

# Sleep Minder INSTRUCTION MANUAL

SleepMinder<sup>TM</sup>
Non Contact Sleep Monitoring

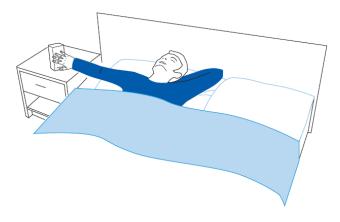
Bianca/Ned

### ABOUT THE SLEEPMINDER<sup>TM</sup>

The SleepMinder $^{\text{TM}}$  uses a specially-designed motion sensor to detect body movement associated with sleeping. It can be used in the home, hospital or clinical setting.

## USING THE SLEEPMINDERTM

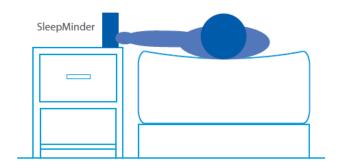
- 1 SleepMinder<sup>TM</sup> uses a removable standard Secure Digital (SD) memory card to store the data. Make sure the memory card is inserted in the slot and that the 'LOCK' tab on the SD card is set at unlocked. Push the SD card into the slot until you hear a click. If the card is flush with the casing, it is inserted correctly.
- ${f 2}$  Insert the power connector from the 12V DC adaptor and turn it on at AC wall outlet. There is no power switch on the unit.
- **3** The small light on the rear will show green. There should be a single beep. This indicates that the unit is powered.
- 4 Put the SleepMinder<sup>TM</sup> on your side of the bed, at about an arm's length 3ft (90cm) from your chest. It is important that the front of the SleepMinder<sup>TM</sup> (indicated by the BiancaMed logo) is facing toward your chest as shown in the figure below.
- 5 Do not switch off the SleepMinder  $^{\text{TM}}$  until you have finished the study even if the study runs over a number of nights.



- The base of the SleepMinder<sup>TM</sup> should be above the mattress, and up to a max 8" (20cm) higher.
- The green light should face away from you.
- Place at approximately an arm's length from you (or 3ft [90cm])

#### Warning

 $\bullet$  If SleepMinder  $^{TM}$  is setup contrary to the operating conditions above it may produce misleading results.



# **SCHEDULES**

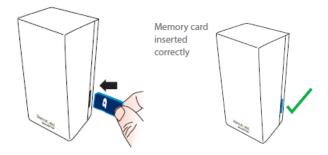
The unit that you have been given may be set to start & stop automatically at particular times. A typical setup is that the unit will record between the hours of 9pm and 9am only, with the time set to your local time zone.

When it is logging, you will see a green light constantly lit on the rear. If the green light flashes, the unit is not logging. All recorded data is saved on the memory card indefinitely. It can store over 1 year of data.

# **TROUBLESHOOTING**

When I insert the memory card and power the device, the red light stays on or the red light flashes or the unit beeps three times.

• This is a problem with the memory card. Power down the unit and wait 2 seconds. Push the memory card to release. Check the 'LOCK' tab on the memory card to make sure it is unlocked. Re-insert the memory card, pushing firmly until you hear a click.



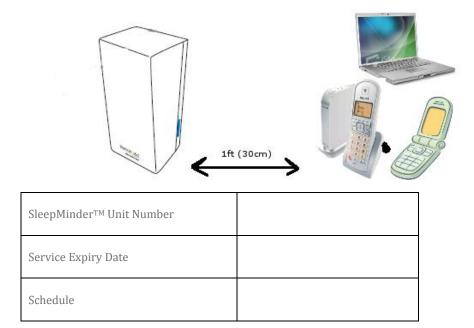
# When I plug in the power cord, there is no green light on the SleepMinder™ at all.

• This is a power problem. Check the AC wall outlet, and check the power adaptor (black unit) is showing a green light.

For further support, please phone BiancaMed on +353 1716 3755 or email help@biancamed.com. BiancaMed Limited, NovaUCD, Belfield Innovation Park, Belfield, Dublin 4, Ireland.

## Warnings

- Never remove the SD-card while the unit is powered. If it is ever necessary to remove the SD-card, the unit must be powered down for 2 seconds before removal.
- Do not use in close proximity (i.e., closer than 1 ft [30cm]) to wireless routers, laptops, mobile phones (especially do not put a mobile phone on your bedside table, beside/in front of the SleepMinder $^{\text{TM}}$ ). In addition, wireless phone handsets (often called DECT phones) should be kept 4m (14ft) if they are operating on 5.8GHz frequency.



### **FCC WARNING STATEMENT**

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This device complies with FCC's RF radiation exposure limits set forth for general population. It must be installed and operated to provide a separation distance of at least 20cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

### BM04 SLEEPMINDER<sup>TM</sup> DEVICE INFORMATION

#### **System Description**

SleepMinder $^{\text{TM}}$  is a motion-recording system that uses a 5.8GHz motion sensor, logging to a Secure Digital memory card. It contains a real-time clock IC with internal battery and safe shutdown PP3 battery. It is intended for continuous operation during normal use.

The SleepMinder<sup>TM</sup> System includes the following components:

- 12V AC Adaptor (Friwo PP8 Medical 12V)
- SleepMinder<sup>TM</sup> with SD memory card
- SleepMinder<sup>TM</sup> carry case

#### **Warnings**

- Contains small parts that can be swallowed. Keep out of reach of children.
- Read the instructions before using the SleepMinder<sup>TM</sup> unit.
- Do not use in the presence of a flammable anesthetic mixture combined with air or with oxygen or nitrous oxide.
- To avoid the risk of fire, do not use in the presence of flammable substances.
- If the equipment is used in a manner not specified by BiancaMed, the performance and protection provided by the equipment may be impaired.
- Only use with the power supply provided.
- The batteries contained within this unit are for replacement by BiancaMed only.

#### Cautions

- Do not immerse or autoclave the SleepMinder<sup>TM</sup> Unit or AC/DC adapter.
- Do not use outside the specified environmental conditions.
- To avoid mechanical or electrical damage, do not drop the unit.
- Do not use in the presence medical equipment such as magnetic resonance imaging (MRI) equipment.
- Do not use in the presence of devices using radio frequencies (RF) such as cell phones, DECT phones, wireless LANs and broadband routers. Devices operating at 5.8GHz are to be kept at least 4 meters from SleepMinder<sup>TM</sup>.
- Moving objects between SleepMinder<sup>TM</sup> and the subject may impair its performance.
- Follow local laws and recycling plans regarding disposal or recycling of components, batteries and packaging.
- Ensure the power cable does not pose a tripping or strangling risk.
- The equipment needs to be installed in accordance with national wiring and installation regulations.
- $\bullet$  In the event of a power failure the performance of SleepMinder  $^{\text{TM}}$  will be impaired.

### **Statement of Electromagnetic Compliance**

This device meets the requirements of the Electromagnetic Compatibility (EMC), pursuant to the Collateral Standard, EN 60601-1-2, which addresses EMC in North America, Europe and other global communities.

**Explanation of symbols** 

===	DC power input only
	Double Insulated Device
LTÜV_	TUV approved
Ø <sub>E</sub>	VDE approved
( (	Device conforms to CE requirements
<u>^</u>	Refer to accompanying documents

SleepMinder™ Unit Number	
Service Expiry Date	
Schedule	

#### **Specifications**

Power supply: Input: 100-240VAC 50-60Hz Output: 12VDC 700mA Max.

Current consumption: 200mA (12V input)

Weight: <500 grams

Operating Conditions:  $5 \degree \text{C} - 40 \degree \text{C} (20\% - 95\% \text{ Relative Humidity})$ Storage/Transport Conditions:  $-20 \degree \text{C} - 60 \degree \text{C} (20\% - 95\% \text{ Relative Humidity})$ 

IP Rating: None Battery Life (Clock & Backup): 5 years

