Reducing complexity

Alice 5 sleep system

PHILIPS

RESPIRONICS

The Alice 5 diagnostic sleep system provides sleep labs with a powerful way to diagnose sleep disorders in the lab setting. The Alice 5 system helps you meet your clinical goals with customizable features, a complete line of sensors and accessories, an advanced software interface, continuous impedance monitoring, and leading technical and clinical support. Alice 5 diagnostic sleep system is compliant with AASM guidelines.

The Alice 5 system records, displays, and prints physiological sleep study information. Features include:

• Fully-integrated sleep laboratory system over a network cable

• Expanded channel capability to 55 total channels

• High-quality ECG with six channels and pulse transit time (PTT)

• Real-time impedance display

• Patient communication/intercom

• Integrated interscorer reliability tool that aids in the education of technicians and in satisfying accreditation requirements

• Complete line of sensors and accessories that have been validated with the Alice system including Pro-Tech sensors, zRIP technology, PTAF technology, electrodes, oximeters, and probes

Addressing your technology needs

Alice 5, appropriate for use with infants through adults, simplifies the integration of lab devices through a high-tech consolidation that requires a maximum of only two cables. Many sleep labs use four or more cables that run from the patient's bedroom to the tech room. Our less cumbersome, two-cable integration provides:

• Complete polysomnography data
• Complete titration information
• Control over lab therapy devices with intercom and video via the network for equipped facilities

You receive usable data for your patient analysis without sacrificing output. Patient data is collected from sensors that deliver the information to a computer running Sleepware, a Window's-based software program designed to monitor, display, process, and download polysomnographic data. Video and audio recording and intercom options are available for equipped labs.

55 total channel capability

The Alice 5 headbox offers expanded neuro and PSG inputs and the system in total can record up to 55 channels. The headbox incorporates an intuitive 10-20 neuro input layout. This allows extra neuro inputs which enhances the evaluation of your patient. Along with the discrete left/right leg EMG, there are two additional differential EMG channels. These may be used for other channels such as intercostal or arm EMG. Recognizing emerging standards and lab diversity, Philips Respironics now offers both pressure-based flow and thermistry in the headbox design. Masimo oximetry technology, which facilitates high-quality signals for patients of all ages, is integrated into the Alice 5 design.

Alice 5 network model

Patient room Network switch **Tech room** WWW...

Maximum of two cables, data, video, audio, and titration control

Real-time insight into patient data

High-quality ECG with six channels and pulse transit time (PTT)
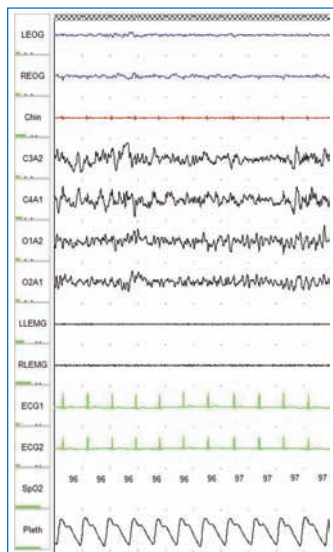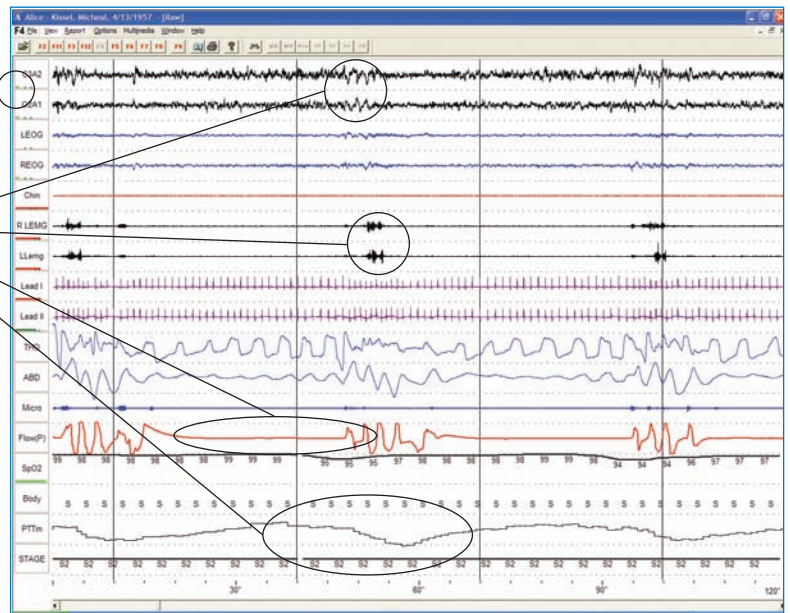
We recognize the relationship between sleep and cardiology and have designed the Alice 5 system to record three ECG leads plus a ground. This yields recordings of lead I and lead II and computed channels including leads III aVL, aVR and aVF. With the high-quality ECG (up to 500 Hz data storage) and Masimo oximetry, Alice 5 provides a high-quality Pulse Transit Time. Arousals trigger subcortical autonomic arousals which result in an increase in blood pressure that is reflected as a reduction in the PTT.

Continuous impedance monitoring

Checking impedance of your electrodes usually means having to exit the screen containing the patient's raw data to perform this function. The Alice 5 has been designed with innovative real-time impedance so you never lose sight of your patient's data. Sleep lab technicians gain real-time insight into the quality of patient data through a continuous display on each EXG channel and oximetry of impedance/signal quality. Continuous display of actual numeric impedance value enables improved data quality. This information is also available during post-acquisition review of the data for training purposes or as a quality-control measure.

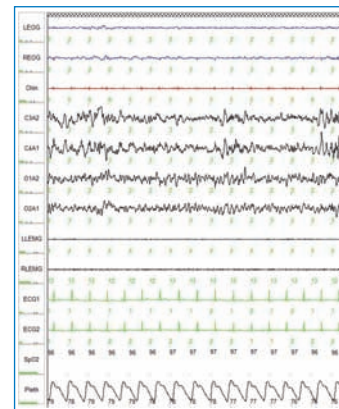The colored bars indicate real-time signal impedance (EEG/EOG/EMG) or signal quality (ECG/Oximetry).

The red flow channel shows apneas (no flow). At the end of each apnea, there is an arousal (EEG) and leg movement (both R LEMG and L LEMG channels). The PTTm trace shows a PTT change in response to the arousal.

Real-time/post-acquisition impedance view

Six-lead ECG with PTT

Numeric impedance value view

Value-added products and services

Philips Respironics is a market leader offering cost-competitive devices that include many product-related services for which some other manufacturers may charge extra. Through our value-added products, programs, and services, we help you to realize long-term benefits through operational efficiencies.

The advantages of purchasing an Alice PSG sleep system include:

- Core software updates throughout the life of your system (for which our competitors may charge extra)

- Unlimited software site licensing. You can add sites as your business grows without having to pay additional software licensing costs.

- No annual service agreements

- An Alice 5 system two-year warranty

- A one-year warranty on the Alice LE

- Starter sensor kits to help reduce your start-up operating costs (other manufacturers may charge extra for initial sensors)

- Dedicated product and technical support services

- Expert installation and training by qualified Philips Respironics employees

Alice 5 specifications and ordering information

Ordering information	
Description	
1017226 - Alice 5 domestic includes:	Base station
	Power supply
	Headbox
	AC power cord
	Speakers
	Headbox wall mounting kit
	Patient cable
	Headbox carrying pouch
	Microphone kit
	Headbox shoulder strap
	Mouse pad
	Alice 5 setup and user's guide
1017229 - Alice 5 international includes:	Base station
	Power supply
	Headbox
	AC power cord
	Headbox wall mounting kit
	Patient cable
	Headbox carrying pouch
	Microphone kit
	Headbox shoulder strap
	Mouse pad
	Alice 5 setup and user's guide

Basic PC recommendations

- Windows-compatible personal computer running Windows Vista Business, Windows XP Professional, or 2000 with a CD-RW drive. A DVD drive is recommended if you will be saving audio/video files onto removable storage media.
- Intel Pentium 3 processor (500 mHz) or greater, 32-bit (x86) processor (1 GHz) required for Windows Vista computers
- 512 MB system memory, 1 GB for Windows Vista computers

Specifications	
Description	
Total channels:	55
Analog inputs:	12 total, 10 in the base station, 2 in the headbox
Neurological channels	
Number of channels:	21 (10 left, 9 right, 2 reference, 2 EOG)
Input impedance:	1.66 Mohm per electrode 3.33 differential
Bandwidth:	0.32 Hz to 106 Hz
Input signal range:	± 3.3mV
Digital resolution:	16 bits
Sample rate:	2000 Hz
Max storage rate:	500 Hz for EEG OEG and EMG and ECG
Electrode impedance testing:	100 Hz square wave between patient electrodes
Calibration signal:	Signal injection, 1 Hz, 98 mVpp square wave to amplifier inputs
Communication interfaces:	Signals sent from patient interface to headbox through sensor cables. Data is digitized and filtered, then sent to the base station where it is stored on a disk or sent through an ethernet connection to a host PC.
Digital filters available during analysis:	0.5 to 100 Hz high pass filter 0.5 to 100 Hz low pass filter 50 or 60 Hz notch filter Anti-aliasing filter
System physical characteristics: **Base station**	
Size:	35.5 cm x 12.7 cm x 31.8 cm
Weight:	3.5 kg
Headbox	
Size:	25.4 cm x 10.1 cm x 5.08 cm
Weight:	700 gr

Philips Respironics carries the complete line of Pro-Tech sensors; ask your Philips Respironics account representative for information.

Family of sleep solutions

Alice 5 and our complete family of in-lab and portable diagnostic devices, software, sensors, and accessories are all designed to make your job easier and maximize patient comfort.

Alice PDx

The Alice PDx portable diagnostic recording device is intended for obstructive sleep apnea screening, follow-up and diagnostic assessment of cardio-respiratory sleep disorders. The flexible and portable system incorporates advanced features required to meet today's industry needs. It satisfies the portable testing requirements for levels II, III, and IV and provides capabilities of basic screening to advanced diagnostic evaluation.

Sleepware

Sleepware is powerful, easy-to-use sleep diagnostic software designed to provide a complete data solution. It records and simultaneously displays data acquired by any of the Alice in-lab data collection systems – Alice 5, Alice LE, and our new portable system, Alice PDx.

Sleepware Lab Manager

Our comprehensive Sleepware Lab Manager is an electronic medical record system that is compatible with any current PSG system on the market. This specialized medical record system uses dynamic database technology to create a customized clinical database of patient information, schedules, PSG results, workflow tracking, quality measurements, therapy management, and more.

OmniLab Advanced

The OmniLab Advanced multi-mode titration system helps make titrating patients more efficient. You can now avoid the inconvenience of interrupting therapy to move patients to another room to titrate them on a different therapy. Six modes – with multiple technologies including BiPAP autoSV Advanced and AVAPS – are accessible directly from your PC, so you can titrate more types of patients than ever before.

Pro-Tech sensors

As a leader in the development, manufacturing, and supply of sensors to the sleep diagnostics industry, we provide a full line of high-performance, quality Pro-Tech sensors. We offer sensors that detect respiratory airflow, respiratory effort, snoring, periodic limb movements, and sleep position. Our sensors also meet current AASM guidelines.

Alice PDx

OmniLab Advanced

Pro-Tech sensors

Please visit www.alice5.respironics.com