Arc

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ARC EEG IS THE CULMINATION OF A DECADES-LONG COLLABORATION WITH OUR CUSTOMERS IN RESPONSE TO THE EVER-CHANGING NEEDS OF BRAIN MONITORING

We considered durability, study duration, data management, and improving your EEG workflow when we designed these rugged, drop-tested, and IP-22 water-resistant EEG solutions for you.

Arc Apollo+™

In-Hospital LTM, EMU, ICU, NICU, and At-Home Ambulatory EEG

Apollo+ amplifiers can be redeployed to meet diverse needs as patient volumes fluctuate.

- Capture 200+ hours of continuous EEG, with 72+ hours on a single charge of rechargeable lithium-ion batteries
- Compact and lightweight 32-channel and 64-channel amplifier configurations with large, clear labels and 10-20 patterns comply with Jasper and ACNS standards
- Add the durable, drop-tested Q-Video® Mobile 3 to capture synchronized HD video with automatic infrared activation, onboard battery, and onscreen video display
- The integrated cellular capacity of our rugged tablet PC provides remote or continuous monitoring with video EEG
- Capture clinically relevant events with continuous data acquisition, impedance checking, built-in programmable patient event buttons, and the Patient Event Switch.
- Never lose a paper patient event log again. The Patient Voice Event Microphone records voice diary entries in real-time, and synchronizes them with the EEG
- Use with Arc USB Photic Stimulator (1-60Hz)

Arc Essentia® EEG

Routine, Clinical, EMU, ICU, NICU, and Outpatient Clinical EEG

Essentia's unique design ensures high quality EEG signals, even in noisy environments. Its rugged hardware will withstand the use and abuse of real-life clinical practice.

- Record up to 32-channels with 7 active reference pairs and 250-2000 Hz storage rates
- Electrode continuity check and continuous impedance checking with LED indicators on the amplifier
- The Remote Input Box with color-coded, secure inputs and secure cable connectors ensures convenient setup, recording integrity, patient comfort, and amplifier protection
- Patients, caregivers, or family can mark clinical activity with the Patient Event Switch
- Use with Arc USB Photic Stimulator (1-60Hz), and USB oximetry sensor (available in select markets)
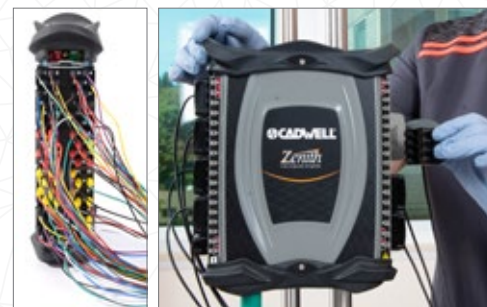
Arc Zenith™

High Channel Count Intracranial or Extracranial EEG with Integrated Direct Cortical Stimulation

Zenith is designed to simplify operational workflow, reduce the potential for error, and shorten setup and surgical time.

- Record up to 288 channels with 1MHz sampling with storage up to 8kHz
- Auto-generate montages and streamline input layout with auto input mapping
- Select any input as ground and any other input as the recording reference on any amplifier
- For functional mapping, use the software-controlled internal switch matrix for stimulation of any contact
- Zenect™ smart connectors are designed to save time and prevent human error, and are custom adapter compatible. Zenect ID chips maintain electrode mapping across inputs and between multiple amplifiers. This allows easy and rapid disconnection and reconnection of electrodes en mass with less potential for error.

Left: Without Zenect. Right: With Zenect.

CADWELL'S CART, COMPUTER, AND WALL-MOUNT OPTIONS ARE DESIGNED SPECIFICALLY FOR TECHNICIANS, PHYSICIANS, AND YOUR EEG ENVIRONMENTS

Our carts are purpose-built with enough options to meet your monitoring environment needs

- Height-adjustable worktops
- Customize your workstation with:
  - Articulating or flexible arms for amplifiers or the Arc photic stimulator
  - Baskets and bins for supplies and accessories
  - Fixed or retractable camera mounts
- Small cart footprints designed for tight spaces like the ICU or NICU

Wall Mount
- Compatible with Essentia, Apollo+ and Zenith amplifiers

Pole Cart
- Smaller footprint for ICU use
- A foldable keyboard tray and storage basket for supplies and accessories
- Mount a camera for video EEG

Fuzion Cart
- Lightweight and versatile
- Ideal for clinical practice with laptop, desktop, or all-in-one PC options
- Can accommodate a multi-modal system with Sierra® Summit™ EMG/EP/NCS/US

A3 Cart
- Space optimized without sacrificing functionality
- Designed to work with all Arc EEG systems and accessories
- Ergonomic flexibility with tilt and swivel monitor mount and adjustable height
- Add a telescopic camera pole to mount an HD camera and IR illuminator
- Upgrade from a flat worksurface to a worksurface with removeable supply drawer

ARC EEG SOFTWARE OFFERS SIMPLE OPERATION, EASY TO INTERPRET DATA, STREAMLINED ASSESSMENT TOOLS, AND A RICH REPORT GENERATOR
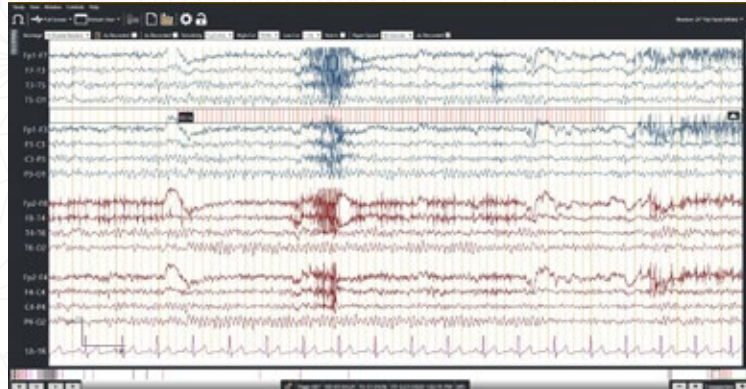
Completely integrated room automation allows you to customize your configurations of external hardware and third-party application triggering.

Arc software requires little training for new users, and helps you:

- Save critical time. Start a study with a single click and enter patent information later.
- Capture important information. Highlight videos, detect subtle movements, switch cameras, and add images to reports.
- Review in record time. Review and monitor live data simultaneously. Customize displays, auto-shade reviewed pages, and export just highlights. Quickly analyze EEG data frequency with automated FFT measurement tool.
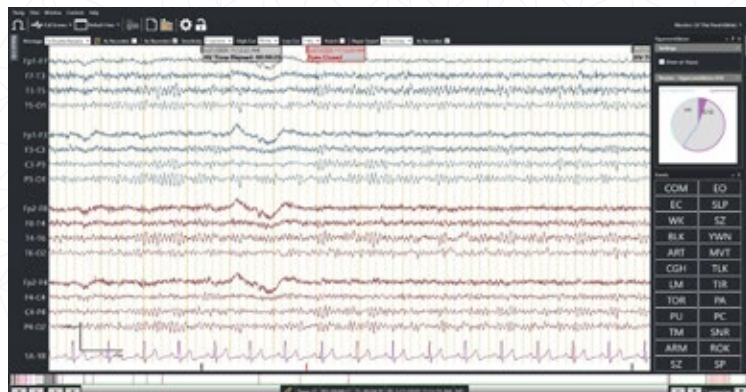
Arc EEG Software Features:

- Customize patient information fields
- Switch users without interrupting studies
- Set up user-specific study types, views, montages, windows, displays, hot keys, and event buttons
- Customize screen calibration to ensure appropriate display of EEG data regardless of monitor
- Align EEG traces
- Superimpose traces
- Customize report templates and create narratives quickly
- Import and review Easy® III EEG records
- Choose Persyst® for seizure detection or Synopsis
- Support specialized Laplacian montages
- Anonymize studies
- Export and share data with a universally compatible viewer
- ...and much more!

Routine EEG with Photic Stimulation

ICU Burst Suppression with Synopsis Trends

Routine Hyperventilation

Cortical Stimulation

Arc Sentinel™

SENTINEL GIVES YOU THE POWER TO REMOTELY MONITOR MULTIPLE PATIENTS FROM ONE COMPUTER

Ideal for nurses' stations and control rooms, Sentinel enables remote camera control, live video feed switching, Synopsis trends viewing, and alerts.

Sentinel with Synopsis Trends, patient events log, patient button notification, and video monitoring.

Arc Synopsis™

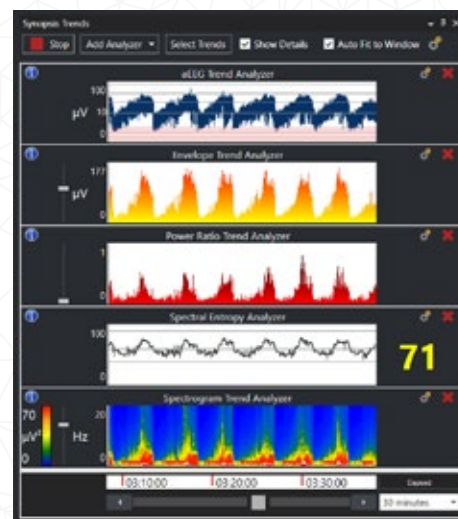## SYNOPSIS HELPS YOU RECOGNIZE KEY EVENTS IN EEG RECORDS

Analyze EEG data patterns and display trend information customized to each user's requirements. Identify, filter, and set parameters for AEEG, Alpha:Delta, Band Power, Amplitude Asymmetry, Envelope, Spectogram, and Spectral Entropy.

Trends Package

- Display customized trends based on each patient's unique requirements
- Modify trends on the fly from any Arc PC
- Save complete trends setups

Detection Package

- Trends Package included
- Detection Window enables adjustable threshold settings for ease of event identification and marking
- Seizure View can consolidate files automatically to show only marked data
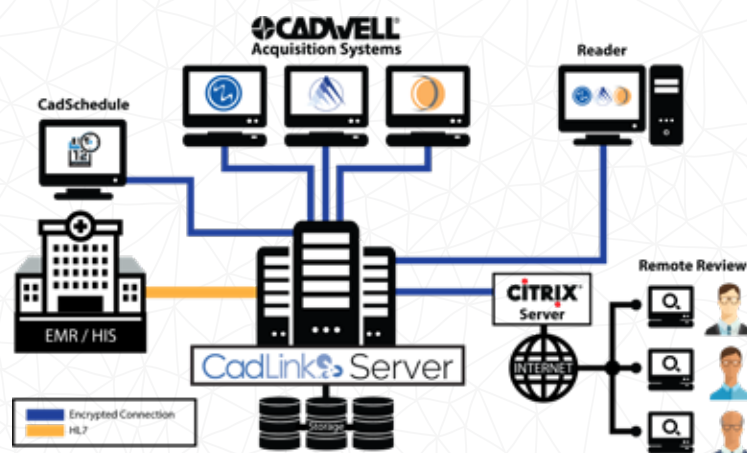

CadLink

CADLINK ENSURES CONTROLLED AND SECURE ACCESS TO STUDY DATA

- Integrate Arc EEG with your current technologies
- Remote EEG monitoring with fail-safe storing and streaming of clinical data
- Secure data and communication: Safe and HIPAA-compliant transferring of encrypted data
- Simple setup, with fast server and client updates that occur independently of EEG recording software

Options:

- CadSchedule: eliminates redundancy and error. Schedule tests, visits, patients, rooms and providers from any CadLink PC. Appointments auto-populate the Arc home screen
- HL7 Support lets you import patient information from HIS/EMR, and export results and reports back to the EMR
- Auto-Archiving saves data automatically according to predefined criteria to ensure that short-term storage never gets full

ROUTINE AND AMBULATORY EEG SOLUTIONS

Arc gives you a choice of solutions for routine adult and pediatric EEG: **Essentia** and **Apollo+**

- Essentia ensures high quality EEG signals, even in noisy environments. Its rugged and water-resistant design will withstand the use and abuse of real-life clinical practice. The compact Remote Input Headbox with secure cable connectors ensures convenient setup, recording integrity, and patient comfort.
- Apollo+ allows your patients the benefits of an ambulatory system: portable, lightweight, comfortable, and battery powered. Apollo+ now offers a 64-channel amplifier for routine studies.

AT-HOME AMBULATORY AND WI-FI ENABLED EEG

Apollo+ and **Q-Video Mobile 3** provide a compact and wearable ambulatory solution for at-home and remote EEG studies. Wi-Fi enabled EEG is available with Arc EEG software version 3.1 and higher.
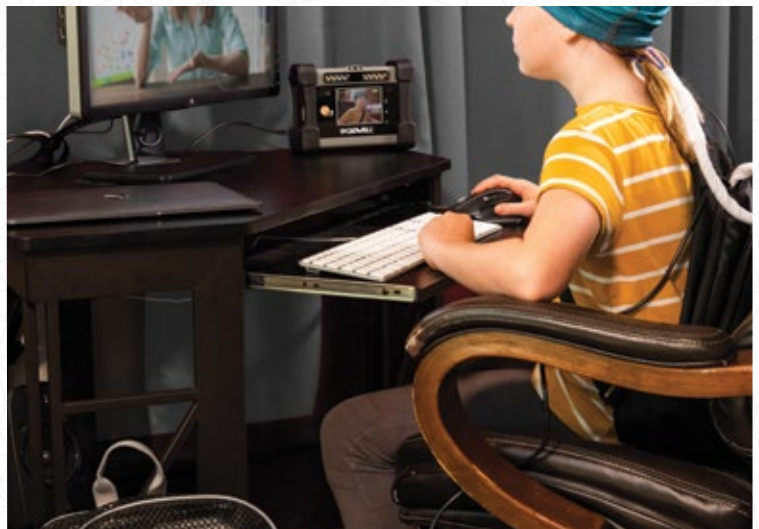
- Meet CPT code changes for intermittent and continuous monitoring.
- Take Apollo+ from clinical to ambulatory use with the durable and drop-tested Q-Video Mobile 3 camera with automatic infrared switching, onboard battery, and video display.
- Capture 72+ hours of uninterrupted battery-powered recording with no patient intervention. Batteries can trickle-charge at night for longer studies.
- Patients can move freely while wearing Apollo+ with continuous data acquisition and impedance checking.
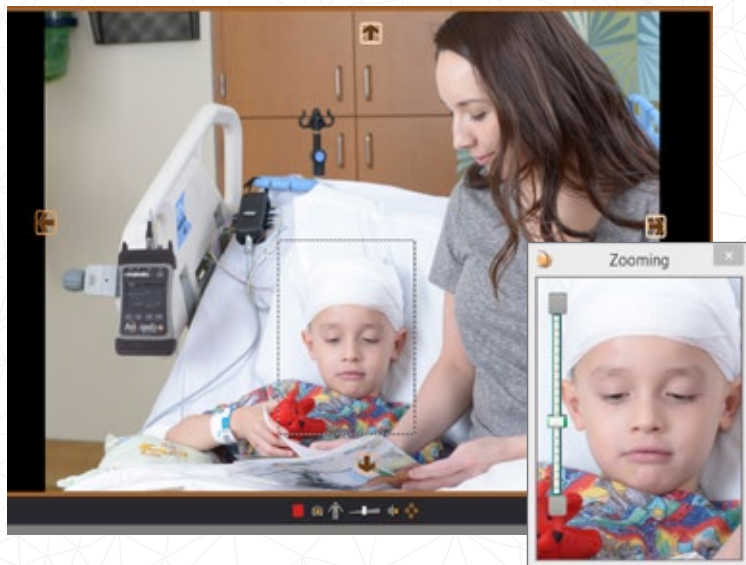

REAL-TIME REMOTE MONITORING

Remotely monitor continuously or intermittently, whether your patient is in the hospital or at home with **Apollo+**. Wi-Fi enabled EEG is available with Arc EEG software version 3.1 and higher.

- Apollo+ is light and wearable. Backpack, harness, and head-mount options assist with patient comfort.
- Acquire data on 32 channels for up to 72 hours without patient intervention. For longer studies, the rechargeable batteries can trickle charge over USB while your patient is sleeping.
- The unique Patient Voice Event Microphone lets your patient record time-synchronized events.
- If your patient loses a reference electrode, change the reference on the fly remotely.
- Capture and remotely view HD video with Q-Video Mobile 3.

LONG TERM MONITORING IN INTENSIVE CARE AND EPILEPSY MONITORING UNITS

Apollo+ and **Essentia** are effective physician tools to help evaluate EEG background, ischemic events, and clinical and subclinical seizures in the Neonatal ICU, NeuroICU, and EMU.

- Arc Software helps assist the diagnosis of epilepsy, localization of seizure foci, monitoring of treatment efficacy, and pre-surgical workup.

HIGH CHANNEL COUNT EXTRACRANIAL OR INTRACRANIAL EEG WITH CORTICAL STIMULATION

Zenith will change the way you monitor epilepsy and simplify your EMU workflow.

- The Zenith system is designed to help reduce the risk of errors, shorten setup and surgical time, and enhance data accuracy and analyses to improve your patient outcomes.
- Create a complete montage in one click. Simplify electrode layout with automated input mapping (patent-pending).
- Control cortical stimulation mapping through Arc software to help guide the surgical plan.
- Customize cortical SSEP stim parameters and create graphs and tables of functional and afterdischarge responses.
- Use Short Pulse Stimulation (SPS) for interruption of afterdischarges during cortical stimulation.
- All intracranial case settings, including montages, follow the patient record.

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For all of your electrodes, accessories, and consumable supplies

- Use Disposable EEG+ Cup Electrode Packs to reduce the clinical and financial implications of health care associated infections.
- Customize your kits with 12-inch, 48-inch, and 60-inch lead lengths.
- Provide quality signals and improve impedances with larger 10mm silver/silver chloride. EEG+ cups that hold more conductive gel.
- Open just one 25-lead pack per patient setup.

SET UP YOUR ACCOUNT TODAY!

THE CADWELL STORY

John Cadwell, BSEE, MD, saw a need for innovative and reliable neurophysiology instruments during his residency at the University of Washington School of Medicine.

John combined his experience in electrical engineering and medicine to design the world's first microprocessor-controlled EMG instrument. Together with his brother, Carl Cadwell, DDS, John formed Cadwell in 1979.

- In the 1980s, Cadwell developed the best-selling 5200A EMG and the Spectrum 32 EEG.
- In the 1990s, Cadwell's Sierra took over the EMG line and Cadwell introduced Cascade IONM and Easy EEG.
- In the 2000s, Cadwell developed the industry's best integrated report generator and introduced Easy PSG.

Lately, we have expanded our headquarters and opened offices in China, Singapore, The Netherlands, and UAE. Our global sales and support teams help physicians and medical centers worldwide help their patients.

Today, our brands include Arc EEG, LTM and ICU cEEG; Cascade® IONM; Sierra® EMG and EP with integrated ultrasound; Easy® PSG and ApneaTrak HSAT Sleep Solutions; and CadLink™ data management.

Cadwell is staying true to its mission: helping you help others.

We are dedicated to helping you help others by developing innovative, user-friendly EEG solutions.

Cadwell has a long history of supporting customers.
Please discuss service, support, warranty and training information with your sales manager or distributor.

✛CADWELL®

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