

Smart Watch Operating Manual



FCC ID : 2ASQB-W8

Model: W8

Dear users, thank you very much for purchasing the health monitoring products produced by our company. This product is a wearable product. Please keep it carefully and use it correctly. Please read this operating manual carefully before using the product and follow the requirements of the operating manual.

The measurement results are for testing reference only and are not used for any medical purpose or basis.

The copyright in this manual belongs to our company and has the final power of interpretation. No reprinting or deletion is allowed without permission, and the version upgrade of the operating instructions will not be followed up and updated. (including the continuous upgrade of APP and watch display interfaces).

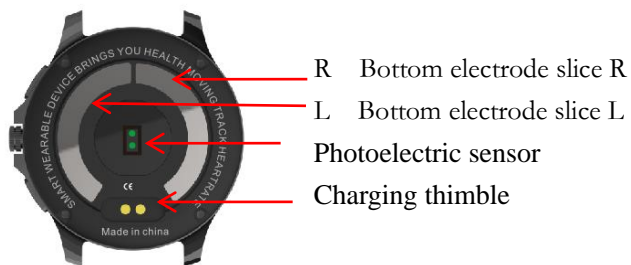
Instruction

1.1 Diagram introduction of the whole machine

Front:



Back:



Note: When testing ECG and blood pressure, it is necessary to fully contact the skin with the three electrodes.

Product characteristics:

- Wearable hardware + smart APP+ big data Cloud Service
- Carry on, control, display and record via APP, and synchronize data to the cloud in real time
- Monitor the changes of physical health values at any time, find and test various health data, and display risk status and evaluation results
- Requirements for mobile phone operating system and version are as follows:

Mobile terminal download APP: WearHeart



Turn on QR code scanning function of the phone, scan QR code on the instructions, and download the "WearHealth" APP. Or manually enter "WearHealth" to download and install in the APP Market. Apple users can download and install "WearHealth" in the App Store and Android users

can download and install “WearHealth” in Google Play.



IOS



Android



Google play,

Using & operating

2.1 Watch switch

When using the watch for the first time, please charge the watch for 1 - 2 hours. When pressing the touching button for 5 seconds, the watch will start automatically. If the battery is too low, the watch will automatically shut down or fail to start up (If the battery is very weak, the watch will not start up immediately after charging. It will take more than 15 minutes for the watch to start up after the battery has some amount of power.).

Note: Do not leave the battery in a state of insufficient power for a long time, otherwise it will damage the quality and life of the battery.

Watch charging method:

The magnetic attraction charging wire is aligned with the charging thimble at the back of the watch. The magnetic attraction wire will be automatically attracted to the watch. USB can be charged by inserting it into the standard 5V charger. (as the following figure:)



Shut-down operation:

When clicking on the icon corresponding to YES, press for 3 seconds to enter shut-down mode

When pressing the touch button area for 3 seconds, the watch will shake and start up

When charging, the device will start automatically



Watch model / version
Blue tooth end four-digital



Click for choosing

Watch operating manual

Two kinds of time interface:

As the following pictures:



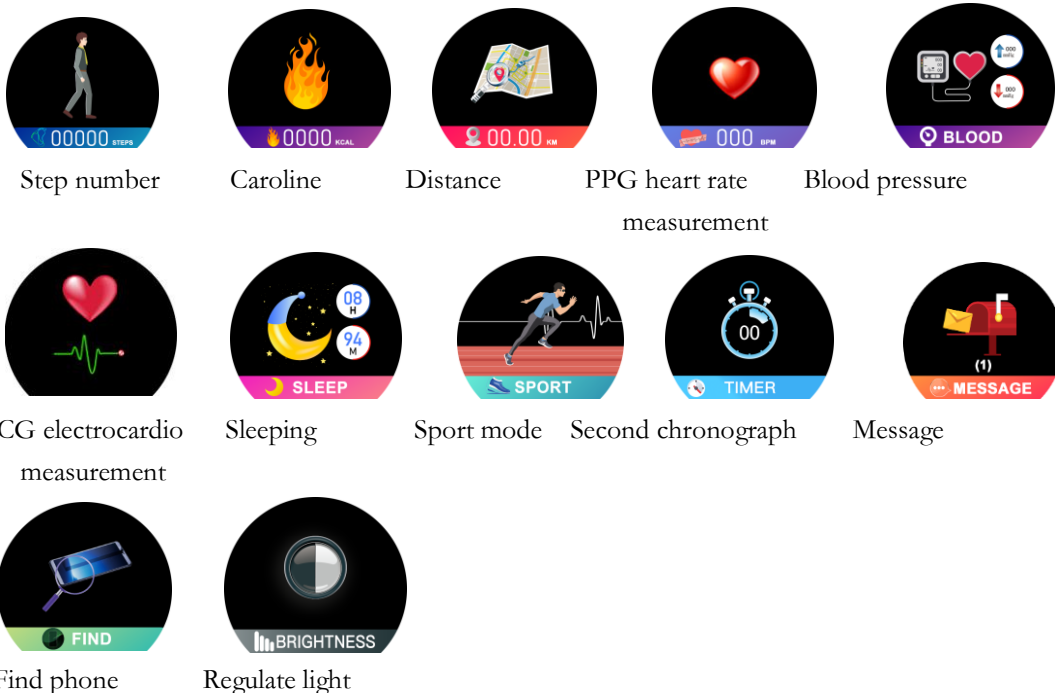
Long press for switching

Display the switch interface, and press for long time to switch on the main interface

Watch display interface:

Lightly touch the button to switch the interface

Normal mode display



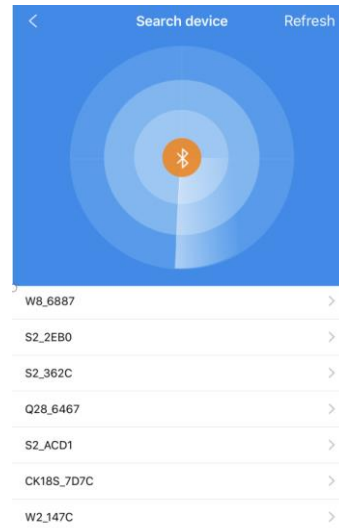
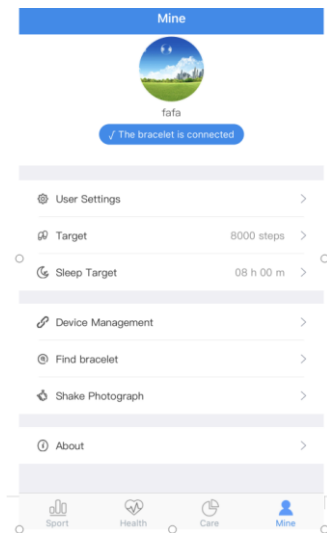
Connect to the watch:

Open the APP downloaded on the mobile phone and register the private account for real-time remote sharing of health data

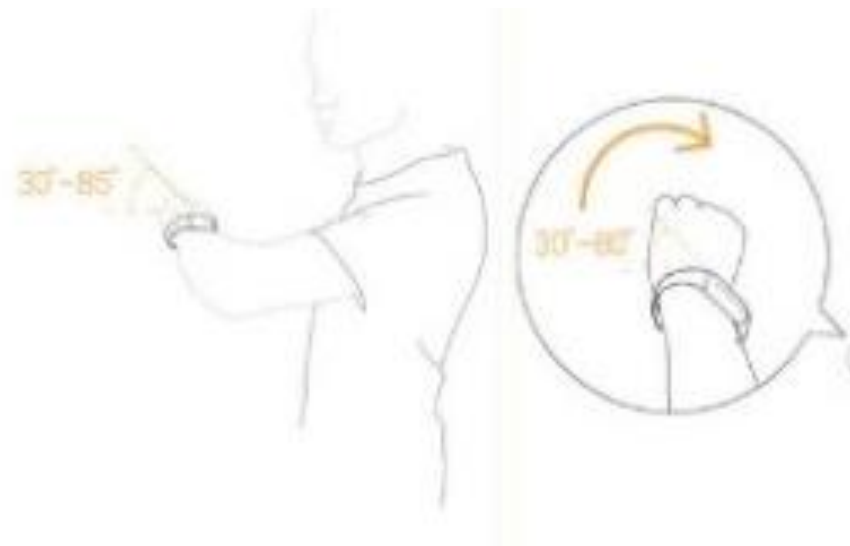
The users in the Mainland China support mobile phone number registration, while the users in foreign countries and Hong Kong, Macao and Taiwan support mailbox registration.

Open the APP, enter the “my” page and click to connect to the “WearHeart” watch. If the phone does not turn on blue tooth, the APP will ask to turn on blue tooth click to confirm and enter the device search page to connect.

After receiving the 4 digit MAC corresponding to the watch “W8” , click the connect. After the connection is successful, indicate “Connected Device” . The watch and mobile phone can use the watch after the time is automatically synchronized.



- Call Reminder: Turn on the reminder switch. When there are phone calls, the watch displays the name and phone number and shakes for the reminder. Press for 3 seconds to exit the interface.
- Bright screen by raising the wrist: the watch swings from the vertical position to the normal watch posture, with the surface angle between 35 and 85 degrees, and the watch automatically brightens the screen.
- Switch screen by turning the wrist: the watch surface stops slightly outward and turns inward to the normal angle between 30 and 80 degrees, and the watch automatically switches the screen data.

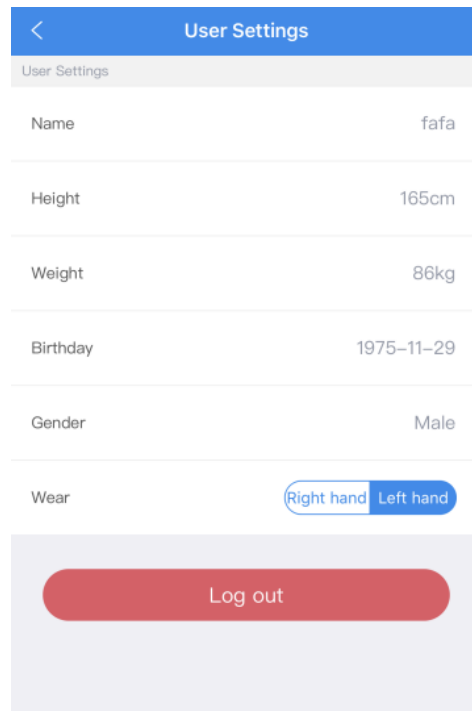


The “Bluetooth Request Pairing” box will pop up after the IOS system connects to the device. Click pairing to connect successfully.

After the connection is successful, enter “My” page, and then enter “Personal Settings” to set personal health parameters. Start using various functions after the settings are completed.

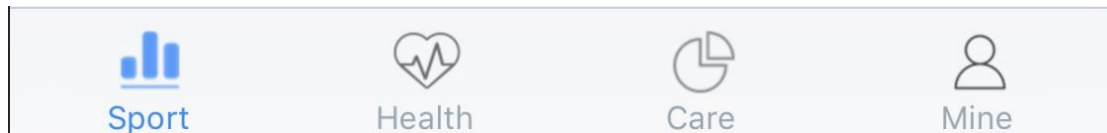
2.2 Open the APP software downloaded and set the personal health information in the option of

“my” option.



2.3 Function introduction

The four functions are respectively “Sport--Health--Care--My” .



Sport

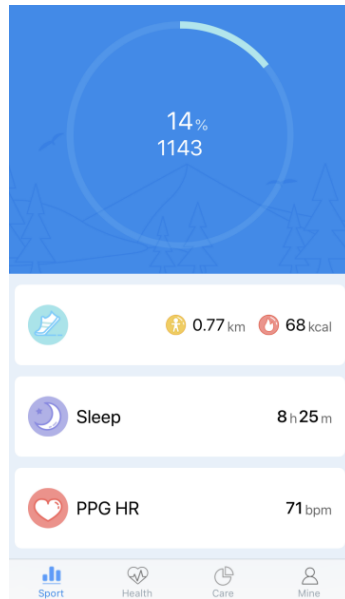
Health

Care

My

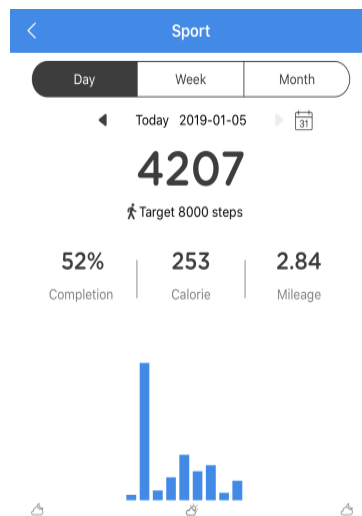
2.3.1 Sport

The three data on the sports page are respectively activity, sleeping, PPG heart rate, as shown in figure:

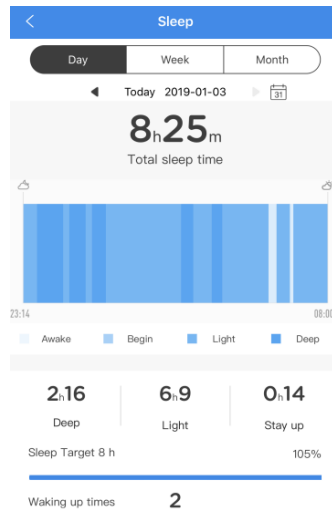


1. Sport: (step number, distance, Caroline and distance)

Sport: Record the daily exercise amount and historical data of the user. Click on the picture to enter the detailed data page and click on “Perpetual Calendar” to view historical data, as shown in the figure.



2. Sleeping: Record the daily and historical sleeping data of the user. Click on the picture to enter the detailed data page and click on “Perpetual Calendar” to view historical data, as shown in the figure.



3. PPG electrocardio heart Rate (it can turn on or turn off for 24 hours automatic monitoring)

displays the heart rate value of watch offline test.

After connecting the watch, click the “Watch Management” on the interface “My” of the APP. When turning on the option of “Hour Heart Rate Monitoring” , the watch will automatically turn on PPG Hour Heart Rate Monitoring and save the data. The watch will save the 7 days history data by default. When the watch is connected to the mobile phone APW, pull down and refresh the home page to synchronize the data. Click the “Perpetual Calendar” to view the history data, as shown in the figure:



2.3.2 The health page monitors three major human health data: heart rate, blood pressure and electrocardiogram



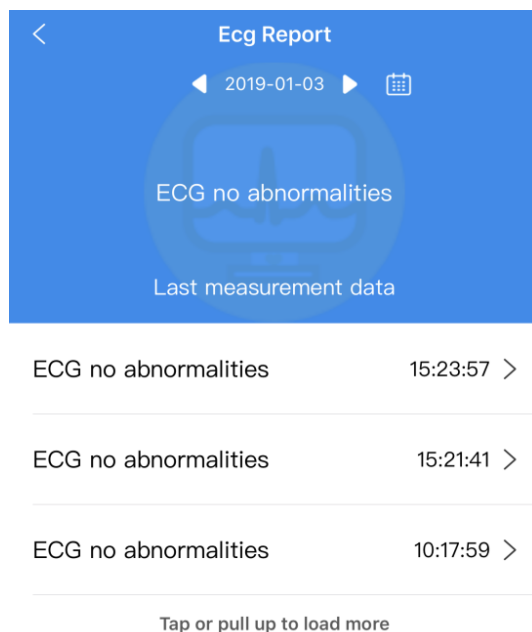
Heart rate:

Heart rate refers to the number of beats per minute in the quiet state of a normal person, also known as quiet heart rate. It is usually 60 - 100 beats per minute and may cause individual differences due to age, sex or other physiological factors. Generally speaking, the younger the age, the faster the heart rate. The heart rate of the elderly is slower than that of the young, and the heart rate of women is faster than that of men of the same age. All these are normal physiological phenomena. In the quiet state, the normal heart rate of adults is 60 - 100 times per minute, and the ideal heart rate should be 55 - 70 times per minute (the heart rate of the athletes is slower than that of ordinary adults. Generally, it is about 50 times per minute).

Blood pressure:



It takes a certain amount of pressure for human blood to be delivered to all parts of the body. This pressure is blood pressure. The blood pressure values of a normal person is 90--139mmHg in systolic blood pressure and 60--89mmHg in diastolic blood pressure. Generally, the daily blood pressure of a normal person fluctuates in the range of 2.7 - 4.0kpa (20 - 30mm Hg). The highest point of blood pressure is usually from 9 am to 10 am and from 4 pm to 8 pm. The lowest point of blood pressure is from 1 am to 3 am at midnight. The best time to measure dizzy blood pressure is from 6 am to 8 am.

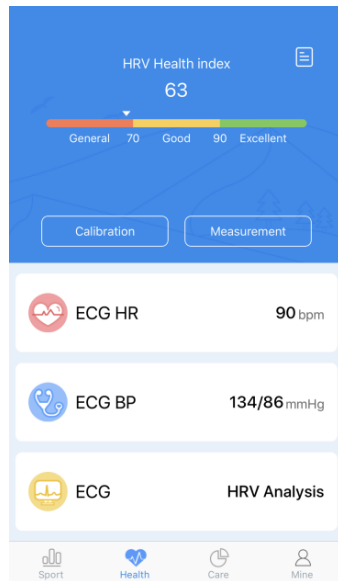


Electrocardiogram:

During each cardiac cycle, the heart is excited by the pacing point, atrium and ventricle one after the other, along with the changes of bioelectricity, various patterns of potential changes (ECG for short) are drawn from the body surface by electrocardiograph. The significance of ECG examination lies in monitoring and inspecting various arrhythmia, ventricular atrial hypertrophy, myocardial infarction, myocardial ischemia and other diseases. The right hand finger contacts the hand ring electrode plate, and the current circulation loop passes through the human body to generate various wave forms of the human electrocardiogram.

2.4

Open the “Measurement Calibration” or “One-key Measurement” page to start the measurement while touching the metal keys on the surface of the equipment with the right hand finger, as shown in the following figure

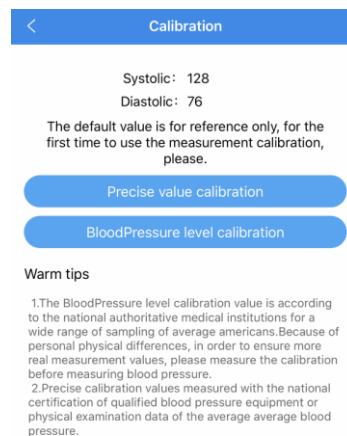


1.Measurement calibration

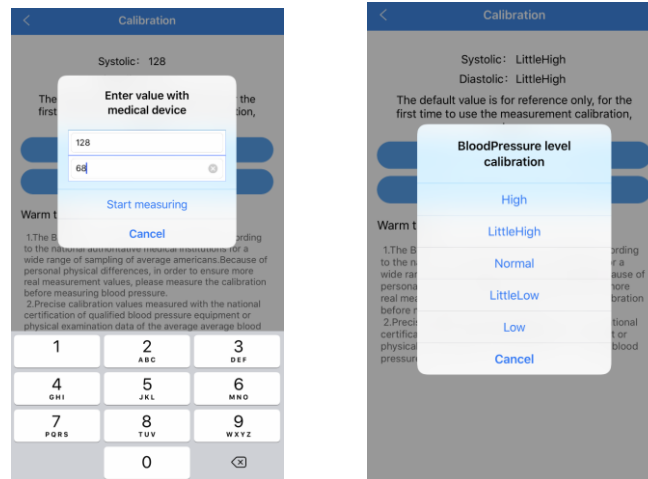
When using the watch to measure for the first time, the measurement calibration must be carried out first:

Click “Measurement Calibration” to enter the blood pressure calibration interface. There are two options:

“Precision Calibration” and “Blood Pressure Level Sample” are shown in the figure:



Click “Accurate Value Calibration” to enter the value of input systolic or diastolic pressure; Or click “Blood Pressure Level Calibration” to enter the selection like high level, normal level or low level. As shown in the following figure:



2. One-button measurement

After completing the blood pressure calibration, you can carry out the one-button measurement:

Important matters needing attention in measuring ECG signals;

The quality of ECG signals will greatly affect the accuracy and consistency of measurement results.

However, the signal quality is limited by the measurement method for acquiring the signal. In order to obtain good ECG signals (that is clear ECG wave-forms) and reliable measurement results, correct measurement methods and operation procedures are particularly important.

Preparation before the first measurement:

- A. Wash your hands with water to release residual charge and keep your hands moist. If necessary, use soap to remove grease from your skin.
- B. Wipe off the grease or dust on the surface of the metal electrode with a wet cloth. If necessary, clean it with alcohol
- C. Sit down for relaxing and try to make your body in a comfortable posture.
- D. The metal electrode should be in full contact with the skin. If possible, rub the electrode on the skin for a while in order to reduce the impedance between the skin and the electrode and achieve good contact.

In the process of measurement, it should be:

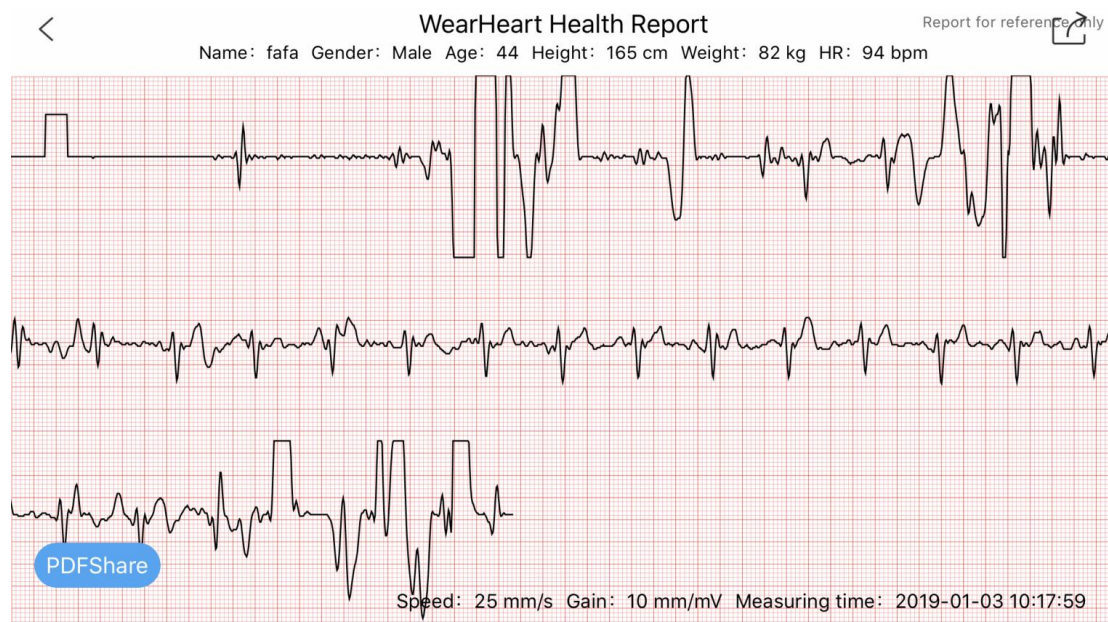
- A. Keep the contact between skin and electricity properly and stably, and do not exert too much force.
- B. Don't move your limbs, such as moving your arms, talking, coughing or sneezing in the measurement.
- C. In winter, the weather is dry, so ensure to wet the skin on the test contact skin and increase the conductivity (just like testing ECG in a hospital and wiping “couplant”)

Please confirm after finishing the measurement:

If the ECG waveform is disordered and drifts seriously, it may result in inaccurate heart rate values and measurement results. Please re-measure according to the above instructions at this time.



Generate the ECG report after completing ECG measurement, and open any HRV record to view ECG report, as shown in the following figure:



3. ECG heart rate offline measurement

The watch is on the ECG and PPG monitoring interface. The right index finger touches the metal key for 3 seconds and appears (picture), and then the test for 30 seconds is completed, the watch vibrates and the test completion interface appears. If the test is successful, then the ECG data is stored at the watch side and uploaded to the cloud server when the watch and mobile APP are connected and synchronized. The user checks the test results on the mobile APP: heart rate, blood pressure and electrocardiogram.

If the test fails, please check the way of wearing the watch. Check whether the electrode pads touch the skin or touch some water to keep the skin moist. Start the test again. As shown in the following figures:

Reminder: As data storage requires a large amount of watch memory, only three sets of historical data can be saved when the watch measures ECG heart rate data offline. Please connect to the mobile APP and synchronize the data in time. If the offline measurement is more than 3 groups of data, the subsequent test data will automatically overwrite the earliest historical data.

Reminder: In order to improve the accuracy of the test and the convenience of viewing the data, it is strongly recommended that users monitor the health data with one-button measurement on the mobile phone APP.

4. PPG heart rate offline measurement:

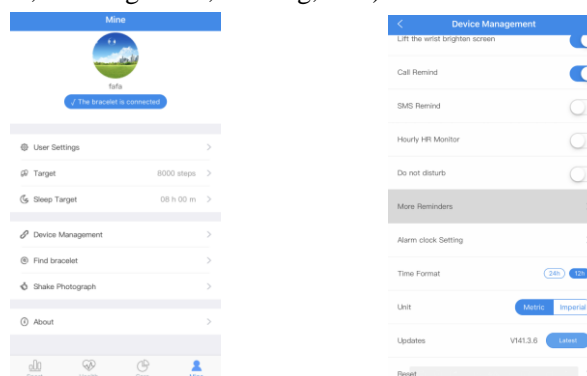
When the watch stays in the heart rate measurement interface for more than 1 second, PPG photoelectric heart rate detection starts and starts to monitor the heart rate value. At the end of the test, the watch will vibrate and display the test result, and the watch will go out into standby mode after 5 seconds. You can press the touch button for a long time to return to the standby main interface in advance.

(If the user's skin color is too dark, there may be deviation in the PPG test alone. It is strongly recommended that the user use one-button measurement on the mobile phone APP.)

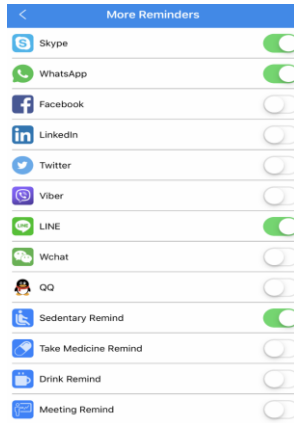
Watch management

2.5.1 Watch setting

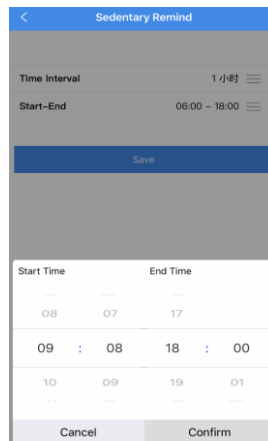
After connecting to the watch, find the watch management function in the interface of “My”. Turn on or off the wrist-picking / wrist-turning bright screen, set alarm clocks (can set 8 alarm clocks) and turn on various reminders (calling SMS, Skype, whatsapp, Facebook, WeChat, QQ, sitting for long time, taking medicine, drinking water, meeting, etc.) as shown in the following figure:



The watch supports the content push and display of Skype, whatsapp, facebook, WeChat, QQ, SMS and others, and return to the main interface after pressing for 3 seconds, as shown in the following figure:



When sitting for long time, taking medicine, drinking water or meeting reminder, it should be set manually according to your needs, as shown in the following figure:



2.5.2 Firmware upgrade of the bracelet terminal

1. When the mobile phone connects to the device, click firmware download and upgrade

If the upgrade fails in the process of upgrading, please wait for 3 minutes to upgrade again, or continue to upgrade after charging the bracelet.

Product parameters

CPU: NORDIC 52832

ECG chip: Texas Instruments TI

PPG chip: HRS 3300

Bluetooth antenna: Taiwan all-band ceramic antenna

LCD: High definition TFTB screen

Battery: li-polymer

Bluetooth: 4.0

Product packing list

1* ECG smart bracelet

2* Operating manual

3* Magnet charging cord

Matters needing attention

- It is not recommended that wear the product when Swimming or diving and bathing in hot water.
- Do not fall or collide with products, which may easily cause scratching and damage to the fuselage.
- Do not disassemble the product without authorization, which may cause quality problems.
- Explosion will occur in case of fire. Do not throw it into the fire.
- Please use it in an environment between - 5 and 45 degrees Celsius.
- Please clean the product with a cleaning machine cloth. It is not recommended to clean the product with soap bath lotion and other washing products.
- This product is not used for disease diagnosis, treatment and prevention.
- Do not check incoming calls or other notices when driving a car, so as not to cause danger due to distraction.
- Do not let children and pets come into contact with this product so as not to cause harm.

Maintenance and care

- Please clean this product regularly with a clean cloth.
- Do not expose this product to chemicals.
- Do not open and disassemble the product housing without authorization.
- This product contains li-polymer which may be harmful to the environment. Please place it properly if it is not used.
- Do not place products in washing machines and dryers.
- Do not use a hot hair dryer to dry for a long time.
- Do not use it in sauna and sweat steam rooms.
- Do not expose it to the sun.
- Do not charge products when the product is full of the water.

After-sales service

Warranty Card

Product name:

Type specification:

Customer name:

Contact method:

Address:

Distribution unit:

Contact method:

Sales date:

FCC ID: 2ASQB-W8

FCC Warning

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.

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

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. The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction