

#### HYGROMETER

- The hygrometer displayed is the humidity of the case inside. Hence, it is influenced by your body.
- To display the actual humidity, the unit must be taken off the hand for about 15 to 30 minutes and must not be exposed to direct sunlight.

#### THERMOMETER

- The thermometer displayed is the temperature of the case inside. Hence, it is influenced by your body temperature.
- To display the actual temperature, the unit must be taken off the hand for about 15 to 30 minutes and must not be exposed to direct sunlight.

#### LOW BATTERY INDICATOR

- Please change battery if the Low Battery Indicator display. The Altimeter, Hygrometer and Thermometer need a good battery to operate. Unusually battery and voltage level will affect the accuracy of the sensors.



Art No.: PYLE\_SPORTS-PFSH2

# PYLE<sup>®</sup> SPORTS

## FISHING / HUNTING HANDHELD



### PFSH2

## INSTRUCTION MANUAL

[www.pyleaudio.com](http://www.pyleaudio.com)

Congratulations on your selection of this Unique Fishing/ Hunting Handheld. To get the most of your purchase, be sure to carefully read this instruction manual and keep it on hand for later reference.

**Important!** The fishing/ hunting time data, sunrise/ set data, moonrise/ set data, moon phase indicator, tidal information produced by this Fishing/ Hunting Handheld are all based on calculation co-related with the current time, current date and current location.

Because of this, make sure the data input in this Fishing/ Hunting Handheld is correct before using such data.

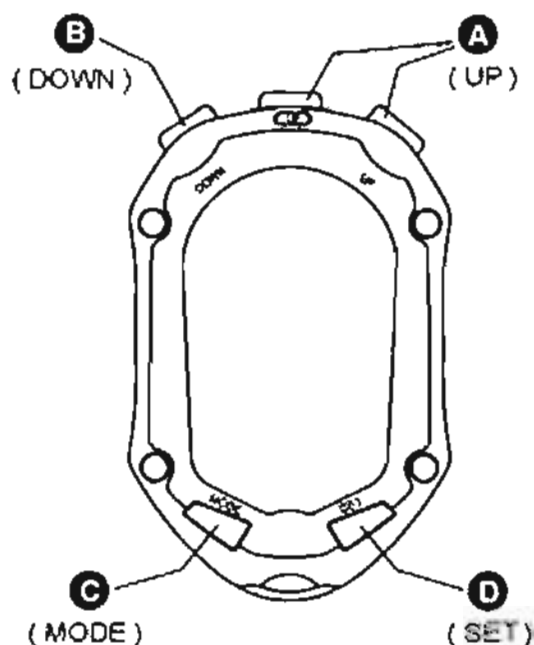
## MAIN DISPLAY KEY FLOW

Key " A " ( UP ) - To view next fishing period

Key " B " ( DOWN ) - To view previous fishing period

Key " C " ( MODE ) - Return to current date

Key " D " ( SET ) - Toggle to display clock or daily alarm



## FUNCTION

### TIDE

- Moon phase
- Moon age
- Current time fishing/hunting favorability level
- 4 Favorable fishing/hunting periods per day with favorability level
- Fishing/Hunting alarm on starting of fishing/hunting period
- Future fishing/hunting time calculation
- Tide graph with time data
- Future tide calculation up to year 2039
- Daily alarm
- Auto Calendar
- Stored 212 cities position and lunitidal interval

### ALTIMETER

- Altitude Range (-500 to 9000 meter/ -1600 to 29500 feet)
- Max./ Min. memory for Altitude
- Altitude history and graphical display of the last 12 hours altitude readings
- Altitude alarm
- Stop watch up to 9hr 59min 59.9sec
- Altitude total gain or loss 44999meter/ feet

### BAROMETER

- Pressure Range 300.0 hPa/ mbar to 1100.0 hPa/ mbar
- Resolution of 0.1hPa/mbar (0.01 inHg)
- Max / Min. memory for Pressure
- Pressure History and Graphical display of the last 12 hours pressure readings
- Barometric Weather Forecast (Sunny, Slightly Cloudy, Cloudy, Rainy, Storm)
- Pressure Trend Indicators
- Sunrise / Sunset Time
- Moonrise / Moonset Time

### THERMOMETER

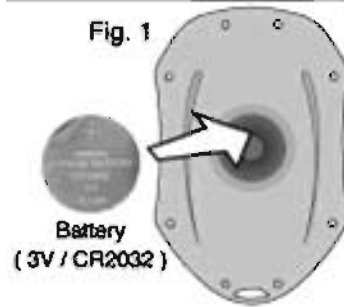
- Thermometer (-50°C to +70°C / -58°F to +150°F)
- °C / °F Selectable
- Max./ Min. memory for Thermometer

### HYGOMETER

- Relative (20% to 95%)
- Max / Min. memory for relative humidity

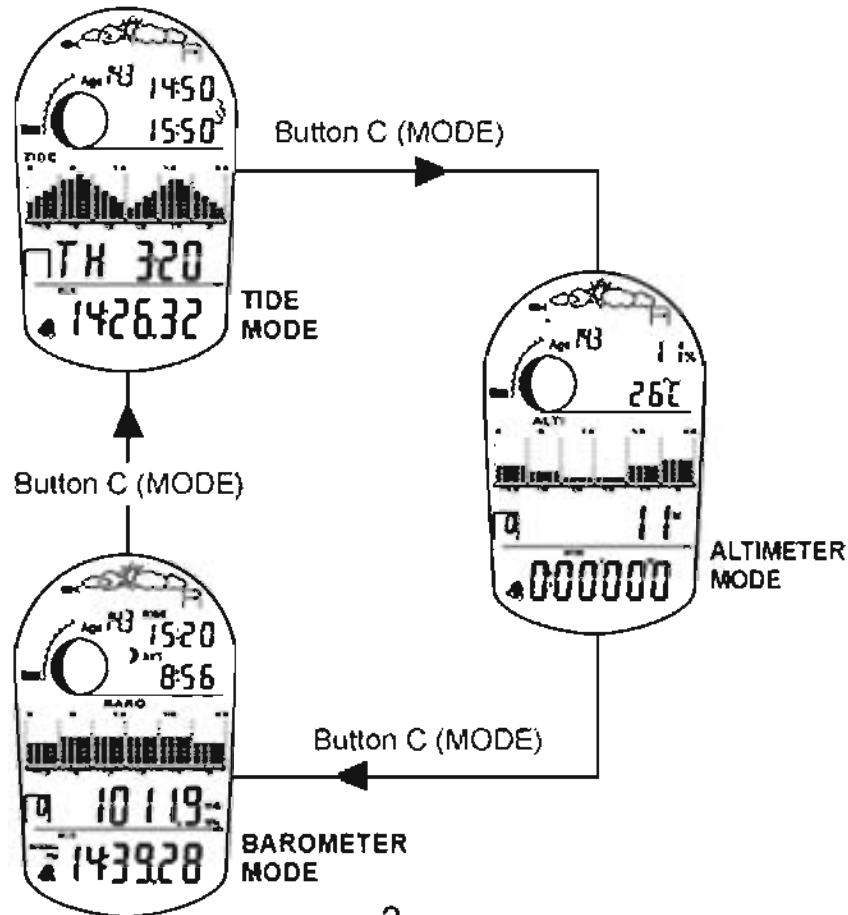
## BATTERY INSTALLATION

Remove the battery cover from the back of the computer by using a small coin, install the 3V battery (CR2032) with the positive (+) pole facing the battery cover and close the cover properly as in Fig. 1.



## MAJOR FUNCTION MODE

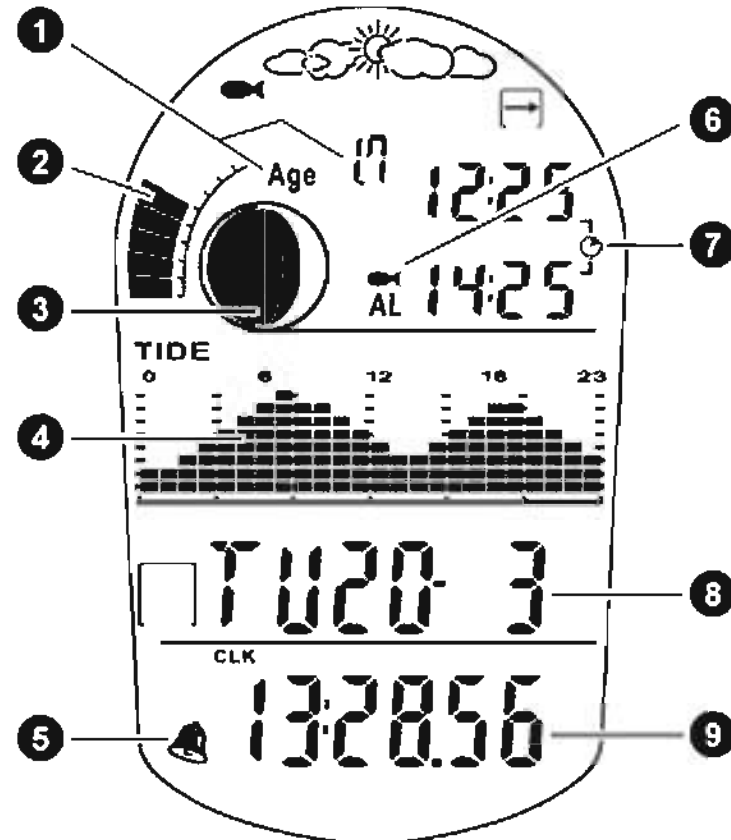
Press button C (MODE) to enter different mode.



## MAIN DISPLAY ILLUSTRATION

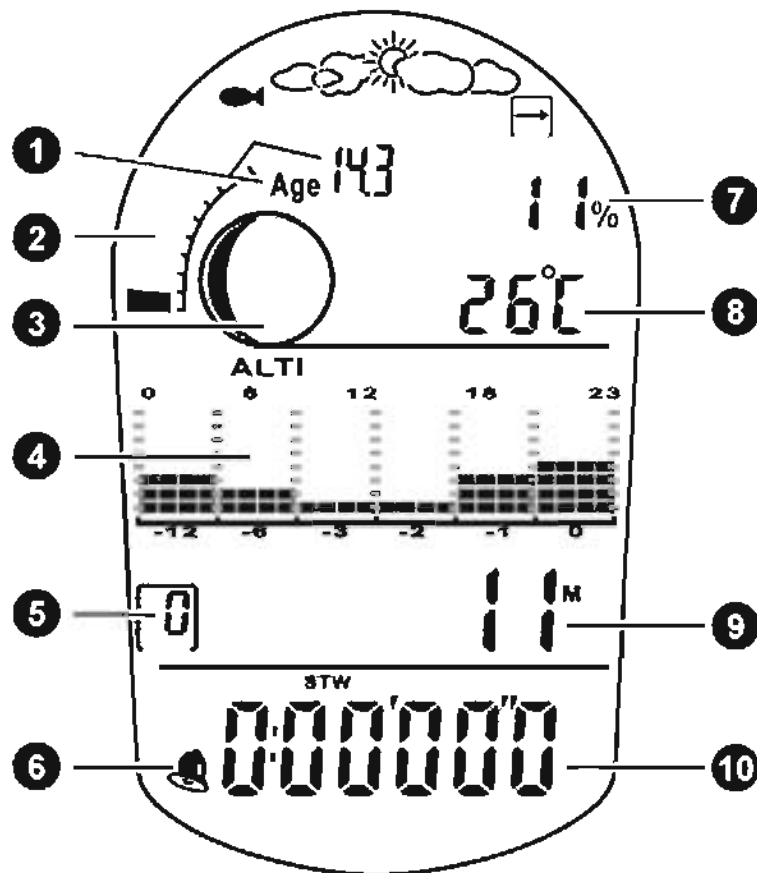
### TIDE MODE

1. Moon age
2. Fishing/ Hunting level indicator
3. Moon phase indicator
4. Tide graph
5. Daily alarm
6. Fishing/ Hunting alarm
7. Fishing/ Hunting periods
8. Current date
9. Clock



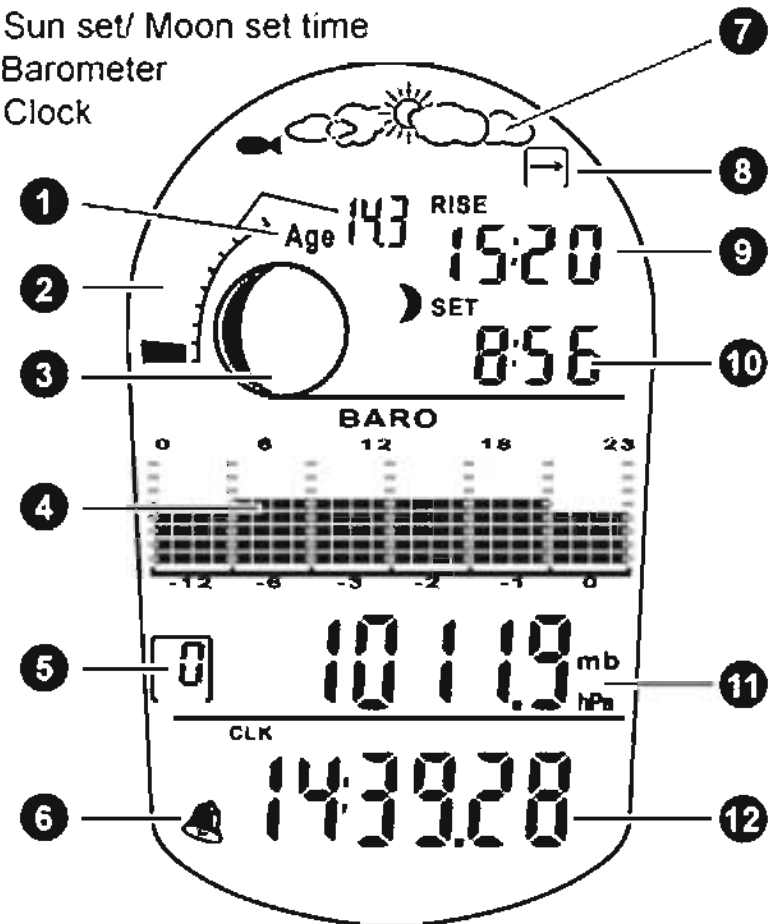
## ALTIMETER MODE

1. Moon age
2. Fishing/ Hunting level indicator
3. Moon phase indicator
4. Altimeter graph
5. History hours of altitude changes
6. Daily alarm
7. Humidity
8. Temperature
9. Current altitude
10. Stop watch



## BAROMETER MODE

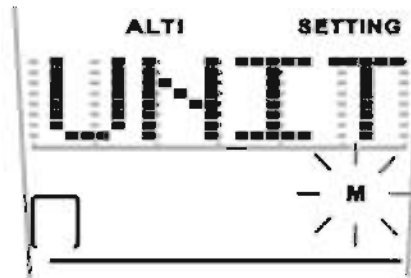
1. Moon age
2. Fishing/ Hunting level indicator
3. Moon phase indicator
4. Barometer graph
5. History hours of atmospheric changes
6. Daily alarm
7. Weather forecast
8. Pressure trend indicator
9. Sun rise/ Moon rise time
10. Sun set/ Moon set time
11. Barometer
12. Clock



## UNIT SETTING

### Altimeter Unit (M/ft) Setting

The "M" digit will start to flicker, press A(UP)/ B(DOWN) to select M(Meter) or ft(Feet). Then press D(SET) to confirm.



### Barometer Unit

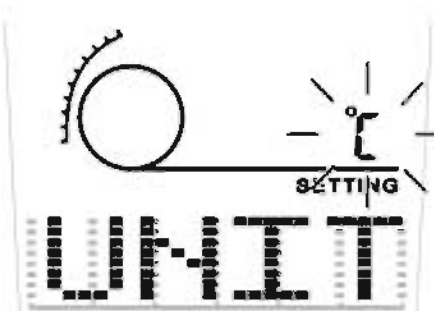
#### (mb/hPa/inHg) Setting

The "mb/hPa" digit will start to flicker, press A(UP)/ B(DOWN) to select: mb/hPa or inHg. Then press D(SET) to confirm



### Temperature Unit (°C/ °F) Setting

The Celsius digit will start to flicker, press A(UP)/ B(DOWN) to select C or F. Then press D(SET) to confirm.



## FISHING/ HUNTING DISPLAY SETTING

### Fishing/ Hunting Display Setting

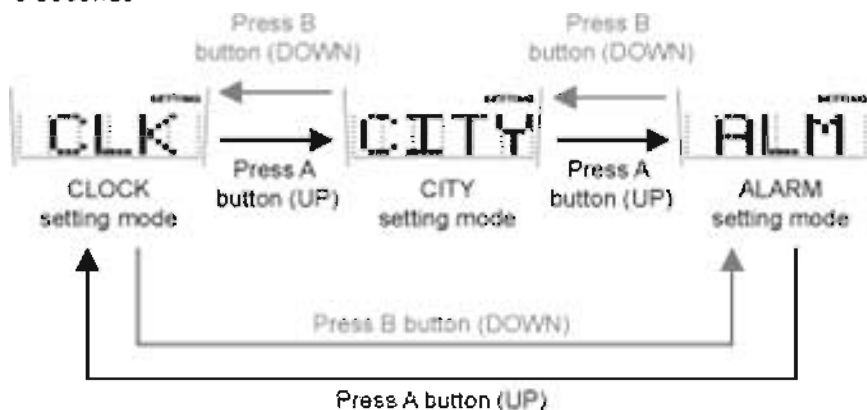
Press A(UP)/ B(DOWN) to select show the Fishing or Hunting display. Then press D(SET) to confirm.



## SELECT SETTING MODE

Press and hold the button D (SET) for approximate 3 seconds until the CLK start to flicker on the display. CLOCK SETTING is shown. After using the A (UP) / B (DOWN) button to switch to different SETTING mode.

Press and hold the D button (SET) for approximate 3 seconds



(Figure 2)

## CLOCK SETTING

Be sure to correctly configure the current time and date and your local data before using the functions of this Fishing Handheld.

To set time (Ref to Figure 2)


1. Press D (SET) button to indicate 12Hr and 24Hr format. Use A (UP) or B (DOWN) button to select and press D (SET) button to confirm the setting.



2. Press A (UP) or B (DOWN) button to select DST on or off. If DST is set to ON, clock and local GMT is add 1 hour automatically.



Note:

If DST is ON,  icon shows on the display.



3. After confirmation, the second digits will flicker. To set minute digits, press A (UP) or B (DOWN) button and adjust minute digits to desire value then press D (SET) button to confirm.
4. Repeat the process until you get desired value for year, month and day then day of week will automatically calculate and display.
5. Press C (MODE) button to exit the setting screen.
6. The year can be set in the range of 2000 to 2039.

## CITY SETTING

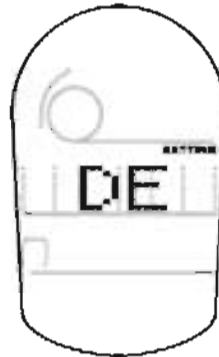
This Fishing Handheld has recorded 49 countries for major 212 cities and 1 user city setting.

### TO SET CITY BY COUNTRY RECORD (Ref to Figure 2)

1. Press D (SET) button to enter the country setting mode and use A (UP) or B (DOWN) button to select your desire country

*(If you cannot find your desire location, then you go to USER setting).*

2. Press D (SET) button to confirm
3. Use A (UP) or B (DOWN) button to select your desire city
4. Press D (SET) button to confirm.
5. Press C (MODE) button to exit the setting screen.

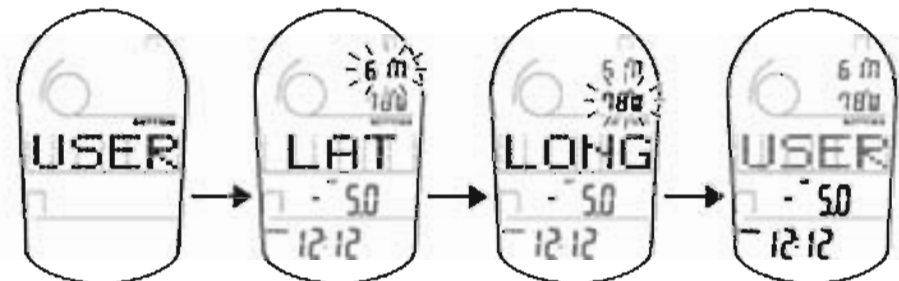


### TO SET CITY BY USER SETTING

The "Site Data List" provides GMT differential, latitude, longitude and lunitidal interval information in 49 countries for major 212 cities . You might not find your current location on the "Site Data List". This function allows you to create your desire location by inputting GMT differential, latitude and longitude values. The information can be easily accessible from the Internet, map or local observatory.

From city setting screen (Ref to Figure 2)

1. Press D (SET) button to enter and use A (UP) or B (DOWN) button to select USER mode, then press D (SET) button to confirm.
2. To enter latitude setting, press A (UP) or B (DOWN) button to adjust the latitude value.
3. Press D (SET) button to move longitude setting and repeat the process to adjust the longitude value.
4. To display the GMT differential setting screen, press D (SET) button and use A (UP) or B (DOWN) button to change it. Press D (SET) button to confirm and move to the interval mode.
5. In the Time mode, press A (UP) or B (DOWN) button to enter setup mode, then press D (SET) button to confirm.
6. Press C (MODE) button to exit the setting screen.



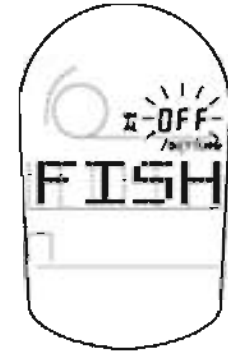
### TO FIND OUT THE LUNITIDAL INTERVAL OF YOUR LOCATION MANUALLY STEP BY STEP

1. You must find out the GMT differential, Latitude and Longitude of your location. They are easily accessible from the Internet, map or local observatory.
2. In the USER mode, configure the location as you found in step 1. Set the Lunitidal Interval to 0 hour 0 min if you do not know it yet.
3. Go to Main Display in order to drop down the medium time of fishing period "T1". This is the moon upper transit time today. For example, fishing period of "T1" is between 9:30 to 11:30, so the medium time is 10:30
4. Locate the newspaper to find today's actual high tides of your location in the weather section. Try to find the high tide time which occurs following the moon transit time recorded in step 3. Remove any Daylight Saving Time if it is in use. For example, two high tides are written on newspaper today giving 1:35 and 13:52 and Daylight saving of +1 hour is current in use. In step 3 you recorded 10:30, so you should pick up the following high tide time 13:52 and minus 1 hour to remove Daylight Saving. Hence, you should record 12:52.
5. Subtract the actual high tide time you recorded in step 3 from the moon transit time recorded in step 3. This difference is the Lunitidal Interval of your location. In the example, this is calculated as  $12:52 - 10:30 = 2:22$
6. Repeat step 2 but this time input the calculated Lunitidal Interval. In the example, it is 2 hours 22 min.

### ALARM SETTING

1. To turn the fishing time alarm on and off

To set fishing alarm (Ref to Figure 2)  
Press SET button to enter fishing alarm setting, then use A (UP) or B (DOWN) button to set fishing alarm on or off.  
Press D (SET) button to confirm, then move to daily alarm setting



2. Set the daily alarm

Press A (UP) or B (DOWN) button to select alarm on or off, then press D (SET) button to confirm.  
The minutes digits will then start to flicker, use A (UP) or B (DOWN) button to adjust to desire value.  
Press D (SET) button to confirm









Repeat the process to adjust hours.

Press C (MODE) button to exit the setting screen.









## MOON PHASE AND MOON AGE

The moon goes through a regular 29.53 a day cycle during which it appears to wax and wane due to how the Sun illuminates the Moon and the relative positioning of the Earth, Moon and Sun. The greater the angular distance between the Moon and the Sun. The more we see illuminated.

<b>Moon Phase Indicator</b>			
<b>Moon Age</b>	28.4 - 29.5, 0 - 1.2	1.3 - 3.6	3.7 - 6.1
<b>Moon Phase</b>	New Moon		
<b>Moon Phase Indicator</b>			
<b>Moon Age</b>	13.6 - 16.0	16.1 - 18.4	18.5 - 20.9
<b>Moon Phase</b>	Full Moon		

## Moon Phase Indicator

The Moon Phase indicator of this watch indicates the current phase of the Moon as shown below.

		
6.2 - 8.6	8.7 - 11.0	11.1 - 13.5
First Quarter (Waxing)		
		
21.0 - 23.4	23.5 - 25.8	25.9 - 28.3
Last Quarter (Waning)		

Moon phase (Part you cannot see)  
(Part you can see)

# THE BAROMETER

Press button C(MODE) to enter the Barometer Mode.

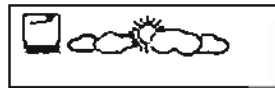
## Barometer and Weather States Adjustment

1. To adjust the barometer and weather states, weather forecast function can have a good initialization.
2. Press and hold button D(SET), the barometer digits will start to flicker.
3. Press button A(UP)/ B(DOWN) to set and then press button D(SET) to confirm.
4. Repeat Step 3 to set your desire digits.
5. Right after the barometer digits setting, press button A(UP)/ B(DOWN) to select different states and then press button D(SET) to confirm.

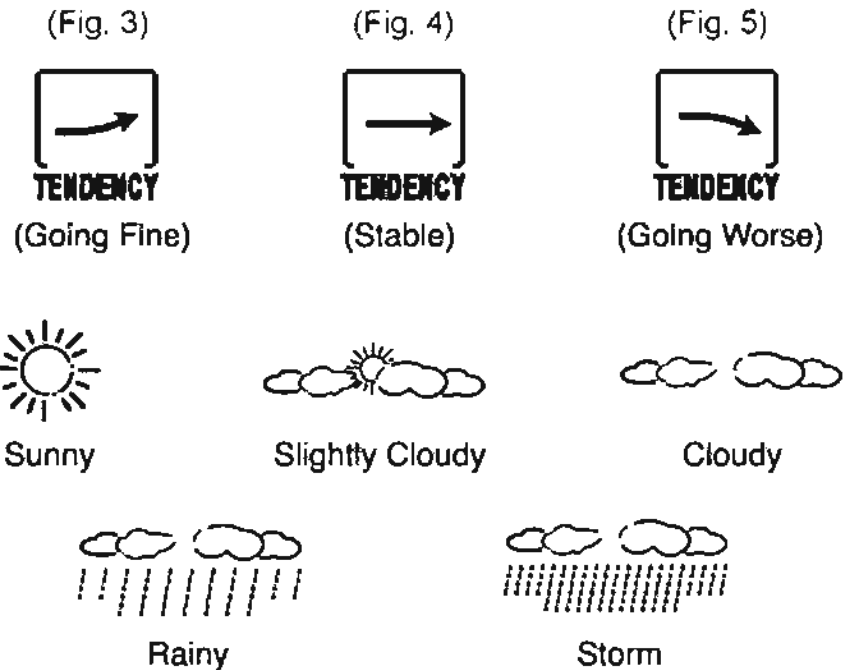


## Weather Forecast

1. The unit is capable of detecting atmospheric pressure changes to predict the weather for the forthcoming 8 hours.
2. The weather forecast is meant for the next 8 hours. It may not necessarily reflect the current weather situation.
3. The accuracy of all general pressure-based technology weather forecast is about 70%, and therefore, cannot be held responsible for any inconveniences so caused by an inaccurate one.

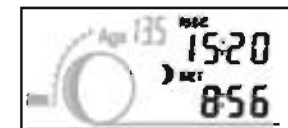


4. According to the barometer change, the pressure trend will indicate the weather is going fine (Fig. 3 UP), stable (Fig. 4 Stable) and going worse (Fig. 5 Down). There are five different states: Sunny, Slightly Cloudy, Cloudy, Rainy and Storm.



## Display Sun rise/set or Moon rise/set Time

Press button D(SET) to check the SUN RISE and SUN SET / MOON RISE and MOON SET time.



## Maximum and Minimum

1. Press button A(UP)/ B(DOWN) to enter the Barometer Memory mode.
2. The memory of maximum and minimum barometer will be scrolled on the display automatically.

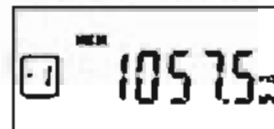


3. To reset the memory, press and hold button D(SET).



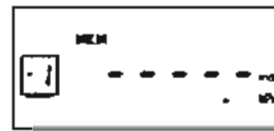
## The Atmospheric Pressure Bar Chart

1. Press button A(UP)/ B(DOWN) to enter the Bar Chart mode.
2. The atmospheric pressure chart records the atmospheric changes for the past 12 hours and it will be scrolled on the display automatically.



- The history hours are:
  - 0 = Current
  - 1 = Past 1 hour
  - 2 = Past 2 hours
  - 3 = Past 3 hours
  - 6 = Past 6 hours
  - 12 = Past 12 hours

3. To reset the records, press and hold button D(SET).

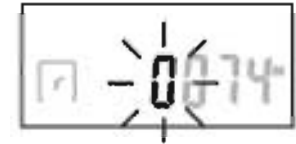


## THE ALTIMETER

Press button C(MODE) to enter the Altimeter Mode.

### Setting the Altimeter

1. To keep a check and re-adjust the altimeter, it will lead to the most accurate reading.
2. Hold button D(SET) to enter Altimeter setting, the altimeter digits will start to flicker.
3. Press button A(UP)/ B(DOWN) to set and then press button D(SET) to confirm.
4. Repeat Step 3 to set your desired digits.



### Zeroing the Altimeter (Sea-level)

1. To resetting the height at sea-level, to set all digits are zero.

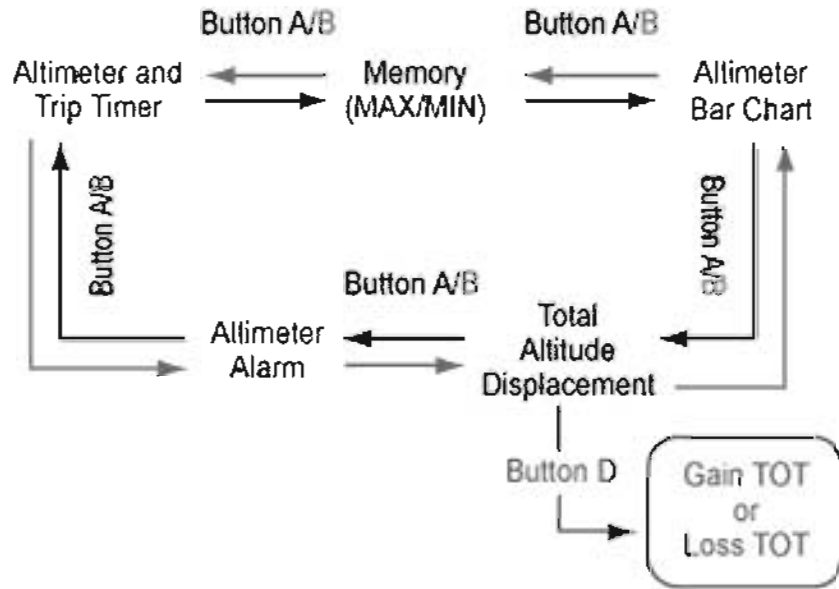
### Temperature and Relative Humidity

1. A build-in sensor measure temperature and humidity and shows on the display.



## Select Sub-Mode of Altimeter

- Press button A(UP)/ B(DOWN) to display following Altimeter sub-mode.



## Trip Timer

1. Press button A(UP)/ B(DOWN) to enter the Altimeter normal mode.
2. To start a trip, press button D(SET) to start the trip timer, and then the total altitude displacement will be recorded automatically.
3. To stop a trip, press button D(SET) to stop the trip timer, and then the total altitude displacement will be stopped to count.
4. To reset the trip timer, press and hold button D(SET).



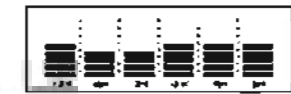
## Maximum and Minimum

1. Press button A(UP)/ B(DOWN) to enter the Altimeter Memory mode.
2. The high and low temperature and hygrometer will be scrolled on the display automatically. The memory of maximum and minimum Altimeter will be scrolled on the display automatically.
3. To clear the records of the altimeter, thermometer and hygrometer, press and hold button D(SET).



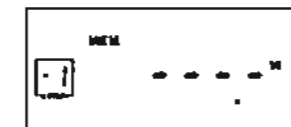
## The Altimeter Bar Chart

1. Press button A(UP)/ B(DOWN) to enter the Bar Chart mode
2. The altimeter bar chart records the altitude changes for the past 12 hours and it will be scrolled on the display automatically.



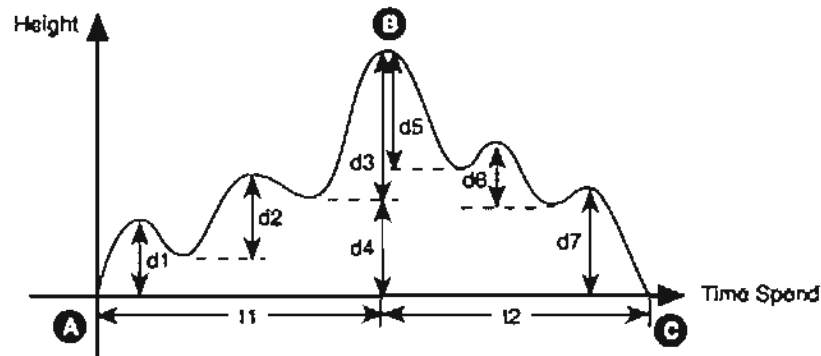
- The history hours are:
  - 0 = Current
  - 1 = Past 1 hour
  - 2 = Past 2 hours
  - 3 = Past 3 hours
  - 6 = Past 6 hours
  - 12 = Past 12 hours

3. To reset the records, press and hold button D(SET).



## The Total Altitude Displacement

- To read the Total Altitude Displacement. Press button A(UP)/ B(DOWN) to enter the Total Altitude Displacement Mode and then press button D(SET) to select the total displacement for the gain (TOT  $\uparrow$ ) or the loss (TOT  $\downarrow$ ).
- Press button A(UP)/ B(DOWN) to quit or left it return automatically to Normal Mode within 2 minutes.



- From **A** to **B**, (the gain TOT  $\uparrow$ )  
 Total altitude displacement for the gain (TOT  $\uparrow$ ) =  $d1+d2+d3$
- From **B** to **C**, (the loss TOT  $\downarrow$ )  
 Total altitude displacement for the loss (TOT  $\downarrow$ ) =  $d5+d6+d7$

## The Altimeter Alarm

- Press button A(UP)/ B(DOWN) to enter the Altimeter Alarm Mode.
- To set the target altitude, press button D(SET) to turn Off/On the Altimeter Alarm (Fig. 6A & 6B).
- Hold button D(SET) until digit starts to flicker (Fig. 7).
- Press button A(UP)/ B(DOWN) to set the digits and then press button D(SET) to confirm.
- Repeat Step 4 to set your desire digits (Fig. 8).
- After setting the target altitude, press button D(SET) to activate or deactivate the alarm (Fig. 9).
- For the Altimeter Alarm sound, it will
  - Beep..Beep..Beep for 1 minutes and the UP ( $\uparrow$ ) icon flashing; when the altitude come across the target in ascending (Fig. 10).
  - Beep Beep..Beep Beep..Beep for 1 minutes and the DOWN ( $\downarrow$ ) icon flashing; when the altitude come across the target in descending (Fig. 11).
- To read the target altitude and the alarm setting, press button A(UP)/ B(DOWN) to the Altimeter Alarm mode and then press button A(UP)/ B(DOWN) to quit or left it return automatically to Normal Mode within 2 minutes.

(Fig. 6A)



(Fig. 6B)



(Fig. 7 )



(Fig. 8)



(Fig. 9)



(Fig. 10)



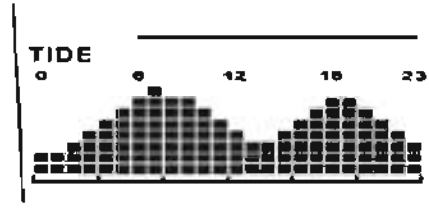
(Fig. 11)



## TIDE GRAPH

It indicates daily tide levels.

In this example, the graph shows the approximate high tide time in 7:00 and 18:00 - 19:00 as well as low tide time in 13:00 - 14:00.



### **Check the previous / future tide information**

The user also can continue to hold the DOWN (previous) or UP (future) button to their desire date to check the tide information and the favorable fishing period.

## CLOCK/ ALARM DISPLAY

In tide mode, press button D(SET) to select the display of time or alarm

## FISHING/ HUNTING ALARM

When fishing/ hunting alarm is on, it performs a beeper alert operation for 15 seconds when a favorable fishing/ hunting period is approached. To stop alarm sound, you can press any buttons. The (🐟) will flashing during the favorable time period

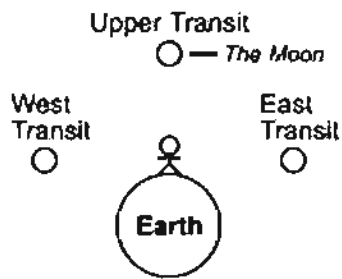


## DAILY ALARM

After the user set the daily alarm, the (🔔) will shown on. The beep sound will operate for 1 minutes, the user can press any button to stop alarm.

## FISHING/ HUNTING TIME CALCULATION

The fishing/ hunting times calculated by this device are based on the long experience of fishing/ hunting that the environment of the moon and tides affect fish and game. The following explains how the moon's transit (position) affects the feeding patterns of fish and game.



- During the month, the most feeding action can be expected on the day of the New Moon and Full Moon making them the best for fishing. Favorable conditions with less action can be expected on the day of the first quarter and last quarter as well.



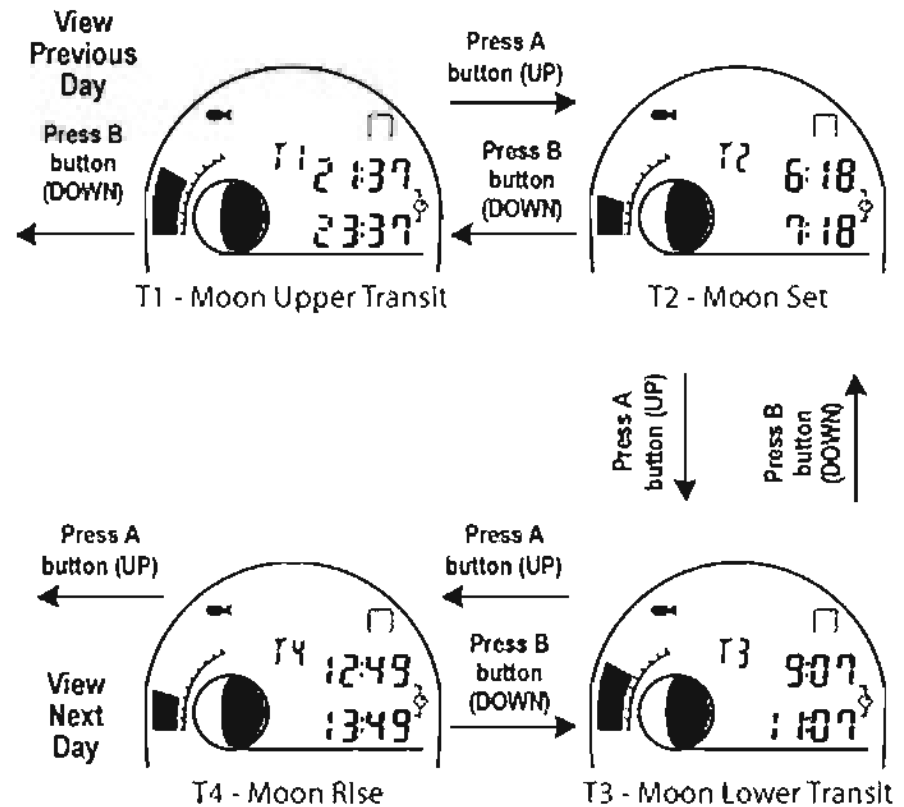
- On a daily basis optimum fishing condition occurs at the upper transit and lower transit. Other less favorable conditions can be expected at the west transit and east transit.

- The upper transit is when the Moon reaches its highest point relative to your current location. While the lower transit is when the Moon reaches the lowest point. The time it takes to perform one cycle from one upper transit to the next upper transit is the "lunar day". Due to the relationship between the Earth rotation and the Moon's orbit the length of the lunar day is 24 hours and 50 minutes.

The device calculates the current Moon age, phase, and transit for the current date in relation to your home site and then uses the calculated result to calculate and display fishing/ hunting time data.

## FISHING/ HUNTING PERIODS










Fish activity can be affected by the movements of the moon and tides. It explains how the moon's transit affects the feeding patterns of fish and game. It is based on the long experience of fishermen, Upper and Lower Transit are the most suitable time for fishing.



*Remark: If any fishing/ hunting period is out of 24-hour period, that will show both --:-- in the starting and ending time of fishing/ hunting period.*

## FISHING/ HUNTING LEVEL INDICATOR

It shows the relative favorability of a fishing/ hunting time as shown in the table below.

Moon Phase	Upper (Hour Angle = 0h) Lower (Hour Angle = 12h)	Set (Hour Angle = 6h) Rise (Hour Angle = 18h)	Other
New moon* Full moon			
First quarter Last quarter			
Other			

## IMPORTANT NOTES

The fishing/hunting time data, sunrise and sunset data, moonrise and moonset data, and moon phase indicator produced by this handheld are all based on calculations that use the watch's current time, date, and Home Site settings. Because of this, you should make sure that the current date and time, and your Home Site data are all correct before using such data.

- When fishing or hunting, always take proper precautions to ensure your own personal safety and the personal safety of others around you.
- Note that the fishing/ hunting time data, sunrise and sunset data, moonrise and moonset data, and moon phase indicator are all based on calculated values. They are provided only for reference purposes.
- See the "Clock setting" and "City setting" sections of this manual for information about setting the current time and date, and about specifying your Home Site.

## ALTIMETER

- Unfortunately all altimeter are going to be affected by barometric pressure (unless they are GPS controlled or similar) as this is what they use to calculate their height.
- To offset this barometric effect on altimeter, please keep a check and re-adjust the altimeter when you are at known heights or re-setting the unit to zero at sea-level.