

dnp ViewFlex™



Screens of the art

dnp ViewFlex™

The seamless optical rearpro system

dnp ViewFlex is a flexible display system which offers a near-seamless panoramic view in conference and control rooms.

As a service for system integrators, dnp ViewFlex is the first system from dnp which is supplied as a complete ready-to-install solution.

The modular dnp ViewFlex system comprises 1 x 2 or 1 x 3 optical high contrast screens mounted in a unique frame construction. The system provides an image-to-image separation of less than 0.3 mm – a new benchmark within the industry!

The dnp ViewFlex concept offers a high-quality display wall of up to 13

m² (7.3 x 1.8 metres) with only three projectors. This makes it easy to adjust and support – and a very cost-effective alternative to video cubes.

Depending on your projection environment, the dnp ViewFlex system is available with dnp New Wide Angle Screens or dnp Black Bead Screens.

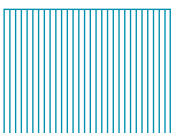
- = **Small and mid-size control rooms**
- = **Business intelligence centres**
- = **Boardrooms**
- = **Videoconferencing**
- = **CAD design studios**
- = **TV editing suites**



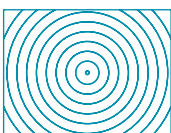
01.
The unique frame concept makes the dnp ViewFlex system ideal for display of full-scale models.

02.
With an image-to-image distance of less than 0.3 mm, the seam is barely visible to the naked eye.

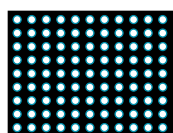
Lenticular lens



Fresnel lens

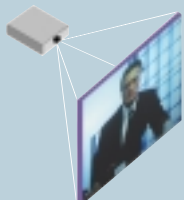


Black Bead lens



Optical screen technology

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



Rear projection

Rear projection means that the projector is placed behind the screen, shooting 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.



Special features

- =Near-seamless framing of less than 0.3 mm
- =Optical Fresnel lens system
- =Enhanced resolution
- =180° horizontal viewing angle
- =High centre-to-corner brightness

Image sources

- =Compatible with LCD, LCOS, DLP, Light Valve and D-ILA projectors
- =Data, graphics, video and still images from computer, HD video, VCR and DVD

Applications

The dnp ViewFlex system fulfills two basic needs in modern business. The need to display up-dated information from several image sources simultaneously – and the need for larger high-quality displays which work in high ambient light.

The philosophy of the dnp ViewFlex system is to improve decision

making, by providing dynamic and well-organized visual input on a large scale.

This makes the dnp ViewFlex concept ideal for monitoring complex processes in control rooms.

Another key application is the business intelligence display, which

shows any combination of live news broadcasts, real-time internet information, video-conferencing and files from business servers.

The dnp ViewFlex system also allows teams of product designers and engineers to share their visions and evaluate full-scale CAD-models in the design phase.



03.

03.

The dnp ViewFlex system used for video-conferencing. One screen monitors all meeting participants in full scale – another displays content relevant to the discussions. The third screen shows a close-up of the speaker.

Framing principle

The unique feature of the dnp ViewFlex system is the flexible suspension system built into the frame.

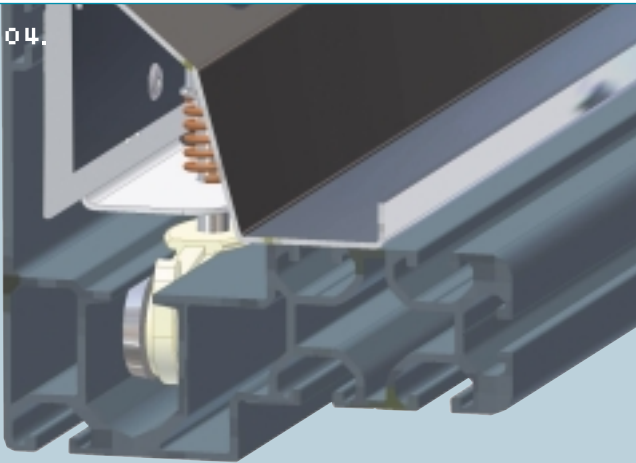
This advanced spring system prevents screen warping as it allows the screens to adjust and adapt to changes in both temperature and humidity. The special spring system

also secures that the screens are kept together with an image-to-image separation of less than 0.3 mm. Unlike most "seamless" screen systems on the market, the dnp ViewFlex system has no visible T-profiles!

Furthermore, the dnp ViewFlex system features integrated baffles

between each screen. This prevents light from one projector affecting the next screen – and makes projector adjustments easier.

04.



04.

The built-in spring system prevents screen warping and reduces the gap between the images to less than 0.3 mm.

05.

The dnp ViewFlex is delivered as a pre-mounted system ready to install.

05.



Screens of the art

The dnp product range includes 9 different screen series in sizes from 40" to 200" for all rear projection applications – each offering individual benefits in both size and specification: dnp Alpha Screen, dnp ViewFlex, dnp Wide Angle, dnp New Wide Angle, dnp Giant Wide Angle, dnp Ultra Contrast, dnp Black Bead, dnp Attention Screen and dnp Holo Screen. Please contact your local dnp distributor for more details.

Choose between

dnp New Wide Angle or dnp Black Bead

The dnp ViewFlex system enables you to choose a 1 x 2 or 1 x 3 configuration with different screen types and sizes. Depending on your projection environment, the dnp ViewFlex system is available with either dnp New Wide Angle High Contrast Screens or dnp Black Bead Screens.

The dnp New Wide Angle HC (High Contrast) has a special dark tint,

which enhances the contrast and makes the screen well-suited for installations in environments with high ambient light. The majority of the configurations are available with the dnp New Wide Angle Screen.

The dnp Black Bead Screen is a high-contrast screen which is especially developed for high-light environments where the screen is viewed from various angles and distances,

e.g. control rooms, show rooms and Point of Sale applications.

For detailed optical specifications, please refer to the dnp New Wide Angle Screen and dnp Black Bead Screen literature, which is available through your dnp dealer or dnp's website at www.dnp.dk.

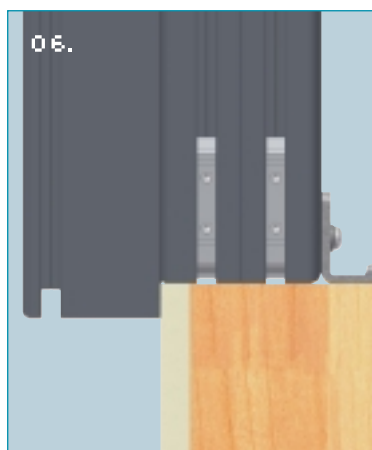


Easy installation

The dnp ViewFlex is supplied as a complete pre-mounted system. The special frame construction features an 8 mm standard T-groove slot, which allows attachment of mirrors, rigs and stands. This will ensure a secure and stable set-up.

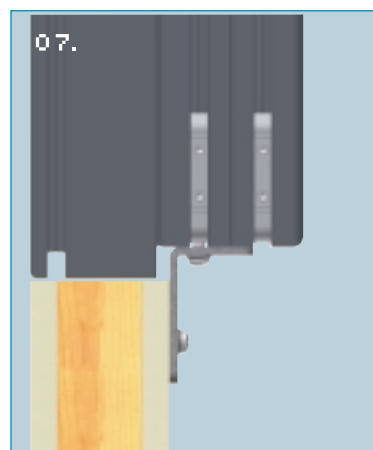
The standard multiple track system enables you to adjust the frame as well as the wall aperture. The recommended aperture dimensions are included in the specification table.

The dnp ViewFlex frame design provides flexible mounting options:



Standard

06.
The standard mounting option.



Flush mount

07.
The flush mounting option.

Packing and delivery

The dnp ViewFlex system is delivered in a special-designed shipping crate, which makes handling and installation easy. Regardless of screen size the crate is less than 1.7 metres in width, allowing the crate to pass through double doors.

08.
The dnp ViewFlex system is crated vertically to make installation easier. The packaging includes eye bolts for lifting straps.



Product specifications

	Size	2 x 67"	2 x 67"	2 x 67"	2 x 67"	2 x 84"	2 x 84"	2 x 100"
	Type No.	BB 1100 NG 1 567 9 110 50	BB 1600 NG 1 567 9 160 50	NWA 1600 HC 3 067 1 160 50	NWA 1900 HC 3 067 1 190 50	NWA 1900 HC 3 084 1 190 50	NWA 2300 HC 3 084 1 230 50	NWA 1850 HC 3 100 1 190 50
Dimensions		1 x 2	1 x 2	1 x 2	1 x 2	1 x 2	1 x 2	1 x 2
*Aperture width (standard) mm		2953 +/- 2	2953 +/- 2	2953 +/- 2	2953 +/- 2	3644 +/- 2	3644 +/- 2	4294 +/- 2
*Aperture height (standard) mm		1251 +/- 2	1251 +/- 2	1251 +/- 2	1251 +/- 2	1510 +/- 2	1510 +/- 2	1754 +/- 2
Optimum lens throw ratio		0.7 - 0.9:1	1.0 - 1.3:1	0.9 - 1.6:1	1.1 - 2.0:1	0.9 - 1.6:1	1.1 - 1.9:1	0.8 - 1.3:1
Optimum projection distance mm		940 - 1260	1360 - 1840	1300 - 2200	1500 - 2700	1500 - 2700	1800 - 3200	1500 - 2600
Weight kg		85.7 +/- 5%	85.7 +/- 5%	79.9 +/- 5%	79.9 +/- 5%	105 +/- 5%	105 +/- 5%	130.7 +/- 5%
Image area								
Width mm		2723	2723	2723	2723	3414	3414	4064
Height mm		1021	1021	1021	1021	1280	1280	1524
Optical specifications								
Screen focal mm		1100	1600	1600	1900	1900	2300	1850
	Size	2 x 100"	2 x 100"	2 x 120"	2 x 120"	2 x 120"	2 x 120"	
	Type No.	NWA 2300 HC 3 100 1 230 50	NWA 2700 HC 3 100 1 270 50	NWA 1850 HC 3 120 1 190 50	NWA 2300 HC 3 120 1 230 50	NWA 2700 HC 3 120 1 270 50	NWA 3200 HC 3 120 1 320 50	
Dimensions		1 x 2	1 x 2	1 x 2	1 x 2	1 x 2	1 x 2	
*Aperture width (standard) mm		4294 +/- 2	4294 +/- 2	5106.8 +/- 2	5106.8 +/- 2	5106.8 +/- 2	5106.8 +/- 2	
*Aperture height (standard) mm		1754 +/- 2	1754 +/- 2	2058.8 +/- 2	2058.8 +/- 2	2058.8 +/- 2	2058.8 +/- 2	
Optimum lens throw ratio		0.9 - 1.6:1	1.1 - 1.9:1	0.7 - 1.1:1	0.8 - 1.3:1	0.9 - 1.6:1	1.1 - 1.9:1	
Optimum projection distance mm		1800 - 3200	2200 - 3800	1500 - 2600	1800 - 3200	2200 - 3800	2600 - 4500	
Weight kg		130.7 +/- 5%	130.7 +/- 5%	164.8 +/- 5%	164.8 +/- 5%	164.8 +/- 5%	164.8 +/- 5%	
Image area								
Width mm		4064	4064	4876.8	4876.8	4876.8	4876.8	
Height mm		1524	1524	1828.8	1828.8	1828.8	1828.8	
Optical specifications								
Screen focal mm		2300	2700	1850	2300	2700	3200	
	Size	3 x 67"	3 x 67"	3 x 84"	3 x 84"	3 x 100"	3 x 100"	3 x 100"
	Type No.	NWA 1600 HC 3 067 1 160 60	NWA 1900 HC 3 067 1 190 60	NWA 1900 HC 3 084 1 190 60	NWA 2300 HC 3 084 1 230 60	NWA 1850 HC 3 100 1 190 60	NWA 2300 HC 3 100 1 230 60	NWA 2700 HC 3 100 1 270 60
Dimensions		1 x 3	1 x 3	1 x 3	1 x 3	1 x 3	1 x 3	1 x 3
*Aperture width (standard) mm		4314.3 +/- 2	4314.3 +/- 2	5351.2 +/- 2	5351.2 +/- 2	6326.6 +/- 2	6326.6 +/- 2	6326.6 +/- 2
*Aperture height (standard) mm		1251 +/- 2	1251 +/- 2	1510 +/- 2	1510 +/- 2	1754 +/- 2	1754 +/- 2	1754 +/- 2
Optimum lens throw ratio		0.9 - 1.6:1	1.1 - 2.0:1	0.9 - 1.6:1	1.1 - 1.9:1	0.8 - 1.3:1	0.9 - 1.6:1	1.1 - 1.9:1
Optimum projection distance mm		1300 - 2200	1500 - 2700	1500 - 2700	1800 - 3200	1500 - 2600	1800 - 3200	2200 - 3800
Weight kg		112.3 +/- 5%	112.3 +/- 5%	148.5 +/- 5%	148.5 +/- 5%	185.8 +/- 5%	185.8 +/- 5%	185.8 +/- 5%
Image area								
Width mm		4084.3	4084.3	5120.6	5120.6	6096	6096	6096
Height mm		1021	1021	1280	1280	1524	1524	1524
Optical specifications								
Screen focal mm		1600	1900	1900	2300	1850	2300	2700
	Size	3 x 120"	3 x 120"	3 x 120"	3 x 120"			
	Type No.	NWA 1850 HC 3 120 1 190 60	NWA 2300 HC 3 120 1 230 60	NWA 2700 HC 3 120 1 270 60	NWA 3200 HC 3 120 1 320 60			
Dimensions		1 x 3	1 x 3	1 x 3	1 x 3			
*Aperture width (standard) mm		7545.8 +/- 2	7545.8 +/- 2	7545.8 +/- 2	7545.8 +/- 2			
*Aperture height (standard) mm		2058.8 +/- 2	2058.8 +/- 2	2058.8 +/- 2	2058.8 +/- 2			
Optimum lens throw ratio		0.7 - 1.1:1	0.8 - 1.3:1	0.9 - 1.6:1	1.1 - 1.9:1			
Optimum projection distance mm		1500 - 2600	1800 - 3200	2200 - 3800	2600 - 4500			
Weight kg		235.8 +/- 5%	235.8 +/- 5%	235.8 +/- 5%	235.8 +/- 5%			
Image area								
Width mm		7315.2	7315.2	7315.2	7315.2			
Height mm		1828.8	1828.8	1828.8	1828.8			
Optical specifications								
Screen focal mm		1850	2300	2700	3200			

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

September 2002

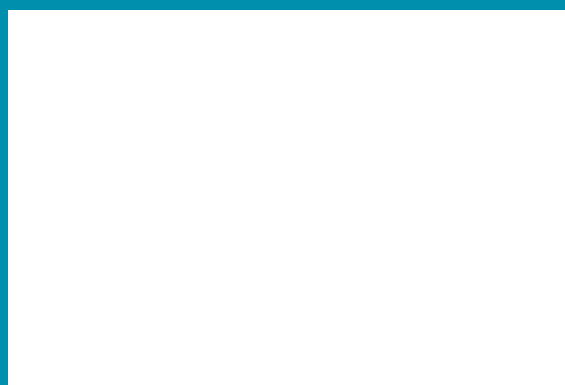
* The aperture width and height are the recommended dimensions of the hole you need to cut in the wall for the ViewFlex frame, when you use the standard mount option (see page 6). Please note, that the measures are recommendations only.

www.dnp.dk

dnp denmark as
Skruegangen 2
DK - 2690 Karlslunde
Denmark
Tel: +45 46 16 51 00
Fax: +45 46 16 52 00

Dai Nippon Printing Co. Ltd.
1-5-17 Higashi-sakashita
Itabashi-ku, Tokyo
174 0042 Japan
Tel: +81-3-5970-4661
Fax: +81-3-5970-4663

DNP Electronics America, LLC.
2391 Fenton Street
Chula Vista, CA 91914
USA
Tel: +1 619 397 6700
Fax: +1 619 397 6739



dnp denmark is the worldwide large screen centre of Dai Nippon Printing Co. Ltd – one of the world's largest printing and media companies. The DNP Group has a total annual turnover of 13 billion US\$.