

## HOW TO MAKE YOUR “HOLOGRAPHIC” PROJECTIONS STAND OUT USING INTEGRAFX FILM WITH YOUR PROJECTOR

### Overview

The IntegraFX holographic rear projection screen is a clear optical film that can display exceptionally bright, crisp video and images projected from behind by a standard video projector, especially in environments with low ambient light. To create a floating “holographic effect” (for example, on a stage), it’s ideal to have little or no light at all. For bright ambient conditions, this film may not be optimal or appropriate as a less transparent film, or you may need to bright projector with high output (ANSI lumen rating or just “lumens”).

### Your projector

The IntegraFX holographic rear projection screens are compatible with standard LED, DLP, LCoS projectors.

The level of brightness required by your projector (measured in lumens) depends primarily on the ambient light conditions, the distance between the projector and the screen (throw distance), the width of your overall screen set up. For example, 100 lumens from a portable projector may be sufficient to create a holographic ghost in a dark room with short throw distance, while 3000 or more lumens may be required for larger stage effects or display digital signage on indoor windows in a shopping mall or office. In some cases (for example large screen and long distance between screen and film), you may need a projector with 4500 or even up to 12000 lumens.

There are number of projector-related websites that explain how to determine the kind of projector and level of lumens you need. A site we like is [http://www.projectorcentral.com/buyers\\_guide.htm](http://www.projectorcentral.com/buyers_guide.htm). You’ll want a projector that provides sufficient brightness (lumens), appropriate throw distance, and keystone correction.

Note the brighter is not always better. You want the projector to provide enough output to illuminate the screen with your content, while not so bright that it overwhelms the viewer or ambient space.

### Positioning the projector and your screen

For the best viewing experience, position the projector off-axis (from above or below the screen) so it does not shine directly into the eyes of the viewer. Projection from the side is also possible.

Off-axis projection results in the trapezoidal “keystone effect”—where the image appears wider at the bottom or top edge opposite to the projector. Sometimes such keystone effect is tolerable, sometimes less so. To counter this effect, many projectors include keystone correction or optical lens shift features.

### Creating the media or video

To create a holographic effect of an object floating in air, create content that contains a bright subject in the foreground and a black background. Black backgrounds create areas on the screen that will appear clear. If your content contains text, remember that by default its reverse “mirror image” will appear, since you are projecting it from the backside of the screen. In your software program or editor, you’ll need to reverse the text.