

# OverView fD70-DL



Barco's OverView fDG70-DL and OverView fDR70-DL are front accessible rear-projection systems with the cutting edge DLP™ technology. The display wall systems are optimized for use in a 24/7 mission critical environment. A built-in second lamp will make you rely for 100% on the availability of your display wall. The OverView D series delivers an outstanding image quality, reliability and ease of use.

## 70" DLP™ projection series with front access

### Superior display quality

- latest high contrast DLP™ technology
- optimal brightness, contrast, color uniformity and large viewing angles
- Optical Dimming to reach equal luminance values without loss of contrast or color depth on all screens
- Dynamic Feedback technology to maintain constant luminance over time

### Reliability and lifetime serviceability

- dual redundant lamp allows you to rely 100% on your Barco display wall
- engineered for ease of maintenance
- dustfree overpressure design
- access to operation and service adjustments through OverView CONTROL MANAGER
- hot swappable lamp from the front gives 100% system up-time and allows lamp maintenance schedule
- Barco's Lamp-Lease Program allows you to efficiently control operational costs

### Projection system

- flexible design for a linear or curved setup
- requires minimal installation depth thanks to front access – can be put against the wall
- modular built-up for easy & fast installation

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## Features of the OverView fD70-DL projection module

Barco designed a projection module based on an innovative modular approach. The concept of having a separate projection unit and illumination unit is unique and results in an easy to maintain projection cube with superior picture quality.

The built in lamp redundancy reduces operational costs and ensures a permanent image. The optical dimmer guarantees equal brightness and contrast across the display wall and keeps the performance of the display constant over time. All maintenance can be done from the front without interruption of the operation.



### Luminance guidelines

- all luminance values are given for on-axis viewing. The 50% luminance value will be present when viewing under the half gain angles (see 'screens table')
- all luminance values are measured at **6500 K** color temperature, normally applied in control rooms for natural lighting conditions
- luminance at other color temperatures can be communicated upon request

### High-precision screen

- provides high-contrast, even in bright ambient light
- type of screen is selected based on overall environmental conditions and operational requirements
- excellent visibility under any viewing angle
- screen modules with easy mounting and narrow screen gap\*
- all screens are double element screens to avoid hotspotting on each display

### Illumination unit

- modular illumination unit
- removable for repair work
- can be replaced without requiring geometrical readjustment
- contains all high power supplies
- integrated redundant lamp system
- active system to reduce tolerancing on brightness
- dual redundant lamp drivers
- choice between high brightness version with a 120W lamp or an economical version with lower cost of ownership with a 100W lamp (option)

### Projection unit

- single-chip DLP™ technology
- OverView fDG70: XGA (1024x768) & OverView fDR70: SXGA\* (1400x1050) resolution
- modular projection unit
- high contrast
- ergonomic luminance
- large color gamut spans the EBU/SMPTE color triangle
- easy to adjust by mini-zoom lens
- easy maintenance
- removable color wheel cartridge
- integrated optical dimmer

Selected for best ergonomic viewing of display wall application

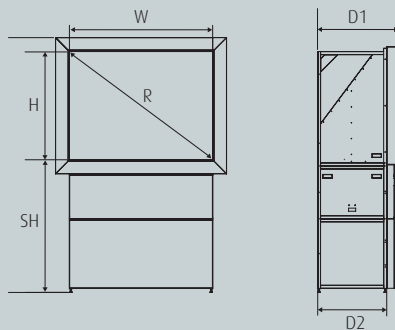
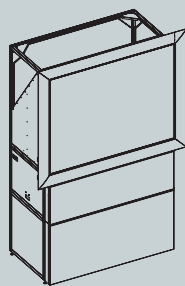
Screens	General	Full viewing angle	Half gain angle
• HVA	High contrast/Excellent viewing angle	180°	35°   35°
• HVM (1)	Medium brightness/Low speckle	180°	35°   27°
• HVX (2)	High brightness	180°	35°   10°

Viewing angle: angle at which the screen content is still viewable, regardless brightness

Half gain angle: angle at which brightness drops to half of on-axis brightness

(1) option, (2) on special request

\* screen gap: 1.5 mm @ 22 C and 50% relative humidity



Structure	OverView fDG70-DL
	OverView fDR'70-DL
W	1,400 mm   55.1 inch
H	1,050 mm   41.34 inch
R	70" nominal
D1	793 mm   31.2 inch
D2	689,5 mm   27.15 inch
Aspect ratio	4:3
SH (°)	1,288 mm   50.7 inch
SH (°)	836 mm   32.9 inch
SH min (°)	613 mm   24.1 inch

(°) standard. Other support heights possible upon request

### Optical dimming with dynamic feedback

A patent pending optical dimming system in combination with a dynamic feedback control loop results in a uniform image across the wall and maintains the brightness over time. This feature allows:

- independent brightness control of each module without loss of contrast or color depth
- equal brightness, contrast and color depth across the display wall
- equal luminance of the display wall across time
- ergonomic dimming of full display wall for day and night operation

### OverView Control Manager

- control of the wall from any place
- graphical user interface represents the display wall on your desktop
- exchanges information between display modules
- display wall health status
- brightness control
- lamp overview and report

70" OverView fDG70-DL, OverView fDR'70-DL						
Luminance (cd/m <sup>2</sup>   ftL)	HVA	HVM (°)	HVM (°)		HVX (°)	
• XGA	100W	95   28	170	50	425	125
	120W	114   33	190	57	515	150
• SXGA*	100W	110   33	190	55	495	145
	120W	125   40	230	65	560	165
• Operating conditions						
Rel. humidity		Up to 90% non condensing				
Temperature		10°C-40°C   50°F-105°F				
• Storing conditions						
		0°C-40°C   32°F-105°F				

(°) Option, (°) on special request

### Redundancy concept

- dual lamp: 100% availability of your display wall
- 2 modes:
  - Hot standby:** 2nd lamp is on, i.e. the switching time in case of lamp failure of the master lamp is virtually zero
  - Cold standby:** 2nd lamp is switched off during operation, i.e. it will only be activated when master lamp failure is detected – switching takes around 30 seconds
- lamp change without direct operator intervention
- hot swappable lamps: failed lamp can be replaced while other lamp generates image
- lamp changes can be planned
- lower operational costs
- Dual DVI-D input on SXGA\* version: allows connection of two simultaneous sources or controllers for full redundancy upon failure of one source or controller

# Specifications Overview fD70-DL

	OverView fDG70-DL		OverView fDR'70-DL	
	100 W	120 W	100 W	120 W
<b>Resolution</b>	XGA		SXGA+	
<b>DMD-chip</b>	1024x768 pixels		1400x1050 pixels	
• Chip	0.7", DDR, ±12°		0.9", LVDS, ±12°	
• MTBF of DMD	typ. 650,000 hours			
• Life time of DMD	typ. 100,000 hours			
<b>Lamp modes</b>	cold standby, hot standby			
<b>Lamp switching time <sup>(1)</sup></b>				
• After lamp switch	0.5 seconds			
• After lamp failure	1.5 seconds			
<b>AC Input Voltage</b>	100-240 VAC, 60-50 Hz			
<b>Power (W)</b>				
• Cold standby	190	210	190	210
• Hot standby	285	325	285	325
<b>Heat dissipation (BTU/h)</b>				
• Cold standby	650	715	650	715
• Hot standby	975	1110	975	1110
<b>Lamp life <sup>(2)</sup></b>	2 x 10,000 hours	2 x 6,000 hours	2 x 10,000 hours	2 x 6,000 hours
<b>Brightness (typ. Lumen)</b>	550	675	650	800
<b>Contrast (typ.)</b>	1300:1		1600:1	
<b>Brightness uniformity <sup>(3)</sup></b>	90%			
	Automated lamp alignment after lamp change for optimized color uniformity and brightness			
	Active patent pending mechanism for brightness tolerancing reduction			
<b>Optical Dimmer</b>	Optical Dimming with Dynamic Feedback			
• Brightness locking	50-100% optical dimming range, without color shift, loss of contrast and loss of colordepth			
• Image equalization	All display modules can be set to equal brightness and contrast			
<b>Color</b>	EBU Color Triangle			
• White point	6500K, but can be set to other values			
<b>Signal input</b>				
• Standard	DVI-D		dual DVI-D	
• Optional on XGA model	DVI-D in/out with support for dual XGA input timing 1024x1536			
• Optional	OverView D Multi input module: DVI-D, DVI-I, Multi Sync RGB input (VGA upto UXGA), Video Input (PAL, NTSC, SECAM)			
<b>Genlocking</b>	Yes			
• Genlock Frequency Range	48-62 Hz			

(<sup>1</sup>) Hot standby-image reaches 50% brightness level, (<sup>2</sup>) lamp manufacturer specs @ IEC 61947-1 test conditions, (<sup>3</sup>) ANSI points



for updated product information see "Visual displays" at  
[www.barcocontrolrooms.com/en/products](http://www.barcocontrolrooms.com/en/products)

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