



trackit

*The Ambulatory  
EEG/Polygraphy  
Recorder*





Trackit ambulatory recorders have a Track record of consistently high performance in some of the worlds leading hospitals and Epilepsy centres. Customers have come to rely on Trackit to produce lab quality recordings in the harshest electrical environment imaginable – the patients home!

Trackit is the only recorder available that can record continuously for over 96 hours (3 PP3 Li batteries and a 3GB CF card with 21 recording channels at 200Hz) without the need to change the battery or flash card.

Being able to record for long periods of time in combination with a high number of recording channels means that Ambulatory EEG can now be implemented to give answers to clinical questions that were previously only obtainable using more expensive LTME methods.



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## An Ambulatory EEG/Sleep recorder that makes no compromises on quality Why settle for anything less?

### Suitable for a wide range of recording applications

Trackit has been designed at the outset with both Ambulatory EEG and Sleep applications in mind. Its small and compact footprint when coupled with the paediatric backpack makes the Trackit ideal for EEG recording applications in Children and Adults.

### Trackit is available in 4 major configurations

- Trackit 24 for applications in Ambulatory EEG. (24 EEG + 4 AUX DC)
- Trackit 32 for applications in Ambulatory EEG. (32 EEG + 4 AUX DC)
- Trackit 24P for applications in Ambulatory EEG and sleep (20 EEG + 4 EEG/Poly + 4 AUX DC)
- Trackit Sleep for applications in Ambulatory EEG and sleep (18 EEG + 8 EEG/Poly + 4 AUX DC)

All these models have the option for extended recording capability with optional pulse oximetry module with added Pulse wave display.







### Uninterrupted recordings for up to 4 days

With Trackit it is now possible to record continuously with 24 channels for up to 96 hours, without the need to change batteries or flash cards. Clinical decisions can be made with more confidence without the need for repeat recordings.

A backup battery and a removable battery compartment allows extended recordings for longer than 4 days where the need arises. Trackit utilises the latest innovations in Lithium Ion battery technology for extended recordings; disposable Lithium PP3 or rechargeable Lithium Camcorder batteries (Canon BP511)

### Signal quality with no compromises

Finally an ambulatory recorder with data that you can rely on! A combination of the latest amplifier design, a robust metal box gives a quality of recording at least as good as lab based EEG. The clinical utility of Ambulatory EEG is of paramount importance to you so we have only used the highest quality components in the construction of the Trackit recorder.

## Intuitive set-up and operation Read and analyse the data on your platform of choice



### Intuitive set-up and operation

The set-up of a recording could not be easier when using the Trackit Wizard, this intuitive software takes you step by step through the set-up process. Simple controls allow traces to be viewed and electrode impedances to be checked prior to recording start. For advanced applications the Trackit software also allows timed, periodic and start on power up recording modes.

The Pocket set-up Wizard for use with a Windows CE (Pocket PC 2003) allows a Trackit recording to be initiated and monitored without the need for expensive and bulky PC equipment – ideal for set-up in the patient's home.

A clear LCD display provides information about the recording status, disk and battery; a real time clock allows correlation of EEG data with patient diary events.

### Read and analyse the data on your platform of choice

One of the unique advantages of Trackit is the fact that all data is written in native European Data Format (EDF). This not only provides a standard for data interchange between different laboratories, but also allows data review on several of the markets leading EEG/Sleep review programs. This gives you the freedom to buy the best ambulatory product without being locked into proprietary review software – no compromises when it comes to ambulatory EEG.



The logo for Trackit, featuring the word "trackit" in a lowercase, sans-serif font. The "t" is stylized with a red dot above it and a red dot below it, and the "i" has a red dot above it.

## Key Highlights Include:

**Small size** The product can be worn unobtrusively for ambulatory EEG recordings ensuring complete patient acceptance - size does matter!

**Flexible recording inputs** with 4 high level DC, 8 bipolar DC polygraphy, and 24 mono-polar EEG ensures that a wide range of monitoring requirements can be addressed. A built in or leaded connector block can be used depending on the application requirement.

**Data and recording flexibility** Trackit's unique architecture allows the system to be configured either as an ambulatory recorder with local storage, a headbox with cable or wireless communication to a host computer (Trackit plus software).

**Trackit Blue** wireless EEG Monitor and acquire EEG on the Host PC using the unique Trackit Blue (Bluetooth class 1) wireless module. Automatically switches to Ambulatory mode when out of range.

**Robust and tamper proof** The use of a strong metal box, a lockable battery bay and the use of plug in batteries means that long recordings can be made with more confidence.

**A wide range of sampling rates** from 1 – 256Hz with independent sampling on selected channels (Poly and AUX only) ensures application flexibility especially when monitoring patients with sleep disorders. 512Hz sampling is available on certain channels for sleep applications (EMG).

**Signal integrity** The use of a metal box and high quality amplifier components means that Trackit is perfectly at home in the harshest of recording environments.

**A safe recording medium** The use of Compact Flash disks ensures complete data integrity for long recordings. Compact Flash disks are more reliable than hard disks; they consume less power resulting in longer recording times and are the technology of the future ensuring a safe investment.

**Removable battery compartment** A removable battery compartment ensures a fast and simple removal and replacement of batteries. Select from either disposable or rechargeable batteries.

**96-hour recordings.** Trackit has been designed at the outset as a 24-hour recorder with the maximum number of EEG channels selected at EEG sampling rates <256Hz. 96 hour recordings are possible using 3 batteries and a 3GB compact flash card (21 ch)

**A completely open data format** Trackit stores and transmits data in European Data Format (EDF). As a consequence data generated by Trackit is compatible with any commercially available EDF file, including the most popular EEG and Sleep analysis software on the market today.



**Ease of operation and set-up** Trackit has been designed at the outset with ease of operation and set-up in mind. A simple user interface with LCD display allows parameters such as time, battery and disk life to be monitored by the technician or patient. A Microsoft Windows set-up program allows recording parameters to be configured and loaded onto the device and recordings to be made while connected to the host computer.

**Easy annotation of patient events** An event button is available for the patient to time stamp points of interest during the recording, allowing faster data reduction and review by the physician.

**Convenience.** A built in impedance check and calibration means that no extra hardware is needed when setting up the device. It is also possible to interrogate impedance values from the device during a recording.







## Specifications

### Trackit 24

for applications in Ambulatory EEG. (24 EEG + 4 AUX DC)

### Trackit 32

for applications in Ambulatory EEG. (32 EEG + 4 AUX DC)

### Trackit 24P

for applications in Ambulatory EEG and sleep  
(22 EEG + 4 EEG/Poly + 4 AUX DC)

### Trackit Sleep

for applications in Ambulatory EEG and sleep  
(18 EEG + 8 EEG/Poly + 4 AUX DC)

- Nonin XPOD Pulse Oximeter with SaO2 and Pulse wave
- Wireless Bluetooth module – Trackit Blue (class 1) for wireless monitoring and recording from the Host PC
- Max differential AC input before clipping: 10 mV pk-pk
- Max operational DC input voltage (electrode offset):  $\pm 250\text{mV}$  ( $\pm 2.5\text{ V}$  using the Hi level AUX inputs)
- Bandwidth: 0.16 - 70 Hz (-6dB)
- Max common mode input voltage: 2V pk-pk
- Common mode rejection ration: >110dB (driven ground)
- Input bias current: <  $\pm 25\text{nA}$
- 1-256Hz sampling rate, independently selectable on poly channels. (1-256Hz or 25-200Hz)
- 16 bit A to D converter with sample and hold on every channel
- 3 PP3 Lithium batteries giving 96 hours life with 21 channels recording
- Lithium ION rechargeable battery (Canon BP511) giving 36 hours life with 21 channels recording
- Up to 5 minute inbuilt battery backup (continue recording while changing batteries)
- Compact flash cards for data storage 32MB – >12GB (industry maximum available)
- Up to 3 minutes of data buffer whilst changing disks
- Use Standard 1.5 mm touch proof electrodes
- Native European Data Format (EDF)
- Small size at only 10cm x 7.5cm x 3.5cm (main unit) (3.8" x 2.9" x 1.4"). Battery Box (standard) 7cm x 7.5cm x 3.5cm (2.8" x 2.9" x 1.4"). Battery Box (small) 3.5cm x 7.5cm x 3.5cm (1.4 x 2.9 x 1.4 inches). (L x W x D)
- Weight: < 500g (including disk and batteries)
- CE mark – (AMTAC - 0473 certificate number 597CE) certified against Directive 93/42/EEC, Annexe II

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