

## fMRI Optical Response Keypad

### System Description:

LUMItouch is a hand held fiber optic patient response system designed specifically for use in functional Magnetic Resonance Imaging and similar environments. The system consists of metal free keypads connected via fiber optic cable to an opto-electronic controller unit.

The response keypads and cabling are fabricated from 100% plastic materials and therefore do not cause electromagnetic interference.

This feature is critical for use in MRI environments where normal electro-mechanical switches with conductor wiring will interfere with or damage the sensitive scanning head.

### Controller Interface:

- Compatible with PC or MAC
- Functionally equivalent to a keyboard
- PS/2 keyboard interface
- USB interface
- Serial RS-232 and TTL interface
- TTL Triggers input from a scanner

### Supported Software:

- Presentation
- E-Prime
- Psyscope
- Others

#### Legend:

- Only optical signals & non conductive materials
- Electrical signals, metallic components



Technical Data	
<b>Optical Keypads</b>	
Response keypads have 2,4 or 5 keys each. Maximum 2 keypads per controller. Both left hand and right hand versions available.	
Dimensions	210x110x40mm (8.5"x4.5"x1.5")
Fiber optic port	10 position fiber optic connector fits through 25m m (1") hole
Standard cable length	15m (45'), custom lengths available
<b>Opto-electronic Controller</b>	
Maps keypad keys to characters-similar to the function of a keyboard.	
Supply voltage	12VDC (adapter included)
Current consumption	500mA
Response time	1.2 ms
Dimensions	38x180x135mm (1.5"x7"x5.3")

