NearBéBé Care

# NearBéBé Care Manual



Infant Health Monitoring System

Product & Mobile APP User Guide Book

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# **Product Manual**

Care main unit user guidebook

Thank you for purchasing NearBéBé Care.

In order to use this product for a long time with safe operation without troubles, please read the user's manual of the product before using the product, and fully understand the operation method and precautions before use

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#### Users should follow the instructions below.

- When using this product, be sure to follow the instructions in the user manual.
- -The company is not responsible for product problems caused by user's careless operation or careless management.
- All repairs to this product may only be serviced by the company or an authorized dealer.
- If this product does not operate normally, contact the service center or company that has been certified.

If you have any questions or problems related to the use of this product, please contact us at any time. In the event that a user or patient is injured due to the user's negligence or misuse, the company or the authorized dealer is not held responsible.

The following terms are used in this manual to highlight safety and precautions to be followed when using the product.

Users should be fully aware of the warnings, cautions. prohibitions, and notes indicated in the entire manual of this product to use the product safely.



Caution



Warning



Prohibition



Note

It indicates content that may cause personal injury or property damage if handled improperly.

It indicates that a person could be killed or injured if handled improperly.

It indicates what should not be done when using the product.

It is a term explanation or additional operation method that is used for normal product use.

Г

NearBéBé Care is a product that mearsures the body's skin temperature by wearing it on diappers of clothing. Infant sleeping postures and abdominal movements can be monitored in real time, and the alert setting function makes it possible to safely check the child's condition condition even when the guardian is sleeping or monitoring intermittently. Since the measured skin temperature or abdominal movement is stored as a trend graph in the mobile app, the guardian can check it later.

Among the functions of the product, sleep posture and abdominal movement are not medical functions except for skin temperature measurement.

#### **Product Features**

#### Continuous skin temperature monitoring and recording

Through the mobile app, you can measure the skin temperature of infants in real time and monitor them for along time.



This product can be used for all ages, but if it is a user who needs caregiving. Please use it under the supervision or management.



This product measures the skin temperature of the abdomen by wearing it in a diaper or clothing without attaching it to the skin as a separate patch. Body temperature range(the following is an average of normal body temperature ranges), environment, time, and physical activity may vary.

Normal body temperature by body part		
Forehead	35.0 ~ 37.5°C	
Armpit	34.7 ~ 37.3°C	
Oral	35.5 ~ 37.5°C	
Anal	36.6 ~ 38.0°C	
Ear	35.8 ~ 38.0°C	

Normal body temperature by age		
0~2years	36.4 ~ 38°C	
3~ 10years	36.1 ~ 37.8°C	
11 ~ 65years	35.9 ~ 37.6°C	
65years or older	36.8 ~ 37.5°C	

#### **Part names**

#### Main unit



- ① Operation LED status indicator
- ② Power button
- ③ Battery LED status indicator
- ④ Charging terminal (terminal contacting the charging cradle)
- (5) Temperature probe (skin temperature sensor)
- 6 Clip (for wearing on diapers or clothing)

#### Operation LED status display information

Status display before Bluetooth connection		
Sky blue (flashing)	Ready for Bluetooth connection	
Product not worn (always on)		
Green (flashing)  Temperature/hygrometer operation display		
Wearing the product (Operates when the power button is pressed)		
Pink (3 flashes)	Product normal connection	

#### **Battery LED Status Display Information**

Common		Operation during product charging	
Blue Low battery or abnormal condition	Blue (light on)	Charging product	
	Blue (light off)	Product charging complete	
	Low battery or abnormal	Low battery or abnormal Blue (light on)	

### Part names



- ① Cradle cover
- 2 Charging pogo pin (body charging contact)
- 3 Status indicator
- 4 Micro 5-pin USB terminal (USB cable insertion part)



For more details on Nearbebe Station, please refer to the Mobile APP Manual

# **Product Description**

#### Components

※ Image and actual product may be different, and some items may be changed due to circumstances.



NearBéBé Care



NearBéBé Station



USB cable

+ 1 copy of Quick Manual

Download the product manual and Mobile app manual from the homepage.



The battery charge may be low when the product is shipped. Be sure to use it after charging.

# **Product Description**

# Usage preparation

- ① Open the packaging box and check the product components.
- 2 Please read the product manual and mobile app manual carefully before use.

# Product management

- ① Before using the product, wipe the back side with an alcohol pad.
- ② After using the product, always keep it clean.
- ③ If the body is stained, wipe it with a dry soft towel.
- 4 In the case of severe contamination, remove water from a towel moistened with water or a neutral detergent and wipe again with a soft cloth.

#### Product storage

- ① Please store the product in the charging cradle.
- ② Ambient temperature: Store within -20°C  $\sim$  60°C and relative humidity (non-condensing) within 15%  $\sim$  95%.
- ③ Keep it out of the reach of water.
- ④ Be careful and store it in a stable state such as inclination, vibration, and shock (including transportation).
- ⑤ Do not store in chemical storage or gas generating areas.
- ⑥ Do not store in a place with high temperature and humidity, in direct sunlight, near a heating/heating device, in a dusty place, or in places affected by salty atmosphere.

# How to use the product

#### How to charge the battery

- 1) Place the product on the NearBéBé Station.
- ② Charge it by connecting it to the 5V output adapter using the USB cable provided as a component in the NearBéBé Station equipped with the product.
- 3 The battery LED (blue) lights up during battery charging.
- 4 When charging is complete, the battery LED (blue) turns off.





#### Power on and off

- ① If the power button is pressed when the product is turned off, the power turns on with the blue LED blinking.
- ② If you press the power button for 2 seconds, the vibration will sound and the power will turn off.





Note

If nothing happens when you press the power button, proceed with charging. If the problem still occurs, please contact us.

# Safety precautions



Warning

- · Self-diagnosis and treatment of body temperature measurements are dangerous. Please follow the guidance of a doctor • If an abnormality is found in the product, immediately stop the operation of the product and contact the
- manufacturer for inspection.



- This product can be used for all ages. However, in case of high fever, be sure to use it according to the doctor's instructions
- Be careful not to let anyone other than the user come into contact with the product, and contact the manufacturer in the following situations.
- In case of abnormal reaction (skin, allergy, etc.) on the skin
- When an error occurs in the overall product
- When used in combination with other medical devices, when the measured skin temperature changes significantly
- Be sure to use a USB 5V power source that is rated. Be careful not to damage the product.
- Be careful not to let liquids or foreign objects get into the body.
- If heat is detected in the product, be sure to remove it from the human body.
- · Since this product is used in conjunction with a mobile app, it may not operate properly depending on the location and power status of the mobile device. Therefore, use it in accordance with the following.
- For continuous measurement of skin temperature, use an auxiliary battery or adapter on the mobile device to
- maintain the power supply.
- Make sure that the product and mobile device do not deviate more than 15m (based on open area).
- If your child is lying down, the communication distance between the mobile device may be significantly reduced.
- When multiple apps are used at the same time or not used for a long time, the apps may be automatically terminated under the mobile operating system, and in this case, the notification may not sound normally.

# Safety precautions



- Use after 30 minutes has elapsed after the measurement target has entered the room from the outside or the thermometer has been moved to a location with a different temperature environment.
- When wearing the product, wear it as close to your skin as possible. If it is not in close contact, it may malfunction
  when it detects skin temperature, sleeping position, and abdominal movement.
- · Do not touch the product with wet hands.
- · Sleep posture, abdominal motion measurement and notification functions cannot be used for medical purposes.



- Be careful for the infant to not to swallow the product or put it in themouth.
- · Do not disassemble, repair or modify the product.
- $\boldsymbol{\cdot}$  This product is not waterproof. Do not immerse or wash in water.

# Disposal

Dispose of products and accessories appropriately in accordance with local regulations.

## **Product service**

#### **Product Warranty**

Product name	Pla	lace of purchase	
Model name	Da	ate of purchase	
Serial No.	С	Customer name	
Contact		E-mail	
Address			

Consumer damage compensation standard

Consumer damage types		Compensation		
		Within the warranty period	After the warranty period	
	When defect occurs	Free repair	Paid repair	
Normall use	When the same defect occurs twice	Product Exchange	Paid repair	
Consumer's	Failure due to user error	Paid repair	Paid repair	
intention or	Failure and damage caused by			
negligence	disassembly, modification of	Paid repair	Paid repair	
riegilgeriee	structure, performance and function			

#### **Product service**

# Consumer damage compensation standards

- ① This product secures excellent quality through strict inspection.
- $\ensuremath{\textcircled{2}}$  The basic warranty period for this product is 1 year from the date of purchase.
- ③ If any of the following situations occur within the quality guarantee period, it will be charged for processing.
  - $\mbox{\it Malfunction}$  caused by improper use, such as operation not in accordance with the instruction manual
  - Failure or damage caused by a drop or external impact after purchasing the product
  - Natural disasters such as fires, earthquakes, floods, and lightning
  - When damage occurs due to use and storage in an environment where the use of products such as high temperature, high humidity, compounds, microorganisms, etc.
  - Failure caused by sand, dirt, etc.
  - If the contents of the purchase date, customer name, store name, manufacturing number, etc. are changed arbitrarily
  - If there is no evidence of product purchase along with the product warranty
  - Failure or damage caused by other types of consumer negligence



#### **Product specification**

Product name	NearBéBé Care Plus	Model name	NB-TM1, NB-WC1
Electrical rating	- Charging voltage : DC5V (USB voltage) - Battery : DC 3.7V, 100mAh, Lithium polymer	Measuring range	30.0°C ~ 42.0°C
Measurement precision	±0.2°C within the temperature range from 30.0°C to 42.0°C (based on room temperature)	Storage environment conditions	- Temperature: -20°C ~ 60°C - Humidity: 15%~95% (non-condensing) - Air pressure: 700 ~1060hPa
Environmental conditions	- Temperature : 10°C ~ 40°C - Humidity : 15%~85% (non-condensing) - Air pressure : 700 ~1060hPa	Dimension & Weight	Main unit (43x43x16mm, 15g) Charging cradle (72.5x55x27mm, 40g) USB cable (100cm, 15g)
Classification of mounting	BF type mount 🛕	Minimum scale unit	0.1°C
Abdominal skin temperature display	Displayed in app	Continuous measurement time	Within 20 hours (based on battery charge)
Minimum measuring time	Within 1 minute	Operation mode	Direct mode
Distance from skin temperature display device	Within 15m of open area	Components	Main unit 1EA, Charging cradle 1EA, USB cable 1EA, Product User Quick Guide
App compatibility	Android4.3 or higher, iOS8.0 or higher	Product color	Sky Blue, Pink, Shine Orange

## Guidance and manufacturer's marking-electromagnetic radiation

This product is designed to be used in the following electromagnetic field environment. Consumers or users of this product must use the product in the following environments.

Radiation check	Compliance	Electromagnetic environment-guidelines
Radioactive (RF) radiation CISPR 11	Class 1	This product radiates RF energy only for its internal function. Therefore, the RF radiation of this product is low and there is very little possibility of interference with nearby electronic products.
Radioactive (RF) radiation CISPR 11	Class B	
Harmonic radiation IEC 61000 -3-2	Class A	This product is suitable for use in any domestic facility, including domestic
Voltage fluctuations/flicker emission IEC 61000-3-3	Application	<ul> <li>facilities that directly connect to public low voltage power supplies supplied for use in building purposes</li> </ul>

#### Guidance and manufacturer marking-Electromagnetic immunity

This product is designed to be used in the following electromagnetic field environment. Consumers or users of this product must use the product in the following environments.

Immunity Check	IEC 60601 inspection level	Compliance level	Electromagnetic environment-guidelines	
Electrostatic discharge (ESD) IEC 61000-4-2	±6 kV Contact ±8 kV Air	±6 kV Contact ±8 kV Air	Flooring should be made of wood, concrete or porcelain tiles. If the floor is covered with synthetic materials, the relative humidity should be at least 30%.	
Electrical rapid conversion/	±2 kV for power supply line			
explosion IEC 61000-4-4	±1 kV for input/output lines	Not applicable	The power quality of the power source must be from	
Surge IEC 61000-4-5	$\pm 1$ kV differential mode	пос аррисавле	a typical commercial or hospital environment	
	±2kV common mode			
Voltage drop, short circuit	< 5 % UT for 0.5 cycle (95 % reduction of UT)		The power quality of the power source should be tha	
interference and voltage	ons in the power  70% LIT for 25 cycles (30% reduction of LIT)		<ul> <li>of a typical commercial or hospital environment. When the user of this product needs to use it even during a</li> </ul>	
supply input line IEC 61000-4-			power outage, it is recommended that the product be powered from an uninterruptible power supply	
11	<5% UT for 5 seconds (>95% re	eduction of UT)	system or battery.	
Power frequency (50/60 Hz) magnetic field IEC 61000-4-8	3 A/m	3 A/m	The power frequency magnetic field should be at the level of a typical ommercial or hospital environment.	
* Note UT means AC voltage	power before applying the chec	k level.		

Susceptibility check	IEC 60601 test conditions	Compliance level	Electromagnetic environment-guidelines
Conducted RF IEC 61000-4-6	3 Vrms 150 kHz ~ 80 MHz	3 A/m	Portable and mobile radios should not be located near any part of the product, including cables, that is closer than the recommended separation distance calculated from the equation for the transmit frequency. (Recommended
Radiated RF IEC 61000-4-3	3 V/m 80 MHz ~ 2.5 GHz	3 V/M	separation distance: Not applicable) $d = \left\lceil \frac{3.5}{\sqrt{s}} \right\rceil \sqrt{p}$ $d = \left\lceil \frac{3.5}{E_i} \right\rceil \sqrt{p}$ 80 MHz ~ 800 MHz $d = \left\lceil \frac{7}{E_i} \right\rceil \sqrt{p}$ 80 MHz ~ 2.5 GHz P is the rated maximum output power (W) specified by the transmitter manufacturer and d is the recommended separation distance (m). The electromagnetic field strength c of the fixed RF transmitter, determined by the electromagnetic site survey, must be less than the compliance level for each frequency range. Disturbance may occur in the vicinity of medical devices marked with the symbol below. ((**)*)

**<sup>%</sup> Note1** The higher frequency range applies in the 80 MHz and 800 MHz ranges.

<sup>\*\*</sup> Note2 These guidelines do not apply in all situations. Electromagnetic transmission is reflected and absorbed by buildings, objects, and people

a. The field strengths of stationary transmitters, such as base stations for radio (cellular/cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast and TV broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the strength of the measured magnetic field at the place where this product is used exceeds the applicable RF compliance level above, monitoring is required to confirm that this product is operating normally. If abnormal performance is observed, additional measures such as bearing or position adjustment of this product may be required.

b. Over the frequency range of 150 kHz to 80 MHz, the magnetic field strength should be 3 V/m or less

# Recommended separation distance between portable and mobile RF communication medical devices and medical devices or systems

This product is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The purchaser or user of this product can prevent electromagnetic interference by maintaining the minimum distance between the portable and mobile RF communication medical devices (transmitters) and this product recommended below, based on the maximum output power of the communication medical device.

	Recommended separation distance according to the frequency of the transmitter (m)		ncy of the transmitter (m)
Rated peak power transmitter power (W)	$d = \left[\frac{3.5}{V_i}\right] \sqrt{P}  150 \text{ kHz} \sim 80 \text{ MHz}$	$d - \left[\frac{3.5}{E_i}\right] \sqrt{P}$ 80 MHz ~ 800 MHz	$d = \left[\frac{7}{E_1}\right] \sqrt{P}$ 800 MHz ~ 2.5 GHz

0.01	0.12	0.12	0.23
0.1	0.38	0.38	0.73
1	1.2	1.2	2.3
10	3.8	3.8	7.3
100	12	12	23

The recommended separation distance d(m) for a transmitter with rated maximum output power not listed above can be determined using the formula applicable to the frequency of that transmitter, where P is the maximum output power rating of the transmitter, expressed in watts (W), as stated by the transmitter manufacturer.

Note 1. A higher frequency range applies at 80 MHz and 800 MHz.

Note 2. These guidelines are not applicable in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects, and people.

#### Certification

#### Wireless conformance certification indications

This wireless facility may not be able to provide services related to human safety because of the possibility of radio interference.

#### [NearBéBé Care]

- ① Model Name: NB-TM1
- ② Equipment name: Specific small output wireless device (wireless device for wireless data communication system)
- ③ Certification number: MSIP-CRM-CmT-NB-TM1

#### [NearBéBé Station]

- ① Model Name: NB-WC1
- ② Certification number: RR-CmT-NB-WC1
- ③ Packing unit: 1EA/ box
- 4 Precautions for us  $\vdots$  Refer to product manual
- ⑤ Other information
- Protection type and degree of protection against the rating
- Power rating constant, rated voltage and rated frequency
- : charging voltage (USB5V), battery (DC3.7V, 100mAh, lithium polymer)

#### Common indications

- ① Country of manufacture: Korea
- 2 Manufacturer : NearBéBé Co., Ltd.
- ③ Manufacturer's Address
- : 200, Gieopdosi-ro, Jijeong-myeon, Wonju-si, Gangwon-do

#### Symbol Discription

Symbol	Meaning	Symbol	Meaning
SN	Serial No.	$\dot{\mathbf{x}}$	BF type device
***	Manufacturer	===	Direct current
~~~	Manufacturing date		— Refer to Instruction manual
Z	Dispose in accordance with established regulations	[]i	— Refer to instruction manual
-20°C	Temperature limit : Transport at -20°C ~ 60°C.	0	Recycle
Ť	Moisture caution	Ţ	Handle with care

# Mobile APP Manual

Mobile application guidebook

#### Preparation

① Search for NearBéBé on the Apple App Store or Google Play





② Install the app on your mobile device.



#### NearBéBé Plus (Wi-Fi Ver.)

When the Care terminal is attached to the Wi-Fi dedicated charging cradle, it connects to the smartphone via Wi-Fi.





App compatibility is Android 4.3 or higher, iOS 8.0 or higher. NearBéBé Care is divided into two versions, Bluetooth and Wi-Fi. Please install the app according to the purchased product

## NearBéBé Station



NearBéBé Station refers to the charging cradle with Wi-Fi communication function.



- 1 Cradle cover
- ② Charging pogo pin (body charging contact)
- 3 Status indicator
  - Yellow: Checking product status (up to 40 seconds)
  - Light blue: Wi-Fi connection required (Wi-Fi setting in the mobile app)
  - Green: Normal operation
  - Red: Status abnormal
- 4 Micro 5-pin USB terminal (USB cable insertion part)



- If the red LED lights up, reconnect the USB cable. If you still have problems, please contact us.
- This product connects to a wireless AP (Wireless AP) 2.4GHz. 5GHz is not supported.

# App launch











① When the app is launched for the first time, it will automatically switch to the app access permission setting screen after 2 seconds of the initial launch screen

② Please grant all authority. (If the permission is denied, the app does not work normally.)

# **User registration**





① Click Register to proceed as a member.



② Fill in the blanks with information.



③ If you are registered, press confirm.



4 Enter your ID and password, log in.

# **Station registration**





① Register the station.



② Enter the nickname and serial number (listed on the back of the station) and click 'S/N Check'.



③ Check that the serial number can be used.



4 The station has been successfully registered.

# **Connecting the station to Wi-Fi network**





① Check the status of the light blue LED on the station status indicator. (At this point, the smartphone running the app must be connected to a 2.4GHz Wi-Fi network.)



• If it is a red LED, reconnect the power immediately.

• In the case of the yellow LED, wait 40 seconds, and if the red LED is displayed, reconnect the power. If the yellow LED is still displayed, check the internet router.



② Tap'Wi-Fi Settings' in the app.

# **Connecting the station to Wi-Fi network**





③ Enter the password of the Wi-Fi network connected to the pop-up window.



④ Click 'Connect' to proceed with the Wi-Fi network connection setup.



[Wifi normal connection]



Note

⑤ When connected to Wi-Fi normally, the status indicator turns green.

If the network connection fails, please reconnect the station power before proceeding.

# **Profile registration**





1) Click 'Register'



② After entering the profile information, press 'Register'.



③ You can edit or delete your profile by pressing the ••• button at the top of the main screen.

# **Linking Station and Care**







Note

Both the station and the NearBéBé Care status indicators should turn green to connect normally

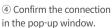
- ① Turn on the power when the station and NearBéBé Care are in the same space.
- ② The green LED of the station should blink without wearing NearBéBé Care.

③ Select a Care from the list of connected devices and press 'Link' to the profile you want to connect.

# **Linking Station and Care**









⑤ It is linked normally.



6 Click the link disconnect icon to disconnect.

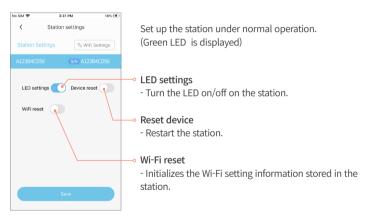


⑦ Monitoring starts when the station and the NearBéBé Care link normally.

# **Station settings**







## Main menu

lcon	Function	Explanation
	Trend graph	Trend graph is displayed and timeline can be registered.
Û	Profile notification settings	You can set up notifications according to your profile.
1	Permission settings	Give profile access (read, read/write) to other IDs.
<u>©</u>	Station	Station registration/deletion and setting, Wi-Fi input setting can be done.
8	Link	You can link or unlink profiles with connected NearBéBé Care devices.

# **App icon function**



#### Side menu

Icon	Function	Explanation
<u></u>	Station	Station registration/deletion and setting, Wi-Fi input setting can be done.
8	Link	Link or unlink profiles with connected NearBéBé Care devices
	Firmware	Update the firmware of the connected nearbebe care equipment. Use the station and care in the same space.
( <del>(</del> ( ))	App notification	Set the app's sound, vibration, and PUSH notifications.
1/	Temperature scale	Set the unit of temperature (°C, Fahrenheit).
71/A	Language setting	Set the language. (Korean, English, etc.)
	App information	Displays current app version information
<b>□</b> (€	Notices	Announcements from NearBéBé.
	Guide	Guides you through how to use NearBéBé Care.

This instruction manual is for NearBéBé Care(NB-TM1) developed by NearBéBé Co., Ltd.

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