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## Body Position Sensor, SPI-Lite™ Module User's Guide

### Part Numbers

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SPI-Lite Kit.....	1658
SPI-Lite Interface Module .....	1663
SPI Body Sensor, 7 ft cable .....	1652
SPI Output Cable, +/- 1.50 millivolts, 1.5mm Safety Connectors, 7 ft cable .....	1665
Option:	
SPI Output Cable, +/- 150 microvolts, 1.5mm Safety Connectors, 7 ft cable.....	1666

### Caution Statements

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**This product is for diagnostic purposes only and is not to be used as an apnea monitor or in a life supporting or life sustaining situation. Federal law restricts this device to sale by or on the order of a physician.**

### Intended Use & Features

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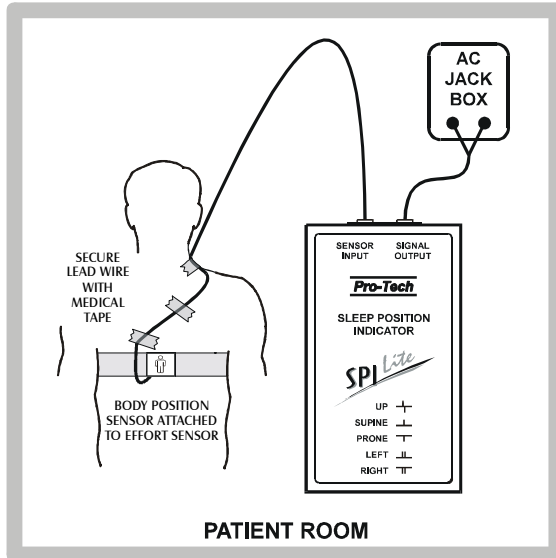
The SPI-Lite™ is intended for use in sleep disorder testing to sense and indicate positions of sleep onto a polygraph recorder. The SPI-Lite™ can distinguish five body positions (supine, prone, left side, right side and sitting up). The position is detected from a padded sensor pillow which mounts comfortably to most respiratory effort belts. The sleep position is recorded onto a polygraph in a coded format every fifteen seconds when the patient is stationary and within one second anytime there is a position change. The SPI-Lite™ connects to an AC coupled jack box. Users may note that the wire set on the sensor pillow appears exceptionally lightweight and without "strain relief." The wire material selected for this sensor is the finest wire available for this application. The lightweight wire was selected for maximum patient comfort. The Kevlar reinforced tinsel wire insures durability, this type of wire is strain relieved on the inside!

### Specifications

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Dimensions, SPI Interface Module (H x W x D).....	2.5 cm x 6.0 cm x 10.0 cm
Weight, SPI Interface Module, With Batteries .....	100 grams
Power Requirements, SPI Interface Module .....	2 AAA alkaline batteries
Response Time .....	approximately 1 second
Output Voltages, Via Selected Output Cable .....	+/-150 microvolts, +/- 1.50 millivolts
Operating Temperature .....	5°C (40°F) - 40°C (104°F)
Storage Temperature.....	-20°C (-4°F) - 60°C (140°F)
Operating/Storage Humidity .....	15 - 95% Non-condensing

## Installation



## Standard Polygraph Settings

SENSITIVITY ..... 500 microvolts per mm (5 millivolts per cm)  
 LOW FREQUENCY / FILTER TIME CONSTANT ..... .1 Hz (1.6 seconds)  
 HIGH FREQUENCY FILTER ..... 35 Hz  
*These are approximate settings intended as a starting point, users should determine optimal settings for their specific system. If a satisfactory sensitivity setting cannot be attained, contact Pro-Tech for an alternative output cable option.*

## Body Position Indications

Supine	Prone	Left Side	Right Side	Sitting Up
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## Cleaning & Maintenance

The Body Position Sensor may be safely wiped clean with a hospital approved disinfectant that is not corrosive to plastic or metal. The sensor is not waterproof. Do not immerse in cleaning solution. Care should be taken to avoid contact of the cleaning solution with the safety connectors. Batteries in the SPI-Lite™ Interface Module must be replaced on a yearly basis.

## Limited Warranty

Pro-Tech Services, Inc. warrants this product to be free of defects in materials and workmanship for a period of one year from the date of purchase. Should any product prove defective in workmanship, materials or performance during the warranty, the sole liability of Pro-Tech Services, Inc. is limited to repair or, at its option, replacement of the product with no charge for parts or labor. Under no circumstances shall Pro-Tech Services, Inc. be liable for any loss or damage, direct, consequential, or incidental, including property damage or personal injury arising from the use of, or the inability to use this product. This warranty is rendered void and Pro-Tech Services, Inc. cannot be held liable for conditions resulting from: damage, marginal performance or malfunctions caused by: misuse, abuse, neglect, improper line voltage, power fluctuations, or any adverse environmental conditions, tampering, unauthorized modifications, adjustments or repairs to the product or its accessories. This warranty is in lieu of all other warranties, expressed or implied, and is extended only to the original purchaser. Features and specifications are subject to change without notice.