

HS Series 4K lens throw ratios

The following table details the information required to calculate the lens throw ratios for the Christie HS Series 4K (4K22-HS, 4K22A-HS, 4K13-HS, and 4K13A-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) | TDmin = 0.38 x W + 0.65 | TDmin = 0.38 x W + 1.65 | Table mount: + 120%/- 60% V + 25%/- 8% H | 200 to 600 | 508 to 1,524 |
| | | | Ceiling mount: + 120%/- 60% V + 8%/- 25% H | | |
| 0.65-0.75:1 zoom (140-144100-XX) | TDmin = 0.66 x W + 3.39 | TDmin = 0.66 x W + 9 | +75%/- 75% V | 50 to 500 | 127 to 1,270 |
| | TDmax = 0.77 x W + 3.39 | TDmax = 0.77 x W + 9 | +31%/- 31% H | | |
| 1.02-1.36:1 zoom (140-115108-XX) | TDmin = 1.03 x W - 0.36 | TDmin = 1.03 x W - 1 | + 40%/- 40% V | 50 to 500 | 127 to 1,270 |
| | TDmax = 1.37 x W - 0.24 | TDmax = 1.37 x W - 1 | + 14%/- 14% H | | |
| 1.2-1.50:1 zoom (140-109101-XX) | TDmin = 1.24 x W - 0.68 | TDmin = 1.24 x W - 2 | + 140%/- 140% V | 50 to 500 | 127 to 1,270 |
| | TDmax = 1.55 x W - 0.21 | TDmax = 1.55 x W - 1 | + 50%/- 50% H | | |
| 1.5-2.0:1 zoom (140-110103-XX) | TDmin = 1.52 x W + 1.35 | TDmin = 1.52 x W + 3 | + 140%/- 140% V | 50 to 500 | 127 to 1,270 |
| | TDmax = 2.02 x W + 1.37 | TDmax = 2.02 x W + 3 | + 50%/- 50% H | | |
| 2.0-4.0:1 zoom | TDmin = 1.95 x W + 12.19 | TDmin = 1.95 x W + 31 | + 140%/- 140% V | 50 to 500 | 127 to 1,270 |

| Lens | Throw distance formula | | Vertical and horizontal offset (%) | Diagonal screen sizes | |
|------------------------------------|---------------------------|------------------------|------------------------------------|-----------------------|--------------|
| | Imperial (in) | Metric (cm) | | Imperial (in) | Metric (cm) |
| (140-111104-XX) | TDmax = 3.94 x W + 9.07 | TDmax = 3.94 x W + 23 | + 50%/- 50% H | | |
| 4.0-7.2:1 zoom (140-116109-XX) | TDmin = 3.95 x W + 12.45 | TDmin = 3.95 x W + 32 | + 140%/- 140% V | 50 to 500 | 127 to 1,270 |
| | TDmax = 7.14 x W + 10.51 | TDmax = 7.14 x W + 27 | + 50%/- 50% H | | |
| 7.2-10.8:1 zoom (140-115101-XX) | TDmin = 7.18 x W + 10.12 | TDmin = 7.18 x W + 26 | + 140%/- 140% V | 80 to 500 | 203 to 1,270 |
| | TDmax = 10.80 x W + 10.15 | TDmax = 10.80 x W + 26 | + 50%/- 50% H | | |

- The 0.38:1 lens throw distance measured from the center of the side feet of the projector closest to the screen.
- For all other lenses, 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.