

Nexense
Life Quality Technology



User Guide

Nexense Ltd

NexSleep™
User's Manual
Revised March 2008

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1 Introduction

What Is the Nexense™ NexSleep™

The Nexense NexSleep™ System (NexSleep) monitors your sleep behavior to detect snoring and then gives you a gentle biofeedback signal to cause you to change your muscle tone or position to prevent your snoring. When you wake up in the morning the NexSleep displays your relative sleep quality in the form of LEDs embedded into the NexSleep Charger Unit. Over time, the NexSleep can improve your sleep quality and reduce the risks of long-term snoring related health problems.

About This Manual

This manual provides the information necessary to effectively operate NexSleep. Please read thoroughly and understand the manual before operating the NexSleep. If any part of this manual is not clear, please contact Nexense Customer Support Center for more clarifications.

Warnings, Cautions and Notes

Warnings, Cautions and Notes are used throughout this manual:



Warning

A **warning** indicates precautions and instructions which, if not followed **may result in serious bodily injury or death**



Caution

A caution indicates instructions, or cautionary notes which, if not followed, may result in a damage to the equipment or to the quality of measurements



Note

Notes contain helpful information and tips

Warnings and Precautions

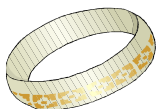


1. The NexSleep is designed for use on individuals **age 16 and above**. It shall **NOT** be used: On newborns or On infants or persons who cannot communicate.

2. The appliance is not to be used by children or persons with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction.

3. Children being supervised not to play with the appliance.

Magnet bracelets should not be worn next to the Sync Feedback Unit.











This device does not serve as a cure for any disease.

Always consult your physician before Using the NexSleep in the following cases: Pregnant & Breastfeeding, Major cardio-respiratory ailments, Sever sleep apnea or any acute medical condition.

2 Getting Started

Your NexSleep is supplied with the following components:

Quantity	Picture	Description
1		SFU- Sync Feedback Unit "A"
1		SFU- Sync Feedback Unit "B" (Optional)
2		SFU battery (One for each SFU)
1		Charging Cradle

Quantity	Picture	Description
1		Power Adapter
		Sensor Plate "A"
1		Sensor Plate "B"
1		CU- Communication Unit
1		Warranty
1		User's manual
1		Quick guide

After unpacking the NexSleep check that all components are present and undamaged. If any component is missing or damaged, contact your authorized Nexense representative.

Keep the original packaging in case you need to store or transport the NexSleep.



Note

NexSleep is supplied with one Sync Feedback Unit as a default. An additional unit such SFU “B” as may be ordered for dual use.

Setting up the NexSleep

Carefully unpack the box and verify that all the components are present.

Positioning the NexSleep

If you sleep on a single layer mattress place both sensors and the Communication Unit under the mattress on a solid and stable surface, such as a box spring or platform bed.

If you sleep on a multi-layer (sandwich) mattress place them between the layers.



Note

See first that you can lift the mattress on your own, if not, make the proper arrangements.

Position "A" Sensor parallel to the shoulder blade/ chest area, on the side of the bed which User A sleeps, 30 cm (12") from the edge, with the logo facing up. Sensor A will be attached to the Charging Cradle and should therefore be positioned as close as possible to an electrical socket on the bed of User A facing up (logo up).

Position "B" Sensor parallel to the "A" sensor plate on the side of the bed that User B sleeps on. 30 cm (12") from the edge, with the logo facing up.

Place the Communication Unit between and beneath the two sensor plates in the legs area of the bed.

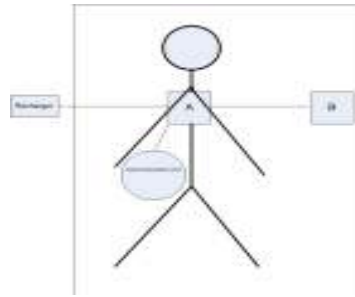


Figure 1: Positioning the Components



Note

Even if only one person is using NexSleep, both Sensors must be connected.

Connecting the NexSleep

Connect the two sensors to each other, white connector to white connector, as shown in Figure 2, with the side containing the arrows facing each other (Figure 3).

Connecting the Sensors to Each Other

Connect the two sensors to each other as shown below

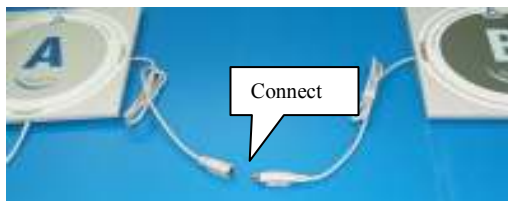


Figure 2: Connecting the Sensors



Figure 3: Connector Orientation

Connecting Sensor “A” to the Communication Unit

Connect Sensor “A” to the Communication Unit.
Black connector to black connector with the side containing the arrows facing each other (Figure 3)



Figure 4: Connecting the Communication Unit to sensor "A"

Connecting Sensor "A" to the Charging Cradle



Figure 5: Underside of the Charging Cradle

Connect Sensor A to the underside of the Charging Cradle where it is marked "*Line In*" and the power adapter to the Power" (Figure 6)

Components Connected



Figure 5: Components on Bed

Figure 5 shows how the NexSleep should look with all the components connected just before you lay down the mattress

Recharging

1. Remove the battery cover from the back of the SFU. Insert the battery at an angle with the side containing the triple golden tips at the edge (Figure 8).



Figure 8: Inserting the Battery



Caution

Turn the Unit upside-down to make sure that the battery is securely in place before placing the cover.

2. Place the SFU on the Mattress. DO NOT yet place the SFU with the battery in the charger.
3. Plug the Power Adapter into an electrical socket (Figure 6). If the NexSleep is properly connected the LEDs in the front of the Charging Cradle will light up and the SF Unit will briefly vibrate twice.



Figure 6: Plugging the Cradle In

4. Place the SF Units in the top of the Charging Cradle (Figure 7).



Figure 7: SF Units in Cradle

5. Charge for a minimum of 12 hours before initial use. The LED on the tops of the SF Units will turn green when the Units are sufficiently charged (See Figure 8).



Figure 8: Green LEDs



Note

Before use the NexSleep the SFU must be fully recharged. (Green LED on top of the SFU)



Caution

- Use **only** the AC Adapter that is supplied with the NexSleep™.
- Use only dedicated battery pack (symbol 1641 of ISO 7000)

The lights (LEDs) on the Sync Feedback Unit indicate the following:

Stable Red Light	Battery being charged in it's cradle
Blinking Red	Unit needs to be charged
Stable Green Light	SFU fully charged (in Cradle)



Note

We recommend that every six months you allow the battery to fully discharge before recharging and that you replace the battery every two years.

3 Using the Nexense NexSleep

- Before using NexSleep make sure that all the cables are firmly connected, and that the charging cradle is connected to an electrical outlet.
- Verify that the SFUs are fully charged, as indicated by the Charge LED illuminating green when unit is placed inside the Charging Cradle.

**Note**

Verify that the NexSleep user who sleeps on the "A" Sensor Plate uses the "A" SFU and that the user who sleeps on the "B" Sensor Plate uses the "B" SFU.

Attaching the Biofeedback Unit

Attach the SFU to your arm or leg as shown in Figure 9.

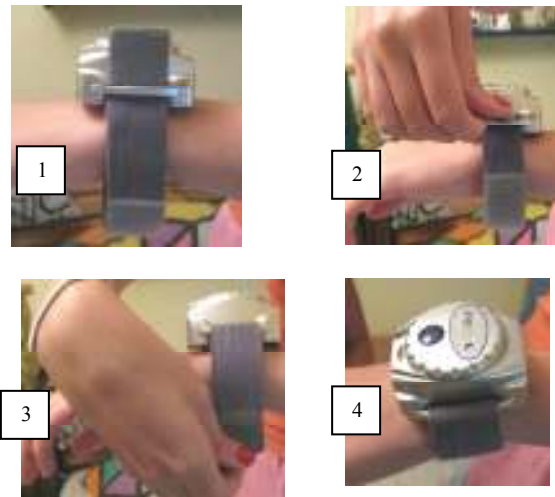


Figure 9: Attaching the SFU



Caution

Make sure that the SFU is not attached too tightly to your wrist.



Note

Attach the SFU just before you go to sleep!
If you read or watch TV in bed before sleeping, attach the Unit only when you finish and you are ready for sleep.

While You Sleep

While you sleep the sensor under the mattress will detect your respiratory pattern to determine if you are snoring. When you begin to snore a signal will be sent to the Synchronized Feedback Unit on your wrist causing it to produce a gentle vibration. Your body will respond to this feedback by changing soft tissue muscle tone or slightly changing your position which may significantly reduce your snoring.

After a certain period of time your body will associate the beginning of snoring with this conditioned reaction, and the number of times that the SFU operates will drop sharply due to your own snoring elimination.

**Caution**

The NexSleep may NOT work properly if there are more than 2 people on the mattress. It is most recommended that children and animals not sleep with you on the mattress at the same time while using the NexSleep

Viewing Sleep Quality

Initial Use

The device gathers sleep quality data during the first five nights of use. This data is used as a comparison point for sleep quality in subsequent nights. It is therefore especially important during the first five nights to attach the SFU as proximate as possible when you go to sleep, and keep it on until you wake up.

Daily Use

When you wake up in the morning, place the SFU in the Charging Cradle. Based on data collected during the night the quality of your sleep will be displayed on the LEDs in the front of the Charging Cradle (Figure 10) according to the following table:

Number Illuminated	Meaning
5	Excellent
4	Very good
3	Good
2	Moderate
1	Poor



Figure 10: Viewing Sleep Quality



Note

In the first week of use, while collecting baseline data, the Sleep Quality Scale will indicate 3 Illuminated LEDs meaning "Good night Sleep", as a default.

4 Technical Specifications

Electrical

Voltage Input Range	100-240 VAC, 50-60 Hz, 0.15A max
Voltage Output Range	7.5VDC, 0.66A Use only dedicated battery pack symbol 1641 of ISO 7000
Battery	2 Lithium-Ion rechargeable battery 650 mAh, 3.7V
Isolation	Oilcloth recommended to prevent moistness

Operating Conditions

Ambient Operating Temperature	15 °C to 35 °C (59-95 °F)
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Storage and Transportation Conditions

Temperature Range	0-40 °C (32-104 °F)
Relative Humidity	10%-90% RH

Classification and Standards

ISO	9001:2000 and ISO 13485:2003
CE	93/42/EEC, class IIa
USA	FCC, UL 60601

FCC warning Statement:

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 UNDESIRE OPERATION.

NOTE: THE MANUFACTURER IS NOT RESPONSIBLE FOR ANY RADIO OR TV INTERFERENCE CAUSED BY UNAUTHORIZED MODIFICATIONS TO THIS EQUIPMENT. SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

5 Troubleshooting

Problem	Possible Solution
Sync Feedback Unit does not charge	Check that the Adapter is plugged into the wall socket
	Check that the Adapter is properly connected to the underside of the Charging Cradle.
NexSleep™ does not function	Check that the Communication Unit is properly connected to Sensor "A".
	Check that the Sensors are properly connected to each other.
	Check that you are using the right SFU (A for A Sensor and the B SFU for B Sensor).

The Sync Feedback Unit does not Vibrate	Check that it is charged.
	Check that all components are properly connected.
	Check that the Charging Cradle is plugged in.



Warning

Trying to disassemble any of the NexSleep components may result in serious injury and will void your warranty.

6 Maintenance

Storage

- Avoid dropping and strong impact.
- Avoid direct sunlight and humidity.
- Do not disassemble, modify or try to repair by yourself!

Cleaning

To clean the NexSleep exterior parts only wipe with a cloth moistened with a mild cleaning agent, then dry the device with a soft and dry cloth.

Do not flush with water.

Do not use organic solvents to clean the Sensors or the SFU and its charging cradle.

The SFU **straps** can be washed separately by hand after removing it from the unit.

7 FAQs

Q: *How will it feel when I sleeping with NexSleep™?*

A: When you first use your NexSleep you may feel vibrations from the SFU. This is normal and you will quickly adjust to this new sensation.

Q: *What do I do when I want to get out of bed in the middle of the night?*

A: If you need to get up during the night, you don't have to remove the SFU. It will resume working when you go back to bed.

Q: *Can I travel with NexSleep?*

A: Your NexSleep has an internal power supply that enables it to operate in other countries. It will operate on power supplies of 100–240V and 50/60Hz. No special adjustment is necessary, but you will require an approved power cord for the region in which you are using the device.

If you decide to travel with NexSleep make sure you pack it in its original box or any other container with a firm padded cover that will hold the system components.

8 Contact Support

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