

DYNAMIC DISPLAY SCREENS

Powerful content is the key to successful dynamic display projects. But without an eye-catching screen the content has no chance of making an impact.

The latest developments in screen technology provide the keys to success. Don't just concentrate on how many ANSI lumens your projector has! Viewers look at the screen – not the projector – so you've got to get it right. Here we offer the essential guide to all screen types and technologies, plus the 'how, where and when' to use them.



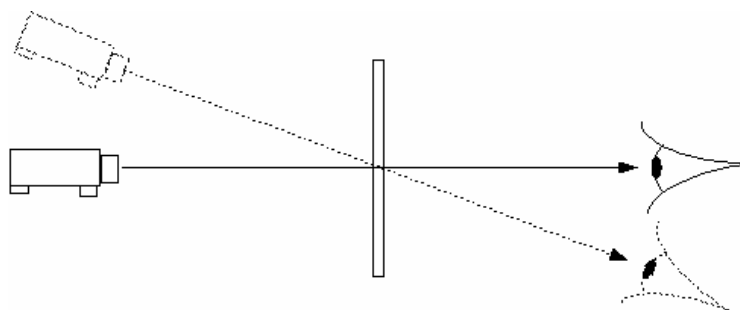
DEALER SUPPORT

Paradigm's fifteen year leadership in the rear projection market translates into a comprehensive range of screens to support every budget and application. We have extensive experience of all relevant applications, including information displays, mission-critical military displays, advertising and point-of-sale. This wealth of experience, plus our technical and manufacturing ability, is at your disposal to create the best possible solutions for your client.

Seeing is believing. We have a massive stock of demonstration screens, frames and stands to allow you to prove and demonstrate anywhere. Our success is grounded on great support. It's all here for you to use; this helpful guide is just the beginning!

There's no such thing as standard display situations. Each application and situation throws up its own challenges and requirements. The size and location of screen are but an initial aspect. But will the projector hang directly behind the screen or need to be angled up on the ceiling? What are the issues when larger screens are used? Which screen will REALLY work in a shop window? Read on!

ON-AXIS SCREENS



'On-axis screens'? It means the projector is placed directly behind the centre of the screen (at 90°). Some of them will work if the projector is at an angle (i.e. 'off-axis'), but never so well. But even more important: they work best when the projector, screen centre and viewer's eye are all in line.

Apollo – Gmax / Cmax

This is a high brightness, low-cost diffusion screen best suited to applications where the screen size is no more than 70". Its performance – not to mention stunning price – has caused many people to **reverse** their views on competing diffusion screens. There are two versions of Apollo screen, the Gmax and Cmax: Gmax offers slightly higher brightness and Cmax provides increased contrast.

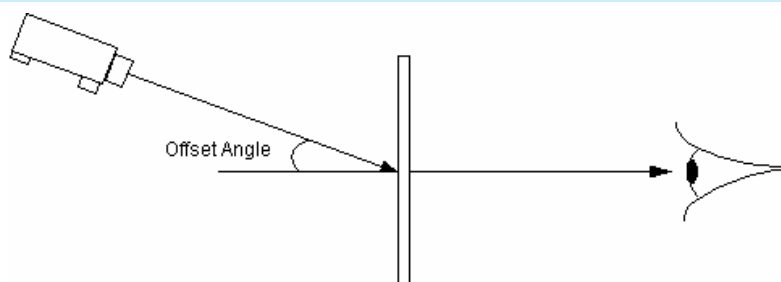
Apollo screens are perfect for most applications and can even be used in some shop window displays.

dnp Ultra Contrast

A so-called 'optical screen' in respect of the advanced, patented lens technologies incorporated. It won the Gold Award at a recent SID (Society for Information Displays) Convention. This has enhanced contrast and colour rendition. But more importantly, it has the necessary 'punch' to be sited in exposed shop windows.

Used in shop windows and in-store applications. Available up to 70".

OFF-AXIS SCREENS



Off-axis screens are specifically designed to produce optimum image quality for given angles of projection. By matching the angle of projection with a screen's stated off-set angle, the brighter the image will appear. Understanding this aspect helps explain why some screens can look acceptable during the demo (with the projector on-axis, or close to) and why they are so disappointing when installed with the projector at an acute angle to the screen, tucked away up in the ceiling.

In many applications, use of an off-axis screen can allow viewers to get closer to the screen whilst the projector is neatly tucked away, out of their sight. This means, for example, that such applications will take up little or no valuable retail floor space.

Holographic screens are also off-axis, but they merit their own section below.

dnp Ultra Contrast Off-Axis

This is a special version of the standard dnp Ultra Contrast screen, specially produced to give an optimum off-set angle of 12°. Available 60" size only – or can be cut down.

dnp Attention

The Attention screen is another high contrast screen material with specially developed lenses to offer a major – but flexible – offset of approximately 20° - 35°.

Attention screens are often suspended from the ceiling within a store. Available up to 120".

HOLOGRAPHIC SCREENS

These show-stoppers have created waves in this industry, caused by imaginative application of advanced holographic technologies.

Most rear projection screens are opaque, being designed for boardrooms and similar 'formal' applications. However, in some retail and exhibition applications a really striking holographic effect can be achieved by using special transparent screen material. In shop windows, not only can passers-by see striking images 'floating' in mid air, but the shop interior can also remain bright and airy, allowing shoppers to see out.

dnp Holo Screen™

The Holo Screen™ provides outstanding brightness performance and is optimised for an off-set angle between 30° and 35°. It can be supplied in three versions: ready-applied to a sheet of clear acrylic (40", 60" & 80"); as a film for permanent mounting on either glass or acrylic (40" & 60"); or as a removable – up to 100 times – film that applies to glass (60" only).

LARGE FORMAT SCREENS

Screen size is determined by factors including: type of information to be displayed; distance to closest and furthest viewer; relative position to viewer; size of location; special constraints at given locations; and so on.

Two simple fact of science are often overlooked here. The image brightness is a fixed relationship between the projector brightness and the screen surface area (a projector of 2,000 ANSI lumens on a 50" screen with gain of 2, generates a theoretical image brightness of 1,645 nit; increase the screen to 70" and the brightness falls to 840 nit). Secondly, a small increase in screen diagonal means a big increase in surface area (a 100" screen has four times the surface area of 50" – and will thus have only a quarter of the brightness).

This means that special factors apply when using large screens. In this market, we describe screens of 70" or over as large. And it's vital to use optical screens (unless the location is very dim and your projector is very bright!). Sometimes even the smallest screens have to be optical, in view of extreme lighting conditions. As ever, demonstration is the most powerful form of communication as to effectiveness.

dnp Alpha

Although we have used many different types of dnp optical screen in these applications, the new Alpha is carving a special niche for itself as it also offers vertical viewing attributes.

SCREEN FRAMES

As designers and manufacturers we offer a complete range of frames and mounting systems for every application. What doesn't exist as standard we can design and make for you. Even if mirrors are needed, to fit the proverbial quart into a pint pot, this is yet another of our specialities.

FURTHER PRODUCT INFORMATION

This brochure is designed to provide a basic overview of screens and their applications. For in-depth information, please refer to the individual product brochures and our team.



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