



# Twice as easy

Ambulatory actigraphy devices that collect and download continuous, objective long-term sleep/wake data

**PHILIPS**

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# Actigraphy made easy

Our Actiwatch 2 and Actiwatch Spectrum ambulatory devices help make actigraphy easier to use, the devices more comfortable to wear, and the data acquisition and analysis functions less complex and time consuming.

The Actiwatch 2 incorporates a state-of-the-art ergonomic design, interchangeable watch bands, an ambient light sensor, and communication and software upgrades such as an automated rest algorithm. The Actiwatch Spectrum includes these features and a real watch face, off-wrist detection, color light recording and other advanced features. Now it's more efficient than ever for you to set up the Actiwatch system, gain user compliance and reliably collect and download sleep/wake data. That means it's now easier than ever to monitor a variety of patients who have a variety of sleep complaints. The Actiwatch 2 and Actiwatch Spectrum actigraphy systems combine improved aesthetics with advanced functionality to meet your needs.

Both devices incorporate high-quality biocompatible materials and well-engineered sensors (accelerometer, light, off wrist) to provide 24/7 wearability and accurate data collection. They have been thoroughly tested to be resistant to environmental conditions such as cold, heat, dust, perspiration and water. They also have been tested for drop resistance. Because of the unique strap material, both devices provide "wear it and forget it" comfort. Rugged durability helps enable the collection of complete data without any lapses.

The Actiwatch 2 and Actiwatch Spectrum can be used to analyze circadian rhythms, automatically collect and score data for sleep parameters, and assess activity in any instance where quantifiable analysis of physical motion is desired.

## Five modes

Both Actiwatch devices have five operational modes to help ensure battery efficiency and extend battery life.

1. Sleep
2. Standby
3. Data Collection
4. Post Collection
5. Communication



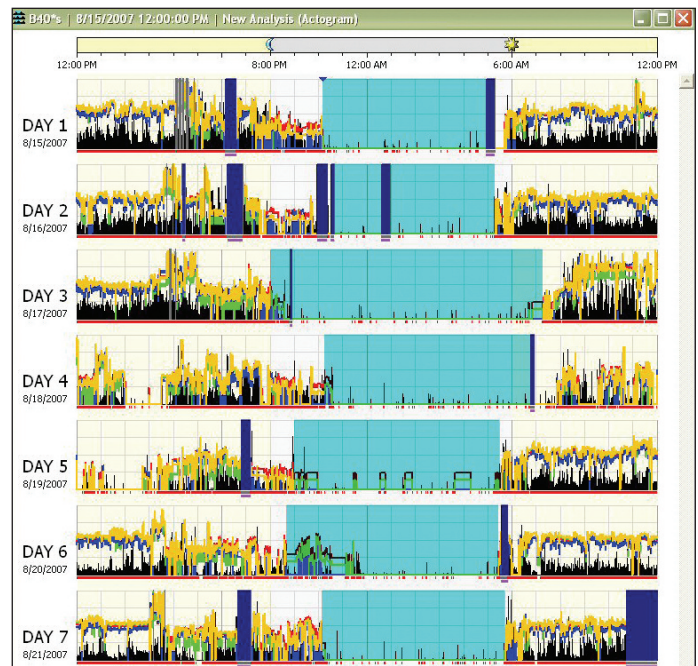
## Actiware software

Actiware software helps make analyzing actigraphy data even easier than before.

Features include\*:

- Automatic rest algorithm
- Minor rest interval detection
- Charts up to seven channels of data on one actogram
- Supports legacy Actiwatch devices and ActiReaders
- Simultaneous data downloading from multiple devices
- Easy to set user defaults for common functions
- Automatic tabulation of sleep statistics for user-defined intervals
- Easy-to-use prompts for installation and communication to the Actiwatch devices
- Detailed how-to-use software tutorial website: [www.learnactiware.com](http://www.learnactiware.com)
- 21 CFR Part 11 compliant

\*Version 5.5 or higher.



Wake/activity intervals are shown in black, sleep intervals in aqua, off wrist intervals in dark blue, event marks in dark blue triangles and light data in red, green, blue and yellow.



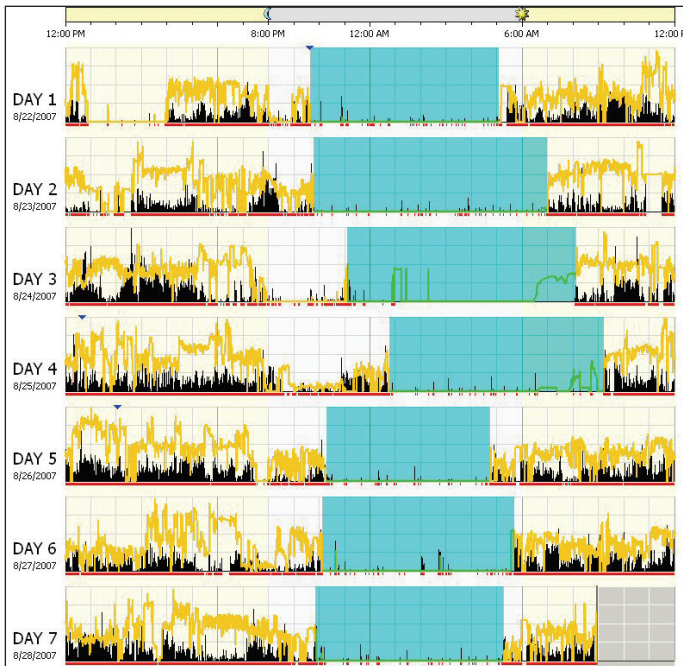


**Actiwatch 2 special features:**

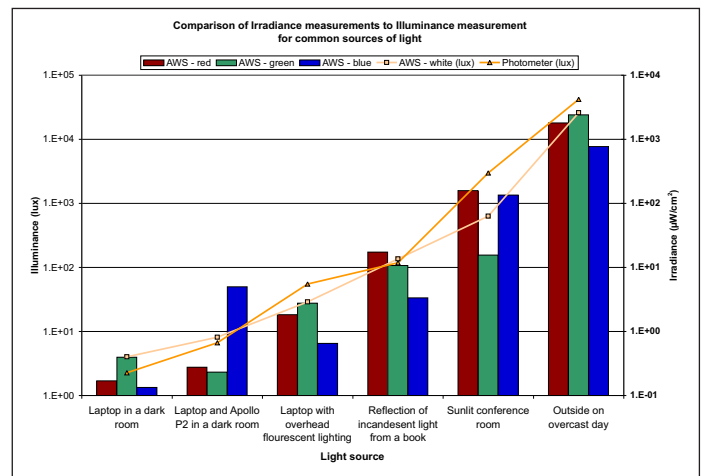
- Small, sleek and comfortable design to help enhance patient comfort and increase patient compliance
- Large memory (1 MBit non-volatile)
- Three data channels: photopic white light illuminance, activity, and event marking
- Ultrasonic welded case designed to provide moisture protection and increased resistance to environmental challenges (moisture, shock, dust, etc.)
- Faster communications rate
- Rechargeable battery – via USB or wall current with 30-day life
- Can be used with a hospital band
- Light-sensing – records information about the amount and duration of ambient white light illuminance in units of lux
- Extra bands included with system

**Actiwatch Spectrum special features:**

- Comfortable, aesthetic design to help enhance patient comfort and increase patient compliance
- Off-wrist detector with real-time feedback on display
- Time and date indicators (like an actual wristwatch)
- Device status indicator (e.g., logging, not logging, on wrist, off wrist, and successful marker push)
- Seven data channels: photopic white light illuminance, red, green and blue light irradiance, activity, off wrist and event marking
- Moisture protection and increased resistance to environmental challenges (moisture, shock, dust, etc.)
- Backlit display
- Infrared communication to the dock
- One-year battery life – changeable at factory
- Large memory (2 MBit non-volatile)
- Faster communications and data-download rate
- White light illuminance in units of lux
- Color light recording – irradiance, in units of microwatts/cm<sup>2</sup>, and photon flux, in units of photons/cm<sup>2</sup>/sec, in three color bands of the visual spectrum: red, green and blue
- Extra bands included with system



Wake/activity intervals are shown in black, sleep intervals in aqua, event marks in dark blue triangles and light data in yellow.



The free-living white light illuminance measurement performance as compared to a photometer is depicted, along with varying intensities of colored light irradiance measurements across common sources of light.

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For more information on the Actiwatch family of products, visit: [actiwatch.respironics.com](http://actiwatch.respironics.com)

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CAUTION: US federal law restricts these devices to sale by or on the order of a physician.

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