

Christie LHD878-DS lens throw ratios

The following table details the information required to calculate the lens throw ratios for the Christie LHD878-DS projectors.

Lens	Throw distance formula		Vertical and horizontal Offset (%)	Diagonal screen sizes	
	Imperial (in)	Metric (cm)		Imperial (in)	Metric (cm)
0.38:1 fixed (121-128102-XX)	TD(a1)= 0.29548 x Diagonal(inches) -24.71634	TD(a1)= 0.751 x Diagonal(inches) - 62.779	-4.2% / +5.0% V	100 to 350	254 to 889
			-5.5 % / +5.4% H		
0.8:1 fixed (121-111104-XX)	TDmin = 0.7973 x W + 3.0716	TDmin = 0.7973 x W + 7.8020	-11.9% / +12.2% V	30 to 600	76.2 to 1524
			-6.6% / +5.9% H		
0.74-0.98 :1 zoom (121-136101-XX)	TDmin = 0.7499 x W + 4.0470 TDmax = 0.9792 x W + 4.0131	TDmin = 0.7499 x W + 10.2793 TDmax = 0.9792 x W + 10.1933	-22.1% / +64.9% V	60 to 600	152.4 to 1524
			-10.4 % / +10.6% H		
1.2-1.8 :1 zoom (121-129103-XX)	TDmin = 1.1683 x W + 2.4163 TDmax = 1.7647 x W + 2.3656	TDmin = 1.1683 x W + 6.1375 TDmax = 1.7647 x W + 6.0087	-23.5% / +64.4% V	30 to 600	76.2 to 1524
			-10.9 % / +10.2% H		
1.7-3.0 :1 zoom	TDmin = 1.7053 x W + 2.8752	TDmin = 1.7053 x W + 7.3031	-23.5% / +70.2% V	30 to 600	76.2 to 1524

Lens	Throw distance formula		Vertical and horizontal Offset (%)	Diagonal screen sizes	
	Imperial (in)	Metric (cm)		Imperial (in)	Metric (cm)
(121-139105-XX)	TDmax = 2.9030 x W + 2.6826	TDmax = 2.9030 x W + 6.8139	-10.9 % / +10.3% H		
2.8-4.9 :1 zoom (121-114107-XX)	TDmin = 2.8192 x W + 1.6775	TDmin = 2.8192 x W + 4.2609	-23.0% / +65.1% V	30 to 600	76.2 to 1524
	TDmax = 4.8259 x W - 1.1161	TDmax = 4.8259 x W - 2.8350	-10.9% / +10.4% H		
4.9-8.3:1 zoom (121-115108-XX)	TDmin = 4.6747 x W + 11.9931	TDmin = 4.6746 x W + 30.4626	-22.9% / +64.6% V	30 to 600	76.2 to 1524
	TDmax = 8.0483 x W + 10.1465	TDmax = 8.0483 x W + 25.7721	-10.9 % / +10.5% 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.