



M O M E N T U M®

AUTHENTIC OUTDOOR WATCHES

**VS-3 ABC (ALTIMETER-BAROMETER-COMPASS) WATCH
OPERATING INSTRUCTIONS - ENGLISH**

**PRESS & HOLD
ALL BUTTONS
TO ACTIVATE
THE WATCH
DISPLAY**



EL

BAROMETER

COMPASS

MODE

ALTIMETER

VS-3 ABC Watch

QUICK START MANUAL

ENGLISH

For full specifications, technical support, FAQs, manuals in additional languages or warranty information, please visit www.momentumwatch.com or call 1.800.663.1881

Warnings & Cautions

PLEASE READ all information in this instruction manual before using this unit.

Please keep in mind, your watch is a sensitive technical instrument. With proper care and maintenance, it will last for many years. However, improper care and handling can cause the various sensors to be damaged and will harm the functioning capabilities.

WARNING: This product is NOT designed to be used as a PRIMARY altitude instrument for flying, skydiving, hang gliding or other sports where sudden significant changes in altitude may occur or when there is a need for industrial precision.

WARNING: This product is an advanced training and fitness tool. Before starting any exercise program, we strongly suggest you visit your doctor for a complete physical and to discuss your exercise plans.

NEVER push the buttons underwater, when the watch is wet or when you are cleaning or rinsing the unit. You are actually pushing water inside the watch.

DO NOT use the watch in a hot tub or extremely hot shower/bath. High temperatures and steam can damage the rubber seals.

DO NOT expose the watch to sudden changes of temperature by going from a hot tub to cold water. This can make the rubber seals contract and allow water to penetrate.

DO NOT wear the watch in soapy dish water or bubble baths. The alkali contained in soaps can damage the rubber seals.

DO NOT use cleaning solvents to clean your watch. Solvents WILL damage the integrity of the plastic. The watch can be wiped clean with a lightly moistened cloth.

ALWAYS rinse the watch with clear tap water after exposure to salt water. Salt is highly corrosive and can damage both the rubber seals and the watch case.

PROTECT the watch from extreme heat, shocks and excessive exposure to direct sunlight.

NEVER expose the watch to strong chemicals such as gasoline, cleaning solvents, acetone, alcohol, insect repellent, sunscreen and other toiletries, as they may damage the unit.

KEEP the unit out of the reach of children and pets. The unit contains small parts that might be swallowed.

Battery Information:

Signs of a failing / dying battery are a fading or blank display (especially when the backlight is active) and/or inaccurate readings.

Using a coin, remove the battery coin hatch. Remove the old CR2032 battery & replace it with a new CR2032 battery. Be sure the battery is in the correct polarity position – positive (+) side of the battery is visible. Replace the battery coin hatch carefully; ensure the coin hatch is properly replaced or the water resistance will be affected and could VOID THE WARRANTY.

NOTE: Keep watch batteries away from children and pets.

NOTE: This product contains a button-cell battery. If swallowed, contact a physician immediately; severe damage or death may occur.

NOTE: Watch batteries contain chemical substances. Dispose of the watch, battery and all components according to local regulations. Unlawful disposal can contribute to environmental pollution.

NOTE: Do not place battery in fire; the battery may explode.

NOTE: Special handling may apply. See www.dtsc.ca.gov/hazardouswaste/perchlorate.

BE AWARE: Lithium batteries of the type used in this unit are very susceptible to improper storage. Many times, batteries purchased as new are dead or weak before they are purchased. If you try a new battery and problems persist, please try a second battery from another source, just to be certain.

Primary Modes of Operation

Each primary mode has a dedicated button. To enter one of the four primary modes, press the corresponding button.

TIME > ALTIMETER > BAROMETER > COMPASS

PRESS THE MODE BUTTON TO ENTER TIME MODE

PRESS THE ALTI BUTTON TO ENTER ALTIMETER MODE

PRESS THE BARO BUTTON TO ENTER BAROMETER MODE

PRESS THE COMP BUTTON TO ENTER COMPASS MODE



TIME



ALTIMETER



BAROMETER



COMPASS



In any mode, PRESS the LIGHT button to illuminate the display for 5 seconds.

In TIME mode, PRESS & HOLD the LIGHT button to activate / deactivate the BUTTON LOCK feature:

Primary Modes of Operation: Time

NOTE: To ensure accurate TIME mode information is displayed, please follow the SETTING instructions (see Secondary Modes of Operations: Settings).

View Time Display Presets:

- PRESS MODE to enter TIME mode, PRESS MODE to toggle through the 3 TIME display presets:



Primary Modes of Operation: ALTIMETER

NOTE: To ensure accurate ALTIMETER mode information is displayed, please follow the SETTING instructions (see Secondary Modes of Operations: Settings).

- PRESS ALTI to enter ALTIMETER mode. The word ALTIMETER will display for 3 seconds, then segue into ALTIMETER mode.



1. Altimeter Graph

2. Altimeter Differential

3. Current Altitude

4. Current Time



Altitude Falling



Altitude Rising

USING THE ALTIMETER DIFFERENTIAL (# 2 above):

- In ALTIMETER mode, PRESS & HOLD LIGHT to reset the DIFFERENTIAL reading to zero - this is considered your reference location.

The ALTIMETER DIFFERENTIAL will display the 'difference in altitude' that has occurred between the reference location (zero) and your current location.

Example: You are about to leave Base Camp # 1 (altitude is 50 meters) and climb to Base Camp # 2. You want to measure the altitude between the two camps, so you reset the DIFFERENTIAL and start climbing. You arrived at Base Camp # 2 and your DIFFERENTIAL now displays 100 meters, so 100 meters is the difference between Base Camp # 1 and Base Camp # 2. The ACTUAL altitude (displayed in the center) will be 150 meters (the original altitude (50 meters) + the differential (100 meters)).

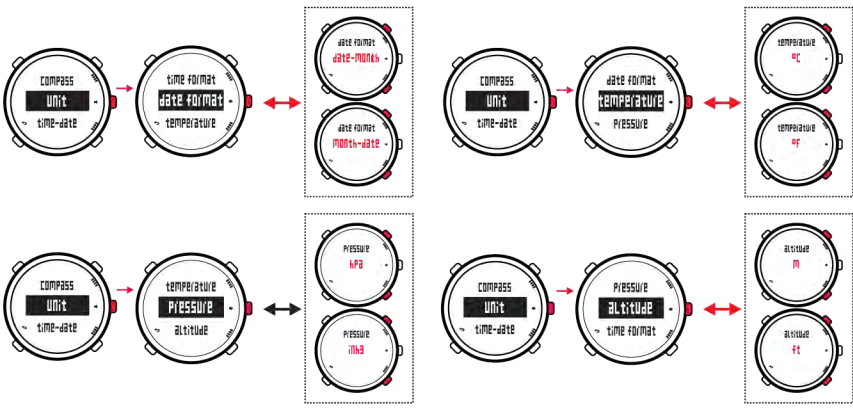


SETTING UNITS OF MEASURE / FORMATS

- From the Settings Sequence, **PRESS COMP** to enter the UNIT setting sequence.
- **PRESS ALTI** and / or **BARO** to toggle through the UNIT settings.

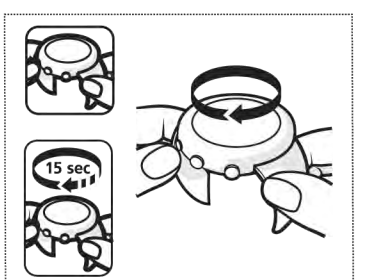
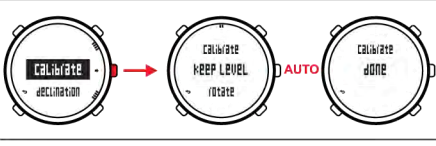
The selected setting will be highlighted in the display:
TIME FORMAT > DATE FORMAT > TEMPERATURE > PRESSURE > ALTITUDE

- **PRESS COMP** to select the variable for editing, then **PRESS ALTI** and / or **BARO** to make changes.
- **PRESS COMP** to move to the next setting.
- When all UNIT setting variables are programmed, **PRESS MODE** to return to the SETTING SEQUENCE.



COMPASS CALIBRATION

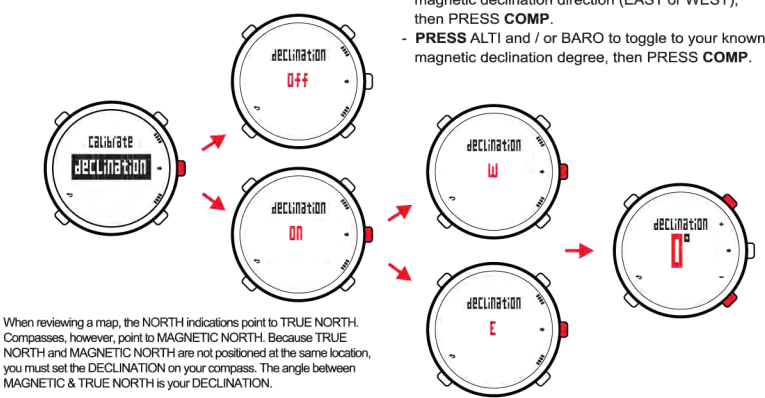
- From the Settings Sequence, **PRESS COMP** to enter the COMPASS setting sequence.
- Find a known cardinal point (using an analog compass). If the digital compass displays an accurate reading, there is no need to calibrate. If the reading is incorrect, follow the instructions below.
- **PRESS ALTI** and / or **BARO** until **CALIBRATE** is highlighted, then **PRESS COMP** to enter the CALIBRATION sequence.



- Keeping the watch level, **ROTATE** the watch clockwise two times. Each revolution will appear approximately 15-20 seconds. The word **DONE** will take in the display to denote that the calibration was successful.

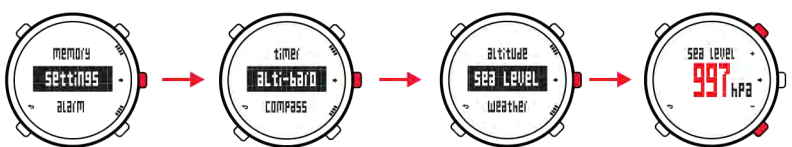
SETTING DECLINATION

- To continue to the magnetic declination setting, **PRESS ALTI** / **BARO** until the word **DECLINATION** is highlighted, then **PRESS COMP** to enter the DECLINATION sequence.
- **PRESS ALTI** and / or **BARO** to activate the magnetic declination, then **PRESS COMP**.
- **PRESS ALTI** and / or **BARO** to toggle to your known magnetic declination direction (**EAST** or **WEST**), then **PRESS COMP**.
- **PRESS ALTI** and / or **BARO** to toggle to your known magnetic declination degree, then **PRESS COMP**.



When reviewing a map, the NORTH indications point to TRUE NORTH. Compasses, however, point to MAGNETIC NORTH. Because TRUE NORTH and MAGNETIC NORTH are not positioned at the same location, you must set the DECLINATION on your compass. The angle between MAGNETIC & TRUE NORTH is your DECLINATION.

ALTIMETER / BAROMETER CALIBRATION



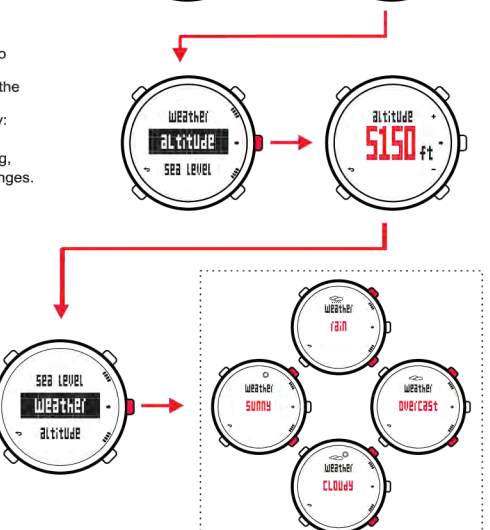
- From the Settings Sequence, **PRESS COMP** to enter the ALTI-BARO setting sequence.
- **PRESS ALTI** and / or **BARO** to toggle through the ALTI-BARO settings.

The selected setting will be highlighted in the display:
SEA-LEVEL > WEATHER > ALTITUDE

- **PRESS COMP** to select the variable for editing, then **PRESS ALTI** and / or **BARO** to make changes.
- **PRESS COMP** to move to the next setting.
- When all UNIT setting variables are programmed, **PRESS MODE** to return to the SETTING SEQUENCE.

Most inaccurate ALTIMETER READINGS result from incorrect BAROMETRIC calibrations. To avoid this discrepancy, the BAROMETRIC PRESSURE is only customizable from 900-1100hPa. However, the watch has a working range from 300-1100hPa, so if the BAROMETRIC PRESSURE drops, the watch will display the correct pressure within the 300-1100hPa range.

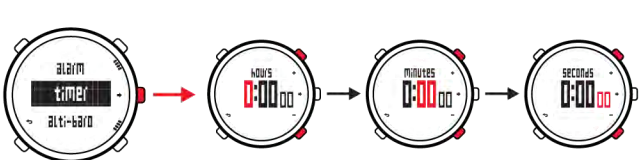
The WEATHER FORECAST ICONS will display the 'predicted' weather (based on barometric pressure) for the next 12 hours (i.e. if the watch displays the rain icon, this means that rain is likely in the next 12 hours). This is only a prediction, so please make sure to regularly check the local weather for updated information.



SETTING COUNTDOWN TIMER

The watch has 100-Hour Countdown Timer (99:59:59).
NOTE: The Countdown Timer can set (in the SETTING SEQUENCE) if it is currently in use (TIMER mode).

- From the Settings Sequence, **PRESS COMP** to enter the TIMER setting sequence.
- The Countdown timer will flash in the display: **HOURS > MINUTES > SECONDS**
- **PRESS ALTI** and / or **BARO** to make changes.
- **PRESS COMP** to move to the next value.
- When all variables are programmed, the watch will return to the SETTING SEQUENCE.



SETTING ALARMS

The watch has 3 independent alarms and an hourly chime.

Alarm 1 and Alarm 2 can be set as a DAILY, MONDAY-FRIDAY or OFF.

Alarm 3 can be set to a future date and time (i.e. birthday, anniversary, important meeting, holiday, etc).

Hourly Chime beeps at the top of each hour.

- From the Settings Sequence, **PRESS COMP** to enter the ALARM setting sequence.

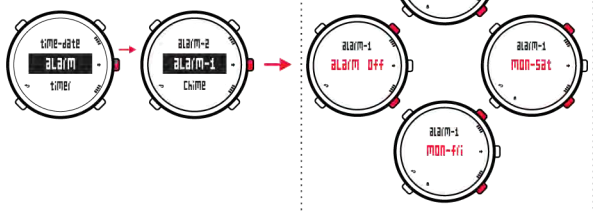
The variable being programmed will be highlighted in the display :

CHIME > ALARM 1 > ALARM 2 > ALARM 3

- **PRESS COMP** to select the variable for editing, then **PRESS ALTI** and / or **BARO** to make changes.
- **PRESS COMP** to move to the next setting.
- When all UNIT setting variables are programmed, **PRESS MODE** to return to the SETTING SEQUENCE.

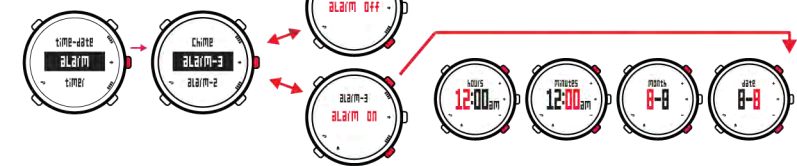
Setting Alarm 1, Alarm 2 and the Hourly Chime:

NOTE: To activate / deactivate the Hourly Chime, simply toggle ON / OFF; no additional set-up is required. If active, the CHIME will automatically sound at the top of every hour.



To activate the ALARM SETTING INFORMATION (for Alarm 3), the ALARM must be turned ON. If OFF is selected, the turning ALARM SETTING INFORMATION will not appear.

Setting Alarm 3:



Secondary Modes of Operations: Alarm

In ALARM mode, the alarms and chime can be activated / deactivated.

NOTE: The alarm times cannot be SET in ALARM mode. To set the ALARM TIMES, return to the SETTING SEQUENCE (as noted earlier in the manual).

- **PRESS MODE** to enter TIME mode.
- **PRESS & HOLD MODE** to enter the Secondary Mode Sequence.
- **PRESS ALTI** and / or **BARO** to toggle through the Secondary Modes until ALARM is highlighted.
- **PRESS COMP** to enter ALARM mode.

The alarm / chime being viewed will appear in the display:

CHIME > ALARM 1 > ALARM 2 > ALARM 3

- **PRESS ALTI** and / or **BARO** to toggle through the alarms, then
- **PRESS COMP** to select the desired value (type of alarm, alarm on / off).

NOTE: A small bell icon will appear in the display to denote that the alarm / hourly chime has been activated.

- When all variables are programmed, **PRESS MODE** to return to the Secondary Mode Sequence.

Secondary Modes of Operations: Stopwatch

The watch is equipped with a 100-Hour Stopwatch with split measurement capability.

NOTE: A small stopwatch icon will appear in the display when the STOPWATCH is active.

- **PRESS MODE** to enter TIME mode.
- **PRESS & HOLD MODE** to enter the Secondary Mode Sequence.
- **PRESS ALTI** and / or **BARO** to toggle through the Secondary Modes until STOPWATCH is highlighted.
- **PRESS COMP** to enter STOPWATCH mode.

USING THE STOPWATCH:

- **PRESS COMP** to START (the word RUN will appear in the display) and / or STOP (the word STOP will appear in the display) the STOPWATCH.
- To take a split, **PRESS BARO** (the word SPLIT will appear in the display with the SPLIT TIME).

NOTE: When you take a split, the STOPWATCH will continue to measure TOTAL TIME.

- When the split time measurement is finished, **PRESS BARO** to return to the RUN.
- To RESET the STOPWATCH, **PRESS COMP** to STOP the STOPWATCH, then **PRESS & HOLD BARO** to RESET.
- **PRESS MODE** to return to the Secondary Mode Sequence.

Secondary Modes of Operations: Timer

The watch is equipped with a customizable Countdown Timer (up to 99:59:59).

NOTE: The countdown time cannot be SET in TIMER mode. To set the COUNTDOWN TIME, return to the SETTING SEQUENCE (as noted earlier in the manual).

- **PRESS MODE** to enter TIME mode.
- **PRESS & HOLD MODE** to enter the Secondary Mode Sequence.
- **PRESS ALTI** and / or **BARO** to toggle through the Secondary Modes until TIMER is highlighted.
- **PRESS COMP** to enter TIMER mode.

USING THE TIMER:

- **PRESS COMP** to START and / or PAUSE the TIMER.

NOTE: A small clock icon will appear in the display when the TIMER is active.

NOTE: If the TIMER is PAUSED, the watch will default back to TIME mode after approximately 30 seconds.

- Once the TIMER reaches the set time, an alert will sound for approximately 5 seconds and the TIMER will **reset automatically**.
- If the TIMER was PAUSED and you wish to **reset manually** (the word PAUSE will appear in the display), **PRESS & HOLD BARO** to RESET.
- **PRESS MODE** to return to the Secondary Mode Sequence.

Secondary Modes of Operations: World Time

The watch is equipped with a World Time mode that displays the TIME OF DAY in 48 cities around the world (relative to your current Time of Day).

- **PRESS MODE** to enter TIME mode.
- **PRESS & HOLD MODE** to enter the Secondary Mode Sequence.
- **PRESS ALTI** and / or **BARO** to toggle through the Secondary Modes until WORLDTIME is highlighted.
- **PRESS COMP** to enter WORLDTIME mode.

NOTE: Not all countries adjust their times for daylight savings (DST), so if DST is turned ON, some times may vary by one-hour.

- **PRESS ALTI** and / or **BARO** to toggle through 48 cities.
- **PRESS MODE** to return to the Secondary Mode Sequence.

Secondary Modes of Operations: Memory (Altimeter Log Books)

- **PRESS MODE** to enter TIME mode.
- **PRESS & HOLD MODE** to enter the Secondary Mode Sequence.
- **PRESS ALTI** and / or **BARO** to toggle through the Secondary Modes until MEMORY is highlighted.
- **PRESS COMP** to enter MEMORY mode.
- **PRESS ALTI** and / or **BARO** to toggle between either MANUAL or AUTOMATIC recordings, then **PRESS COMP**.

If a MANUAL recording is being reviewed, PRESS ALTI and / or BARO to toggle through to the desired recording.

The top line will show the RECORD NUMBER, the middle line will show the ALTITUDE (at the time of the recording) and the bottom line will automatically toggle between the time and date that the data was recorded.

If an AUTOMATIC recording is being reviewed, PRESS ALTI and / or BARO to toggle through to the desired recording, then PRESS COMP. PRESS ALTI to toggle through the FOUR data screens.

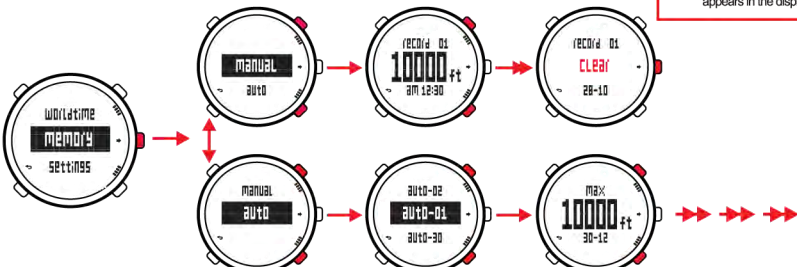
Screen 1: MAXIMUM ALTITUDE with time and date

Screen 2: MINIMUM ALTITUDE with time and date

Screen 3: TOTAL ASCENT with the date

Screen 4: TOTAL DESCENT with the date

To DELETE a RECORD, PRESS & HOLD COMP for 3 seconds or until CLEAR appears in the display.



ALTIMETER LOG OPERATION (MEMORY):

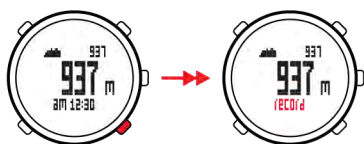
The Altimeter Data Log allows you to manually record up to 50 data files and automatically record up to 30 data files. To review the recorded altimeter data files, see **Secondary Modes of Operations: Memory**.

NOTE: The data files operate on a first in, first out platform. If more than 50 manual files or 30 automatic files are recorded, the oldest files will be deleted.

MANUAL RECORDINGS:

When a data file is manually recorded, the altitude, time and date (at the time of the recording) will be saved.

- In ALTIMETER mode, PRESS & HOLD ALTI until the word RECORD appears in the display.



AUTOMATIC RECORDINGS:

Automatic recordings are saved only when the watch is kept in ALTIMETER mode during an activity.

Example: You are going for a 2 hour hike and you want the altimeter data recorded for the duration. When you start hiking, make sure your watch is in ALTIMETER mode. Every ten minutes, the watch will automatically record the time and date, minimum and maximum altitude and the total ascent and descent (at the time of the recording). When the 2 hour hike is over, simply PRESS the MODE button and the data will be saved.

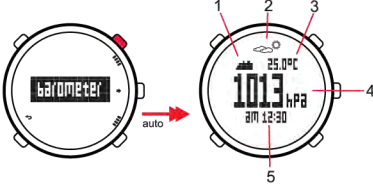
NOTE: The data is recorded every ten minutes and the watch will store up to 5 hours worth of data (30 automatic logs).

Remember: the data recordings operate on a first in, first out platform, so if your activity is over 5 hours long, the earliest data will be replaced by new data.

NOTE: If your ASC / DSC totals 99,999 ft (30,480 m), the automatic data recording will reset to zero.

Primary Modes of Operation: BAROMETER

NOTE: To ensure accurate BAROMETER mode information is displayed, please follow the SETTING instructions (see Secondary Modes of Operations: Settings).



1. Barometer Graph

2. Weather Prediction

3. Current Temperature

4. Current Pressure Reading

5. Current Time



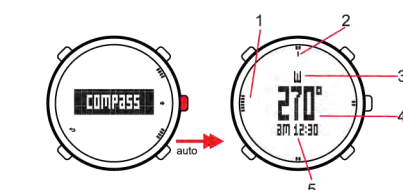
Pressure Falling



Pressure Rising

Primary Modes of Operation: COMPASS

NOTE: To ensure accurate COMPASS mode information is displayed, please follow the SETTING instructions (see Secondary Modes of Operations: Settings).



1. True North Indicator

2. Twelve O'Clock Direction

3. Current Cardinal Heading (Twelve O'Clock Direction)

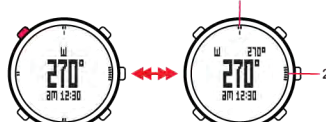
4. Current Directional Degree

5. Current Time

TARGET POSITION TRACKING

In COMPASS mode, the watch is equipped with a Target Location Lock, which allows you to select and 'lock' a specific Cardinal Heading and Directional Degree.

- In COMPASS mode, once a Target Location is selected, PRESS & HOLD LIGHT to 'Lock' and / or 'Unlock' the Target Location's Cardinal Heading and Directional Degree.



1. Target 'Locked' Location

2. True North Indicator

Secondary Modes of Operation

NOTE: To exit any portion of the Setting Sequence or Secondary Mode review, PRESS MODE until the watch returns to TIME mode.

- PRESS MODE to enter TIME mode.
- PRESS & HOLD MODE to enter the Secondary Mode Sequence.
- PRESS ALTI and / or BARO to toggle through the Secondary Modes.

The selected secondary mode will be highlighted in the display:

SETTINGS > MEMORY > WORLDTIME > TIMER > STOPWATCH > ALARM

- PRESS COMP to view settings within the selected Secondary View mode.
- To exit the Secondary Mode Sequence, PRESS MODE until the watch returns to TIME mode.



NOTE: After approximately 60 seconds of no button activity, the watch will default back to TIME mode.

Secondary Modes of Operations: Settings

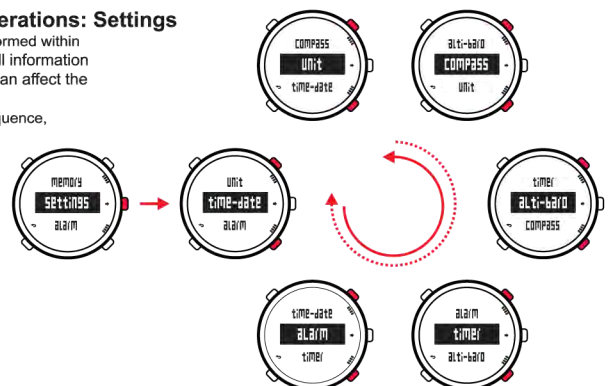
All settings and calibrations are performed within the SETTING mode. Please enter all information correctly, as incorrect information can affect the accuracy of data provided.

- From the Secondary Mode Sequence, PRESS COMP to enter the SETTING mode.
- PRESS ALTI and / or BARO to toggle through the settings.

The selected setting will be highlighted in the display:

TIME-DATE > UNIT > COMPASS > ALTI-BARO > TIMER > ALARM

- PRESS COMP to enter the highlighted Setting Sequence.



SETTING TIME & DATE

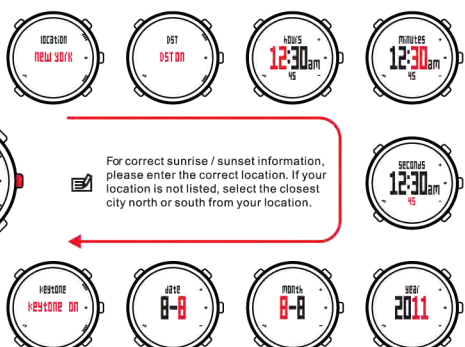
- From the Settings Sequence, PRESS COMP to enter the TIME-DATE setting sequence.

The variable being programmed will flash in the display (the first variable (location) is an exception - this will not flash):

LOCATION > DAYLIGHT SAVINGS

TIME > HOURS > MINUTES > SECONDS > YEAR > MONTH > DATE > KEY TONE

- PRESS ALTI and / or BARO to make changes.
- PRESS COMP to move to the next value.
- When all variables are programmed, the watch will return to the SETTING SEQUENCE.



For correct sunrise / sunset information, please enter the correct location. If your location is not listed, select the closest city north or south from your location.