

MR Safe 32" LCD Display



BOLDscreen 32

MR Safe LCD display for 3T & 7T fMRI

We have engineered our BOLDscreen displays 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 32 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.



www.crsLtd.com/boldscreen32

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BOLDscreen 32

→ Superior image quality

BOLDscreen 32 can be driven just like the LCD monitor on your desk, with standard software tools.

However, unlike other monitors, BOLDscreen 32's custom electronics deliver your stimulus direct to the screen - output is lag free and synchronous to the input video signal. The dual-link DVI input will synchronise to a 1920x1080 @ 120Hz video signal and will output video at the same rate.

The high resolution 32" IPS panel with native 10-bit RGB colour resolution has a stunning static contrast ratio of 1400:1 and a fast 5ms grey-to-grey response time.

To achieve the image quality required for scientific visual stimulation, we illuminate the panel with a custom scanning LED backlight. This produces highly saturated chromatic displays and a peak white output at up to 350cd.m⁻². Built-in real-time calibration ensures consistent luminance immediately from switch on, and automatically compensates for the usual drifts in brightness due to temperature changes and ageing.

→ No interference with scan

BOLDscreen 32 has no observed effect on functional and structural MRI scans at 3T & 7T, even when located directly at the exit of the scanner bore, and no effect on the displayed image whilst scanning.

Display characteristics

32" 1920 x 1080 full colour IPS LCD with 120Hz panel drive.

Native 10-bit colour resolution.

Light output is synchronous to the input video signal.

Digital DVI video input delivers high fidelity noise-free displays.

Custom scanning LED backlight, peak white up to 350cd.m⁻²

Static contrast ratio of 1400:1
(measured with the backlight on; [1 1 1]:[0 0 0] RGB contrast ratio)

Typical grey-to-grey response time 5ms.

Automatic compensation of brightness for temperature and ageing.

Image can be flipped to correct for viewing via a mirror.

→ Easy to install & integrate

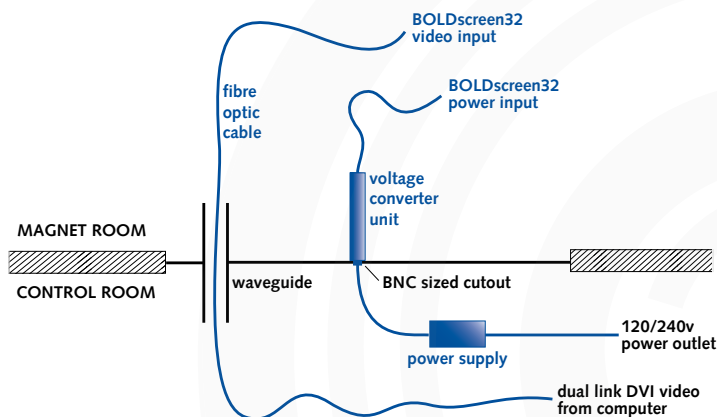
BOLDscreen 32's display is designed to provide maximum field of view when sited at the rear of a 70cm bore and viewed via headcoil mounted mirrors.

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

The fibre optic DVI video cable passes through the waveguide, to your computer in the control room, and power is supplied via the filter panel.

BOLDscreen 32 can be used in conjunction with equipment from various other manufacturers, and integrates neatly with our eye tracker, audio system, response boxes and other *Made for fMRI* accessories.

BOLDscreen32 Cable Installation via RF Filter Panel



→ Other BOLDscreen models

- BOLDscreen 24
calibrated 24" display for fMRI up to 3T
- Display++
32" desktop LCD display with equivalent characteristics to BOLDscreen 32, suitable for subject training in mock scanners (not MR-Safe)

Cambridge Research Systems

Tel: +44 1634 720707

USA/Canada Toll Free: 1 866 846 2929

Email: enquiries@crsltd.com

www.crsltd.com

For more details:

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