



babyleaf

Freedom of baby care



BABYLEAF HEAR

A simple audio baby monitor
that just works

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Thank you for purchasing our digital baby monitor. Your unit has been manufactured and checked under the strictest possible quality control to ensure that each monitor leaves the factory in perfect condition. In the unlikely event you find any defects or have any problem, please contact our dealer or service center.

Please read this manual carefully to obtain maximum performance and extended service life from the unit.

Features

- Full digital technique operating in the 902-928MHz with zero interference
- Operating range 800m in open space
- Low radiating power (only 10% of normal DECT or 50% of ECO DECT)
- Talk back function on parent unit to soothe your baby
- Capable of using two baby units to monitor more babies
- Starry night light projector and lullaby function on baby unit with capability to remotely control from parent unit
- Baby's room temperature indication on parent unit with Hi/Lo temperature alert
- Battery status indicator and low battery alert on both baby and parent unit
- Digitally adjustable microphone sensitivity
- Audio and visual alert for out of range
- Vibration alert
- Baby feeding timer
- Parent unit operate with Li rechargeable battery
- Optional movement sensor mat wirelessly connected to baby unit to monitor baby's breathing rhythm

WARNING

The Babyleaf Hear should not be regarded as a medical device. Premature babies or those considered to be at risk should be under the supervision of your doctor or health personnel.

Direct supervision of your baby at a regular interval by a responsible adult is strongly recommended in addition to using the Babyleaf Hear.

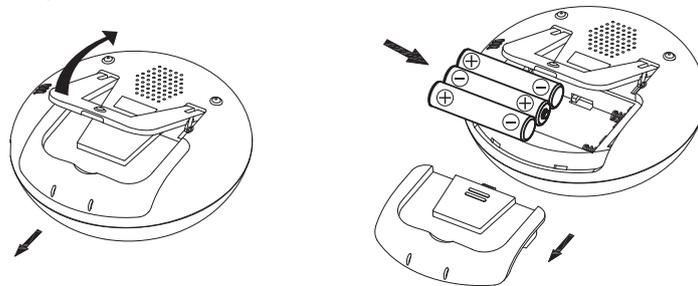
DIGITAL TECHNOLOGY AND APRS

This baby monitor employs full digital technology with zero interference.

The unit can automatically select free channel or hop to free channel during communication to avoid interference from other electronic devices. In addition, thanks to the Automatic Power Reduction System (APRS) which senses the signal strength between the baby and parent unit and automatically reduces the emission power from baby unit when the two units are in close vicinity. The level of radiation to baby is greatly reduced.

POWER SUPPLY

(A) Baby Unit (BU)



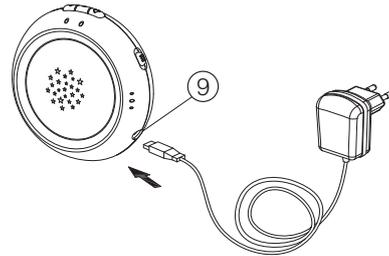
1. Operation from batteries

Pull up the support lever and slide open the battery door in direction as shown. Insert 3 pieces AAA size (UM-4) alkaline batteries into the compartment. Observe correct polarities indication. Install back the battery door.

N.B. For best performance, do not mix use old and new batteries or alkaline and rechargeable batteries.

2. Operation using AC adapter

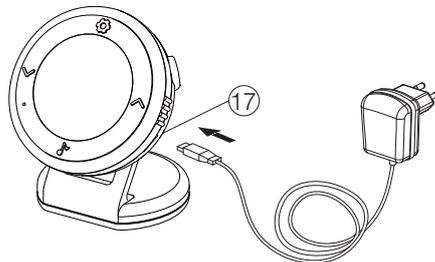
The unit can be operated on AC mains using the supplied 5V AC adapter. Connect the output plug of adapter to USB port ⑨. The power supply from the battery will be cut off once the adapter's output plug is inserted into USB port ⑨.



(B) Parent Unit (PU)

1. Operation from battery pack

The Li polymer battery pack is already installed in the unit.



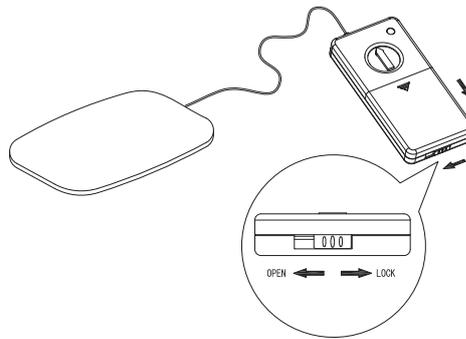
2. Charging the battery pack

Connect the output plug of supplied 5V AC adapter to USB port ⑰. With the unit being switched off, the Power / charging indicator ● will light up red .

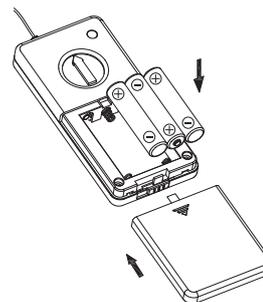
Once battery is charged up (normally it takes around 4 hours), the power / charging indicator ● will go off or turn green (if unit is switched on). Now the unit is ready for operation. Either you can disconnect the AC adapter or keep connecting will cause no damage to the battery. In the latter case, when the battery is being consumed and voltage falls to a certain level, AC adapter will automatically start charging up the battery again.

Note : Before using the parent unit for the first time, charge up the Li polymer battery for at least four hours. It is recommended to switch off the unit during first charging.

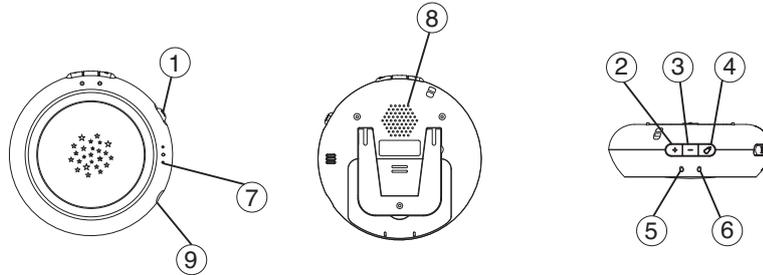
(C) Movement Sensor Mat (Optionally purchased)



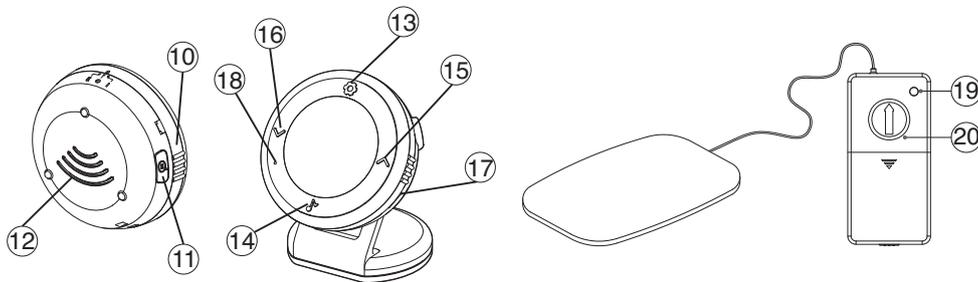
Set the lock lever to open position, slide open the battery door in direction as shown. Install 3 pcs AAA (UM-4) alkaline batteries, observe correct polarities. Slide back battery door and set the lever back to lock position. Under normal operation, the batleng can last for days.



CONTROLS LAYOUT



Baby Unit (BU)

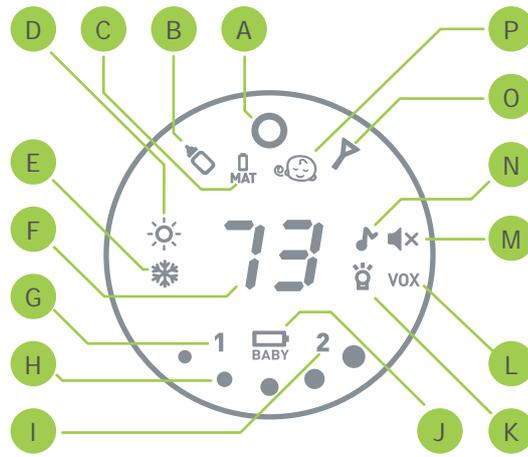


Parent Unit (PU)

Movement Sensor Mat

- | | |
|---|-------------------------------|
| 1. Power ON/OFF switch | 11. Talk back button |
| 2. Up + button | 12. Speaker |
| 3. Down - button | 13. Setting button |
| 4. Feeding timer button | 14. Music button |
| 5. Power On / batter low indicator | 15. Up button |
| 6. Transmit indicator | 16. Down button |
| 7. Microphone | 17. USB port |
| 8. Speaker | 18. Microphone |
| 9. USB port | 19. Movement indicator |
| 10. Power On / Off / vibration selection ring | 20. Movement sensitivity knob |

ICON SCREEN



- | | |
|---|-------------------------|
| A Power Indicator
Green - On
Flashing Green - Battery low
Red - Under Charging | |
| B Feeding Timer | I Baby unit 2 |
| C Movement sensor
mat battery low | J Baby unit battery low |
| D High temperature alert | K Night light on |
| E Low temperature alert | L Night light VOX |
| F Baby's room
temperature | M Speaker mute |
| G Baby unit 1 | N Lullaby on |
| H Sound level meter | O Out-of-range |
| | P Baby breathing alert |

PAIRING

This process is to match the PU with BU and movement sensor mat so that they can communicate with each other while no other devices (even baby monitor of identical model) can interfere with you or receiving your signal.

The PU and BU are already paired when they are shipped from factory. However, it is necessary to perform pairing again when extra BU is added to work with the PU.

1. Press and hold the  button ⑬ of PU.
2. Rotate the side ring ⑩ to switch on unit, then release  button ⑬ after hearing a beep. The icon screen will show a “1” and a “P” flashing.
3. Set the BU power ON/OFF switch ① to ON position while holding down the + button ② until the transmit indicator ⑥ lights up, then release + button ②. The transmit indicator ⑥ will start flashing. Repeat same procedure for the other BU.
4. Now press the feeding timer button  ④ on one of the BU, the transmit indicator ⑥ becomes steady and two beep sound will be heard.
5. At the same time, the “P” on PU icon screen will stop flashing which represent the pairing process is performed successfully. This BU will be BU No 1.
6. Now press  button ⑮, the PU icon screen will show a “2” and a “P” flashing.
7. Repeat step 4 for the other BU. The “P” on PU screen will stop flashing which represent the pairing process is performed successfully. This BU will be BU no. 2.
8. Switch off all the units and switch them on again, the baby monitor is now ready for operation.
9. In case the PU and BU cannot communicate with each other, repeat pairing process again.

10. The pairing between BU and movement sensor mat should be performed after the successful pairing between BU and PU or otherwise the system will not operate properly.
11. Set the BU into pairing mode by repeating step 3 above.
12. Switch on the movement sensor mat by turning the knob (20) clockwise, now press the feeder timer button (4), the transmit indicator (12) shows steady on and two beep sound will be heard in the BU, indicating the pairing is successful.

In case you have two movement sensor mats to be paired to two BU, Please pair each one in turn with the other BU being switched off.
13. Switch off the BU and then switch on again for normal operation, probably you will hear the breathing abnormal alarm in PU after 20 sec in case nothing is placed on the movement sensor mat. Slight tap the mat few times and the alarm will stop, this shows the system is working properly.

N.B. When it is no longer necessary to monitor the baby's breathing as he grows older, the movement sensor mat is required to unpair from BU to avoid false alarm. To achieve this perform pairing process again between PU & BU by repeating above steps 1-8, but leave out steps 11-13.

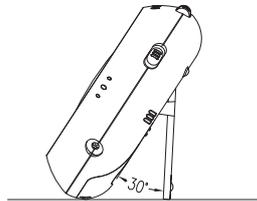
OPERATION

Baby Unit (BU)

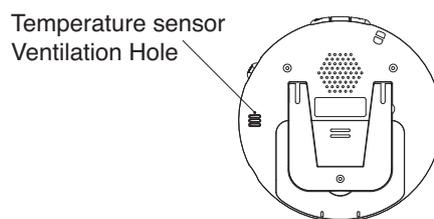
1. Set the power ON/OFF switch ① to ON position, the power on indicator ⑤ should light up steady green, if it starts flashing, the battery has run down. Either replace with new battery or use the AC adapter as power supply. The battery low alert of BU is also shown as  on icon screen of PU, reminding the parents to replace the batteries in case they are running down.
2. Place the BU about 1m from the baby's crib with the microphone ⑦ facing towards the baby.
3. Adjust the microphone sensitivity using the + - button ②③ such that the unit will be set to transmit whenever the microphone ⑦ picks up a sound at your desirable loudness level. The transmit indicator ⑥ will blink everytime these buttons are pressed, more number of blinks mean the microphone is more sensitive to sound (maximum is 5 blinks and minimum is 1 blink). Press + to increase and – to decrease the microphone sensitivity.
4. Once the BU is in transmit mode, the transmit indicator ⑥ will light up red. The unit will return to standby mode a few seconds after the microphone ⑦ stops picking up any sound and the transmit indicator ⑥ goes off.
5. This baby monitor is equipped with talk back and music function so that the parent can speak or play lullabies to comfort baby. The volume of parent's voice or music from speaker ⑧ can be adjusted using the + - button ②③.

N.B. While there is music or parent's voice heard from speaker ⑧, the + - button ② ③ can be used to adjust volume. Under normal mode when there is no sound from speaker ⑧, the + - button ②③ will only adjust the microphone sensitivity.

6. The starry night projector can be set to permanently ON or VOX (voice activated) remotely by the PU. Under VOX mode, the starry night projector is switched on once the microphone (7) detects a sound and goes off a few seconds after the microphone (7) stops picking up any sound. The starry night can be projected on the ceiling or wall by making the BU to stand on its support lever.



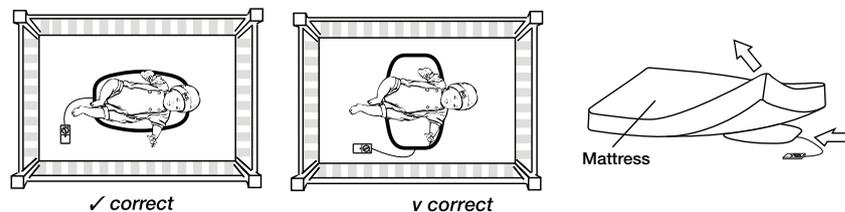
7. Press the feeding timer button (4) to initiate the feeding timer countdown in PU, two beep sound will be heard. The PU icon screen will show (4) flashing and once the set period has elapsed, an alarm will be heard and (4) show flashing to remind parents to feed the baby.
8. The temperature sensor inside unit detects the ambient temperature and its current reading is shown on the icon screen of PU. The normal operating range of sensor is -19° C(-20°F) to + 50° C(122°F). Temperature outside this range will be shown as - - on the icon screen.



In case there is a sudden big temperature change (e.g. you bring out the unit from indoor to outdoor during winter time), the sensor may need to take a few minutes before it can settle to the new environment and show the correct reading on the icon screen.

Movement Sensor Mat

1. Place the movement sensor mat underneath the mattress, lengthwise direction and directly under where your baby sleeps. For optimum performance, there should be no bedclothes tucked between the sensor mat and the mattress. Besides, if the mattress support is too soft (such as box spring or underpadding), a hard board is required to be placed underneath the mat to provide a firm surface for it. The size of the board should be larger than the sensor mat.



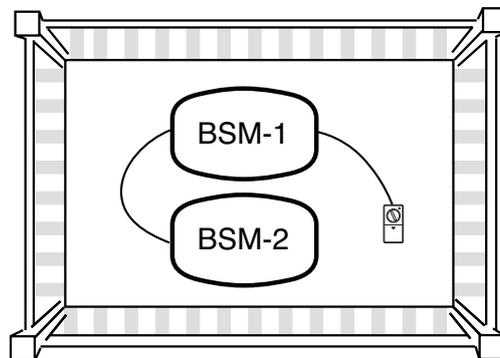
2. With the baby placed in crib, switch on sensor mat by turning the movement sensitivity knob (20) in clockwise direction. Adjust the position of knob (20) such that the movement indicator (19) will blink in pace with the breathing movement of baby.

Slip the control box underneath the mattress to keep out of reach of baby and place it as far away from the sensor mat as possible.

According to the change in weight as baby grows, it may be necessary to adjust the sensitivity setting of knob (20) again. In case the sensitivity setting is not appropriate, the movement indicator (19) will always stay ON or OFF and false alarm may occur.

N.B. Before attempting to adjust the knob (20), wait for at least 15 -20 min until the baby has settled down or fallen asleep.

3. For environment with continuous vibration from the floor, the sensor mat may has false detection and delay or prevent the alarm from sounding. Under such circumstance, move the crib to the corner of the room or near a solid supporting wall. Moreover, keep the crib away from strong draft and air current.
4. Besure the BU and sensor mat is within the same room or apart from each other not more than a distance of 10m, otherwise they may lost connection with each other and breathing movement of baby cannot be monitored.
5. When the baby's movement increases as he grows older, he may move away from the sensor mat and cause false alarm. Additional movement sensor mat can be connected to increase the coverage.

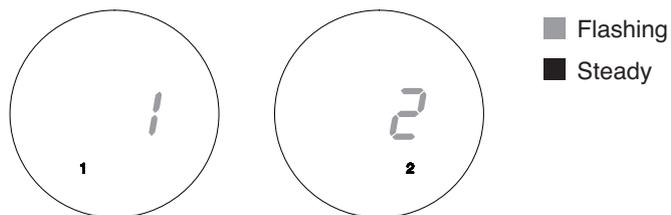


N.B. In case there are two BUs operating in the system, besure each BU and its corresponding sensor mat are far away from each other and placed in separate rooms to avoid interfering each other and creating false alarm.

Parent Unit (PU)

1. Rotate the side ring (10) clockwise or anti-clockwise to switch on the unit
(Clockwise – unit on with vibration/Anti-clockwise – unit on only).
2. The icon screen will show up for around 20 sec and if there is no sound from baby, the icons (except the power indicator (9)) will go off to save battery power.
3. Normally, the power indicator (9) will show green and when battery becomes low, it will start flashing green. Once the unit is under charge, this indicator will show red.
4. To enter setting mode, long press the (gear) button (13) for 2 sec. The icon screen will show either following :

(a) When the PU is paired to two BU



Use the (up/down) buttons (15)(16) to select between the BU to be set, press (gear) button (13) to confirm.

(b) When the PU is paired to only one BU



☼ Starry night projector

Use the (up/down) buttons (15)(16) to select between OFF, ON or VOX (projector is on only when baby makes sound) for the starry night projector, press (gear) button (13) to confirm.



↕ Out of range alarm

Use the **↕** buttons (15)(16) to select between OFF or ON. Press **⚙️** button (13) to confirm.

ON - Once the PU is unable to receive signal from BU, an alarm will be heard and **↕** show flashing on icon screen.

OFF - No alarm will be provided when PU exceeds the communicating range of BU.



☀️ High temperature alarm

Use the **↕** buttons (15)(16) to select a high limit (allowable range from 10°C/50°F to +50°C/122°F) above which the PU will provide alarm (☀️-will show on icon screen and temperature reading flashing). In case OFF is selected, no limit is set. Press **⚙️** button (13) to confirm.



❄️ Low temperature alarm

Use the **↕** buttons (15)(16) to select a low limit (allowable range is -9°C/16°F to 3° below the selected high limit) below which the PU will provide an alarm (❄️ will show on icon screen and temperature reading flashing). In case OFF is selected, no limit is set. Press **⚙️** button (13) to confirm.



Feeding timer

This function acts like a timer and remind parents of the next feeding time. The period to next feeding time can be set from 1 hour to 8 hours in 0.5 hour step. Once the set period has elapsed, an alarm will be heard and  flashing in icon screen. In case OFF is selected, no timer is set. Use the  buttons (15) (16) to select, press  button (13) to confirm.



Breathing alert

This feature is useful when the BU is paired to a movement sensor mat. Use the  buttons (15) (16) to select between ON or OFF, press  button (13) to confirm.

ON – The PU will monitor the breathing movement of baby and  will show up on icon screen. In case there is no movement for over 20 sec, it will provide an alarm and  starts flashing to alert parents. Moreover, the PU will provide an alarm in case sensor mat battery is low ( show flashing on icon screen) or sensor mat is out of range from BU ( and  show flashing on icon screen).

OFF – The PU will stop monitoring the movement of baby ( will not show up on icon screen). This is useful to avoid false alarm in case the parents need to take out the baby from crib for feeding or other purpose. Under such mode, the PU also will not provide an alarm in case the sensor mat battery level is low or the sensor mat is out of range from BU.

5. Place the PU at a reasonable distance away from BU to avoid feedback. Too close a distance will create a screeching sound at the speaker ⑫.
6. Once the PU receives a signal, the icon screen will light up and depending the signal is coming from which BU, the corresponding baby unit no. will show up together with other information (room temperature, battery level, starry night projector status) of that BU.

N.B. In case the PU is paired to only one BU, the icon screen will not show the baby unit no.

7. The speaker ⑫ volume can be adjusted using the  buttons ⑮⑯. The temperature reading also change correspondingly during adjustment to show the level (1 to 5) being selected. When the level is set to minimum and the  show up on icon screen, the speaker ⑫ is totally muted. Under such circumstances, the parents can still monitor the baby activities by looking at the sound level meter.
8. If the PU is paired to work with two BUs, BU no. 1 always has top priority. This means while the unit is listening to signal from BU no. 2, in case BU no. 1 starts transmitting, PU will immediately switch listening to BU no.1 until it stops to transmit, then it will switch back to listen to BU no.2.
9. To avoid parent missing the attendance to BU no.2, while PU is listening to signal from BU no.1, in case BU no. 2 starts to transmit, “2” will show flashing on icon screen to alert parent. If parent prefers to listen to BU no. 2, he can short press  button ⑬ and PU switches listening to BU no.2 while “1” go flashing (if BU no. 1 still transmitting). Further press of  button ⑬ will switch back to BU no. 1 again. Under such arrangement, the parent is able to monitor both babies.
10. Under standby mode, the PU will alternately scan between the two BUs for activities. When either one of the BU starts to transmit, the PU will immediately listen to that BU and the icon screen will only show information from it until the signal goes off.

11. When the PU is set to ON with vibration, whenever a baby's voice is detected, the vibrator starts functioning. This feature is useful when the parent is working under noisy environment (eg. vacuum cleaning). To save battery power, it is recommended not to use the vibrating alert frequently.
12. Once the PU is beyond the communication range of BU for over 30 sec, an out of range alarm will be heard (ON is selected in setting of out of range alarm) together with  flashing on icon screen. Besides, the temperature reading will show - - . The alarm will only go off when the PU falls back within the communication range of BU.

N.B. This alarm will also be heard in case the BU is switched off, or its battery has run down, or its power is cut off.

13. Whenever the baby's room temperature falls outside the range as preset by the high and low temperature limits, an alarm will be heard,  or  will show up and temperature reading starts flashing on icon screen.
14. The playing of music on BU can be remotely controlled by parents. Short press the  button (14) to turn on music, while the no. 1 – 6 flashing on icon screen, use  buttons (15)(16) to select the music you preferred. To stop music, short press  button (14) again.

N.B. Once the no. 1 – 6 changes back to temperature reading, pressing the  buttons (15)(16) only adjust the PU speaker volume but not selecting the music.

During music playing, the baby's cry may not become noticeable since the music may distract the parents attention. So it is strongly recommended to turn off the music momentarily at regular intervals to listen to activity of baby.

15. It is possible for parent to talk back to baby to soothe his emotion. Press and hold the  button (11),  show up on icon screen. Speak towards the microphone (18). Release  button (11) after finish speaking. It is worth noted that the parent can talk back anytime they prefer, even when the BU is transmitting.

N.B. Each time the  button (11) is pressed and released, the BU will be set to transmit for 10 sec before returning to standby mode (even baby is not making any sound). This is useful for parents to monitor the activity of baby's room when baby is sleeping.

16. The various alarm is designed to have following priority :

Out of range alarm > Breathing alert > Temperature alarm > Feeding alarm > Battery low alarm

Only one kind of alarm can be heard at any time to avoid confusion.

17. Each time anyone of the    button (13)(14)(15)(16) is pressed, a beep tone  will be heard to validate your entry.

HOW TO DISABLE ALARM SOUND

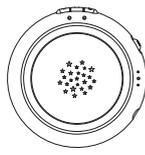
An alarm can be muted by short press of anyone of     button (11) (13)(15)(16). However, the alarm icon will keep showing on icon screen until the condition is rectified.

PRECAUTIONS

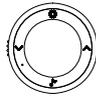
- Use only the supplied AC adapters, use of other adapters may cause damage to the baby monitor.
- When not using the monitor for a long period of time, remove all batteries from the PU, BU and movement sensor mat to avoid damage due to battery leakage.
- Disconnect the AC adapter from the wall outlet when the monitor is not to be operated.
- The unit is best performed within a temperature range of $-10^{\circ}\text{C}/14^{\circ}\text{F}$ to $+50^{\circ}\text{C}/122^{\circ}\text{F}$.
- Do not open the cabinet, no serviceable parts inside.
- The unit should not be exposed to dripping, splashing and that no objects filled with liquids, such as vases shall be placed on it.
- Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent.
- Batteries (battery pack or batteries installed) shall not be exposed to excessive heat such as sunshine, fire or the like.
- The MAINS plug or an appliance coupler is used as the disconnect device, the disconnect device shall remain readily operable
- Only use the power supply as included in the packaging.

STANDARD ACCESSORIES

- a. Baby unit
- b. Parent unit with belt clip
- c. Stand for PU
- d. 3.7V Li polymer rechargeable battery pack (installed in PU)
- e. 5V AC adapters x 2
- f. Movement sensor mat (optional)



a.



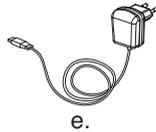
b.



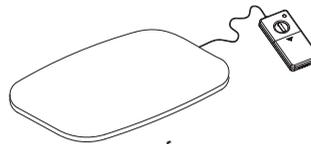
c.



d.



e.



f.

TROUBLE SHOOTING GUIDE

Problem	Possible Causes	Solution
BU has no transmission	<ul style="list-style-type: none"> - Mic sensitivity is too low - Battery has run down or AC adapter improperly connected 	<ul style="list-style-type: none"> - Adjust mic sensitivity higher by using + button ② Replace with new battery or Check connection
Always transmitting	<ul style="list-style-type: none"> - Mic sensitivity is too high 	<ul style="list-style-type: none"> - Adjust mic sensitivity lower using - button ③
Out-of-range alarm always on	<ul style="list-style-type: none"> - Pairing is not successful - BU battery has run down - Distance between BU and PU exceeds the operation range 	<ul style="list-style-type: none"> - Perform pairing again - Replace with new battery or use AC adapter - Move the BU and PU closer together
Temperature alarm always on	<ul style="list-style-type: none"> - The high and low temperature limit is set too close to the current reading 	<ul style="list-style-type: none"> - Set the high and low temperature limit around 5° difference from current reading
 Icon always show flashing	<ul style="list-style-type: none"> - Baby is not in the crib - Sensitivity of sensor - mat is not properly set - Baby's breathing is abnormal 	<ul style="list-style-type: none"> - Place baby back to crib or set breathing alert to OFF - Adjust sensitivity using movement sensitivity knob ⑳ such that the movement indicator ⑲ blink in pace with baby's breathing - Take immediate care of baby and consult doctor
 and  always show flashing	<ul style="list-style-type: none"> - Sensor mat is off - Battery of sensor mat is running down - Distance between BU and mat exceed 10m 	<ul style="list-style-type: none"> - Switch on sensor mat using movement sensitivity knob ⑳ - Replace with new battery - Move BU closer to sensor mat
Always showing low battery alert	<ul style="list-style-type: none"> - Battery has run down 	<ul style="list-style-type: none"> - Recharge battery using AC adapter (PU). Replace with new battery or use AC adapter (BU & mat)
Battery life is short	<ul style="list-style-type: none"> - Starry night projector & music is permanently switched on - Vibration alert is switched on 	<ul style="list-style-type: none"> - Switch off strarry night projector & music or set to VOX operate(BU) - Switch off vibration alert(PU)
Too short communication range	<ul style="list-style-type: none"> - Many steel structures between BU and PU - BU battery has run down 	<ul style="list-style-type: none"> - Re-locate BU or PU - Replace with new battery or use AC adapter
PU & BU cannot communication with each other	<ul style="list-style-type: none"> - Pairing is lost 	<ul style="list-style-type: none"> - Perform pairing process again



FCC Warning

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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,

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 or more 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.

FCC Radiation Exposure Statement:

For parent unit:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

For Baby unit:

This equipment must be installed and operated in accordance with provide instructions and the antenna used for this transmitter must be installed to provide co- located a separation distance of at least 20 cm from all persons and must not be End- users and installers must be provide with antenna installation instructions and transmitter operating conditions for satisfying RF exposure compliance