



NAVITAR®

Projection Lens Solutions



Projection Lenses

Projection Solutions

Navitar's NuView replacement and ScreenStar conversion projection lenses help you overcome the limitations of standard LCD and DLP projectors.

NuView Replacement Lenses

NuView lenses replace the existing prime lens of your projector. These high-resolution lenses are available for LCD, DLP, DILA and LCOS projectors and are compatible with most popular resolutions such as XGA, WXGA, SXGA+, 720P and 1080P. No matter what your application, screen size, or projection distance, we have the right lens for you.

ScreenStar Conversion Lenses

These easy-to-use conversion lenses are set in front of your projector lens to change your image size or throw distance by 20-50%. ScreenStar lenses can be used with DLP, LCD, LCOS and DILA format projectors - both standard and high definition.

Custom Lenses

Navitar's engineering and design team can create custom projection lenses for OEM applications. Call us to discuss your requirements.



The Navitar Advantage

With Navitar, you get more than just a projection lens. We offer our customers:

- Lifetime product warranty
- 45-day evaluation program
- No-hassle return policy
- Exceptional customer service
- Affordable pricing
- Extensive product line
- Expert industry knowledge

Selection

We have lenses available for numerous projector brands and models including:

3M	Epson	Planar
ASK	Hitachi	Plus
BenQ	InFocus	Projection Design
Boxlight	JVC	Proxima
Canon	Knoll	Runco
Casio	Liesegang	Samsung
Christie	Luxeon	Sanyo
Dell	Marantz	Sharp
Digital Projection	Mega Power	SIM2
DreamVision	Microteck	Sony
DWIN	Mitsubishi	Toshiba
Dukane	NEC	ViewSonic
Eiki	Optoma	Vidikron
ELux	Panasonic	Yamaha

Projector Types

Navitar lenses are compatible with the following projector types:

- LCD
- DILA
- LCOS
- Single Chip DLP
- 3-Chip DLP

New Projection Technologies

Navitar is active in emerging projection technologies including laser projection, holographic projection, LED projection, flashing LED, MEMS technology, etc. If you are working on a requirement for optics for any new projection technology, Navitar and our Special Optics division are ready to help with your project. Call us to discuss your requirements.

Replacement

NuView Lenses

Replaces the existing prime lens of your projector.



One Change Is All You Need

NuView lenses replace the existing prime lens of your projector and allow you to use your projector in a variety of applications. NuView lenses are compatible with LCD, DLP, DILA and LCOS projectors.

NuView Long Throw Zoom Lenses

Use a long throw lens to increase projection distance and move your projector farther from the screen. The zoom feature allows you to choose your projection distance and image size by simply rotating the lens. See available lenses and specifications in table below.

NuView Wide Angle Fixed Focal Lenses

Use a wide angle lens in rear screen applications or to produce much larger images for front projection. See available lenses and specifications in table below.

Online Lens Finder



Quickly find the correct replacement lens for your projection application.

www.presentation.navitar.com/apps/lenssearch/

NuView Lens Projection Chart

Navitar long throw zoom (MCZ) and fixed focal length (MCL) replacement lenses are listed below with their focal lengths (in both mm and inches) and distance to width ratios for compatible projector panel sizes. Complete Navitar part numbers include a 3-digit projector specific prefix. A complete list of lenses available by projector manufacturer can be found at www.presentation.navitar.com.

Part #	Focal Length (mm)	Focal Length (inches)	Panel Sizes								
			0.7 DLP	0.8 LCD	0.99 LCD	1.1 LCD (1080P)	1.22 LCD (WXGA)	1.3 LCD	1.4 LCD	1.65 LCD (1080P)	1.8 LCD
Distance to Width Ratio											
Long Throw											
MCZ275	50-70	2.0-2.75	3.5-4.9:1	3.0-4.3:1	2.5-3.5:1	2.1-2.9:1	-	-	-	-	-
MCZ500	70-125	2.75-5.0	4.9-8.8:1	4.3-7.7:1	3.5-6.3:1	2.9-5.1:1	-	2.7-4.8:1	-	-	-
MCZ125	70-125	2.75-5.0	-	-	-	-	2.6-4.6:1	-	2.5-4.4:1	1.9-3.4:1	1.9-3.4:1
MCZ537	114-196	4.5-7.7	-	-	-	-	4.3-7.4:1	-	4.1-7.0:1	3.2-5.5:1	3.2-5.4:1
MCZ087	132-220	5.2-8.7	9.3-15.4:1	8.1-13.5:1	6.5-11.2:1	5.4-9.0:1	-	5.0-8.3:1	-	-	-
MCZ900	150-230	6.0-9.0	10.7-16.1:1	9.2-14.1:1	7.6-11.3:1	6.1-9.4:1	-	5.8-8.6:1	-	-	-
MCZ151	184-314	7.2-12.4	-	-	-	-	6.8-11.6:1	-	6.5-11.0:1	5.0-8.6:1	5.0-8.6:1
MCZ123	187-312	7.4-12.3	-	-	-	7.7-12.8:1	-	7.1-11.8:1	-	-	-
MCZ183	272-464	10.7-18.3	-	-	-	-	10.7-17.1:1	-	9.6-16.3:1	7.5-12.7:1	7.4-12.7:1
Wide Angle											
MCL047	11.9	0.47	0.8:1	-	-	0.5:1	-	-	-	-	-
MCL1625	16	0.63	1.2:1	1.0:1	0.8:1	0.7:1	-	-	-	-	-
MCL2125	21	0.83	1.5:1	1.3:1	1.1:1	0.9:1	-	0.8:1	-	-	-
MCL1028	25.4	1.0	1.8:1	9.0:1	1.3:1	1.0:1	-	0.9:1	-	-	-
MCL012	30	1.2	2.1:1	9.0:1	1.5:1	1.2:1	-	1.2:1	-	-	-

Contact Navitar today at 800.828.6778 or 585.359.4000

Conversion

ScreenStar Lenses

Sits in front of your projector's prime lens.

Out In Front

ScreenStar conversion lenses sit in front of your projector's standard lens to increase your picture size or increase throw distance by 20-50%. These lenses decrease the overall cost of installations by allowing you to reduce the number of projectors being used or selecting a lower cost, less featured projector. ScreenStars work with LCD, DLP, DILA and LCOS projectors.

Standard ScreenStar Lenses

Part #	Description	Image Conversion
SSW065	0.65X wide angle converter	50% larger image
SSW08	0.8X wide angle converter	25% larger image
SST120	1.20X telephoto converter	17% smaller image
SST150	1.50X telephoto converter	33% smaller image
SST300	3.00X telephoto converter	67% smaller image

Mini ScreenStar Lenses

Part #	Description	Image Conversion
SSC05*	0.5X mini wide angle converter	100% larger image
SSC065	0.65X mini wide angle converter	50% larger image
SSC08	0.8X mini wide angle converter	25% larger image
SSC125	1.25X mini telephoto converter	20% smaller image

*Call for availability



Mounting Options

Stabilizing Leg

Allows you to simply place the ScreenStar lens in front of the prime lens of your projector. Included with all models except the SST300.

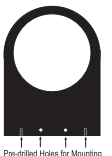


Table Mount

Allows you to place the lens in front of the projector and easily adjust the height and tilt as required. For all models except the SST300 and HDSSW065.



Ceiling Mount

ScreenStar ceiling adapter mounts are available for Chief Manufacturing and Premier Mounts.



Custom Mounts

Navitar's engineering team can create a custom mount for your specific application. Contact us to discuss your needs.

HD

HD Solutions

The Move to High Definition

Today's HD projectors provide vibrant and rich image output and require high resolution, superior quality lenses for peak performance. Navitar HD ScreenStar lenses are the first available high definition wide-angle conversion lenses in the industry.

Our HD ScreenStar lenses, constructed with multi-element, highly corrected lens systems, are designed to specifically match the functionality of these projectors. Navitar HD ScreenStar lenses provide you with excellent image contrast and high resolution. You can change image size or throw distance by simply placing a HD ScreenStar lens in front of the existing prime lens of your projector. There is no loss of quality in the conversion.

Features of HD ScreenStar Lenses

- Multiple element highly corrected lens system
- Optimized for 1080P resolution
- Excellent image contrast and twice the resolution of standard ScreenStar lenses
- Enhanced gaming images for standard formats
- Large diameter optics for easy fit
- Highest MTF available
- Excellent light transmission

HD ScreenStar Lens Applications

- Simulation and Training
- Home Theater
- Gaming
- Planetarium...and more.



HD ScreenStar Lenses

High Quality - High Impact

HD ScreenStars were specially designed to match the performance of HD projectors. When placed in front of the projector's existing prime lens, the image size or throw distance can be changed with no loss of quality in the conversion.

These highly-corrected lens systems, optimized for 1080P resolution, also compliment other formats such as 720P and SXGA+. If your application includes higher resolution graphics and video from sources such as Blu-ray DVD players and gaming systems such as Xbox 360 and Playstation 3, HD ScreenStars will maintain the quality of your images.



HD ScreenStar Lenses

Part #	Description	Image Conversion
HDSSW05*	0.5X HD wide angle converter	100% larger image
HDSSW065	0.65X HD wide angle converter	50% larger image
HDSSW08	0.8X HD wide angle converter	25% larger image



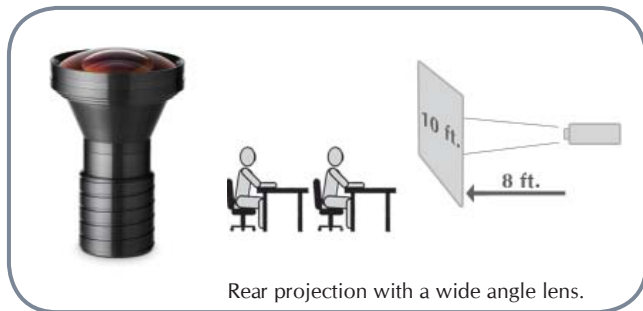
Projection Solutions

Navitar Lenses Expand Your Projection Capability

Larger Image?

NuView wide angle fixed focal length replacement lenses allow you to:

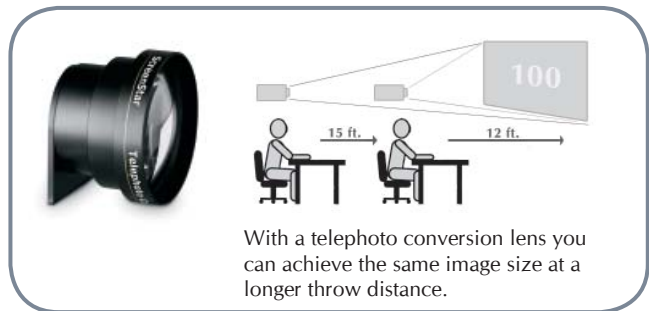
- Use the projector closer to the screen
- Produce a larger image at your present working distance
- Shorten present working distance and increase image back to the original size



Smaller Image?

ScreenStar telephoto conversion lenses allow you to:

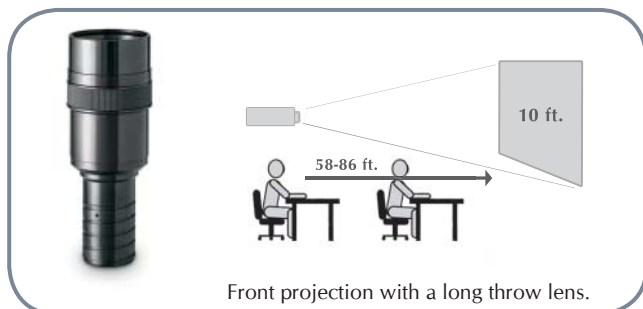
- Place the projector farther away from the screen
- Maintain the same image width
- Reduce your picture size while projecting from the same distance



Longer Throw Distance?

NuView long throw zoom replacement lenses allow you to:

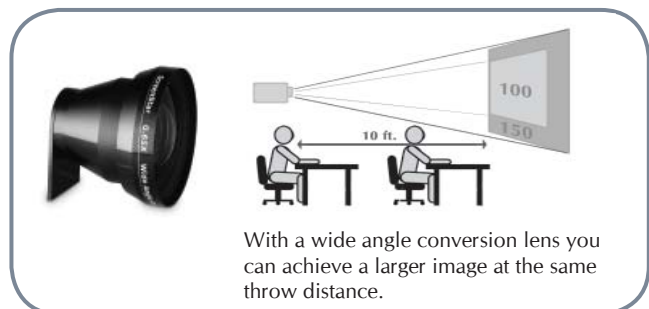
- Increase the working distance and place projector farther away from the screen
- Choose a variety of projection distances and image sizes by rotating the lens



Shorter Throw Distance?

ScreenStar wide angle conversion lenses allow you to:

- Produce a larger image from the same projection distance
- Maintain the same size image while moving projector closer to the screen



Customer Solutions

ScreenStar Conversion Lenses

Training & Simulation

- ScreenStar lenses are used in firearms training simulators in conjunction with laser technology. ScreenStars make the images larger to fill screens when there is limited space at training facilities.
- Wide angle HD ScreenStar lenses are used in flight simulation training applications to provide a larger field of view and high resolution images.

Military Communications

- ScreenStar lenses are used in Military Rapid Tactical Operations Centers to provide the widest images from the shortest distance.

MRI

- ScreenStar telephoto conversion lenses are used in MRI systems. The telephoto lens projects a required small image at a large throw distance.

Planetariums

- Wide angle HD ScreenStar lenses are used with digital projectors to provide the widest possible images using the least amount of projectors. HD lenses provide greater flexibility in alignment to the projector prime lens and maintain straight lines throughout the image so projector output can be combined for crisp, clean edge bleeding.

NuView Replacement Lenses

Interactive Projection & Amusement

- Wide angle NuView lenses are used in theme park rides throwing images onto wide curved screens. NuView lenses offer a variety of focal lengths not available through projector manufacturers.

Home Theater

- NuView lenses give contractors and builders more flexibility in projector placement for home theater installations.

Education

- NuView long throw zoom lenses are used in classrooms with ceiling mounted projectors projecting onto wall mounted screens. They provide a greater zoom range than competitor's lenses.

Digital & Retail Signage

- Long throw lenses are used with digital projectors to beam high-impact images and promotional messages onto screens within department and grocery stores, banks, automotive locations and other consumer service related outlets.

Law Enforcement & Homeland Security

- Law enforcement and government agencies use Navitar's NuView lenses to project geographical maps, crime scene locations, tactical data and training presentations for homeland security and crime prevention efforts.



3D/4D Theater • Cinema Advertising • Consumer Electronics • Corporate • Digital and Retail Signage • Education
Government and Military Communication • Home Theater • Interactive Projection and Amusement • MRI Projection Applications
Portable Presentation • Religious/Praise and Worship • Rental and Staging • Training and Simulation



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