Smart Watch

USER GUIDE
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1. Introduction
This sports watch incorporates Bluetooth, altimeter, barometer, compass, pedometer, sunrise and sunset times, thermometer, log recorder, time, stopwatch, dual time and calendar etc. This user guide describes main functions, operation method and some application living example. Every chapter describes one mode with LCD display drawing. Setting method and using method are described in it also. You can enjoy the outdoor sport fullest.

2. Features
- Time functions: hour, minute, second, year (2010-2099), month, date, weekday, 12H/24H
- Alarm clock
- Bluetooth
- Countdown timer (99:59:59-0)
- Stopwatch (0-99:59:59), (MAX record 10 group).
- Pedometer, step counter, movement time record calorie, distance record
- Sunrise and sunset times (Default 28 cities or set the latitude and longitude).
- Compass, altimeter, barometer, thermometer, air pressure trend
- The total increase/decrease height, Highest point/lowest point
- Air pressure trend chart (latest 48 hours)
- 7 days altitude, barometric record and check
- Movement relative height view
- Digit compass, 16 direction display
- Low battery remind
- EL backlight

3. Start
Use one coin turn contrarotate back cover, put on battery CR2032 to open the watch.

4. LCD display of function mode

**Button operation**
- **Altitude/Up/Start/Stop**
- **Barometer/Down/Reset**
- **Compass/Confirm/History**
- **Time/Setting**
- **Backlight/bluetooth**

**Figure 1**

**Figure 2**

Under time mode, press button [M] to enter Pedometer, Stopwatch, Countdown timer in turn.
5. General setting

Before you start to use your sports watch, it's better to set the measurement units and general setting according to your preference. General setting is adjusted in MENU. Hold press button [M] 5 sec under time mode to enter setting mode. Press [L] to exit setting.

5.1 Setting items

After enter setting, press [A] or [B] to switch setting items. Press [C] to enter setting item. Press [M] to return back to last menu. Press [L] to exit setting. Detail setting is as below,

- Time-date: set time, date, countdown timer, alarm, world time, DS
- Sunrise: city selection, latitude, longitude, time zone setting
- Units: set time format, date format, temperature unit, barometer unit, altitude unit, weight unit, stride unit
- Pedometer: set stride and weight
- General: set button tone, LCD contrast, weather forecast
- Compass: magnetic declination
- Alti-baro: sea level altitude and sea level air pressure

5.2 Adjust data

Enter MENU to adjust setting. Any adjustment you make in MENU take effect immediately. For example, if you enter TIME-DATE in MENU and adjust the time from 12:00 to 11:30, then press [M] to saving and exit. The time will be update to 11:30.

5.3 Changing units

Detail setting items of unit is as below,

- TIME: 24H/12H
- DATE: DD/MM/MM/DD
- TEMPERATURE: °C/°F
- AIR PRESSURE: hPa/inHg
- ALTITUDE: meter/feet
- WEIGHT: kg/Lb
- STEPS: cm/inch
Method to change unit:
1) Under time mode, long press [M] enter MENU
2) Press [A] two times to UNITS, press [C] to enter Units setting.
4) Press [L] to save and exit setting or press [M] to return back to last menu.

5.4 Changing general setting
In GENERAL you set the general settings, including:
- BUTTON TONE: on/off
- LCD CONTRAST: 0-10 level
- WEATHER: Sunny - Partly cloudy - Cloudy - Rainy
PS: The weather forecast accuracy is about 70%

5.5 Backlight
Press [L] to turn on backlight and it will be turned off after 5 seconds. 
Under MENU, long press [L] to turn on backlight.

6. Time mode
Under time mode, it display week, date, time, weather conditions. Long press [A] to switch below items at upper LCD display,
- Week
- Sunrise and Sunset time
- World time

6.1 Time setting
6.1.1 Time & Date setting
1) Under time mode, long press [M] to enter setting mode
2) Press [C] to enter into time-date
3) Press [C] to enter into time
4) Press [C] to switch setting items: hour, minute, second
5) Press [A] or [B] to adjust data
6) Press [M] to return back to last menu, press [A] to switch to date setting, press [C] to enter into date setting mode
7) Press [C] to switch setting items: year, month, day
8) Press [A] or [B] to adjust data
9) Press [L] to save and exit setting

6.1.2 World time setting
1) Under time mode, long press [M] to enter setting mode
2) Press [C] to enter into time-date
3) Press [A] in turn to switch to dual time
4) Press [C] to enter into dual time setting mode
5) Press [A] or [B] to select city
6) Press [L] to save and exit setting

6.1.3 DST setting
1) Under time mode, long press [M] to enter setting mode
2) Press [C] to enter into time-date
3) Press [A] in turn to switch to DST
4) Press [C] to enter into DST setting mode
5) Press [A] or [B] to turn on or off DST
6) Press [L] to save and exit setting
6.1.4 Sunrise and sunset setting
Select one city which you locate.
1) Under time mode, long press [M] to enter setting mode
2) Press [A] to switch to SUNRISE
3) Press [C] to enter into Sunrise setting
4) Press [C] to enter city selection
5) Press [A] or [B] to select city
6) Press [L] to save and exit setting
If the city which you located is not listed in unit, please set longitude,
latitude and time zone,
1) Under time mode, long press [M] to enter setting mode
2) Press [A] to switch to SUNRISE
3) Press [C] to enter into Latitude, Longitude and time zone in turn.
4) Press [C] to enter into setting
5) Press [A] or [B] to set data
6) Press [L] to save and exit setting

6.2 Alarm clock setting
1) Under time mode, long press [M] to enter setting mode
2) Press [C] to enter into time-date
3) Press [A] to switch to alarm
4) Press [C] to enter into alarm clock setting, and to select sound
or shock warning.
5) Press [C] to switch setting items including alarm clock work
6) Press [A] or [B] to set detail data
group, turn on/off, hour, minute
7) Press [L] to save and exit setting
when turn alarm clock, the symbol ⌘ will display on LCD.
Press any button to turn off alarm. Or keeping 30 seconds, it will
stop alarm automatically.

6.3 Stopwatch
1) Under time mode, press button [M] twice
to enter stopwatch.
2) Press [A] to start, stop or restart stopwatch
3) Press [B] to record each lap, total 10 group
4) Press [C] to review data when stopwatch stop to record
5) Press [A] or [B] to switch each lap
6) Press [B] 2 seconds to reset stopwatch

6.4 Countdown timer
Countdown timer setting,
1) Under time mode, long press [M] to enter setting mode
2) Press [C] to enter into time-date
3) Press [A] two times to countdown timer
4) Press [C] to enter into countdown timer setting
5) Press [C] to switch among hour, minute and second in turn.
6) Press [A] or [B] to set data
7) Press [L] to save and exit setting
Start to countdown,
1) Under time mode, press [M] three times to
turn on/off, hour, minute
to enter countdown timer mode
2) Press [A] to start, stop and restart.
3) Press [B] 2 seconds to reset countdown timer
6.5 Pedometer
Under time mode, press [M] to enter pedometer mode.
- Upper: STEP
- Middle: steps
- Below: Press [B] to switch among current time, sports time, step speed, calorie and distance
1) Current time (00:00)
2) Step time (Lap00:00:00)
3) Step speed (0.0Km/h or Mi/h)
4) Calorie (0 KCAL)
5) Mileage (0.00 Km or Mile)

Pedometer setting,
1) Under time mode, long press [M] to enter setting mode
2) Press [A] three times to enter pedometer
3) Press [C] to enter pedometer setting
4) Press [C] to switch between step distance and weight setting
5) Press [A] or [B] to set data
6) Press [L] to save and exit setting

Using pedometer,
1) Under time mode, press [M] to enter pedometer mode
2) Press [A] to start, stop pedometer, when turn on pedometer, there will be icon display on screen. And pedometer will work under every mode.
PS: 1. To get more accuracy measurement, it's better using it under time mode.
2. To save battery, pedometer will be turned off automatically at 0:00 everyday. Please turn on it if you need.
Under below situations, pedometer may not measure so accuracy,
1) In bag with irregular shaking
2) Hanging on waist or backpack vertically
3) Walking unnatural
4) Wearing sandals, slippers, clogs etc
5) Walking irregular at crowded place
6) Walking very slowly
7) Climbing at steep slope or going up or down stairs
8) Taking bus or car etc.

7. Altimeter & Barometer Mode
7.1 How Altimeter & Barometer work
Altimeter & barometer is measured base on one sensor which can measures air pressure. Knowing the work method of altimeter and barometer, it help you using this unit more accurately.
Caution: please ensure there is no dirty or sand near sensor. Please don't insert anything into the hole of the sensor.
7.1.1 Getting correct readings
Under barometer mode, you can get current air pressure.
If you want to get accuracy sea level air pressure, please input accuracy sea level altitude base on your location. Sea level altitude can be checked on some topographic maps.
If you want to get accuracy sea level altitude, please input accuracy sea level air pressure base on your location. Sea level air pressure can be checked on some weather news paper or website.
Weather changing can influence altitude measurement. When
weather change high frequency, it's better to calibrate sea level altitude or sea level air pressure. Especially calibrate when start to climbing.

7.1.2 Why the result is not accuracy
If keeping altimeter mode long time at same place and the weather changes, the altitude will be not accuracy.
During climbing, if the weather changes high frequency, the altitude will be not accuracy.
At this time, please calibrate sea level altitude or sea level air pressure on time.

7.2 Sea level altitude & sea level air pressure setting
1) Under time mode, long press [M] to enter setting mode
2) Press [A] in turn to alti-baro
3) Press [C] to enter alti-baro
4) Press [B] to enter into setting mode
5) Press [A] or [B] to set data
6) Press [M] to return to last menu
7) Press [L] to save and exit setting

PS: During measuring temperature, please take off on wrist as body temperature will influence the accuracy.

7.3 Weather forecast
Under time mode, weather forecast will display on top of LCD.
Weather forecast have four style: sunny - partly cloudy - cloudy - raining. The accuracy of weather forecast is 70%.
When climbing or under altimeter mode, the accuracy of weather forecast will be influenced. If it is not accuracy enough, please calibrate it base on item 5.4.

7.4 Altimeter
Under time mode, press [A] to enter altimeter mode.
LCD display,
- Upper: Sports time
- Middle: Sea level altitude

Climbing altitude
Under time mode, press [A] to enter altimeter mode. At below of LCD display, it is climbing altitude.
When start climbing, long press [B] to clear climbing altitude to zero. Then press [B] to switch to climbing time (LOG 00:00:00), press [A] to start to record climbing time.
Under climbing time record mode, press [A] can start or stop record.
Long press [B] to reset climbing altitude and time seperately.

Altitude record
Unit will record altitude every half hour and display as an altitude trend chart. Under altimeter mode, press [C] to check altitude record. Press [A] or [B] to browse altitude record in turn.
Altitude record

Total altitude gain and total altitude loss
Under altimeter mode, press [B] to switch to climbing time
Press [A] to start climbing time record, unit will count altitude gain and altitude loss automatically.
Press [A] to stop climbing time record. Unit will count total altitude gain and loss automatically.
Long press [C] to clear zero of total altitude gain and loss.
Under altimeter mode, press [C] two times to check total altitude gain and loss.

Calculation of total altitude gain and loss,
From A to B, propradation,
The total height gain=\(d_1+d_2+d_3\);
From B to C retrogradation,
The total height loss=\(d_4+d_5+d_6\)

7.5 Barometer
Under time mode, press [B] to barometer mode.
LCD display,
- Upper: Sea level air pressure
- Middle: 24 hours air pressure trend chart
- Below: Press [B] to switch among current air pressure, time and temperature.

Air pressure record
Unit will record air pressure every half hour and display as an air pressure trend chart.

8. Compass
Under time mode, press [C] to enter compass mode.

8.1 Getting accuracy data
Under compass mode, please ensure to keep horizontal to get accuracy data. If there is no operation in 30 seconds, LCD will show "start compass" to save battery. Press [C] restart compass.

8.1.1 Compass calibration
A. When should we calibrate compass?
Using first time or after replacing battery, press [C] to enter compass mode. It requests calibrate compass first.
To let compass working more accuracy, we should calibrate compass regularly. When compass decline degree too much, we should calibrate compass
B. How to enter into compass calibration?
Using first time or replacing battery, press [C], it will enter into compass calibration. To get more accuracy data, under compass mode, long press [C], it will enter into compass calibration.

C. How to calibrate compass?
When enter into calibration, circle on LCD display will rotate, splay on the top. Keep watch level, rotate it clockwise with equal speed and slowly till it exits calibration automatically and enter into compass mode.

If there is no operation in 30 seconds, compass will go to IDLE mode. If calibrating is not successfully, compass calibration mode will be displayed on LCD when enter into compass mode. Then we should calibrate it again.

Magnetic Declination
Magnetic declination is defined as the angle between magnetic north (the direction the north end of a compass needle points) and true north. Only a GPS can determine true north by knowing your exact orientation on the earth. All digital compasses measure magnetic north. The declination is positive when the magnetic north is east of true north. The declination is negative when the magnetic north is west of true north. To determine the declination for your location, visit: http://www.ngdc.noaa.gov/geomagmodels/Declination.jsp

For example, Phoenix, AZ produces the following result: Declination = 10 degrees 59 minutes changing 6 minutes per year. To convert to decimal format: Declination = 10 + 59'/60 (* /nteger, Declination = 11play. This will offset magnetic north by +11 degrees (or 11 degrees to the East) to true north. Note that the magnetic declination changes as a function of time for your location. In the above example, the declination changes -6 minutes (or 0.10 degrees) per time function is insignificant.

Magnetic declination setting,
1) Under time mode, long press [M] to enter setting mode
2) Press [A] in turn to compass
3) Press [C] to enter declination
4) Press [A] or [B] to set data
5) Press [L] to save and exit setting

8.2 Using compass
Under time mode, press button [C] to enter compass mode.

LCD display:
- Upper: Bearing code (such as NE, SW, ESE etc.)
- Middle: Degree (This degree is measured degree between north
to current position)
- Below: Time
- Outer ring: Three black points (Always indicating North)

9. Battery replacing
This unit adopts 3v lithium battery. Model no. is CR2032.
NOTE: To reduce the risk of fire or burns, do not crush, puncture or dispose of used batteries in fire or water. Recycle or dispose of used batteries properly.
NOTE: Please take care of O-ring at battery notch. If it is missed, the waterproof level will be reduced.
NOTE:: Turn on backlight high frequency will reduce battery life.
Install or change battery:
1) Adopt a coin and rotate anticlockwise to open battery case. Please take care O-ring on battery notch and keep unit clean and dry, take off old battery
2) Keep BTT+ at top and install battery
3) Cover the battery case, align thread and rotate clockwise. Normally rotation will be very easy. When you have to rotate it powerful, the thread may not be aligned or be broken.
4) Tighten up battery case

10. Bluetooth ON/OFF
under the time surface Long press button “L” such as Figure 4 the screen will show the icon that is bluetooth (the arrow show the position) this icon will blink, it mean bluetooth on. after that long press again to off it.
Bluetooth connect
1. First scan two-dimension code (the code on last page), download the apps , meantime open the Smart phone bluetooth after that press the arrow (the Figure 5) show to enter the Basic surface. (Figure 6), then press “Device” to connect the Smart watch. the blink bluetooth icon would be stop it. it means connection successful.
PS: you also can search “climbing” at APP store or Google play to download APP

Figure 4

Figure 5

Figure 6
11. APP Introduce
The APPS have four surface "Basic" "Walk" "Altimeter" "Barometer"

11.1 Basic surface (Figure 7)
1) Climber: you can set your basic data, such as Birthday, Gender, Height etc.
2) Device: connect the Smart watch
3) Sync time: can sync the smart phone time on the watch
4) Camera: can use the watch to be the shutter (press any button to make picture).
5) Incoming call: the watch will shock to reminder meantime. the watch screen will show number (PS: Few mobile device may can not remind cause of incompatible problem)
6) Alert Clock: available set two group
7) Reset Watch: clear all smart watch data
8) Unbind: remove the connect for current watch

11.2 Walk
the main surface for "Walk", please reference Figure 8, press the left icon to enter "basic". you can see your step at present and percent of the goal of each day in the circle. you also can check the distance, the caloire and exercise time at present. your present position will show on the below of the surface.
PS: this position is according to your Smart Phone.
when you press the area of circle you will enter to Figure 9. it can monitor your day, week and month that your walk database. let you compare it.
11.3 Altimeter
under the "Walk" slide your smart phone enter to "Altimeter". please
reference Figure 10, press top left to enter the "basic". you can see
the altitude at present in the circle. you also can check the sea surface height,
calorie and exercise time at present. your present position will show on the
below of the surface.
PS: "sea surface height" will automatic receive the database from your
smart phone by internet. the data is according to your position
when you press the area of circle you will enter to Figure 11. it can monitor
your day, week that your altimeter database. let you compare it.

11.4 Barometer
under the "Altimeter" slide your smart phone enter to "Barometer".
please reference Figure 12, press top left to enter the "basic". you can see the Pressure at present in the circle. you also can check the sea surface pressure, temperature and weather at present. your present position will show on the below of the surface.
PS: "sea surface pressure" and "weather" will automatic receive the database from your smart phone by internet. the data is according to your position. the "temperature" is sync Smartwatch.
when you press the area of circle you will enter to Figure 13. it can monitor
day and week that air pressure and temperature database. let you compare it.
12. Specifications

- Operating temperature: -20°C -- +60°C / -4°F -- +140°F
- Storage temperature: -30°C -- +60°C / -22°F -- +140°F
- Water-resistant: 50m / 160ft
- Battery: CR2032
- Battery life-time: about 1 year in normal use

Altimeter
- Display range: -500m -- 9000m / -1640ft -- 32760ft
- Resolution: 1m / 3ft

Barometer
- Display range: 300 -- 1100hPa / 8.8 -- 32.6inHg
- Resolution: 0.1hPa / 0.03inHg

Thermometer
- Resolution: 1°C / 1°F

Compass
- Resolution: 1°

Apps
- Min: Android 4.3
- Min: iOS 7