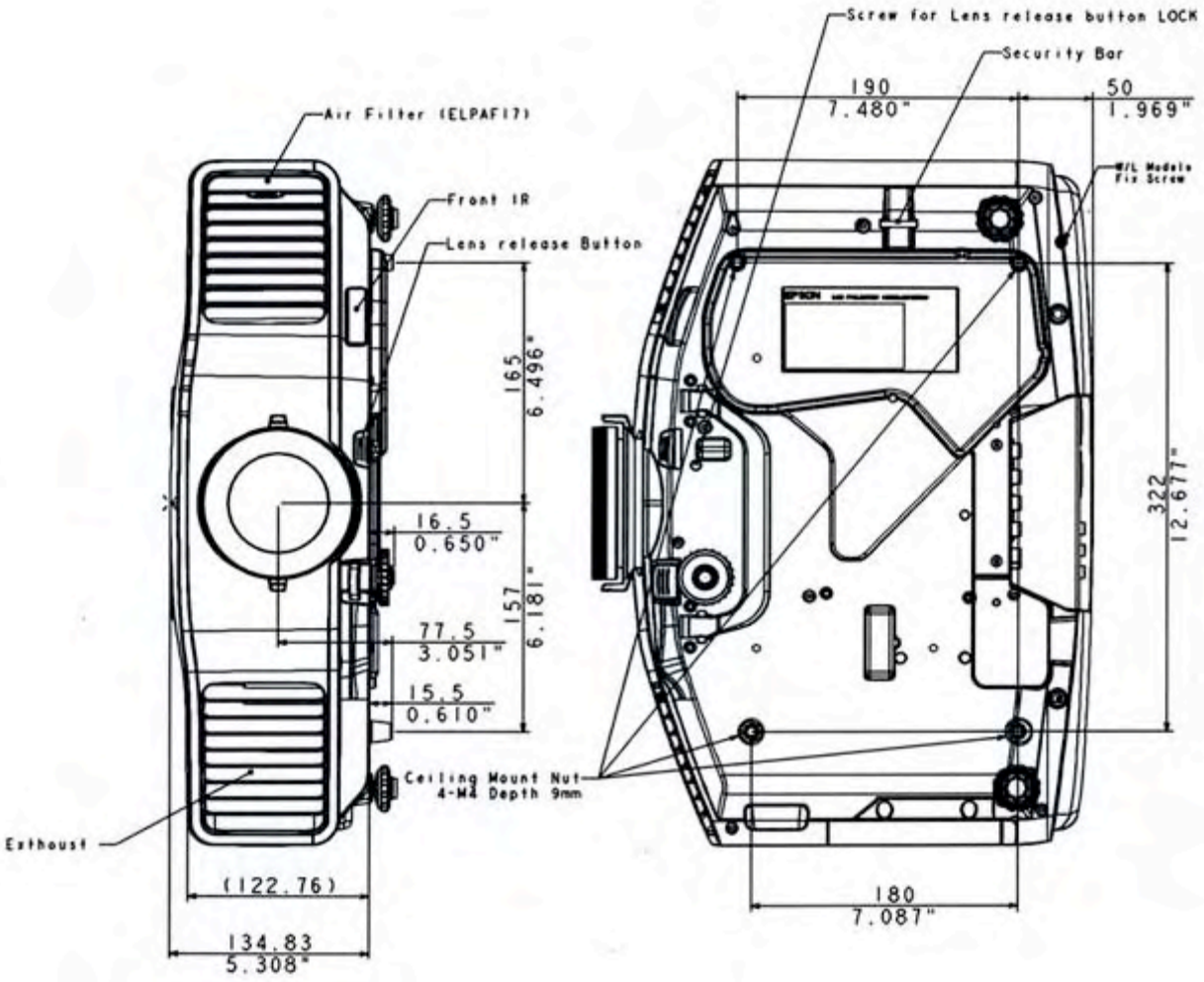
Screen [inch]	Projection distance						V-Offset	
	Wide			Tele			Wide & Tele	
	cm	inch	foot	cm	inch	foot	V1 cm	V1 inch
min 40	420	165	13.8	572	225	18.8	0 ~61	0.0 ~ 24.0
40	420	165	13.8	572	225	18.8	0 ~61	0.0 ~ 24.0
50	529	208	17.4	719	283	23.6	0 ~76	0.0 ~ 30.0
60	639	251	21.0	867	341	28.4	0 ~91	0.0 ~ 36.0
80	857	338	28.1	1162	457	38.1	0 ~122	0.0 ~ 48.0
100	1076	424	35.3	1457	574	47.8	0 ~152	0.0 ~ 60.0
150	1623	639	53.3	2194	864	72.0	0 ~229	0.0 ~ 90.0
200	2170	854	71.2	2932	1154	96.2	0 ~305	0.0 ~ 120.0
250	2717	1070	89.1	3669	1445	120.4	0 ~381	0.0 ~ 150.0
max 300	3264	1285	107.1	4407	1735	144.6	0 ~457	0.0 ~ 180.0

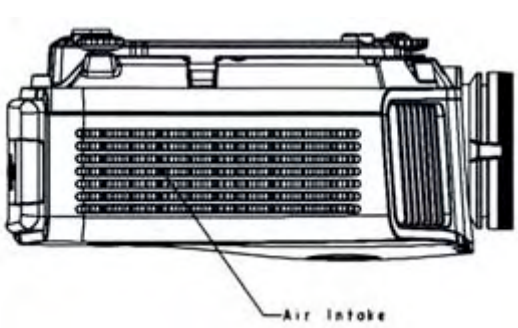
This chart is for reference. For Exact measurements use **Distance Formula** Calculations.

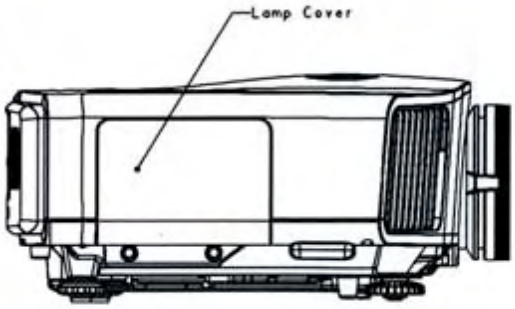
16 : 9

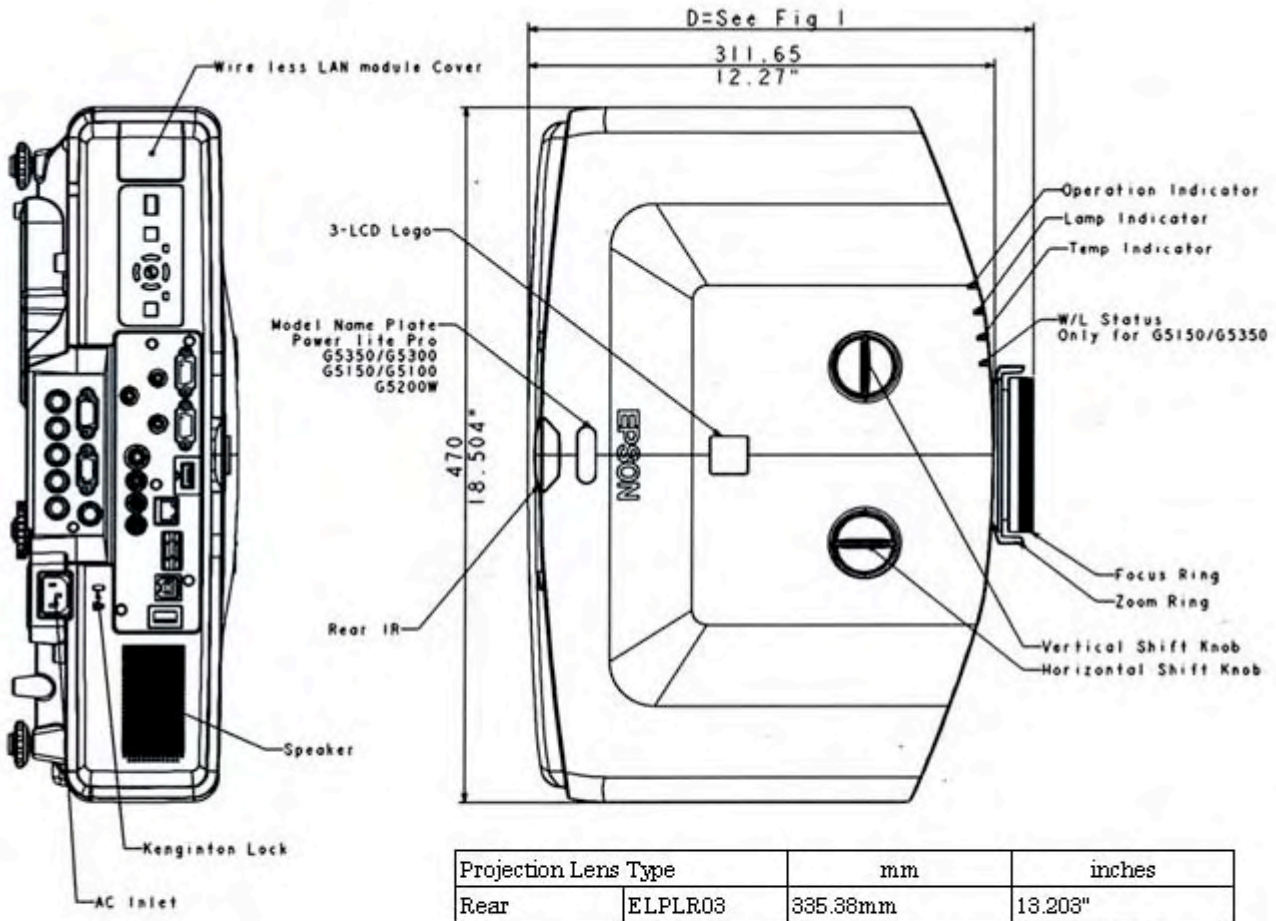
Screen [inch]	Projection distance						V-Offset	
	Wide			Tele			Wide & Tele	
	cm	inch	foot	cm	inch	foot	V1 cm	V1 inch
min 36.7	420	165	13.8	572	225	18.8	-8 ~53	-3.0 ~ 21.0
30	338	133	11.1	462	182	15.2	-6 ~44	-2.5 ~ 17.2
40	457	180	15.0	623	245	20.4	-8 ~58	-3.3 ~ 22.9
50	577	227	18.9	784	309	25.7	-10 ~73	-4.1 ~ 28.6
60	696	274	22.8	944	372	31.0	-12 ~87	-4.9 ~ 34.3
80	934	368	30.6	1266	498	41.5	-17 ~116	-6.5 ~ 45.8
100	1173	462	38.5	1587	625	52.1	-21 ~145	-8.2 ~ 57.2
150	1768	696	58.0	2391	941	78.4	-31 ~218	-12.3 ~ 85.8
200	2364	931	77.6	3194	1258	104.8	-42 ~291	-16.3 ~ 114.4
250	2960	1165	97.1	3998	1574	131.2	-52 ~363	-20.4 ~ 143.0
max 275	3264	1285	107.1	4407	1735	144.6	-57 ~400	-22.5 ~ 157.5

Projector Dimensions









Projection Lens Type		mm	inches
Rear	ELPLR03	335.38mm	13.203"
Standard	ELPLS03	337.85 ±1.5mm	13.301 ±0.059"
Mid Throw	ELPLM04	337.87 ±2mm	13.298 ±0.0787"
Mid Throw	ELPLM05	340.53 ±3.5mm	13.407 ±0.138"
Long Throw	ELPLL06	341.11 ±3mm	13.430 ±0.118"

Fig 1

Available Accessories

V12H007T16	IR Mouse Receiver for Remote Control
V13H010L47	Replacement Lamp for PowerLite Pro G5150
V13H010L46	Replacement Lamp for PowerLite Pro G5200W
V13H010L46	Replacement Lamp for PowerLite Pro G5350
V12H005C28	Remote Control Cable Set
V13H134A17	Air Filter
V12H306P11	Optional Wireless 802.11 g/b/a Module for PowerLite Pro G5150NL/G5350NL

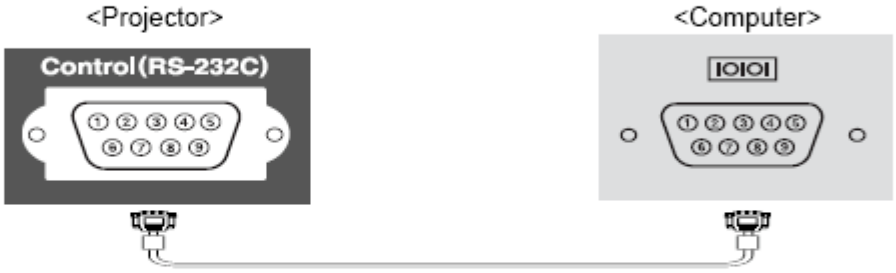
Available Ceiling Mounts

ELPMBPRG	Advanced Projector Ceiling Mount with Precision Gear
ELPMBP01	Adjustable Suspended Ceiling Channel Kit
ELPMBP02	False Ceiling Plate
ELPMBP03	Structural Round Ceiling Plate
ELPMBC01	Adjustable Extension Column (Pipe) 8" - 11"

Projector Panel

Serial Cable Connection

- Communication condition
  - Baud rate : 9600 bps
  - Data length : 8 bits
  - Parity : No
  - Stop bit : 1 bit
  - Flow control : No
- Connector : D-sub 9pin
- Projector input : Control(RS-232C)



Projector		PC serial cable	Computer	
GND	5	———	5	GND
RD	2	←———	3	TD
TD	3	———→	2	RD

Signal name	Function
GND	Common ground
TD	Transmitted data
RD	Received data

RS232 Codes

Projector Control Codes:

Command Function	Command Name	Example	Code Returned Definition
Power On	PWR ON	:PWR ON	01
Power Off	PWR OFF	:PWR OFF	00
Power Status	PWR?	:PWR?	00: Standby Mode (Network OFF) 01: Lamp ON 02: Warmup 03: Cooldown 04: Standby Mode (Network ON) 05: Abnormality standby
Lamp Usage	LAMP?	:LAMP?	LAMP=nn (nn = Lamp Hours)
Changing Luminance	LUMINANCE	:LUMINANCE	00: High 01: Low
Confirming Luminance	LUMINANCE?	:LUMINANCE?	00: High 01: Low
Selecting Input Source	SOURCE	:SOURCE	10: Computer 1 VGA 11: Computer 1 RGB 14: Computer 1 Component 1F: Computer 1 Auto 20: Computer 2 VGA 21: Computer 2 RGB 24: Computer 2 Component 2F: Computer 2 Auto 30: HDMI 31: Digital RGB 33: RGB Video 34: YCbCr 35: YPbPr 41: Video 2 Composite 42: S Video 45: Video 1 BNC 50: EasyMP
Confirming Input Source	SOURCE?	:SOURCE?	SOURCE=xx (Where xx equals list above)
Setting A/V Mute	MUTE	:MUTE ON	ON/OFF
Confirming A/V Mute	MUTE?	:MUTE?	ON/OFF
Freeze Setting	FREEZE	:FREEZE	ON/OFF
Confirming Freeze	FREEZE?	:FREEZE?	ON/OFF

For more Projector Codes please see the ESCVP21 manual.

ESCVP.net

For communication over IP, please see the ESCVP.net manual.