

# OverView D



Barco's OverView D series integrate cutting edge DLP™ technology into 50", 67" and 80" display wall systems that are designed and optimized for use in a 24/7 mission critical environment. The Barco designed projection engine provides a set of unique features. The result is an unrivaled DLP™ rear projection system with outstanding picture quality, reliability and ease of use.

## DLP™ projection series

### 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 contrast loss 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 IR remote control and an On-Screen Display
- easy lamp replacement from the rear of the system while system runs
- Barco's Lamp-Lease Program allows you to efficiently control operational costs

### Flexibility

- designed to form display walls of any size, in a linear or curved setup
- requires minimal installation depth
- innovative modular concept

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- optimized for mission critical operation
- engineered for use in 24/7 applications
- building block for fully integrated solution
- image quality optimization based upon ergonomical studies
- low total cost of ownership

Selected for best ergonomic viewing of display wall application

Screens	General	Full viewing angle	Half gain angle (hor. ver.)
• HVA	High contrast/Excellent viewing	180°	35°   35°
• XB	High contrast/High brightness	180°	32°   9°

Full 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

#### 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
- patented stitch solution provides seamless solution on 67" and 80"
- patented screen modules with easy mounting and narrow screen gap
- all screens are double element screens to avoid hotspotting on each display
- optional 50" seamless screens without bezels with ZeroGap technology are available

#### 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

# Features of the OverView projection module

Barco Control Rooms 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.

50" OverView mDG50-DL, OverView mDR50-DL, OverView mDR*50-DL			
Luminance (cd/m <sup>2</sup>   ftl)	HVA	XB (°)	
• (S)XGA	100W	195   55	660   190
	120W	240   70	810   235
• SXGA*	100W	225   65	775   224
	120W	275   82	950   275
• Seam Size Screen	mullion	none	
	interscreen gap	< 0.8 mm (°) or 0 mm ZeroGap technology (°)	
• Operating Conditions			
	Humidity	Up to 80% non condensing	
	Temperature	10°C-40°C 50°F-105°F	
• Storing Conditions			
		0°C-40°C 32°F-105°F	

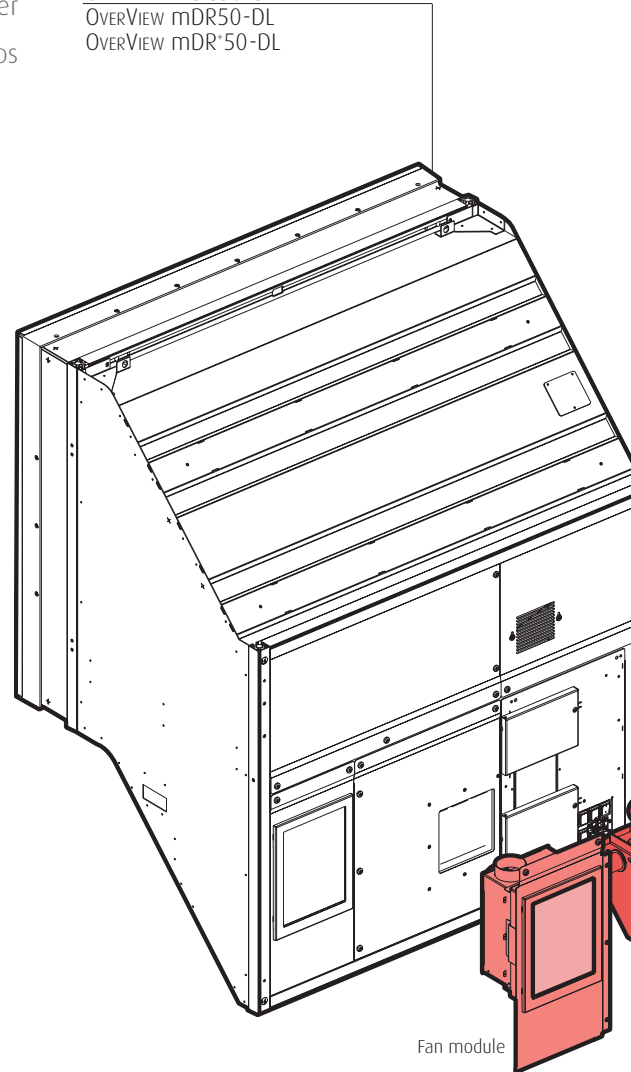
67" OverView cDG67-DL, OverView cDR67-DL, OverView cDR*67-DL			
Luminance (cd/m <sup>2</sup>   ftl)	HVA	XB (°)	
• (S)XGA	100W	100   30	380   110
	120W	120   35	450   130
• SXGA*	100W	120   35	450   130
	120W	145   42	575   155
• Seam size Screen	mullion	none	
	interscreen gap	< 0.2 mm - patented stitch concept	
• Operating Conditions			
	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	

80" OverView cDG80-DL, OverView cDR*80-DL			
Luminance (cd/m <sup>2</sup>   ftl)	HVA	XB (°)	
• XGA	100W	75   22	275   80
	120W	85   25	325   95
• SXGA*	100W	85   25	325   95
	120W	100   29	375   112
• Seam size Screen	mullion	none	
	interscreen gap	< 0.2 mm - patented stitch concept	
• Operating Conditions			
	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	

High brightness & 3200K option			
XGA		HVA	
• 50"	200W, 3200K	200   59	
	200W, 6500K	400   117	
• 67"	200W, 3200K	100   29	
	200W, 6500K	200   58	

(°) Hot Standby-image reaches 50% brightness level, (°) lamp manufacturer specs @ IEC 61947-1 test conditions, (°) ANSI points, (°) sdi input upon request, (°) upon special request, (°) modular screens upon request, (°) depend- ing on wall dimension, (°) @ 22°C and 50% relative humidity, (°) optional on XGA, SXGA\* model only

OverView mDG50-DL  
OverView mDR50-DL  
OverView mDR\*50-DL



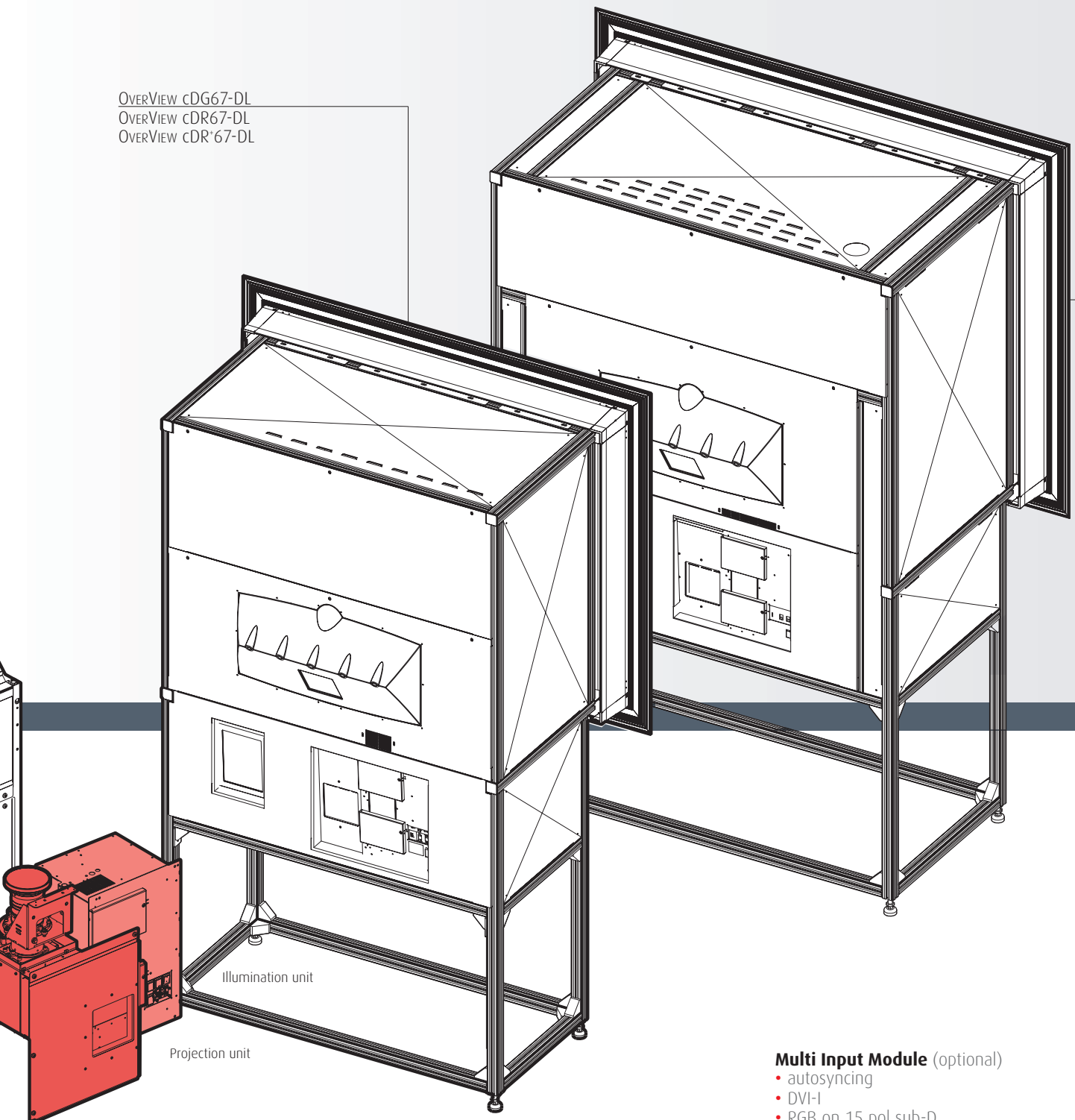
## Luminance guidelines

- 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

## Luminance guidelines backdrop applications

- for backdrop applications often a color temperature of **3200 K** is required.

OVERVIEW CDG67-DL  
OVERVIEW CDR67-DL  
OVERVIEW CDR'67-DL



A dedicated solution with retractable 3200 K/6500 K filter cartridge is available for the XGA product

#### Projection unit

- single-chip DLP™ technology
- XGA (1024x768) SXGA (1280x1024) and SXGA\* (1400x1050) resolution
- modular projection unit
- high contrast
- ergonomic luminance
- large color gamut spans the EBU/SMPTE color triangle
- easy to adjust
- easy maintenance
- removable color wheel cartridge
- integrated optical dimmer

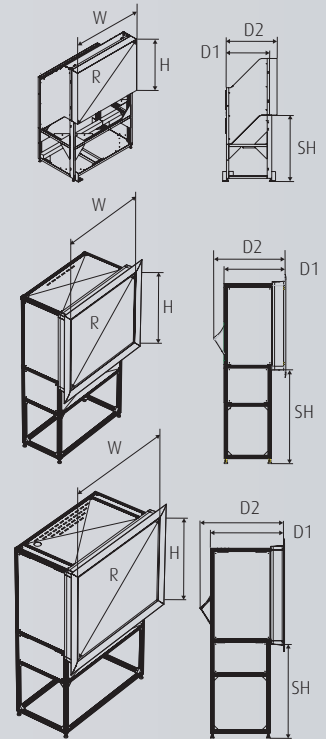
#### Illumination unit

- 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)
- 200W lamp option XGA for high-brightness applications with wide viewing angle requirements

#### Multi Input Module (optional)

- autosyncing
- DVI-I
- RGB on 15 pol sub-D (RGB/Hsync/Vsync)
  - resolution VGA-UXGA
  - pixelclock: 12 MHz-140 MHz
  - horizontal frequency: 12 KHz-100 KHz
- video: 2x cinch, PAL, NTSC, SECAM
- s-video: mini-Din 4 Pol
- DVI-D out
- input selection
  - channel selection by input selection tool
  - can be set in automatic source switch-over for redundancy of sources
  - via graphical user interface

OVERVIEW cDG80-DL  
OVERVIEW cDR'80-DL



Structure	OVERVIEW mDG50-DL OVERVIEW mDR'50-DL	OVERVIEW mDR50-DL	OVERVIEW cDG67-DL OVERVIEW cDR'67-DL	OVERVIEW cDR67-DL	OVERVIEW cDG80-DL OVERVIEW cDR'80-DL
W	1,000 mm   39.4"	1,000 mm   39.4"	1,368 mm   53.9"	1,335 mm   52.6"	1,600 mm   63"
H	750 mm   29.5"	800 mm   31.5"	1,026 mm   40.4"	1,068 mm   42"	1,200 mm   47.2"
R	50" nominal	50" nominal	67" nominal	67" nominal	80" nominal
D1	568 mm   22.4"	568 mm   22.4"	810 mm   31.9"	810 mm   31.9"	965 mm   38.0"
D2	664.5 mm   26.2"	721 mm   28.4"	942 mm   37.1"	950 mm   37.4"	1,098 mm   43.2"
Aspect Ratio	4:3	5:4	4:3	5:4	4:3
SH (°)	875 - 1,000 - 1,200 mm	875 - 1,000 - 1,200 mm	1,288 mm   50.7"	1,288 mm   50.7"	1,288 mm   50.7"
SH min	455 mm   17.9"	455 mm   17.9"	622 mm   24.5"	668 mm   26.3"	537 mm   21.1"
Weight (excl. structures)	62 kg	68 kg	123.4 kg	123.4 kg	137.5 kg

(°) standard. Other support heights possible upon request



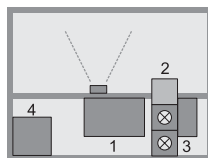
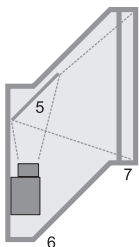
for updated product information see "Visual Displays" at [www.barcocontrolrooms.com/en/products](http://www.barcocontrolrooms.com/en/products)

### Redundancy concept

- dual lamp: 100% availability of your display wall
- 3 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

**Auto Switch mode:** ensuring controlled, balanced aging of the lamps

- no image loss in hot stand-by
- lamp change without direct operator intervention
- lamp changes can be planned
- lower operational costs
- failed lamp can be replaced while other lamp generates image
- standard Dual DVI-D allows connection of two simultaneous sources or controllers for full redundancy upon failure of one source or controller



- 1 Projection unit
- 2 Illumination unit
- 3 Power supply
- 4 Fan module
- 5 Mirror
- 6 Structure
- 7 Screen module or stitched screen

# Specifications Overview D

General	100W			120W			200W
• Resolution	XGA	SXGA <sup>(8)</sup>	SXGA*	XGA	SXGA <sup>(8)</sup>	SXGA*	XGA
	OverView DG	OverView DR	OverView DR*	OverView DG	OverView DR	OverView DR*	OverView DG
• DMD-chip	1024x768	1400x1050	1400x1050	1024x768	1400x1050	1400x1050	1024x768
	0.7"	0.95"	0.95"	0.7"	0.95"	0.95"	0.7"
	DDR	LVDS	LVDS	DDR	LVDS	LVDS	DDR
	±12°	±12°	±12°	±12°	±12°	±12°	±12°
• Number of pixels used	0.79 M pix	1.31 M pix	1.47 M pix	0.79 M pix	1.31 M pix	1.47 M pix	0.79 M pix
• Pixelshape	Square						
• MTBF of DMD	typ. 650,000 hours						
• Life time of DMD	typ. 100,000 hours						
• Lamp modes	Cold Standby, Hot Standby, Auto Switch (all with two lampdrivers)						
• Lamp switching time <sup>(1)</sup>							
After lamp switch	0.5 seconds						
After lamp failure	1.5 seconds						
• AC Input Voltage	100-240 VAC, 60-50 Hz						
• Power (W)							
Cold standby	190			210			290 <sup>(5)</sup>
Hot standby	285			325			520
• Heat dissipation (BTU/h)							
Cold standby	650			715			1200 <sup>(5)</sup>
Hot standby	975			1110			1850
• Lamp life <sup>(2)</sup>	2 x 10,000 hours			2 x 6,000 hours			2 x 2,000 hours
• Brightness @ 6500 K <sup>(7)</sup>	550	625	700	675	715	800	1125
• Contrast (Typ.)	1300:1	1600:1	1600:1	1300:1	1600:1	1600:1	1300:1
• Brightness uniformity <sup>(3)</sup>	90%						
	Automated lamp alignment after lamp change for optimized color uniformity and brightness						
	Active patent pending mechanism for brightness tolerancing reduction						
• Optical Dimmer	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						
• Color	EBU Color Triangle						
White point	6500 K <sup>(4)</sup>	6500 K <sup>(4)</sup>	6500 K <sup>(4)</sup>	3200 K <sup>(5)</sup>	6500 K <sup>(4)</sup>	6500 K <sup>(4)</sup>	3200 K <sup>(5)</sup>
				6500 K <sup>(4)</sup>			6500 K <sup>(4)</sup>
• Signal input							
Standard	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) <sup>(6)</sup>						
• Genlocking	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, (<sup>4</sup>) 6500 K, but can be set to other values, (<sup>5</sup>) special 3200 K option for backdrop, (<sup>6</sup>) sdi input upon request, (<sup>7</sup>) Typ. ANSI Lumen, (<sup>8</sup>) based upon SXGA of emulation OverView DR\* model



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

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Barco Control Rooms is an ISO 9001 registered company.  
The information and data given are typical for the equipment described. However any individual item is subject to change without any notice.  
The latest version of this product sheet can be found on [www.barcocontrolrooms.com](http://www.barcocontrolrooms.com)  
DLP™ technology by Texas Instruments offers crystal clear images with superior quality. DLP is a trademark of Texas Instruments.

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