

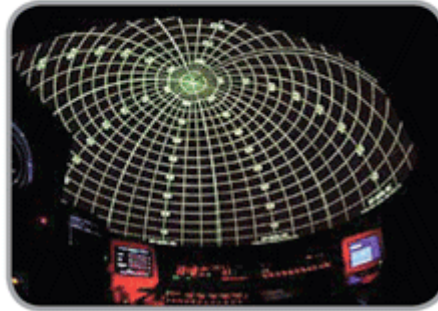
# HemiStar® 180° Projection Lenses

Cutting Edge Solutions for Dome and Video Globe Presentations and Non-Flat Dig

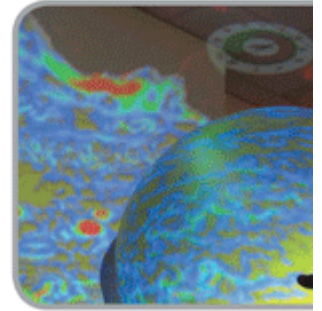
180 Degree Solutions  
For Dome & Planetarium  
Presentations



360 Degree Solutions  
For Spherical Ball &  
Globe Presentation



Digital Signage L  
Non-flat, Irregular :  
Screen Surface



Navitar has leapfrogged the current 180 degree and 360 degree projection optics technologies with the creation of multiple applications. This fish eye projection lens provides maximum projection flexibility for the installation and maintain focus even though there is a varying projection distance to the screen.

## HemiStar lens features:

- 6.75 mm focal length
- F# 3.05
- Compatible with a LCD or single chip DLP projector
- 95% center to edge relative illumination
- Focus range 15" to infinity
- Resolution with 1.3" XGA Projector will be 768 x 768
- Resolution with 0.95" SXGA+ will be 1050 x 1050
- 1:1 throw ratio with 1.3" format projector
- 180 degree field of view (FOV)
- On-axis or off-axis projection

## Currently in Development & Prototype Stage at Navitar:

**New** HemiStar 180° Projection lens for use with 0.65" single chip DLP projectors and resolution of 1920: IN5534L with 7000 lumens.

**New** HemiStar 180° Projection lens for use with 0.67" single chip DLP projectors with a resolution of 1280: PT-DW6300ULS with 6000 lumens.

## Custom Lenses

Navitar offers custom optical projection solutions for use in dome and curved-screen applications including dome presentation, immersive displays, simulation applications, and planetariums. Our design team of optical, mechanical and electrical engineers have years of experience and are ready to design and seamlessly integrate a custom projection lens into your system.

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## Navitar's new HemiStar lens line is solving optical challenges that

For years, AV professionals have had to use multiple projector systems in order to project very wide and only achievable solution to hold the focus on a curved surface was to stitch together multiple images on a screen. The sought, was to find a single fisheye lens which could project a bright and sharp image, using just one projector.

### Meeting the Need for Sharp & Clear Immersive Dome Systems

People began to look for an immersive dome display solution as a way to visually place themselves in a 3D environment. Early models were not very bright or sharp. Typical dome size was approximately 1.5-2 meters wide and the systems, offering a near diffraction limited projection lens for curved surfaces. This solution is ideal for film and live-action presentations.

### More Efficient Planetarium Presentation Systems

The oldest functioning planetarium in the world was designed in 1774 by Dutch astronomer, Eise Eisinga

large planetarium dome surface. Later slide projectors were replaced by video projectors, which enabled t and sharp JVC 4k and Sony 4K projectors with custom Navitar lenses for large installations. For smaller,

### [Overcoming Early Video Globe and 360° Projection Limitations](#)

Years ago, finding a workable globe projection solution for large sphere presentations, interactive touch s digital video globes were extremely expensive and often not evenly in focus from top to bottom. The Hen utilizing the HemiStar for globe projection for a variety of projects including special effects for theater an

### [Digital Signage Applications for Projection Non-Flat Surfaces](#)

The next trend in digital signage and special effect displays is to create eye-catching, memorable images l curvy and wavy surfaces, rather than standard flat surfaces. The HemiStar is a cost-effective solution for t of all shapes and sizes, such a wavy surfaced wall or a life size tunnel that you can walk right through. No center exhibits.