



Simply, optical bliss ...

Nippura Blue Ocean® Rear Projection Screens are totally different than all previous screen technologies as they are finely cast into the center of optical cell-cast acrylic using a revolutionary patented micron order diffuser. Blue Ocean® Screens are for use with rear projection systems, which by design virtually eliminate equipment sound, heat and light interference effectively; dramatically delivering a hi-definition image to the viewing audience even in ambient conditions which would render front projection useless. What viewers encounter is an amazingly brilliant & color-faithful image so deep and bodied that it appears to be *flowing* out of the Blue Ocean® Projection Screen.



Blue Ocean® Projection Screens are the first ever to cast the screen into a hi-tolerance viewing plane centered between two ultra-clear panels of cell-cast acrylic, the same type of material used in hi-optic fighter jet canopies and the world's largest aquariums. Blue Ocean® Projection Screens also offer something never before found in screens: self-rigidity. The thickness of each screen can be fabricated so that it maintains its form without external frames or tension systems. Frameless hi-definition projected images without borders amplify the infinite depth viewing experience. Because of its durability, outdoor applications of entertainment around the garden and

pool are also possible.

Blue Ocean® Projection Screens will not end in expensive obsolescence; made from an innovative proprietary diffusion material which does not restrict resolution, the screen never needs to be upgraded and does not degrade like many of today's hi-tech displays. Blue Ocean® Projection Screens can fully utilize and enhance all upcoming advancements in hi-resolution feed & hi-definition projectors without the hassle and expense of upgrades typical of other media technologies.



Standard sizes are available in 72", 84" and 100" 16:9. Blue Ocean® Projection Screens can also be custom fabricated into any geometric shape imaginable: curved walls, hemispheres, teardrops, or tunnels. These shapes will come in the world's largest seamless sizes up to 27' by 11'.

Blue Ocean® Advantages

- Amazingly deep and bodied optical presentation of the projection
- Truly faithful replication without lens element aberrations, moiré or rainbows
- Extremely uniform & balanced color representation
- Outstanding contrast and sharpness
- Expansive viewing cone horizontally and vertically
- Unrivaled comparative performance in ambient exposure conditions
- Unlimited resolution acceptability without scintillation
- No ghosting (white/bright shadow-bleaching on darker image backgrounds)



Traditional screen at angle

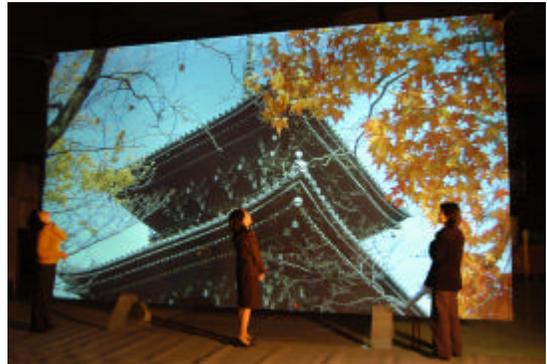


BLUE OCEAN screen at angle
A brilliant, uniform, and extremely wide viewing cone.

- Custom thickness, sizes, and shapes up to 340" diagonal
- Beyond real 3-D stereoscopic projection (spectacular 3-D contrast ratios)
- Diverse range of applications, conditions, and designs
- Self-rigidity for frame-less presentation stand and suspension
- Durability and safety during shipping, installation, and client use
- Standard acrylic finish for limited simultaneous projection functionality
- Two standard Screen gain levels UL 0.7 , MG 1.0 - , HG 1.3 & custom gain levels
- Ease of maintenance & ease of repair
- Custom thickness, sizes and shapes for unique applications

What is Blue Ocean®?

Blue Ocean® Projection Screen production begins by utilizing Nippura's highest optical grade of cell cast acrylic panels. This is the best grade of acrylic with the highest optical properties and tolerances, the same acrylic (PMMA) we use for our aquarium products around the globe. Almost all other conventional screens are made of commodity grade extruded acrylic. Blue Ocean® Projection Screens are processed to exacting uniform thickness so there is no surface waviness on the screen surface like what is easily found on conventional screens made from extruded acrylic.



Screens utilize the proprietary diffuser Blue Ocean®. This highly efficient micron order multi-scattering diffuser radiates out uniform brightness and brilliantly balanced colors.

Blue Ocean® is not coated onto the screen surface like conventional screens. Blue Ocean® is cast within an acrylic monomer matrix into a hi-tolerance 2.5mm plane centered between the two cell-cast acrylic plates. Diffusion takes place in the center of the screen. This configuration makes the Blue Ocean® medium essentially impossible to damage from normal wear and tear, shields out ambient light for far greater ambient light performance at much lower gain metrics with amazing contrast, and creates the deep bodied effect that differentiates it from all other screens.

Outdoor Blue Ocean®

Since Blue Ocean® is cast between two ultra-clear panels of cell-cast acrylic, the resulting screen extremely durable and is perfect for outdoor applications around the garden and pool. Normal wear and tear scratching has no long-term effect on the screens' performance, and a ten year old screen, simply re-polished, will literally look and perform

“ ... this is the same material that is in Shamu's bay window ”

exactly as it did the day it left the factory. Users are no longer forced to deal with the risk of conventional surface-mounted screens that can be easily rendered useless by the slightest damage or scratch. Even if it starts blowing a nor'easter with rain and snow, there is no need to worry about the screen; remember this is the same material that is in Shamu's bay window. Blue Ocean® is rigid, insulates, and is durably weather resistant so there is really nothing better suited for outdoor theater.



About Nippura

Nippura is known for its core business of creating the world's largest acrylic panels, tunnels, cylinders and spheres for the professional aquarium industry. Nippura was the first company ever in 1968 to produce a large scale aquarium from acrylic (PMMA). Nippura has been the catalyst for the modernization of theme park aquariums. While Nippura Aquarium products can be found all over the world you may find yourself staring through them at some of the more local notable aquariums like the Monterey Bay Aquarium, Atlantis Paradise Island, Baltimore Aquarium, New York Aquarium, Ripley's Aquarium Gatlinburg, & the new Georgia Aquarium just to mention a few... The largest size Aquarium Window Aqua-wall® created to date by Nippura measures more 74' x 27' x 2' thick (297,000lbs) and listed in the 2004 Guinness Book of Records. Nippura's technology for consistently producing hi-tolerance cell cast acrylic in large sizes with exacting optical properties has been leveraged for developing Blue Ocean® Rear Projection Screens.



Not a projection, actual photo of Okinawa Aquarium Tank through Nippura Aqua-wall®