OV-808

80″ XGA DLP™ projection module

Barco's OV-D2 series integrates cutting edge DLP™ technology into 80″ video 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, resulting in an unrivaled DLP™ rear projection system with outstanding picture quality, reliability and ease of use.

Superior display quality
- Latest high contrast DLP™ technology
- Brightness, contrast, and large viewing angles tailored to the human eye providing maximum readability
- Vibrant colors
- Sense^{6} technology providing consistently excellent video wall uniformity over time

Reliability and lifetime serviceability
- Engineered for ease of maintenance and serviceability
- Durable components with high reliability from lamp to screen
- Dual redundant lamp offering 100% reliability
- Easy lamp replacement from the rear of the system while system runs
- 100% sealed off optical engine, preventing dust contamination
- Fast Ethernet communication allowing redundant projection access for direct control and configuration
- Barco's Lamp-Lease Program allowing to efficiently control operational costs

Flexibility
- Designed to form video walls of any size, in a linear or curved setup
- Requires minimal installation depth
- Innovative modular concept for easier build up and design

Integrated system
- Barco Wall Control Manager software with central graphical overview of the video wall
- Integrating individual projection modules into a single display

BARCO

Visibly yours

Features of the OV-808 projection modules

Sense[6]

Sense[6] brings wall uniformity to a next level.

Not only does Sense[6] increase color and brightness uniformity in the corners of each single projection module, Barco's innovative Sense[6] technology also keeps all projection modules equal over time and across the entire video wall.

By integrating a patented brightness and color sensor, the video wall's color and brightness is continuously measured and communicated between projection modules. Sense[6] automatically matches the brightness of full white, full black and all gray levels in between, as well as the colors of all projection modules. The I-lamp recalibrates the color sensor for long-time stability.

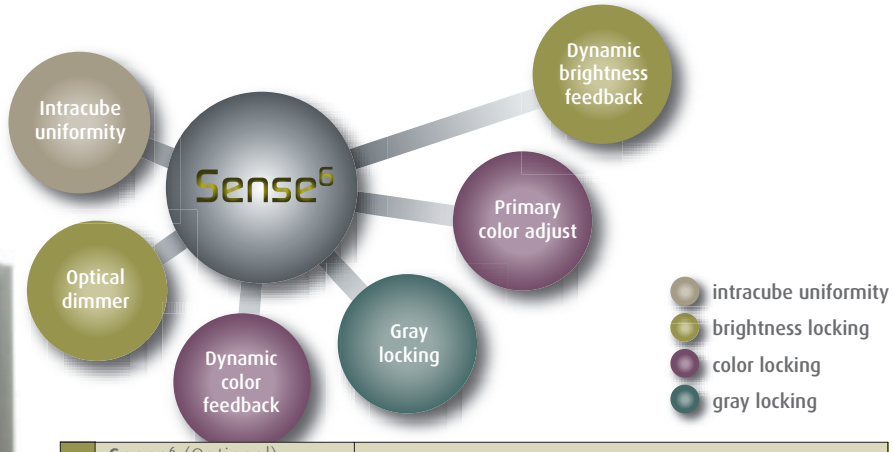
Sense[6] operates unnoticed in the background and requires no operator intervention whatsoever. For instance, Sense[6] will work during automatic lamp change without special operator actions. The intended video wall content remains unchanged at all times. No special screen calibration patterns are needed.

80" OV-808		HVA	HVAII
	Power	**Luminance** (cd/m²| ftL) ([1])	
	120 W	115 | 34	200 | 59
	132 W	125 | 37	220 | 65
	180 W	170 | 50	300 | 88
	Interscreen gap	< 0.2 mm by patented stitch concept	
	Humidity conditions	Up to 90% non condensing ([2])	
	Temperature conditions	12°C-32°C | 53.6°F-89.6°F ([2])	
	Storing conditions	0°C-40°C | 32°F-105°F	

([1]) @ 6500 K, values are approx 50% @ 3200 K
([2]) depending on wall configuration

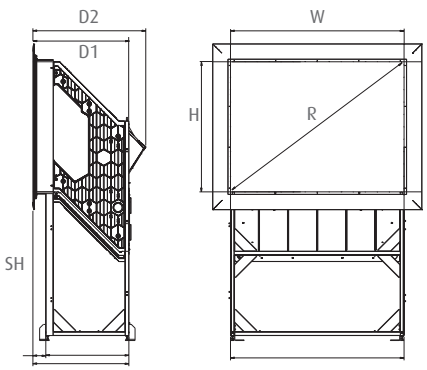
Screens	Screen type	Brightness	Viewing angle	Full viewing angle	Half gain angle (h.|v.)	1/5 gain angle (h.|v.)
	HVA	Normal	Excellent	180°	±35°| ±35°	~ ±65°| ±65°
	HVA II ([3])	Medium	Wide	180°	±35°| ±35°	~ ±45°| ±45°

([3]) upon special request



Sense⁶	Sense⁶ (Optional)	
	Color shift between projection modules over time	Shift in ΔE* over time < 3 (with color lock)
	On-screen brightness uniformity	Very high brightness and color uniformity
	ANSI 9 brightness min.	97%
	ANSI 13 brightness typ.	95%
	Projector color/ brightness uniformity	
	ΔE* intercube typ.	< 6
	ΔE* intracube typ.	< 3
	Brightness locking	Makes brightness of all projection modules equal at all times without operator intervention
		High Dynamic Range (HDR) by optical dimming preserves contrast, independent of brightness level or lamp life
		Active dynamic brightness sensor feedback technology measures brightness and serves as input to the optical dimmer
	Color locking	Makes color of all projection modules equal at all times without operator intervention
		Primary Color Adjust is a color algorithm that adjusts color to a common color target in red, green, blue and white
		Active dynamic color sensor feedback technology collects color information from all projection modules. The True Color Sensor measures the complete spectrum rather than just red, green and blue and is based upon the standard spectral function according to CIE 1931
	Gray locking	Makes gray levels equal across projection modules

ΔE* is a parameter which incorporates color and brightness differences into one unit. Additionally, ΔE* takes into account the adaptation level of the human eye to brightness and color.



Dimensions	OV-808	
	Width W	1600 mm | 63.0"
	Height H	1200 mm | 47.2"
	Diagonal R	80" nominal
	D1	862.5 mm | 34.0"
	Full depth D2	1023 mm | 40.3"
	Aspect ratio	4:3
	Standard height SH	875 mm, 1000 mm, 1200 mm | 34.5", 39.4", 47.2"
	Min screen height SH	570 ± 30 mm, 22.4"
	Weight/module	131.3 kg | 289 lbs

Technical specifications OV-808

Display capabilities	**Resolution**			
	XGA 1024 x 768 TruePixel			
	Absolute resolution			
	16 dpi			
	Luminous flux @ 6500 K @ 132 W			
	875			
	Dynamic contrast			
	4800:1			
	Color			
	100% EBU			
	White point			
	6500 K, natural lighting ([1])			
Imaging device	**DMD chip**			
	0.7" LVDS ±12° DarkChip3, BrilliantColor™			
	Pixel accuracy			
	PixelTrue display, shows each pixel true to the input pixels without scaling or smoothing effects			
	MTBF of DMD			
	typ. 650,000 hours			
	Life time of DMD			
	typ. > 100,000 hours			
	Image retention			
	No image retention or burn-in			
Lamps	**Lamps**			
	Choice between 120 W, 132 W and 180 W			
	Lamp-life ([2])	120 W	132 W	180 W
		10,000 hrs	6,000 hrs	6,000 hrs
	Lamp redundancy			
	Cold standby or hot standby with redundant power supply Automatic lamp switch by autosensing lamp failure			
	Lamp replacement			
	Defect lamp can be hot-swapped without image loss			
	Lamp switch			
	Dynamic feedback of brightness and color readjusts video wall to equal performance			
	Switching time			
	< 1.5 seconds			
	I-lamp			
	Intelligent lamp carries a.o. lamp life information & spectrum			
Color wheel	**Color wheel, rotation speed & lifetime**			
	Color wheel cartridge with MTTR < 5 minutes			
	3x speedn for better image representation			
	Air bearing with rating of 50,000 hours			

Power	**AC input voltage**			
	100-240 VAC, 60-50 Hz			
	Power (W)	120 W	132 W	180 W
	Cold standby	< 250	< 275	< 335
	Hot standby	< 390	< 430	< 550
	Heat dissipation (BTU/h)	120 W	132 W	180 W
	Cold standby	< 850	< 900	< 1145
	Hot standby	< 1325	< 1375	< 1875
Signal	**Signal input/output**			
	1 x DVI-D in/out, 1 x Dual-link DVI-D in/out			
	Pixel clock			
	162 MHz | 270 MHz ([3])			
	Input frequency			
	Multi sync 30-75 Hz			
	Genlock range			
	Genlock in 49-61 Hz range			
	Supported input resolutions			
	VGA, SVGA, XGA, SXGA, SXGA+, UXGA, 1080p, dual XGA, triple XGA ([3]), quad XGA ([3]), dual SXGA+([3])			
	Cropping			
	Possible			
	Scaling (optional)			
	Up- and down scaling			
Communications	**Barco Wall Control Manager**			
	Graphical representation of video wall on operator PC			
	Integrates separate projection modules into a single display, allowing a.o. Sense[6]			
	Client – server architecture provides central video wall logic with multiple access from multiple sites			
	Health status in the blink of an eye and support for trouble shooting			
	Configuration of different settings			
	Wall control by the operator			
	Multiple access levels			
	Direct ethernet access			
	Projection module settings and control through standard ethernet browser			
	Easy and fast firmware upgrade over ethernet			
	Autodiagnostics			
	Projector self test			
	Integration to third party equipment			
	External video wall control from different devices through SOAP based API			

([1]) Special 3200 K option for backdrop • ([2]) Lamp manufacturer specs @ IEC 61947-1 test conditions
([3]) On second input

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