



# f-100 Complete Solution for fMRI



MRI CONDITIONAL  
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f-100 FMRI System



ISO 13485:2016

## fMRI Hardware

Our hardware portfolio consists of equipment designed for functional magnetic resonance imaging. We offer a complete hardware package for clinical fMRI and a modular solution for research purposes. Our hardware is compatible with MRI scanners from all major vendors and uses standardized interface adaptors for audio and visual input.



## MRI LED Monitor

### Multipurpose Usage

This brand new, stunning 32" HD MRI LED monitor was designed to provide an optimal MRI compatible monitor that satisfies the needs of both clinical and advanced scientific applications.

### Optimal Design

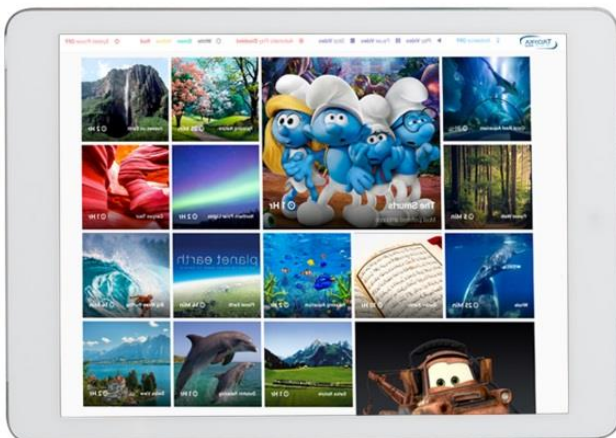
With its slim design, high definition display and superior image quality, the MRI LED Monitor is an optimal choice for an easy to use alternative to conventional projectors or goggle-based image delivery systems in MRI room.

### Flexible Positioning

The low weight and height adjustable mobile foot stand allow easy positioning of the monitor anywhere in the MRI room. The monitor can also be wall mounted.

### Patient Entertainment System

A wireless tablet with the real-time media integration playback offers patient amazing experience during the scan. The entertainment software includes over 250 animation, videos and images that patient can choose to watch during the MRI scan. Once the patient chooses the video, the video is transmitted through the wireless communication network to the monitor and the audio signal goes to the MRI sound system for the complete patient experience.



## MRI Audio System

The headphones give a superb sound, replicating even minute details with incredible precision, thanks to the electrostatic transducers. The device significantly reduces scanner noise, allowing undisturbed patient communication during stimuli presentation.

### Slim Headphone

The slim headphone, fits perfectly even in a 32-channel head coil. The headphone provides approximately 24 dB noise isolation.

### Designed for fMRI – Suited Clinical Use

Designed specifically for fMRI, the superior sound quality and increased noise isolation provide a more precise audio stimulation to the patient, which yields a more robust BOLD response than traditional. Designed with reliability and durability in mind, the headphones are incredibly robust and suited for daily use in a busy clinical environment.

### Communication Console

Through easy and accessible controls, the Communication Console offers one-way patient communication and full flexibility of audio settings. Thanks to its two input channels, it allows connecting a wide variety of audio devices through 3,5 mm mini jack and 6 mm jack. There are two speakers on the amplifier which allows the technicians to hear the sound/music given to the patient. Patient headphone sound level and technician room's sound level can be controlled separately and simultaneously. There is a MUTE circuit in the amplifier to stop the music automatically and allow the patient to hear the technician's instructions given via microphone when the technician turns the microphone on. MRI computer can be connected to the sound amplifier which provides the patient listen to the MRI auto voice commands and after the auto voice commands music continues to play.



## Fiber-Optic Response Buttons

Developed for clinical and research use the response buttons are an MRI compatible subject response. Ergonomically designed for use in either hand and for minimizing patient movement inside the scanner, it is suitable for a wide range of experimental paradigms. We offer a large variety of response buttons especially for your requirements

The FMRI response pad is the perfect choice for computer response tasks used in the human brain mapping project. It is non-magnetic, non-electronic, and entirely made of the plastic, so will not add noise to the images or raise safety concerns in the MR/MEG room or similarly demanding environments.



## Synbox – The Synchronization Unit

The interface unit provides real-time feedback on subject responses via USB connection for PC. The Synbox is high feature package for subject response in fMRI. It's really easy to use. Attach the handheld to the interface and the computer USB cable and it is ready to get responses. There are two trigger inputs (optical and TTL) for syncing your computer with the scanner.



The opto-electronic interface receives optical signals from the handheld devices in the MR suite, and converts them into electronic signals for the computer.

### Features

- Auto-gain adapts to changing configurations and devices
- Supports devices with 4 button
- Faster-for better timing, improved responsiveness
- Internal programs (firmware) are locally upgradable through the USB connection

