

The point of screen setting

4 Selection of projector

The criteria for selecting a projector are ①Throw distance ②Brightness ③Resolution ④Contrast ratio

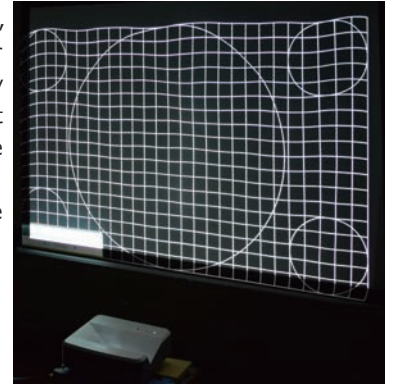
- ①It is the first point of selection that if the expected screen size fits in the planned location.
- ②A brightness of more than 5000 lm. For use in a general office, 3000 lm or more is required.
- ③The resolution is subject to what you look at. If you mainly look at PC data, 1:1 pixel mapping WXGA is recommended.
If you want to see 4 K HDR, you need to pay attention not only to the projector but also to peripherals such as the screen.
- ④The contrast ratio is more important than brightness in the dedicated theater room, but living theaters require.

Main resolution

Resolution	W x H(dpi)	Aspect ratio
SVGA	800×600	4:3
XGA	1024×768	4:3
HDTV(720P)	1280×720	16:9
WXGA	1280×768	16:10
HDTV(FHD)	1920×1080	16:9
WUXGA	1920×1200	16:10
4K UHD	3840×2160	16:9
DCI-4K	4096×2160	1.90:1

Precautions for using ultra short throw projector.

Ultra short-throw projectors, when projected onto a regular screen, the image is extremely distorted as shown in the right picture due to the extreme incident angle. To avoid this distortion, choose a fixed screen like PA.



5 Screen material characteristics

The screen materials can be divided into four major characteristics.

Let's create a better viewing environment by knowing the difference among the four characteristics of "diffusive", "reflective", "retroreflective" and "wide gradation".

※The light reflection angle by the materials property has the same property in the vertical and horizontal directions.

Wide gradation type (HDR)	Diffusive type(White)
<p>The screen is dedicated to HDR compatible projectors. It is a screen with a high gain but with a reduced hotspot. It features a wide range of gradation that suppresses black floating while extending the brightness. Moreover, in order to make the viewing angle as wide as possible, it has the characteristics of diffusion, regression and reflection as well.</p>	<p>directions allow for a wide viewing angle and is the most used screen because it allows you to view homogeneous images from any location. On the other hand, harmful light also diffuses in the same way, so it is required that there are enough light control and light output of the projector.</p>
Retroreflective type(Beads)	Reflective type(Pearl,Silver)
<p>A screen with an optical lens glass sphere scattered on the surface. Due to the nature of reflected light returning in the same direction as incident light, it is characterized by the fact that the influence of ambient light is reduced. The dynamic image is attractive as it compensates the light intensity of the projector with low light output. It is necessary that viewing at a position close to the projector.</p>	<p>A special pearl pigment gravure printed on the surface to ensure a wide viewing angle while maintaining high brightness. Reflective type that reflects light symmetrically with respect to the incident angle. The projector must be placed in a position that is symmetric with respect to the viewing position.</p>