Actiwatch Mini®

Main Features

- Wrist worn or collar-worn ultra lightweight sleep and activity monitor for ambulatory monitoring of activity and sleep especially in paediatrics and veterinary applications
- Recording of physical activity by means of an accelerometer
- Used with the ActiLight light intensity monitor to assess the effects of light intensity on activity and sleep
- Designed for use with custom sleep and activity analysis software with a reader for data transfer to a PC
- Records for up to 90 days with a 1 minute epoch
- Suitable for use in sleep disorder monitoring and circadian rhythm studies
- Validated against polysomnography for use in sleep
- All data stored in the software is fully exportable for analysis in a third party program

The Actiwatch Mini is an ultra light-weight version of the Actiwatch designed especially for use with children. It is a wrist-mounted device which detects and logs movement intensity and duration. The data is stored in the watch and can be downloaded to a PC for analysis. As such, it is a convenient tool for the ambulatory recording of either limb activity or general physical activity for clinical use and for research purposes.

Physical Activity

The activity plots coupled with specialised software serve to quantify the intensity and duration of daily physical activity as an indicator of a particular lifestyle or to monitor the effects on mobility of a medical condition as well as the efficacy of treatment for that condition.

Sleep

The Actiwatch Mini is also useful for screening patients with suspected sleep disorders before resorting to tests in a sleep clinic.

Sleep analysis software serves to analyse sleep wake patterns and to calculate sleep onset latency, sleep efficiency and sleep fragmentation.

Validation

The Actiwatch has been validated against polysomnography the 'gold standard' for use in sleep studies[1] and it has been used extensively for other applications.

Fields of Applications

The Actiwatch is in use in the fields of physical activity monitoring, sleep, respiratory medicine, paediatrics, psychiatry, health psychology, pain, Parkinson's research, geriatric medicine, dermatology and urology.

Technical Specification

Weight:	7.5 grams
Battery life:	500 days
Battery type:	CR 1220
Memory:	128 KB
Waterproof:	Yes
Warranty:	2 years
Diameter:	24 mm
Depth:	7 mm
Epoch Range:	2s-15min
PC Analysis:	Win® 2000 /XP

Bibliography

1. Kushida C, Chang A, Gadkary C, Guilleminault C, Carrillo O, Dement W.

Comparison of actigraphic, polysomnographic, and subjective assessment of sleep parameters in sleep-disordered patients. ***Sleep Medicine 2 (2001) 389-396***

2. Kevin So, Pat Buckley, T. Michael Adamson, and Rosemary S. C. Horne

Actigraphy correctly predicts sleep behavior in infants who are younger than six months, when compared with polysomnography. ***Pediatric Research, Vol. 58, No. 4, 2005, 761-765***

Epoch length	2 sec	5 sec	10 sec
Recording time	72 hours	180 hours	15 days
Epoch length	**15 sec**	**30 sec**	**1 min**
Recording time	22.5 days	45 days	90 days

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