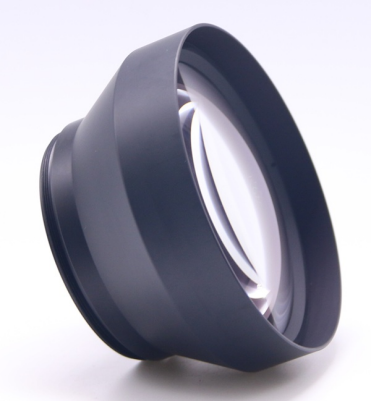
LB SERIES

长焦转换镜

适用于市场上大部分采用下列面板的投影机。按光机平台、面板架构、镜头光路与安装接口匹配具体配置。标称转换倍率为 1.4X。



标称转换倍率	同距离画面宽度	画面宽度变化
1.4X	**71.4%**	**-28.6%**

光机平台与面板适配

3LCD	0.59 / 0.63 / 0.64 / 0.76 英寸
1DLP	0.65 / 0.66 / 0.67 / 0.8 英寸

面板尺寸用于初步选型，不能单独作为兼容保证。具体适配以实际光机与镜头接口为依据，投影机亮度、分辨率及功能名称不作为本页镜头型号划分依据。

应用与配置

应用效果	同距离获得更小画面；同宽度使用更长投影距离。
安装方式	按适配配置确认安装结构、支架与镜头间距。
参考配置组合投射比	1.89–3.08:1（仅对应资料所述配置）

组合投射比随原镜头、光机平台与变焦位置变化，参考范围不适用于所有投影机。外形尺寸、重量及支架按具体适配配置提供。

LB SERIES

转换倍率计算示例

以下爱普生机型用于举例说明同一光机平台，属于计算应用示例，不是完整适配清单，也不是该系列的适用范围定义。

CB-L895E	CB-L895U	CB-L890U	CB-L790U
CB-L690U	CB-L690E	CB-L570U	CB-L775U

本算例的统一假设

原投射比	1.50:1
投影距离 D	3.00 m
原画面宽度 W	2.00 m
转换倍率 k	1.4X

1.50:1 是为演示计算统一设定的工作投射比，不代表上述各机型的固定原厂参数。实际计算请使用原镜头在所选变焦位置的真实投射比。

计算公式与结果

原投射比	TR = D / W = 3.00 / 2.00 = 1.50
加装后的组合投射比	TR' = TR x k = 1.50 x 1.4 = 2.10:1
保持距离 3.00 m	W' = D / TR' = 3.00 / 2.10 = 1.429 m
保持画面宽度 2.00 m	D' = W x TR' = 2.00 x 2.10 = 4.20 m
画面宽度变化	W' / W = 1 / 1.4 = 71.4%

使用参考配置范围计算

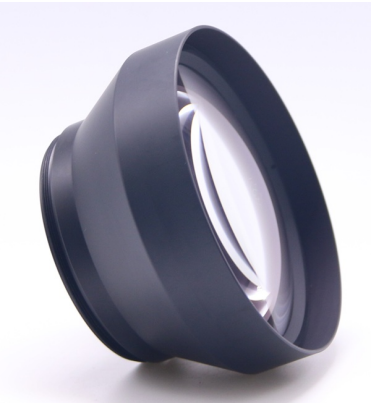
目标画面宽度为 2.00 m 时，按资料所述配置的组合投射比 1.89–3.08:1 计算，理论距离为 3.78–6.16 m。此范围只适用于对应配置。

上述公式中的画面尺寸均为宽度，不是对角线。请统一单位与投影距离测量基准。标称计算不能替代实际设置下的画面覆盖、暗角、畸变、对焦及亮度均匀性检查。

LB SERIES

Telephoto Conversion Lens

Designed for most projector configurations using the 3LCD and 1DLP panel sizes listed below. Select the matching configuration by optical engine, panel architecture, optical path and mounting interface. The nominal conversion factor is 1.4X.



Nominal conversion factor	Width at same distance	Width change
1.4X	**71.4%**	**-28.6%**

Optical engine and panel compatibility

3LCD	0.59 / 0.63 / 0.64 / 0.76 inches
1DLP	0.65 / 0.66 / 0.67 / 0.8 inches

Panel size is a selection filter, not a standalone compatibility guarantee. Match the actual optical engine and lens interface; projector brightness, display resolution and feature names do not identify the required lens configuration.

Application and configuration

Application	Smaller image at a fixed distance; longer distance for the same width.
Installation	Confirm mounting structure, support and lens spacing for the selected configuration.
Reference combined throw ratio	1.89-3.08:1 (described configuration only)

Combined throw ratio varies with the original lens, optical engine and zoom position. The reference range is not universal to every projector. Dimensions, weight and support hardware are supplied for the selected configuration.

LB SERIES

Conversion calculation examples

The following Epson model names illustrate one shared optical-engine platform. They are calculation examples, not an exhaustive compatibility list or the definition of the series.

CB-L895E	CB-L895U	CB-L890U	CB-L790U
CB-L690U	CB-L690E	CB-L570U	CB-L775U

Assumptions for this example

Original throw ratio	1.50:1
Projection distance D	3.00 m
Original image width W	2.00 m
Converter factor k	1.4X

1.50:1 is an assumed working setting for the calculation. It is not a stated factory specification for every model above. Use the actual original-lens throw ratio at the selected zoom position.

Formula and worked result

Original throw ratio	TR = D / W = 3.00 / 2.00 = 1.50
With converter	TR' = TR x k = 1.50 x 1.4 = 2.10:1
Same distance 3.00 m	W' = D / TR' = 3.00 / 2.10 = 1.429 m
Same image width 2.00 m	D' = W x TR' = 2.00 x 2.10 = 4.20 m
Width conversion	W' / W = 1 / 1.4 = 71.4%

Using the reference configuration

For a target image width of 2.00 m, the described combined ratio 1.89-3.08:1 gives a theoretical distance of 3.78-6.16 m. This reference range applies only to its matching configuration.

All image sizes in these formulas are width, not diagonal. Use consistent units and the same distance reference point. Nominal calculations do not replace optical checks for coverage, vignetting, distortion, focus and brightness uniformity at the intended settings.