



PX9510 / PW9520 / PU9530

Digital Projector
Installation Guide



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Product information

Type: DLP™ Technology

Dimensions (W x H x D): 505 x 197 x 385 mm

Weight: 17.5 kg (38.6 lbs)

Specifications	PX9510	PW9520	PU9530
DMD size	0.7"	0.65"	0.67"
Native resolution	XGA (1024 x 768)	WXGA (1280 x 800)	WUXGA (1920 x 1200)
Aspect ratio	4:3	16:10	16:10
Brightness	6500 Lumens	6000 Lumens	6000 Lumens
Lamp Wattage	280W x2		
Power consumption(Max)	730W		

Lens information

Model Name	Lens Type	BenQ Part Number	Optical spec	Screen Size
LSIST3	Wide fix	5J.JAM37.01 I	F=1.85, f=11.6mm	40"~500"
LSIST2	Ultra wide	5J.JAM37.06 I	F=1.96-2.3	40"~500"
LSIST1	Wide zoom	5J.JAM37.02 I	F=1.85~2.5, f=18.7~26.5mm	40"~500"
LSISD	Standard	5J.JAM37.00 I	F=1.64~1.86, f=26~34mm	40"~500"
LSILT1	Semi Long	5J.JAM37.05 I	F=1.86~2.48, f=32.9~54.2mm	40"~500"
LSILT2	Long zoom 1	5J.JAM37.03 I	F=1.86~2.41, f=52.8~79.1mm	40"~500"
LSILT3	Long zoom 2	5J.JAM37.04 I	F=1.85~2.48, f=78.5~121.9mm	40"~500"

Notice (when edge blending)

- To avoid the image shaking or some pixels in the display may be misaligned, do not use the projector in the following location:
 - In a building close to a construction site.
 - In a room where an air conditioner unit is working and it vibrates.
 - In a place where the temperature changes dramatically that may cause thermal contraction.
- Before making any adjustment, leave the projector lit for at least 15 minutes after its lamp is turned on. This allows the internal temperature of the projector to stabilize.

Product information

PX9510 Formulas:

Definitions:

W = Image Width

H = Image Height (size)

C = Throw distance

4:3 Screen Formulas:

$W = H \times 4/3$

$H = W \times 3/4$

Diagonal = $W \times 5/4$

PX9510

Part Number						5J.JAM37.01 I		5J.JAM37.02 I				5J.JAM37.00 I				5J.JAM37.05 I			
Throw Ratio						LS1ST3 (Wide Fix Lens)		LS1ST1 (Wide Zoom Lens)				LS1SD (Standard Lens)				LS1LT1 (Semi Long Lens)			
						0.79		1.3 ~ 1.85				1.79~2.35				2.30~3.81			
Diagonal		Width		Height (B)		N/A		Wide		Tele		Wide		Tele		Wide		Tele	
(inch)	(m)	(inch)	(m)	(inch)	(m)	(inch)	(m)	(inch)	(m)	(inch)	(m)	(inch)	(m)	(inch)	(m)	(inch)	(m)	(inch)	(m)
40	1.02	32	0.81	24	0.61	24.5	0.62	40.4	1.03	58.5	1.49	55.8	1.42	74.1	1.88	71.9	1.83	121.3	3.08
50	1.27	40	1.02	30	0.76	31.0	0.79	51.0	1.30	73.6	1.87	70.4	1.79	93.2	2.37	90.7	2.30	152.4	3.87
60	1.52	48	1.22	36	0.91	37.6	0.96	61.6	1.57	88.8	2.25	85.1	2.16	112.4	2.86	109.5	2.78	183.5	4.66
80	2.03	64	1.63	48	1.22	50.8	1.29	82.9	2.11	119.0	3.02	114.3	2.90	150.8	3.83	147.0	3.73	245.7	6.24
100	2.54	80	2.03	60	1.52	63.9	1.62	104.1	2.65	149.2	3.79	143.5	3.65	189.1	4.80	184.6	4.69	307.9	7.82
120	3.05	96	2.44	72	1.83	77.1	1.96	125.4	3.18	179.4	4.56	172.8	4.39	227.4	5.78	222.1	5.64	370.1	9.40
150	3.81	120	3.05	90	2.29	96.8	2.46	157.3	3.99	224.8	5.71	216.7	5.50	285.0	7.24	278.4	7.07	463.4	11.77
180	4.57	144	3.66	108	2.74	116.6	2.96	189.1	4.80	270.1	6.86	260.5	6.62	342.5	8.70	334.8	8.50	556.7	14.14
200	5.08	160	4.06	120	3.05	129.7	3.30	210.4	5.34	300.3	7.63	289.8	7.36	380.8	9.67	372.3	9.46	618.9	15.72
300	7.62	240	6.1	180	4.57	195.5	4.97	316.6	8.04	451.5	11.47	436.0	11.07	572.6	14.54	560.0	14.23	930.0	23.62
400	10.16	320	8.13	240	6.1	261.3	6.64	422.9	10.74	602.6	15.31	582.2	14.79	764.3	19.41	747.8	18.99	1241.0	31.52
500	12.70	400	10.16	300	7.62	327.1	8.31	529.1	13.44	753.7	19.14	728.5	18.50	956.1	24.28	935.5	23.76	1552.0	39.42

Part Number						5J.JAM37.03 I				5J.JAM37.04 I				5J.JAM37.06 I			
Throw Ratio						LS1LT2 (Long Zoom 1 Lens)				LS1LT3 (Long Zoom 2 Lens)				LS1ST2 (Ultra Wide Lens)			
						3.71~5.57				5.50~8.56				0.77~0.97			
Diagonal		Width		Height (B)		Wide		Tele		Wide		Tele		Wide		Tele	
(inch)	(m)	(inch)	(m)	(inch)	(m)	(inch)	(m)	(inch)	(m)	(inch)	(m)	(inch)	(m)	(inch)	(m)	(inch)	(m)
40	1.02	32	0.81	24	0.61	115.9	2.94	176.8	4.49	169.6	4.31	271.2	6.89	23.9	0.61	30.4	0.77
50	1.27	40	1.02	30	0.76	146.2	3.71	222.3	5.65	215.0	5.46	341.9	8.68	30.3	0.77	38.4	0.98
60	1.52	48	1.22	36	0.91	176.5	4.48	267.9	6.80	260.3	6.61	412.6	10.48	36.7	0.93	46.5	1.18
80	2.03	64	1.63	48	1.22	237.1	6.02	358.9	9.12	350.9	8.91	554.0	14.07	49.5	1.26	62.5	1.59
100	2.54	80	2.03	60	1.52	297.7	7.56	450.0	11.43	441.6	11.22	695.3	17.66	62.4	1.58	78.6	2.00
120	3.05	96	2.44	72	1.83	358.2	9.10	541.0	13.74	532.2	13.52	836.7	21.25	75.2	1.91	94.7	2.40
150	3.81	120	3.05	90	2.29	449.1	11.41	677.6	17.21	668.2	16.97	1048.8	26.64	94.4	2.40	118.8	3.02
180	4.57	144	3.66	108	2.74	540.0	13.72	814.2	20.68	804.1	20.42	1260.9	32.03	113.7	2.89	142.9	3.63
200	5.08	160	4.06	120	3.05	600.6	15.26	905.3	22.99	894.8	22.73	1402.2	35.62	126.5	3.21	158.9	4.04
300	7.62	240	6.1	180	4.57	903.6	22.95	1360.5	34.56	1348.0	34.24	2109.1	53.57	190.7	4.84	239.2	6.08
400	10.16	320	8.13	240	6.1	1206.6	30.65	1815.8	46.12	1801.2	45.75	2816.0	71.53	254.9	6.47	319.5	8.12
500	12.70	400	10.16	300	7.62	1509.5	38.34	2271.1	57.69	2254.3	57.26	3522.9	89.48	319.1	8.10	399.9	10.16

PW9520 Formulas:

Definitions:

W = Image Width

H = Image Height (size)

C = Throw distance

16:10 Screen Formulas: $W = H \times 16/10$ $H = W \times 10/16$ Screen Diagonal = $W \times 18.868/16$ **PW9520**

Part Number		5JJAM37.01 I				5JJAM37.02 I				5JJAM37.00 I				5JJAM37.05 I					
		LS1ST3 (Wide Fix Lens)				LS1ST1 (Wide Zoom Lens)				LS1SD (Standard Lens)				LS1LT1 (Semi Long Lens)					
Throw Ratio		0.8				1.31~1.87				1.81~2.38				2.33~3.86					
Diagonal		Width		Height (B)		N/A		Wide		Tele		Wide		Tele		Wide		Tele	
(inch)	(m)	(inch)	(m)	(inch)	(m)	(inch)	(m)	(inch)	(m)	(inch)	(m)	(inch)	(m)	(inch)	(m)	(inch)	(m)	(inch)	(m)
40	1.02	34	0.86	21	0.54	26.4	0.67	43.6	1.11	63.1	1.60	60.2	1.53	79.8	2.03	77.6	1.97	130.5	3.31
50	1.27	42	1.08	26	0.67	33.5	0.85	55.0	1.40	79.3	2.01	75.9	1.93	100.4	2.55	97.8	2.48	163.9	4.16
60	1.52	51	1.29	32	0.81	40.5	1.03	66.4	1.69	95.5	2.43	91.7	2.33	121.0	3.07	117.9	3.00	197.3	5.01
80	2.03	68	1.72	42	1.08	54.7	1.39	89.3	2.27	128.0	3.25	123.1	3.13	162.3	4.12	158.3	4.02	264.1	6.71
100	2.54	85	2.15	53	1.35	68.8	1.75	112.1	2.85	160.5	4.08	154.5	3.93	203.5	5.17	198.7	5.05	330.9	8.41
120	3.05	102	2.58	64	1.62	82.9	2.11	135.0	3.43	193.0	4.90	186.0	4.72	244.7	6.22	239.0	6.07	397.7	10.10
150	3.81	127	3.23	79	2.02	104.1	2.64	169.2	4.30	241.7	6.14	233.1	5.92	306.5	7.79	299.6	7.61	498.0	12.65
180	4.57	153	3.88	95	2.42	125.3	3.18	203.5	5.17	290.4	7.38	280.3	7.12	368.4	9.36	360.1	9.15	598.2	15.19
200	5.08	170	4.31	106	2.69	139.4	3.54	226.4	5.75	322.9	8.20	311.7	7.92	409.6	10.40	400.5	10.17	665.0	16.89
300	7.62	254	6.46	159	4.04	210.0	5.33	340.6	8.65	485.3	12.33	468.9	11.91	615.7	15.64	602.3	15.30	999.0	25.38
400	10.16	339	8.62	212	5.38	280.6	7.13	454.8	11.55	647.7	16.45	626.1	15.90	821.9	20.88	804.1	20.42	1333.1	33.86
500	12.70	424	10.77	265	6.73	351.2	8.92	569.0	14.45	810.1	20.58	783.3	19.90	1028.0	26.11	1005.9	25.55	1667.1	42.35

Part Number		5JJAM37.03 I				5JJAM37.04 I				5JJAM37.06 I							
		LS1LT2 (Long Zoom 1 Lens)				LS1LT3 (Long Zoom 2 Lens)				LS1ST2 (Ultra Wide Lens)							
Throw Ratio		3.76~5.64				5.56~8.67				0.78~0.99							
Diagonal		Width		Height (B)		Wide		Tele		Wide		Tele		Wide		Tele	
(inch)	(m)	(inch)	(m)	(inch)	(m)	(inch)	(m)	(inch)	(m)	(inch)	(m)	(inch)	(m)	(inch)	(m)	(inch)	(m)
40	1.02	34	0.86	21	0.54	124.9	3.17	190.3	4.83	183.3	4.65	292.2	7.42	25.8	0.65	32.8	0.83
50	1.27	42	1.08	26	0.67	157.5	4.00	239.2	6.08	232.0	5.89	368.1	9.35	32.7	0.83	41.4	1.05
60	1.52	51	1.29	32	0.81	190.1	4.83	288.1	7.32	280.7	7.13	444.0	11.28	39.6	1.00	50.0	1.27
80	2.03	68	1.72	42	1.08	255.2	6.48	385.9	9.80	378.1	9.60	595.9	15.13	53.3	1.35	67.3	1.71
100	2.54	85	2.15	53	1.35	320.3	8.14	483.7	12.29	475.6	12.08	747.7	18.99	67.1	1.70	84.5	2.15
120	3.05	102	2.58	64	1.62	385.5	9.79	581.5	14.77	573.0	14.55	899.6	22.85	80.9	2.05	101.8	2.59
150	3.81	127	3.23	79	2.02	483.2	12.27	728.2	18.50	719.1	18.27	1127.3	28.63	101.6	2.58	127.6	3.24
180	4.57	153	3.88	95	2.42	580.9	14.75	874.9	22.22	865.3	21.98	1355.1	34.42	122.2	3.10	153.5	3.90
200	5.08	170	4.31	106	2.69	646.0	16.41	972.7	24.71	962.7	24.45	1506.9	38.28	136.0	3.45	170.8	4.34
300	7.62	254	6.46	159	4.04	971.7	24.68	1461.8	37.13	1449.9	36.83	2266.2	57.56	204.9	5.20	257.0	6.53
400	10.16	339	8.62	212	5.38	1297.3	32.95	1950.8	49.55	1937.1	49.20	3025.4	76.85	273.8	6.95	343.2	8.72
500	12.70	424	10.77	265	6.73	1623.0	41.22	2439.8	61.97	2424.2	61.58	3784.7	96.13	342.7	8.70	429.4	10.91

PU9530 Formulas:

Definitions:

W = Image Width

H = Image Height (size)

C = Throw distance

16:10 Screen Formulas: $W = H \times 16/10$ $H = W \times 10/16$ Screen Diagonal = $W \times 18.868/16$ **PU9530**

Part Number						5J,JAM37.01 I		5J,JAM37.02 I				5J,JAM37.00 I				5J,JAM37.05 I			
Throw Ratio						LS1ST3 (Wide Fix Lens)		LS1ST1 (Wide Zoom Lens)				LS1SD (Standard Lens)				LS1LT1 (Semi Long Lens)			
Throw Ratio						0.76		1.25~1.79				1.73~2.27				2.22~3.67			
Diagonal		Width		Height (B)		N/A		Wide		Tele		Wide		Tele		Wide		Tele	
(inch)	(m)	(inch)	(m)	(inch)	(m)	(inch)	(m)	(inch)	(m)	(inch)	(m)	(inch)	(m)	(inch)	(m)	(inch)	(m)	(inch)	(m)
40	1.02	34	0.86	21	0.54	25.1	0.64	41.4	1.05	59.9	1.52	57.2	1.45	75.8	1.93	73.6	1.87	124.1	3.15
50	1.27	42	1.08	26	0.67	31.8	0.81	52.3	1.33	75.4	1.92	72.1	1.83	95.5	2.42	92.9	2.36	155.9	3.96
60	1.52	51	1.29	32	0.81	38.5	0.98	63.1	1.60	90.9	2.31	87.1	2.21	115.1	2.92	112.1	2.85	187.8	4.77
80	2.03	68	1.72	42	1.08	52.0	1.32	84.9	2.16	121.8	3.09	117.0	2.97	154.3	3.92	150.5	3.82	251.4	6.39
100	2.54	85	2.15	53	1.35	65.5	1.66	106.6	2.71	152.7	3.88	147.0	3.73	193.5	4.92	188.9	4.80	315.0	8.00
120	3.05	102	2.58	64	1.62	78.9	2.01	128.4	3.26	183.6	4.66	176.9	4.49	232.8	5.91	227.6	5.78	378.6	9.62
150	3.81	127	3.23	79	2.02	99.1	2.52	161.0	4.09	230.0	5.84	221.8	5.63	291.6	7.41	285.0	7.24	474.1	12.04
180	4.57	153	3.88	95	2.42	119.3	3.03	193.6	4.92	276.4	7.02	266.7	6.77	350.5	8.90	342.6	8.70	569.5	14.47
200	5.08	170	4.31	106	2.69	132.8	3.37	215.3	5.47	307.3	7.81	296.6	7.53	389.7	9.90	381.0	9.68	633.1	16.08
300	7.62	254	6.46	159	4.04	200.1	5.08	324.0	8.23	461.9	11.73	446.3	11.34	585.9	14.9	573.2	14.56	951.2	24.16
400	10.16	339	8.62	212	5.38	267.4	6.79	432.7	10.99	616.6	15.66	595.9	15.14	782.3	19.87	765.3	19.44	1269.7	32.25
500	12.70	424	10.77	265	6.73	334.8	8.50	541.5	13.75	771.2	19.59	745.6	18.94	978.3	24.85	957.4	24.32	1587.8	40.33

Part Number						5J,JAM37.03 I				5J,JAM37.04 I				5J,JAM37.06 I			
Throw Ratio						LS1LT2 (Long Zoom 1 Lens)				LS1LT3 (Long Zoom 2 Lens)				LS1ST2 (Ultra Wide Lens)			
Throw Ratio						3.58~5.38				5.31~8.26				0.75~0.93			
Diagonal		Width		Height (B)		Wide		Tele		Wide		Tele		Wide		Tele	
(inch)	(m)	(inch)	(m)	(inch)	(m)	(inch)	(m)	(inch)	(m)	(inch)	(m)	(inch)	(m)	(inch)	(m)	(inch)	(m)
40	1.02	34	0.86	21	0.54	118.7	3.01	181.0	4.60	173.9	4.42	277.7	7.05	24.5	0.62	31.1	0.79
50	1.27	42	1.08	26	0.67	149.7	3.80	227.6	5.78	220.2	5.59	350.0	8.89	31.1	0.79	39.2	1.00
60	1.52	51	1.29	32	0.81	180.7	4.59	274.1	6.96	266.6	6.77	422.3	10.73	37.6	0.96	47.4	1.20
80	2.03	68	1.72	42	1.08	242.7	6.16	367.3	9.33	359.4	9.13	567.0	14.40	50.8	1.29	63.8	1.62
100	2.54	85	2.15	53	1.35	304.3	7.73	460.4	11.70	452.1	11.48	711.6	18.07	63.9	1.62	80.2	2.04
120	3.05	102	2.58	64	1.62	366.7	9.31	553.6	14.06	544.9	13.84	856.2	21.75	77.1	1.96	96.6	2.45
150	3.81	127	3.23	79	2.02	459.4	11.67	693.3	17.61	684.0	17.37	1073.1	27.26	96.8	2.46	121.1	3.08
180	4.57	153	3.88	95	2.42	552.4	14.03	833.0	21.16	823.1	20.91	1290.1	32.77	116.5	2.96	145.7	3.70
200	5.08	170	4.31	106	2.69	614.7	15.6	926.4	23.53	915.9	23.26	1434.7	36.44	129.7	3.29	162.1	4.12
300	7.62	254	6.46	159	4.04	924.0	23.47	1392.1	35.36	1379.6	35.04	2157.8	54.81	195.4	4.96	244.0	6.20
400	10.16	339	8.62	212	5.38	1233.9	31.34	1857.9	47.19	1843.3	46.82	2880.9	73.18	261.2	6.63	325.9	8.28
500	12.70	424	10.77	265	6.73	1543.7	39.21	2323.6	59.02	2307.1	58.60	3604.0	91.54	326.9	8.30	407.7	10.36

Note:

- Ceiling installation must be done by a qualified professional. Contact your dealer for more information. It is not recommended you install the projector yourself.
- Only use the projector on a solid, level surface. Serious injury and damage can occur if the projector is dropped.
- Do not use the projector in an environment where extreme temperature occurs. The projector must be used at temperatures between 41 degrees Fahrenheit (5 degrees Celsius) and 104 degrees Fahrenheit (40 degrees Celsius).
- Screen damage will occur if the projector is exposed to moisture, dust or smoke.
- Do not cover the vents on the projector. Proper ventilation is required to dissipate heat. Damage to the projector will occur if the vents are covered.

Lens shift range

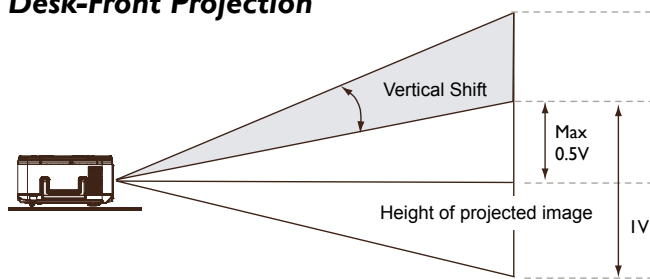
Lens shift adjustable range

The adjustable range for lens shift is tabulated below and subject to the conditions listed.

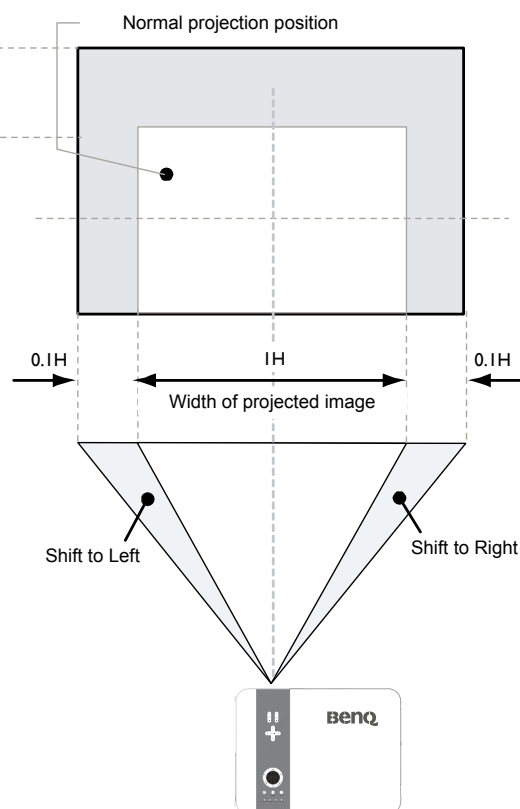
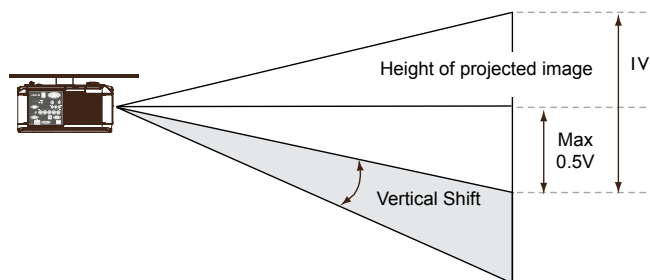
Note:

The drawings below apply to the standard lens only.

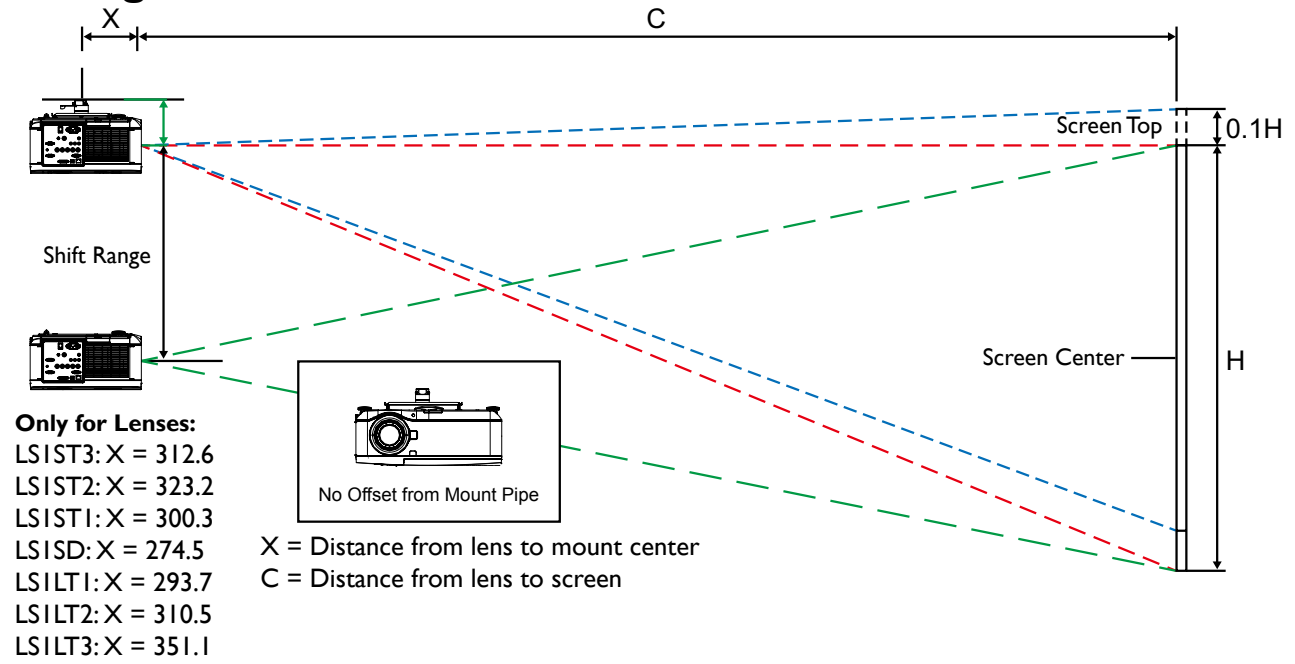
Desk-Front Projection



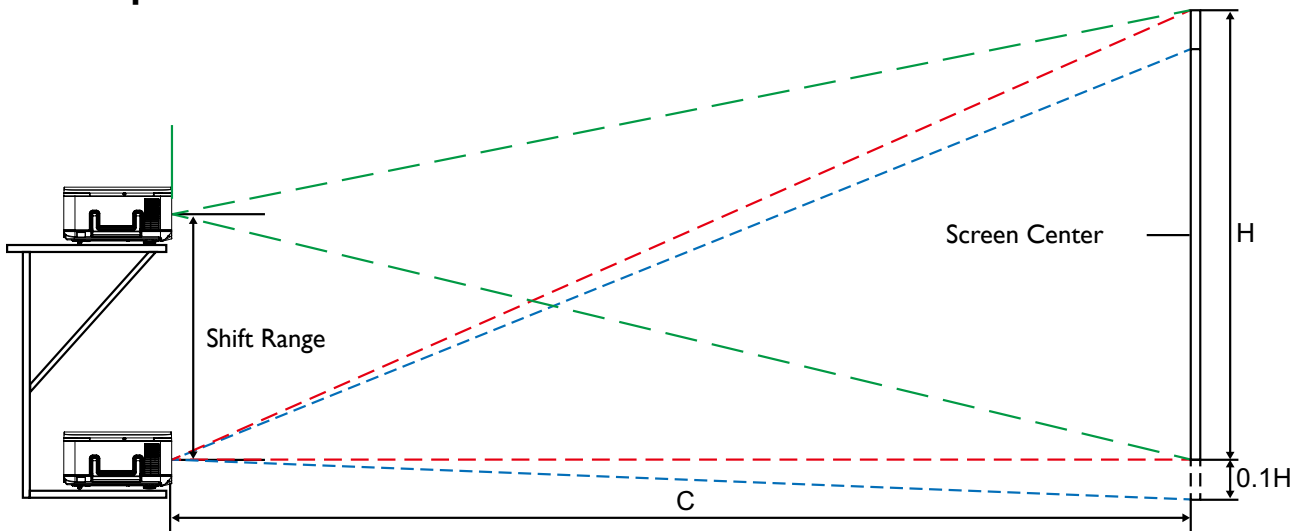
Ceiling Mount-Front Projection



Ceiling mount installation

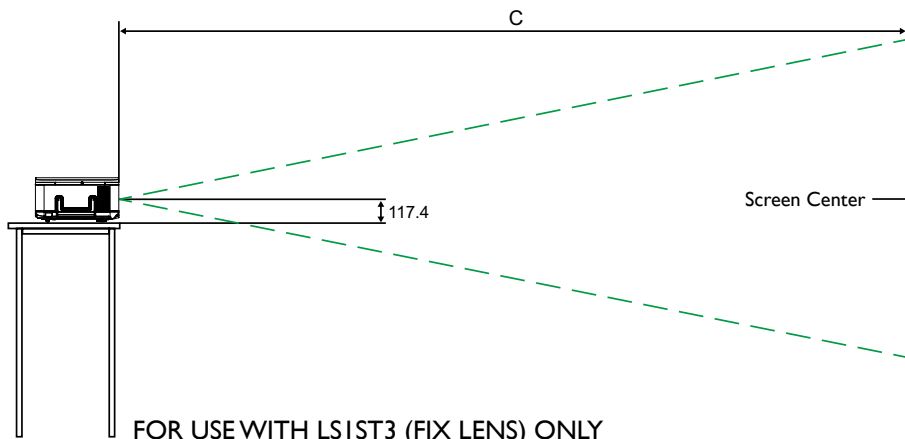


Desktop Installation



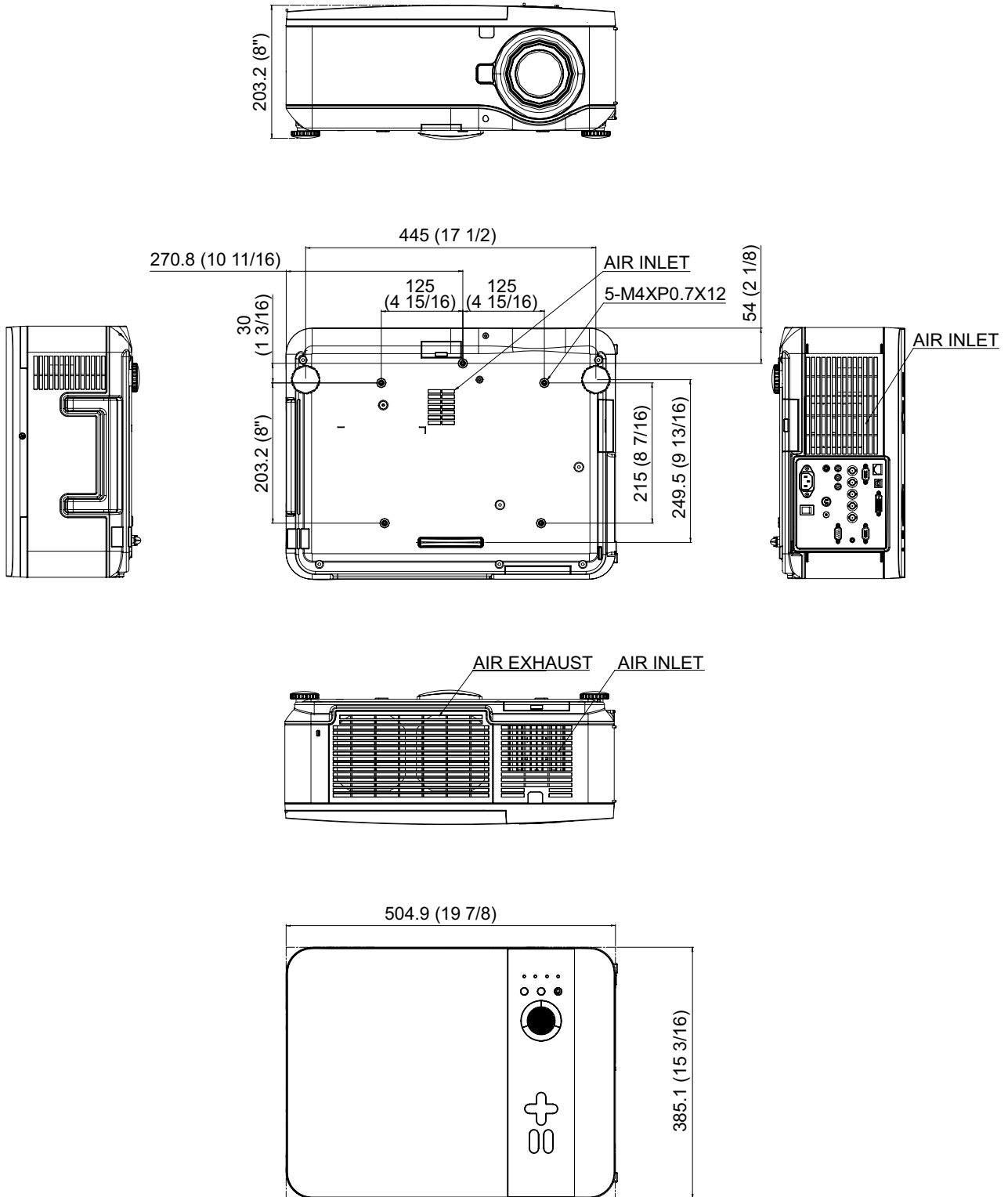
Note:

Lens Shift feature is not available to LSIST3 (Fix Lens). This lens should be used for "zero degree"/"no-offset" applications. See below:



FOR USE WITH LSIST3 (FIX LENS) ONLY

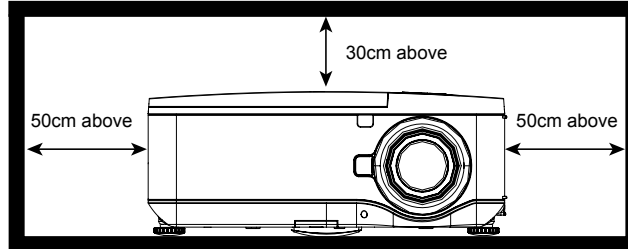
Projector dimension



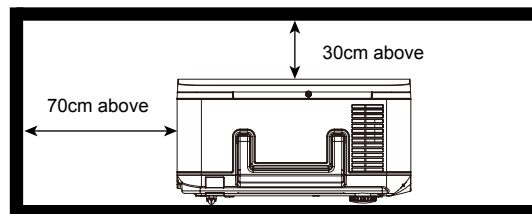
Clearance around the exhaust vent

For proper ventilation of the projector, make sure to leave some space around the projector as shown in the illustration below:

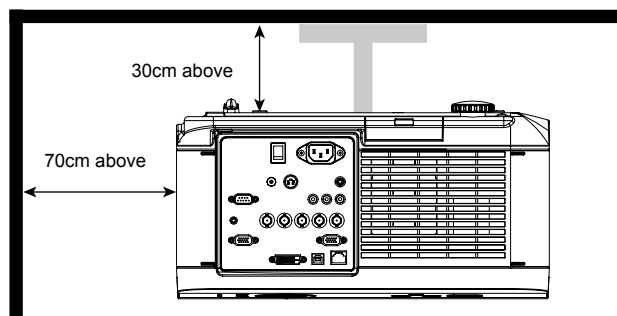
Right / Left / Top side



Back / Top side



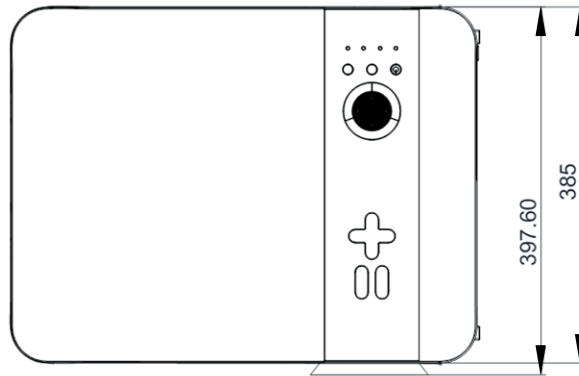
Ceiling mount / Back side



Lens dimension

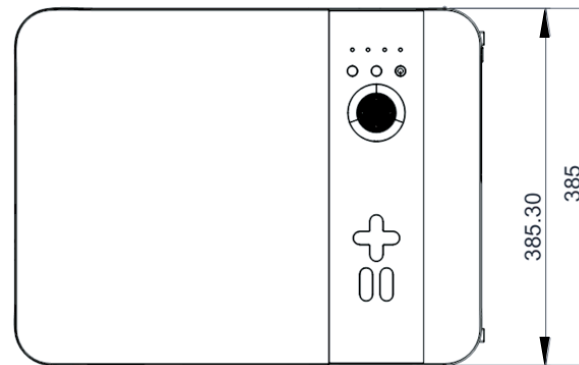
Optional Lens (Wide Fix: LSIST3)

New Wide Fix Lens



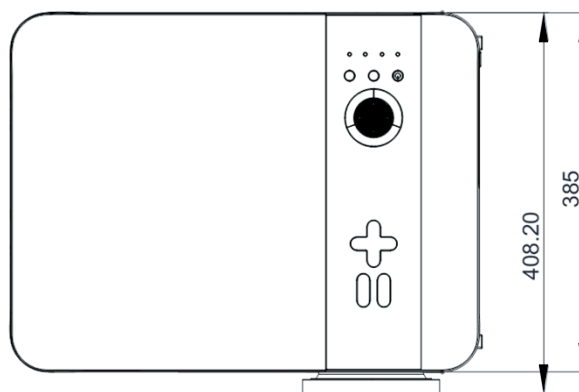
Optional Lens (Wide Zoom: LSIST1)

Wide Zoom Lens



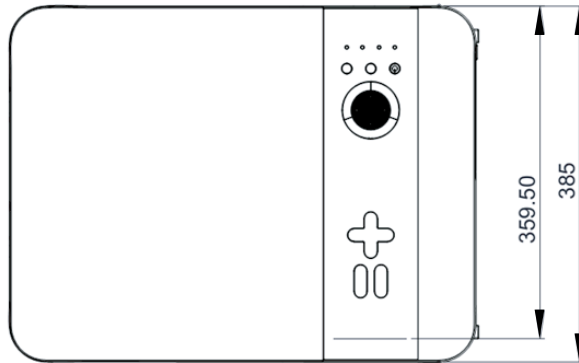
Optional Lens (Ultra Wide: LSIST2)

Ultra Wide Lens



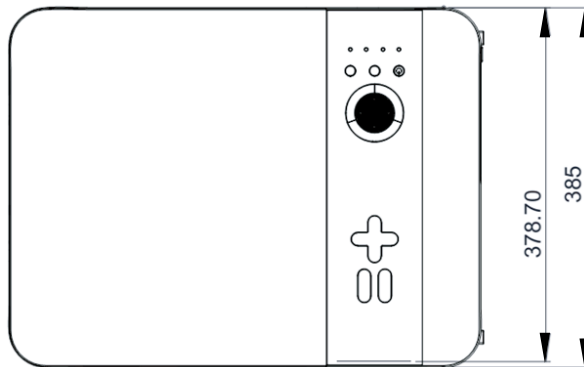
Optional Lens (Standard: LSISD)

Standard Lens



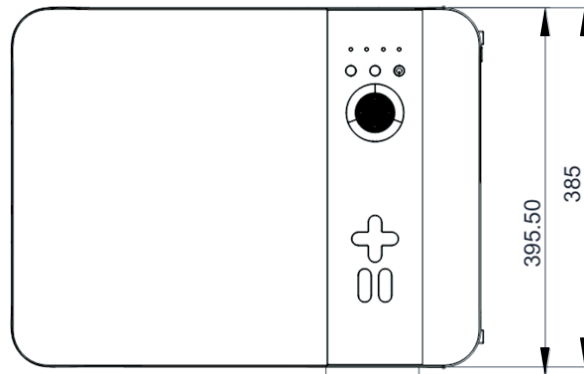
Optional Lens (Semi Long Throw: LSILT1)

Semi Long Throw Lens



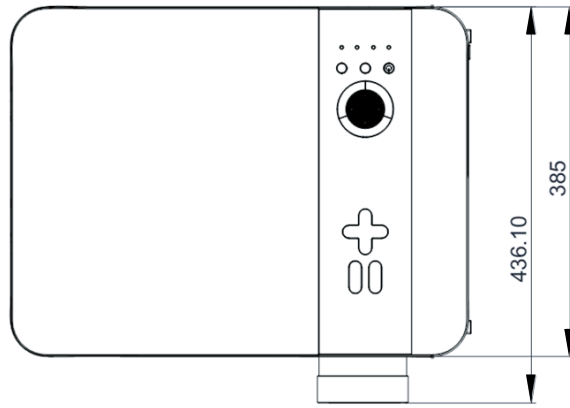
Optional Lens (Long Throw I: LSILT2)

Long I Lens

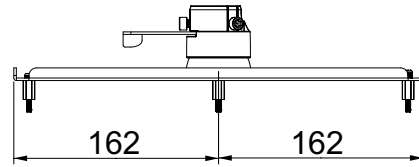
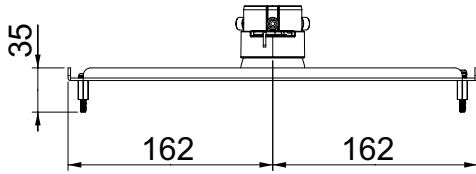
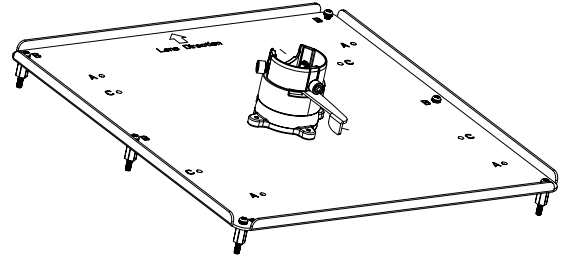
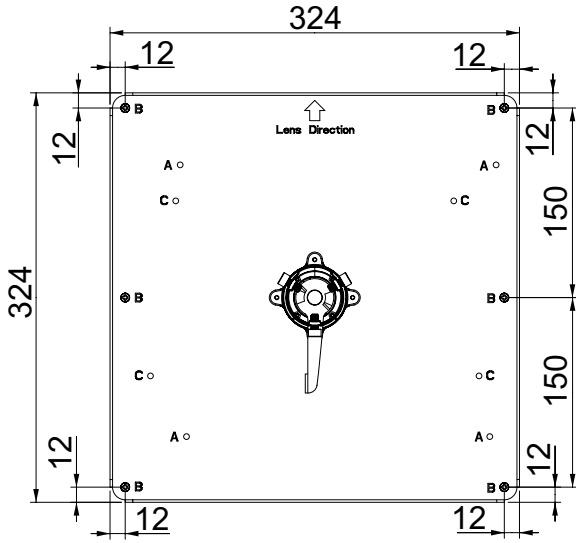


Optional Lens (Long Throw 2: LSILT3)

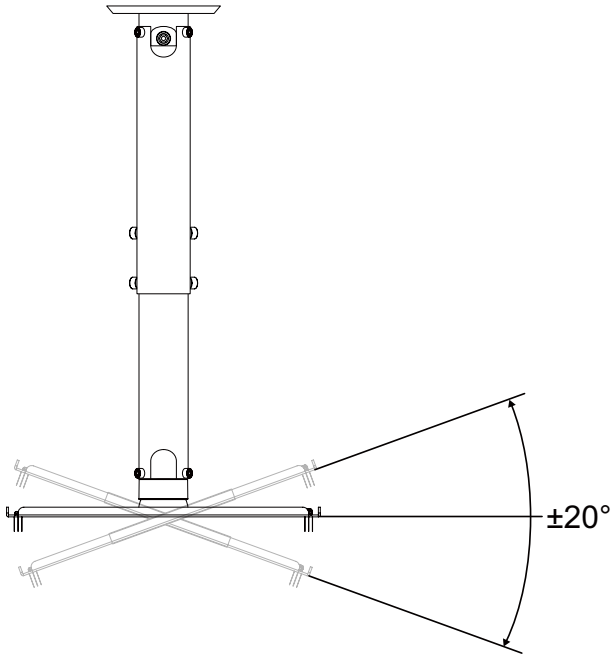
Long 2 Lens



Ceiling mount dimension

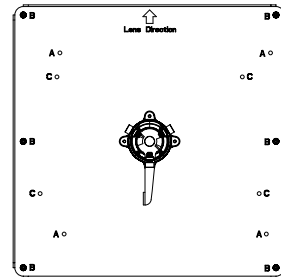


Ceiling Mount (Part Number: 5J.JCY10.001)

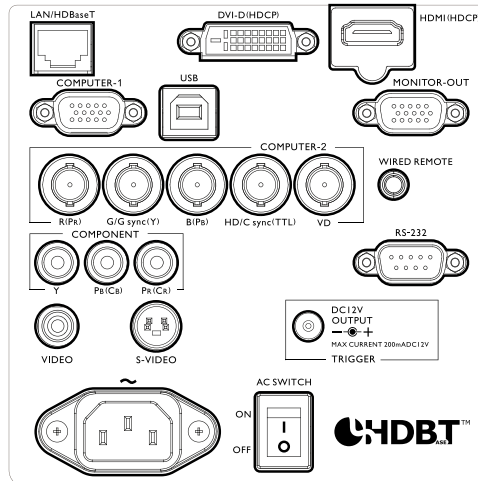


Note:

- Mark A: PW9500/PX9600
- Mark B: PU9730/PX9710/PW9620
- Mark C: PX9210/PU9220



IO panel



- **LAN/HDBaseT**
For connection to RJ45 Cat5/Cat6 Ethernet cable to input uncompressed high-definition video (HD), control signals.
- **DVI-D (HDCP)**
Connection to DVI source.
- **HDMI (HDCP)**
Connection to HDMI source.
- **Computer-1**
15-pin VGA port for connection to RGB, component HD source, or PC.
- **USB**
Maintenance exclusive port for authorized maintenance personnel only.
- **Monitor Out**
Connection to other display equipment for concurrent playback display.
- **Computer-2 (R/Pr, G/Y, B/Pb, HD, VD)**
Connection to RGB or YPbPr/YCbCr output signal with BNC type input terminal.
- **Component (Y/Pb (Cb)/Pr(Cr))**
Connection to a video source.
- **RS-232**
Standard 9-pin D-sub interface for connection to PC control system and projector maintenance.
- **Video**
Connection to a video source.
- **S-Video**
Connection to a video source.
- **TRIGGER**
3.5mm mini earphone jack, employs 350mA display relay to provide 12(+/-1.5)V output and short circuit protection.
- **Wired Remote**
Connection to input Niles or Xantech compatible IR repeater system.

Caution:

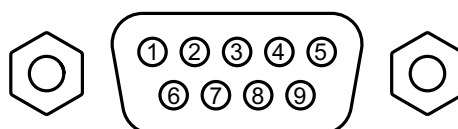
Make sure the port is valid before inserting a wired remote controller. The remote controller may be damaged in case of an invalid port, e.g. a wired remote controller is connected to trigger output.

RS232 command

RS232 pin assignment

Pin	Description
1	NC
2	TXD
3	RXD
4	NC
5	GND

Pin	Description
6	NC
7	CTS
8	RTS
9	NC



Function	Type	Description	ASCII
Power	Write	Power On	<CR>*pow=on#<CR>
	Write	Power off	<CR>*pow=off#<CR>
	Read	Power Status	<CR>*pow=?#<CR>
Source Selection	Write	COMPUTER/YPbPr	<CR>*sour=RGB#<CR>
	Write	COMPUTER 2/YPbPr2	<CR>*sour=RGB2#<CR>
	Write	Component	<CR>*sour=YPbr#<CR>
	Write	DVI-D	<CR>*sour=dvid#<CR>
	Write	HDMI	<CR>*sour=hdmi#<CR>
	Write	Composite	<CR>*sour=vid#<CR>
	Write	S-Video	<CR>*sour=svid#<CR>
	Write	HDBaseT	<CR>*sour=hdbaset#<CR>
	Read	Current source	<CR>*sour=?#<CR>
Picture Setting	Write	Bright	<CR>*appmod=bright#<CR>
	Write	Presentation	<CR>*appmod=preset#<CR>
	Write	Cinema	<CR>*appmod=cine#<CR>
	Read	Picture Mode	<CR>*appmod=?#<CR>
	Write	Contrast +	<CR>*con=+#<CR>
	Write	Contrast -	<CR>*con=-#<CR>
	Read	Contrast value	<CR>*con=?#<CR>
	Write	Brightness +	<CR>*bri=+#<CR>
	Write	Brightness -	<CR>*bri=-#<CR>
	Read	Brightness value	<CR>*bri=?#<CR>
	Write	Color +	<CR>*color=+#<CR>
	Write	Color -	<CR>*color=-#<CR>
	Read	Color value	<CR>*color=?#<CR>
	Write	Sharpness +	<CR>*sharp=+#<CR>
Write	Sharpness -	<CR>*sharp=-#<CR>	

Function	Type	Description	ASCII
Picture Setting	Read	Sharpness value	<CR>*sharp=?#<CR>
	Write	Color Temperature-Warm	<CR>*ct=warm#<CR>
	Write	Color Temperature-Normal	<CR>*ct=normal#<CR>
	Write	Color Temperature-Cool	<CR>*ct=cool#<CR>
	Write	Color Temperature-lamp native	<CR>*ct=native#<CR>
	Read	Color Temperature Status	<CR>*ct=?#<CR>
	Write	Aspect 4:3	<CR>*asp=4:3#<CR>
	Write	Aspect 16:9	<CR>*asp=16:9#<CR>
	Write	Aspect 16:10	<CR>*asp=16:10#<CR>
	Write	Aspect Auto	<CR>*asp=AUTO#<CR>
	Write	Aspect Real	<CR>*asp=REAL#<CR>
	Write	Aspect 5:4	<CR>*asp=5:4#<CR>
	Write	Aspect 1.88	<CR>*asp=1.88:1#<CR>
	Write	Aspect 2.35	<CR>*asp=2.35:1#<CR>
	Read	Aspect Status	<CR>*asp=?#<CR>
	Operation Settings	Write	Projector Position-Front Table
Write		Projector Position-Rear Table	<CR>*pp=RE#<CR>
Write		Projector Position-Rear Ceiling	<CR>*pp=RC#<CR>
Write		Projector Position-Front Ceiling	<CR>*pp=FC#<CR>
Read		Projector Position Status	<CR>*pp=?#<CR>
Write		Quick auto search on	<CR>*QAS=on#<CR>
Write		Quick auto search off	<CR>*QAS=off#<CR>
Read		Quick auto search status	<CR>*QAS=?#<CR>
Write		Direct Power On-on	<CR>*directpower=on#<CR>
Write		Direct Power On-off	<CR>*directpower=off#<CR>
Read		Direct Power On-Status	<CR>*directpower=?#<CR>
Write		Standby Settings-Standard	<CR>*standbynet=standard#<CR>
Write		Standby Settings-Eco	<CR>*standbynet=eco#<CR>
Write		Standby Settings-Network	<CR>*standbynet=network#<CR>
Read		Standby Settings-Network Status	<CR>*standbynet=?#<CR>
Write		9600	<CR>*baud=9600#<CR>
Write	14400	<CR>*baud=14400#<CR>	

Function	Type	Description	ASCII
Operation Settings	Write	19200	<CR>*baud=19200#<CR>
	Write	38400	<CR>*baud=38400#<CR>
	Write	57600	<CR>*baud=57600#<CR>
	Write	115200	<CR>*baud=115200#<CR>
	Read	Current Baud Rate	<CR>*baud=?#<CR>
Lamp Control	Read	Lamp Hour	<CR>*ltim=?#<CR>
	Read	Lamp2 Hour	<CR>*ltim2=?#<CR>
	Write	Lamp hour reset	<CR>*ltim=reset#<CR>
	Write	Lamp2 hour reset	<CR>*ltim2=reset#<CR>
	Write	Normal mode	<CR>*lampm=lnor#<CR>
	Write	Eco mode	<CR>*lampm=eco#<CR>
	Write	Dual lamp	<CR>*lammd=dual#<CR>
	Write	Number 1 lamp	<CR>*lammd=num1#<CR>
	Write	Number 2 lamp	<CR>*lammd=num2#<CR>
	Write	Single lamp (minimum)	<CR>*lammd=single#<CR>
	Read	Current Lamp status	<CR>*lammd=?#<CR>
	Read	Lamp Mode Status	<CR>*lampm=?#<CR>
	Miscellaneous	Read	Model Name
Write		Blank On	<CR>*blank=on#<CR>
Write		Blank Off	<CR>*blank=off#<CR>
Read		Blank Status	<CR>*blank=?#<CR>
Write		Freeze On	<CR>*freeze=on#<CR>
Write		Freeze Off	<CR>*freeze=off#<CR>
Read		Freeze Status	<CR>*freeze=?#<CR>
Write		Menu On	<CR>*menu=on#<CR>
Write		Menu Off	<CR>*menu=off#<CR>
Read		Menu Status	<CR>*menu=?#<CR>
Write		Up	<CR>*up#<CR>
Write		Down	<CR>*down#<CR>
Write		Right	<CR>*right#<CR>
Write		Left	<CR>*left#<CR>
Write		Enter	<CR>*enter#<CR>
Write		3D Sync Off	<CR>*3d=off#<CR>
Write		3D Auto	<CR>*3d=auto#<CR>
Write		3D Sync Top Bottom	<CR>*3d=tb#<CR>
Write		3D Sync Frame Sequential	<CR>*3d=fs#<CR>
Write		3D Side by side	<CR>*3d=sbs#<CR>
Write		3D inverter disable	<CR>*3d=da#<CR>
Write		3D inverter	<CR>*3d=iv#<CR>

Function	Type	Description	ASCII
Miscellaneous	Read	3D Sync Status	<CR>*3d=?#<CR>
	Write	Trigger on	<CR>*trigger=on#<CR>
	Write	Trigger off	<CR>*trigger=off#<CR>
	Read	Trigger status	<CR>*trigger=?#<CR>
	Write	High Altitude mode on	<CR>*Highaltitude=on#<CR>
	Write	High Altitude mode off	<CR>*Highaltitude=off#<CR>
	Read	High Altitude mode status	<CR>*Highaltitude=?#<CR>
	Read	Error Code	<CR>*error=report#<CR>
	Write	Lens Shift Up	<CR>*lst=up#<CR>
	Write	Lens Shift Down	<CR>*lst=down#<CR>
	Write	Lens Shift Left	<CR>*lst=left#<CR>
	Write	Lens Shift Right	<CR>*lst=right#<CR>
	Write	Focus Plus	<CR>*focus=+#<CR>
	Write	Focus Minus	<CR>*focus=-#<CR>
	Write	Zoom Plus	<CR>*zoom=+#<CR>
	Write	Zoom Minus	<CR>*zoom=-#<CR>
	Write	Keystone-Vertical Decrease	<CR>*keyst=-#<CR>
	Write	Keystone-Vertical Increase	<CR>*keyst=+#<CR>
Read	Keystone-Vertical Status	<CR>*keyst=?#<CR>	