EIKI Lens Specifications: BRILLIANT Series Projectors

February 10, 2006.

Most Models	Screen Dimensions.												
Resolution: XGA (1024x768) or SVGA (800x600)							3.0	5	6	7.5	9	12	15
Aspect Ratio: (3 High by 4 Wide by 5 Diagonal)						2.67	4	6.67	8	10	12	16	20
Nominal Panel Size 0.79" Diagonal (0.8")						40	60	100	120	150	180	240	300
Aperture: 0.	.632	in. wide				-				-	-		
Standard Lens T/W Shift/Limits Lens Description							(Dista	nce to	Scree	n) in fe	eet.		
LC-XB30/28/26/22, LC-	SB21	1.25	9:1	0.787"~1.181" Manual, Zoom	0.787	3.3	5.0	8.3	10.0	12.5	14.9	19.9	24.9
LC-XB25/20/15, LC-SB20		1.92	(fixed)	(20~30mm) f:1.7~2.5	1.215	5.1	7.7	12.8	15.4	19.2	23.1	30.8	-

LC-XB23 & LC-SE	Screen Dimensions.												
Resolution: XGA (1024x768) or SVGA (800x600)							3.0	5	6	7.5	9	12	15
Aspect Ratio: (3 High by 4 Wide by 5 Diagonal)						2.67	4	6.67	8	10	12	16	20
Nominal Panel Size 0.6" Diagonal						40	60	100	120	150	180	240	300
Aperture:	0.495	in. wide											
Standard Lens T/W Shift/Limits Lens Description							(Dista	nce to	Scree	n) in fe	et.		
LC-XB23, LC-SB22		1.79	10:1	0.886"~1.063" Manual, Zoom	0.886	4.8	7.2	11.9	14.3	17.9	21.5	28.6	35.8
		2.15	(fixed)	(22.5~27 mm) f:1.65~1.81	1.066	5.7	8.6	14.4	17.2	21.5	25.8	34.5	43.1

LC-XB27N	Screen Dimensions.												
Resolution: XGA (102	H'	2.0	3.0	5	6	7.5	9	12	15				
Aspect Ratio: (3 High by 4 Wide by 5 Diagonal)							4	6.67	8	10	12	16	20
Nominal Panel Size 0.7" Diagonal							60	100	120	150	180	240	300
Aperture:	0.56	in. wide											
Standard Lens Description T/W Shift/Limits Lens Description							(Dista	ance to	Scree	n) in fe	eet.		
LC-XB27N		1.24	6:1	0.697"~1.114" Manual, Zoom	0.696	3.3	5.0	8.3	9.9	12.4	14.9	19.9	24.9
		1.93	(fixed)	(17.7~28.3 mm) f:1.6~2.5	1.083	5.2	7.7	12.9	15.5	19.3	23.2	30.9	38.7

Notes

Image Height for 16:9: width stays the same as 4:3 (ignore Diagonal	H'	1.50	2.25	3.75	4.50	5.63	6.75	9.00	11.25

How to use the T/W column. If your screen size does not appear on this chart, use the T/W column to find the lens you need. Divide the Throw distance by the screen Width to get your "target T/W number". Then, look for a lens with a T/W range that covers it.

Understanding Shift/Limits. The numbers in the Shift/Limits column express the projector positions possible as a ratio of the image heights Above:Below a line drawn perpendicular to the screen between the lens and the screen. 1:1 = center of the image. 10:0 = top of the image.

These charts are a simulation. Effective Focal Length (EFL) most accurately represents lens behavior, and drives the calculations..

Calculations are from the front glass of the lens and accurate to approximately +/- 3.%. Specifications are subject to change without notice.

