

Nio Color 3MP dental display

Diagnostic display for dentistry (MDNC-3421 Option DE)



- Shows sharp, bright dental images
- Reveals more details
- Enables faster decisions

Barco's Nio Color 3MP dental display has everything it takes for dental specialists. It brings sharp and bright images to the diagnostic reading room so you can quickly visualize concealed anatomic structures and easily detect dental pathologies.

An accurate diagnosis

The Nio Color 3MP dental display has been designed for use in the dental reading room. Even when used in different ambient light conditions, it will provide you with crisp, high-contrast detail, enabling an accurate treatment planning.

For endodontic treatment, for example, visualization of small details, such as root cracks, is essential as it defines a patient's entire treatment plan: should the tooth be treated or extracted in order to avoid dental abscesses and other oro-facial pain disorders? The swift and correct diagnosis of such problems is essential when providing treatment.

Planning with confidence

Thanks to the integrated uniformity technologies, subtle abnormalities or concealed anatomical structures in the oral and maxillofacial region can be visualized without imperfections or screen noise. While keeping the brightness steady over time, you can make accurate decisions.

In the case of oral surgery, it means critical structures can be assessed more accurately, which is crucial when planning for dental implant placement, for example. Detailed visualization of the bone structure, accurate localization of nerves and arteries all contribute to the success and safety of the procedure. The outcome? A quicker treatment and recovery for your patients.

PRODUCT SPECIFICATIONS**NIO COLOR 3MP DENTAL DISPLAY**

Screen technology	IPS-TFT Color LCD
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	3MP (2048 x 1536 pixels)
Pixel pitch	0.2109 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
Front sensor	Yes
Maximum luminance (panel typical)	900 cd/m ²
DICOM calibrated luminance	500 cd/m ²
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) 3x USB 2.0 downstream
Power rating	24 VDC, 4 A
Power requirements	This device shall only be powered by the following medical approved power supplies: Sinpro Electronics, type CPU110-201 Ratings marked on the medical power supply: ■ Input rating: 100–240 VAC, 1.5 A, 47–63 Hz ■ Output rating: 24 VDC, 4.58 A Efore (Roal Electronics), type RHPS390A Ratings marked on the medical power supply: ■ Input rating: 100–240 VAC, 3.0 A, 50/60 Hz ■ Output rating: 24 VDC, 8.33 A
Power consumption	50 W (nominal) < 0.5 W (standby)
Dimensions with stand (W x H x D)	491 x 472–572 x 235 mm
Dimensions w/o stand (W x H x D)	491 x 378 x 84 mm
Dimensions packaged (W x H x D)	500 x 280 x 670 mm
Net weight with stand	Option DE: 12.0 kg Option DE NC: 10.7 kg
Net weight w/o stand	Option DE: 7.0 kg Option DE NC: 5.7 kg
Net weight packaged	Option DE: 16.5 kg (without accessories) Option DE NC: 15.2 kg (without accessories)
Tilt	-10° to +30°

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Swivel	-45° to +45°
Pivot	90°
Height adjustment range	100 mm
Mounting standard	VESA (100 mm)
Screen protection	Option DE: Protective, anti-reflective glass cover Option DE NC: N/A
Recommended modalities	All digital images, except digital mammography
Certifications	CE0120 (MDD 93/42/EEC; A1:2007/47/EC class IIb product) CE 2014/30/EU, CE93/42/EEC; A1:2007/47/EC class II b IEC 60950-1:2005, A1:2009 (ed. 2) IEC 60601-1 (ed 3.1) ANSI/AAMI ES 60601-1:2005, R1:2012 CAN/CSA-C22.2 No. 60601-1:2014 DEMKO EN60601-1:2006, A12:2014, A1:2013 EN 60601-1-2:2007 CCC GB92542008+ GB4943.12011+ GB17625.12003 KC VCCI FCC class B ICES001 level B FDA 510(k) RoHS
Supplied accessories	User guide Documentation disc System disc Video cable (1 x DisplayPort) Mains cables (UK, European (CEBEC/KEMA), USA (UL/CSA; adaptor plug NEMA515P), Chinese (CCC)) USB 2.0 cable External power supply
Optional accessories	Graphics board
QA software	MediCal QAWeb
Warranty	5 years, including 20000 hrs backlight warranty
Operating temperature	0 °C to 40 °C (15 °C to 35 °C within specs)
Storage temperature	-20 °C to 60 °C
Operating humidity	8% to 80% (non-condensing)
Storage humidity	5% to 85% (non-condensing)
Operating pressure	70 kPa minimum
Storage pressure	50 to 106 kPa

Last updated: 11 Apr 2018

Technical specifications are subject to change without prior notice. Please check www.barco.com for the latest information.