

# Projected Scenery



Contact XS  
for  
Details

Scenery projection is possible on a budget

**Are you ready to explore the limitless possibilities of projected scenery?**

## Here's what you should know:

### Front surface versus rear surface projection

**Front surface screens are white and typically reflect stage light.**

**Rear surface screens are gray, which do a better job of rejecting stage light, provide better contrast, which helps to achieve blacker blacks and whiter whites.**

**Front surface requires projecting over actors heads at a very steep angle.**

**Rear surface is projected from behind the actors, on axis, providing an image which appears brighter to the audience.**

### Lens options, short throw versus Ultra Short Throw (UST)

**Short throw lenses are typically fixed, with 0.8:1 to 0.67:1 aspect ratio.**

**Ultra Short Throw (UST) is 0.38:1, allowing for a much shorter throw distance.**

**With our UST lens, a 20' wide screen can be filled from less than 10' off the back wall.**

**14K Projector, UST lens and 20' x 12.5' screen \$5500 first week  
second week \$2200, third week \$1500\***

The Fine Print:

Accounting for stage blocking and properly aimed stage lighting, a minimum of 50 lumen per square foot of screen surface is required for rear projection.

A 20' wide by 12'-6" tall image area is 250 square feet, and requires a minimum of 12,500 lumens,

24' wide by 15' tall image area is 360 square feet, and requires a minimum of 18,000 lumens,

30' wide by 18'-9" tall image area is 562.5 square feet, and requires over 28,000 lumens to achieve the minimum output.

Front projection typically requires more projector output to provide sufficient contrast.

Not all projector manufacturers calculate lumens the same, the WU14K-M produces 14,000 center lumens, 12,500 ANSI lumens, and 13,625 ISO lumens.

To calculate throw distance, take the width of the screen, and multiply by the lens aspect ratio e.g. 20' wide x 0.67 = 13'-3", then add the depth of the projector for rear projection. If front projecting, the 13'-3" is to the top of the image area for a hung projector. Since the image will be a trapezoid, extreme keystone correction will be required, which wastes a lot of the projector's output lumens.

20' wide x 0.3808 = 7'-7 1/2", and since the UST lens mounts sideways, the depth of the projector is less of a concern, allowing for the screen to be placed less than 10' from the upstage wall.

Not all UST lenses work the same, some require the projector to be far above, or below the desired image area. The unique Christie Digital UST allows for the projector to be on axis, in the center of the screen, which makes mounting the projector as simple as placing it atop a 6' scaffold against the back wall.

The screen has an 8" black border, so the image cannot go all the way to the stage surface.

The Christie Roadster WU14K-M has a current draw of 1500 Watts, and requires a full circuit of non-dimmed power.

\* Price includes local delivery, 25 miles from our warehouse and one technician to supervise installation and removal.

Please call for shipping quote.



*Show Special pricing good for 90 days after the show*

XS Lighting & Sound 1632 Broadway Blvd. Kansas City, MO 64108

816.221.6966 www.xsighting.com sales@xsighting.com

