

# MDSC-2324

Full HD 24-inch surgical display



- For the best hand-eye coordination
- Allows for easy cleaning and disinfection
- Works with Nexxis for video-over-IP integration

Barco's MDSC-2324 is a 24-inch near-patient surgical display with LED backlight, featuring full HD resolution and a wide color gamut. Purpose-built for the operating room, the MDSC-2324 offers an easy-clean design, smart mechanics and the most detailed images in the procedure room today.

### Color-calibrated, artifact-free images

Thanks to its high brightness, high contrast and high resolution, the MDSC-2324 presents surgeons with accurate, realistic images and excellent depth perception. It also offers the fastest, lag-free transmission of surgical images and the highest image quality available today.

Our next-generation motion adaptive de-interlacing and noise reduction algorithms, using full 10-bit image processing, are your guarantee for detailed, sharp, and noise-free pictures, so you can detect the most subtle changes in tissue color.

### Multi-source, multi-display imaging over IP

With its broad input connectivity, the MDSC-2324 offers the highest flexibility for multi-modality imaging (PiP & PaP), enabling reproduction of images from multiple sources and to multiple displays in the integrated operating room.

The 24-inch display is one of Barco's network-enabled surgical displays and offers integrated functionality (optional) for use with Nexxis digital OR, ensuring smooth distribution of uncompressed video and data over the IP network without delay.

### Designed for use in the operating room

Barco's MDSC-2324 allows easy cleaning and disinfection thanks to its smooth surface, splash-proof housing, and front screen protection (IP45). The fan-less design avoids the spread of contaminants.



The display comes with a smart cable management system that hides the cables for a clutter-free set-up. It is light and compact, allowing easy (dual-monitor) mounting on surgical booms and spring arms.

Barco's MDSC-2324 features:

- 24" wide-screen LCD
- Full HD resolution
- Wide viewing angle
- High-brightness LED backlight
- Advanced, full 10-bit, image processing algorithms for artifact-free video reproduction
- Widest range of SD and HD input signals, including 3G-SDI and DisplayPort
- Calibrated for perfect color and grayscale reproduction (ITU 709 and DICOM standards)
- Easy cleaning thanks to full size protection screen and smooth design without gaps
- Easy cable management allowing hiding of cables in a flexible back cover
- Lightweight for easy mounting on spring arms

**PRODUCT SPECIFICATIONS****MDSC-2324**

Screen technology	TFT AM LCD
Active screen size (diagonal)	611 mm (24.1")
Active screen size (H x V)	518 x 324 mm (20.4 x 12.7")
Aspect ratio	16:10
Resolution	W-UXGA (1920 x 1200)
Pixel pitch	0.270 mm
Color support	1073 million (10-bit)
Color gamut	Wide gamut (Adobe RGB 1998)
Viewing angle	178° (panel typical)
Maximum luminance	400 cd/m <sup>2</sup> (panel typical)
Contrast ratio	1500:1 (panel typical)
Response time (Tr + Tf)	18 ms (typical)
Housing color	White RAL 9003
Video inputs	<p>Video input signals:</p> <ul style="list-style-type: none"><li>-DVI-I Single-Link (Digital &amp; Analog – HDMI video support with HDCP)</li><li>-Component Video RGBS / YPbPr (4xBNC)</li><li>-S-video (4-pin Mini DIN)</li><li>-Composite video (1xBNC)</li><li>-3G-SDI (1xBNC)</li><li>-DisplayPort (VESA std 1.1a)</li><li>-Optional: integrated BARCO Nexxis network adapter</li></ul> <p>Video input formats:</p> <ul style="list-style-type: none"><li>-VGA &amp; DVI: Up to 1920x1200 at 60Hz (reduced blanking)</li><li>Maximum pixel clock: 165MHz</li><li>Maximum Hor freq: 90kHz</li><li>Maximum Ver freq: 75Hz</li><li>-Standard PAL and NTSC for S-Video, Composite and Component</li><li>-Component YPbPr/ RGBS: HDTV -up to 1080i &amp; 1080p</li><li>-SDI Format Supported: 625/25 PAL, 525/29.97 NTSC, 1080i50, 1080i59.94, 1080i60, 720p50, 720p59.94, 720p60, 1080p50, 1080p59.94, 1080p60</li><li>-SDI Compliance: SMPTE 425M (Level A), SMPTE 424M, SMPTE 292M, SMPTE 259M-C, SMPTE 296M, ITU-R BT.656, ITU-R BT.601</li><li>-Displayport 1.1a: up to 1920 x 1200 60Hz</li></ul>
Video outputs	<p>DVI-D</p> <p>S-video (4-pin Mini DIN)</p> <p>Composite video (1xBNC)</p> <p>3G-SDI (1xBNC)</p>
Power requirements (nominal)	<p>Power source for external power supply: 100 – 250 VAC / 47-63 Hz auto-switch</p> <p>Power source for display power input: +24 VDC / 2.3A (LED and DDI version), 3.2A (MNA version)</p> <p>Power supply for external module: +5VDC ±10% @500mA (max) through the DVI connectors DVI-in &amp; DVI-out (on pin 14 or pin 16 -OSD programmable)</p>
Power consumption	<p>55W max (LED and DDI version)</p> <p>75W max (MNA version)</p>
Power management	<p>DVI-DMPM states supported</p> <p>Power On state</p> <p>Active-Off state</p>
Dot clock	165 MHz max (DVI)
Gamma curve	Native, 1.8, 2.0, 2.2, 2.4, DICOM
OSD languages	English, French, German, Spanish, Italian
Dimensions w/o stand (W x H x D)	595 x 414 x 84 mm (23,4" x 16,3" x 3,3")
Dimensions power supply (W x H x D)	210 x 103 x 52 mm (8,27" x 4,06" x 2,05")

**PRODUCT SPECIFICATIONS****MDSC-2324**

Dimensions packaged (W x H x D)	712 x 605 x 178 mm (28,03" x 23,82" x 7,01")
Net weight w/o stand	8.0 kg (17.6 lbs) 9.6 kg (21.2 lbs) including power supply and accessories
Net weight power supply	1.5 kg (3.31 lbs)
Net weight packaged w/o stand	12.5 kg (27.6 lbs)
Power supply DC output cable length	2.5 m (8.2 ft)
Mounting standard	VESA (100 x 100 mm)
Screen protection	Protective, non-reflective PMMA cover
Recommended modalities	Endoscopy, Laparoscopy, PACS, PM, US, CT, MR
Certifications	CE (Medical Device Class I) EN 60601-1: 2006 + A1:2013 + A12:2014 (Medical Electrical Equipment – Part 1: General Requirements for Safety) IEC 60601-1: 2012 Edition 3.1 (Medical Electrical Equipment – Part 1: General Requirements for Basic Safety and Essential Performance) IEC 60601-1-6 (Ed. 3); Am1 ANSI/AAMI ES 60601-1:2005/(R)2012 and A1:2012, C1:2009/(R)2012 and A2:2010/(R)2012 (Medical Electrical Equipment – Part 1: General Requirements for Basic Safety and Essential Performance) CAN/CSA-C22.2 No. 60601-1: 14 (Medical Electrical Equipment – Part 1: General Requirements for Basic Safety and Essential Performance (Harmonized with Ed. 3.1) CCC: GB9254-2008 + GB4943.1-2011 + GB17625.1-2012 BIS (except for MNA version): IS13252 (PART1):2010 +A1:2013 +A2:2015 INMETRO IEC 60601-1-2: 2014 EN 60601-1-2: 2015 EN 55011/CISPR11 (MNA version: Class A, LED and DDI version: Class B) FCC CFR 47 Part 15 Subpart B (MNA version: Class A, LED and DDI version: Class B) RoHS compliant IP21 (IP45 front side only)
Supplied accessories	1x DVI-D video cable 1x printed User Guide (English) 1x documentation disc, containing all translations of the User Guide 1x external power supply 4 screws, 4 dented washers and an Allen key Mains cables
Optional accessories	Barco stand (K9302097A) Power extension cable 10m (K3495066) Power extension cable 30m (K3495068)
Warranty	3 years
Operating temperature	10 ~ 35°C for performance / 0 ~ 40°C for safety
Storage temperature	-20 ~ +60°C
Operating humidity	10 ~ 90% (non-condensing)
Storage humidity	10 ~ 90% (non-condensing)
Operating altitude	3000 m max
Storage altitude	12000 m max

**Last updated: 23 Apr 2020**Technical specifications are subject to change without prior notice. Please check [www.barco.com](http://www.barco.com) for the latest information.