dnp Giant Wide Angle Screen™

TV studio version

The GWA TV Studio Screen is a single element optical system with two active lens surfaces. Due to its optical lens design, the dnp GWA Screen offers super-enhanced brightness uniformity and contrast levels.

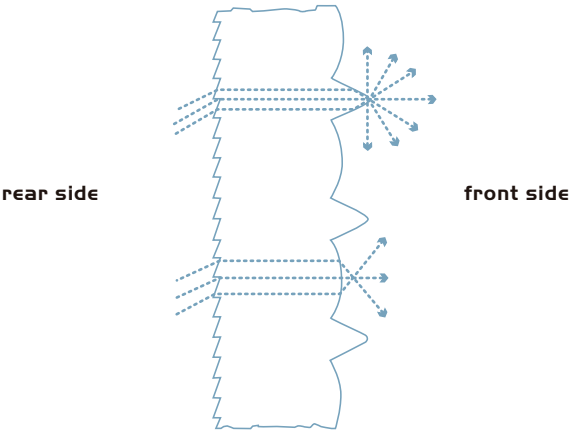
- = High contrast anti-reflective surface
- = Optical Fresnel lens system
- = Screen sizes from 140"-200"
- = Available in 16:9 wide-screen format up to 180"
- = Compatible with CRT, LCD, DLP, LCOS, Light Valve and D-ILA projectors

The TV studio version of the dnp Giant Wide Angle Screen (GWA) is a large optical rear projection screen, specially designed to meet the requirements in brightly-lit TV studios. With sizes up to 200", the screen offers a seamless image area of 4 x 3 metres.

The new GWA TV Studio Screen produces sharp, high-contrast images over a broad viewing area. Furthermore it has a matt surface to avoid reflection of light.

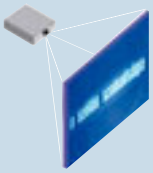
Typical TV studios operate in light levels well above 1000 lux, which completely "washes out" the image on front projection screens. This unique optical rearpro screen generates enhanced black levels, which will create an image with a high contrast level.

The screen offers you large high-quality projected images in TV studios – either as part of the studio setting or as an audience display.



screen profile (horizontal section)

The high precision Fresnel lens on the projector side redirects the projected light and sends it forwards at right angles to the screen. The diffusion material in the acrylic screen controls the vertical light distribution. The fine pitch lenticular lenses on the front side of the screen distribute the image through a 180° horizontal viewing area. The matt surface prevents reflections from light sources in the studio environment.



Rear projection

Rear projection means that the projector is placed behind the screen, shining straight forward towards the audience. The optical screen controls the light path and distributes bright, sharp images into a predefined viewing zone. Furthermore, the presenter and the audience can stand in front of the image without casting shadows. And with the projector equipment hidden behind the screen, the viewing area remains quiet, clean and tidy.

Screen specifications

Giant Wide Angle Screen TV studio version	Type no.	140" GWA TV 3500 3 140 1 350 35	150" GWA TV 3500 3 150 1 350 35	160" GWA TV 3500 3 160 1 350 35	180" GWA TV 4800 3 180 1 480 35	200" GWA TV 4800 3 200 1 480 35		
Dimensions								
Width	mm	2878 +/- 2	3081 +/- 2	3284 +/- 2	3688 +/- 3	4064 +/- 3		
Height	mm	2168 +/- 2	2321 +/- 2	2473 +/- 2	2774 +/- 3	3048 +/- 3		
Rec. lens throw ratio range		1.0 - 1.7:1	0.9 - 1.6:1	0.9 - 1.5:1	1.0 - 1.8:1	0.9 - 1.7:1		
Rec. projection distance range*	mm	2840 - 4840	2740 - 4880	2930 - 4880	3800 - 6700	3800 - 6700		
Thickness	mm	7.5 +/- 1	7.5 +/- 1	7.5 +/- 1	7.5 +/- 1	7.5 +/- 1		
Weight	kg	58.3 +/- 10%	65.6 +/- 10%	74.5 +/- 10%	92.1 +/- 10%	111.5 +/- 10%		
Image area								
Width	mm	2845	3048	3251	3662	4038		
Height	mm	2134	2286	2438	2743	3017		
Optical specifications								
Screen focal	mm	3500	3500	3500	4800	4800		
Outer frame dimensions								
Width	mm				3742 +/-3	4118 +/-3		
Height	mm				2823 +/-3	3097 +/-3		

* General tolerance = -20/+40%, related to the actual screen focal length.

General specifications

Optical specifications	Peak Gain	Pitch		
Giant Wide Angle Screen TV studio version	**3.0 +/- 0.5**	**0.5 mm**		

Subject to change without notice. Please check specification at time of ordering.

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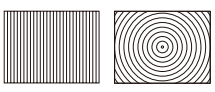
Special options

The TV studio version of the GWA Screen is available in sizes from 140"-200" in 4:3 format. On request the screens can be cut down to 16:9 widescreen format up to 180". Screens in sizes from 140"-160" can be ordered ready-mounted in the dnp frame system to make installation easier.

A special rigid 40 x 40 mm square aluminium frame is available for screens in size range 161"-200". The screen is pre-fitted with the frame's top section for easy removal from the crate. This special framing system is supplied as standard with all screens from 161"-200".

Lenticular lens Fresnel lens



Optical screen technology

dnp optical screens enhance the image for optimum viewing by combining the focusing ability of a Fresnel lens with the distributive properties of a lenticular lens. The result is brilliantly sharp images, superb contrast and up to 4 times brighter images than conventional front or rear projection screens.

www.dnp.dk

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Screens of the art