Intelligent Wireless Body Temperature Monitoring System

USER MANUAL

COPYRIGHT STATEMENT

DISCLAIMER

This manual is written in accordance with available information and its contents are subject to change without notice. Raiing has made best effort to guarantee its content accurately reliable when we write this instruction booklet. However, the Company does not assume liability of the loss and damage which caused by the omission in this manual, inaccuracies or typographical errors.

Software upgrade causes the discrepancies in this manual, software shall prevail. When product improves or technology changes, you may visit the company technical support website to inquire related information.

SAFETY REQUIREMENT

In order to avoid the appearance of unnecessary harm, please read the following information before using the intelligent wireless body temperature monitoring system.

·   Don't work together with nuclear magnetic resonance or CT equipment.

·   Explosion danger: do not use the monitor in flammable anesthetic gas.

·   Doctor should make diagnosis on clinical manifestation and symptoms only use the monitor as subsidiary.

·   Please check Instrument regularly to make sure it is close to the skin, otherwise the data may be inaccurate.

·   High pressure disinfection, vinyl oxide disinfectant or infusion Instrument into liquid disinfectant may lead to incorrect data.

·   Unexpected action of patient may lead to incorrect data.

·   When charging, please stop using the device.

·   Please use original charger, otherwise we assume no responsibility for any accident.

INTRODUCTION

The wireless thermometer, model WTM-BT30-I is the combination device of thermometer and Bluetooth communication unit intended to be worn at axilla to monitor the armpit temperature continuously.

For the monitoring operation, switch the thermometer on and stick the thermometer in the user's axilla. The thermometer will make a Bluetooth connection between the thermometer and the iOS device automatically (User should setup Bluetooth properly on iOS device). Then the thermometer starts to measures the body temperature by means of testing the NTC resistor's resistance value and calculates the body temperature every 10 seconds continuously and sends the temperature data to the iOS device through Bluetooth connection.

The wireless thermometer, model WTM-BT30-I, uses a 100mAh, 3.7V rechargeable lithium battery for operation. When the battery is low, internal circuit will detect the low battery condition automatically and send "low battery" signal through Bluetooth communication unit to iOS device.

INTENDED USE

WTM-BT30-I is an electronic device with intended use of measuring armpit temperature continuously and sending the measuring result to iOS device (Ver4.3 or above) through Bluetooth connection to monitor body temperature. The device is reusable and intended for temperature measurement of adult and pediatric. It can be used in hospital and at home. Not used in ICU and other emergency condition.

ACCESSORIES

· USB transfer Micro USB line

· User manual
· Medical back glue samples(10 pieces)

· Guarantee card

· Certificate of competency

APPERANCE AND DESCRIPTION

1. LED digital display: press the button for less than 0.5 second, the LED will display the maximum temperature in the past 10 minutes. You can clear it by force shaking the

instrument.

2. Bluetooth indicator: when the instrument try to connect with iOS device, the indicator blink twice every 3 seconds; when connect successfully, once every 3 seconds; when disconnect, no light.

3. Button: press the button for more than 2 seconds to turn on the instrument or power off.

4. Micro USB interface: charging port. When the instrument is charging, it will stop other functions.

5. Charge indicator: red light indicates the instrument is charging, green light indicates charging has been finished.

6. Temperature probe: make sure the probe is close to skin when measuring temperature.
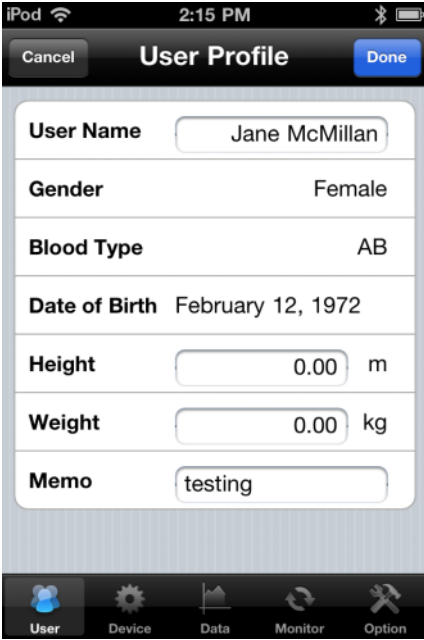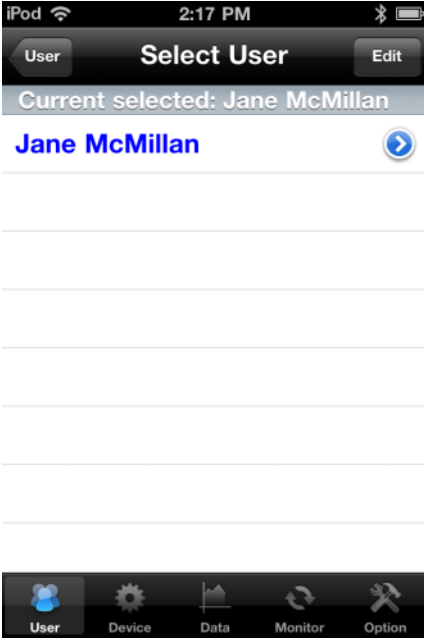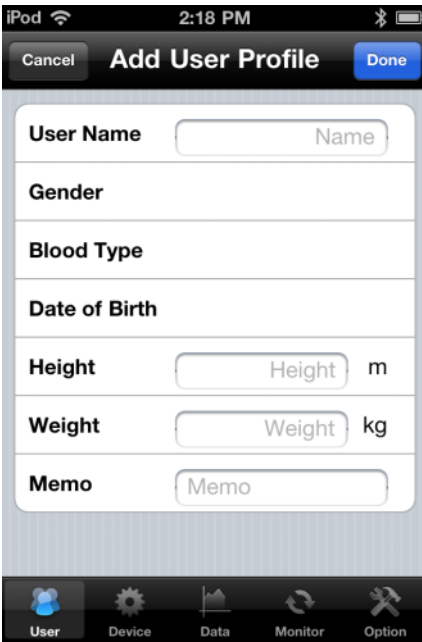
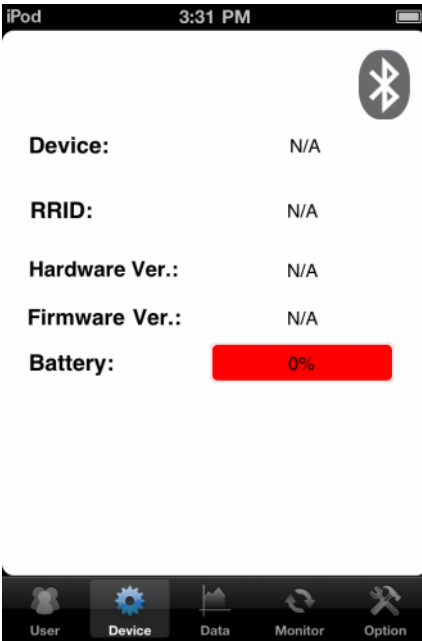7. You can paste medical tape here.

GETTING STARTED

· IOS device software installation:
  Please download "Vitals Monitor" from the APP store, and install it on the iOS device.
· STEPS:

1. Press the button for more than 2 seconds to turn on the instrument.

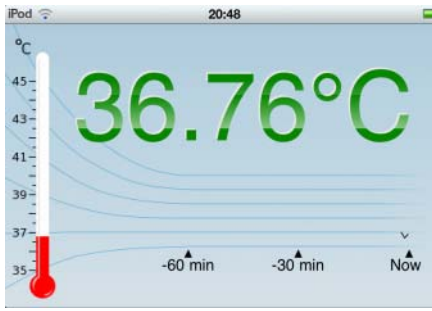2. Turn on iOS device and open Bluetooth.

3. Run "Vitals Monitor" in iOS device.

4. Pastes the product in the armpit with medical tape.

5. Monitor temperature through "Vitals Monitor".

6. Double click the button to connect or disconnect with iOS device.

· "Vitals Monitor" software instruction

1) User Interface In this interface user can modify current user information, select users or add a new user.		In the current user interface, you can edit the user name, gender, date of birth and other information.
		In the select users interface, you can select current user from existing users. Select "User" return to the user interface, select "Edit" to edit or delete user.

	iPod 🔋 2:18 PM ✳ 🔋 **Cancel** **Add User Profile** **Done** **User Name** (Name) **Gender** **Blood Type** **Date of Birth** **Height** (Height) m **Weight** (Weight) kg **Memo** (Memo) 👥 ⚙ 📈 🔄 🛠 User Device Data Monitor Option	In the choice of "Add a new user" option, you can edit the user name, gender, date of birth and other information.
2)Device Interface	iPod 3:31 PM 🔋 ✳ **Device:** N/A **RRID:** N/A **Hardware Ver.:** N/A **Firmware Ver.:** N/A **Battery:** [0%] 👥 ⚙ 📈 🔄 🛠 User Device Data Monitor Option	When a product successfully connected with the receiver, the device interface displays product information.

3)Data Interface		Temperature interface: Vertical interface shows the data. Click the "Switch" to choose the data interval from 1 minute, 5 minutes, 1 hour, 1-day. Click the "Data" to return the data interface
		Rotate the iOS device to horizontal interface to show the data curve.
4) Monitoring Interface		Real-time monitoring through the vertical interface Green characters means the temperature is normal. Red means the temperature is high or low. Display " ---.-" when Bluetooth disconnect.

		Horizontal interface: Real-time plot temperature data curve
5) Options Interface		In the options interface, you can set the temperature unit, high and low temperature alert switch, high and low alert limits, etc.

MAINTENANCE AND PRESERVATION

· Please charge when the low battery indication shows, otherwise the instrument will not work correctly.

· Clean the surface of the instrument with moist alcohol tampon before use it.

· The temperature of the store environment should be -10   55   (14   131   ) and the humidity should be 10%   85%.

SPECIFICATIONS

· Measurement range: 25   45

· Display resolution: 0.01

· Accuracy: the error is less then ±0.1   from 25   to 45

- Measure time: the temperature displayed will become stable in 150s when the temperature changes

- Battery work time: internal battery provide power to the product works for 24 hours when it connected with iOS device.

- Temperature data storage: the instrument sent temperature data continuously to iOS device, when Bluetooth connect. It can record 72 hours' temperature data after Bluetooth disconnect and sent them to iOS device when next connect. It will power off automatically after record 72 hours' temperature data.

- Temperature trend alert: the function can be realized after the instrument connected with iOS device. The color of the temperature data displayed turn to red and there is a music, when alert temperature high or low. It can be set to on or off.

- Low-voltage indication: LED display "Lo" after any key operation. When the instrument connected with iOS device, there will be a indicating dialog box.

- Bluetooth disconnect indication: the decimal point of the LED blink every 5 seconds, iOS device display yellow "---.-"in monitor interface. When Bluetooth disconnect by accident, there will be indicating dialog box or display red "---.-"and blink in monitor interface.

PRODUCT DECLARATION-ELECTROMAGNETIC RADIATION - ON OTHER DEVICES AND SYSTEMS

WTM is designed to be used under a given electromagnetic environment, and users must ensure that the product be used under the following environment.

Radiation Testing	Basis	Electromagnetic Environment-Guidance
RF interference CISPR 11	Group 2	The product use RF signals to transfer data, so it's RF signals may interfere with the surrounding electrical equipment
RF interference CISPR 11	Class B	The temperature monitor applies to all institutions, including community and household buildings with direct access to the public low-voltage power supply.

TROUBLESHOOTING

Symptom	Possible Reason	Solution
The temperature data cannot be displayed properly	Low battery of Instrument	1. Turn on again 2. Please charge the battery

Cannot turn on Instrument	1. May the battery power is shortage or no electricity 2. There are some problems of the instrument	1. Turn on again 2. Please charge the battery 3. Contact customer service
Unusual temperature data	1. The position of Instrument is not correct 2. There are some problems of the instrument	1. Check the position of Instrument 2. Contact customer service

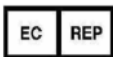## SYMBOL DEFINITION

Symbol	Definition
	Device type is BF
	Read user manual before use
SN	Serial number
	Date of manufacture
	Manufacturer
EC REP	Authorized representative in the European community

Raiing Medical Company

Room 408, Buidling 11, Huatong Road, Changping Dict, Beijing

Bernhardt Kern

EC REP Iohann Hoerbigerg. 6 1230 Vienna, Austria

Number: RR-JS-1/0-01-19

Revision: V1.0

Date: 2011/06/06

*** Caution ***

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, including interference that may cause undesired operation.

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

FCC statement

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.