

HS Series 2K HD lens throw ratios

The following table details the information required to calculate the lens throw ratios for the Christie D13HD2-HS, D16HD-HS, and D20HD-HS projectors.

Lens	Throw distance formula		Vertical and horizontal offset (%)	Diagonal screen sizes	
	Imperial (in)	Metric (cm)		Imperial (in)	Metric (cm)
0.38:1 fixed (140-142108-XX)	TD = 0.38 x W - 0.65	TD = 0.38 x W - 1.65	+120%/-65% V	200 to 600	508 to 1524
			+7%/-15% H		
0.65-0.75 zoom (140-144100-XX)	TDmin = 0.66 x W + 3.39	TDmin = 0.66 x W + 9	+120% /- 120% V	50 to 500	127 to 1270
	TDmax = 0.77 x W + 3.39	TDmax = 0.77 x W + 9	+/- 50% H		
0.84-1.02:1 zoom (140-114107-XX)	TDmin = 0.84 x W + 3.74	TDmin = 0.84 x W + 10	+120% /- 21.9% V	50 to 500	127 to 1270
	TDmax = 1.02 x W + 3.74	TDmax = 1.02 x W + 10	+/- 50% H		
1.02-1.36:1 zoom (140-115108-XX)	TDmin = 1.02 x W + 2.36	TDmin = 1.02 x W + 6	+120% /- 21.9% V	50 to 500	127 to 1270
	TDmax = 1.36 x W + 2.36	TDmax = 1.36 x W + 6	+/- 50% H		
1.2-1.50:1 zoom (140-109101-XX)	TDmin = 1.24 x W -5.08	TDmin = 1.24 x W - 13	+120% /- 120% V	50 to 500	127 to 1270
	TDmax = 1.55 x W -4.61	TDmax = 1.55 x W - 12	+/- 50% H		
1.5-2.0:1 zoom (140-110103-XX)	TDmin = 1.52 x W - 2.45	TDmin = 1.52 x W - 6	+120% /- 120% V	50 to 500	127 to 1270
	TDmax = 2.02 x W - 2.43	TDmax = 2.02 x W - 6	+/- 50% H		

Lens	Throw distance formula		Vertical and horizontal offset (%)	Diagonal screen sizes	
	Imperial (in)	Metric (cm)		Imperial (in)	Metric (cm)
2.0-4.0:1 zoom (140-111104-XX)	TDmin = 1.95 x W + 6.99	TDmin = 1.95 x W + 18	+120% /- 120% V	50 to 500	127 to 1270
	TDmax = 3.94 x W + 3.87	TDmax = 3.94 x W + 10	+/- 50% H		
4.0-7.2:1 zoom (140-116109-XX)	TDmin = 3.95 x W + 6.35	TDmin = 3.95 x W + 16	+120% /- 120% V	50 to 500	127 to 1270
	TDmax = 7.14 x W + 4.41	TDmax = 7.14 x W + 11	+/- 50% H		
7.2-10.8:1 zoom (140-145101-XX)	TDmin = 7.18 x W + 10.12	TDmin = 7.18 x W + 26	+120% /- 120% V	50 to 500	127 to 1270
	TDmax = 10.80 x W + 10.15	TDmax = 10.80 x W + 26	+/- 50% H		

- Throw distance measured from the center of the front foot of the projector.
- All lenses are made of glass.
- Calculated throw distance (TD) values are subject to a +/- 5% tolerance for individual lens variation.
- Calculated offset values are subject to a +/- 7% centering tolerance.