MDSC-2224

24-inch full HD surgical display

APPROVED

OSD

10 BIT

COVER

WIDE VIEW

DISPLAYPORT

CLEANABLE

LED TECHNOLOGY

WUXGA 1920 X 1200

24" SCREEN
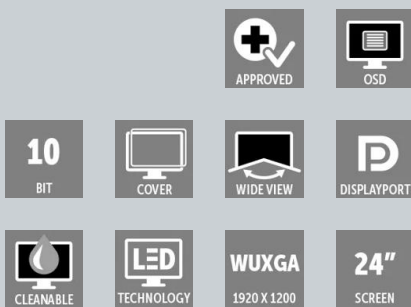
- **For the best hand-eye coordination**

- **Allows for easy cleaning and disinfection**

- **Works with Nexxis for video-over-IP integration**

Barco's MDSC-2224 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-2224 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-2224 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-2224 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-2224 allows easy cleaning and disinfection thanks to its smooth surface, splash-proof housing, and full screen protection. The fan-less design avoids the spread of contaminants.

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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-2224 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-2224

General specifications

Screen technology	TFT AM LCD / S-IPS technology / LED backlight
Active screen size (diagonal)	611.3 mm (24")
Active screen size (H x V)	518.4 x 324 mm (20.4" x 12.7")
Aspect ratio	16:10
Resolution	1920 x 1200
Pixel pitch	0.270 mm
Color imaging	Yes
Color support	1073 million (10-bit)
Color gamut	Wide gamut (Adobe RGB 1998)
Viewing angle	178° Hor / 178° Ver
Maximum luminance	350 cd/m² (typical)
Contrast ratio	1000:1 (typical)
Response time	6 msec (GtG -typ)
Dot clock	(max) 165 Mhz
Gamma curve	Native, 1.8, 2.0, 2.2, 2.4, DICOM
Housing color	White RAL 9003
Video inputs	Video input signals: -DVI-I Single-Link (Digital & Analog – HDMI video support with HDCP) -Component Video RGBS / YPbPr (4xBNC) -S-video (4-pin Mini DIN) -Composite video (1xBNC) -3G-SDI (1xBNC) -DisplayPort (VESA std 1.1a) -Optional: integrated BARCO Nexxis network adapter Video input formats: -VGA & DVI: Up to 1920x1200 at 60Hz (reduced blanking) Maximum pixel clock: 165MHz Maximum Hor freq: 90kHz Maximum Ver freq: 75Hz -Standard PAL and NTSC for S-Video, Composite and Component -Component YPbPr/ RGBS: HDTV -up to 1080i & 1080p -SDI Format Supported: 625/25 PAL, 525/29.97 NTSC, 1080i50, 1080i59.94, 1080i60, 720p50, 720p59.94, 720p60, 1080p50, 1080p59.94, 1080p60 -SDI Compliance: SMPTE 425M (Level A), SMPTE 424M, SMPTE 292M, SMPTE 259M-C, SMPTE 296M, ITU-R BT.656, ITU-R BT.601 -Displayport 1.1a: up to 1920 x 1200 60Hz
Video outputs	DVI-D S-video (4-pin Mini DIN) Composite video (1xBNC) 3G-SDI (1xBNC)
Remote control	RS-232 (D-sub 9-pin)
Power requirements (nominal)	Power source for external power supply: 100 – 250 VAC / 47-63 Hz auto-switch Power source for display power input: +24 VDC / 2.5A Power supply for external module: +5VDC ±10% @500mA (max) through the DVI connectors DVI-in & DVI-out (on pin 14 or pin 16 -OSD programmable)
Power management	DVI-DMPM states supported Power On state Active-Off state
Power consumption (nominal)	less than 60 W (LED version)
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")
Net weight w/o stand	7.9 kg / 17.4 lbs (MDSC-2224 LED) 8.3 kg / 18.3 lbs (MDSC-2224 MNA)
Net weight packaged w/o stand	10.0 kg (22.0 lbs)
Mounting standard	100 x 100 mm VESA
Screen protection	IP21 / Front face: IPx5 Double coated, anti-reflective PMMA / White RAL 9003
Recommended modalities	Endoscopy, laparoscopy, X-ray, CT, MR, US
Regulation Compliance	IEC60601 3rd Edition Approvals/Marking: CE, C-UL-US, DEMKO, CCC Safety (Medical equipment): IEC60601-1, UL60601-1, CSA-C22.2 nr 601-1-M90 Electromagnetic Compatibility: EMC Medical EMC Standards: IEC60601-1-2, EN55011 /CISPR 11, FCC CFR47 part 15 & 18/Class A Environment: ROHS-2, REACH, WEEE compliant
Temperature	Operating: 0° -40° C / Storage: -20° -60° C
Humidity	Operating: 10% – 90% R.H. / Storage: 5% – 90% R.H.
Keyboard/mouse	Touch-sensitive, 7-key, backlit, bottom-right
Supplied accessories	User Manual, DVI Dual-Link cable 3.0m, Mains cables (EU (CEBEC/KEMA) & US (Hospital grade UL)), External power supply
Optional accessories	Barco Surgical LCD Display Desk Stand, Barco MDSC Surgical Medical LCD Display Extension Cable 10m
Warranty	3 years

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