S2 system

advanced **fMRI** platform

Make Science **Better**

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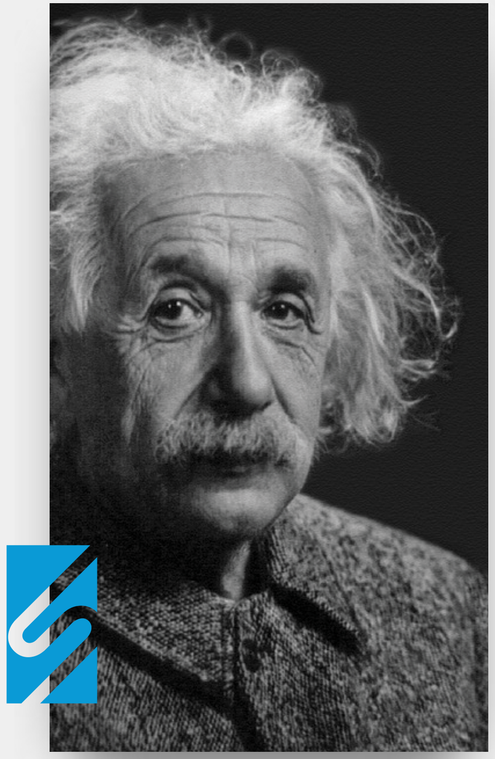

“Everything should be made as simple as possible, but not simpler”

Albert Einstein

Main
features

Wireless devices
comfort for patients and flexibility

Multi-seat control S2 app
convenient control of experiments

Reliable
robust and durable components applied

Main
features

Modular
easy to develope - ready for challenges

Easy develop
only one fibre optic

Wireless device

Our pioneering solution of MR-safe wireless transmission of data opens new possibilities in design of **fMRI** devices. We deliver not only two models of multi-button wireless response pads for examining paradigms based on finger taping but also tailor-made solutions to fit customer specific requirements. Patient comfort as well as easy installation and maintenance is the result of the device being wireless.

Easy instalation

The installation is fast thanks to compact design as well as the minimum wiring. The system does not make the lab look chaotic. Regardless of the number of external devices use, the communication between the operator and the Faraday's cage takes place via one fabric optic only

Reliable

We aim at offering extremely reliable products, thus only trustworthy components and solutions are used. As a result, **S2 System** offers a very extreme solid construction *(CNC machined aluminum enclosures, high endurance push-buttons)* and includes a range of protections against external factors.

Multi-seat control S2 app

S2 system is controlled by the user friendly S2 app that can be installed on PC or tablet and can be developed alongside lab's **fMRI** set. Multiple devices can be added and controlled with the same application. The S2 app enables the intuitive adjustment of key values, developed filters of triggers and real time simultaneous monitoring of experiment from multiple workstations

Modular

S2 is designed as a modular and flexible system. Universal interface, built in docking stations, as well as wavebands provide a wide range of possibilities for future development. Consequently, development of custom-made **fMRI** devices can be easily started and implemented.

Wireless **Response Pad**

7 Maximum number of devices in them

2 Advised minimum number of devices in the system

Symetrical enclosure enables left and right hand use.

2 buttons with durability over 5 million strokes.

Wireless devices provide increased comfort for patients and freedom of movement.

Charging and synchronizing stands are placed in Faraday's cage, however charging with a standard USB power source is also possible.

Buttons coded with **four colours.**

Minimum 8 hours of work in MRI enviornment without charging guarantees more flexible use.

4 indicator LEDs make monitoring and maintenance of the device easier.

Possibility of **adjusting the device to a thigh** with a special neoprene pocket fastened with Velcro.

Ergo Pad

7 Maximum number of devices in the system

2 Adviced minimum number of devices in the system

Symetrical enclosure enables left and right hand use.

Construction based on **reliable, low stroke and low force micro-switches.**

4 buttons allow formulating paradigms that demand more complex finger tapping responses.

Ergonomic design enables sure and comfortable grip as well as longer experiments.

Possibility of **adjusting the device to a hand with a leash.**

Optimal size adjusted for biggest possible group of potential of subjects.

Minimum 8 hours of work in MRI enviornment without charging means more flexible use.

Wireless devices provide increased comfort for patients and freedom of movement.

4 indicator LEDs make the device monitoring and maintenance easier.

Charging and synchronizing stands are placed in Faraday's cage but charging with a standard USB power source is also possible.

fMRI **MIDI**

8 **Minimum 8 hours without charging**

2 **Full size octaves (163 mm)**

Wireless devices guarantee
increased comfort for patients and freedom of movement.

Ergonomic design
enables a sure and comfortable grip.

Optimal size
adjusted for all known MRI scanners.

4 indicator LEDs
for easy monitoring and maintenance of the device.

Reliable construction
and MRI compatibility tested materials.

25 Keys with fMRI compatible springs for real keyboard touch stroke and force.

Charging
with a USB power source inside or outside Faraday's cage.

4 threaded holes at the bottom for different fixing possibilities.

About the company

The goal of SMIT-Lab is to deliver innovative, turnkey engineering solutions with a scientific approach.

We focus on improving efficiency and quality within every aspect of life by using design, the newest technologies, innovative thinking as well as deep down knowledge.

We follow modern day trends and offer solutions that reflect real needs, problems and queries.

We simplify life by creating electronics and mechanics.

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