CGX *A Cognionics Company*

in partnership with

BRAIN VISION
Solutions for neurophysiological research

Quick-20r

MAY 2020 PRODUCT OVERVIEW

CGX. The leader in mobile EEG Solutions for real-world neurophysiological monitoring.

Quick-20r Headset

Fully redesigned wireless headset.

The CGX Quick Series is well regarded for generating research-level data from our active dry and semi-dry polymer electrodes. Our new Quick-20r features electrical, mechanical and structural enhancements for faster set-up, extended wear time, enhanced reliability, and artifact immunity.

Quick Series Headsets

Quick-20r
8 or 20 Channel Systems.

- EEG amplifier and wireless electronics integrated into headset.
- Flexible composite arms create good contact between the sensors and head.
- Fits adolescents through adults. Child-size available.
- Includes one additional ExG lead for ECG, EMG, and EOG.
- 6 hours of uninterrupted data gathering.
- Standard 10-20 montage.
- Multi-modal physiological recording (ExG, GSR, SpO2, Temperature, and Respiration) with AIM Physiological Monitor.
- Multi-input (digital, light, sound) triggering with new Wireless StimTrigger.

Fully mobile, fully wireless.
3 Minute setup.

- Put headset on subject
- Check impedance map (software included)
- Adjust sensors — if required — for comfort and contact
- Begin wireless data acquisition

Quick Series Dry Headsets

Technical Overview

Wireless Amplifier
A/D Resolution: 24-bit simultaneous sampling analog-to-digital converters.
Sampling rate: 500 samples per second.
Bandwidth: 0-131 Hz with true DC coupling.
3-axis accelerometer measures head motion.
Wireless Range: 10 meters.
Noise: <1.0 μV RMS from 1-50 Hz, shorted inputs.
Compatible with optional CGX Wireless StimTrigger.
Compatible with optional AIM Physiological Monitor

Sensors
Active electrodes and active shielding for highest signal quality.
Choose Drypad, Flex, or HydroFlex sensors at any position.

Data Stream
Bluetooth Low Energy.
Full access to raw data via real-time streaming API.
Continuous impedance check with real-time monitoring of all channels simultaneous with EEG.
Export data to BDF, EDF, or CSV.
Compatible with NeuroPype, LabStreaming Layer, EEGLAB, BCILAB, MATLAB, BCI2000, OpenViBE, Neuroguide and more.
Open API allows you to build your own applications.

Power
Two AAA batteries: 6 hours

Cleaning
Hand wipe between sessions

General
Weight: 596g in use
Fits heads sized 52-62 cm
Dimensions: 20 x 18 x 19 cm

Available Systems

Quick-8r
Quick-20r Headset with 8 hot positions (including 1 ExG Channel)
Bluetooth Low Energy Dongle
10 Drypad Sensors
10 Drypad Ear Sensors
10 Flex Sensors
10 HydroFlex Sensors
A1 Earclip
A2 Earclip
3 Active Lead Wires
2 Passive Lead Wires
30 Skintact Sensors
5 Alcohol Wipes
4 Rechargeable AAA Batteries
Battery Charger
Carrying Case
3 Year Warranty

Quick-20r
Quick-20r Headset (including 1 ExG Channel)
Bluetooth Low Energy Dongle
20 Drypad Sensors
10 Drypad Ear Sensors
40 Flex Sensors
20 HydroFlex Sensors
A1 Earclip
A2 Earclip
3 Active Lead Wires
2 Passive Lead Wires
30 Skintact Sensors
5 Alcohol Wipes
4 Rechargeable AAA Batteries
Battery Charger
Carrying Case
3 Year Warranty

Quick-30 Dry Headset

The industry-leader in signal quality.

Designed for researchers requiring the highest signal quality in a standard 10-20 montage. The Quick-30 (v 3.0) incorporates a host of mechanical and structural enhancements for faster set-up and significantly increased durability and wear-time.

Quick-30

- EEG amplifier and wireless electronics integrated into headset.
- Flexible composite arms create good contact between the sensors and head.
- Fits adolescents through adults
- Use the systems in wireless mode, and capture data on-board with a built-in SD card.
- Up to16 hours of uninterrupted data gathering in SD mode.
- Add up to 2 additional ExG leads.
- Millisecond precise event synchronization with optional Wireless StimTrigger.
- Multi-modal physiological recording (ExG, GSR, SpO2, Temperature, and Respiration) with optional AIM Physiological Monitor.

All Quick Series headsets are fully mobile.

Quick Series Dry Headsets

Technical Overview

Wireless Amplifier
A/D Resolution: 24-bit simultaneous sampling analog-to-digital converters.
Sampling rate 500 or 1,000 samples per second.
Bandwidth 0-131 or 262 Hz (depending on sampling rate), with true DC coupling.
Storage through microSD and microSDHC.
3-axis accelerometer measures head motion.
Wireless Range: 10 meters.
Noise: <1.0 µV RMS from 1-50 Hz, shorted inputs.
Compatible with optional CGX Wireless StimTrigger.
Compatible with optional AIM Physiological Monitor.

Sensors
Active electrodes and active shielding for highest signal quality.
Choose Drypad, Flex, or HydroFlex sensors at any position.

Power
Bluetooth.
On-board SD card.
Full access to raw data via real-time streaming API.
Continuous impedance check with real-time monitoring of all channels simultaneous with EEG.
Export data to BDF, EDF, or CSV.
Compatible with NeuroPype, LabStreaming Layer, EEGLAB, BCILAB, MATLAB, BCI2000, OpenViBE, Neuroguide and more.
Open API allows you to build your own applications.

Power
Lithium-ion: 8 hours wireless, 16 hours with microSD card

Cleaning
Hand wipe between sessions.

General
Weight: 610 grams
Fits heads sized 52-62 cm

Available Systems

Quick-30
Quick-30 (V 3.0) Headset plus 2 ExG Channels with Optional Module
Bluetooth Dongle
30 Drypad Sensors
60 Flex Sensors
30 HydroFlex Sensors
3 Earclips
3 Lead Wires
20 Extenders
5 Alcohol Wipes
4 Lithium-ion Batteries
2 Chargers
Carrying Case
3 Year Warranty

Dev Kit

Versatile Development Kit

The Dev Kit includes everything you need to undertake EEG experiments and custom hardware development: a 32-channel amplifier, inputs for CGX dry electrodes ExG's, and a headband for mounting dry electrodes.

Dev Kit

Up to 32 Channel System

- Soft, washable fabric band with reinforced polymers for a snug, artifact-resistant fit.
- Standalone Amp (data acquisition unit) attaches to headband, stores data on an SD card, or streams via Bluetooth low energy.
- Up to 16 hours of battery life.
- Configure loose lead lines to meet your experimentation needs.
- Compatible with CGX sensors.

Use with

- AurisDK In-Ear EEG sensor

Headband holds up to 8 active, shielded dry electrode pods.

Dev Kit

Technical Overview

Wireless Amplifier
A/D Resolution: 24-bit simultaneous sampling analog-to-digital converters.
Sampling rate 500 or 1,000 samples per second.
Bandwidth 0-131 or 262 Hz (depending on sampling rate), with true DC coupling.
3-axis accelerometer measures head motion.
Wireless Range: 10 meters.
Noise: <1.0 µV RMS from 1-50 Hz, shorted inputs.
Compatible with optional CGX Wireless StimTrigger.
Compatible with optional AIM Physiological Monitor.

Data Stream
Bluetooth Low Energy.
On-board SD card.
Full access to raw data via real-time streaming API.
Continuous impedance check with real-time monitoring of all channels simultaneous with EEG.
Export data to BDF, EDF, or CSV.
Compatible with NeuroPype, LabStreaming Layer, EEGLAB, BCILAB, MATLAB, BCI2000, OpenViBE, and more.

Power
Lithium-ion: 8 hour wireless, 16 hours with microSD card.

General
Weight: 100 grams
Dimensions: 89 x 70 x 23 mm

Included

Dev Kit
32-Channel Compact Amplifier
Lead Wire Adaptor (for use with CGX sensors)
Bluetooth Low Energy Dongle
Headband
10 Drypad Sensors
10 Flex Sensors
10 HydroFlex Sensors
10 Sensor Adaptors
30 Skintact Sensors
10 3.5mm Cables
9 Active Pods
1 Ground Pod
USB Charging Cable
Wall Charger
Carrying Case
3 Year Warranty

AurisDK
3 Auris Earbuds With Lead Wires 100 Disposable HydroFlex Earbud Sensors

Auris Earbuds

Unique in-ear EEG for researchers. Comfortable and light-weight with excellent signal quality. Plugs into a single channel on the Dev Kit.

AurisDK *Dev Kit Accessory*

- Stays in place during motion
- Kit includes 100 disposable HydroFlex Earbud Sensors
- Replacement sensors available

AIM Physiological Monitor

Combine mobile EEG with advanced physiological monitoring.

Everything you need to measure physiological response. The AIM Physiological Monitor is a compact, sophisticated unit that adds heart rate, temperature, respiration, GSR, PPG/HRV/SpO2 and more to any EEG system.

AIM Physiological Monitor
Physiological accessory

- Stream wirelessly via Bluetooth, or write to an SD Card.
- Bundled with our proprietary physiological sensors.
- Compact design clips onto belt, or sits on surface.
- 6 hours of battery life.

Sensors

PPG/HRV/SpO2

GSR

Auto-switching ExG

Temperature

Respiration

3rd Party Sensors

Use with any CGX Headset

Attach to armband. Leads stay neat and organized.

Aim Physiological Monitor

Technical Overview

Wireless Amplifier
A/D Resolution: 24-bit simultaneous sampling analog-to-digital converters.
Sampling rate 500 samples per second.
Bandwidth 0-131 Hz with true DC coupling.
Storage through microSD and microSDHC.
3-axis accelerometer measures head motion.
Wireless Range: 10 meters.
Noise: <1.0 µV RMS from 1-50 Hz, shorted inputs.
Compatible with optional CGX Wireless StimTrigger.

Sensors
4-Channel auto-switching referential or bipolar ExG.
Bioimpedance-based respiration sensor.
PPG/HRV/SpO2.
12-bit solid state temperature.
GSR (EDA).
Third party sensing through 2 BIN-5, bipolar connectors with 5v analog inputs.

Data Stream
Export saved data in EEG or CSV (text).
LabStreaming real-time output.
Stream data using the simple API in C, C++, C#, Java, MATLAB or Python.
Open API allows you to build your own applications.

General
Battery Life: 4 hours wireless, 6 hours microSD
Weight: 130g

Included

AIM Physiological Monitor
AIM Wireless Amplifier
Bluetooth Dongle
8 Sensor Leads
Ground Lead
PPG/HRV/SpO2
GSR
Temperature Sensor
Respiration Sensor Set
30 ECG Electrodes
2 Lithium-ion Batteries
Charger
Carrying Case
3 Year Warranty

Wireless StimTrigger

Co-designed by Cedrus and CGX for sophisticated research projects.

Mark events precisely with this all-in-one wireless trigger. Connect to eye trackers and other recorders without the need for software or algorithmic timing compensation.

Wireless StimTrigger

- Accepts light sensors, audio sensors, RB-x40, microphone, and USB.
- m-pod signal mapping assigns any event marker to any output line.
- Wireless broadcasting sends information to a limitless number of in-range receiving systems for multi-subject group research.
- Compatible with virtually all popular triggering and stimulus presentation packages including E-Prime, Presentation, and more.

Works with all CGX systems.

Wireless StimTrigger

Technical Overview

Inputs
Four (4) light sensors (4th light sensor can be used for microphone)
Microphone for onset of vocal response
Audio in/out pass-through for auditory stimulus
Cedrus RB-x40 response pad
USB Input for event codes
External TTL input

Wireless Output
Resolution: 16-bit simultaneous Event Marker data
Timing and Latency: <2ms
Wireless Protocol: Proprietary 2.4 GHz
Wireless Range: 20 meters
Compatible with all CGX systems

Built-in Outputs
Direct TTL output
Audio in/out pass-through
Time-stamped output via USB
Configurable output
Compatible with over a dozen popular recording devices via Cedrus m-pods with support for up to 3 simultaneous m-pods

Power
Input: 100-240V AC, 50-60hz, 1.0-0.5A
Output: 9V DC, 2.0A

General
Weight: 525g
Dimensions: 17.5 x 13.5 x 6cm

Included

Wireless StimTrigger
Wireless StimTrigger
Two Light Sensors with Replacement Adhesives
Two 3.5mm Audio Cables
mini-USB Cable
Power Adapter
Carrying Case
Manual
1 Year Warranty

Computer With Stimulation Software | **Wireless StimTrigger** | **CGX Headset** | **Recording Computer**

Computer running E-Prime is wired to the StimTrigger with a USB cable.

Microphone and Light Sensor wired to StimTrigger.

StimTrigger sends trigger data to CGX headset using CGX's patented wireless protocol.

CGX headset combines EEG and trigger data into a single file, sending it wirelessly to the recording computer.

Warranty

Headsets And Devices

3 year warranty on manufacturing for headsets and devices. 1 year warranty on Wireless StimTrigger. Warranty is void if the device has been opened or tampered with.

Accessories

1 year warranty on manufacturing defects. 90 day warranty on lead wires and lead wire bundles.

Returns

All units returned to CGX for repair and assessment must have an RA number, issued by CGX. CGX will pay outbound shipping costs only.

Ship all returns with an RA number to:
CGX
Attn: Service
8445 Camino Santa Fe, #104
San Diego, CA 92121

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