MR Safe 24" LCD Display

CAMBRIDGE RESEARCH SYSTEMS

BOLDscreen 24

MR Safe LCD display for 3T fMRI

We have engineered BOLDscreen 24 from the ground up, to provide the superior image quality necessary for vision research: high contrast, high resolution visual stimuli. They're the only displays with no time lag, integrated calibration and, of course, no interference with the scanner - even when positioned right at the exit of the bore.

BOLDscreen 24 is easier to set up than a projector, has lower maintenance costs, and is significantly cheaper than goggles. It integrates with our audio system, eye tracker and the other *Made for fMRI* devices from our range.

Designed for fMRI by CRS

www.crsltd.com/boldscreen24

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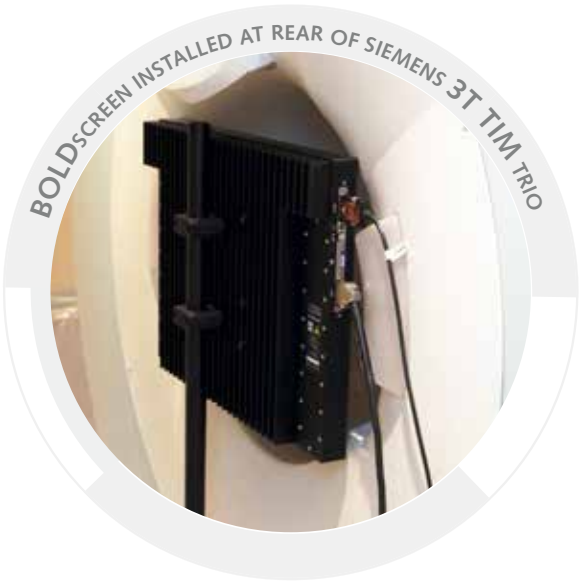
BOLDscreen 24



Superior image quality

BOLDscreen 24 has a digital DVI input and can be driven just like the LCD monitor on your desk, with standard software tools.

However, unlike other monitors, BOLDscreen 24's custom electronics deliver your stimulus direct to the screen - output is lag free and synchronous to the input video signal.

The high contrast LED matrix backlight creates highly saturated chromatic displays with excellent spatial uniformity, and real-time calibration ensures consistent luminance immediately from switch on.

Easy to install & integrate

BOLDscreen's 24" display is designed to provide maximum field of view when sited at the rear of a 60cm bore and viewed via headcoil mounted mirrors.

An adjustable tripod is supplied as standard, and other stands and mounting options are available to suit your needs.

The power supply is MR Conditional, and can be installed within the scanner room. The fibre optic DVI video cable passes through the waveguide, to your computer in the control room.

BOLDscreen 24 can be used in conjunction with equipment from various other manufacturers, and integrates neatly with the eye tracker, audio system, response boxes and our other *Made for fMRI* accessories.

Display characteristics

24" 1920 x 1200 full colour H-IPS LCD with fixed 60Hz frame rate.
Native 8-bit colour resolution, true colour 16.7 million display.
Light output is synchronous to the input video signal.
Digital DVI video input delivers high fidelity noise-free displays.
Super bright LED matrix backlight, peak white up to 800cd.m^{-2}
Typical contrast ratio 1000:1
Typical spatial uniformity 2% over central 75% of display area.
Typical grey-to-grey response time 5ms.
Normal switching frequency of the backlight is 75kHz.
Automatic compensation of brightness for temperature and ageing.
Image can be flipped to correct for viewing via a mirror.

No interference with scan

BOLDscreen has no observed effect on functional and structural MRI scans at 3T, even when located directly at the exit of the scanner bore, and there's no effect on the displayed image whilst scanning.

Other BOLDscreen models

- BOLDscreen 32
  premium 32" 120Hz display for fMRI up to 7T
- Display++
  32" desktop LCD display with equivalent characteristics to BOLDscreen 32, suitable for subject training in mock scanners (not MR-Safe)

Why choose BOLDscreen?

Visit our website to learn more about the attention to detail that sets BOLDscreen apart:

- Frequently Asked Questions
- Installed sites & customer testimonials
- Full specification & explanation of unique features
- Safety and emissions standards
- RF spike test & EPI test data
- Installation details & mounting options
- Integration with other equipment

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