

# Nio Color 2MP LED (MDNC-2221)

2MP high-bright color display system



- Color medical display with 1600 x 1200 resolution
- Barco LED technology to unveil the subtlest details
- Front sensor for on-demand image quality checks

Nio Color 2MP LED is a 2 MegaPixel color display system with LED backlights, providing excellent image quality for confident diagnoses. Nio Color 2MP LED provides an effective display solution for a multitude of applications and modalities, including 3D PACS, 3D echo, ultrasound, orthopedic imaging, CAD, image fusion, nuclear medicine and PET.

### Confident color reading

Equipped with high-bright LED backlights, Nio Color 2MP LED delivers excellent brightness and more shades of gray to detect subtle details more quickly. The unique front-of-screen sensor ensures you see consistent and precise images at all times for confident diagnoses.

### On-demand image quality checks

The front-of-screen sensor on Nio Color 2MP LED, which works seamlessly with Barco's online MediCal QAWeb solution for automated Quality Assurance and on-demand calibration, makes sure you are viewing perfect DICOM images.

### An excellent investment

The Nio Color 2MP LED is as low in power consumption as it is high in brightness. Because it uses less power, the display produces less heat and requires less cooling, which impacts maintenance and operational costs. Additionally, the LED backlights offer a long lifetime - even at high brightness - providing an excellent return on your investment.

- High-bright and power-efficient LED backlights
- Accurate grayscale and color rendering
- Front sensor and MediCal QAWeb for easy DICOM conformance



- High-performance 3D rendering with full 3D, OpenGL and DirectX support

**PRODUCT SPECIFICATIONS****NIO COLOR 2MP LED (MDNC-2221)**

Screen technology	IPS-Pro
Active screen size (diagonal)	540 mm (21.3")
Active screen size (H x V)	432 x 324 mm (17.0 x 12.8")
Aspect ratio (H:V)	4:3
Resolution	2MP (1600 x 1200 pixels)
Pixel pitch	0.27 mm
Color imaging	Yes
Gray imaging	Yes
Bit depth	30 bit
Viewing angle (H, V)	178°
Uniformity correction	ULT
Ambient light presets	Yes, reading room selection
Ambient light sensor	Yes
Backlight Output Stabilization (BLOS)	Yes
Front sensor	Yes
Maximum luminance (panel typical)	800 cd/m <sup>2</sup>
DICOM calibrated luminance	500 cd/m <sup>2</sup>
Contrast ratio (panel typical)	1400:1
Response time ((Tr + Tf)/2) (typical)	10 ms
Housing color	RAL 9003 / RAL 9004
Video input signals	1x DVI 1x DisplayPort
USB ports	1x USB 2.0 upstream (endpoint) 2x USB 2.0 downstream
Power rating	24 VDC, 3.75 A
Power requirements	This device shall only be powered by the following medical approved power supply:  Bridgepower, type JMW190KB2400F11 Ratings marked on the medical power supply: ■ Input rating: 100–240 VAC, 2 A, 50–60 Hz ■ Output rating: 24 VDC, 3.75 A
Power consumption	50 W (nominal) < 1 W (hibernate) < 1 W (standby)
Dimensions with stand (W x H x D)	Portrait: 378 x 525~625 x 235 mm Landscape: 491 x 466~566 x 235 mm
Dimensions w/o stand (W x H x D)	Portrait: 378 x 491 x 83 mm Landscape: 491 x 378 x 83 mm
Dimensions packaged (W x H x D)	655 x 388 x 495 mm
Net weight with stand	11.3 kg
Net weight w/o stand	6.3 kg
Net weight packaged	15.5 kg (without accessories)
Tilt	-5° to +25°
Swivel	-30° to +30°

**PRODUCT SPECIFICATIONS****NIO COLOR 2MP LED (MDNC-2221)**

<b>Pivot</b>	90°
<b>Height adjustment range</b>	100 mm
<b>Mounting standard</b>	VESA (100 mm)
<b>Recommended modalities</b>	All digital images, except digital mammography
<b>Certifications</b>	CE0120 (MDD 93/42/EEC; A1:2007/47/EC class IIb product) CE -2014/30/EU CE -93/42/EEC; A1:2007/47/EC class II b IEC 60601-1(ed.3); IEC 60601-1(ed.3 am1) ANSI/AAMI ES60601-1(2005+C1:09+A2:10+A1:12) CAN/CSA-C22.2 No. 60601-1(2014) EN 60601-1-2:2015 EN 60601-1:2006/A11:2011/A12:2014; EN 60601-1:2006/A1:2013 CCC -GB9254-2008 + GB4943.1-2011 + GB17625.1-2012 KC VCCI FCC class B ICES-001 Level B FDA 510(k) RoHS
<b>Supplied accessories</b>	User guide Documentation disc System disc Video cable Mains cable(s) USB cable External power supply
<b>QA software</b>	MediCal QAWeb
<b>Warranty</b>	5 years, including 20000 hrs backlight warranty
<b>Operating temperature</b>	0 °C to 35 °C (15 °C to 30 °C within specs)
<b>Storage temperature</b>	-20 °C to 60 °C
<b>Operating humidity</b>	8% to 80% (non-condensing)
<b>Storage humidity</b>	5% to 85% (non-condensing)
<b>Operating pressure</b>	70 kPa minimum
<b>Storage pressure</b>	50 to 106 kPa

Last updated: 29 May 2018

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