THE MIND INSTITUTE

The MIND Input Device

The Solution for Subject-Response Testing in a Magnetic Environment

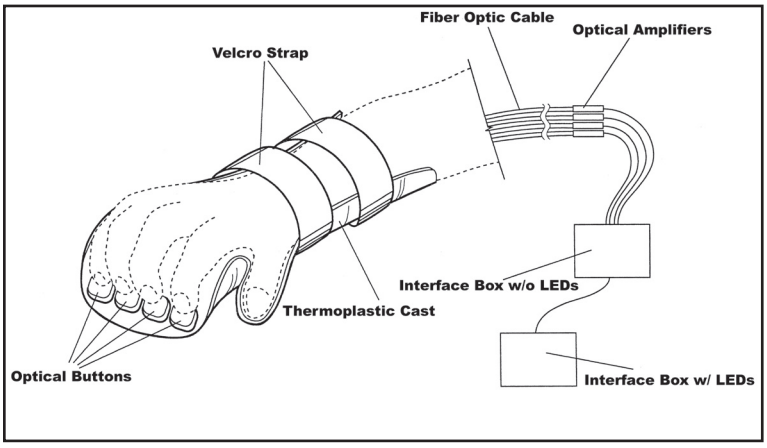
Collecting subject responses in a magnetic environment is a challenge. The device used must be completely non-magnetic and preferably non-metallic to reduce unwanted signal noise that would need to be removed by expensive RF (radio frequency) filters. It must be easy to use, while keeping the fingers comfortably positioned on the response buttons. In short, it must be comfortable, robust and reliable.

The MIND Input Device (patent # 7,039,266) is specifically designed for use in an fMRI (functional magnetic resonance imaging) or MEG (magnetoencephalography) environment. It is a complete system with response cast, optical amplifiers, and interface boxes.

The response cast consists of 100-percent plastic and fiber-optic parts, making it magnetically and RF inert. Five optical buttons are attached to a thermoplastic cast that is secured to the forearm by a Velcro strap. An optical cable connects the cast to amplifiers placed outside of the magnet room, keeping the MRI/MEG data free of any artifact.

Designed and used at The MIND Institute, one of the nation's premier neuroscience research facilities, the device is currently in service at the Center for Magnetic Resonance Research at the University of Minnesota, Martinos Center for Biomedical Imaging at Massachusetts General Hospital, and the Mental Health Clinical Research Center at the University of Iowa.

- LEDs provide instant visual feedback to the experimenter to ensure that the subject is responding correctly
- Compatible with E-Prime®, MEL Professional, NBS Presentation®, and other leading stimulus-delivery software packages
- Compatible with external data-acquisition systems like PowerLab®, BioPac, LabVIEW, etc.
- Additional specifications available at www.themindinstitute.org



MRI-compatible/MRI-safe

For fMRI and MEG applications

Non-magnetic

Non-metallic

No RF interference

No costly RF filters needed

Highly compatible

Easy to use

Comfortable

Practical

Robust

Reliable

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