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"The aspect ratio of the screen should match that of the projector"

Aspect Ratio

Definition: The aspect ratio of a display device is the ratio of width to height and is calculated by dividing the height into the width.

Gain

Definition: Gain is a measurement of the amount of light reflected from the projection screen surface at various angles compared to the amount of light reflected from a laboratory test specimen made of magnesium carbonate. Screen brightness can vary based on the composition of the viewing surface and the viewing angle. Matte white viewing surfaces are most commonly used and have a gain of 1 to 1.5 and an off-axis viewing angle of around 50 degrees.

When referring to screen dimensions and aspect ratios please consider this:

The electronics industry has established a standard when referring to the resolution and/or aspect ratio of display devices. For example, when we talk about the resolution of a computer monitor or video projector we use phrases like "1024 by 768" or "800 by 600". When we talk about aspect ratios we say "4 by 3" or "16 by 9". Therefore when we talk about resolution, aspect ratio or size the <u>first</u> number that we say refers to the width of the display device and the second number refers to the height of the display device. BEI considers a projection screen to be a display device, and therefore refers to projection screen sizes and aspect ratios in this manner to maintain continuity with the established standard for display devices. To avoid confusion when ordering a screen be sure to label your dimensions with a "W" for width and a "H" for height.

COMPARISON OF ASPECT RATIOS AND PROJECTOR RESOLUTIONS

WIDTH - 120"

SQUARE (1:1)

HEIGHT - 120"

5:4 (1.25:1)

HEIGHT - 96" SXGA - 1280 X 1024

4:3 (1.33:1)

HEIGHT - 90" VGA - 640 X 480 SVGA - 800 X 600 XGA - 1024 X 768

SXGA - 1280 X 960 UXGA - 1600 X 1200 QXGA - 2048 X 1536

16:9 (1.77:1)

HEIGHT - 68" VGA - 640 X 360 SVGA - 800 X 450 XGA - 1024 X 576 SXGA - 1280 X 720 UXGA - 1600 X 900 QXGA - 2048 X 1152