**fNIR IMAGER SYSTEMS**

- Real-time information about changes in oxy-Hb and deoxy-Hb concentration
- Easy setup! Comfortable to wear for prolonged periods!

### Continuous Wave fNIR Spectroscopy

- Affordable, Portable Cognitive Assessment

### Complete Optical Brain Imaging Solutions

- Hemodynamic response & neural activity in the prefrontal cortex
- Wired or new Wireless Systems
- Real-time oxy-Hb, deoxy-Hb, and raw data values
- Adult, Pediatric, or Split-Placement Sensors
- Record simultaneous EEG
- Synchronize with physiological variables — add a BIOPAC Research System for ECG, RESP, dZ/dt, BP, EDA, etc.
- Record EEG data and fNIR data at the same time — works with wireless BioNomadix EEG, wireless B-Alert X10, and more!
- fNIRSoft standalone software — record, process, analyze and visualize fNIR signals
- Trigger Acquisition & Record Digital Triggers

### NEUROSPEC Research Neurosciences

**Wired & Wireless Solutions**

- Easy Setup ... Comfortable ... Noninvasive

**WWW.NEUROSPEC.COM**
fNIR technology measures hemodynamic response and neural activity of human subjects and empowers researchers by providing greater flexibility for study design, including working within complex lab environments and operating in non-traditional lab locations for field studies.

Subjects wear an fNIR sensor on the forehead that detects oxygen levels and provides real-time values for oxy-hemoglobin and deoxygenated hemoglobin. It provides a continuous and real-time display of the oxygen changes as the subject performs different tasks. Each subject can sit in a front of a computer and take a test or perform mobile tasks.

fNIR imaging systems measure oxygen level changes in the prefrontal cortex of human subjects. Each fNIR system provides real-time monitoring of tissue oxygenation in the brain as subjects perform tasks, take portraits, or receive stimulation that allows researchers to quantitatively assess brain functions—such as attention, memory, planning, and problem-solving—while individuals perform cognitive tasks.

Most studies have been published for a wide range of applications, including Brain Computer Interface, Human Performance, Neuroimaging, and Pain/Pressure Pain research.

Synchronize with fNIR Soft and AcqKnowledge. The fNIR Soft is a BNC trigger output that sends TTL pulses, at the beginning and end of baseline, and at the beginning and end of a recording session.

Use the MP160 System with a wide array of amplifiers and transducers, including wireless BioNomadix. AcqKnowledge performs automated analysis tools for ERP, ensemble averaging, and more!

New Sensor Design! Comfortable, replaceable adult sensor pad connects to Imager via durable transmission cable.

fNIRSoft Pro includes in fNIR400A or as upgrade fNIRSoft-Pro-U

fNIR Soft STAND-ALONE SOFTWARE

Use fNIRSoft (fS) to record, process, analyze and visualize functional near infrared (fNIR) spectroscopy signals. Easy to use GUI and wizard style tools for...

Temporal Visualization

Time Series Analysis

Data Management

Scanning Engine

Signal Analysis

fS Viewer: Temporal Visualization and Time Series Analysis Tools

- Temporal visualization of fNIR Data
- Customizable display graphs by data type (event/time/area/wavelength, sensor geometry, time period and multiple color palettes
- User interface for time series data analysis
- Graph and export options (simple and customizable)
- Automatic and user-selectable co-registration of all event markers (frame-by-frame video)
- Event related and epoch analysis with customizable block definitions

fS Viewer: Topograph Tool

- Spatial visualization of fNIR Data
- Pro Brain mapping and visualization over brain surface image
- Pro Leffingwill’s analysis with thresholding, animation (temporal changes) or group/subject/condition average
- Pro Export visualization time-based for animation, threshold-based for evaluation

fS Scripting Engine: Built-in Command Line Interface

- fS Scripting Language (functional and data-oriented)
- Editor with syntax highlighting and quick access tools for command line and text editor
- History of commands and log operations in command pane (save for future reference)
- Store procedures in script and re-apply procedures to previously saved data files

fS Data Management: Import and Export Data Tools

- Select and export time-series data in various formats through a wizard style tool
- Export customizable template, export various types of text data through a wizard
- Save/Share data in native binary format

fS Signal Analysis: Data Processing Tools

- Apply Spatial Processing actions (Average/Feature Extraction/Signal Conditioning)
- Apply Spatial Processing actions (Average/Feature Extraction/Signal Conditioning)
- Apply Call-by-call Processing actions (Average/Feature Conditioning)
- Apply common statistical comparison and correlation
- Apply advanced Modified Beer Lambert Law

Buy Today!