English

snuza®

HERO MD

Portable Baby Breathing Monitor

INSTRUCTION MANUAL

READ INSTRUCTIONS IN FULL BEFORE USE



Important: This portable baby breathing monitor may not be able to detect all life-threatening events.

SNUZA is a registered trademark of

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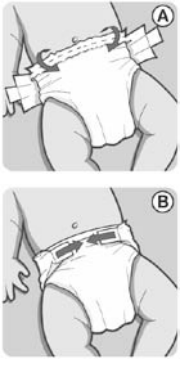
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1. IMPORTANT – READ FIRST!

It is essential that Hero[MD]'s coloured flexible tip containing the breathing sensor maintains constant contact with baby's tummy.



ALWAYS:

Use the correct size diaper (nappy). If it is too loose, Hero[MD] may lose contact.

Fold the top of the diaper over before attaching Hero[MD] to ensure a firm grip. Use the diaper adjusters to provide a snug fit around the tummy.

Firmly clip Hero[MD] onto the folded diaper waistband, using the full extent of the clip.





Ensure that Hero^{MD} sits squarely on the diaper, and that the Breathing Sensor (1) is in contact with baby's tummy.

Press the ON/OFF button (6) to start monitoring.



Always follow the above procedure to ensure that your baby's breathing is being monitored, and to prevent false alarms caused by lack of contact with baby's tummy.

NOTE:
Handle Hero^{MD} with care to prevent damage to clip or sensor.





2. INTRODUCTION



Intended use:
Hero^{MD} is a breathing monitor for the detection of infant breathing cessation.

Intended user:
This equipment is intended to be operated by the baby's caregiver. The caregiver must have a good understanding of the instructions and safety measures contained in the user manual.

Usage environment:
Home Safety

Hero^{MD} safely and conveniently monitors your baby's breathing movement while sleeping to provide an early intervention opportunity in the event of any interruption in baby's breathing.
Hero^{MD} should be clipped onto your baby's diaper (nappy) for total portability. No cords, wires, sensor pads, flat surface or external power are required.
Clip on, switch on and experience peace of mind.
Hero^{MD} detects even the slightest abdominal movement and will alert you if your baby's breathing rate falls to less than 8 breaths per minute (this warning can be disabled), or if no breathing is detected at all for a period of 20 seconds. Hero^{MD} will first vibrate gently after 15 seconds in an attempt to rouse the baby.

If the vibration succeeds in rousing the baby and breathing is detected after such an event, on each detected breath the Breathing Indicator Light (3) will flash red. After three vibration/rouse events, the Rouse Warning will alert you to the fact that your baby's breathing movements have stopped for 15 seconds on three occasions. The Rouse Warning is characterized by a short beep and flashing of the red Breathing Indicator Light (3) every 2 seconds. Monitoring will continue when the Rouse Warning is active but will require the caregiver to attend to the baby to investigate. The Rouse Warning alarm can be reset by briefly pressing either the ON/OFF or MODE/OFF buttons, or by turning the device off and then back on. The rouse warning feature can be disabled during monitoring by pressing the MODE/OFF button for 2 seconds indicated by a single beep, flashing of the red Breathing Indicator Light (3) and Alarm Indicator Light (4). When the device is turned off and on again, the settings revert to the rouse warning feature being enabled.

3. PRECAUTIONS AND CONTRA-INDICATIONS

- This device is not intended to prevent or monitor a disease or condition such as Obstructive Apnea.
- Movement from external sources such as being pushed in a pram or travelling in a vehicle or aircraft may be detected by Hero^{MD} 's sensor. Hero^{MD} should not be relied upon where external sources of movement are present.
- The monitored baby must sleep in his/her own separate bed as the monitor may detect the breathing or movement of any other person sharing the bed with the baby, and will not alarm as long as it detects that movement, even if the baby stops breathing.
- Radio transmitters such as cell phones, audio and video baby monitors, cordless phones, walkie-talkies, wireless routers, etc. may cause interference with the monitor's ability to detect breathing or movement. The monitor should not be placed within 2 meters of other transmitting devices.
- No modification of this device is allowed.
- A single device should be dedicated for use with one baby only.
- Small parts that have become detached for some unlikely reason may result in a choking hazard.
- In case your baby develops skin sensitivity where the device makes contact with your baby's skin, refer to section 8.3. If the skin sensitivity persists, contact us via www.snuza.com.
- Keep out of reach of pets, pests and other children as damage to the device might cause it to not perform as intended.
- Do not insert anything into the Sound Emission Hole (2).
- Do not allow any liquid to enter the Sound Emission Hole.
- Avoid bending the breathing sensor unnecessarily (fig 1).
- Do not use undue force to bend the clip (fig 2).
- Do not pull the Battery Cover Release Clip (10) beyond the Guard Rail (11).

4. PARTS IDENTIFICATION

FRONT



(1) Breathing Sensor

(2) Battery Indicator Light

(3) Breathing Indicator Light

(4) Alarm Indicator Light

(5) Sound Emission Hole

(6) ON/OFF Button

(7) MODE/OFF Button

REVERSE



(12) Applied Part

(8) Diaper/Nappy Clip

(9) Battery Cover

(10) Battery Cover Release Clip

(11) Clip Guard Rail

5. QUICK START GUIDE

5.1 Important: Use the correct diaper size and make sure it fits snugly (*see Section 6 Diaper/Nappy Fitment*).

5.2 Do not switch the monitor on when clipped onto your baby's diaper.

5.3 Place the monitor on a **flat, stationary** surface. Switch on by briefly pressing the ON/OFF button (6).

5.4 A start-up test will illuminate the indicator lights, vibrate the stimulator, play 3 audible tones, perform a battery test, and perform a sensor test.

5.5 When the sensor has been tested, a startup tone is heard.

5.6 Clip Hero^{MD} onto the diaper so that the Breathing Sensor (1) is in direct contact with the baby's tummy (*see Section 7 Fitting your Hero^{MD}*).

5.7 The Breathing Indicator Light (3) flashes on each movement. See Section 8.2 Monitoring for a full description.

5.8 If breathing is not detected for 15 seconds, the vibrating stimulator will attempt to rouse the baby.

5.9 If breathing resumes within 5 seconds after a vibration, the Breathing Indicator Light (3) will flash red to indicate that there has been a 15-second period of no breathing.

5.10 After three vibrations, the Rouse Warning is activated – Hero^{MD} beeps every 2 seconds and the Breathing Indicator Light (3) flashes red with every beep.

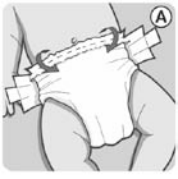
5.11 If the period of no breathing reaches 20 seconds, the full audible alarm will sound, Hero^{MD} will vibrate and the Alarm Indicator Light (4) will flash red.

5.12 The caregiver must attend to the baby.

5.13 The alarm can only be deactivated by switching the monitor off.

5.14 To switch off the monitor, press both the ON/OFF (6) and MODE/OFF (7) buttons simultaneously. A shutdown tone will be heard and monitoring will stop.

6. DIAPER/NAPPY FITMENT





Important: Correct diaper fitment is essential for the operation of Hero^{MD}. The thin flap of material at the top of the diaper must be folded over the thicker part before the diaper is closed (this is the section to which Hero^{MD} will be attached). The diaper should fit snugly on the baby with the top of the diaper just below the belly button. Loose fitting diapers will gape, causing the monitor to lose contact with the baby and false alarm. A very 'full' or wet diaper may also cause it to gape. If baby sleeps on his or her side, Hero^{MD} should be placed off-center of the navel and the mattress.

7. FITTING YOUR HERO^{MD}

When attaching your Snuza monitor you should put your fingers in between the baby's diaper and the baby's skin. Make sure that the monitor is clipped securely onto the diaper and away from the baby's skin when clipped on in order not to harm the baby.

Ensure that the Battery Cover (9) is secure. Clip your Hero^{MD} all the way onto the diaper to the full extent of the clip, as shown:-





Make sure that the Breathing Sensor (1) is in contact with the baby's tummy around the belly button area, although closer to the sides may suit different sleeping positions.



The World Health Organisation (WHO) recommends that babies be placed to sleep on their back unless advised otherwise by a doctor. See http://www.who.int/en/

8. OPERATION

8.1 Startup

Hero[MD] must not be switched on while clipped onto your baby's diaper. The monitor must be placed on a flat, stationary surface during the self-test.

Switch on by briefly pressing the ON/OFF button (6).

A startup-test will run which will test all indicator lights, the vibration stimulator, the audible alarm and the battery level. If a failure of any item is detected, the Self-Test Failure Alarm will sound and the device cannot be used.

After the battery test, the Battery Indicator Light will flash 3 times with simultaneous single-tone beep. The colour of the Battery Indicator Light has the following meaning:

🟢	Green	Battery OK
🟡	Yellow/Orange	Battery nearing depletion – the monitor can be used but the battery must be replaced as soon as possible.
🔴	Red	Battery flat – Hero[MD] cannot be used, replace battery. The Low Battery Signal will immediately commence.

If the battery indicator is either green or yellow/orange, Hero[MD] will proceed to test the sensor. The sensor self-test can last between 1 and 40 seconds, if the device does not detect zero movement.

The sensor test is indicated by a beep every 2 seconds and flashing of the red Breathing Indicator Light (3) and Alarm Indicator Light (4). The device must be placed on a stationary surface during this test. If the 40 second limit is reached then the self-test Failure Alarm will sound and the device cannot be used.

If the sensor test passes, a startup tune will be heard with simultaneous flashing of the green Breathing Indicator Light (3) indicating that monitoring

has commenced and Hero[MD] can be positioned on the baby's diaper/nappy *(see section 7 Fitting your Hero[MD])*.
Warning: Ensure that the battery level is high enough for proper operation (i.e. green or orange light). Otherwise, DO NOT use the monitor. If the battery is too flat to operate, the Battery Indicator Light (2) will flash red accompanied by a short beep every second. Change the battery before further use *(see Section 10.3 Replacing the Battery).*
To switch OFF, press both the ON/OFF button (6) and the MODE/OFF button (7) simultaneously.

8.2 Monitoring

During monitoring, the Breathing Indicator Light (3) provides information about your baby's breathing, while the Alarm Indicator Light (4) alerts you to potential problems.
If there is no breathing detected then the alarm indicator light will flash red every 3 seconds. If breathing is detected then the Breathing Indicator Light (3) flashes with each breath:-

	Green on each breath	Breathing detected with no prior rouse event.
	Yellow and breathing rate alarm (Dual-tone beep every second)	Breathing rate below 8 breaths per minute. If the breathing rate increases to over 8 breaths per minute, breathing indicator light will reset to green (normal) and the warning will stop. To disable this function, see Section 9.3 Breathing rate warning.
	Red on each breath	There has been at least one incident of no breathing for 15 seconds, where breathing was detected after the vibration (see below).
	Red and Rouse Warning Alarm	The Rouse Warning indicates that there has been 3 vibration/rousing

		incidents. To disable this function, see Section 9.2 Rouse Warning.

The Alarm Indicator Light (4) signifies the following:-

● (( ))	Flashes red with vibrating stimulus and 5 short beeps	If no movement is detected at all for 15 seconds, Hero^{MD} gently vibrates in an attempt to rouse the baby. The Alarm Indicator Light (4) flashes red simultaneously with a beep. If breathing movement is detected again within the next 5 seconds, the Breathing Indicator Light (3) will flash red on each subsequent breathing movement. This is an indication that there has been an incident of no breathing movement for 15 seconds.
● 🔈))	Flashes red and alarm sounds	If no breathing movement at all is detected for a further 5 seconds after the vibration stimulus (20 seconds in total), the Alarm Indicator Light (4) flashes red and the high-priority audible alarm sounds. The operator must attend to the baby immediately. The alarm can be deactivated by turning Hero^{MD} off completely (press ON/OFF (6) and MODE/OFF (7) buttons simultaneously).

NOTE: It is recommended that the parent / caregiver is trained to deal with situations where the baby has, for example, suffered from a prolonged apnea event.

8.3 Clothing

- Hero[MD] can be clipped onto the folded waistband of the diaper or the waistband of elasticated pants, as long as the Breathing Sensor (1) touches the baby in the tummy area.
- The soft sensor tip on the monitor is made from medical grade silicone and is hypoallergenic. In the unlikely event that a red friction mark is noticed on the baby's skin where the monitor was positioned, then we recommend that a thin layer of clothing is placed between the baby's skin and the monitor, but ensure that the Sensor maintains contact. The position of the monitor must also be changed to a different location on the tummy, away from where the red mark was noticed and preferably closer to the side.
- The monitor can also be used if baby is dressed in light clothing (for example, a Babygro) over the nappy or pants to which Hero[MD] is attached.
- Too much clothing may attenuate or muffle the alarm. Make sure the alarm can be heard if baby is covered in clothing and/or blankets.

9. SETTINGS

9.1 AudibleTick

This feature causes Hero[MD] to emit an audible 'tick' on each breathing movement. To enable the Audible tick, ensure that Hero[MD] is switched ON, then press the MODE/OFF button (7) briefly (less than 1 second). To increase the volume of the tick, press the MODE/OFF button once again for medium volume and again for high volume. To turn off, briefly press the MODE/OFF button a fourth time – Hero[MD] will give a louder beep. This feature may be used with a baby sound monitor to enable you to 'hear' baby's movements from a distance.

9.2 Rouse Warning

During monitoring, if no breathing movement is detected for 15 seconds, Hero[MD] vibrates gently in an attempt to rouse the baby. If breathing

movement resumes within the next 5 seconds, the Breathing Indicator Light (3) will flash red on each subsequent breathing movement as an indication that there has been an event of no breathing for 15 seconds. With the Rouse Warning enabled, after 3 such vibration and successful rousing incidents, the Breathing Indicator Light (3) will flash red every 2 seconds with a simultaneous audible beep. This alerts you to the fact that your baby has stopped breathing for 15 seconds on three occasions and has then resumed breathing movement after Hero^{MD} has vibrated.

Note:- Monitoring will continue while the Rouse Warning is sounding. The Rouse Warning is automatically enabled each time Hero^{MD} is switched ON. To disable this feature, ensure that Hero^{MD} is switched ON, then press and hold the MODE/OFF button (7) for at least 2 seconds until a tone is heard with a brief vibration and a simultaneous flash of the red Breathing Indicator Light (3) and Alarm Indicator Light (4). If you want to enable the warning again, switch Hero^{MD} off completely (press both ON/OFF (6) and MODE/OFF (7) buttons simultaneously), then switch it ON again (the rouse warning is enabled by default when Hero^{MD} is switched on).

9.3 Breathing-rate Warning

The Breathing-rate Warning alerts you if there are less than 8 breathing movements per minute. The warning is identified by the Breathing Indicator Light (3) flashing yellow with a simultaneous dual-tone audible beep every second. This feature is automatically enabled each time Hero^{MD} is switched ON. To disable this warning during monitoring, ensure that Hero^{MD} is switched ON, then press and hold the ON/OFF button (6) for more than 2 seconds until there is a brief double-beep with short vibration and a simultaneous flash of the yellow Breathing Indicator Light (3) and Alarm Indicator Light (4). If you want to enable the warning again, switch Hero^{MD} off completely (press both ON/OFF (6) and MODE/OFF (7) buttons simultaneously), then switch it ON again. The Breathing-rate Warning is enabled by default when Hero^{MD} is switched on.

10. BATTERY

10.1 Battery Indicator

If the battery becomes depleted during monitoring, the Battery Indicator Light (2) will flash as follows:-

● ♪	3 audible beeps every 4 seconds and red flash every 2 seconds	The battery is nearing depletion. Replace battery before further use (*see Section 10.3 Replacing the Battery*).

10.2 Battery Life

The life of the replaceable battery depends entirely on usage. Battery life will vary significantly depending on the average daily duration of use and/or alarm duration and/or number of alarms. Turning on and off unnecessarily shortens the battery life. If the number of alarms is high, check diaper fitment.

Please note that the product guarantee does not apply to the battery.

The typical operating time before the battery needs replacement is 4 - 6 months when used on average 8 hours per day.

10.3 Replacing the Battery

For all MD models: use a CR2 (CR15270) battery available from most retail outlets (please see our website www.snuza.com for information about batteries and details of your national distributor).

10.3.1 Use your fingernail or a small flat implement. With a pinching action (Figure 2 and Figure 3), gently pull back the Battery Cover Release Clip (10) on the underside of the monitor and lift the Battery Cover at the same time (Figure 4).

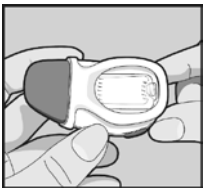


Fig 1



Fig 2

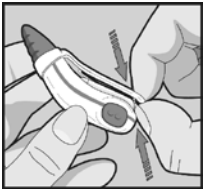


Fig 3



Fig 4

10.3.2 Remove the depleted battery by gently tapping Hero[MD] on your hand with the battery cover opening towards the ground.

10.3.3 Insert the new battery, negative end first, as shown in Figure 5. Ensure that the polarity is correct (align the positive end '+' of the battery with the '+' symbol in the battery housing, as indicated). Replace the Battery Cover and ensure that it is correctly closed (Figure 6).

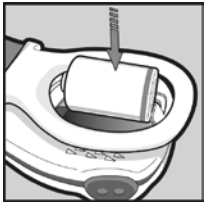


Fig 5



Fig 6

Do not use the monitor without the Battery Cover in place.

10.3.4 Test the unit by switching on and ensuring that the Battery Indicator Light (2) flashes green.

10.3.5 If the unit starts alarming after the battery has been replaced, simply press the ON/OFF and OFF/MODE buttons simultaneously to turn it off.

NOTE: Incorrect placement of the battery may result in a safety hazard; please follow the instructions as above.

11. MAINTENANCE

11.1 Disposal

The device, battery and packaging material must be disposed of in accordance with your country's laws governing the disposal and recycling of batteries.

11.2 Cleaning and Storage

- Gently wipe with a damp cloth to remove any dirt. A mild soap may be used for stubborn dirt.

- Do not use any other cleaning agents as they may contain damaging chemicals.
- The monitor is splash resistant, not waterproof. Do not immerse in water. If it gets wet, dry it off immediately.
- When changing the battery, dirt that is trapped between the battery replacement hatch and the case may be cleaned with a dry cotton bud once the Battery Cover (9) has been removed. Be sure that the rubber seal is free of dirt before replacing the Battery Cover, as this could compromise the seal.
- When not in use, keep your Hero^{MD} in its protective case. Do not store in a damp area.

12. TROUBLESHOOTING

- Check incorrect fitment and placing of Hero^{MD} on baby's diaper (*see Section 6 Diaper/Nappy Fitment and Section 7 Fitting your Hero^{MD}*).
- Battery failure. The Battery Indicator Light (2) will show red (*see Section 10.3 Replacing the Battery)*.

Please visit our website www.snuza.comfor further information.

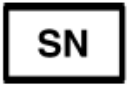
13. DISCLAIMER

Customers use this monitor at their own risk and Snuza International (Pty) Ltd, its members, employees, agents, contractors, representatives, manufacturers, distributors and associates ("SNUZA") shall not be held liable for any loss, damage or injury suffered by the customer or any other person arising from, or in connection with, the use or manufacture of the monitor, including loss, damage or injury suffered by the customer or any other person as a result of any defects in respect of the monitor, and all warranties, and any other liability from whatsoever cause arising, are hereby excluded and the customer hereby indemnifies Snuza International (Pty) Ltd in respect of any such liability.

14. GUARANTEE

Snuza International (Pty) Ltd guarantees this product to be free from defects in materials and workmanship for a period of 12 months from the original date of purchase, verified by a sales receipt. Our guarantee liability shall be limited to replacing the unit free of charge and does not include transport costs. Our guarantee extends to all countries in which this product is supplied. By the act of operating this product, the user accepts all resulting liability. We reserve the right to modify the provisions of this guarantee at any time without notice. This guarantee does not cover the battery, incorrect application, tampering, misuse or transport damage.

15. TECHNICAL DESCRIPTION

	Type BF applied part
CE 0120	CE marking according to Annex II of MDD 93/42/EEC
IP52	IP52 The enclosure of the monitor is protected against the ingress of dripping water
	Device Serial Number (the first two numbers indicate the year of manufacture)
	See the Disposal section for proper disposal of the monitor
Typical service life	Hero[MD] has an expected service life of 2 years from the date of manufacture
Environmental Conditions	Permissible environmental operating conditions: · Temperature: 5 ºC TO 40 ºC. · Humidity: 15% TO 93%, Non Condensing · Air pressure: 700HPA TO 1060HPA
Permissible environmental conditions of transport and storage	· 25 °C without relative humidity control; and

after having removed the device from its protective packaging and subsequently between uses:	+70°C at a relative humidity up to 93%, non-condensing
Power Source:	Internally Powered
Battery Specification:	Common name: CR2 IEC: CR17355 3.0 Volt 800 mAh Size (mm): 26 x 15 x 15 Lithium
Sound pressure level:	75dBm at 10cm

Scan the following QR code to see the electromagnetic compatibility tables:

Contact Us:

For assistance with using or maintaining Hero^{MD} or to report unexpected operation or events, contact us via:

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