

Functions:

(1) On/off

- Press "on/off" button to switch on.
A beep sound occurs indicating the unit is switched on.
LCD display shows all functions for a seconds and then turn to normal mode.
- In normal mode, the display shows reading of:
 - pressure: in the unit of mb (mbar) (or inHg).
 - height: shows in the unit of m (meter) (or ft).
 - temperature: shows in the unit of °C (or °F).
 - direction: shows in whole circle bearing, e.g. 255° (or compass bearing e.g. S75°W (=255°)
 - time: shows and starts time at 12 hour format e.g. 12:00:00 am (or 24 hour format).
 - calendar: shows in d/m with day (or m/d).
 - bar graph
 - weather forecast: show in graphic icon

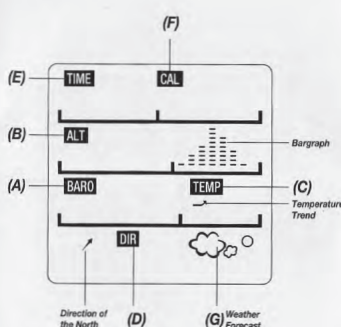
To operate under the scope of the above (i) to (viii), press "mode" to switch as following:

- "BARO", "ALT", "TEMP", "DIR", "TIME" and "CAL".
- "BARO", "ALT", "TEMP", "TIME" and "CAL".

- Press and hold "on/off" for 3 seconds to switch off.



(A) - (G): "Function" Display



Measurement and Display function

(A) Pressure

To look for BARO information:

- Press "mode" to pressure mode.
"BARO" appears, Bar graph for the pressure trend of previous 12 hours shows.
Press "mode" again to exit and switch to the "ALT" mode.

- BARO mode includes following functions:
 - Real-time pressure reading in mb (hPa) or inHg.
 - Pressure trend reading (past 12 hours readings)

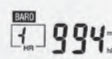
To switch between (a) and (b), press "+" and "-" together

(3) Air pressure unit switchable

- Go to (2a)
- Press together "set" and "+" to switch between mb (hPa) and inHg.

(4) Pressure Trend (past 12 hours reading)

- Go to (2a)
- Display will show one pressure reading for the previous past hour with "- 1hr" next to the reading.
- Press "+" or "-" to check record of reading in other hours within the past 12 hours.



(B) Altitude

To look for ALT information:

- Press "mode" to altimeter mode.
"ALT" appears, Bar graph for the altimeter trend of previous 12 hours shows.
Press "mode" again to exit and switch to the "TEMP" mode.

- ALT mode includes following functions:
 - Real time altimeter reading in m or ft
 - Max/min altimeter memory recalling
 - Altitude Trend (past 12 hours reading)
 - High/low altimeter alarm
 - Current ascent/descent rate in ft/hr or m/hr
 - Ascent/descent differential altitude Δ_↑, Δ_↓; Δ_↑H, Δ_↓H
 - Accumulative ascent/descent altitude Σ_↑, Σ_↓; Σ_↑H, Σ_↓H

To switch between (a) and (g), press "+" and "-" together

(3) Altitude unit switchable

- Go to (2a)
- Press together "set" and "+" to switch between m or ft.

(4) Setting a reference altitude

The altimeter uses the pressure sensor to detect the current air pressure, which is then used to estimate the current altitude. The unit is pre-programmed with preset values, which are used to convert air pressure reading to altitude values. If a reference altitude is used, the unit will calculate relative altitude based on the reference altitude (not the preset value). After a reference altitude is set, the unit adjusts the air-pressure-to-altitude conversion calculation accordingly. The altitude measurements calculated is subjected to error caused by the change in air pressure. Therefore updating the reference altitude whenever one is recommended.



- Go to (2a)
- Press and hold "set", "OFF" displays, which representing the reference altitude is not in use.
- Press "+" or "-" to turn on the reference altitude setting and "On" display.
- Press "set" to confirm, real time altitude flashing.
- Press "+" once to increase one digit or press and hold "+" for acceleration of increments.
- Press "-" once to decrease one digit or press and hold "-" for acceleration of increments.
- Press "set" to confirm and real time altitude change to the preset reference altitude.
- If no reference altitude is set and turn off, the unit uses the preset value for altitude calculation.

(5) Switch on/off altitude measurement

In order to save battery life, user can switch off the measurement of altitude.

- Go to (2a). Press "set" and "-" to switch off the measurement of altitude.

- Display reads "----" It stops the measurement of altitude.

- When the measurement is stopped, the unit keeps updating the altitude for every 15 minutes (same as the pressure measurement).

- Press "set" and "-" together in (2a) to switch on the measurement again. Display reads real time reading immediately and update every second immediately.

- Should the measurement is switched off, the unit will still convert the altitude by the pressure value in every 15 minutes and bar graph will also be updated accordingly.

- Should the measurement is switched off, other value in (2a) to (2g) will keep as last reading.

(6) Altitude max/min memory recalling

- Go to (2c), display shows the maximum reading.
- Press "+" to show maximum altitude tested. "MAX" shows on the display.
- To clear the memory, in (6i), press and hold "set" the reading reset the memory to 0 (a beep sound) and start to record the maximum reading.
- Press "-" to show minimum altitude tested. "MIN" shows on the display.
- To clear the memory, in (6iv), press and hold "set" the reading reset the memory to 0 (a beep sound) and start to record the maximum reading.
- Press "+" and "-" together to (2c).

(7) Altitude Trend (past 12 hours reading)

- Go to (2c). Display will show one altimeter reading for the previous past hour with "- 1hr" next to the reading.
- Press "+" or "-" to check record of reading in other hours within the past 12 hours.

(8) High/low altimeter alarm

- Go to (2c), display shows flashes "AL".
- Press and hold "+" to set and check high alarm, "AL" and "HI" flashes. -700m or previous reading shows on the display; or
- Press and hold "-" to set and check low alarm, "AL" and "LOW" flashes. -700m or previous reading shows on the display.
- To set the alarm, Press "+" or "-" to set the desired alarm setting: -700m → 9000m → -700m, each press 10th, continue press 100th.
- Press and hold "set" to confirm and the display returns to (2a) real time reading and shows "HI" or "LOW"
- When the reading reaches the alarm setting, alarm beep turns on for 15 times, "HI" or "LOW" flashing.

- Press any key to stop the alarm and "HI" or "LOW" stops flashing; or it stops automatically after 15 times.
- To delete high alarm setting, press "set" and "+" in (2d) to delete high alarm set, "HI" disappear; or
- To delete low alarm setting, press "set" and "-" in (2d) to delete low alarm set, "LOW" disappear.
- Press "+" and "-" to exit and switch to (2e).

(9) Current ascent/descent rate

- Go to (2e), display shows the current ascent rate. "Δ" shows on the display.
- Press "-" to show current descent rate. "Δ" shows on the display.
- Press "+" and "-" together to return to (2f).

(10) Ascent/descent differential altitude

- Go to (2f), display shows the ascent differential altitude reading. "ΔH" and "Δ" shows on the display.
- Press "+" to show ascent differential altitude reading. "ΔH" and "Δ" shows on the display.
- To clear the memory, in (10i), press and hold "set", the reading reset to 0 and start to record the ascent differential altitude reading.
- Press "-" to show descent differential altitude reading. "ΔH" and "Δ" shows on the display.
- To clear the memory, in (10iv), press and hold "set" the reading reset to 0 and start to record the descent differential altitude reading.
- Press "+" and "-" together to switch (2g).

(11) Accumulative ascent/descent altitude

- Go to (2g), display shows the accumulative ascent altitude reading. "Σ" and "Δ" shows on the display.
- Press "+" to show accumulative ascent altitude tested. "Σ" and "Δ" shows on the display.

(C) Temperature

To look for TEMP information:

- Press "mode" to TEMP mode.
"TEMP" appears.
Press "mode" again to exit and switch to "DIR" (or "TIME") mode.

(2) TEMP mode includes following functions:

- Real-time temperature reading; and
- Temperature trend (An arrow shows on the display representing the temperature is)

- rising; or ↗
- steady; or →
- down going ↘

(3) °C/°F switchable

- Go to (2a)
- Press together "set" and "+" to switch between °C and °F.

(4) Temperature max/min memory recalling

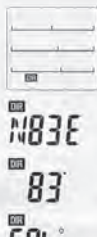
- Go to (2a)
- Press "+" to show maximum temperature tested. "MAX" shows on the display.
- Press "-" to show minimum temperature tested. "MIN" shows on the display.
- Press and hold "set" to clear memory individually. Display returns to real time in 5 secs.



(D) Direction

To look for Compass information:

- (1) Press "mode" to DIR mode.
 appears. Press again to exit and switch to "TIME" mode.
- (2) DIR mode includes following functions:
 - (a) Real time direction reading in whole circle bearing or compass bearing
 - (b) Calibration function
- (3) Type of bearing switchable
 - (i) Press "set" and "+" to switch between different types of bearing.
- (4) Calibration
 - (i) In "DIR" mode, Press and hold "set", "CAL" appears.
 - (ii) Turn the unit for 360 degree horizontally.
 - (iii) Press and hold "set" to confirm and exit to real-time compass.
- (5) Sleep mode
 - (i) When the unit is in the compass mode, it starts to measure and update the direction every second for 1 minute.
 - (ii) Afterward the display read "----".
 - (iii) In compass mode, press "set" to reactivate the unit to measure and update the direction every second for 1 minute; or
 - (iv) Press "mode" to exit and re-enter to the DIR mode again.



(E) Time

To look for TIME information:

- (1) Press "mode" to time mode.
 shows on the display. Press "mode" again to exit and switch to "CAL" mode.
- (2) TIME mode includes following function:
 - (a) Real time clock
 - (b) Alarm time setting ( shows on the display)
 - (c) Timer (count up and count down):  shows on the display
- To switch between (a) to (c) one by one, in TIME mode press together "+" and "-" for each switching.
- (3) 12/24switchable
 - (i) Go to (2a),
 - (ii) Press together the "set" and "+" to switch between 12/24 time format.
- (4) Clock Set
 - (i) Go to (2a), press and hold "set". Hour digits flash.
 - (ii) Press "+" or "-" to set hour digits. Press "set" to confirm. Minute digits flash.
 - (iii) Press "+" or "-" to set minute digits. Press and hold "set" to confirm and go back to real time mode. Second digits return to 00.
- (5) Alarm and snooze On/Off
 - (i) Go to (2b), press and hold "set" to get into the alarm mode. Hour digits flash.
 - (ii) Press "+" or "-" to set hour digits. Press "set" to confirm. Minute digits flash.



(4) Language for Day and Calendar set

- (i) Go to (2a), "d/m" or "m/d" shows.
- (ii) Press and hold "set", display shows "E" representing English for day showing.
- (iii) Press "+" or "-" to select the language. Display show as following: "E" → "D" → "F" → "I" → "S" → "E"



You can select E for English, D for German, F for French, I for Italian or S for Spanish. They are shown in the language chart below.

Language	Day-of-the-week						
	Mon	Tues	Wed	Thur	Fri	Sat	Sun
English	E	Mo	Tu	We	Th	Fr	Sa Su
German	D	Mo	Di	Mi	Do	Fr	Sa So
French	F	Lu	Ma	Me	Je	Ve	Sa Di
Italian	I	Lu	Ma	Me	Gi	Ve	Sa Do
Spanish	S	Lu	Ma	Mi	Ju	Vi	Sa Do

- (iv) Press "set" to confirm and month digits flash first. Press "+" or "-" to set month. Press "set" to confirm. Then date digits flash.
- (v) Press "+" or "-" to set date. Press and hold "set" to confirm and go back to real time mode.
- (vi) Go to (2b). "yr" shows and 4 places digit shows also.
- (vii) Press and hold "set", the last 2 digits of year flash (the first 2 digits "20" will not flash). Press "+" or "-" to set year from "00" to "99".
- (viii) Press and hold "set" to confirm and go back to real time mode.

(iii) Press "+" or "-" to set minute digits.

- (iv) When time is reached,  flashes and beeping sound of alarm will last for 1 minute. Press any key to stop the alarm.
- (v) To get into the alarm with snooze mode, press "set" again, both  &  flashes.
- (vi) When time is reached,  flashed and stop it by pressing any key. While  start flashing. Snooze will sound for every 5 minutes and repeat for 5 times.
- (vii) Press "set" to cancel both function mode  & .
- (viii) Press "+" and "-" to return to the real time mode.



(6) Timer Set (23:59s)

- Go to (2c),  flashes. Time digits "0:00:00" show on the display.
- (7) Count up
 - (i) Press "mode" to start count up.
 - (ii) Press "mode" to pause/stop and re-start.
 - (iii) May press together "+" and "-" to go to other time mode during counting while the  flashes during counting.
- (8) Count down
 - (i) Press and hold "set". Hour digits flash. Press "+" or "-" to set hour digit. Press "set" to confirm. Minute digits flash.
 - (ii) Press "+" or "-" to set minute. Press "set" to confirm. Second digits flash.
 - (iii) Press "+" or "-" to set second. Press "set" to confirm.
 - (iv) When setting is confirmed, all digit stop flashing and all are set well.

- (v) When all digits are set well. Press "mode" to start count down.
- (vi) Press "mode" to pause and re-start.
- (vii) During counting, may press together "+" and "-" to go to other time function and  flashes during count down.
- (viii) When time is reached, it sounds for 1 minute and digit remain "0:00:00". Or press any key to stop beeping when time is reached.
- (ix) Press "mode", the last setting will display. Simply press "mode" again to start count down again.

- (9) Timer clear
 - (i) In timer  mode, press "mode" to pause counting. Then press "set" to clear. Timer digits return to "0:00:00"

(F) Calendar

To look for CALENDAR information:

- (1) Press "mode" to CAL mode.
 will appear.
- (2) CAL mode includes :
 - (a) date and month showing (d/m or m/d) with day
 - (b) year showing (2000-2059)
- To switch between (a) and (b), press "+" and "-" together.
- (3) Switchable d/m or m/d
 - (i) Go to (2a), press together "set" and "+" to switch between "d/m" or "m/d".



Maintenance/ Precautions

- Do not leave the Main Unit exposed to direct sunlight when the unit is not in use.
- Do not disassemble the Main Unit and sensor.
- Check relative position of sensor periodically.
- For cleaning, use neutral detergent on soft cloth, and wipe off later with dry cloth. Do not apply paint thinner, benzene, or alcohol, to avoid damages on the surface.
- If there is mud, sand or clog-like between the button and the body, the movement of the button may be disturbed. Softly wash away such objects with water.

Specification

- Air Pressure**
 Pressure Range: 300 ~ 1100mb (hPa); 8.85inHg ~ 32.45inHg
 Resolution: 1 mb/hPa; 0.01inHg
 Sensing Time: 15 minutes
- Altitude**
 Altitude Range: -700m ~ +9000m; -236ft ~ +2952ft
 Resolution: 0.1m for -500.0m to 999.9m; otherwise 1m
 Sensing time: 2 sec.
 (Sensing time under sleep mode is 15 minutes)
- Temperature**
 Temperature range: -10°C ~ +60°C or +14°F ~ +140°F
 Resolution: 0.1°C or 0.1°F
 Sensing Time: 1 min
- Direction**
 Range: 0-359°
 Resolution: 1°
 Sensing time: 1 sec for 1 min
 Unit: whole circle bearing, e.g. 255°
 (for compass bearing e.g. S75W (=255))

(G) Weather forecast

To look for Weather forecast

(It will be shown on the display by all time. Includes icons of the following)

- (i) sunny 
- (ii) partly cloudy 
- (iii) cloudy 
- (iv) rainy 
- (v) thunder storm 
- (vi) moon and star 



Backlight

- (i) Press "B/L" to turn on the backlight.
- (ii) Press again to switch off. Or it will turn off automatically after 10 seconds.

Battery Replacement

Turn the Main Unit over. Use a coin or similar opener to open cover. Insert a new batteries (2 x 3 volts "CR2032" size or equivalent) as the direction indicated. Close the cover.

