

# **SUUNTO ESSENTIAL**


## USER GUIDE


1. SAFETY.....	4
2. Welcome.....	5
3. Introduction.....	6
4. Getting started.....	7
5. General settings.....	9
5.1. Changing units.....	9
5.2. Changing general settings.....	9
5.2.1. Button tone.....	9
5.2.2. Tone guides.....	9
5.2.3. Backlight.....	10
5.2.4. Language.....	10
5.2.5. Activating button lock.....	10
6. Using time mode.....	11
6.1. Changing time settings.....	11
6.1.1. Setting time.....	11
6.1.2. Setting date.....	11
6.1.3. Setting dual time.....	12
6.1.4. Setting sunrise and sunset times.....	12
6.2. Using stopwatch.....	12
6.3. Using countdown timer.....	12
6.4. Setting alarm.....	13
7. Using ALTI & BARO mode.....	14
7.1. How Alti & Baro works.....	14
7.1.1. Getting correct readings.....	14
7.1.2. Getting incorrect readings.....	14
7.2. Setting profiles and reference values.....	15
7.2.1. Matching profile to activity.....	15
7.2.2. Setting profiles.....	15
7.2.3. Setting reference values.....	15
7.3. Using weather trend indicator.....	16
7.4. Activating storm alarm.....	16
7.5. Using altimeter profile.....	17
7.5.1. Using altitude difference measurer.....	17
7.5.2. Recording logs.....	17
7.6. Using barometer profile.....	18
7.6.1. Recording logs.....	19
7.7. Using automatic profile.....	19
7.8. Using depth meter profile.....	20

7.8.1. Recording logs in depth meter profile.....	20
8. Using compass mode.....	21
8.1. Getting correct readings.....	21
8.1.1. Calibrating compass.....	21
8.1.2. Setting declination value.....	22
8.2. Using compass.....	22
8.2.1. Using bearing tracking.....	23
9. Using memory.....	24
9.1. Alti-baro memory.....	24
9.2. Viewing and locking logs.....	24
9.2.1. Viewing logs.....	24
9.2.2. Locking and unlocking logs.....	25
9.3. Choosing recording interval.....	25
10. Care and support.....	26
10.1. Handling guidelines.....	26
10.2. Replacing battery.....	26
10.3. Getting support.....	27
11. Specifications.....	28
11.1. Icons.....	28
11.2. Technical data.....	29
11.3. Warranty.....	29
11.4. CE.....	30
11.5. Patent notice.....	31
11.6. Trademark.....	31
11.7. Copyright.....	31

# 1. SAFETY

## Types of safety precautions:


 **WARNING:** - is used in connection with a procedure or situation that may result in serious injury or death.

 **CAUTION:** - is used in connection with a procedure or situation that will result in damage to the product.

 **NOTE:** - is used to emphasize important information.

## Safety precautions:

 **WARNING:** DO NOT USE FOR SCUBA DIVING.

 **WARNING:** ALLERGIC REACTIONS OR SKIN IRRITATIONS MAY OCCUR WHEN PRODUCT IS IN CONTACT WITH SKIN, EVEN THOUGH OUR PRODUCTS COMPLY WITH INDUSTRY STANDARDS. IN SUCH EVENT, STOP USE IMMEDIATELY AND CONSULT A DOCTOR.

 **CAUTION:** DO NOT EXPOSE TO RAPID TEMPERATURE CHANGES.

 **CAUTION:** DO NOT APPLY SOLVENT OF ANY KIND.

 **CAUTION:** DO NOT APPLY INSECT REPELLENT.

 **CAUTION:** TREAT AS ELECTRONIC WASTE.

 **CAUTION:** DO NOT KNOCK OR DROP.

## 2. Welcome

*“For nearly 80 years Suunto has provided accurate, reliable information to people in need of it. Our instruments enable our users to reach their goals more effectively and get more out of their sports experience. Our products are often very critical to the user. Therefore we at Suunto take pride in maintaining highest quality standards for our products.”*

Founded in 1936, Suunto is the world leader in precision compasses, dive computers and wristop altimeters. Trusted by climbers, divers and explorers on every continent, Suunto Outdoor instruments deliver legendary design, accuracy and dependability. In 1987, Suunto pioneered the first dive computer, followed by the first Altimeter-Barometer-Compass watch in 1998. Suunto remains the foremost choice of today's outdoor professional. To learn more about Suunto products and the people who use them, visit [www.suunto.com](http://www.suunto.com).

## 3. Introduction

Suunto Essential brings together an altimeter, barometer and an electronic compass in one package. It also has clock, stopwatch and calendar functions.

This User Guide explains the features, how they work, and how you access them. In addition, we have included examples of how you can use them in real life situations.

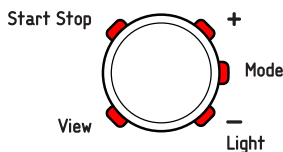
Each main chapter explains a mode and its views. It also gives you information on how to set and use these views.


Suunto Essential gives you readings on time, barometric pressure and altitude. Additional information is given for every reading so that you can make the most of your favorite outdoor activities.

## 4. Getting started

### Basic settings

Press any button and your Suunto Essential will activate. You are then prompted to set the language, units (imperial or metric), time and date. Use the upper right [+] button and lower right [- Light] button to change the settings. Accept and move to the next menu item by pressing the right middle [Mode] button. You can always return to the preceding menu item by pressing the lower left [View] button. When the settings are set as you want, you can start using the basic time features of your Suunto Essential.



 **NOTE:** You need to set the altimeter, barometer and compass to get correct readings. Please refer to the User Guide for detailed information on setting these properly.

### Modes

Your Suunto Essential has three modes: **TIME**, **ALTI & BARO** and **COMPASS**. These modes are explained in detail in the User Guide. The enabled mode is indicated by a rectangle around the mode name. You switch between the main modes with the right middle [Mode] button. Try it!



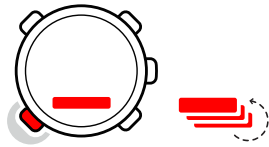
### Views

Each mode has a set of views that you access with the lower left [View] button. Views are presented in the lower part of the display. Views contain supplementary information about the enabled mode, for example, viewing seconds as supplementary information in the **TIME** mode. Some views are also interactive.

Suunto Essential has four interactive views:

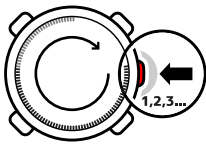
- Stopwatch (**TIME** mode)
- Countdown timer (**TIME** mode)
- Log recorder (**ALTI & BARO** mode)
- Altitude difference measurer (**ALTI & BARO** mode)

When interactive views are enabled, you can start, stop and restart them with the upper left [Start Stop] button and reset them by keeping the upper right [+] button pressed. Enter the stopwatch in **TIME** mode and try it out!



## Menu

In **MENU** you can change values, change the general settings and units, or view logs stored in the logbook. To enter **MENU**, keep the middle right [Mode] button pressed while in the **TIME, ALTI & BARO** or **COMPASS** mode. The segments in the outer part of the display indicate your transition time. Exit **MENU** by pressing the upper left [Start Stop] button. Whenever an exit option is available in **MENU**, this is indicated with an “X” on the screen next to the [Start Stop] button. Get familiar with entering and exiting **MENU**!



## Backlight

You can activate the backlight in any mode by pressing the lower right [- Light] button. The backlight turns off automatically after 5 seconds. If you want to see the backlight when you are in **MENU**, you need to activate it in the **TIME, ALTI & BARO** or **COMPASS** mode before entering **MENU**. The backlight will return to normal when you return to a mode.

## Button lock

You can activate and deactivate the button lock by keeping the lower right [-Light] button pressed.



**NOTE:** You can change views and use the backlight when the button lock is activated.

## Changing values

To change a setting, you have to be in **MENU**. To enter **MENU**, keep the right middle [Mode] button pressed down in the **TIME, ALTI&BARO** or **COMPASS** mode. Any changes you make in **MENU** take effect immediately. For example, if you enter TIME-DATE in **MENU** and change the time from 12:30 to 11:30 and exit. The time will be set to 11:30.



## 5. General settings

Before you start to use your Suunto Essential, it's a good idea to set the measurement units and general settings according to your preferences. General settings are changed in **MENU**.

### 5.1. Changing units

In **UNITS** you select the measurement units, including:

- **TIME** : 24h/12h
- **DATE**: dd.mm/mm.dd
- **TEMPERATURE** : °C/°F (Celsius/Fahrenheit)
- **AIR PRESSURE**: hPa/inHg
- **ALTITUDE**: meters/feet

To enter **UNITS** in **MENU**:

1. Enter **MENU** by keeping [Mode] pressed in the **TIME** , **ALTI & BARO** or **COMPASS** mode.
2. Scroll down to **UNITS** using [- Light] .
3. Enter with [Mode] .

To change units:

1. In **UNITS**, scroll between the list items using [+] and [- Light] .
2. Enter with [Mode] .
3. Change the values using [+] and [- Light] , accept with [Mode] .
4. Exit **MENU** with [Start Stop] .

### 5.2. Changing general settings

In **GENERAL** you set the general settings, including:

- **BUTTON TONE**: on/off
- **tone GUIDE**: on/off
- **BACKLIGHT**: light button/any button
- **LANGUAGE**: English, French, Spanish, German

To enter **GENERAL** in **MENU**:

1. Enter **MENU** by keeping [Mode] pressed in the **TIME** , **ALTI & BARO** or **COMPASS** mode.
2. Scroll down to **GENERAL** using [- Light] .
3. Enter with [Mode] .

#### 5.2.1. Button tone

In **BUTTON TONE** you turn the button tone on or off. A button tone is emitted every time a button is pressed, confirming an action.

1. In **GENERAL**, select **BUTTON TONE**.
2. Switch the button tone on or off with [+] and [- Light] .

#### 5.2.2. Tone guides

In **tone GUIDE** you turn the tone guides on or off. You will hear tone guides when:

- You change a setting value
- You set the altitude reference value
- You start or stop the log recorder
- You mark an altitude point while you are recording logs
- You start or stop the stopwatch
- The device switches between the **ALTIMETER** and **BAROMETER** profile when you are using the **AUTOMATIC** profile.

To turn tone guides on or off:

1. In **GENERAL**, select **TONE GUIDES**.
2. Switch the tone guides on or off with [+] and [- Light].

### 5.2.3. Backlight

In **BACKLIGHT** you switch between two different light features: any button and light button.

To set the backlight to normal or night use:

1. In **GENERAL**, select **BACKLIGHT**.
2. Switch the backlight between **LIGHT BUTTON** and **ANY BUTTON** with [+] and [- Light].

When **LIGHT BUTTON** has been selected, you can activate the backlight with [- Light]. The backlight is turned off automatically after 5 seconds. If you want to see the backlight when you are in the **MENU**, you need to activate it in the **TIME, ALTI & BARO** or **COMPASS** mode before entering the **MENU**. The backlight will then be activated until you exit **MENU**.

When **ANY BUTTON** has been selected, the backlight is activated every time you push a button.


### 5.2.4. Language

In **LANGUAGE** you choose the language of your Suunto Essential user interface (English, German, French or Spanish).

To choose a language:

1. In **GENERAL**, select **LANGUAGE**.
2. Select a language from the list with [+] and [- Light].

### 5.2.5. Activating button lock

You can activate and deactivate the button lock by keeping [-Light] pressed down. When the button lock is activated, it is indicated with a lock symbol .

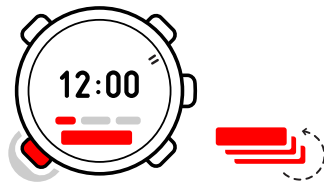


**NOTE:** You can change views and use the backlight when the button lock is activated.

## 6. Using time mode


The **TIME** mode handles time measurement.

**TIME** ALTI & BARO COMPASS



With [View] you can scroll through the following views:

- Date: current weekday and date
- Seconds: seconds as numbers
- Dual time: time in another time zone
- Sunrise and sunset : time of sunrise and sunset at a specific location
- Stopwatch: sport timer
- Countdown timer: alarm goes off after a set duration
- Empty: no additional view

 **NOTE:** The seconds view in the lower panel of the screen turns off after 2 hours in idle state to save battery. Activate by re-entering the view.

### 6.1. Changing time settings

You change the time settings in **MENU**.

To enter time settings in **MENU**:

1. Enter **MENU** by keeping [Mode] pressed down.
2. Scroll down to **TIME-DATE** using [- Light] .
3. Enter with [Mode] .

#### 6.1.1. Setting time

In **TIME** you set the time.

To set the time:

1. In **TIME-DATE**, select **TIME**.
2. Change the hour, minute and second values with [+] and [- Light] .

#### 6.1.2. Setting date

In **DATE** you set the month, day and year.

To set the date:

1. In **TIME-DATE**, select **DATE**.
2. Change the year, month and day values with [+] and [- Light] .


To change the format in which the time is displayed, see 5.1. *Changing units*.

### 6.1.3. Setting dual time

In **DUAL TIME** you can set the time for a location in a different time zone.

To set dual time:

1. In **TIME-DATE**, select **DUAL TIME**.
2. Change the hour, minute and second values with [+] and [- Light] .

 **NOTE:** We recommend that you set the current time at your current location as the main time because the alarm clock emits alarms according to the main time.


You are traveling abroad and you set the dual time to be the time at home. The main time is the time at your current location. Now you always know the local time and you can quickly check what time it is at home.

### 6.1.4. Setting sunrise and sunset times

In **SUNRISE** you select a reference city that your Suunto Essential uses to give you sunrise and sunset times.

To set sunrise and sunset times:

1. In **MENU**, select **SUNRISE**.
2. Scroll through the locations with [+] and [-Light] .
3. Select a location with [Mode] .

 **NOTE:** If you want to set the sunrise and sunset times for a location that is not listed in your device, select another reference city from the same time zone. Select the closest city north or south from your location.

You're hiking in Algonquin, a huge national park north of Toronto. You want to know when the sun sets, so that you know when to start putting up your tent for the night. You choose "Toronto" as your reference sunrise-sunset city. Your now tells you when the sun will set.

## 6.2. Using stopwatch

The stopwatch measures time. Its resolution is 0.1 seconds.

To use the stopwatch:

1. In the **TIME** mode, select the stopwatch view.
2. Start, stop and restart the stopwatch with [Start Stop] .
3. Keep [+] pressed to reset the stopwatch.

Your friend is training for a running competition, and needs to know how long it takes him to run the 100 m dash. You start the stopwatch the instant he breaks from the blocks. You stop the stopwatch the instant he crosses the finish line. The result: 11.3 seconds. Not bad!

## 6.3. Using countdown timer

In **COUNTDOWN** you can set the countdown timer to count down from a preset time to zero. It sounds an alarm when zero is reached. The default is 5 minutes.

To change the default countdown time:

1. In **MENU**, select **TIME-DATE**.
2. Select **COUNTDOWN**.
3. Set the timer minutes and seconds (maximum 99 minutes and 59 seconds).
4. Accept with [Mode] .

To start counting down:

1. In **TIME** mode, select the countdown timer view.
2. Start, stop and restart with [Start Stop] .
3. Keep [+] pressed to reset the timer.

You're on a hiking expedition. It's morning. You wake up, come out of your tent, and start to make breakfast at your campfire. This time, you want 8-minute eggs. You set the countdown timer to 8 minutes with your eggs in the pot and wait for the water to come to a boil. When the water boils, you engage the countdown timer. At the eight-minute point, your gives the alarm. Presto! Perfect 8-minute eggs.

## 6.4. Setting alarm

You can use your Suunto Essential as an alarm clock.

To access the alarm clock and set the alarm:

1. In **MENU**, select **TIME-DATE**.
2. Select **ALARM**.
3. Switch the alarm on or off with [+] and [- Light] .
4. Accept with [Mode] .
5. Use [+] and [- Light] to set the hours and minutes.

When the alarm is switched on, the alarm symbol 🔔 appears on the display.

When the alarm sounds, you can either snooze or turn the alarm off.

If you choose **YES** or do nothing, the alarm stops and restarts every 5 minutes until you stop it. You can snooze up to 12 times for a total of 1 hour. If you choose **NO**, the alarm stops and restarts the same time the following day.



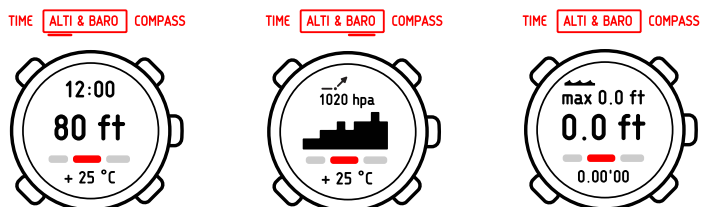
**TIP:** When the snooze is turned on, you can deactivate it in the **TIME** mode by keeping [View] pressed down.

You want to wake up early tomorrow morning. You set your alarm for 6:30 before you go to bed. The alarm wakes you up at 6:30 the next morning but you want to sleep for another 5 minutes. You choose YesYes when the device asks you if you want to snooze. After 5 minutes the alarm goes off again. This time you get up and happily start preparing for your trip. What a difference five minutes can make!

**NOTE:** The alarm symbol is blinking when the snooze is activated. When snooze is deactivated, the alarm symbol stops to blink.

## 7. Using ALTI & BARO mode

In the **ALTI & BARO** mode you can view the current altitude, barometric pressure or snorkeling depth. It offers four profiles: **AUTOMATIC**, **ALTIMETER**, **BAROMETER** and **DEPTH METER** (see 7.2.2. *Setting profiles*). You can access different views depending on which profile is activated when you are in the **ALTI & BARO** mode.



### 7.1. How Alti & Baro works

To get the right readings from **ALTI & BARO**, it is important to understand how Suunto Essential calculates altitude and sea level air pressure.

Suunto Essential constantly measures absolute air pressure. Based on this measurement and reference values, it calculates altitude or sea level air pressure.

**⚠ CAUTION:** *Keep area around sensor free of dirt and sand. Never insert any objects into the sensor openings.*

#### 7.1.1. Getting correct readings

If you are engaged in an outdoor activity that requires you to know the air pressure, you need to enter the altitude reference value for your location. This is found on most topographic maps. Your Suunto Essential will now give you the correct readings.

To get the correct altitude readings, you need to enter the sea level air pressure reference value. The sea level air pressure reference value relevant to your location can be found in the weather section of the local newspaper or on the websites of national weather services.

Absolute air pressure is measured constantly  $Absolute\ air\ pressure + altitude\ reference = Sea\ level\ air\ pressure$

\*  $Absolute\ air\ pressure + sea\ level\ air\ pressure\ reference = Altitude$  \*

Changes in local weather conditions will affect altitude readings. If local weather changes often, it is advisable to reset the current altitude reference value frequently, preferably before starting your journey when the reference values are available. If local weather is stable, you do not need to set reference values.

#### 7.1.2. Getting incorrect readings

##### altimeter Altimeter profile + standing still + weather change

If your **ALTIMETER** profile is on for an extended period of time with the device in a fixed location while the local weather changes, the device will give incorrect altitude readings.

## altimeter Altimeter profile + altitude moving + weather change

If your **ALTIMETER** profile is on and the weather changes frequently while you climb in altitude or go down in altitude, the device will give you incorrect readings.

## Barometer Barometer profile + altitude moving

If the **BAROMETER** profile is on for an extended period of time as you climb in altitude or go down in altitude, the device assumes that you are standing still and interprets your changes in altitude as changes in sea level air pressure. It will therefore give you incorrect sea level air pressure readings.

You're on the second day of your two-day hike. You realize that you forgot to switch from the Barometer Barometer profile to the altimeter Altimeter profile when you started moving in the morning. You know that the current altitude readings given by your are wrong. So, you hike to the nearest location shown on your topographic map for which a altitude reference value is provided. You correct your altitude reference value accordingly. Your altitude readings are correct again.

## 7.2. Setting profiles and reference values

### 7.2.1. Matching profile to activity

The **ALTIMETER** profile should be selected when your outdoor activity involves changes in altitude (e.g. hiking in hilly terrain). The **BAROMETER** profile should be selected when your outdoor activity does not involve changes in altitude (e.g. surfing, sailing). To get the correct readings, you need to match the profile to the activity. You can either let Suunto Essential decide which profile is most suitable for you at the moment, or you can choose a suitable profile yourself.

### 7.2.2. Setting profiles

To set the profile:

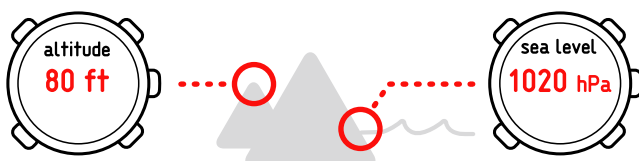
1. In **MENU**, select **ALTI-BARO**.
2. Select **PROFILE**.
3. Choose a suitable profile.

Alternatively you can set the profile in the **ALTI & BARO** mode by keeping [View] pressed down.

### 7.2.3. Setting reference values

To set the reference value:

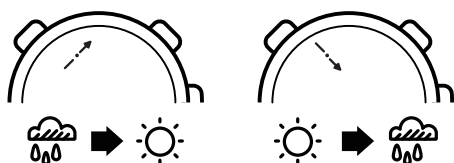
1. In **MENU**, select **ALTI-BARO**.
2. Select **REFERENCE** and choose between the **ALTIMETER** and **SEA LEVEL**.
3. Set the known reference value using [+ ] and [- Light].



You're hiking and take a break when you see a sign with the current altitude. You check your altitude reading and discover a small difference between the two numbers. You set the altitude reference value on your to match that of the sign.

### 7.3. Using weather trend indicator

The weather trend indicator is located on the upper side of the display. It is displayed in the **TIME** and **ALTI & BARO** modes, providing you with quick reference to check upcoming weather conditions. The weather trend indicator is comprised of two lines forming an arrow. Each line represents a 3-hour period. The right line represents the last 3 hours. The left line represents the 3 hours prior to the last 3 hours. So the line can indicate 9 different patterns in the barometric trend.



	Situation 3-6 hours ago	Situation last 3 hours
	Dropped heavy (>2 hPa/3hours)	Dropping heavily (>2 hPa/3hours)
	Remained stable	Rising heavily (>2 hPa/3hours)
	Rose heavy (>2 hPa/3hours)	Dropping heavily (>2 hPa/3hours)

**TIP:** If the weather trend indicator shows that the air pressure is constantly rising, there is a higher possibility of sunny weather upcoming. Again, if the air pressure is constantly dropping, there is a higher possibility of rainy weather.

### 7.4. Activating storm alarm

The storm alarm notifies you that a pressure drop of 4 hPa / 0.12 inHg or more has occurred during a 3-hour period. Suunto Essential will activate an alarm and flash an alarm symbol on the display for 20 seconds. The storm alarm only works when you have activated the **BAROMETER** profile in the **ALTI & BARO** mode.

To activate the storm alarm:

1. In **MENU**, select **ALTI-BARO**.
2. Select **STORM ALARM**.
3. Switch the storm alarm on or off with [+] and [- Light] .

**TIP:** You can stop the storm alarm by pressing any button.

You are hiking in a dense forest when your activates the storm alarm. The weather has taken a turn for the worse in the last 3 hours - the sky is getting dark. Good thing your warned you, because you need to find shelter from the hard rain that may soon fall.



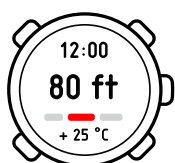
## 7.5. Using altimeter profile

The **ALTIMETER** profile calculates altitude based on the reference values. The reference values can either be sea level air pressure or a previous point of altitude reference value. When the **ALTIMETER** profile is activated, the word **ALTI** is underlined on the display.

When the **ALTIMETER** profile is activated, you can access the following views with [View] :

- Log recorder: records the altitude changes into logs
- Altitude difference measurer: measures the altitude difference from a set point
- Temperature: measures the current temperature
- Empty: no supplementary information

TIME **ALTI & BARO** COMPASS



### 7.5.1. Using altitude difference measurer

The altitude difference measurer shows the difference in altitude between a set point and your current position. This feature is especially useful for mountain climbing, for example when you want to track your progress in terms of altitude climbed.

To use the altitude difference measurer:

1. In the **ALTI & BARO** mode, select the altitude difference measurer view.
2. Start, stop and restart it with [Start Stop] .
3. Keep [+] pressed to reset.

You are about to start climbing a mountain that is 3, 280 feet (1000 m) high. You want to be able to check your progress as you climb, so you activate the altitude difference measurer on your . You start climbing, checking your altitude occasionally to see how far you are from the next check point. At some point you start to get tired. You check your altitude, and see that there's still a lot of climbing ahead. Maybe you need to rethink your next check point.

### 7.5.2. Recording logs

The log recorder stores all your movements in altitude between the start and stop times. If you are engaged in an activity in which your altitude changes, you can record the altitude changes and view the stored information later.

You can also set altitude marks (laps), allowing you to view the duration and ascent/descent height between your previous mark and current mark. Your marks are stored in memory and you can access them later.

To record a log:

1. In the **ALTI & BARO** mode, select the log recorder view.
2. Start, stop and restart it with [Start Stop] .
3. When you are recording a log, set laps with [+] .
4. Keep [+] pressed to reset (this can only be done when the recorder is stopped).


Log height difference: shows the measured altitude difference between a log starting point and a log finishing point with the following icons:

	In the additional views:
▲	is displayed when your altitude is above the starting point.
—	is displayed when your altitude is the same as at the starting point.
▼	is displayed when your altitude is below the starting point.
≡	is displayed when you view how much you have ascended from the log start.
≡	is displayed when you view how much you have descended from the log start.


Altitude points are recorded according to the recording interval you have chosen (see 9.3. *Choosing recording interval*).

To change the recording rate:

1. In **MENU**, select **MEMORY**.
2. Select **REC INTERVAL**.
3. Change the recording rate with [+] and [- Light] .

 **NOTE:** An estimation of how much time you can record is shown in the lower part of the display when you browse between the recording rates. The actual recording durations may vary slightly depending on your activity during the recording period.

You can access your history of recorded logs, including log details, from **LOGBOOK** in **MENU** (see 9.2. *Viewing and locking logs*).

 **TIP:** When you have stopped the log recorder, you can enter the logbook and view your current recordings before you reset the recorder.

You're going on another mountain hike. This time you want to record how much you ascend and descend so as to compare the figures with previous hikes. You set your to the altimeter profile and start the log recorder when you begin the hike. After the hike you stop your log recorder and reset it . Now you can compare it with your previous logs.

## 7.6. Using barometer profile

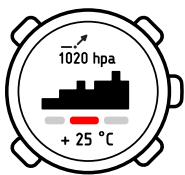
The **BAROMETER** profile shows the current sea level air pressure. This is based on the reference values given and the constantly measured absolute air pressure. Changes in sea level air pressure are presented graphically in the middle of the display. The display shows the recording of the last 24 hours with a recording interval of 30 minutes.


When the **BAROMETER** profile is activated, the word **BARO** is underlined on the display.

When the **BAROMETER** profile is activated, you can access the following views with [View] :

- Temperature: measures the current temperature
- Log recorder: records the altitude changes in logs
- Altitude reference: shows the altitude reference value
- Time: shows the current time

- Empty: no additional view



 **NOTE:** If you are wearing your Suunto Essential on your wrist, you will need to take it off in order to get an accurate temperature reading because your body temperature will affect the initial reading.

A 7-day log of changes in sea level air pressure can be viewed in **ALTI-BARO** memory in **MENU** (see 9.1. *Alti-baro memory*).

You're still hiking and you're getting tired. You decide to take a nap and you set up your tent. Since your altitude will stay the same for a while, you activate the BarometerBarometer profile. When you wake up, you will be able to check changes in sea level air pressure with an eye on the weather.

### 7.6.1. Recording logs

When you are recording logs in the **ALTIMETER** profile, you can switch to the **BAROMETER** profile when you for example take a break during a hike.

The log recorder will continue recording the log, but it will not record changes in air pressure. When the barometer profile is activated, the device assumes you are not moving in altitude, and it will therefore not record any altitude changes. The altitude log will therefore be flat during this period. For information on using the log recorder, see 7.5.2. *Recording logs*.


You can start, stop and reset the altitude measurement while in the **BAROMETER** profile.

You are recording your altitude changes during a hike and decide to take a longer break. You switch to the BarometerBarometer profile. Since the altitude recording continues but no altitude changes are occurring, you go to the log recorder view in the BarometerBarometer profile and stop the altitude recording.

## 7.7. Using automatic profile

The **AUTOMATIC** profile switches between the **ALTIMETER** and **BAROMETER** profiles according to your movements. When the **AUTOMATIC** profile is activated, [auto icon] appears on the upper right part of the display. Depending on which profile is activated, you can access the **ALTIMETER** or **BAROMETER** profile views with [View] .

When the device is moving 5 meters in altitude within 3 minutes, the **ALTIMETER** profile is activated. When the device does not move in altitude for 12 minutes, the **BAROMETER** profile is activated.

 **NOTE:** The **AUTOMATIC** profile should not be activated all the time. Some activities require the **BAROMETER** profile to be constantly activated even though you might be moving (e.g. surfing). In other words, in certain situations you need to choose a suitable profile manually.

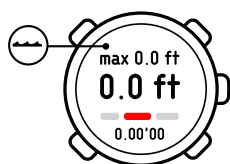
## 7.8. Using depth meter profile

You use the **DEPTH METER** profile when snorkeling. It shows your current depth and the maximum depth you reached during a snorkeling dive. The maximum depth of the device is 32.8 ft (10m). When the **DEPTH METER** profile is activated, a wave icon appears on the upper left part of the display.

When the **DEPTH METER** profile is activated, you can access the following views with [View] :

- Log recorder: records your snorkeling dives
- Temperature: measures the current temperature
- Time: shows the current time

TIME **ALTI & BARO** COMPASS



### 7.8.1. Recording logs in depth meter profile

The log recorder in the **DEPTH METER** profile works similarly to the log recorder in the **ALTIMETER** profile, but instead of recording altitude it records the depth of your snorkeling dives.

To record logs in the **DEPTH METER** profile:

1. In the **ALTI & BARO** mode, select the log recorder view.
2. Start, stop and restart it with [Start Stop] . Begin a snorkeling dive.
3. When you return to the surface, reset by holding [+] pressed.

**CAUTION:** Do not push buttons while the device is under water.

**NOTE:** You need to reset your log recorder in the **ALTIMETER** profile before using the log recorder in the **DEPTH METER** profile. Otherwise, your maximum depth will stay the same as your current altitude above the surface.

**TIP:** When you have stopped your log recorder, before resetting it, you can enter the logbook and view your current recordings!

## 8. Using compass mode

The **COMPASS** mode allows you to orient yourself in relation to magnetic North. In **COMPASS** mode you can access the following views with [View] :

- Time: shows the current time
- Cardinals: shows the current heading in cardinal directions
- Bearing tracking: shows the direction between the heading and set bearing.

The compass will switch itself to power saving mode after a minute. Reactivate it with [Start Stop] .

### 8.1. Getting correct readings

To ensure correct compass readings while in COMPASS mode: **COMPASS**


- calibrate the compass correctly when prompted (see *8.1.1. Calibrating compass*)
- set the correct declination value
- keep the device level
- keep away from metal (e.g. jewelry) and magnetic fields (e.g. power lines)

#### 8.1.1. Calibrating compass

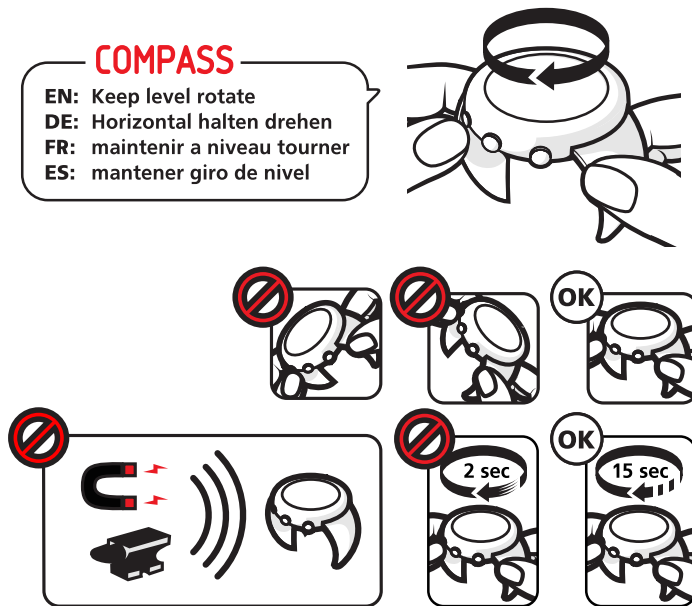
The device needs to be carefully calibrated during first time use and when the battery is replaced. The device will always prompt you about it when it is needed.

To calibrate the compass:

1. Keep the device level, do not tilt it in any directions.
2. Slowly rotate the device clockwise (around 15 seconds per round) until the compass is activated.

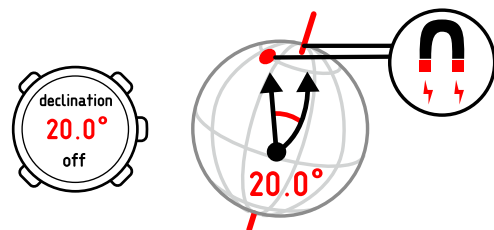
 **NOTE:** *If you notice deviations in the compass, you can recalibrate it by keeping it level and rotating it slowly clockwise 5-10 times while in compass mode.*

 **TIP:** *Re-calibrate the compass before each use for best possible accuracy.*



### 8.1.2. Setting declination value

Paper maps point to true North. Compasses, however, point to magnetic North – a region above the Earth where the Earth’s magnetic fields pull. Because magnetic North and true North are not at the same location, you must set the declination on your compass. The angle in between magnetic and true north is your declination.



The declination value appears on most maps. The location of magnetic North changes yearly, so the most accurate and up-to-date declination value can be obtained from the internet (for example the National Geophysical Data Center for the USA).

Orienteering maps, however, are drawn in relation to magnetic North. This means that when you are using orienteering maps you need to turn the declination correction off by setting the declination value to 0 degrees.

To set the declination value:

1. In **MENU**, select **COMPASS**.
2. Turn the declination off or choose **W** (west) or **E** (east).
3. Set the declination value with [+ ] and [- Light] .

## 8.2. Using compass

When you are in the **COMPASS** mode, you see two moving segments on the rim of the display. These point towards North. The hairline at 12 o’clock shows your heading and functions as a compass direction arrow. The numerical value of your heading is shown in the center of the display.

In **COMPASS** mode you can access the following views with [View]:

- Time: shows the current time
- Cardinals: shows the current heading in cardinal directions
- Bearing tracking: shows the direction between the heading and the set bearing

The compass will switch itself to power saving mode after a minute if no buttons are pressed. Reactivate it with [Start Stop] .

You can use the compass in two ways: you can use the bezel or the bearing tracking.

TIME ALTI & BARO COMPASS




### 8.2.1. Using bearing tracking

In bearing tracking you can lock a bearing (direction) and your Suunto Essential compass will guide you along it.

To use the bearing tracking:

1. Point the compass direction arrow in the direction you want to travel and press [Start Stop] . The bearing is now locked. Your current heading is shown in the middle of the display, and it will change according to your movements.
2. The arrows in the top row of the display point you in the direction you need to take in order to keep to your desired bearing. The  $\blacktriangleright$  symbol confirms that you are aiming towards the right direction.

 **NOTE:** Pressing [- Light] also activates the backlight.

You're hiking and you've just climbed a steep hill. Looking out over the valley below, you see a cabin on another hill. You decide to hike to the cabin through the valley. You point the direction arrow of your compass towards the cabin and lock the bearing. Once you're in the valley, the arrows in the display's top row show you where to go. Because the compass is active for only 40 seconds at a time to conserve battery life, now and then you need to re-start the compass to check your heading. Keep an eye on it and you'll get there soon.

## 9. Using memory

### 9.1. Alti-baro memory


**ALTI-BARO** automatically records changes in altitude or sea level air pressure for the last 7 days. Information will be stored depending on which profile is active at the moment of the recording. Records are stored every 30 minutes.

To view the records of the last 7 days:

1. In **MEMORY**, select **ALTI-BARO**.
2. Use [+] and [- Light] to browse through the records.

You are camping in the mountains. You want to predict tomorrow's weather, so you switch your to the BarometerBarometer profile for the night. In the morning you check the alti-baroalti-baro memory and note that the air pressure remained stable for the whole night. Hopefully this will continue during the day.

### 9.2. Viewing and locking logs

Logs recorded by the log recorder in the **ALTIMETER**, **BAROMETER** or **DEPTH METER** profile are stored in **LOGBOOK**. You can store up to 10 logs. A new log always replaces the oldest log in **LOGBOOK**. To save logs, you can lock them.  is shown when a log is locked. You can only lock up to 9 logs.

When entering **LOGBOOK**, you are shown the number of unlocked logs. You can then choose to either view or lock logs.

When you view logs, you are first shown a list of available logs complete with times and dates. You can scroll and then enter each log to view its summary information and details.

#### 9.2.1. Viewing logs

When viewing log summaries, you are shown

- A summary graph, time of recording and highest point
- Total descent, duration of descent, average descent speed
- Total ascent, duration of ascent and average ascent speed
- Altimeter split time (total log duration from start) and lap times (duration since last lap time)

When viewing log details, you are shown:


- A graph of the changes in altitude
- Time of recording
- Altitude/depth at the time of recording

To view the logs:

1. In **MEMORY**, select **LOGBOOK**.
2. Choose a log from the list.
3. Select **VIEW**.
4. Switch between log summaries with [+] and [- Light] .
5. View log details with [Mode] .



6. Increase and decrease scrolling speed and change direction with [+] and [- Light] . Stop with [Mode] .

 **NOTE:** When scrolling the graph, your current position is in the middle of the graph.

 **NOTE:** Only altimeter logs include summaries.

### 9.2.2. Locking and unlocking logs

To lock or unlock the logs:

1. In **MEMORY**, select **LOGBOOK**.
2. Choose a log from the list.
3. Select **LOCK / UNLOCK**.
4. Lock/unlock the log with [Mode] OR Cancel with [View] ).

## 9.3. Choosing recording interval

You can choose the recording interval in **REC INTERVAL** in **MENU**.


You can choose between five recording intervals:

- 1 second
- 5 seconds
- 10 seconds
- 30 seconds
- 60 seconds

When browsing through the intervals, the available recording time is shown in the lower part of the display.

To choose a recording interval:

1. In **MEMORY**, select **REC INTERVAL**.
2. Choose a recording interval using [+] and [- Light] .


 **TIP:** Short lasting activities with fast changes in altitude is better to record with faster recording interval (e.g. downhill skiing). Again, long time activities with slower changes in altitude is better to record with slower recording interval (e.g. hiking)

## 10. Care and support

### 10.1. Handling guidelines

Handle your Suunto Essential with care. The sensitive internal electronic components may be damaged if the device is dropped or otherwise mishandled.

Do not try to open or repair your Suunto Essential by yourself. If you are experiencing problems with the device, please contact your nearest authorized Suunto Service Center.

 **TIP:** Remember to register your product at [www.suunto.com/support](http://www.suunto.com/support) to get personalized support.

Use only original Suunto accessories - damage caused by non-original accessories is not covered by warranty.

### Leather straps

Suunto Essential leather straps are made from high quality natural hides. The performance and lifespan of these straps can differ from one strap to the next given the natural variation in the materials.


Usage also has a significant impact on the performance and lifespan of leather straps, much like belts, wallets and other items made from leather. Contact with fresh water, salt water, and perspiration may change the color and odor of the strap, as well as shorten its lifespan.


If you intend to swim, snorkel or participate in strenuous activities with your Suunto Essential, we recommend using a synthetic strap.


### Cleaning

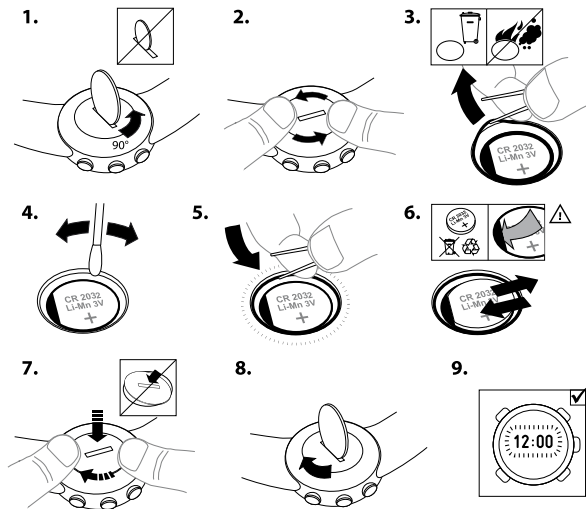
Regularly clean and dry your Suunto Essential with fresh water and a soft cloth, particularly after heavy perspiration or swimming. Avoid getting leather straps wet.

### 10.2. Replacing battery

 **NOTE:** To reduce the risk of fire or burns, do not crush, puncture or dispose of used batteries in fire or water. Recycle or dispose of used batteries properly.

 **NOTE:** If the threads of the battery compartment cover are damaged, send your device to an authorized Suunto representative for service.

 **NOTE:** Suunto original battery replacement and strap kits must be used if available for your product. Kits are available at Suunto webshop and some authorized Suunto dealers. Not using these kits and careless battery replacement may void warranty.



### 10.3. Getting support

To get additional support, visit [www.suunto.com/support](http://www.suunto.com/support). There you will find a comprehensive range of support materials, including Questions and Answers and instruction videos. You can also post questions directly to Suunto or email/call Suunto support professionals.

There are also many how-to videos on the Suunto YouTube channel at [www.youtube.com/user/MovesCountbySuunto](http://www.youtube.com/user/MovesCountbySuunto).

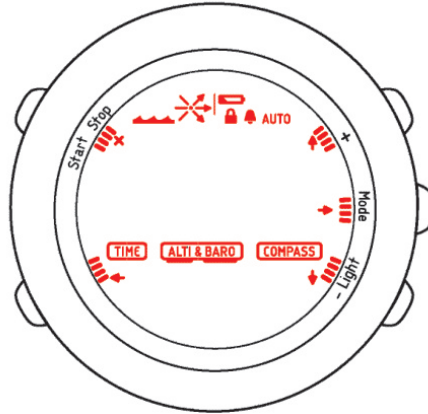
We recommend registering your product at [www.suunto.com/support/](http://www.suunto.com/support/) to get the best personalized support from Suunto.

To get support from Suunto:













1. First visit Suunto.com ([www.suunto.com/support](http://www.suunto.com/support)) to see if your question has been asked/answered already.
2. If you cannot find an answer to your question online, try emailing Suunto at [support@suunto.com](mailto:support@suunto.com).
3. Call Suunto. See the latest list of numbers on the last page of this guide or at [www.suunto.com/support](http://www.suunto.com/support). Suunto's qualified customer support staff will help you and, if needed, troubleshoot your product during the call.

# 11. Specifications

## 11.1. Icons



The following icons are displayed in Suunto Essential:

	alarm
	alti-baro mode
AUTO	automatic profile
	back/return
	battery low
	button indicator
	button lock
	compass line
	compass mode
	depth meter profile
	down/decrease
	forward/accept
x	quick exit
	time mode
	up/increase



weather trend indicator

## 11.2. Technical data

### General

- Operating temperature -20°C ... +60 °C / -4°F ... +140°F
- Storage temperature -30 °C ... +60 °C / -22°F ... +140°F
- Water resistance: 30 m / 100 ft
- Lens: sapphire crystal
- User-replaceable battery CR2032
- Battery life-time: ~ 1 year in normal use

### Altimeter

- Display range: -500 m ... 9000 m / -1640 ft ... 32760 ft
- Resolution: 1 m / 3 ft

### Barometer

- Display range: 920 ... 1080 hPa / 27.13 ... 31.85 inHg
- Resolution: 1 hPa / 0.03 inHg

### Depth meter

- Depth display range: 0 ... 10 m / 0 ... 32.8 ft
- Resolution: 0.1 m

### Thermometer

- Display range: -20°C ... 60°C / -4°F ... 140°F
- Resolution: 1°C / 1°F

### Compass

- Resolution 1°

## 11.3. Warranty

Suunto warrants that during the Warranty Period Suunto or a Suunto Authorized Service Center (hereinafter Service Center) will, at its sole discretion, remedy defects in materials or workmanship free of charge either by a) repairing, or b) replacing, or c) refunding, subject to the terms and conditions of this Limited Warranty. This Limited Warranty is only valid and enforceable in the country of purchase, unless local law stipulates otherwise.

### Warranty Period

The Limited Warranty Period starts at the date of original retail purchase. The Warranty Period is two (2) years for Products unless otherwise specified.

The Warranty Period is one (1) year for accessories including but not limited to wireless sensors and transmitters, chargers, cables, rechargeable batteries, straps, bracelets and hoses.

## Exclusions and Limitations

This Limited Warranty does not cover:

1. a. normal wear and tear such as scratches, abrasions, or alteration of the color and/or material of non-metallic straps, b) defects caused by rough handling, or c) defects or damage resulting from use contrary to intended or recommended use, improper care, negligence, and accidents such as dropping or crushing;
2. printed materials and packaging;
3. defects or alleged defects caused by use with any product, accessory, software and/or service not manufactured or supplied by Suunto;
4. non-rechargeable batteries.

Suunto does not warrant that the operation of the Product or accessory will be uninterrupted or error free, or that the Product or accessory will work with any hardware or software provided by a third party.

This Limited Warranty is not enforceable if the Product or accessory:

1. has been opened beyond intended use;
2. has been repaired using unauthorized spare parts; modified or repaired by unauthorized Service Center;
3. serial number has been removed, altered or made illegible in any way, as determined at the sole discretion of Suunto; or
4. has been exposed to chemicals including but not limited to sunscreen and mosquito repellents.

## Access to Suunto warranty service

You must provide proof of purchase to access Suunto warranty service. For instructions how to obtain warranty service, visit [www.suunto.com/warranty](http://www.suunto.com/warranty), contact your local authorized Suunto retailer, or call Suunto Contact Center.

## Limitation of Liability

To the maximum extent permitted by applicable mandatory laws, this Limited Warranty is your sole and exclusive remedy and is in lieu of all other warranties, expressed or implied. Suunto shall not be liable for special, incidental, punitive or consequential damages, including but not limited to loss of anticipated benefits, loss of data, loss of use, cost of capital, cost of any substitute equipment or facilities, claims of third parties, damage to property resulting from the purchase or use of the item or arising from breach of the warranty, breach of contract, negligence, strict tort, or any legal or equitable theory, even if Suunto knew of the likelihood of such damages. Suunto shall not be liable for delay in rendering warranty service.

## 11.4. CE

Suunto Oy hereby declares that this product is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

## 11.5. Patent notice

This product is protected US Patent application serial number 11/152,076 and corresponding patents or patent applications in other countries. Additional patent applications are pending.

## 11.6. Trademark

Suunto Essential, its logos, and other Suunto brand trademarks and made names are registered or unregistered trademarks of Suunto Oy. All rights are reserved.

## 11.7. Copyright

Copyright © Suunto Oy. All rights reserved. Suunto, Suunto product names, their logos and other Suunto brand trademarks and names are registered or unregistered trademarks of Suunto Oy. This document and its contents are proprietary to Suunto Oy and are intended solely for the use of clients to obtain knowledge and information regarding the operation of Suunto products. Its contents shall not be used or distributed for any other purpose and/or otherwise communicated, disclosed or reproduced without the prior written consent of Suunto Oy. While we have taken great care to ensure that information contained in this documentation is both comprehensive and accurate, no warranty of accuracy is expressed or implied. This document content is subject to change at any time without notice. The latest version of this documentation can be downloaded at [www.suunto.com](http://www.suunto.com).

# Index

alarm.....	13	locking and unlocking logs.....	25
ALTI & BARO.....	14	locking and unlocking logs.....	25
ALTI & BARO mode.....	14	locking logs.....	24
altimeter.....	17	logs.....	17, 19, 20, 24, 25
altimeter profile.....	17	memory.....	24, 25
altitude difference measurer.....	17	modes.....	11, 14, 21
automatic.....	19	profiles.....	15, 17, 18, 19, 20
automatic profile.....	19	readings.....	14
backlight.....	10	recording.....	17, 19, 20
barometer.....	18	recording interval.....	25
barometer profile.....	18	recording logs.....	17, 19
battery.....	26	reference values.....	15
bearing tracking.....	23	setting.....	11, 12, 13, 15
button lock.....	10	setting declination value.....	22
button tone.....	9	split.....	24
calibrating.....	21	stopwatch.....	12
calibrating compass.....	21	storm alarm.....	16
care.....	26	sunrise and sunset.....	12
changing.....	9, 10, 11, 26	support.....	27
cleaning.....	26	technical data.....	29
COMPASS.....	21, 22	TIME.....	11
correct.....	14	TIME mode.....	11
correct readings.....	14, 21	time settings.....	11
countdown timer.....	12	tone guides.....	9
date.....	11	units.....	9
declination value.....	22	unlocking.....	25
depth meter.....	20	using.....	22
depth meter profile.....	20	using ALTI & BARO mode.....	14, 15, 16, 17, 19
dual time.....	12	using ALTI & BARO mode.....	14, 15, 16, 17, 18, 20
general settings.....	9, 10	using COMPASS mode.....	21, 22, 23
getting correct readings.....	21	using profiles.....	17, 18, 19, 20
icons.....	28	using TIME mode.....	11, 12, 13
incorrect.....	14	viewing.....	24
incorrect readings.....	14	viewing logs.....	24
language.....	10	views.....	21
lap.....	24	weather trend indicator.....	16
locking.....	24, 25		





# SUUNTO CUSTOMER SUPPORT

1. [www.suunto.com/support](http://www.suunto.com/support)  
[www.suunto.com/register](http://www.suunto.com/register)
2. **AUSTRALIA (24/7)** +61 1800 240 498  
**AUSTRIA** +43 72 088 3104  
**BELGIUM** +32(0)78 483 936  
**CANADA (24/7)** +1 855 624 9080  
**中国 (CHINA)** +86 400 8427507  
**中国香港 (CHINA - Hong Kong)** +852 58060687  
**DENMARK (EN, SV)** +45 89872945  
**FINLAND** +358 94 245 0127  
**FRANCE** +33 48 168 0926  
**GERMANY** +49 893 803 8778  
**ITALY** +39 029 475 1965  
**JAPAN** +81 34 520 9417  
**NETHERLANDS** +31 10 713 7269  
**NEW ZEALAND (24/7)** +64 988 75 223  
**POLAND** +48 1288 10196  
**PORTUGAL (EN, ES)** +35 1308806903  
**RUSSIA** +7 499 918 7148  
**SPAIN** +34 911 143 175  
**SWEDEN** +46 85 250 0730  
**SWITZERLAND** +41 44 580 9988  
**UK (24/7)** +44 20 3608 0534  
**USA (24/7)** +1 855 258 0900

**Manufacturer:**

Suunto Oy  
Tammiston kauppatie 7 A,  
FI-01510 Vantaa FINLAND



© Suunto Oy

Suunto is a registered trademark of Suunto Oy. All Rights reserved.