

DIGITAL FISHING BAROMETER

钓鱼气压表

user manual

用户手册

INTRODUCTION

Do you know,

What is relationship between atmospheric pressure and fishing?

When is the perfect fishing time? How to find more fun for fishing?

This digital fishing barometer is professional designed for fishing-enthusiasts. It can increase successful fishing chance and bring more fishing funs for you.

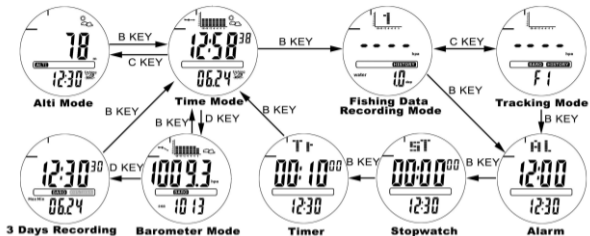
It has been known that the atmospheric pressure effects fish active, such as high air pressure, high DO in water, fish will be active and has a good appetite. On the contrary, fish will be dispirited and has a bad appetite. If we know the trend of barometric pressure, it can greatly increase the chance of successful fishing.



A . Features

- Altimeter●Barometer●Thermometer
- Fishing time remind function●pressure tracking function
- Fishing data recording●3days history data recording.
- Alarm●Stopwatch●Counting down
- Hour●Minute●Second●Month●Date display
- Weather forecast●Storm Alarm
- EL Backlight●30M waterproof

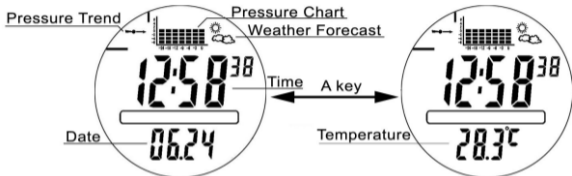
B . Product function modes



C. Modes description

1. Time Mode

A. Normal condition



- Press A key , EL illuminates for 3 seconds and to step sequentially through the following items (blink) : date<-->temperature ;
Press A key for 2 seconds :
 - Unsuitable pressure for fishing(or the tracking function OFF): NULL ;
 - Suitable Pressure for fishing , Turn ON/OFF the fishing symbol blinking (Non-fishing mode) ;
- Note : When the fishing symbol blinking, means suit for fishing, but if

you have no plan to go fishing, you can turn off the blinking; after 00:00 , the function of pressure detective for fishing will turn on again Automatically. When turn off the blink, the symbol still blink in fishing (recording or tracking) mode if it's suitable for fishing.

- Press B key , to enter the Fishing data recording mode(History Mode) ;
Press and hold B key for 2 seconds to enter the Setting mode ;
- Press C key , to enter the Altimeter mode ;
- Press D key , to enter the Barometer mode ;
Press and hold D key for 2 seconds to turn on the pressure tracking function;
- Pressure arrow is level default (point to middle) , compare current pressure to the last 1 hour to get the state of upward, steady, downward.
- 24 hours pressures chart is level default , update the data every hour and compare to the last 24 hours to get the trend interval of 3 hours.
- When it is suitable for fishing ,press and hold A key for 2 seconds to turn off the fish symbol blinking , the symbol no-blink in all modes. Press and hold A key for 2 seconds again to open blink function ,the symbol will blink when in right conditions: 1、 When press and hold D key for 2 seconds to

turn on the pressure tracing function in time mode ; 2、 when it is 00:00(new day) , restart to blink function automatically , when the tracing air pressure exceed the suitable fishing pressure, the fishing symbol start to blink.

B. Setting mode

Press and hold B key for 2 seconds in time mode to enter the setting mode ,“24H”start to blink.

- Press A key , illuminates the backlight and exit ;
- Press B key to step sequentially through the following items (blink) :
12/24H--Hour--Minutes--Seconds--Month---Date---Year--W
eather--Temperature unit--Temperature --Air pressure unit--Air
pressure---Height unit--Height --Sea level air
pressure---12/24H ;
- Press C key for 1 decrement in the desired setting item ;
Press and hold C key for 2 seconds , the desired setting item
decrease quickly ;
- Press D key for 1 increment in the desired setting item ;
Press and hold D key for 2 seconds , the desired setting item

increase quickly ;

- When setting the no-values items (12/24H、 Temperature unit、 Air pressure unit、 Height unit) , the C/D key is the switches , it will not change the values ;

- When working at setting, it will exit and store the current values if without any keystroke operation within 30 seconds ;

- Temperature range from -10.0°C to 70.0°C ;

Rule : temperature ≥ 70 , auto reset -10°C ;

temperature < -10 , auto reset 70°C ;

Air pressure, sea level air pressure range from 500hpa to 1100hpa ;

Rule : pressure ≥ 1100 , auto reset 500hpa ;

pressure < 500 , auto reset 1100hpa ;

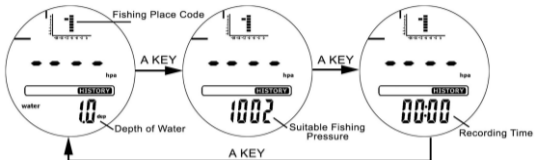
Altitude set range from -700m to 9000m ;

Rule : Altitude $> 9000\text{m}$, auto reset -700m ;

Altitude $< -700\text{m}$, auto reset 9000m ;

2. Fishing data recording (History) mode

A. Normal condition

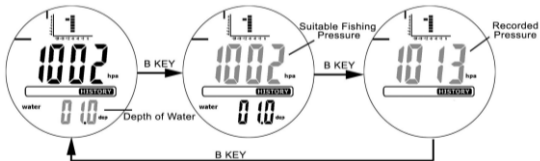


- Press A key , illuminates for 3 seconds and to step sequentially through the following items: depth of water--suitable fishing pressure--store time ;
Press and hold A key for 2 seconds , lock/unlock the mode ;
- Press B key to enter Alarm mode ;
Press and hold B key for 2 seconds to enter Fishing data setting mode ;
- Press C key , enter the fishing place pressure tracking inquire ;
Press and hold C key for 2 seconds to set the suitable pressure as stored pressure ;
- Press D key to switch the fishing place code ;

Press and hold D key for 2 seconds to store the current pressure as a fishing place recording pressure ;

- When fishing place did not store air pressure , the middle shows “---” , press and hold D key to store the air pressure , the middle show the stored air pressure , and update the storing time.
- When the air pressure of the fishing place did not store ,the function of pressing C key for 2 seconds to set the current pressure as suitable fishing place is invalid.

B. Setting condition



- Press A key , illuminates and store the setting ;
- Press B key to step sequentially through the following items: depth of water---suitable fishing pressure ;
- Press C key for 1 descending in the desired setting item ;

Press and hold C key for 2 seconds , the desired setting item descend quickly ;

- Press D key for 1 increment in the desired setting item ;
Press and hold D key for 2 seconds , the desired setting item increase quickly ;

- In setting mode , it will exit and store the current values if without any keystroke operation within 30 seconds ;

- Suitable fishing pressure range and rule are the same as in Time mode ; depth of water set range from 0.0-99.9m.

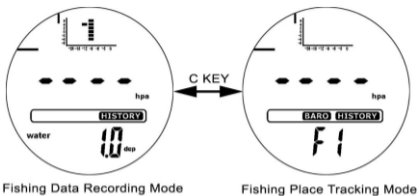
- If the fishing place did not store the pressure , there is no fishing pressure setting item , we just can set the depth of water and suitable fishing pressure.

- when setting suitable fishing pressure and stored pressure, we differ it by the depth of water display:

Display the depth of water , alter the suitable fishing pressure;

No display anything , alter the stored pressure data ;

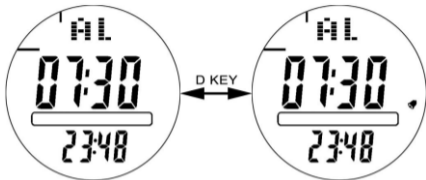
3. Fishing place pressure tracking mode



- Press A key , illuminates for 3 seconds ;
Press and hold A key for 2 seconds to lock/unlock mode ;
- Press B key , enter Alarm mode ;
- Press C key , enter fishing place pressure recording mode ;
- Press D key to switch the fishing place code ;
- There is no pressure chart display upon the LCD in tracking mode if did not store pressure advance; otherwise, if the fishing pressure has stored, there is pressure chart display when in tracking mode.

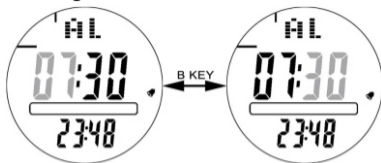
4. Alarm mode



A. Normal condition



- Press A key , illuminates for 3 seconds ;
- Press B key , enter stopwatch mode ;
Press and hold B key for 2 seconds to enter Alarm setting.
- Press C key , invalid ;
- Press D key , to step sequentially through the items : Alarm OFF--Alarm ON ;

B. Setting condition



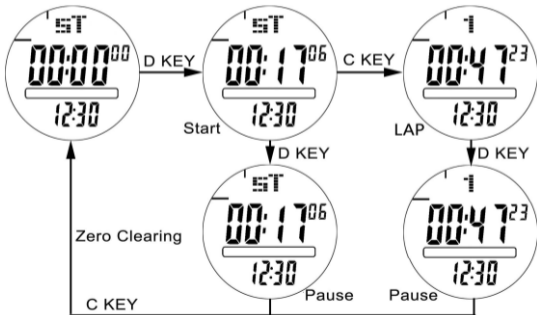
- Press A key , illuminates for 3 seconds and exit ;
- Press B key , to step sequentially through the items :
Hour→Minute→Hour ;
- Press C key for 1 descending in the desired setting item ;
Press and hold C key for 2 seconds, the desired setting item
descend quickly ;
- Press D key for 1 increment in the desired setting item ;
Press and hold D key for 2 seconds, the desired setting item
increase quickly ;
- The symbol  will display when alarm is active; Symbol  disappear
when Alarm OFF.
- When the time goes to the alarm time you set, it will ring bell for

60 seconds, press any key to stop it.

- In Alarm mode, when Hour system is 12H, "P" means alarm time, the time in the bottom is current time with time system of 24H ;
- Alarm will turn on automatically when enter setting mode ;

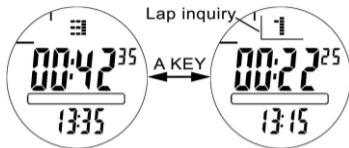
5. Stopwatch mode

A. Normal condition



- Press A key , illuminates for 3 seconds; enter LAP inquire condition when stopwatch have got LAP, and pause ;
- Press B key , enter Counting down mode ;
- Press C key , get LAP when countdown is running; reset when countdown is pause;
- Press D key , start/pause stopwatch ;
 - when stopwatch running, press C key to get 6 LAPs maximum;
 - The maximum range is 23:59:59 , the time will not run when reach the maximum; Press C key to reset stopwatch ;
 - It can not enter the LAP inquire when we did not get LAP when running;
 - If we got LAP, press D key to pause; press C key to reset stopwatch: only clear the display , we can also inquiry LAP ; but if restart stopwatch, it will clear LAP also.

B. LAP inquiry



- Press A key , illuminates for 3 seconds and back to Stopwatch mode ;
- Press B key , enter counting down mode ;
- Press C key to check down LAP ;
- Press D key to check up LAP ;
- When enter LAP inquiry mode , the top area will display "L"symbol , to distinguish the LAP inquiry mode and stopwatch mode ;

6. Counting down mode

A. Normal condition



- Press A key , illuminates for 3 seconds;
- Press B key , enter Time mode ;
Press and hold B key for 2 seconds to set counting down value
When the counting down paused;
- Press C key ,it is invalid when running; reset when the counting down is paused;
- Press D key , start/pause counting down ;

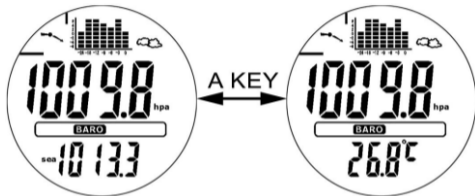
B. Counting down



- Press A key , illuminates for 3 seconds , confirm and exit ;
- Press B key , to step sequentially through the items : Hour→Minute→Second ;
- Press C key for 1 descending in the desired setting item ; Press and hold C key for 2 seconds , the desired setting item descend quickly ;
- Press D key for 1 increment in the desired setting item ; Press and hold D key for 2 seconds , the desired setting item increase quickly ;
- The Maximum of counting down range is 99:59:59 ;

- When counting down reach 00 : 00 : 00 , alarm for 60 seconds ;
- The value can be set only in pause condition;

7. Barometer mode



- Press A key , illuminates for 3 seconds and to step sequentially through the items : sea air pressure→temperature ; Press and hold A key for 2 seconds to lock/unlock mode ;
- Press B key , enter Time mode ;
- Press C key , invalid ;
- Press D key , enter 3 days history data recording mode

8. 3 days history data recording mode

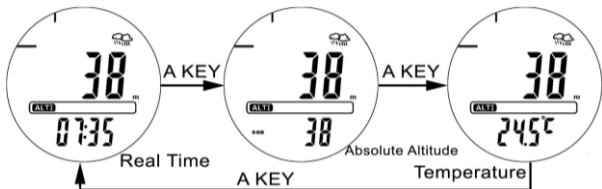


- Press A key , illuminates for 3 seconds and to step sequentially through the items : Hour and Date→the maximum of air pressure and temperature→the minimum of air pressure and temperature ; Press and hold A key for 2 seconds to lock/unlock mode ;
- Press B key , enter Time mode ;
- Press C key , invalid ;
- Press D key , switch the history date ;
 - Only it is display time and date , can do the date switch by press D key;
 - The history date will update when changing the month and day in

setting mode;

- In history dates, the 1st is today, the 2nd is yesterday, the 3rd is the day before yesterday.

9. Altimeter mode



- Press A key , illuminates for 3 seconds and to step sequentially through the items : time→height above sea level→temperature ;
Press and hold A key for 2 seconds to lock/unlock mode ;
- Press B key , enter Time mode ;
- Press C key , invalid when the relative height measure OFF;

Zero Clear relative height and restart to measure when the relative height measure active ;

Press and hold C key for 2 seconds , Turn ON/OFF the relative height measure mode ;

➤ Press D key , invalid ;



Relative Altitude
Upward



Relative Altitude
Steady



Relative Altitude
Downward

- The arrow display when relative height active; When the arrow is upward , means going up ;when the arrow is downward , means going down ;
- Altitude range: -700~9000m or -2300~29529ft , when the unit is feet , the maximum value exceed the display range and larger than 20000 , it will display like this :



- When the relative height OFF , the middle value is absolute altitude;

10. Function Description

1. Mode lock : mode lock is only valid for Fishing data recording mode, barometer mode, altimeter mode, 3 days history data recording mode;



It will return to Time mode if without any keystroke operation within 30 seconds when mode unlock ; it will stay in the the current mode if the mode locked; The mode unlock automatically if switch to other mode;

2. Data record frequency (by sensor) :

Barometer、 altimeter、 Fishing data recording mode :

- ◆ $t < 10$ minutes , test interval 5 seconds ;
- ◆ $10 \text{ minutes} \leq t < 60 \text{ minutes}$, test interval 1 minutes ;
- ◆ $t \geq 60$ minutes , test interval 10 minutes ;

Time、 Alarm、 Stopwatch、 counting down、 3 days data recording mode :

- ◆ test interval 10 minutes

3. Weather forecast measurement method ;judge the weather interval 1 hour (by the atmosphere changes for the last 4 hours) , if the atmosphere pressure is upward, indicates fine weather , if the atmosphere pressure is downward, indicates bad weather.

There are 4 kinds of weather status (good to bad):

sunny, cloudy, overcast sky , rainy.



Sunny



Cloudy



Overcast sky



Rain

Note : weather forecast is not a precision instrument , accompanied by the change of the current airflow, height , the result maybe cause some deviation.

4. Air pressure chart and arrow tend :

- ◆ barometer, altimeter trend



upward



steady



downward

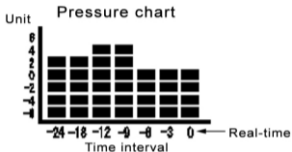
Judge measures :

Barometer judge measure : update and store the pressure interval 1 hour. Measure by current pressure-the last 1 hour pressure interval 1 hour ,you can get a array , if the absolute value of the data in the array $<1\text{hpa}$, indicate steady ; if the data in the array $>1\text{hpa}$, indicate upward ; if the data in the array $<-1\text{hpa}$, indicate downward ;

Altimeter mode measure : when measure the relative height , if the height >0 , indicate upward; $=0$, indicate steady ; <0 ,

indicate downward.

- ◆ pressure chart



Air pressure chart shows the pressure change of last 24H, "0" point means the current time. The squares of horizontal axis indicate time intervals; The squares of vertical axis indicate units of pressure changes, each square indicate 1hpa pressure.

5. Storm alarm :



The storm alarm notifies that a pressure drop of 4 hPa/0.12inHg or more has occurred during a 3 hour period. it will activate an alarm along with blink , indicate that the storm will come soon.

6. Fishing data recording :



6.1 How to adjust the fishing place recorded pressure :

- ◆ **Method 1:** In fishing place , enter fishing place pressure recording

mode, choose the fishing place code , press and hold D key for 2 seconds to store the current pressure to the right fishing place code; the air pressure and the time will be updated at the same time.

◆ **Method 2:** enter fishing place pressure recording mode , press and hold B key for 2 seconds enter fishing data setting ,adjust the pressure , then press A key to store.

6.2 How to adjust the suitable fishing air pressure

6 suitable fishing air pressure default value are 1002hpa;

◆ **Method 1:** enter fishing place pressure recording mode after the store the fishing air pressure , press D key to choose fishing place code , press and hold C key for 2 seconds to store the air pressure to be suitable fishing air pressure.

◆ **Method 2:** enter fishing place pressure recording mode , press and hold B key for 2 seconds to enter setting, adjust the suitable fishing pressure and store by press A key.

6.3 Meaning of fishing symbol :

Status of fishing symbol		Meaning
Non-fishing mode	Fishing mode	
Disappear	Disappear	The tracing function is disable
Appear, No blinking	Disappear	Tracing enabled but does not meet the applicable to fishing conditions
	Blinking	At least a fishing place satisfy applicable to fishing conditions, but turn off the blinking in non-fishing mode manual.
Blinking	Blinking	At least a fishing place meet applicable to fishing conditions, can go for fishing.

6.4 How to judge whether the same place(same absolute altitude) to turn on track for every time?

In Time mode , press and hold D key for 2 seconds to turn on the fishing tracing function (if there is no fishing air pressure to be stored , it is invalid) , at the same time , it will judge whether the same place(same absolute altitude) with last time.

Judge method: when the first time to active the tracking function, it will store the absolute altitude automatically; if next time active the tracking function, it will compare the altitude with stored one. If the D-value<20m, it will be seem at the same place(same absolute altitude, tracking data of this this time and all previous are valid; If the D-value>20m, it will be seem at different place(different absolute altitude, then, tracking data of this time is valid, and clear other tracking data of before. (the fishing air place is exist , tracing fishing air pressure show "---" , fishing suitable symbol disappear).

6.5 How to judge tracking fishing real-time pressure in the same place when you turn tracking function?

If you leave the place(absolute altitude) where you turn on the tracking function, the real-time pressure of fishing place is invalid(the pressure detected by watch in different absolute altitude will effect the tracking result). So we compare the absolute altitude with the stored before , if the value<30m , it is considered same place(absolute altitude), and we can see the realtime pressure of fishing place which you tracked. If the value>30m , it is considered different place(absolute altitude), the tracking function is not valid.

6.6 Compete operation process :

Step 1 : in fishing place , choose the Corresponding fishing place code , then store the air pressure ;

Step 2 : When back home(the sooner you back home, the better of tracking result;), turn on the Fishing tracing function ;

Step 3: If the symbol of finishing blinking, that's mean at least one place has suitable pressure for fishing; enter the tracking inquire mode;

Step 4 : Switch the fishing place code by press D, and get the right place code with fishing symbol blinking ;

Step 5 : Go fishing with the corresponding fishing place ;

7. In setting mode, the item which will be set is blinking , It will exit if without any keystroke operation within 30 seconds ;

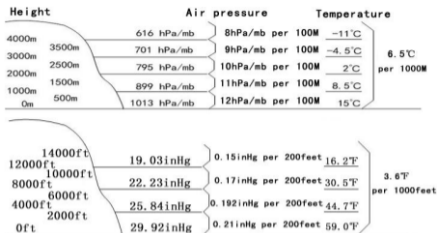
8. Low voltage remind : when the battery voltage is lower than 2.5V , it show the low power symbol , remind to change the battery.

9. If the operation is valid with a key tone , else not.

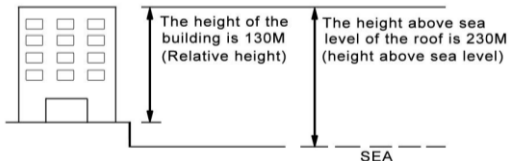
10.Units switch: temperature($^{\circ}\text{C}$ - $^{\circ}\text{F}$), air pressure(hPa-inHg), altimeter(m-ft) ,can be switch in the setting mode.

◆ **The work principle of hypsometer :**

With the height increasing, usually air pressure and temperature will reduce. This watch measure the height according to the international standard air pressure (ISA) made by International Civil Aviation Organization (ICAO). This value defines the relation between height, air pressure and temperature.



Excerpt from :international civil aviation organization



◆ **Note that the veracity of the value measured will be affected in the following situations :**

When air pressure changed with the weather change;

When temperature changed extremely;

When this watch is bumped strongly;

◆ **Notes when measure height and temperature at the same time :**

Though the height and air temperature can be measured at the same time, please note that the condition needed in each measurement is different to get the best result. When measure air temperature, you'd better take your watch from your wrist to minimize the affection to the measurement result by your body heat. However, when measure height, you'd better wear your watch on your wrist. Because this can improve the accuracy of the measurement by keeping constant watch temperature.

◆ **The following actions need to be take first before measuring height or temperature:**

When height measurement is priority, please wear your watch on your wrist or put it in a place where your watch temperature can be kept constant.

When air temperature measurement is priority, please take your watch off from your wrist and hang it on your handbag or any place not exposed to direct sun shine. Please note that when take your watch from your wrist, the measurement value of air pressure sensor will be affected temporarily. The air pressure sensor in this watch can be used to measure the change of air pressure for your reference to forecast weather. This sensor is not a precise device for official weather forecast. The sudden change of air temperature can affect the measurement result of the sensor.

Air temperature measurement can be affected by body temperature (when you wear your watch), direct sun shine and humidity. To get a more exact air temperature

measurement, please take your watch from your wrist, put it in a place where does not exposed to direct sun shine and in drafty condition, and wipe the watchcase dry. It will take 20 to 30 minutes for the watchcase to reach actual environmental temperature.

D. Specification

- Work temperature : $-10^{\circ}\text{C}\sim 60^{\circ}\text{C}$
- Work voltage : 3V
- Time accuracy : ± 30 seconds/month ($T=25^{\circ}\text{C}$)
- Thermometer precision : $\pm 1^{\circ}\text{C}$ ($-10^{\circ}\text{C}\sim 70^{\circ}\text{C}$)
- Barometer precision : $\pm 1\text{mb}$ ($-10^{\circ}\text{C}\sim 40^{\circ}\text{C}$)
- Altimeter precision(altitude ascent every 1000m) : $\pm 5\text{m}$
($-10^{\circ}\text{C}\sim 40^{\circ}\text{C}$)
- Battery type : CR2016 (220mAh)
- Battery life term : 12months(Japan battery)

