



Milian Lite Breathing Monitor
Quick Installation Guide and Operating Instructions

EN - English

Please read the Instructions For Use before commissioning!

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Quick Start Guide

Assembly

1. Position the sensor pads according to the assembly instructions in the User's Guide (page 8.) or according to the pictures depicting assembly instructions on the back of the box. Using the optional sensor pads, which can be purchased separately, you can connect up to 4 sensor pads at the same time. 2 strong self-adhesive Velcro strips help secure the central unit in its final position.

**IMPORTANT! The central unit must be positioned so that the child cannot reach it.
Use the supplied spiral clamp to fasten the line (Instructions For Use, page 9)!**

2. Inserting the batteries: use the slots on the back to remove the device cover. The top and bottom can be separated by hand, no tools are needed.

3. Replacing the device cover: ensure that the LED and button are below the hole and carefully push the cover into place. Screws are not needed. To remove the top part, press the white frame of the top part.

Switching on

Press and hold the button marked  on the front of the device. When the display shows a line circling around (after approximately 1 second), release the button. The display will show "E" followed by a number from 1 to 5 indicating the battery voltage level (5 high voltage, 1 low voltage). Then the factory set **threshold** L 3 (see page 6 of the Operating Instructions for details) will be displayed for a short period of time, followed by a number indicating motion detection from 0 to 9 (0 no motion, 9 strong motion) every 3 seconds.

When the displayed number reaches or exceeds the threshold value (3), the LED to the left of the display flashes green to indicate that the motion value is correct.

Switching off

When switched on, press the button  twice for a short period of time. After two short beeps, the device displays: "OFF", and switches off. All this (two presses and one beep) is necessary to ensure that the device is not switched off accidentally and that the sound informs of the switching off. The audible signal can sometimes be disturbing, unwanted, therefore, if you hold the button longer the second time (until the "≡" disappears from the screen), the device will turn off without sound.

Settings

The device will operate safely even if the user settings are not changed. However, there may be circumstances when it is advisable to change the factory settings. For example, when you need to eliminate the effect of disturbing vibrations caused by heavy traffic on the street (see page 7 of the Operating Instructions for details).

Instructions For Use

Dear parents!

Thank you for buying the Milian Lite Breathing Monitor!

Even the most careful parental supervision can't do what the Milian Lite Breathing Monitor can do: constantly monitor every child's vibrations and alert the parent in time when lack of movement is detected. Thus, the parent can intervene and prevent a process that could have more serious consequences. Although the device signals possible problems, it does not replace parental care. This device is not a life-saving device - however, **you and your Milian Lite Breathing Monitor can save lives together!**

Types, package contents

- **Milian Lite 1:** Central unit ML-01, **1 sensor pad 30x50 cm**, 1 spiral to fasten the line, 2 AA batteries, 2 Velcro fasteners, Quick Start Guide and User's Guide, Instructions For Use, warranty card.

Note: Recommended for use under a baby's nest, in a cradle or in a port cot.

- **Milian Lite 2:** Central unit ML-01, **2 sensor pad 30x50 cm**, 2 spiral to fasten the line, 2 AA batteries, 2 Velcro fasteners, Quick Start Guide and User's Guide, Instructions For Use, warranty card.

Note: Recommended for use in a 60x120 cm cot.

- **Milian Lite 3:** Central unit MB-01, **3 sensor pads 30x50 cm**, Y-distributor, 3 spirals to fasten the line, 2 AA batteries, 2 Velcro fasteners, Quick Start Guide, Instructions For Use, warranty card.

Note: Recommended for use in a 60x140 cm cot.

Read this manual carefully and use the product only in accordance with the Instructions For Use! The "Quick Start Guide" supplied with the device provides basic information on the operation of the device. However, to ensure safe use, you must be aware of the following:

Functions of the device

Monitoring the movements of a healthy child. In case of lack of movement, the device warns the parent with a sound signal and short text information.

Device operation

The device detects the movement of the child using one or more sensor pads. It continuously analyses the signals of the sensor pad, displays movement intensity and, if necessary, instructs the parent to intervene (sound, light, text display).

The sensor pad(s) can be placed under the mattress or on the mattress in accordance with the Instructions For Use (page).

Basic function: if the intensity of movement does not reach the set limit of 12 seconds, the device will emit three beeps in order to make the child move more vigorously. If this fails, the device emits a

sound signal to warn the parent. It is advisable to prepare for such an event by asking your paediatrician for advice in advance.

By continuously monitoring the child's movements, the MILIAN Lite Breathing Monitor can provide parents with signals in a timely manner that can prevent major problems.

Intended use

- This device cannot be used and is not suitable for the diagnosis, treatment or prevention of any disease!
- This device is not suitable for the prevention of Sudden Infant Death Syndrome (SIDS), as this is an unexpected and unprecedented event. However, early recognition and parental preparedness play a huge role in the success of resuscitation.
- This device is not a medical device.
- This device does not replace parental supervision and responsibility!
- It is recommended to take a baby first aid course!

Warnings

Attach the sensor pad cable to the cot so that it cannot be reached or pulled by the child. You can use the included spiral cable clamp. Use the Velcro fastener delivered with the unit to attach the central unit of the device to the cot. The central unit must be placed on the cot so that your child cannot reach it under any circumstances. The central unit in front of the child should be separated by a cot barrier. Never cover the central unit and never place any objects on it! Never allow children to play with the device! Never allow the device to be operated by an older sibling! Proper operation of the device is the responsibility of the parent!

Limitations

As the device is a very sensitive movement monitor, several important rules must be followed when using it:

- Minimize vibrations and movements in the surrounding area! These include fan, air conditioning, draft, floor movement when walking, older children playing around the cot, etc.
- If the device is used in a port cot, the port cot must not be in contact with the adult bed, as adult movement may be transmitted to the device!
- The child cot must not be within reach of another child's cot or adult bed.
- The sensitivity of the device is set to monitor the movement of infants and young children. Do not use the breathing monitor for children older than 2 years or for children weighing more than 20 kg.
- The device can be used with any commercially available mattress that can be placed in the cot!

Commissioning

Carefully read and follow the “Quick Start Guide” delivered with this device.

It is important to place the sensor pads according to the child's weight and cot size. The photo guide on the back of the box or the Installation Guide on our website in the “Documents” section (<https://milianchild.hu/telepitesi-utmutato/>) or this User's Guide can help you (page).

In general, until the child can roll or crawl away when sleeping and weighs more than 3.5 kg, place **one** sensor pad under the mattress, in the same direction as the child. With this placement, the child will lie over the sensor pad along its entire length and not next to it. If the child can roll or crawl away from its place, it is necessary to use a second sensor pad. If the child can crawl, it is advisable to place the sensor pads crosswise in the cot, 5-15 cm from each other.

To avoid a false alarm, it is also important to use **one** sensor pad **on the mattress** instead of under the mattress, **until the child reaches a weight of 3.5 kg**. In doing so, temporarily remove the mattress between the baby and the sensor pad for safe sensing until the child weighs more than 3.5 kg. To ensure that the child feels comfortable, cover the sensor pad with a child blanket or a double-folded soft blanket. If the child weighs more than 3.5 kg, it is advisable to place the sensor pad under the mattress.

Similarly, place the sensor pads on the mattress if the child is to be **placed on its side**, even if it weighs more than 3.5 kg. In this case, the parts of the body that are moving during sleep (abdomen, chest) are moving sideways and the child is also lying on its hand, which is why much less movement is transmitted to the mattress and the sensor pad(s).

Post-commissioning test

Switch on the device without the child and look at the display. Stand a little further so that your movement does not interfere with the sensing. In this case, the value of 0-1 is acceptable.

After reaching the resting position (the first displayed number below the subthreshold value), the device beeps briefly for the first time after approximately 12 seconds, indicating that it has been recording subthreshold motion for too long. In this case, if the child responds to the sound with movement, the device restarts the monitoring cycle. During this test, push the mattress down a little (imitating the child) to restart the monitoring cycle.

If the device does not receive any movement feedback, it emits three short beeps and only then triggers the alarm, approx. -20 seconds after reaching the state of rest. In this case, only the parent can stop the alarm by pressing the button briefly.

If the test was successful without the baby, repeat it with the baby. If the child is awake, the numeric display will show 8-9.

When you take the child out of the cradle, after temporary big signal change, the device must safely indicate that the child has stopped moving. Here it should be noted that there are mattresses which, after taking the baby out, will indicate subsequent movement for a relatively long time, up to 10-20 seconds due to weight loss, which is perceived as movement by the device. Fortunately, this cannot happen in a real situation when the baby is in the cot.

If, when testing without the baby, you see that the device occasionally or continuously shows a value higher than 0-1, it means that it is detecting movement of external origin. Find out the origin of the disturbing movement and try to eliminate or reduce it!

It may happen that the external disturbing movement cannot be eliminated, for example in case of heavy street traffic. In this case, the movement detection threshold should be set 2 units higher than the recorded interference value. For example, if the interference value is 3, set the threshold "L" to 5. You can do so in the device menu.

Changing the threshold L=3: Switch on the device. When it reaches the operating state (5 seconds), press and hold the power button. When "≡" appears on the display, release the button, then press and hold it again until "L" appears (approximately 6 seconds).

You can change the threshold number by pressing the button briefly and select the threshold number by pressing the button longer. The device will record the new threshold value, display "P" and beep briefly to confirm the operation is complete.

This eliminates the possibility of external interference, but at the same time the device will be less sensitive to baby's movements. Therefore, it may be necessary to place the sensor pad on the mattress until the child weighs more than 4 kg.

Normally, it is not necessary to change the factory-set threshold value “L”=3, only if it is not possible to filter out the external disturbing movements in any other way.

IMPORTANT! THE FACTORY SET THRESHOLD VALUE “L = 3” MAY BE CHANGED ONLY IN JUSTIFIED CASES!

If you change the location of the device or cot, repeat the above test. The test should be performed once a week.

M - (MEMORY REPLAY) - the last 12 minutes of memory can be replayed.

Switch on the device. When it reaches the operating state (5 seconds), press and hold the power button. When “≡” appears on the display, release the button, then press and hold it again until “n” appears (approximately 6 seconds). When the button is released, the device will display: Naplo P12, then it automatically starts playing the events 12 minutes before the alarm.

It may be necessary to check the data stored in the memory if, for example, an alarm has occurred but the child is OK. In this case, it is not clear whether the alarm was true or false. Checking the data for the last 12 minutes before the alarm can help you determine the cause.

The data are replayed in 1-minute steps, back in time from the 12th minute. Therefore, the first display will be P12, then the 12th minute will be replayed, the original display speed will be accelerated to 3x. If the device is new and no 12-minute data is stored in the memory, the device starts at the beginning of the actually recorded data, for example P5, which means that 5 minutes will be replayed.

If you do not want to go through the whole 12 minutes, you can skip to the beginning of the next minute by briefly pressing the button. “L” appears on the display for a short time.

To pause, press and hold the button. When “OFF” appears, memory replay ends and the unit stops.

Battery voltage monitoring

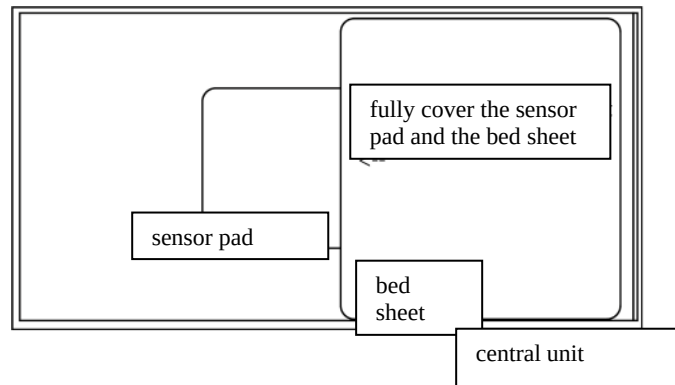
Batteries must be in good condition, otherwise the device cannot function properly. Therefore, it is important that the batteries are replaced when the device indicates that the batteries are discharged. However, the device will not signal the need for battery replacement when switched on (when the baby is asleep) or during the night.

If the device evaluates the battery status as appropriate after being switched on, the batteries can ensure the operation of the breathing monitor for another 12 hours.

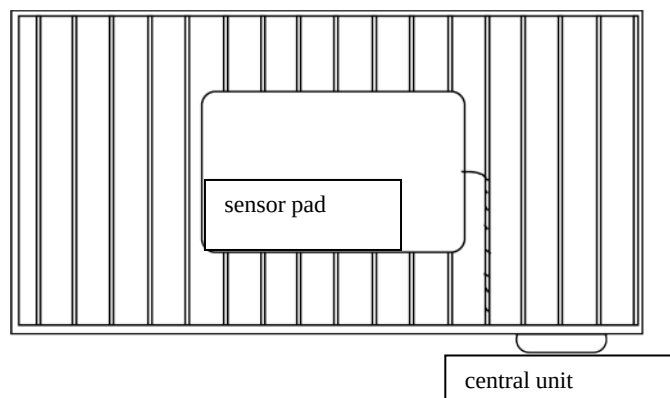
When you switch the device off, it checks the battery status again and if it approaches an insufficient value (<2.8V), the device will emit a sound and “E” will flash. In this case, the batteries must be replaced! If you do not replace them, the signalling will be repeated the next time the device is **switched on**. If, in the meantime, the battery has been discharged (<2.7V) and safe operation is endangered, it will not be possible to switch the device on and you will have to replace the batteries. **With this sophisticated battery monitoring, you can avoid your child being disturbed by battery status signalling**, as it will emit a warning sound first when switched off, when your child is likely to be awake. If you then replace the battery, there will be no sound signal at the next switching-on.

Ways of placing sensor pads with a top view of the cot

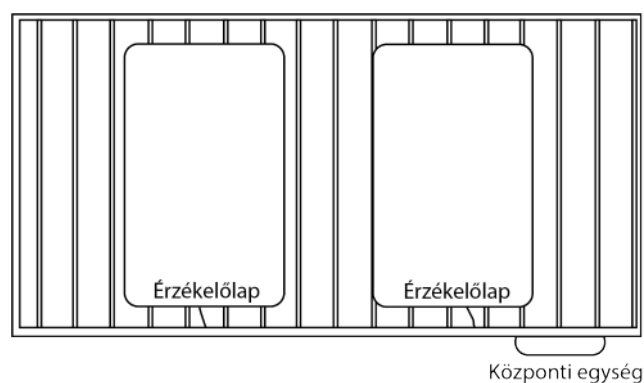
If the child's weight is **under 3,500 grams**, 1 sensor pad should be placed on the mattress in the longitudinal direction. Cover the sensor pad and cable with a bed sheet and then place a child blanket under the child to make it feel comfortable. The child must be placed above the sensor pad with its abdomen around the centre of the pad:



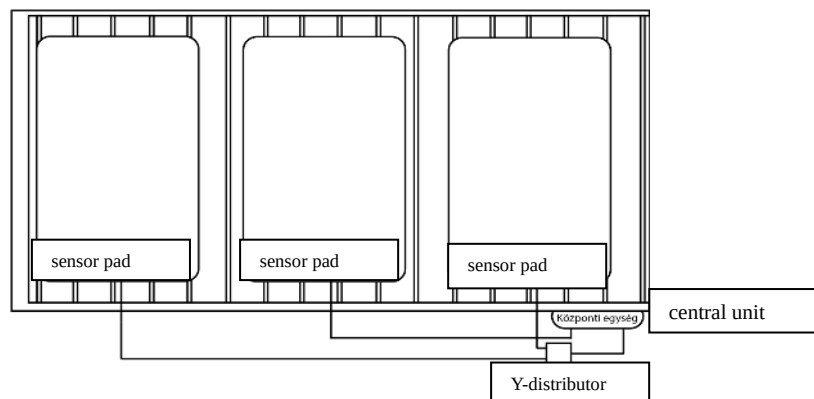
Similarly, **place the sensor pads on the mattress** if the child is to be placed on its side, even if it weighs more than 3.5 kg. When the child's weight **is equal to or over 3,500 grams**, place 1 sensor pad between the bed frame and the mattress, unless the child can roll or crawl away from its place. The child must be placed above the sensor pad with its abdomen around the centre of the pad:



If the child weighs more than 3,500 grams, and if it is already crawling away from its place, place the sensor pads as shown in the picture below: the ideal arrangement for a **60 x 120 cm** cot, with 2 sensor pads:



Ideal arrangement for a **60 x 140 cm** cot with **3** sensor pads and a Y-distributor:
Place the sensor pad that is directly connected to the central unit in the centre.



Using the Velcro fastener

In the device package you will find 2 strong, self-adhesive Velcro fasteners, which can be used to attach the device to the cot. Attach one Velcro fastener to the bed in the desired place (a grease-free clean surface is required for proper adhesion). Attach the other half of the Velcro fastener to the back of the device as shown below:



Using the spiral to fasten the line

The device package contains a spiral (s) for fastening the line, which must be placed on the vertical grid of the cot, as shown below. If necessary, wind the cables several times around the cot grid.

Technical data, cleaning, maintenance

The power consumption of the central unit is approximately 1 mA,

The expected battery life is approx. 1500 operating hours, provided an alkaline battery with a capacity of 1500 mAh is used.

Two-stage signalling of battery voltage, safety limitation.

Display type: 7 segments, green colour.

Type of sound signalling: piezoelectric, volume 75-80 dB.

Since the device's battery monitoring is set to 2 1.5 V “AA” alkaline batteries, **it is not possible to use a different type of batteries or rechargeable batteries** due to their different voltage.

The electrical noise emission (electrosmog) of the device is practically unmeasurable.

Load capacity: 20 kg, provided the sensor pads are placed evenly under the mattress. If the sensor pad is placed above the mattress, the load capacity is 10 kg per sensor pad.

The plastics used are commonly used in healthcare (PVC, polycarbonate), do not emit solvents and their use is safe. The sensor pads are protected against dripping water. They can be cleaned with a damp soap cloth and disinfected with sanitary cleaners. The central unit is not protected against water. It can be cleaned with a damp cloth, materials used for sensor pads. It is recommended to clean the central unit and the sensor pads if they are dirty, but at least once a week. The device does not require any other maintenance apart from cleaning.

It is recommended to visually inspect the condition of the device, sensor pads and wires before each use. In the event of a problem or fault, contact the device manufacturer or distributor!

For instructions on inserting the batteries, please refer to the “Quick Start Guide”.

Information on safe handling of batteries

- Never use rechargeable batteries!
- Never use carbon-zinc batteries!
- Do not mix old and new batteries.
- Do not recharge non-rechargeable batteries.
- Insert the batteries in the correct direction.
- Remove discharged batteries from the device and handle them properly.
- It is recommended to use similar or identical batteries.
- Batteries may only be inserted or replaced by an adult.
- Make sure that used batteries are kept out of reach of children and dispose of them at a designated collection point.
- If you will not be using the device for a long time, remove the batteries!
- When the device is no longer in use, dispose of it at the appropriate waste collection point, in accordance with valid regulations.
- The device can be used at temperatures from 10 °C to 35 °C, at max. humidity of 90%.