

dnp Beta Screen™



The dnp Beta Screen is an advanced double element screen which is especially developed for modern control room applications. The Beta Screen offers improved horizontal and vertical viewing angles and superior brightness uniformity – even when it is used together with ultra short throw lenses in the range of 0.7:1

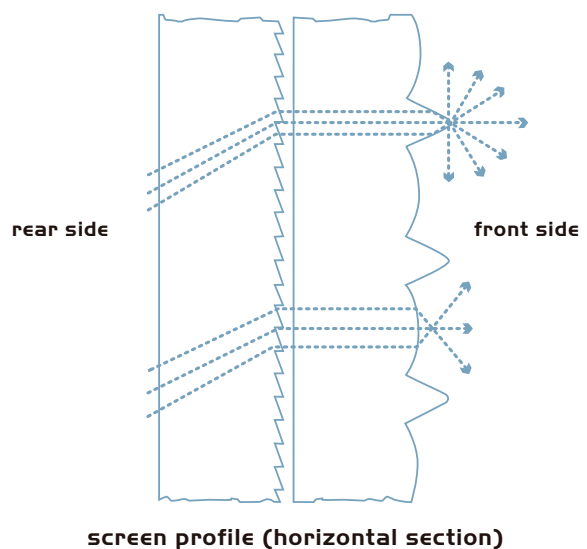
With a Peak Gain of 2.0, the Beta Screen has been optimized for modern control room engines, which offer high brightness uniformity. The improved black levels and contrast of the screen result in crisp and vivid images – allowing display of very detailed images.

The Beta Screen is available in the range of 84" – 120", which are the most frequently used sizes for most new control room applications. As projectors become more and more powerful and with higher resolution, the trend goes towards larger cubes and thus fewer screens and projectors in the wall. The result is lower maintenance

costs and fewer seams, which are critical factors in modern control room displays.

As the Beta Screen is designed exclusively for state-of-the-art control room applications, it is only available in focal lengths for ultra short throw lenses. The screen can be supplied in both 4:3 and 5:4 aspect ratio.

- = High resolution and brightness uniformity
- = 180° viewing angles
- = Ultra short focal length
- = Screen sizes from 84" – 120"
- = Available in 4:3 and 5:4 format
- = Compatible with LCD, DLP, LCOS, Light Valve and D-ILA projectors



The rear element of the Beta Screen consists of a reversed Fresnel lens which directs all projected light forwards at right-angles. The unique lenticular lens on the front element controls both the vertical viewing angles and distributes the light horizontally offering true 180° viewing angles.



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

Beta Screen	Type no.	84" Beta 1450 4:3 3 084 6 145 31	84" Beta 1450 5:4 3 084 6 145 30	100" Beta 1500 4:3 3 100 6 150 30	100" Beta 1500 5:4 3 100 6 150 31	120" Beta 2300 4:3 3 120 6 230 30
Dimensions						
Width	mm	1732.3 +/- 1	1692.3 +/- 1	2082.8 +/- 1.5	2035.2 +/- 1.5	2489.2 +/- 1.5
Height	mm	1305.6 +/- 1	1358.9 +/- 1	1574.8 +/- 1.5	1638.3 +/- 1.5	1879.6 +/- 1.5
Rec. lens throw ratio range		0.7 - 1.0:1	0.7 - 1.0:1	0.6 - 0.9:1	0.6 - 0.9:1	0.8 - 1.1:1
Rec. projection distance range*	mm	1230 - 1670	1230 - 1670	1280 - 1730	1280 - 1730	1960 - 2650
Thickness	mm	7.5 +/- 1	7.5 +/- 1	11.0 +/- 1	11.0 +/- 1	11.0 +/- 1
Weight	kg	20.4 +/- 10%	20.7 +/- 10%	43.3 +/- 10%	44.0 +/- 10%	61.8 +/- 10%
Image area						
Width	mm	1706.9	1666.9	2032	1984.4	2438.4
Height	mm	1280.2	1333.5	1524	1587.5	1828.8
Optical specifications						
Screen focal	mm	1450	1450	1500	1500	2300

* General tolerance = +/- 15%, related to the actual screen focal length.

General specifications

Optical specifications	Peak Gain	Lenticular pitch			
Beta Screen	2.0 +/- 0.3	0.25			

Subject to change without notice. Please check specification at time of ordering. Detailed gain curves can be viewed and downloaded at www.dnp.dk

April 2004

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