Multi-functional GPS Electronic Altimeter

GPS, Altimeter, Barometer, Compass, Hygrometer Thermometer, Weather Forecast, LED torch, Alarm clock, Time/Date

USER MANUAL

1. Features:

Altimeter
- Altimeter Range (-700 to 9000 meters/-2296 to 29500 feet)
- Altimeter precision: 1meter/feet
- Max./Min. altitude record
- Altitude history and curve chart of last 24-hour altitude reading
- Altitude total gain and loss range: 44999 meters/feet
- Sea level altitude setting
- GPS distance, speed, vertical lifting rate and return journey record
- Altitude variation warning, target altitude warning

Barometer
- Pressure measurement range 300hpa to 1100hpa(8.84 inHg to 32.44inHg)
- Pressure measurement resolution 0.1hpa (0.01inHg)
- Last 24-hour pressure history curve graph
- Weather Forecast: Sunny-Cloudy to Sunny-Cloudy-Rainy
- Pressure tendency arrow indicator
- Sea level pressure setting

Hygrometer Thermometer
- Temperature measurement range :-20℃ to 60℃, humidity measurement range: 20%-95%
- ℃ / ℉ selectable temperature unit
- Max/min temperature and humidity record

Time:
- Time: hour, minute, second
- Calendar: year, month, date, week
- Alarm clock function

- Time-zone setting

GPS return journey

- Direction, distance and speed
- GPS return journey place selection

Compass

- Direction display
- Angle degree
- Magnetic declination setting

2. Start

2.1 Parts list

QTY	Item
1	Unit size：100 x66 x20mm
1	Battery charger
1	String

2.2 Precautions

⚠️Caution: The unit is water resistant not for diving. Don't put it in the water. Avoid getting wet in rain for long time.

⚠️Caution: Keep away from strong magnetic field environment, it will destroy compass.

⚠️Caution: Don't drop or apply excessive force on LCD display.

⚠️Caution: Don't operate outside of temperature range (-20℃ to 60℃) .When the temperature is lower than temperature range,please put it to the part which is close to the pocket of human body.

✎Note: Don't use magnetized battery, it will destroy the compass to work.

✎Note: Don't use the product under strong magnetic field environment or strong electromagnetic interference environment (such as TV,computer,electronic products),it will destroy the compass to work.

3. LCD display image
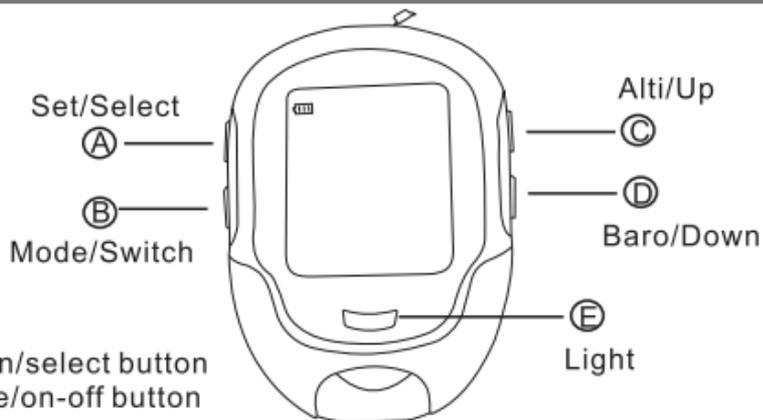
Button definition:

Ⓐ **Set/Select**: setting button/select button
Ⓑ **Mode/Switch**: time mode/on-off button
Ⓒ **Alti/up**: altimeter mode/up
Ⓓ **Baro/down**: barometer mode/down
Ⓔ **Light**: backlight button/ flashlight/Switchgear button

Icon:

🔲	Battery remind	🕐	Air pressure trend arrow
🌦	Weather forecast	▲▲▲	Altimeter/air pressure trend chart

Backlight: press the [E] button to turn on the backlight, and the backlight will shut automatically after 5S.
Flashlight: Long press the [E] button for 2-3 seconds to turn on / off the flashlight.
Switchgear:It can start or shut down by pressing the [E] key about 6S.
Note: the shutdown function can be achieved in any mode.

4. Function mode LCD display

Under time mode, short press [B] button to enter into time,hygrometer thermometer,compass and GPS return journey modes.

Time Mode

Hygrometer Thermometer mode

Compass Mode

GPS return journey mode

Press [B]
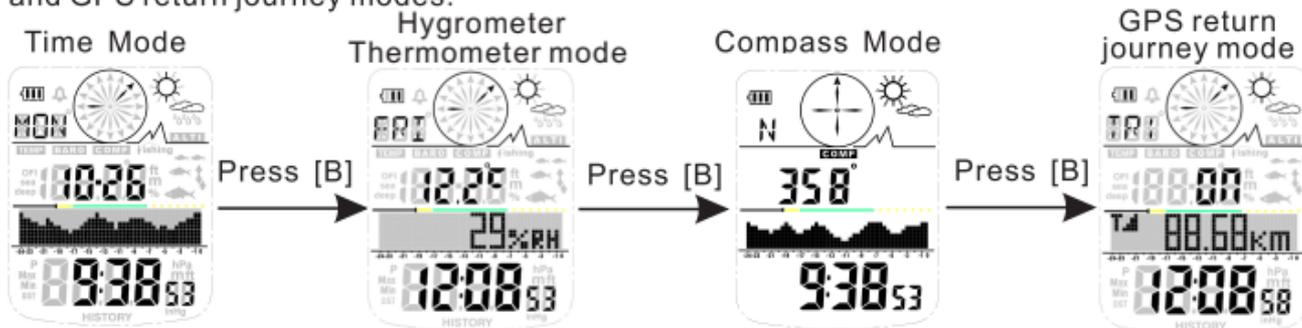
Press [B]

Press [B]

Under the time mode, short press [C] button to enter into the altimeter mode, short press [D] button to enter into the barometer mode.

Altimeter Mode

Time Mode

Barometer Mode

Press [C]

Press [D]

5. Setting mode

Before use the product, please set measurement unit and general setting according to your preference.

You can press [A] button to change the general setting.

Under specific mode (such as time mode),long press[A]button for 2-3 seconds to enter into the setting mode in the mode, press [C] or[D] button to set specific item, add or decrease data, press [B] button to confirm and enter into the next setting object (the selected setting object will flicker, refer to figure 1). After finishing setting, press [A] button to exit the setting modeinterface, if there is no operation during 30s, the system will automatically save the current setting and return the time mode. LCD display:
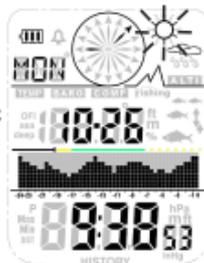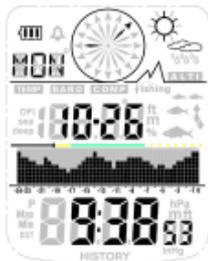
Figure 1

6. Time mode

LCD display:
- Upper part: week
     Air pressure trend arrow
     Weather forecast
- Middle part: date
- Icon: 24-hour air pressure trend chart
- Lower part: time

6. 1 Time mode setting

Under the time mode, long press [A] button for 2-3 seconds to enter into the time mode setting: weather forecast, time, date, time zone,alarm clock, 12Hr/24Hr format, unit setting. The selected setting object will flicker, press [C]or[D] button to add or decrease data, press [B] to confirm the next setting object again.

6. 1. 1 Weather forecast setting

When the product enters into setting mode,the current weather forecast icon will flicker.Press [C] or [D] button to set specific item,set the specific weather forecast as the right figure. Press [B] button to confirm and enter into the next setting object.

Weather	Icon
Sunny	
Cloudy-Sunny	
Cloudy	
Rainy	

6. 1. 2 Time setting

Hour begins to flicker, press [C] or [D] button to set hour.

Press [B] button successively enter into minute and second mode, press [C] or [D] button to add or decrease data.

Press [B] button to confirm to enter into the next object.

Note: under 12-hour format, the afternoon time P will display LCD display.

6. 1. 3 Date setting

Year begins to flicker, press [C] or [D] button to set year.

Press [B] button successively enter into month and date mode, press [C] or [D] button to add or decrease data.

Press [B] button to confirm to enter into the next object.

6.1.4 Time-zone setting

Time zone begins to flicker, press [C] or [D] button to set time zone, add 0.5h one time to set.

Press [B] button to confirm to enter into the next object.

6. 1. 5 Alarm clock setting

Alarm clock hour begins to flicker, press [C] or [D] button to set hour.

Press [B] button to set minute mode, press [C] or [D] button to add or decrease data.

Press [B] button to set to open/close alarm clock mode,press [C] or [D] button to select to open/close alarm clock.

Press [B] button to confirm to enter into the next object.

6. 1. 6 12Hr/ 24Hr Format

The time format begins to flicker, press [C] or [D] button to switch 12Hr/ 24Hr, press [B] button to save and enter into the next setting object.

6. 1. 7 Unit setting

Unit icon will display on the LCD screen, the temperature unit begins to flicker. Press [C] or [D] button to switch temperature unit ℃/℉.

Press [B] button to enter into air pressure unit setting.

The air pressure unit begins to flicker,press [C] or [D] button to switch air pressure unit inHg/hPa.

Press [B] button to enter into altimeter mode setting, the altitude unit begins to flicker, press [C] or [D] button to switch altitude unit m/ft.

Press [B] button to cycle to weather forecast setting.

Note: when the unit is set as feet, the coherent units of the altimeter mode and GPS return journey mode will change into feet units.

7. Hygrometer Thermometer mode

Under time mode, press [B] button to enter into temperature and humidity mode. LCD display:

- Upper part: week, air pressure trend arrow, weather forecast
- Middle: temperature, humidity
- Lower part: time

Check max or min data in history temperature and humidity mode:

Under the temperature and humidity mode, short press [C] or [D]button to checkmax or min data in history temperature and humidity mode.

Note: under the temperature and humidity mode, the reading displays the relative value not for absolute value.
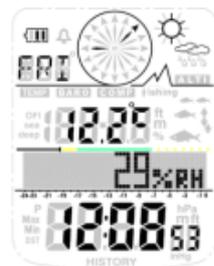
8. Compass mode

Under time mode, press [B] twice to enter into the compass mode.
LCD display:
- Upper part: Direction(such as E, S, W, N etc)
                        Direction arrow indicator, weather forecast
- Middle part: angle degrees (the degree is measured degree between
north to current position.)
- Chart: 24-hour air pressure trend chart
- Lower part: current time.
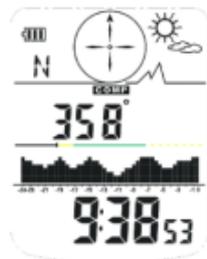
Compass calibration:

A.When should calibrate compass?
First use or restart the product, press [B] button to enter into compass mode, you need to
calibrate the compass first.
In order to make the compass to more accuracy, calibrate the compass regularly.
When the measured deviation of the compass, it needs to calibrate the compass.
B. How to enter the compass calibration mode?
First use or restart the product, under the time mode, short press [B] button twice to enter into
the compass mode, it will automatically pop calibration image.
In order to make the compass to more accuracy, long press [B] button 2-3 seconds to enter into
the compass calibration mode.
C. How to calibrate the compass?
After entering the compass calibration state, the round icon on LCD will rotate, and "CAL" will
display on LCD.Keep watch to be level,rotate it clockwise with equal speed,until it automatically
enters into the compass mode.
Under the compass calibration mode, if there is no operation, it will automatically return to the
time interface.

Magnetic declination setting
The magnetic declination is the angle between magnetism north line and true north line. The magnetic inclinations of different places are different, the magnetic declination is 90 degrees at the geomagnetic pole. If you want to know check the magnetic declination of specifical place, please check the following website:
http://www. ngdc. noaa. gov/geomagmodels/Declination. jsp
Magnetic declination setting method
Under the compass mode, long press [A] button for 2-3 seconds to enter into the magnetic declination setting mode.
Press [C] or [D] button to add or decrease data.
Press [A] to confirm and exit the magnetic declination setting.

9．GPS return journey mode
Under the time mode, press [B] button for three times to enter into the GPS return journey mode, details as following:
- Upper part: return journey target point, air pressure trend arrow,
                        weather forecast
- Middle part: GPS return journey ON/OFF, distance
- Lower part: current time
Under the return journey mode, short press [C] or [D] button to switch distance, speed and return journey countdown time in an upper-down manner.

GPS return journey point details as following:
Save 9 return journey points at most, the user can choose the saved GPS return journey points according to needs.Under the GPS return journey setting mode, press [C] or [D] button to select the return journey point in an upper-down manner, short press [A] button to confirm and return the GPS return journey mode interface.

9

10．Altimeter mode

Under the time mode, short press [C] button to enter into the altimeter mode, details as following:

Under the altimeter mode, short press [C] or [D]button to switch distance interface, speed interface and vertical lifting rate;

Long press [B] button for 2-3 seconds to ON/OFF GPS.

Check altitude gain and loss as well as history altitude record data, details as following:

Under the altimeter mode, press [A] button to check the altitude gain/loss, max/min altitude.

Press [A] button to check history altitude data every 30 minutes again.

Press [C] button to check altitude gain, the max altitude and history max data every 30 minutes in a clockwise manner.

Press [D] button to check altitude loss,the min altitude and history altitude data every 30 minutes in an anticlockwise manner.
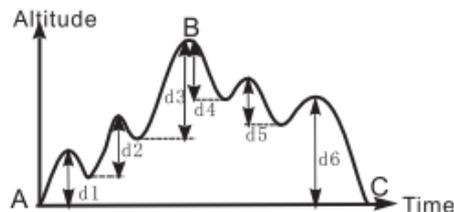
Altitude gain/ loss calculation:
From A point to B point in a climbing manner,
The total altitude gain=d1+d2+d3;
From B point to C point in a down manner,
The total altitude loss= d4+d5+d6

Under the altimeter mode, long press [A] button to enter into an altimeter setting mode, press [B] button to successively enter into climbing altitude reset, altitude setting, altitude change warning setting (Interval), target altitude warning setting (Target) and GPS storage return journey setting.

Climbing altitude reset and altitude setting:

Long press [A] button to enter into the climbing altitude reset interface, when "CLR" flickers, press [C] or [D] button to reset the climbing altitude. Under the altimeter setting mode, press [B] button one time toenter into the altitude setting, when the altitude data flickers, press [C] or[D] to add or decrease data, long press to rapidly add or decrease data.

Altitude warning setting:

Altitude change warning setting（Interval）：

Under the altitude setting mode, press [B] for two times to enter into an altitude change warning interface, when "no" flickers, press [C]or[D] to open/close altitude change warning, press the [B] button to confirm and enter into the next setting object.

When the altitude data flickers, press [C]or[D] to add or decrease the data, long press to rapidly add or decrease data.

The interval of the altitude change warning is set between 5m-100m(10ft-350ft),

when the changed data reaches to the presetting data, it will ring for two times .

Target altitude warning setting（Target）：

Under the altimeter setting mode, press [B] button for three times to enter into a target altitude warning setting interface, when "no" flickers, press [C] or [D] button to open or close target altitude warning, press [B] button to confirm and enter into the next setting object.

When the target altitude data flickers, press [C] or [D] button to add or decrease data, long press to rapidly add or decrease data.

When the presetting data is reached, it will ring, an alarm clock icon and an altitude icon will flicker at the same time.

GPS storage return journey setting：
Save 9 GPS return journey points(TR1-TR9) at most.
When GPS is in ON state, it means that the user can save the return journey points according to the needs：
Under the altimeter setting mode, press [B] button for 4 times to enter into a storage return journey point interface,the middle of the interface displays longitude and latitude data (degree, point) of the return journey point.
When the return journey target point starts to flicker, press [C] or [D] button to switch the GPS return journey points(TR1-TR9).
Press [B] button to confirm to enter into the next setting object, the "no" starts to flicker, press [C] or [D] button to choose YES or NO, please confirm if it saves the return journey point.
Short press [A] button to confirm and return the altimeter mode interface.
Note: if there is not operation in 30s, the system will automatically exit the setting mode and return the time interface.
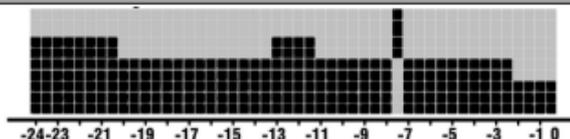Note: for saving power, when you don't use GPS, please close the GPS in manual manner.
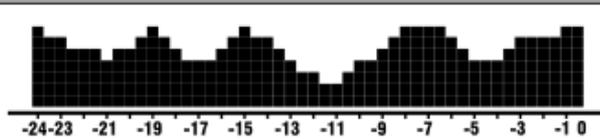
11．Barometer mode
Under the time mode, press [D] button to enter into the barometer mode. LCD display:
- Upper part: air pressure trend arrow
              weather forecast
- Middle part: sea level pressure
- Icon: 24-hour air pressure trend arrow
- Lower part: current air pressure

Altimeter trend chart

Air pressure trend chart

Set sea-level pressure data:

Under the barometer mode, long press [A] button for 2-3 seconds to enter into the sea-level pressure setting mode, press [C] or [D] button to add to decrease the data, long press to rapidly add or decrease data, press [A] button to save and return the sea-level pressure altitude mode.

12．USB charge

1) As shown in figure 1, the multifunctional electronic altimeter is upward, the yellow part on the middle of the upper part of the product is lightly pushed aside from left side, then the port of one end of the USB line is aligned to the charging port soas to be insert in slight shaking manner.

2) As shown in figure 2, the other end of the USB interface is connected with the power supply, the charging icon 🔋 arranged on the left side of the product will flicker, and the product starts to charge.

Note: before charging, we must dry the charging base or the contact of the watch. At the same time, try to ensure that the environment is dry and well ventilated. Otherwise, the metal contact is easy to dirty and water, which leads to bad contact, short circuit or other risk.In addition to the capacity of the battery, the endurance of the watch has a great relationship with the strength of your use. If you use the various functions of the watch very frequently, the use time will be affected.We can turn off some functions and reduce the use of electricity in some unnecessary time periods.
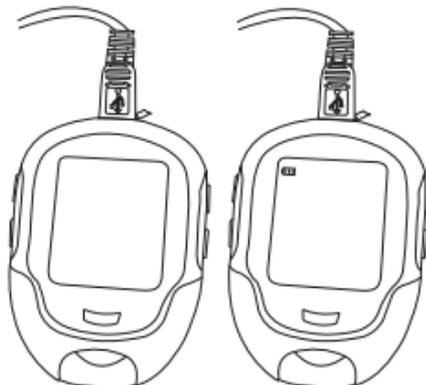

Figure 1　　Figure 2