



NOWLEY

INSTRUCTION MANUAL 86227

**Heart Rate Monitor Pedometer Watch
User Manual**

TABLE OF CONTENT

1	General Description.....	1
1.1	Product Overview.....	1
1.2	Functions	2
1.3	System Specifications	2
2	Operation Guidance.....	3
2.1	Button Function overview.....	3
2.2	Mode Switch	5
2.3	General function	6
2.3.1	Auto-return Function.....	6
2.3.2	Initial Screen Memory	6
3	Time Mode	6
3.1	View Time.....	6
3.2	Time and Date Setting	7
3.2.1	First Time Zone.....	7
3.2.2	Second time zone	11
4	Heart Rate Measurement (HRM) mode	12
4.1	HRM Operations.....	12
4.2	BMI Review BMI.....	14
4.3	Personal Information Setting	14
4.4	Troubleshooting.....	16
4.4.1	Attentions When Measure Heart Rate	16
4.4.2	Fail to detect heart rate	16
5	Pedometer Mode	17
5.1	Activate/Stop Pedometer Function.....	17
5.2	Review step counting/distance/elapsed time/Calories	17
5.3	Personal Pedometer Data Setting	18
5.4	Q & A.....	19
5.4.1	Why can't I set a target step?.....	19
5.4.2	Why isn't the distance recorded correct at all?.....	19

5.4.3 Why is there a sudden increase in the step count?	19
5.4.4 Why does the number of steps seem inaccurate?	20
6 Stopwatch Mode	20
6.1 How to check Elapsed Time	20
6.2 How to Measure Split Time	20
6.3 How to Check Two Runners' Finish Time	20
7 Daily Recordings Mode.....	21
8 Archive Mode	22
8.1 How to Check the Previous Record	22
8.2 How to Delete Archived Entries.....	22
9 Alarm Mode.....	24
9.1 Alarm On/Off.....	24
9.2 Chime on/Off	24
9.3 Alarm Time Setting	24
10 Countdown Timer Mode.....	25
10.1 Countdown Timer Operation	25
10.2 Countdown Timer Setting	26
11 Appendix.....	27
11.1 Relationship between Percentage of MHR and Fat Burnt	27
11.2 BMI	28

1 General Description

1.1 Product Overview

This product is designed to monitor the heart rate and step count of an average. Based on the pre-set personal data, it will determine his/her calorie consumption.

It's must necessary to input the personal data including age, gender, height, weight and RHR (resting heart rate), highest and lowest heart rate limits, etc in the setting menu prior to operating Heart Rate Pedometer Watch.

If your heart rate is below or over the heart rate limits setting that you preset, the watch will remind you with a beep sound and flashing screen that the exercise intensity should be stayed in the target heart rate zone. In this way, it will help you achieve exercise result effective better because, calorie and fat consumption (KCAL/FAT) during exercise can be figured out according to the tested heart rate and pre-set personal information.

This product is not only suitable for professional and amateur sportsman, but also good for those who want to keep fit through effective exercise.

This product is designed for training and fitness only and cannot be used for precise accurate medical purpose.

1.2 Functions

1. Calendar: Year 2000~2099 (auto-calibrated calendar) including year/month /date/day of week;
Time: hour/minute/second including 12/24 hour format
2. Dual time zone: display time in two different time zones.
3. Daily alarm: it's settable to be on/off (off by default).
4. Hourly Chime: it's settable to be on/off (off by default).
5. Heart Rate Measurement: Using the same principles as an ECG to determine heart rate and percentage of maximum heart rate.
6. BMI: Calculate the Body Mass Index (BMI) based on an individual's height and weight.
7. Pedometer

- (1) Step range : 0~999999
- (2) Distance : 0~9999.99km
- (3) Calorimeter: 0~99999.9kcal
- (4) Duration: 0~1440min
- (5) Target Step Count : Alerts with beep sound upon completion
- 8. Pedometer data storage: Up to 30 entries. Each entry can be selectively deleted.
- 9. Stopwatch
 - (1) Stopwatch of 23h59m59s
 - (2) Split interval function
 - (3) Countdown timer of 23h59m59s
 - (4) EL Backlighting

1.3 System Specifications

- Battery : CR2032 (3V , 210mAh)
- Battery Life based on below conditions:
 - Average use of EL Backlight per day: 10 seconds, alarms rings per day: 20 seconds
 - Average daily use of heart rate monitor: once per day, 30 seconds duration
 - (1) pedometer 8 hours per day, it's 9 months battery life
 - (2) pedometer 4 hours per day, it's; 16 months battery life
 - (3) pedometer 2 hours per day, it's 26 months battery life
 - (4) pedometer 1 hour per day, it's 37 months battery life
 - Frequent daily use of heart rate monitor: 10 times a day, 30 seconds duration.
 - (1) pedometer 8 hours per day, it's 9 months battery life
 - (2) pedometer 4 hours per day, it's 15 months battery life
 - (3) pedometer 2 hours per day, it's 22 months battery life
 - (4) pedometer 1 hour per day, it's 30 months battery life
- Precision of heart rate monitor: $\pm 2\% / \pm 1\text{bpm}$ (which is conditioned that the test is done under the normal status, excluding heart rate abnormalities).

- Precision of pedometer: $\geq 90\%$
- Water resistance: 10ATM
- Operating temperature: $0^{\circ}\text{C} \sim 50^{\circ}\text{C}$

2 Operation Guidance

2.1 Button Function overview

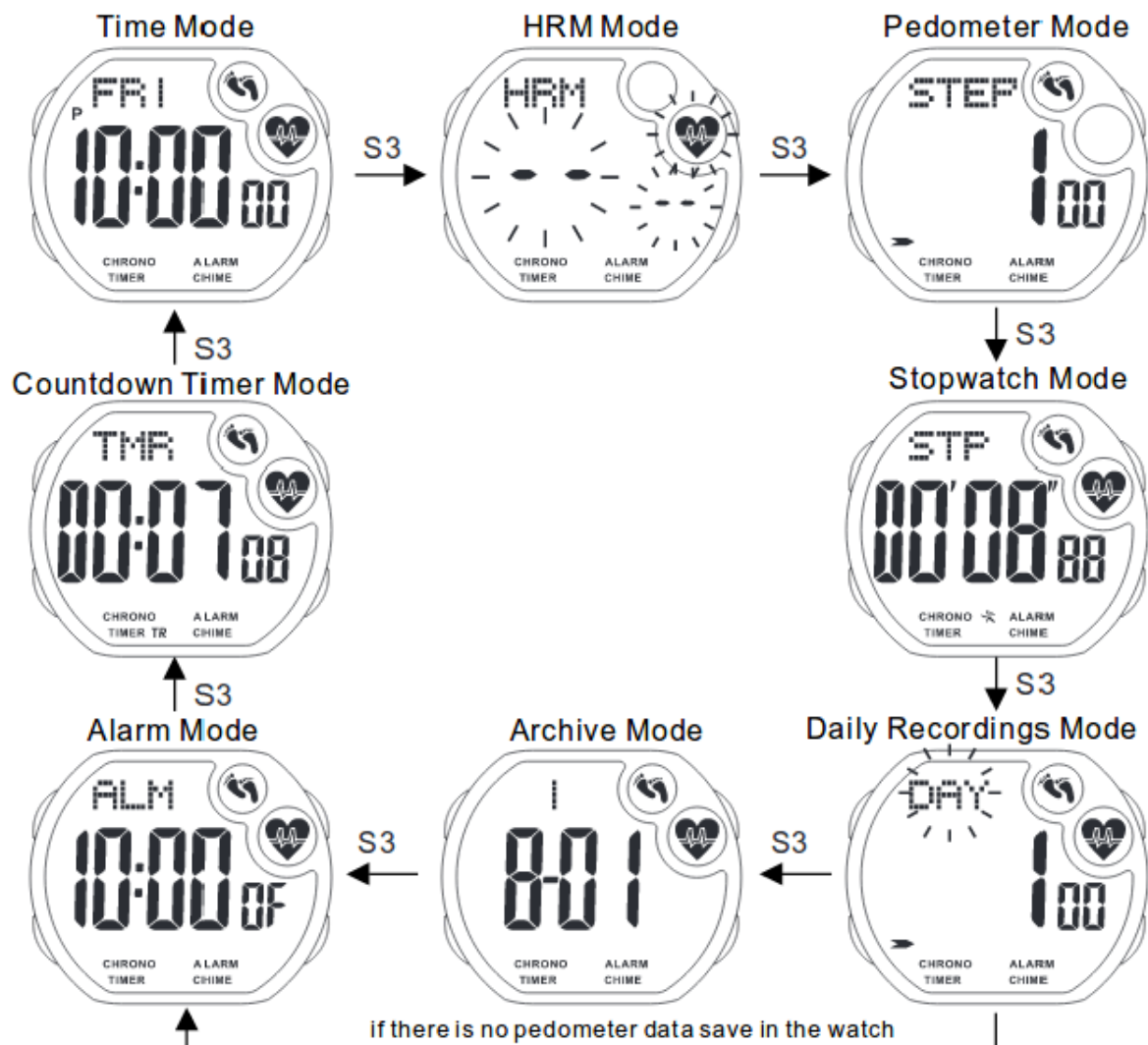


Buttons	Functions
S1 (ST/STP)	Turn on/off alarm, stopwatch, countdown timer, pedometer and heart rate monitor Under Archive Mode, press S1 to view next item in menu cycle Under Setting mode, press S1 to increase unit value or hold for fast advance
S2 (RST)	Under Stopwatch mode, Switch between Stopwatch and SPL function and resets Stopwatch. Under Time mode, hold S2 for the date display. Under HRM mode, hold S2 to display BMI Under countdown timer mode, hold S2 to reset the timer to previous setting. During setting, hold S2 to decrease unit value or hold for fast decrease
S3 (MODE)	Not in setting state, Press S3 to switch mode among the different modes During setting, switch target setting items.
S4 (SET/EL)	Under Archive mode, press S4 to view previous item in menu cycle Not in setting state, Press S4 to display EL Backlight for 3 seconds Not in setting state, Hold for 2 seconds to enter the setting mode

Notice: Under any mode, press four button at the same time, LCD will show full display. If you need to reset the watches, please hold four buttons for 4 seconds at the same time. If less than 4 seconds, the watch will be back to the previous display, but not reset.

2.2 Mode Switch

There are a total of 8 different modes. (But if there is no pedometer data saved in the watch, then Archive Mode will be skipped when switch function).



2.3 General Function

2.3.1 Auto-return Function

1. During setting of any mode, if no button operation in 20 seconds, the setting will be saved automatically and the watches will exit setting mode.
2. Under the Alarm mode, Daily recording mode and Archive mode, if no button operation in 1 min, the watch will automatically return to Time mode.

2.3.2 Initial Screen Memory

When enter Pedometer mode, Daily recording mode and Archive mode, the initial screen displayed is the screen when exiting Pedometer mode, Daily recording mode and Archive mode.

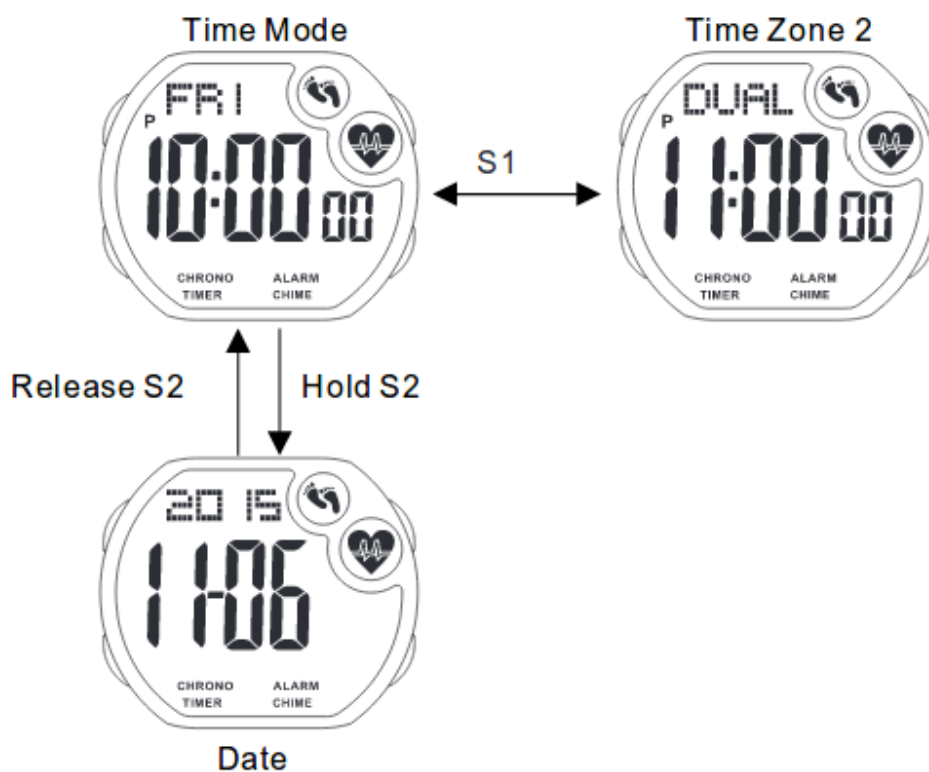
3 Time Mode

3.1 View Time

There are two time zones: first time zone and second time. Time mode features two changeable time zones.

Press S1 to switch between time zone 1 and time zone 2.

In the first time zone, hold S2 to view the date.







3.2 Date and Time Settings




3.2.1 First Time Zone

1. In the first time zone, hold S4 until you hear a beep sound then release button S4, the digits flashing means it's ok to do the setting.
2. Press S3 to switch among the below 7 setting

Second→Minute→Hour→Year→Month→Day→Hour Format

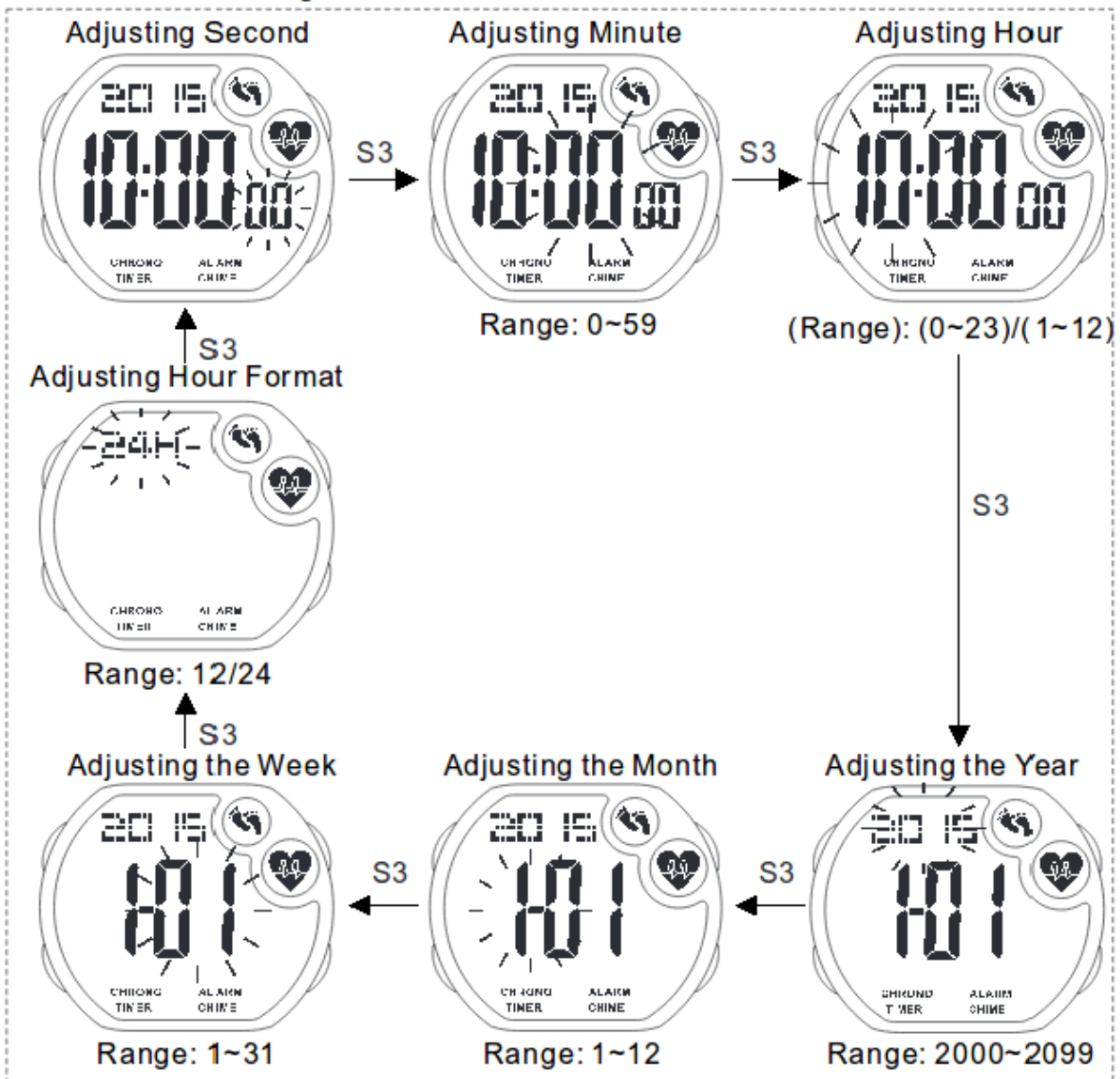
3. When the digits flash, press S1 or S2 to do the adjust as below:

Screen Display	Function	Instructions
	0 Resetting the second digit to Zero	Press S1 or S2
	Adjust minute	Press S1 (+) or S2 (-)
	Adjust Hour	Press S1 (+) or S2 (-)
	Adjust year	Press S1 (+) or S2 (-)

Screen Display	Function	Instructions
	Adjust Month	Press S1 (+) or S2 (-)
	Adjust Date	Press S1 (+) or S2 (-)
	Switch 12/24 hour format (12/24H)	Press S1 or S2

4. After finish setting, press S4 to save settings and exit the menu.

First time zone setting

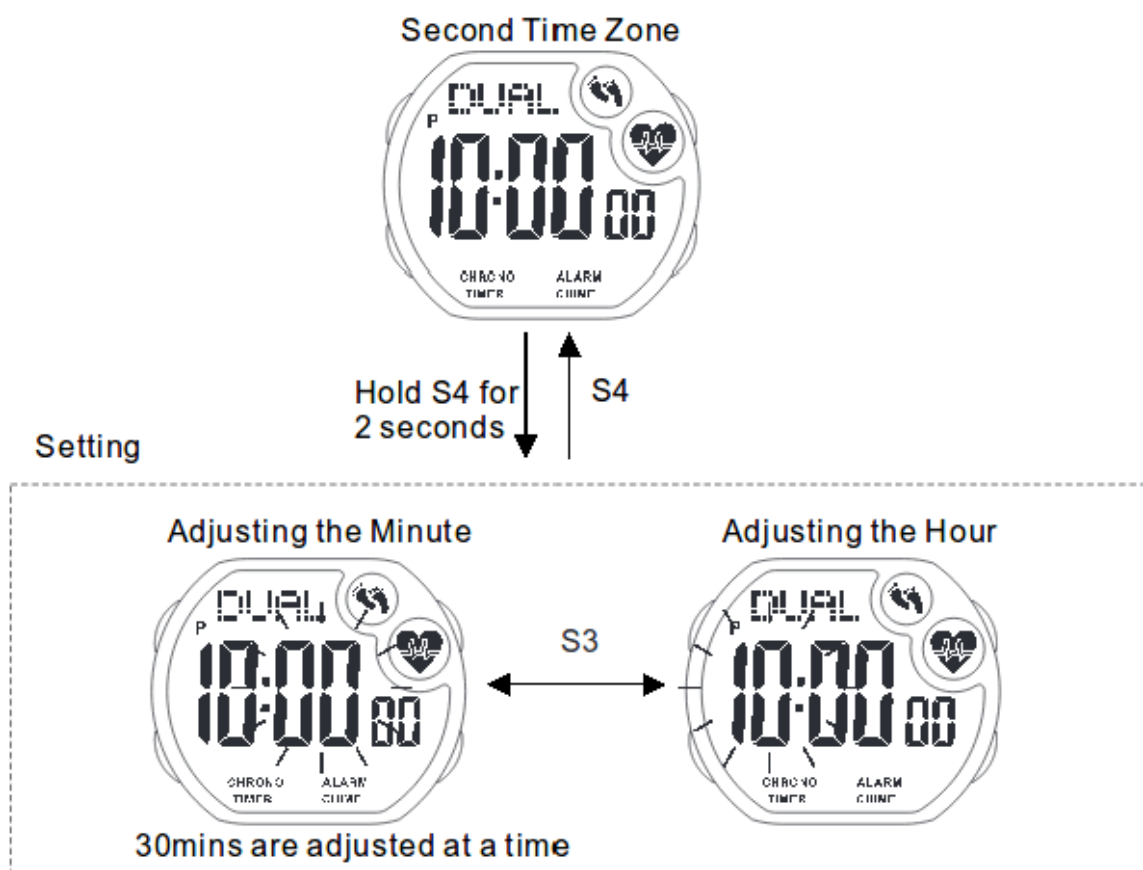


3.2.2 Second time zone

1. In the second time zone, hold S4 until you hear a beep sound then release button S4, the digits flashing means it's ok to do the setting.
2. Press button S3 to switch between hour and minute

Minute→Hour

3. When the digit is flashing, press S1 or S2 to adjust
4. After finish setting, press S4 to save settings and exit the menu.

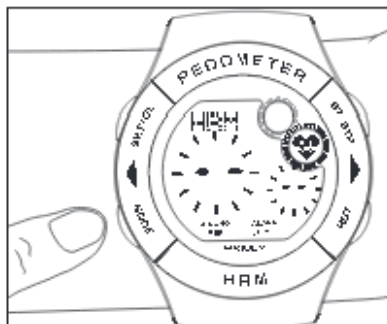


- In time mode, if 12 hour format on, it will display P icon after 11:59
- In Second time zone, when setting minute, the minute digit will be adjusted by 30mins at a time

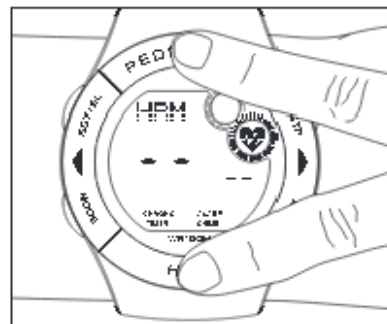
4 Heart Rate Measurement Mode

4.1 HRM Operations

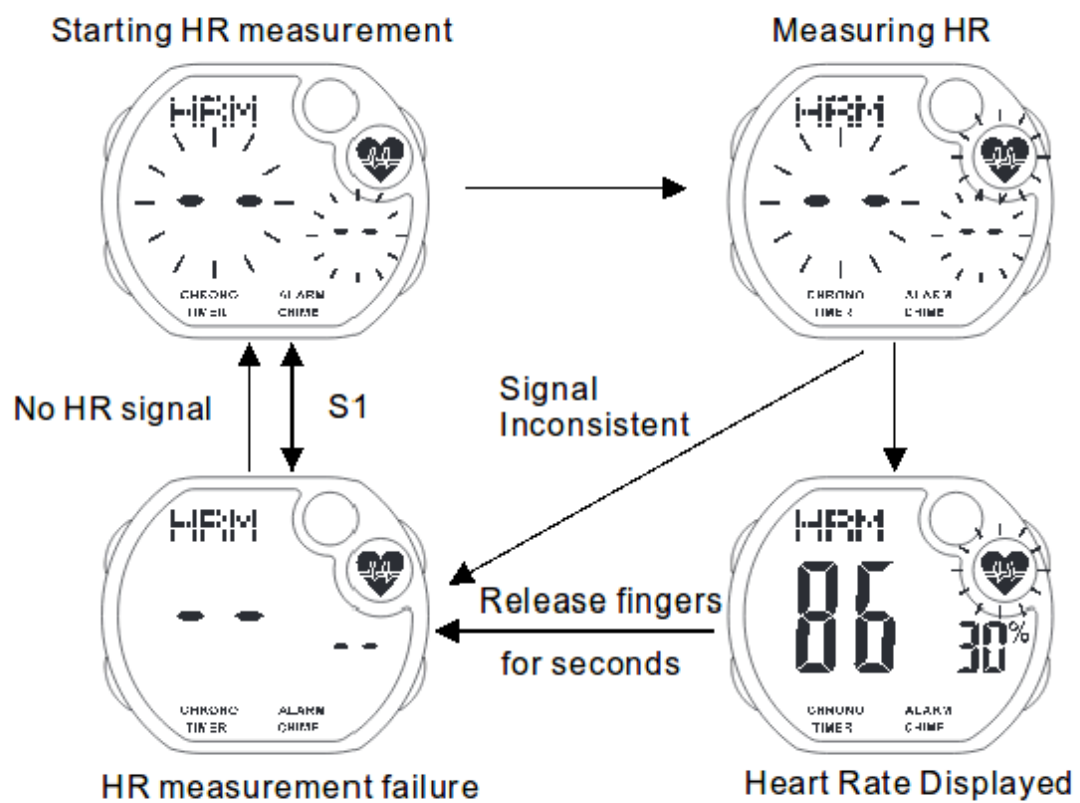
Press S3 to switch the mode till enter HRM mode. Once the watch is under HRM mode, HR measurement circuit is activated automatically. If there is no heart rate signal or heart rate is inconsistent, the measurement function will be deactivated automatically after a certain time to save power. Press S1 to activate or deactivate measurement circuit.



Place the watch on your wrist and then press button S3 (mode) to switch to HRM mode.



Cover the 2 sensor areas with your finger pads and make sure there is enough contact area.



4.2 Review BMI

Press and hold S2 to review the BMI

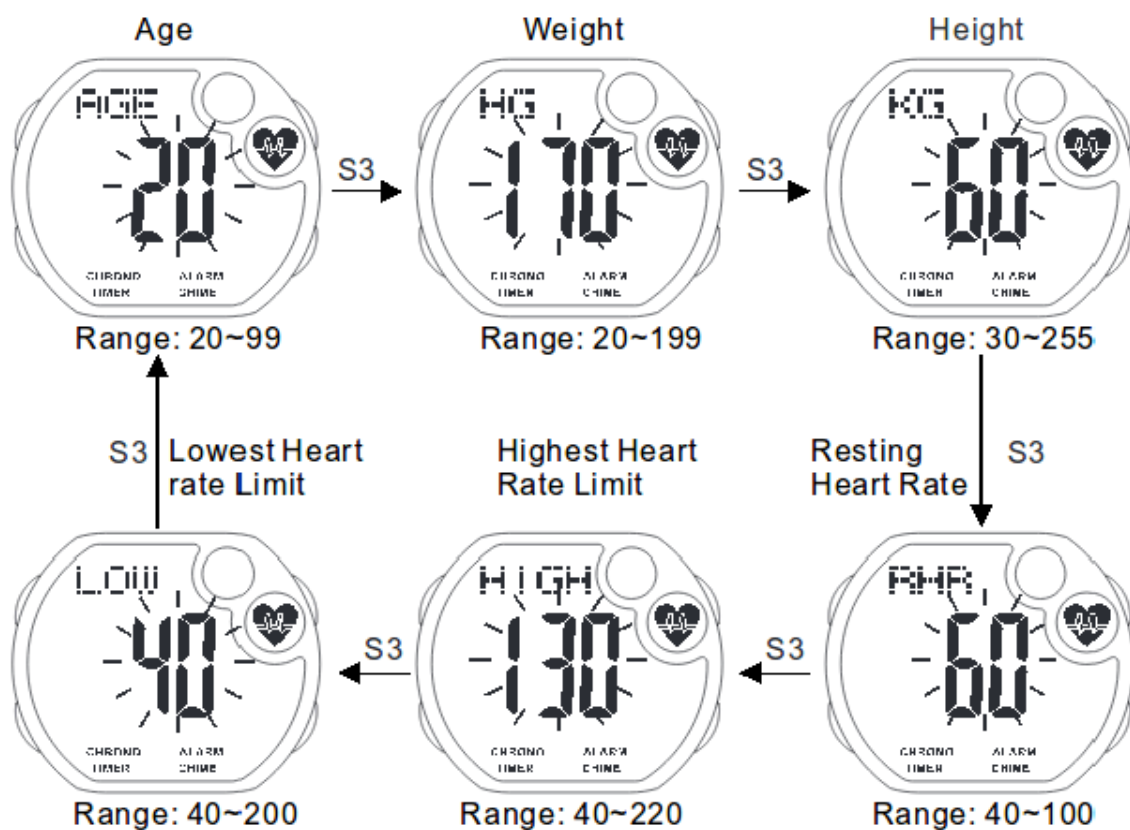


4.3 Personal information settings

1. Under HRM mode, hold S4 until you hear a beep sound then release button S4, the digits flashing means it's ok to do the setting.
2. Press S3 to cycle through the variables: age, weight(KG), height(HG), resting heart rate (RHR), highest Heart Rate(HIGH), lowest heart rate (LOW).

Age→Weight(KG)→Height(HG)→Resting heart rate(RHR)
→Highest margin(HIGH)→lowest margin(LOW)

3. Press S1 to increase values (hold for fast increasing); press S2 to decrease values (hold for fast decreasing).
4. After settings, press S4 save and exist setting mode.




- The watch is not capable of calculating the highest and lowest heart rate limits, so please preset it according to doctor's advice or previous records.
- If the tested Heart rate value exceed the highest or lowest limit, the watch will beep and the screen will flash.
- When preset the lowest heart rate limit, it cannot lower than the highest heart rate limit.


4.4 Troubleshooting

4.4.1 Attentions When Measure Heart Rate

- A. This product is available to measure heart rate in the still state. If during sport, the measurement might not be succeed or not accurate.
- B. This product operates on the same principles as an ECG, the upside & downside of metallic bezel and the case back function as electrodes to measure the electric activity of your heart beat, so three electrodes must contact with finger or wrist during the measuring. Please make sure all of protect films on bezel and case back are take off before test.
- C. When measuring your heart rate, please plate the watch on the wrist, cover 2 sensor area on upside and downside of bezel with fingers. Make sure the touching is full, stable and gently to guarantee the accuracy of measurement.
- D. When the temperature is low, please warm your hands before contact the sensors and if climate is dry, please moisten the fingers and wrist before contact the sensors.


4.4.2 Fail to detect heart rate

It can be told why heart rate measurement is failed according to the icon  on the LCD display.


- A. If the  symbol is always on


The reason is either the sensor in watch didn't get the electrocardio- signal or the measurement circuit is deactivated.


The watch will deactivate the measurement circuit if there is no signal in 10 seconds. Then, please press S1 to activate the measure circuit.

If the measurement circuit is inactivated,  is on, but "--" is not flashed as below illustrator.



If the measurement circuit is activated but the signal is too weak to be measured,  is on too but "--" will keep flashing.

B. There is no  on LCD, the reason is no signal.

C.  Is flashing, but frequency is not even.


The reason is that electrocardio-signal has been detected but not stable.

For the above problem, please refer to the term C & D in chapter 4.4.1

5 Pedometer Mode



5.1 Activate/stop the pedometer function

Press S1 to activate/stop the pedometer. The  symbol should start flashing to indicate that the pedometer is active.

If no movement is registered on the pedometer for 4 minutes, pedometer will enter sleep mode automatically to save power.

5.2 Review step counting/distance/elapsed time/Calories burned

1. Press S2 to cycle through the following recorded information:

Steps→Distance (UNITS)→Elapsed Time→Calories

2. When the pedometer is inactive, hold S2 for two seconds to delete all data from the most recent recording.

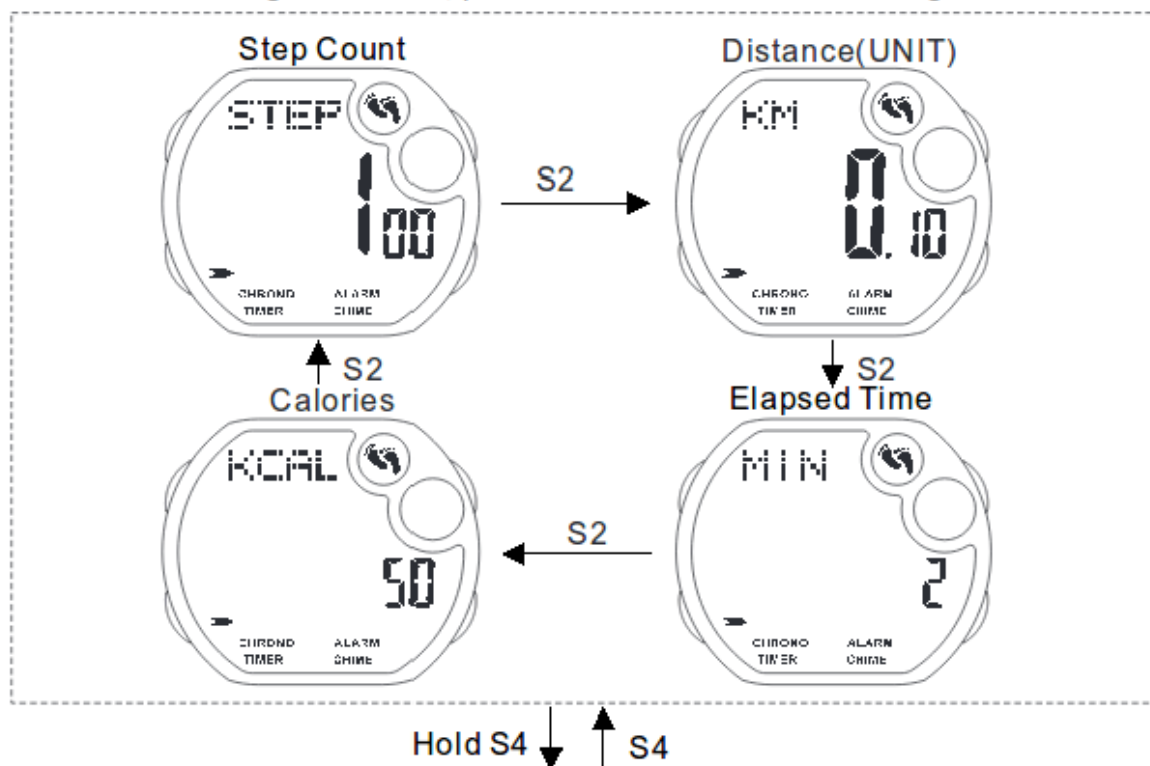
- If the values have not been deleted, the pedometer will resume recording from where it was stopped.

5.3 Personal Pedometer Data Setting

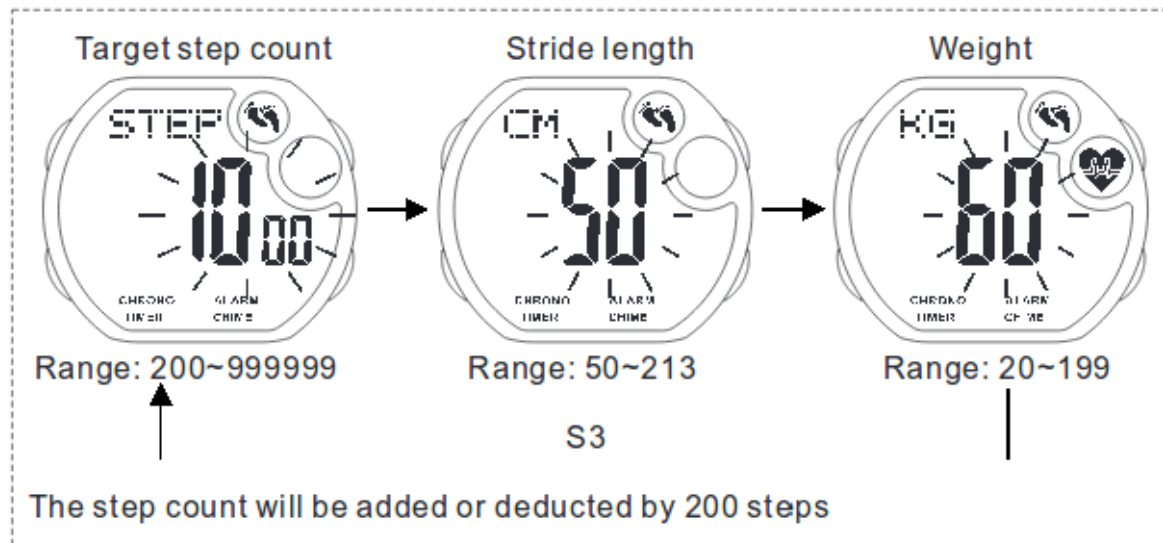
1. When the watch is under pedometer mode, hold down the S4 button until a beep sound, release the S4 button to enter the settings as indicated by flashing digits on the display.
2. Press S3 to cycle through the menu items. The following information can be configured:

Target step count → stride length (CM) → Weight(KG)

3. Press the S1 button to increase the value of the variable, press S2 to decrease the value of the variable.
4. Once the setting is finished, press S4 to save and exit setting menu.



Setting



5.4 Q & A

5.4.1 Why can't I set a target step?

It's not allowed to set personal information after step count activated. Therefore, please make sure to set up the correct personal information before step count, as those values are being used to determine the distance and your calorie burned.

5.4.2 Why isn't the distance recorded correct at all?

The distance is calculated upon the steps and the "stride length" you preset, so please check to make sure that the correct stride length is set.

5.4.3 Why is there a sudden increase in the step count?

The pedometer may not be able to register movement with complete precision at all times, but it has a built in function that allows it to try and account for any

at all times, but it has a built in function that allows it to try and account for any discrepancies in its measurement which is why you will notice certain spikes in your recording.

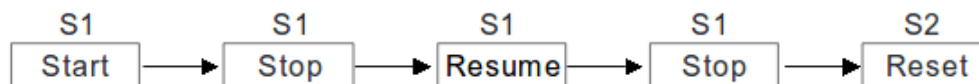
5.4.4 Why does the number of steps seem inaccurate?

There are two possible causes for this problem:

- (1) The pedometer is only intended for measuring walking and/or jogging. It is unlikely to produce the reliable data when measuring activities involved sprinting.
- (2) The pedometer's operation is based on principles of biomechanics, specifically on how people's arms behave during movement. If your arms are moving excessively during exercise then there is a possibility that it may affect the pedometer's measurements.

6. Stopwatch

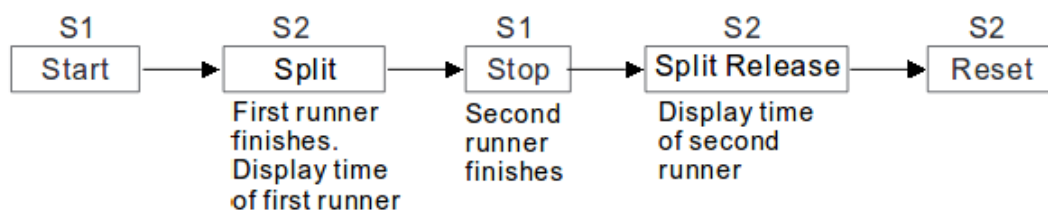
6.1 How to check Elapsed Time




6.2 How to Measure Split Time



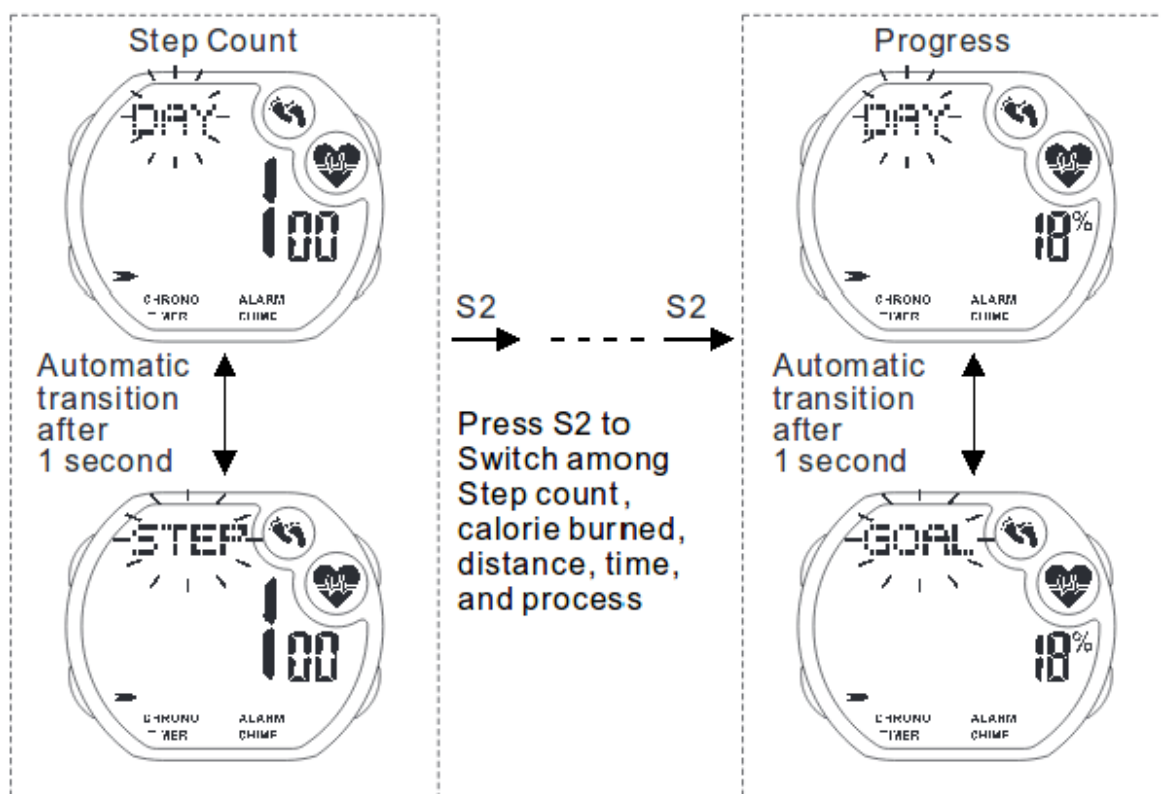
6.3 How to Check Two Runners' Finish Time



- If you alternate to other modes while the stopwatch is active, it will continue to run in the background as indicated by the  symbol

7 Daily Recording Mode

The Daily Recording mode only records and displays the results on a day-to-day basis, including step count, calorie burned, distance and progress. Press S2 to cycle through the various variables.



- Under daily recording mode, this pedometer watch will automatically save all the information recorded on the daily basic at 00:00/12:00am the next day, then the daily data will be cleared.

8 Archive Mode

8.1 How to Check the Previous Records

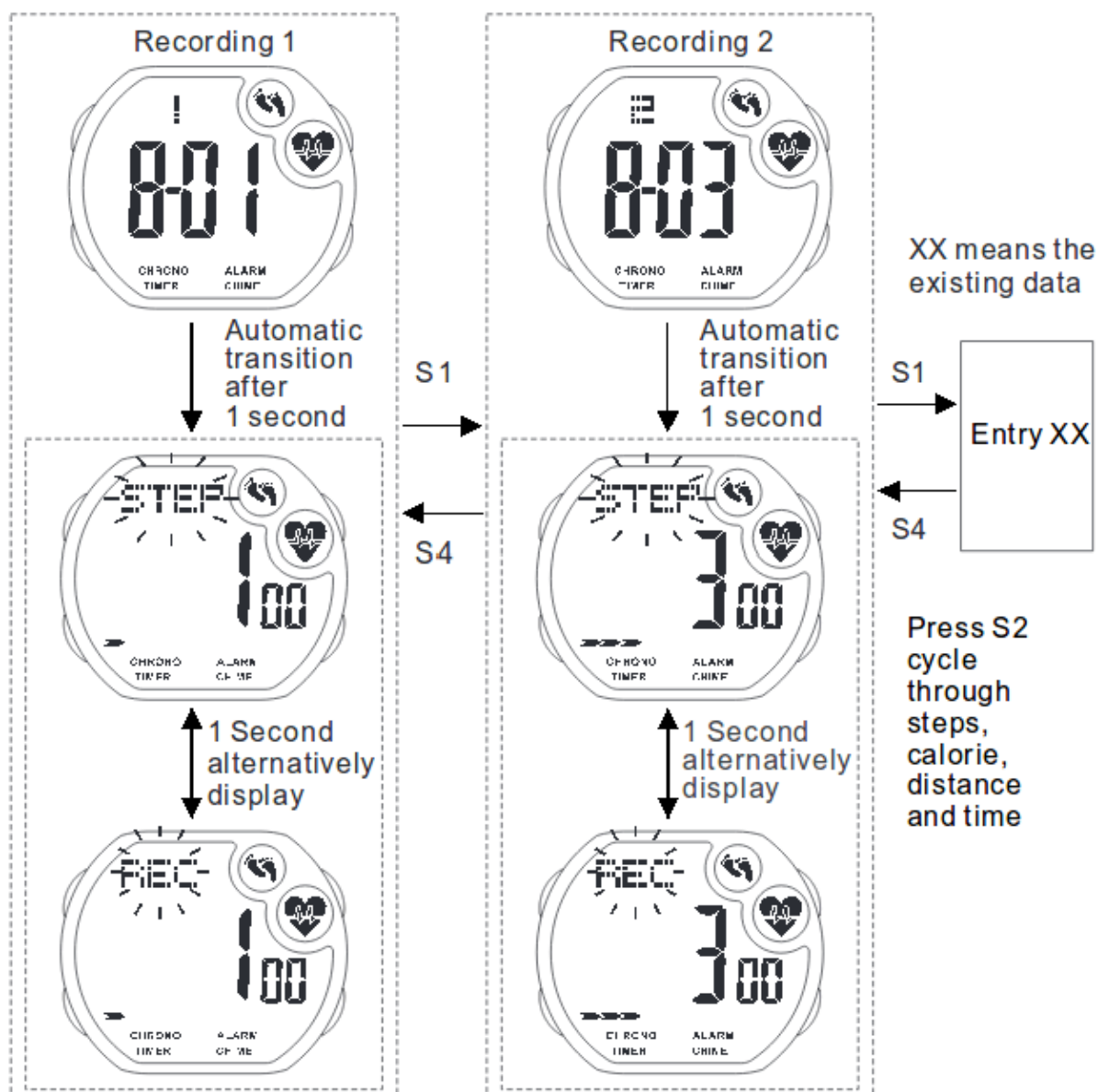
Press S1 to browse forward or Press S4 to browse backward the daily recording date by date

Press S2 to cycle through steps/calorie/distance/time display.

8.2 How to Delete Archived Entries

Hold S2 for two seconds to delete the current viewed entry


Hold S4 for two seconds to delete all records.




- When viewing archived entries, date will be displayed first, then change to steps after 2 seconds. When display of Steps, press S2 to cycle through steps, calorie, distance and time display.
- Under archive mode, press S4 is not able to activate EL light.
- It's available to store 30 days' data in the watch.

9 Alarm Mode

9.1 Alarm On/Off

Press S1 to turn on/off alarm under alarm mode. When the alarm is on, the symbol  will be on display.

9.2 Chime on/off

Press S2 to turn on/off the chime, the symbol  will be on display when chime is turned on.

- The chime function is only applied to the first time zone clock.

9.3 Alarm Time Setting

1. Under the alarm mode, hold S4 until you hear a beep sound and the hour digit begins to flash.
2. Press S3 to switch between the hours and minutes.

Minute→hour

3. Press S1 to increase the value of the unit (hold down for accelerated increase); press S2 to decrease the value (hold down for accelerated decrease).
4. After setting, press S4 to save the setting and exit.



- After setting, alarm will be on.

10 Countdown Timer Mode

10.1 Countdown timer Operation

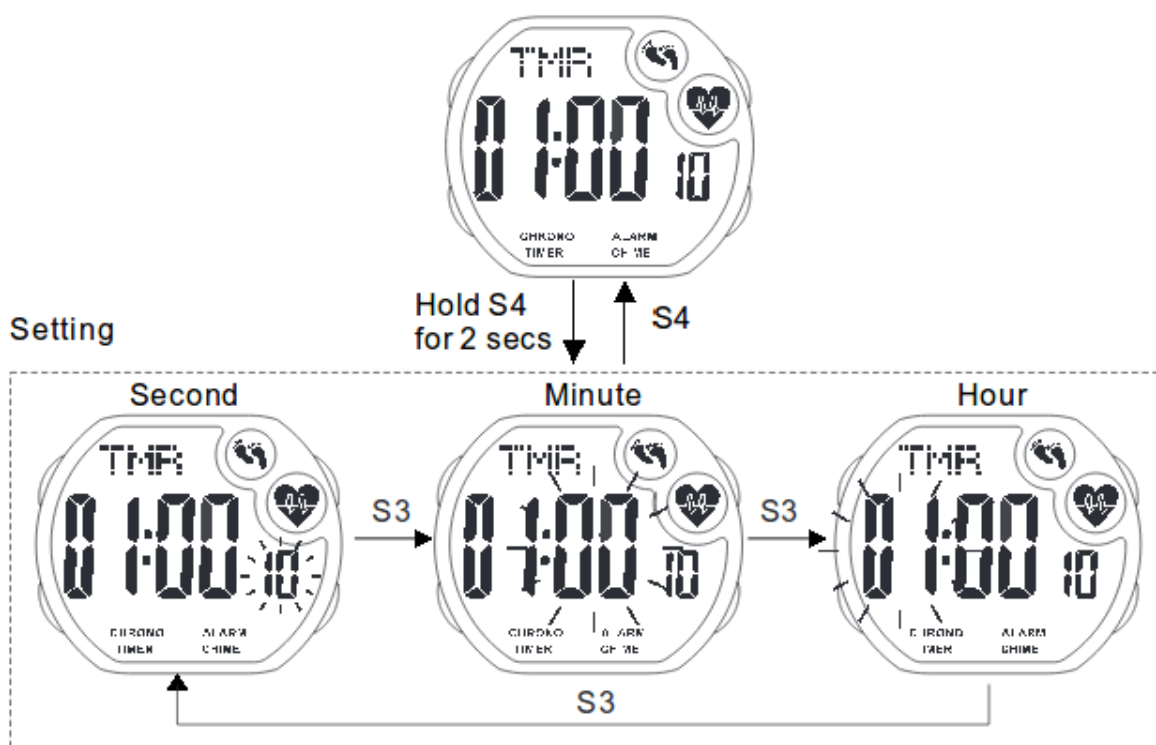


- When the countdown timer is complete, the system will automatically revert back to the set value. Press any button will stop the beep sound.
- Cycling to other functions while the countdown timer is running will not cancel

it. The countdown timer will continue to run in the background as indicated by the “TR” symbol.

10.2 How to set the countdown timer

1. Under the countdown timer mode, hold the S4 button until a beep sounds, the digit will begin to flash.
2. Press S3 to switch among hour, minute and second.
3. Press S1 to increase the value of the unit (hold down for accelerated increase); press S2 to decrease the value (hold down for accelerated decrease).
4. After setting, press S4 to save the settings and exit.



11 Appendix

11.1 Relationship Between Percentage of MHR and fat burnt

Generally speaking, individual heart rate varies person to person. The minimal heart rate for a normal person is resting heart rate (RHR), which is about a person's heart rate in the morning: awake but still lying down with no physical exertion. The maximum safe heart rate for an individual is maximum heart rate (MHR). The higher the percentage of MHR, the more calories consumed. Those calories are from sugar and fat. The relationship between percentage of MHR and calorie consumption is shown in below form.

Percentage of MHR	Exercise Intensity	Exercise Effect	Fat and Sugar burnt
Below 50%	Rest or moderate exercise (eg.walking)		Low calorie expenditure and mainly sugar burnt
50%~60%	Jogging, Breathing is regular	Warm up aerobic exercise, stress relief	Fat burnt increase and less sugar burnt
60%~70%	Running at a comfortable speed. Breathing becomes deeper. You can carry on a conversation	Cardiovascular exercise; the speed you drop back to after running at a fast speed; weight loss	Maximum fat burnt and less sugar burnt
70%~80%	Running at moderate speed. You can only talk in a short phrases.	Improve aerobic capacity. the best zone for improving cardiovascular and respiratory system.	Least fat burnt and more sugar burnt.

80%~90%	Running at a fast speed. Breathing is heavy	Improve anaerobic capacity; develop speed.	Seldom fat but maximum sugar burnt.
90%~100%	Sprinting. Breathing is labored. Most people can only stay in this zone for short periods.	Improve anaerobic exercise performance and your tolerance; develop muscles.	Maximum sugar burnt and almost no fat burnt.

11.2 BMI

The body mass index is a statistical measure of body weight based on a person's weight and height. BMI provides a reliable indicator of body fatness for most people, which allows for the comparison of individuals of different heights in terms of their weight. BMI is widely used to identify weight problems within a population, usually whether individuals are normal, overweight or obese.

However, please remember that BMI is only a guide and other issues such as body type and shape have a bearing as well. Therefore, it does not accurately apply to juveniles, athletes, elderly populations, pregnant women or those who are doing weight training. If you think your BMI is incorrect, please consult your doctor and do body fat test.

BMI for adults (Just a guide)

BMI range-kg/m ²	Category
Less than 18	Underweight
18.5~24.9	Normal
22~24	Fitness
Over 25	Over weight