

Selecting the Right Screen

Four Steps to Selecting a Screen

Need a little help finding the perfect screen? Follow our fast and easy guide to selecting a screen. It's all you need to know in four simple steps.

Step One -- Choose manual or electric operation

Step Two -- Selecting a Screen Surface

Step Three -- Choosing an Aspect Ratio

Step Four -- Determining Screen Size

Step One: Choose Manual or Electric Operation

Your first decision is to decide how you want to use your screen. Do you want your screen to be mounted below the ceiling or recessed into the ceiling? Do you want your screen to be manual or electrically operated? Below are the mounting orientations we currently offer.

Screen Mounting Options:

Manual Screens -- An economical choice for projector screens that can be easily operated at a moments notice.

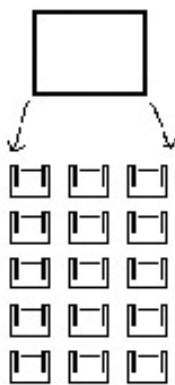
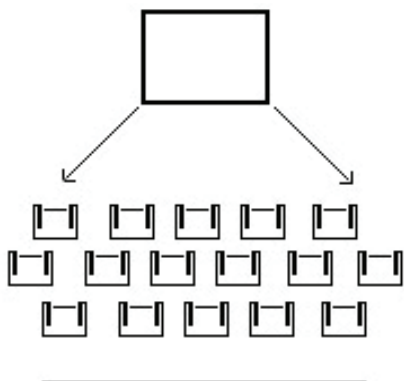
Electric Screens -- High-end projection screens that add elegance to their permanent location. Electric operation is preferred for larger screens, especially when located in high ceilings.

There are a wide variety of screens available in both categories. Some screens will include additional features such as designer casing, tab tensioning, wall mounting brackets, and more. For each screen type, we list the available features available in a convenient chart format.

Step Two - Selecting a Screen Surface

The way a screen surface refracts light is what differentiates one screen fabric from another. Manufacturers specify both gain and viewing angle to help you decide which surface is best for you. Take some time to think about the following questions before making your final decision:

Does your viewing area have controlled lighting or ambient light?



Does the room or rooms where you plan to use your screen have controlled lighting? Or is there ambient light from windows and office/household lighting? Your screen material can help minimize the effects of ambient light in rooms without controlled lighting. Screen materials can also help to increase the appearance of contrast or brightness of a projected image. See the descriptions on our surfaces page to learn more about surface characteristics.

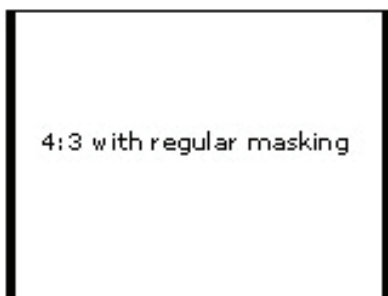
What is the room configuration?

In rooms that are wider than they are deep, some audience members may find themselves at an angle to the screen where “fall-off” occurs, making it more difficult for them to see the image. In these situations, a screen surface with a larger viewing angle is preferred. Longer rooms may require larger screens so that those in the back of the room can see details more clearly.

What type of images do you intend to display?

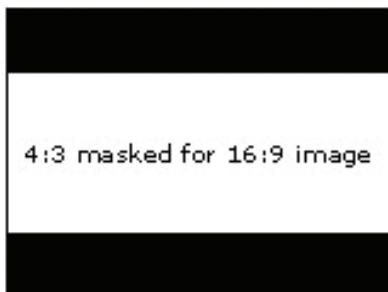
The content you display on your screen will also play a part in determining which screen is best for you. Gray screen material is popular with home theater enthusiasts because the material adds the appearance of contrast to a video image. White or matte white screens are more popular in business applications. In situations where accurate color is desired, such as 35mm film display, a white or matte white surface will provide truer color representation.

Common Applications	Screen Surface Suggestions
Video (TV, VHS, or DVD sources)	gray*, white*, or matte white*
35mm slides (using traditional slide or digital projector)	white or matte white
Power Point slides (New standard for high definition TV - less common)	white or matte white
Detailed spreadsheets or CAD designs (high-res, high detail)	white or matte white



Step Three - Choosing an Aspect Ratio

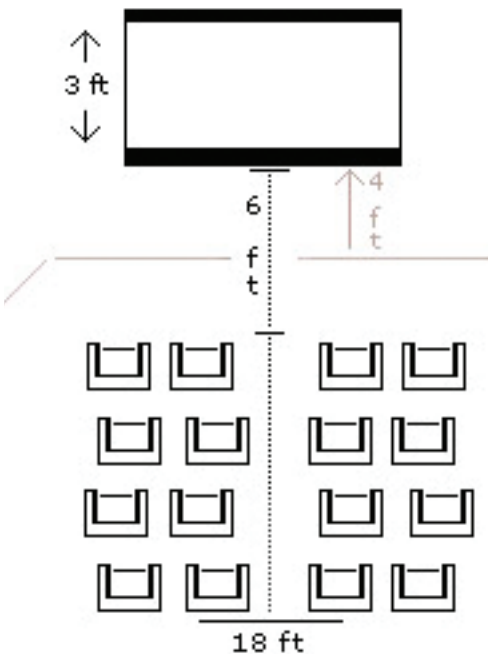
Standard NTSC television, video, and computer display images in a 4:3 aspect ratio. High-definition television or HDTV is shown in widescreen (or 16:9) format. Most films shown in a cinema display in an even wider aspect ratio than that. Our most popular screen aspect ratios, as you might expect, are also the 4:3 or 16:9 formats. But which one is best for you? We have created a handy reference for deciding which aspect ratio is best for you.



Quick Tip: Masking borders can be added (and potentially removed) as a way to eliminate the projected black bars you see when using your projector in its non-native format (ie 4:3 projector displaying in 16:9). Masking borders also enhance the perceived brightness of an image on a screen. The human eye perceives the image to have more contrast and a sharper picture with brighter colors.



Common Applications	Aspect Ratio	Width/Height
NTSC Video (US Standard for TV broadcast)	1.33	gray*, white*, or matte white*
PAL Video (European Standard for TV broadcast)	1.33	white or matte white
HDTV Video (New standard for high definition TV - less common)	1.78	white or matte white
Cinemascope* (35mm film format used in theaters)	2.35*	white or matte white
35 MM Filmstrip	1.32	4:3



Step Four - Determining Screen Size

Your screen size needs to fit your setting. A small screen won't work in an auditorium, and a large screen will overwhelm a small boardroom or home theater. You should also keep in mind the performance of your projector - what is the range of sizes the projector can display? Other factors to consider include the room configuration and the size of your typical audience.

Screen size recommendations from Da-Lite:

Screen height should be approximately equal to 1/6 the distance from the screen to the last row of seats, allowing text to be read and detail to be seen in the projected image. Ideally, the first row of seats should be approximately two screen heights away.

The bottom of the screen should be a minimum of 4 feet above the audience floor, allowing those seated toward the rear of the audience to see the screen. This may require additional screen "drop" for ceiling hung screens.

Still have questions? Call us now for the best advice and for your best price!