



# **Heart Rate Monitor** *sports watch*

No chest strap, No finger, Electro-optical cell



Heart rate

**Kcal**

Calorie  
Consumption

**SPD**

Speed  
Distance



Bluetooth



Caller ID  
Vibrating



Clock/Timer

**User Manual**—Heart Rate Monitor Sports Watch

| L7 specification |   |                           |
|------------------|---|---------------------------|
| CPU              | type  | CORTEX-M0                 |
|                  | frequency   | 50MHZ                     |
| Memory           | cache   | 4Kbytes RAM               |
|                  | Mass storage                                      | 64KBytes FLASH            |
| connect          | Bluetooth   | BT 2.0                    |
| sensor           | acceleration                                      | KXTE9-2050, 3-Axis, +/-2g |
|                  | Heart rate monitor                                | reflective green light    |
| Screen           | display   | FSTN                      |
|                  | Resolution ratio                                  | 96*96                     |
| others           | waterproof  | Water resistance          |
|                  | Alert   | YES(Vibrator)             |
| Use environment  | Working temperature                               | (-10~+50°C)               |
|                  | Storage temperature                               | (-20~+60°C)               |
| Battery          | volume  | 230mAh                    |
|                  | type  | Li-ion Polymer Battery    |
| Power            | Input voltage                                     | 3.3~4.2V                  |
|                  | Maximum power                                     | 0.6W                      |
| accessory        | Charging clip, manual, certificate, warranty card |                           |



- [ MENU ] Under standby status, single press, enter into menu;
- [ MODE ] Under standby status, single press, shift display interface;  
Under standby status, press three seconds to open/close Bluetooth;
- [ UP ] Under menu status, single press, move up or increase;  
Under standby status, press three seconds to open/close backlight;
- [ DOWN ] Under menu status, single, move down or decrease;  
Under standby status, press three seconds to view sport log;
- [ CONFIRM ] Under time interface, single press, start/pause stopwatch; long press to clear the stopwatch to zero;  
Under sport interface, single press, start/pause sport detection;  
Under challenge interface, single press, start/pause sport challenge;  
Under menu status, single press, confirm.



up and down

left and right

missed call



failure

succeed

battery status



sport

alarm clock

Bluetooth

When the watch is power on in the first time, the system will run the initial guidance Three fixed prompt interfaces, respectively, "Please enter personal information", "Please set the date and time" and "set successfully welcome."



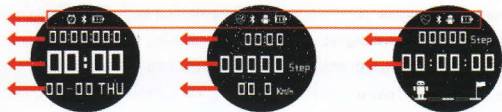
Personal information setting interface:

1. height, unit: CM, the system default value 170;
2. weight, unit: KG, the system default value 60;
3. footage, unit: CM, the system default value 60;
4. gender, the system default "male";
5. save.

Date and time setting interface:

1. use 24-hour format;
2. date format: year/month/day;
3. save.

When the setting is complete you are prompted, welcome.





## Time interface

1. Prompted the state bar: Bluetooth, alarm clock, battery status;
2. stopwatch: 0:00:00:0, press confirm button the stopwatch start, press it again, the stopwatch pause, long press to clear zero;
3. time display: 24-hour format; time setting please see "5.3.1 menu-system setting-date & time";
4. date and week display: month, day and week display: Monday to Sunday.

## Sport interface

1. Prompted the state bar: Bluetooth, sport, heart rate, battery status;
2. heart rate detection: contain the current heart rate, maximum heart rate, average heart rate, heart rate percentage); Press UP button switch can be recycled;
3. Day accumulative step-value: five digits;
4. sport detection: calorie, distance, current speed, pedometer per minutes; press DOWN button switch can be recycled;
5. sport detection start and pause: press CONFIRM button.

## Target (Challenge) interface

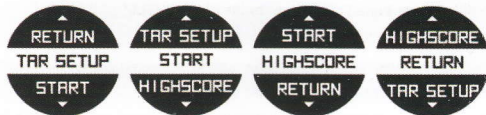
1. Prompted the state bar: Bluetooth, sport, battery status;
2. current step value: five digits;
3. countdown stopwatch: 00:20:00, the system default 20 minutes countdown;
4. challenge start and pause: press CONFIRM button, stopwatch start/pause, press three seconds CONFIRM buttons to clear zero for the stopwatch;
5. robot and flag: the system automatically divided the distance into five segments, challenge each completed a segment, the robot then jump to the corresponding position. For example: Challenges distance is set to 1 km, each completed two hundred meters, the robot forward one segment;
6. After setting the time and distance to complete the challenge, the system displays , which means that a successful challenge. Unfinished challenge, the system displays , which means that challenge fails.

Contain four options: TARGET, MS VIEW (message view), SYS SETUP (system setup), and RETURN.



## 5.1 MENU- TARGET

Contain four options: TAR SETUP, START, HIGHSCORE, and RETURN.



### 5.1.1 MENU - TARGET-TAR SETUP



Operation steps:

1. Press MENU button;
2. Press UP or DOWN button to shift;
3. Select TAR SETUP;
4. Press CONFIRM button enter into setting;
5. 00:00:00 is challenge countdown setting: respectively as hour, minute, second; the system default is 20 minutes and it shows as **00:20:00**, press UP or DOWN button to increase or decrease, press CONFIRM button automatically enter into the next option setting;

6. 00.0 Km is challenge distance setting, unit: KM; the default challenge distance is 01.0Km. press UP or DOWN button to increase or decrease;
7. Setting completion, automatically return to the "TAR SETUP";
8. Press MENU button back to the main interface.

### 5.1.2 MENU-TARGET-START



Operation steps:

1. Press MENU button;
2. Press UP or DOWN button to shift;
3. Select to START;
4. Press CONFIRM button enter into challenge interface; the challenge start, the timer timing. Press the CONFIRM button again, the challenge pause. Press three seconds, challenging interface timer reaches zero, the robot returns to the initial position;
5. Description: the system automatically divided the distance into five segments, challenge each completed a segment, the robot then jump to the corresponding position. For example: Challenges distance is set to 1 km, each completed two hundred meters, the robot forward one segment.



## MENU -TARGET- START-challenge finish

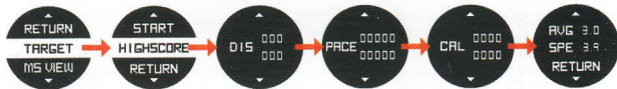
Distance to the flag icon:

The system default distance is 1 km to white / black and horizontal stripe sharing five segments in percent, each of more than one segment complete, and humanoid icon forward a grid, to achieve the target in default 20 minutes or do not meet the target, the system pop-up boxes.

Note: Press the Confirm button prompt message disappear or disappear automatically after 3 seconds.



## MENU-TARGET-HIGHSCORE



Four data table: CAL(calories), PACE, DIS(distance), AVG SPE(average speed); the records comparison of the highest and current data

Constraints and rules:

1. Initially, the historical highest data is the date of the first challenge;
2. Move UP and DOWN button to view;
3. "RETURN" option, the CONFIRM button to return.

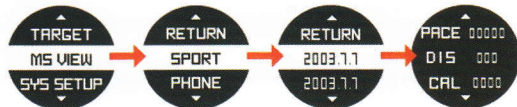
## MENU -MS VIEW



Contains four options: SPORT (sport log), PHONE, DEL MS(delete message) and RETURN  
Constraints and rules:

1. sport log in days and it is showed 4 day's record; you can choose one of them to view the detail data and it includes PACE, DIS (distance), CAL(calories) and SPE (average speed);
2. PACE show the total number of that day; the same as distance and calorie;
3. average speed show the average sport speed of that day;
4. Move UP and DOWN button to view;
5. "RETURN" option, the CONFIRM button to return.

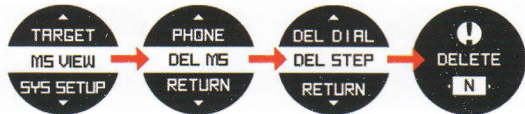
## MENU- MS VIEW-SPORT





Constraints and rules:

Only save three telephone logs and the new phone is covering in the last log.



Delete dial and delete sport

Constraints and rules:

Click the delete dialog box will be prompted to delete the corresponding information.



Contains eight options: PROFILE, TIME DATE, BLUETOOTH, ALARM, language, IMEI, HEARTBEAT and RETURN.



Personal information setting interface:

1. height, unit: CM, the system default value 170;
2. weight, unit: KG, the system default value 50;
3. footage, unit: CM, the system default value 45;
4. gender, the system default "male";
5. save.

### 5.3.2 MENU-SYS SETUP-TIME DATE



1. use 24-hour format;
2. date format: year/month/day;
3. save.

### 5.3.3 MENU-SYS SETUP-HEARTBEAT



Constraints and rules:

Open heart rate- heart rate ON, sport heart rate detection interface work properly. (Press the CONFIRM button in the sport interface, heart rate detection start)

Close heart rate- heart rate OFF, sport heart rate detection interface do not work. (Press the CONFIRM button in the sport interface, heart rate detection close)

### 5.3.4 MENU-SYS SETUP-BLUETOOTH



Constraints and rules:

Bluetooth open: ON

Bluetooth close: OFF

After Bluetooth open/close. Time, sport and target interface correspondingly display/hide Bluetooth icon.

### 5.3.5 MENU-SYS SETUP-ALARM



Constraints and rules:

Alarm open: ON

Alarm close: OFF

Alarm clock open/close, time interface display/hide alarm clock icon.



