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CLAWGEAR

MISSION SENSOR II

Instruction Manual

1.0 Introduction

- Thank you for purchasing this Watch. Your Watch features electronic sensors, which measures and shows the outdoor conditions: weather forecast, temperature, pressure, altitude and compass directions.
- Your Watch provides the essential information you need when you go hiking, wild camping and other outdoor activities especially for a prolonged period.
- Your Watch also includes current time, daily alarm, chronograph, timer and dual time functions.
- Your Watch is carefully designed and produced for outdoor activities. In order to utilize the features, it is advisable to read the following instructions before using the Watch.
 - Avoid exposing your Watch to extreme conditions for an unreasonable time.
 - Avoid rough usage or severe impact on your Watch.
 - Do not open the Watch's case unless by a certified service agency because your watch contains delicate electronic sensors and components.
 - Clean your Watch with a soft cloth occasionally for a longer useful life.
 - Keep your Watch away from magnets or any appliances which contain magnetic objects such as mobile phones, speakers and motors.
 - Store your Watch in a dry place when it is not in use.

2.0 Buttons and Its Functions - Model A and Model B

Mode Button [M]

- To select among the Current Time, Daily Alarm, Chronograph, Timer and Dual Time modes.
- To select among the setting items in setting display.

Sensor Button [SR] (Model B), Sensor Button [SR] / EL Button[EL] (Model A)

- To select among the Altimeter, Barometer, Track and Compass modes.
- Hold 1 second to turn on the EL Back Light for about 3 seconds. (Model A only)

Start/Stop Button [S/S]

- To select between functional displays under the same mode.
- To activate the 'start' or 'stop' chronograph function in the chronograph mode.
- To toggle Yes/No.
- To increase the digits in setting display.

Lap/Reset Button [L/R]

- To activate the 'lap' or 'reset' chronograph function in the chronograph mode.
- To move the cursor to the left by one in the History recalling display.
- To decrease the digits in setting display.
- To toggle Yes/No.

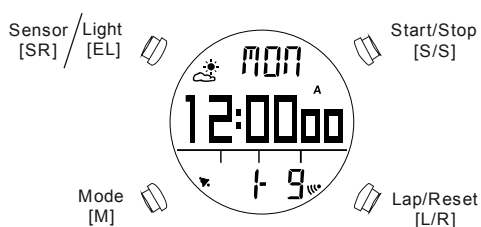
EL Button [EL] (Model B)

- To turn on the EL back light for about 3 seconds.

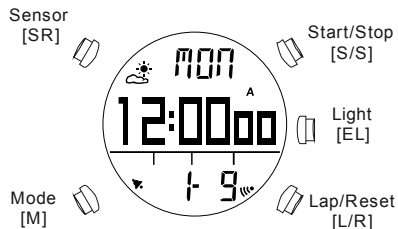
Note

Press any button to activate the watch under Power Saving Mode. (For more information, please refer to Chapter 14.0)

2.0 Buttons and Its Functions - Model A and Model B

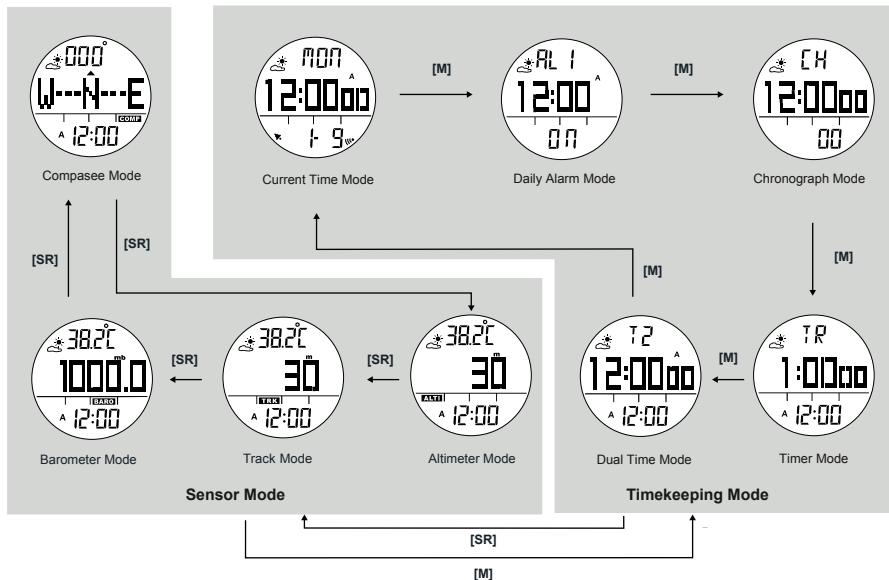


Model A



Model B

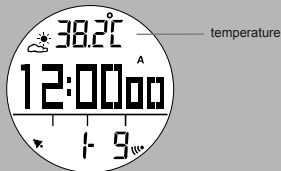
3.0 Major Function Modes -Timekeeping Mode and Sensor Mode



4.0 Current Time Mode - Functional Display



Day of Week Display



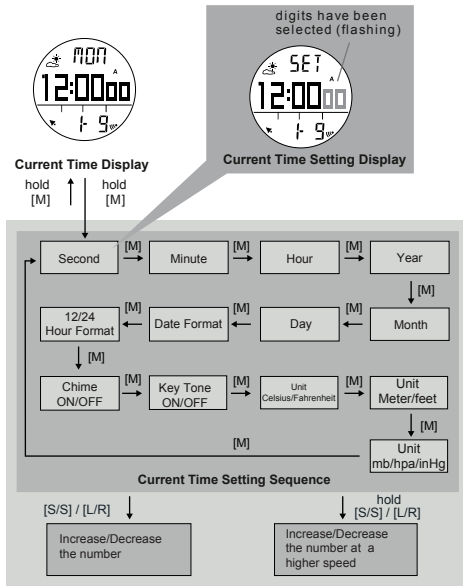
Temperature Display

Current Time Mode

Functional Display

- The Current Time Mode includes 4 kinds of functional displays:
 - Day of Week display
 - Current Time display
 - Date
 - Weather Forecast
- To select between day of week and temperature displays by pressing [S/S].

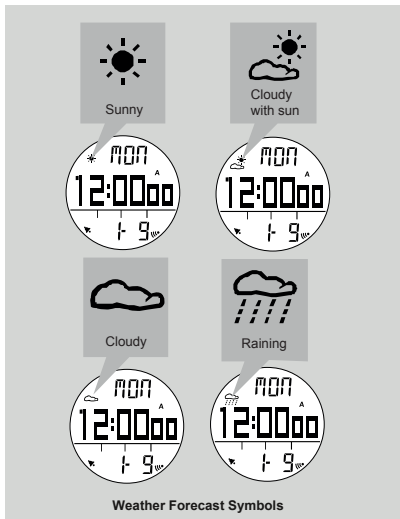
4.2 Current Time Mode - Setting the Current Time



How to Set the Current Time

- To select the setting display, press and hold the [M] button for about 2 seconds in the Current Time Mode. In setting display, the word "SET" will appear.
- In the setting display, press the [M] button to change the selection following the adjacent Current Time Setting Sequence.
- When the second digits are flashing (selected), press the [S/S] or [L/R] button to reset the digits to "00".
- When the digits are flashing (selected), press the [S/S] or [L/R] button to increase / decrease the number. (Hold down the button to change the number at a higher speed).
- When month-day order setting is selected, press the [S/S] or [L/R] button to select either month-day or day-month format. When 12/24 hour format setting is selected, press the [S/S] button to select either 12 or 24 hour format.
- When the setting is completed, press and hold the [M] button to exit the setting display.

4.1 Current Time Mode - Weather Forecast Feature



Weather Forecast Feature

- A special feature of the Watch is the coming weather predicting function. It works by analyzing the changes of the past air pressure.

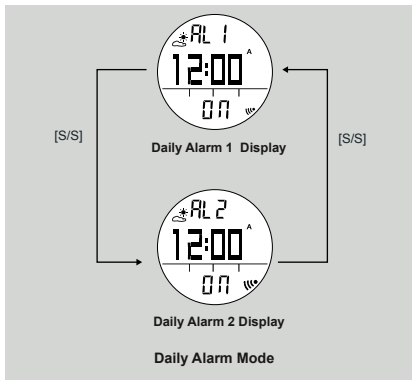
How to Indicate the Coming Weather

- The Watch provides 4 different symbols to indicate the forecast weather, which are:
 - Sunny
 - Cloudy with Sun
 - Cloudy
 - Raining

IMPORTANT: Since the Watch predicts the coming weather by using the data of the changes in the air pressure, a higher accuracy may result when the user stays at the same altitude for at least 24 hours.

IMPORTANT: The Watch predicts the weather by adopting general weather prediction principles, it is NOT capable to reflect the dramatic changes of weather within a very short period of time.

5.0 Daily Alarm Mode - Daily Alarm 1, Daily Alarm 2



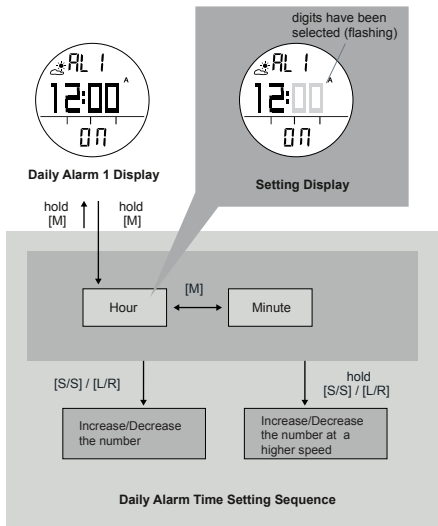
Daily Alarm 1 and Daily Alarm 2

- The Watch includes two daily alarms: Daily Alarm 1 and Daily Alarm 2. The Daily Alarm 1 and Daily Alarm 2 are working independently.
- Press the [S/S] button to switch among the Daily Alarm 1 and Daily Alarm 2 following the adjacent diagram.

How to Turn ON/OFF the Daily Alarm

- To turn ON/OFF the Daily Alarm 1 (2), press the [L/R] button in Daily Alarm 1 (2) Display.
- When the Daily Alarm 1 (2) is ON, the alarm indicator '●)))' will appear.
- If the alarm indicator appears, the Watch will sound at the preset alarm time every day. When the alarm sounds, press any button to stop the beep.

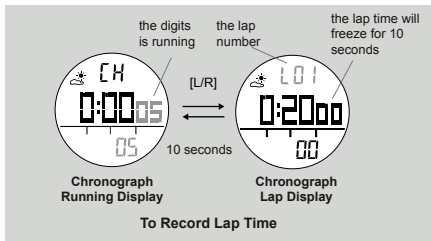
5.1 Daily Alarm Mode - Setting the Alarm



How to Set the Alarm 1 and Alarm 2

- To select the setting display, hold the [M] button for about 2 seconds in the Alarm 1 (2) Display, then the digits have been selected will flashing.
- In the setting display, press the [M] button to change the selection between minute and hour.
- When the digits are flashing (selected), press the [S/S] or [L/R] button to increase / decrease the number. (Hold down the button to change the number at a higher speed).
- When the setting is completed, press and hold the [M] button to exit the setting display.

6.1 Chronograph Mode - Recording and Recalling Lap Time



How to Record Lap Time

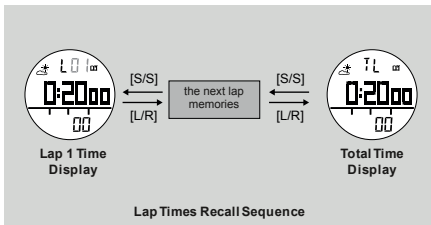
- The chronograph can measure elapsed time without stopping the counting - lap time.
- The Chronograph Mode allows recording lap time up to 10 laps.
- When the chronograph is counting, press the [L/R] button once to record a lap time (this key operation will not affect the counting).
- The lap number and lap time will appear on the display for 10 seconds, and it returns to counting display automatically.
- Repeat the steps mentioned above to get another lap time.

How to Recall Lap Times

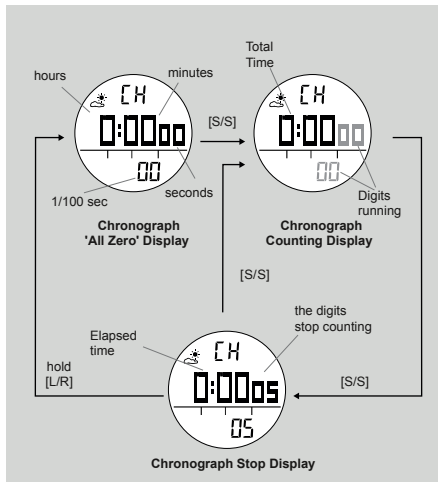
- To recall lap time, hold down the [M] button in the Chronograph Display.
- When the Lap 1 Time Display appears, press the [S/S] or [L/R] button to check the next or previous lap time respectively.
- Hold down the [M] button to go back to the Chronograph Display.

How to Reset Lap times

- To record a new set of lap time, hold the [L/R] button for 2 seconds when it is stopped.



6.0 Chronograph Mode - Start/Stop the Chronograph



Chronograph Mode

- The Watch includes a function to measure elapsed time, accumulative elapsed time and lap times - Chronograph Mode.
- The display shows an 'All Zeros' display when the chronograph is selected the first time or it is reset.

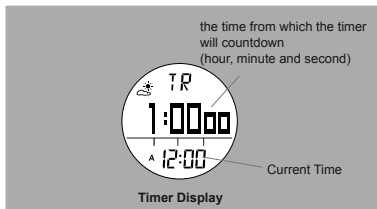
How to Start/Stop the Chronograph

- When the chronograph is stopped (not counting), press the [S/S] button once to start the chronograph (counting); press the [S/S] button once again to stop the chronograph (not counting). Repeating these steps will get an accumulative elapsed time.

How to Reset the Chronograph

- To record a new set of elapsed time, hold the [L/R] button for 2 seconds to reset the chronograph to the 'All Zeros' display when the chronograph is stopped.
- In the 'All Zeros' display, the chronograph is ready for a new counting.

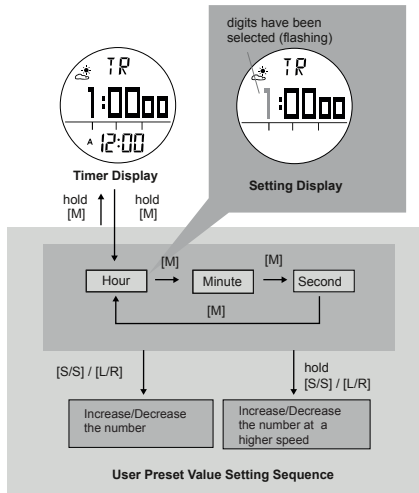
7.0 Timer Mode - Countdown Timer and the Quick-Set-value



Countdown Timer

- The Watch includes a countdown timer feature: the Timer Mode.
- The Timer starts counting from the preset value to zero and stops at zero.
- The count down time is able to set by the user.
- The setting limit is up to 99 hours 59 minutes 59 seconds.
- Once the user preset time is set, like 30 minutes, the value is stored into the Watch for the user to recall it in the future.
- To set the count down time, check the coming section for more details.

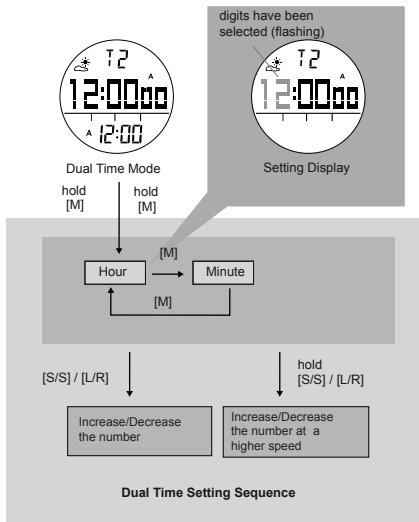
7.1 Timer Mode - Setting the Count Down Timer



How to Set the Count Down Timer

- To select the setting display, hold the [M] button for 2 seconds, and the digits have been selected will flashing.
- In the setting display, press the [M] button to change the selection among hour, minute and second.
- When the digits are flashing (selected), press the [S/S] or [L/R] button to increase / decrease the number. (Hold down the button to change the number at a higher speed).
- When the setting is completed, hold the [M] button to exit the setting display.

8.0 Dual Time Mode - Dual Time and Setting the Dual Time



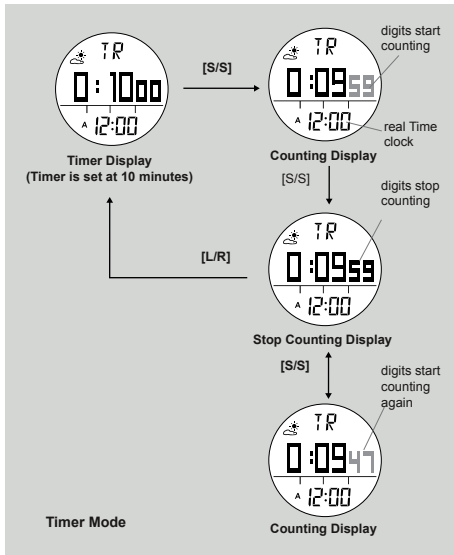
Dual Time Mode

- The Watch includes a function to show the time of a second time zone - Dual Time Mode.
- The second digit of the dual time synchronizes with the Current Time.

To Set the Dual Time

- To select the setting display, hold the [M] button for 2 seconds in the Dual Time Mode and the digits have been selected will flashing.
- In the setting display, press the [M] button to change the selection between hour and minute.
- When the digits are flashing (selected), press the [S/S] / [L/R] button to increase / decrease the number. (Hold down the button to change the number at a higher speed).
- When the setting is completed, press and hold the [M] button to exit the setting display.

7.2 Timer Mode - Using the Timer



How to Use the Timer

- When the Timer is set, press the [S/S] button to start the timer. Press the [S/S] button once again to stop the timer.

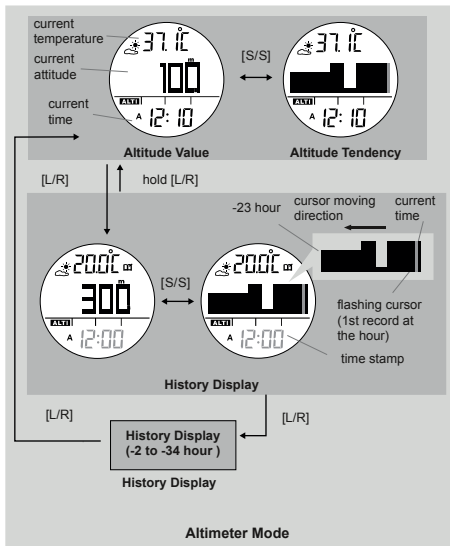
Timer Alarm Sound

- In the last 10 minutes, the Watch will beep for every minute.
- In the last minute, the Watch will beep for every 10 seconds. In the last 5 seconds, the Watch will beep for every second.
- When it reaches 0, a beep sound will last for 30 seconds. Pressing any button can stop the beep sound.

How to Reload the Timer

- The last target time will be reloaded automatically at the end of the 30-second beep sound.
- Press the [L/R] button when the timer is stopped.

9.0 Altimeter Mode - Temperature and History Display



Functional Display

- Altimeter mode includes two functional displays: altitude value or altitude tendency, which are shown in the middle of display.
- The top line shows the temperature and bottom line shows the time.

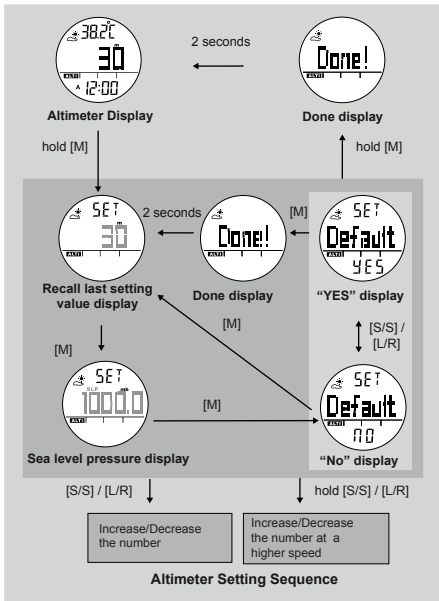
History Display

- The watch can store up to 34 past hourly data including altitude and temperature.
- Press [L/R] to recall the latest hourly data, corresponding history data (altitude and temperature) with flashing time-stamp will be shown.
- Press [L/R] to recall next hourly data as adjacent diagram.
- Hold [L/R] for 2 seconds can return to current time display instantly.

IMPORTANT: If you want to have an accurate reading of air temperature, you must take off the watch from the wrist that prevents body temperature effect on your watch.

IMPORTANT: Altimeter updated rate is 1 second for the first 5 minutes, then 10 seconds for next 24 hours and 1 minute afterward.

9.1 Altimeter Mode - Setting the Altimeter



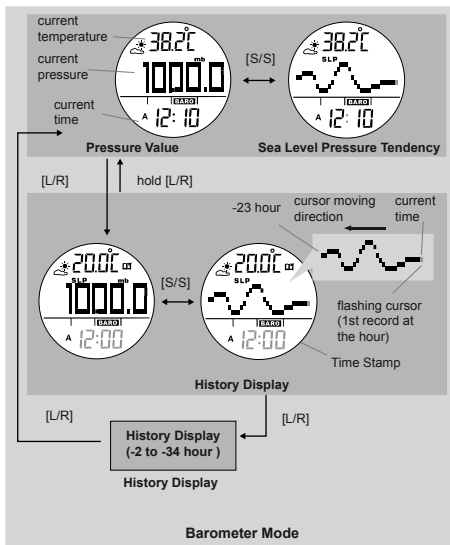
How to Set the Altitude and Sea level pressure

- To select the setting display, hold the [M] button for 2 seconds, the word "SET" and the flashing value of altitude will appear.
- In the setting display, press the [M] button to change the selection between altitude, sea level pressure and default setting.
- When the digits are flashing (selected), press the [S/S] or [L/R] button to increase / decrease the number. (Hold down the button to change the number at a higher speed).

Reset to Default

- In order to adjust the altitude to default value, select "YES" in Set Default Display as adjacent diagram, press [M] to confirm and "Done!" message will be shown.
- To exit the Adjustment Display, hold the [M] button for 2 seconds, and the Watch will go back to the Altimeter Mode.

11.0 Barometer Mode - Temperature and History Display



Functional Display

- Barometer mode includes two functional displays: pressure value or sea level pressure tendency, which are shown in the middle of display.
- The top line shows the temperature and bottom line shows the time.

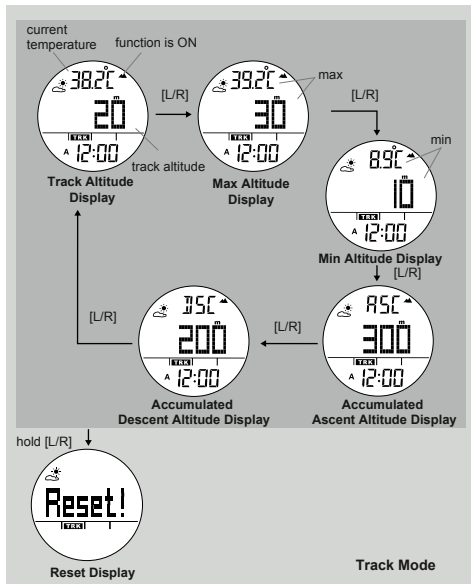
History Display

- The watch can store up to 34 past hourly data including sea level pressure and temperature.
- Press [L/R] to recall the latest hourly data, corresponding history data (sea level pressure and temperature) with flashing time-stamp will be shown.
- Press [L/R] to recall next hourly data as adjacent diagram.
- Hold [L/R] for 2 seconds can return to current time display instantly.

IMPORTANT: If you want to have an accurate reading of air temperature, you must take off the watch from the wrist that prevents body temperature effect on your watch.

IMPORTANT: Barometer updated rate is 1 second for the first 5 minutes, then 10 seconds for next 24 hours and 1 minute afterward.

10.0 Track Mode



How to Measure the Relative Altitude

- The Watch can measure relative altitude. For example, it can measure the ascending or descending altitude between the starting point and the finish point of a trail.
- When the Track mode is selected, the icon "TRK" will appear on the screen.
- To start measure the ascending or descending altitude of a trail, hold [L/R] to reset the reading to zero and press [S/S] to start tracking at the starting point of a trail. The flashing "▲" indicator will be shown on the display.
- You can check the reading at any point you like and it shows the altitude relative to the starting point.
- When you finish the Tracking, press [S/S] to stop the function.

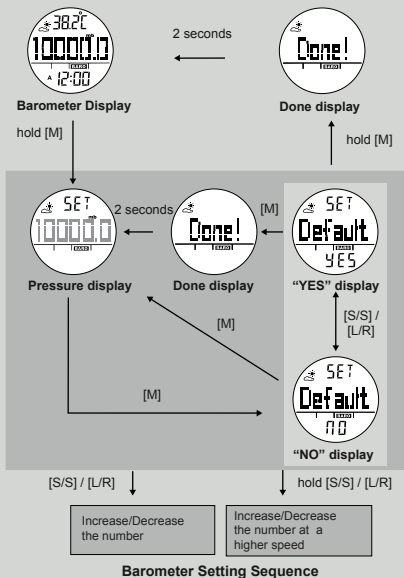
Track Mode

- Press [L/R] to recall the maximum height/temperature, minimum height/temperature, accumulated ascent altitude, accumulated descent altitude as adjacent diagram.

Update Rate

- The watch will updated the reading automatically.
- For the first 5 minutes, when the Track mode is selected, it will updated every second.
- Will update every 10 seconds in the next 24 hours.
- Afterwards, it will update every minute.

11.1 Barometer Mode - Setting the Pressure



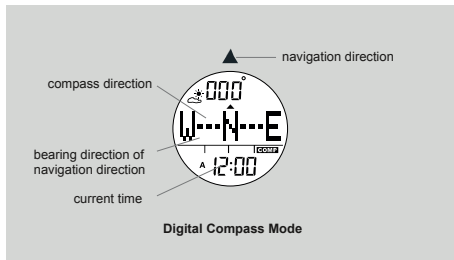
How to Set the Barometer

- To select the setting display, hold the [M] button for 2 seconds, the word "SET" and the flashing value of pressure will appear.
- In the setting display, press the [M] button to adjust the pressure.
- When the digits are flashing (selected), press the [S/S] or [L/R] button to increase / decrease the number. (Hold down the button to change the number at a higher speed).

Reset to Default

- In order adjust the pressure to default value, select "YES" in Set Default Display as adjacent diagram, press [M] to confirm and "Done!" message will shown.
- To exit the Adjustment Display, hold the [M] button for 2 seconds, and the Watch will go back to the Barometer Mode.

12.0 Compass Mode - Precautions



Precautions for using the Compass

- Keep your Watch away from magnets or any appliances which may contain magnetic objects such as mobile phones, speakers, motors and etc.
- The Watch, like most magnetic compass, points to the magnetic north which is slightly different from the true north. Check the 'What is Magnetic Declination' section for more details.
- Perform the compass calibration from time to time, because the calibration can ensure the precision of the compass.
- To achieve an accurate result, you should avoid measuring direction on the following conditions:
 - 1) The watch is placed close to the magnetic objects.
 - 2) The watch is placed close to the metal objects.
 - 3) The watch is placed close to the electrical appliances.
 - 4) The watch is placed inside a moving object or a ferroconcrete building.

12.2 Compass Mode - Compass Mode



Normal Display



Idle Display



Distortion display

Compass Mode

Compass Mode

- In the Compass Mode, the top row of the display shows the bearing direction.
- The middle row of the display shows the compass direction.
- The bottom row of the display shows the current time in hour and minute.
- The pointer encircled the display shows the direction of magnetic North analogically.

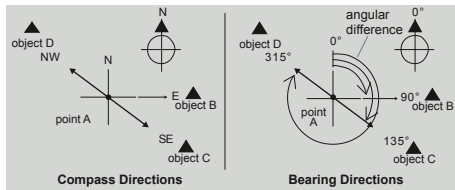
IDLE Mode

- If no key is pressed for about 1 minute, the watch will go to the IDLE Mode automatically. To activate the compass again, press any button.

Distortion

- If distortion is detected, the bearing direction will flash.
- Please refer to the coming section "Calibrating the Compass" to restore the compass to normal operation when distortion is detected.

12.1 Compass Mode - Compass Directions and Bearing Directions



The Direction of an Object

- The direction of an object from a point can be specified in either compass directions or bearing directions.
- The Watch includes both compass directions and bearing directions.

The Compass Directions

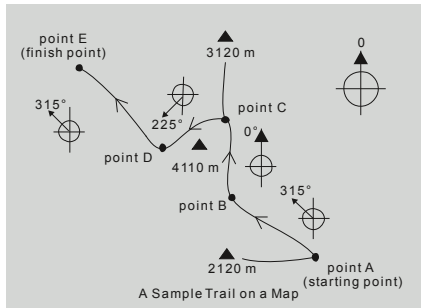
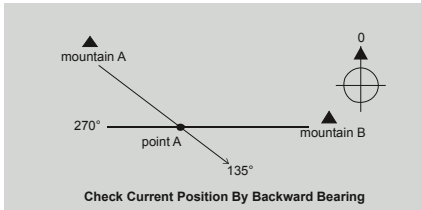
- The compass directions are shown in the adjacent table.
- For example, in the figure on the left, the compass direction of object B from point A is due East. The compass direction of object C from point A is Southeast. The compass direction of object D from point A is Northwest.

The Bearing Directions

- The Bearing direction of an object is defined as the angular difference between North and the object. (Assume 0° for due North, and the measuring range is from 0° to 359°).
- For example, in the figure on the left, the bearing direction of object B from point A is 90°. The bearing direction of object C from point A is 135°. The bearing direction of object D from point A is 315°.

Marks	Compass Directions	Bearing Directions
N	North	349° - 11°
NNE	North Northeast	12° - 33°
NE	Northeast	34° - 56°
ENE	East Northeast	57° - 78°
E	East	79° - 101°
ESE	East Southeast	102° - 123°
SE	Southeast	124° - 146°
SSE	South Southeast	147° - 168°
S	South	169° - 191°
SSW	South Southwest	192° - 213°
SW	Southwest	214° - 236°
WSW	West Southwest	237° - 258°
W	West	259° - 281°
WNW	West Northwest	282° - 303°
NW	Northwest	304° - 326°
NNW	North Northwest	327° - 348°

12.3 Compass Mode - Applications of the Compass



Check your position by Backward Bearing Directions

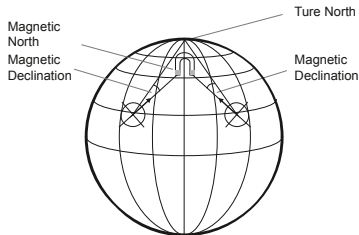
- Spot two distant identifiable landmarks like mountains, light-house, fort or building from your current position, for example the mountains A and B.
- Check out the backward bearing directions of mountains A and B from your current position, for example 135° from mountain A and 270° from mountain B.
- Use a ruler to draw a line 135° from the north at the mountain A to your current position on the map. Draw another line 270° from the north at the mountain B to your current position on the map.
- Your current position on the map will be the intersection (point A) of the lines 135° from the mountain A and 270° from the mountain B.

The Compass Directions

- During a trekking, the Watch can keep your course in a correct way. For example, the correct trail starts from point A and finishes at point E as drawn on the adjacent map.
- Mark the points (identifiable landmarks) where the trail turns its direction or the trail branches its way, such as the points A, B, C, D and E on the adjacent map.
- Find out the bearing directions of point B from point A (315°), point C from point B (0°), point D from point C (225°), and then point E from point D (315°).
- During the trekking, make sure that the heading direction is 315° from point A to point B. Performing the similar checking in other sections of the trail helps you keep your course correctly.

IMPORTANT: If you are in doubt of the directions and positions of the trail, consult the park administration office before starting the trekking.

12.4 Compass Mode - Magnetic Declination



What is Magnetic Declination

- The Magnetic North Pole is slightly different from the True North Pole.
- The Watch, like most magnetic compass, points to the Magnetic North Pole. On the contrary, everything measured on a map is related to the True North Pole.
- The angular difference between Magnetic North Pole and True North Pole is called magnetic declination. Its magnitude (degrees and minutes) and direction (easterly and westerly) depend on where you are in the world.
- For a serious compass user who intends to perform an accurate navigation, the compass must be adjusted for magnetic declination.
- The Watch also includes a compensation setting for Magnetic Declination. Check the coming section "Calibrating the compass - Magnetic Declination Mode" for more details.

Magnetic Declination Information

- Most topographic maps include a small arrow which shows the magnetic north pole and magnetic declination information.
- For the benefit of the user, this manual includes the magnetic declinations for some major cities. Check the coming section 'Magnetic Declination at Major Cities' for more details.
- For those cities, their names are not included on the list, please check the online magnetic declination information at:
1. <http://www.geomag.nrcan.gc.ca/calc/mdcal-eng.php>
2. <http://www.ngdc.noaa.gov/cgi-bin/seg/gmag/fldsnt1.pl>

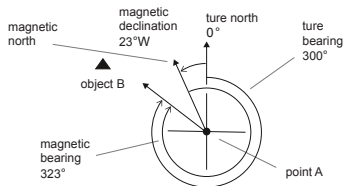
12.6 Compass Mode - Magnetic Declination at Major Cities

No.	Country/Place	Major City	Declination	No.	Country/Place	Major City	Declination
1	Afghanistan	Kabul	+3E	33	Netherlands	Amsterdam	+0E
2	Australia	Canberra	+12E	34	New Zealand	Wellington	+22E
3	Austria	Vienna	+3E	35	Norway	Oslo	+2E
4	Bahrain	Manama	+2E	36	Pakistan	Islamabad	+2E
5	Bangladesh	Dhaka	+0E	37	Philippines	Manila	-1W
6	Belgium	Brussels	+0E	38	Portugal	Lisbon	-3W
7	Brazil	Brasilia	-21W	39	Russia	Moscow	+10E
8	Canada	Ottawa	-14W	40	Singapore	Singapore	+0E
9	Chile	Santiago	+3E	41	SouthAfrica	Cape Town	-24W
10	China	Beijing	-6W	42	Spain	Madrid	-2W
11	China	Hong Kong	-2W	43	Sweden	Stockholm	+5E
12	Costa Rica	San Jose	-1W	44	Switzerland	Bern	+1E
13	Cuba	Havana	-4W	45	Taiwan	Tai-pei	-4W
14	Czech Republic	Prague	+3E	46	Thailand	Bangkok	-1W
15	Denmark	Copenhagen	+3E	47	UAE	Abu Dhabi	+2E
16	Egypt	Cairo	+4E	48	United Kingdom	London	-2W
17	Finland	Helsinki	+8E	49	United States	Washington, DC	-11W
18	France	Paris	-1W	50	United States	Juneau	+22E
19	Germany	Berlin	+3E	51	United States	Phoenix	+11E
20	Greece	Athens	+4E	52	United States	Little Rock	+1E
21	Hungary	Budapest	+4E	53	United States	Sacramento	+14E
22	India	New Delhi	+1E	54	United States	Denver	+9E
23	Indonesia	Jakarta	+1E	55	United States	Atlanta	-4W
24	Israel	Jerusalem	+4E	56	United States	Honolulu	+10E
25	Italy	Rome	+2E	57	United States	Boston	-15W
26	Japan	Tokyo	-7W	58	United States	Saint Paul	+1E
27	Jordan	Amman	+4E	59	United States	Jackson	+0E
28	Kenya	Nairobi	+0E	60	United States	Santa Fe	+9E
29	Korea	Seoul	-8W	61	United States	Oklahoma City	+5E
30	Malaysia	Kuala Lumpur	+0E	62	United States	Salem	+16E
31	Mexico	Mexico City	+6E	63	United States	Harrisburg	-11W
32	Nepal	Kathmandu	+0E	64	United States	Salt Lake City	+12E

NOTE: Since magnetic declinations will be changed with time, it is recommended to check the updated data from following sites:

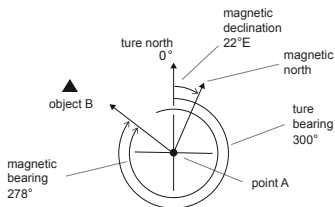
<http://www.magnetic-declination.com/> & <http://www.ngdc.noaa.gov/geomagmodels/Declination.jsp>

12.5 Compass Mode - Magnetic Declination Compensation



True Bearing (TB) =
Magnetic Bearing (MB) + Westerly Magnetic Declination (W)
 $300^\circ \text{ (TB)} = 323^\circ \text{ (MB)} + 23^\circ \text{ (E)}$

**Compensate the Bearing
with Westerly (W) Magnetic Declination**



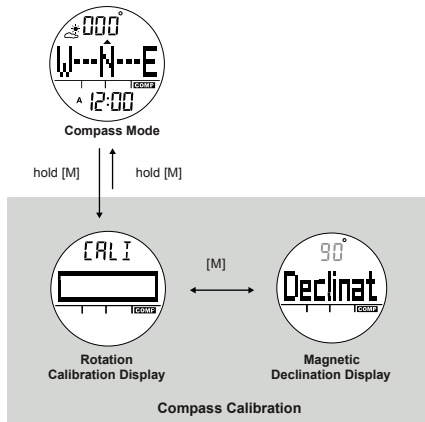
True Bearing (TB) =
Magnetic Bearing (MB) + Easterly Magnetic Declination (E)
 $300^\circ \text{ (TB)} = 278^\circ \text{ (MB)} + 22^\circ \text{ (E)}$

**Compensate the Bearing
with Easterly (E) Magnetic Declination**

Magnetic Declination Compensation

- To compensate for an object's bearing, either subtract westerly (W) magnetic declination or add easterly (E) magnetic declination with the magnetic bearing.
- Example 1:** Westerly magnetic declination 23° and the compass needle points 323° .
 - $TB = MB - W$. When $MB = 323^\circ$; $W = 23^\circ$
 - $TB = 323^\circ - 23^\circ$
 - $TB = 300^\circ$
 - The true bearing is 300°
- Example 2:** Easterly magnetic declination 22° and the compass needle points 278° .
 - $TB = MB + E$. When $MB = 278^\circ$; $E = 22^\circ$
 - $TB = 278^\circ + 22^\circ$
 - $TB = 300^\circ$
 - The true bearing is 300°
- The Watch allows you to compensate the compass bearing at a place where the magnetic declination is either Westerly declination or Easterly declination.
- Check the coming section "Calibrating the Compass" for more details of the setting.

12.7 Calibrating Mode - Calibration the Compass



When to Calibrate the Compass

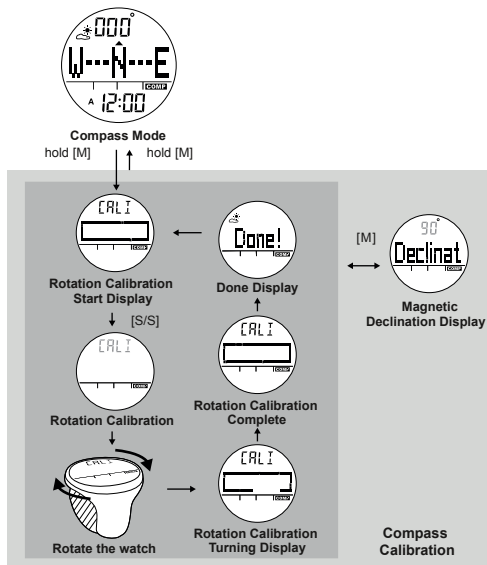
- The Watch has to employ a compass calibration in one of the following conditions:
 - 1) The Watch is being used for the first time,
 - 2) The battery is replaced,
 - 3) The bearing direction digits are flashing,
 - 4) The compass is used in a location that is apart from the place in which the compass has been calibrated,
 - 5) The user intends to maintain the precision of the digital compass.

How to Calibrate the Compass

- The compass calibration includes two different processes: Rotation Calibration Mode and Magnetic Declination Setting.
- It is advisable to conduct both calibrations from time to time to achieve a more accurate reading.

IMPORTANT: If the compass has not been calibrated, the direction made by the compass may be inaccurate.

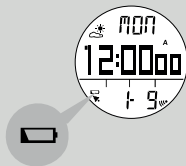
12.8 Calibrating the compass - Compass Rotation Calibration Mode



Rotation Calibration Display

- To select the Rotation Calibration Display, hold the [M] button in the Compass Mode.
- To start rotation calibration, press [S/S] button once.
- Start turning the watch (keep your watch horizontally) in the same direction.
- Rotate the watch until the rectangular pattern is filled.
- The word "Done!" will be shown when finishes.

13.0 Low Battery Indication & Battery Replacement



Low Battery Indication

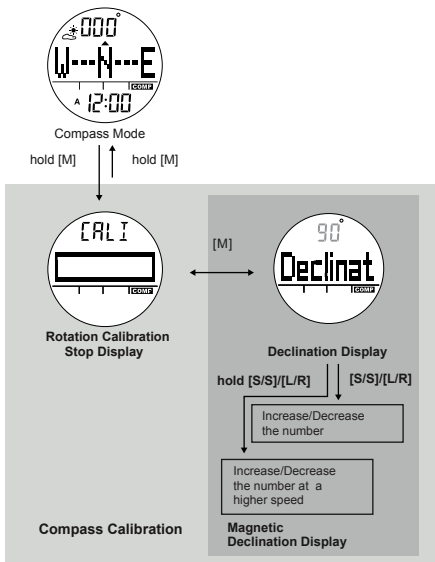
Low Battery Detection

- When the battery-low indicator appears on the display, it means that the capacity of the battery is low. It is recommended to replace the battery with a new CR2032 battery.
- However, if the appearance of battery-low indicator is caused by using the Watch under very cold condition, the indicator will disappear when normal temperature returns.

NOTE: It is recommended to complete the battery replacement by a certified service agency because this Watch contains delicate electronic sensors and components.

NOTE: The memory will be cleared when the battery is replaced. Follow the previous section "Calibrating the Compass" to calibrate the compass before using the Compass.

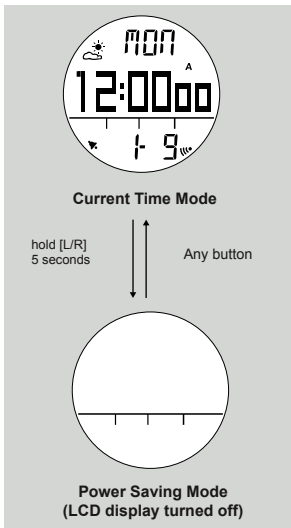
12.9 Calibrating the compass - Magnetic Declination Mode



Magnetic Declination Mode

- Check the coming section "Magnetic Declination at Major Cities" to choose the magnetic declination of the city which is close to your current position. The angle will be input into the Watch during the calibration.
- To select Magnetic Declination Display, press the [M] button in Rotation Calibration Display.
- When the current magnetic declination appears, press the [S/S] or [L/R] button to increase/ decrease the number. (Hold down the button to change the number at a higher speed).
- When the setting is completed, hold the [M] button to confirm the setting and exit the adjustment display.

14.0 Power Saving Mode



Power Saving Mode

- This Watch has a Power Saving Function which can turn off the LCD display so that the battery can last longer.
- In the Power Saving Mode, the watch function is still working normally. (i.e. The timekeeping function is still running in Power Saving Mode.)

How to enter/exit the Power Saving Mode

- To enter the Power Saving Mode, hold down the [L/R] button in Current Time Mode for about 5 seconds and the LCD display will be turned off.
- Press any key in Power Saving Mode to exit this mode and the LCD display will be resumed.

15.0 Specifications

Current Time Mode

- Normal Time with month, day, day of week, hour, minute and second display

Time System

- 12-hour or 24-hour format

Calendar System

- MM/DD or DD/MM format
- Auto-Calendar pre-programmed from the year 2000 to 2099

Dual Time function

Weather Forecast

- 4 symbols to indicate the predicated weather

Daily Alarm Mode

- 2 daily alarms

Alarm Sound

- Sounds for 30 seconds at preset time of real time clock

Chronograph Mode

- Resolution: 1/100 second

Measuring Range

- 99 hours 59 minutes 59.99 seconds

Measuring Mode

- 10 laps memory
- Recall Lap memory and total time

Count Down Timer

- Resolution: 1 second

Measuring Range

- 99 hours 59 minutes 59 seconds

Time Sound

- Last 10 minutes beeps once per minute
- Last 1 minutes beeps once per 10 seconds
- Last 5 seconds beeps once per second
- Sounds for 30 seconds when counting to zero

Temperature

Resolution

- 0.1°C
- 0.1°F when below 100°F, 1°F when above >100°F.

Range:

- -10 ~ +60 °C / 14 ~ +140°F

Unit

- °C / °F

Altimeter Mode

Measuring range

- -706 to +9164 meter / -2316 to 30065 feet

Unit

- 1m (1 ft)

History Recall

- 34 hourly history data (altitude and temperature)

15.0 Specifications

Display

- Graphical display for altitude tendency

Track Mode

Display

- Track altitude difference
- User selectable on/off
- Show max/min altitude, max/min temperature, accumulated altitude ascent/descent along the track.

Barometer Mode

Resolution

- 0.1mb / 0.1 hPa / 0.01 inHg

Measuring range

- 300 to 1100 mb (hPa) / 8.86 to 32.48 inHg

Unit

- mb/hPa/inHg

History Recall

- 34 hourly history data (sea level pressure & temperature)

Display

- Graphical display for sea level pressure tendency

Other

- Pressure offset adjustable

Compass Mode

Resolution

- 1°

Display

- Cardinal direction in scrolling matrix

Backlight

- Electro - Luminescent (EL) backlight

Other

- Hourly chime
- Key tone ON/OFF
- Power saving mode
- Low battery detection