

Apnea Monitor: Training and safety guidelines

What is an apnea monitor?

An apnea monitor, such as the SmartMonitor 2, tracks your baby's breathing rate and heartbeat while they sleep, and sounds an alert if they go out of their normal range for any reason. It can also be programmed to record all alarm events.

What do I need to know to use it safely?

Following these safety guidelines will help reduce possible risks. Refer to the manufacturer website if you would like further information.

- The SmartMonitor 2 is a monitoring device only. It will not prevent the loss of breathing or heart activity, nor will it restore breathing or heart activity.
- Anyone using the SmartMonitor 2 should be trained in current infant Cardiopulmonary Resuscitation (CPR), which is a proper way to restore breathing and heart activity.
- Make sure the alarm speaker is never blocked or covered.
- Never use the monitor on your baby while they are being bathed. This could result in electrical shock and/or damage to the equipment.
- Do not place the apnea monitor in or near liquids. This could cause electrical shock.

What do the alarms mean?

Whenever the patient's breathing effort or heart activity are not within the limits set by the physician, an indicator light will come on and an alarm will sound. The monitor has 2 types of alarms: patient and system.



Patient alarms

An intermittent (off and on) beeping and blinking light alerts the caregiver during the following alarm events:

- **Apnea:** Patient has stopped breathing for longer than the limit set by the physician.
- **Low Breath Rate:** Breathing rate is lower than the limit set by the physician.
- **Low Heart Rate:** Heart rate is lower than the limit set by the physician.
- **High Heart Rate:** Heart rate is higher than the limit set by the physician.

System Alarms












A constant audible alarm and steady light indicates one of the following monitor conditions:

- Loose Lead
- Low Battery
- Memory Full
- Accidental Power-Off
- Internal System Error

If an alarm sounds:

If an alarm sounds while you are monitoring your baby, check your baby first. Always check your baby's skin color. Is it normal? Always check to see if your baby is breathing. If your baby is not breathing, follow the instructions listed in the table under "Respond Like This."

| Light | Alarms | Check Baby | Respond Like This |
|---------------------|------------------------------------|--|---|
| Red Apnea or Low HR | Intermittent 1 beep per second | Skin is pale or blue Baby is not breathing | Respond as instructed by your physician or in your CPR class |
| Red Apnea or Low HR | Intermittent 1 beep per second | Skin color is good Baby is responsive and breathing | Watch to see if baby's breathing and color remains normal. If alarm continues, check electrode placement and replace if necessary. |
| Red High HR | Intermittent 2 beeps per second | Skin color is good Baby is crying | Calm baby down and make sure the alarm stops. |
| Red Loose Lead | Continuous | Skin color is good Baby is responsive and breathing | Check the connections between lead wires, patient cable and the monitor. If something has come loose, reconnect and press the reset button, if alarm doesn't stop, replace the electrodes. |
| Yellow Low Battery | Continuous | | There is about 30 minutes of battery life left. Plug in to charge as soon as possible. |

| Definition of symbols | | | | | |
|---|--------------------------|---|---------------------------|---|---|
|  | Reset button |  | High heart rate indicator |  | Heart rate indicator |
|  | Apnea indicator |  | Low battery indicator |  | Power indicator: Monitor is on |
|  | Respiration indicator |  | Memory full indicator |  | Alternating current: Monitor is plugged in and charging |
|  | Low heart rate indicator |  | Loose lead indicator | | |



Using the SmartMonitor 2

- 1 Set the monitor on a clean, flat surface.** Make sure the speaker is not obstructed. To avoid interference, make sure no other electrical appliances are within 3 feet of the monitor.
- 2 Make sure the patient cable is securely inserted into the front of the monitor.** The larger end of the patient cable has three openings labeled, LA (black), RL (green), and RA (white).
- 3 Insert the white lead wire into the opening labeled RA.** Insert the black lead wire into the opening labeled LA.
 - When you need to remove a lead wire, grasp and pull at the strain relief area located near the connecting tip. Do not pull on the wire itself.
- 4 To attach the electrodes to the infant, make sure the skin is clean and dry and free of any powders or lotions.**
 - Place the electrode with the white lead wire below the right armpit, in line with the nipples.
 - Place the electrode with the black lead wire on the baby's left side, directly opposite of the white lead wire.
 - Each time you replace the electrodes, slightly change their position up or down the baby's side to avoid skin irritation.
- 5 Connect the power cord or battery charger to the back of the monitor and plug it into a wall outlet.** Keep the monitor plugged in as much as possible to keep the battery at full charge.
- 6 Press the power button to activate the monitor.** All of the lights should come on and the alarm will sound briefly. After the system check, the following lights should be on:
 - The green (battery) charger light is on. (if plugged into an outlet)
 - The green power light is on.
 - The green respiration light and the green heart light are blinking.
 - All other lights should be off.
- 7 To turn the apnea monitor off:**
 - Press and hold the blue RESET button.
 - Press and release the gray POWER button.
 - Wait 2 seconds then release the RESET button.

Notes

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