LIGHTWEIGHT & WIRELESS

Small light-weight amplifier for high quality recordings and accompanying mobile app for real-time brain activity monitoring, out of the lab, in real life.

Scientists can set it up on PC or Smartphone in just a few minutes and walk it out of their labs. Acquired EEG data are readily available in MATLAB & EEGLAB

Lighter than 60g
81x52x12 mm
Light and Compact

250-500Hz sampling
0-133Hz flat frequency response
High Signal quality

24ch Recording cap
Customizable
and Comfortable

3D built-in gyroscope
For recording
head motion

Bluetooth 10m range
Wireless
recordings

up to 5 hours recordings
Long
battery life

smarting

We bring convenience and simplicity to complex research experiments.

Contact us:
info@mbraintrain.com
www.mbraintrain.com

mbt | mBrain Train

SMART, RELIABLE, SIMPLE

SMARTING

The first truly mobile EEG device for recording brain activity in an unrestricted environment.

SMARTING streamer is easily synchronized with other sensors, with no need for any additional hardware. This is allowed by fully integrated LabStreamLayer (LSL) support.

High signal quality

Submillisecond time precision

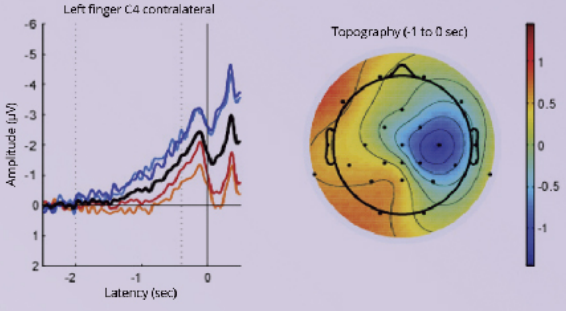
Easy to use mobile app

USING
SMARTING
ON MOBILE

In addition to full mobility, Smarting Android app maintains high signal quality and synchronization, while integrating mobile phone features in your experiments.

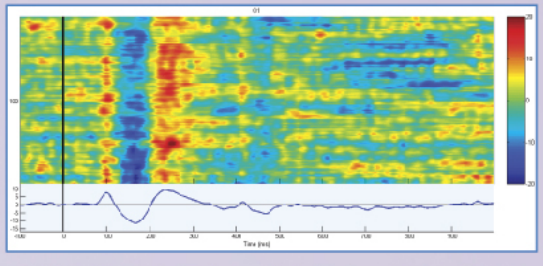
It enables signal recording & visualization, precise triggering information and manual inserting of event markers. We also provide the SDK and easy third party software integration

Other cell-phone data (GPS and accelerometer) are also available to enable wider scope of experiments.



Readiness Potential recorded with Smarting App

Consistent Event Related Potential among different trials (the amplitude is color-coded and 200 trials are aligned on the Y-axis) testify to the millisecond precision of the recordings.



Visual Detection Task recorded with Smaring App

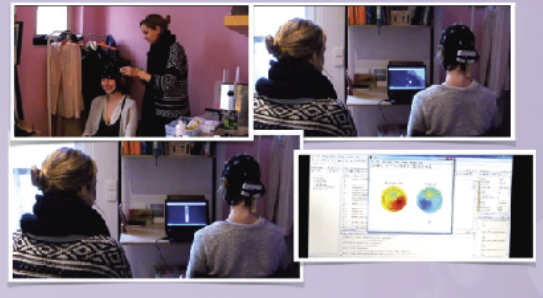
USE CASES
IN SCIENTIFIC LABS

NEURO-REHABILITATION

STUDY SUMMARY:

The study performed in Oldenburg University tracked changes in the motor cortex activity, for the possible after-stroke rehabilitation treatment. Subjects played a computer game that targeted specific motor-cortex areas to increase their activity.

DOI:10.1109/SMC.2015.552



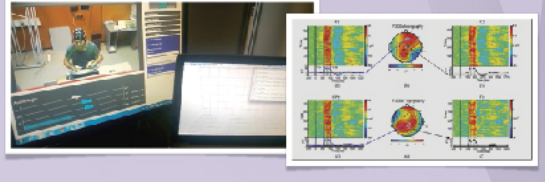
NEURO-ERGONOMICS

STUDY SUMMARY:

The study monitored attention via the P300 amplitude analysis during the 2 hour long recording in a replicated factory workplace.

SMARTING recordings were synchronously coupled with LeapMotion, Kinect, temperature recordings, etc.

DOI: 10.3389/fnhum.2016.00171
10.1080/00140139.2016.1142121



SPORT MEDICINE

STUDY 1 SUMMARY:

German professional dart Bundesliga players were recorded to understand how one player influences the other. SMARTING is used simultaneously with Eye Tracker from SMI, that recorded their gaze and where exactly were they looking.

Visit mBrainTrain YouTube channel for video.

STUDY 2 SUMMARY:

What is the cognitive load while biking in a free environment? The participants were asked to perform a three-class outdoor oddball task, while peddling on a fixed bike or riding through the KU Leuven campus.

DOI: 10.1088/1741-2560/13/4/046017