SUUNTO D6M

USER GUIDE

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.*

TIP: *- is used for extra tips on how to utilize the features and functions of the device.*

Before you dive

Make sure that you fully understand the use, displays and limitations of your dive instruments. If you have any questions about this manual or the dive computer, contact your Suunto dealer before diving with the dive computer. Always remember that YOU ARE RESPONSIBLE FOR YOUR OWN SAFETY!

Safety precautions

⚠ ***WARNING:*** *ONLY TRAINED DIVERS SHOULD USE A DIVE COMPUTER! Insufficient training for any kind of diving, including freediving, may cause a diver to commit errors, such as incorrect use of gas mixtures or improper decompression, that may lead to serious injury or death.*

⚠ ***WARNING:*** *You must read the printed quick guide and online user guide for your dive computer. Failure to do so may lead to improper use, serious injury or death.*

⚠ ***WARNING:*** *THERE IS ALWAYS A RISK OF DECOMPRESSION SICKNESS (DCS) FOR ANY DIVE PROFILE EVEN IF YOU FOLLOW THE DIVE PLAN PRESCRIBED BY DIVE TABLES OR A DIVE COMPUTER. NO PROCEDURE, DIVE COMPUTER OR DIVE TABLE WILL PREVENT THE POSSIBILITY OF DCS OR OXYGEN TOXICITY! An individual's physiological make up can vary from day to day. The dive computer cannot account for these variations. You are strongly advised to remain well within the exposure limits provided by the instrument to minimize the risk of DCS. As an added measure of safety, you should consult a physician regarding your fitness before diving.*

⚠ ***WARNING:*** *If you have a pacemaker, we recommend you do not scuba dive. Scuba diving creates physical stresses on the body which may not be suitable for pacemakers.*

⚠ ***WARNING:*** *If you have a pacemaker, consult a doctor before using this device. The inductive frequency used by the device may interfere with pacemakers.*

⚠ ***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.*

⚠ ***WARNING:*** *Not for professional use! Suunto dive computers are intended for recreational use only. The demands of commercial or professional diving may expose the diver to depths and conditions that tend to increase the risk of decompression sickness (DCS). Therefore, Suunto strongly recommends that the device not be used for any commercial or professional diving activities.*

⚠ ***WARNING:*** *USE BACKUP INSTRUMENTS! Ensure that you use backup instrumentation, including a depth gauge, submersible pressure gauge, timer or watch, and have access to decompression tables whenever diving with a dive computer.*

⚠ ***WARNING:*** *For safety reasons, you should never dive alone. Dive with a designated buddy. You should also stay with others for an extended time after a dive as the onset of possible DCS may be delayed or triggered by surface activities.*

⚠ ***WARNING:*** *PERFORM PRE-CHECKS! Always check that your dive computer is functioning properly and has the correct settings before diving. Check that the display is working, the battery level is OK, tank pressure is correct, and so forth.*

⚠ ***WARNING:*** *Check your dive computer regularly during a dive. If there is any apparent malfunction, abort the dive immediately and safely return to the surface.*

⚠ ***WARNING:*** *THE DIVE COMPUTER SHOULD NEVER BE TRADED OR SHARED BETWEEN USERS WHILE IT IS IN OPERATION! Its information will not apply to someone who has not been wearing it throughout a dive, or sequence of repetitive dives. Its dive profiles must match that of the user. If it is left on the surface during any dive, the dive computer will give inaccurate information for subsequent dives. No dive computer can take into account dives made without the computer. Thus, any diving activity up to four days prior to initial use of the computer may cause misleading information and must be avoided.*

⚠ ***WARNING:*** *DO NOT EXPOSE ANY PART OF YOUR DIVE COMPUTER TO ANY GAS MIX CONTAINING MORE THAN 40% OXYGEN! Enriched air with greater oxygen content presents a risk of fire or explosion and serious injury or death.*

⚠ ***WARNING:*** *DO NOT DIVE WITH A GAS IF YOU HAVE NOT PERSONALLY VERIFIED ITS CONTENTS AND ENTERED THE ANALYZED VALUE INTO YOUR DIVE COMPUTER! Failure to verify tank contents and enter the appropriate gas values where applicable into your dive computer will result in incorrect dive planning information.*

⚠ ***WARNING:*** *Using a dive planner software such as in Suunto DM5 is not a substitute for proper dive training. Diving with mixed gases has dangers that are not familiar to divers diving with air. To dive with Trimix, Triox, Heliox and Nitrox or all of them, divers must have specialized training for the type of diving they are doing.*

⚠ ***WARNING:*** *Do not use Suunto USB Cable in areas where flammable gases are present. Doing so may cause an explosion.*

⚠ ***WARNING:*** *Do not disassemble or remodel Suunto USB Cable in any way. Doing so may cause an electric shock or fire.*

⚠ ***WARNING:*** *Do not use Suunto USB cable if cable or parts are damaged.*

⚠ ***CAUTION:*** *DO NOT allow the connector pins of the USB cable to touch any conductive surface. This may short circuit the cable, making it unusable.*

Emergency ascents

In the unlikely event that the dive computer malfunctions during a dive, follow the emergency procedures provided by your certified dive training agency to immediately and safely ascend.

2 GETTING STARTED

2.1 Display states and views

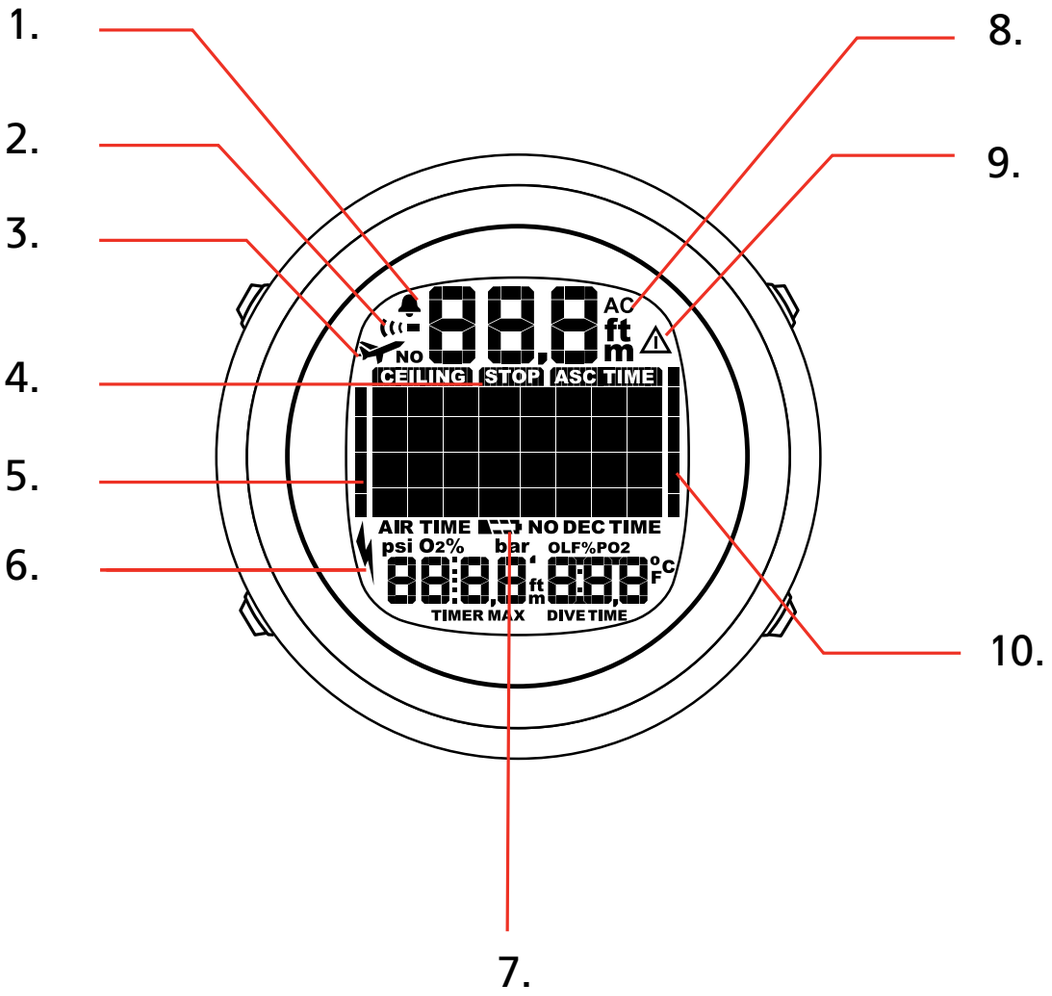
Suunto D6M has three main modes: **TIME**, **DIVE** and **MEMORY**. Change modes by pressing [MODE].

Unless **DIVE** mode is turned off, Suunto D6M automatically switches to **DIVE** mode if you are more than 1.2 m (4 ft) under water.

Time and dive modes have different views in the bottom row which you can scroll through with [DOWN] and [UP].

2.2 Icons

Suunto D6M uses the following icons:



Icon	Description
1	Daily alarm
2	Dive alarm
3	No-fly
4	Safety stop

Icon	Description
5	Tank pressure (if available)
6	Wireless transmission (if available)
7	Low battery
8	Active water contact
9	Diver attention symbol
10	Ascent rate

2.3 Set up

To get the most out of your Suunto D6M, take some time to read this manual and familiarize yourself with the modes and settings. Make absolutely sure you have it set up as you want before getting into the water.

To get started:

1. Wake up the device by keeping any button pressed until the display turns on.
2. Keep [DOWN] pressed to enter **Time Settings**.
3. Set time. See *3.6.1 Time*.
4. Set date. See *3.6.2 Date*.
5. Set units. See *3.6.3 Units*.
6. Press [MODE] to exit settings.

3 FEATURES

3.1 Activation and pre-checks

Unless the dive mode turned off, the dive mode activates automatically when you dive deeper than 1.2 m (4 ft). However, you should switch to dive mode before diving to check altitude and personal settings, battery condition and so on.

Each time your Suunto D6M enters dive mode, a series of automatic checks are performed. All graphical display elements are turned ON, and the backlight and the beep are activated after which the battery level is checked.

Before leaving on a dive trip, it is highly recommended that you switch to dive mode to make sure everything is functioning properly. You should perform your manual checks before entering the water.

3.1.1 Wireless transmitter pre-check

If the optional wireless tank pressure transmitter is used, check that:

1. The transmitter is properly installed and the tank valve is open.
2. The transmitter and Suunto D6M are paired.
3. The transmitter is sending data (wireless transmission icon blinks, tank pressure is displayed).
4. There is no transmitter low battery warning.
5. There is enough air for your planned dive. Check the pressure reading against your back-up pressure gauge.

3.1.2 Battery indicators

Temperature or internal oxidation can affect the battery voltage. If you store your Suunto D6M for a long period or use it in cold temperatures, the low battery warning may appear even though the battery has enough capacity.

In these cases, re-enter dive mode and check the battery power. If the battery is low, the Low Battery warning comes on.

If the low battery icon appears in surface mode, or if the display looks faded, the battery may be too low. Battery replacement is recommended.

NOTE: *For safety reasons, the backlight and buzzer (sound) cannot be activated when the low battery warning is displayed.*

3.2 Alarms, warnings and notifications

Suunto D6M has audible and visual alarms designed to let you know when important limits or presets are being reached.

The two audible alarm types indicating high or low priority:

Alarm type	Sound pattern	Duration
High priority		2.4 s sound + 2.4 s break
Low priority		0.8 s sound + 3.2 s break

Suunto D6M displays information during the alarm breaks in order to save battery life.

Low priority alarms:

Alarm type	Alarm reason
Low priority alarm, repeated twice. Tank pressure value blinks.	Tank pressure reaches the defined alarm pressure or the fixed alarm pressure, 50 bar (700 psi). Acknowledge the alarm by pressing any button.
Low priority alarm, repeated twice. Maximum depth value blinks	Defined maximum depth or the maximum depth of the device exceeded. Acknowledge the alarm by pressing any button.
Low priority alarm, repeated twice; dive time value blinks	Defined dive time exceeded. Acknowledge the alarm by pressing any button.

Visual alarms

Symbol on display	Indication
⚠	Attention - extend surface interval

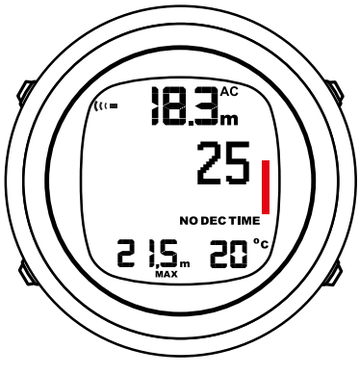
Symbol on display	Indication
NO	Do not fly

3.3 Altitude diving

The atmospheric pressure is lower at high altitudes than at sea level. After traveling to a higher altitude, you will have additional nitrogen in your body, compared to the equilibrium situation at the original altitude. This 'additional' nitrogen is released gradually over time and equilibrium is restored. It is recommended that you acclimatize to a new altitude by waiting at least three hours before making a dive.

3.4 Ascent rate

The ascent rate is displayed as a vertical bar along the right side of the display. The higher the bar, the faster you are ascending.



3.5 Backlight

To active the backlight in dive mode, press [MODE].

In other modes, keep [MODE] pressed until the backlight activates.

You can define how long the backlight stays on when you activate it or turn the backlight off altogether.

To set backlight duration:

1. While in time mode, keep [DOWN] pressed.
2. Press [DOWN] to scroll to **BACKLIGHT** and press [SELECT].
3. Set duration or turn off with [DOWN] or [UP].
4. Press [MODE] to save and exit to settings.

NOTE: *When the backlight is off, it does not illuminate when an alarm sounds.*

3.6 Calendar clock

The calendar clock is the default mode of Suunto D6M .

3.6.1 Time

In the time settings, you can set the hours, minutes, seconds, and format (12 or 24-hour).

To set time:

1. While in time mode, keep [DOWN] pressed.
2. Press [UP] to scroll to **Time** and press [SELECT].
3. Set hours with [DOWN] or [UP] and confirm with [SELECT].
4. Repeat for minutes and seconds.

   Set the format with [DOWN] or [UP] and confirm with [SELECT].
5. Press [MODE] to exit.

3.6.2 Date

The date and weekday are shown in the bottom row of time mode. Press [DOWN] to toggle between views.

To set the date:

1. While in time mode, keep [DOWN] pressed.
2. Press [UP] to scroll to **Date** and press [SELECT].
3. Set year with [DOWN] or [UP] and accept with [SELECT].
4. Repeat for month and day.
5. Press [MODE] to exit.

3.6.3 Units

In the units setting, choose whether the units are displayed in the metric or Imperial system.

1. While in time mode, keep [DOWN] pressed.
2. Press [UP] to scroll to **Units** and press [SELECT].
3. Press [DOWN] to toggle between **Metric** and **Imperial** and confirm with [SELECT].
4. Press [MODE] to exit.

3.6.4 Dual time

Dual time allows you to keep track of the time in a second time zone. Dual time is shown in the bottom left of the time mode display by pressing [DOWN].

To set dual time:

1. While in time mode, keep [DOWN] pressed.
2. Press [UP] to scroll to **Dual Time** and press [SELECT].

3. Set hours with [DOWN] or [UP] and confirm with [SELECT].
4. Repeat for minutes.
5. Press [MODE] to exit.

3.6.5 Alarm clock

Suunto D6M has a daily alarm which can be set to activate once, on weekdays or every day.

When the daily alarm activates, the screen blinks and the alarm sounds for 60 seconds. Press any button to stop the alarm.

To set the daily alarm:

1. While in time mode, keep [DOWN] pressed.
2. Press [UP] to scroll to **Alarm** and press [Select.]
3. Select alarm activation with [DOWN] or [UP] and confirm with [Select].

   The options are **OFF**, **ONCE**, **WEEKDAYS**, or **EVERY DAY**.
4. Set hours with [DOWN] or [UP]and confirm with [SELECT].
5. Repeat for minutes.
6. Press [MODE] to exit.

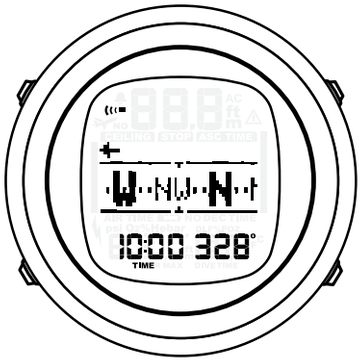
3.7 Compass

Suunto D6M includes a digital compass.

The tilt-compensated compass gives you accurate readings even if the compass is not horizontally level.

The compass can be activated from either time or dive mode and shows the current bearing and depth.

1. While in TIME or DIVE mode, keep [SELECT] pressed to activate the compass.



2. Press [MODE] to exit the compass display.

When in dive mode, the compass display includes additional information in the bottom left and right views.

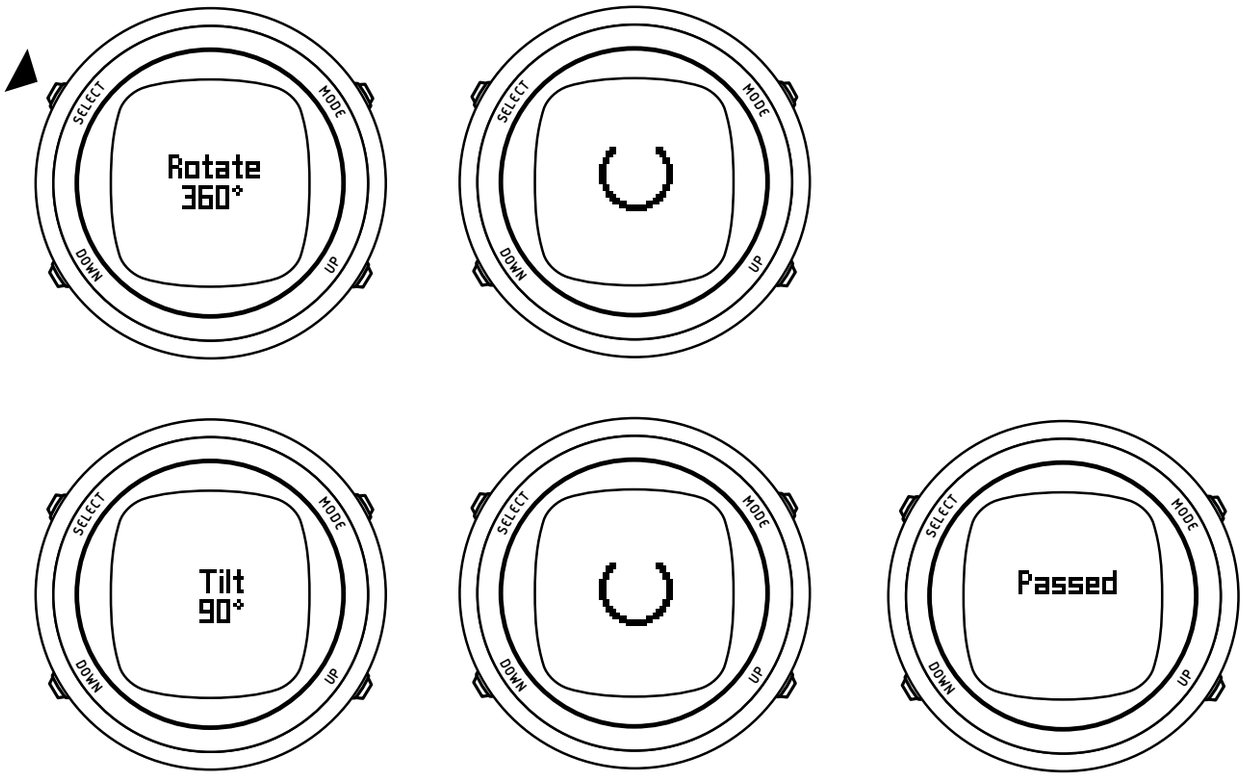
1. Press [DOWN] to scroll through the bottom left views. (tank pressure, max. depth, time)
2. Press [UP] to scroll through the bottom right views. (dive time, temperature, bearing)

3.7.1 Calibrating compass

When you first start using Suunto D6M, the compass needs to be calibrated. Suunto D6M displays the calibration icon when you enter the compass.

To calibrate the compass hold the device level and slowly rotate the unit 360° in your hand.

To complete the calibration, Suunto D6M instructs you to tilt the device 90° to a vertical position.



During the calibration process, the compass adjusts itself to the surrounding magnetic field.

If the calibration fails,**Try Again** appears. If calibration continues to fail, move to another location and try again.

When traveling overseas, it is recommended that you recalibrate the compass at the new location before using it.

To manually start the calibration:

1. While in the compass view, keep [DOWN] pressed.
2. Press [DOWN] to scroll to **Calibrate**.

3. Press [SELECT] to start the calibration.

3.7.2 Setting declination

You should always adjust your compass declination for the area where you are diving to get accurate heading readings. Check the local declination from a trusted source and set the value in Suunto D6M.

1. While in the compass view, keep [DOWN] pressed.
2. Press [DOWN] to scroll to **DECLINATION** and press [SELECT].
3. Press [DOWN] to toggle to **East** or **West** and confirm with [SELECT].
4. Set **Declination Degrees** with [DOWN] or [UP].
5. Press [MODE] to save and exit.

3.7.3 Setting compass timeout

You can define how long the compass stays on after you have activated it. Reset the timeout with any button press while using the compass.

After the timeout, the Suunto D6M returns to time or dive mode.

To set the timeout:

1. While in the compass display, keep [DOWN] pressed.
2. Press [DOWN] to scroll to **Timeout** and press [SELECT].
3. Adjust the timeout time with [DOWN] or [UP].
4. Press [MODE] to exit.

3.7.4 Setting bearing lock

A bearing is the angle between north and your target. In simple terms, it is the direction you want to travel. Your heading, on the other hand, is your actual direction of travel.

The default bearing is North.

You can set a bearing lock to help you orientate yourself underwater and ensure you maintain your direction of travel. For example, you can set a bearing lock for the direction to a reef before leaving the boat.

The last locked bearing is stored and available the next time the compass is activated. In **DIVE** mode, the locked bearings are also stored in the log. To lock a bearing:

1. With the compass active, hold the watch in front of you and turn yourself towards your target.
2. Press [SELECT] to lock the current degree displayed on the watch as your bearing.
3. Press [SELECT] to clear the lock.

If, at any point, your bearing moves outside the compass display, right or left arrows appear to show turn direction.

Suunto D6M provides help for navigating square and triangular patterns, as well as navigating a return heading with the following symbols.

Symbol	Explanation
	You are traveling towards the locked bearing.
	You are 90 (or 270) degrees from the locked bearing.
	You are 180 degrees from the locked bearing.
	You are 120 (or 240) degrees from the locked bearing.

3.8 Depth alarm

By default the depth alarm sounds at 30 m (100 ft). You can adjust the depth according to your personal preference or switch it off.

To adjust the depth alarm:

1. While in a dive mode, keep [DOWN] pressed to enter settings.
2. Press [UP] to scroll to **Depth Alarm** and press [SELECT].
3. Press [UP] to toggle the alarm on/off and confirm with [SELECT].
4. Adjust depth with [DOWN] or [UP] and accept with [SELECT].
5. Press [MODE] to exit.

When the depth alarm activates, the backlight blinks and the low priority audible alarm pattern sounds. Acknowledge the alarm by pressing any button.

3.9 Display contrast

You can adjust the contrast of the display according to your preference or, for example, to suite changing dive conditions.

1. While in time mode, keep [DOWN] pressed.
2. Press [UP] to scroll to **Contrast** and press [Select].
3. Use [DOWN] or [UP] to change the contrast from 0 (lowest) to 10 (highest).
4. Press [MODE] to exit.

3.10 Dive history

Suunto D6M has a detailed logbook and dive history available in memory mode.

The logbook contains a sophisticated dive profile for each recorded dive. The time between each data point saved in the log is based on the configurable sample rate (see).

The dive history is a summary of all recorded dives.

To access dive history:

1. Press [MODE] until you see **MEM**.
2. Switch between **History** and **Logbook** with [DOWN] or [UP].
3. When you are viewing the history or logbook, you can press [MODE] to go back and select the other one. Press [MODE] a second time to exit.

History

The history dive view shows a summary of the following:

- Dive hours

- Total number of dives
- Maximum depth

The scuba dive history records a maximum of 999 dives and 999 diving hours. When these limits are reached, the counters reset to zero.

Logbook

To access the logbook:

1. Press [MODE] three time until you come to **MEM** mode.
2. Press [UP] to choose **Logbook**.
3. Press [DOWN] or [UP] to scroll to the log you wish to look at and press [SELECT].
4. Press [SELECT] to scroll through the pages.
5. Press [MODE] to exit.

Each log has three pages:

1. Main page

   - maximum depth
   - date of dive
   - type of dive (**G** stands for **Gauge** mode)
   - dive start time
   - dive number – from oldest to newest
   - total dive time (in minutes in all modes)
2. Surface time and warnings page

- maximum depth
- surface time after previous dive
- average depth

3. Dive profile graph

- water temperature
- depth/time profile of the dive

Press [UP] to step through the dive profile graph or keep [UP] pressed to auto-scroll.

The dive profile graph shows point by point dive information such as depth, compass heading, decompression info, ceiling and ascent time.

The **End of Logs** text is displayed between the oldest and most recent dive.

The logbook capacity depends on the sample rate. With the default setting (20 s) and without transmitter data the capacity is approximately 140 hours. With transmitter data the capacity is minimum 35 hours.

If the memory is full, when new dives are added, the oldest dives are deleted.

The contents of the memory remain when the battery is changed (providing that the battery has been replaced according to the instructions).

NOTE: *Several repetitive dives are considered to belong to the same repetitive dive series if the no-fly time has not ended.*

3.11 Dive mode

The dive mode in Suunto D6M is **Gauge** mode which you can use as a bottom timer.

The timer in the center of the display shows dive time in minutes and seconds and activates at the start of the dive. The total running dive time, in minutes, is in the lower right corner.

The timer in the center of the display can be used as a stopwatch by pressing [SELECT] during the dive.

Long pressing [DOWN] resets the main timer and adds a bookmark to the dive log. The previously-timed interval is displayed below the main timer.

Gauge mode has the following settings

- Depth alarm (see)
- Dive time alarm (see)
- Sample rate (see)

Gauge mode is a bottom timer only and thus includes no decompression information or calculations.

3.12 Dive numbering

If the Suunto D6M has not counted the no-fly time down to zero, then repetitive dives belong to the same dive series.

Within each series, the dives are given numbers. The first dive of the series is **DIVE 1**, the second **DIVE 2**, and so on.

If you start a new dive with less than five (5) minutes at the surface, Suunto D6M treats the new dive as part of the previous dive. The dive time continues where it left off.

After five (5) minutes or more at the surface, any new dives are part of a repetitive dive series. The dive counter displayed in the planning mode adds one to each new dive in the repetitive series.

The planning mode allows you to review the no-decompression limits on the next dive in a series.

3.13 Dive time alarm

The dive time alarm can be activated and used for several purposes to add to your diving safety. It is simply a countdown timer in minutes.

To set the dive time alarm:

1. While in a relevant dive mode, keep [DOWN] pressed.
2. Press [DOWN] or [UP] to scroll to **ALARM TIME**.
3. Press [UP] to toggle the alarm on and press [SELECT] to confirm.

4. Adjust the duration with [UP] or [DOWN] and accept with [SELECT].
5. Press [MODE] to exit.

3.14 Diver Safety

Because any decompression model is purely theoretical and does not monitor the actual body of a diver, no decompression model can guarantee the absence of DCS. Experimentally it has been shown that the body adapts to decompression to some degree when diving is constant and frequent.

3.15 Sample rate

The sample rate controls how often information from the dive is saved to the active log. The default sample rate is 20 seconds.

To change the sample rate:

1. While in a dive mode, keep [DOWN] pressed.
2. Press [UP] to scroll to **Sample Rate** and press [SELECT].
3. Press [DOWN] or [UP] to change the rate and confirm with [SELECT].
4. Press **MODE** to exit.

The sample rate options are: 10, 20, 30 and 60 seconds.

3.16 Software version

You can check the software version and battery status of Suunto D6M under the general settings.

1. While in time mode, keep [DOWN] pressed.
2. Press [UP] to scroll to **Version** and press [SELECT].

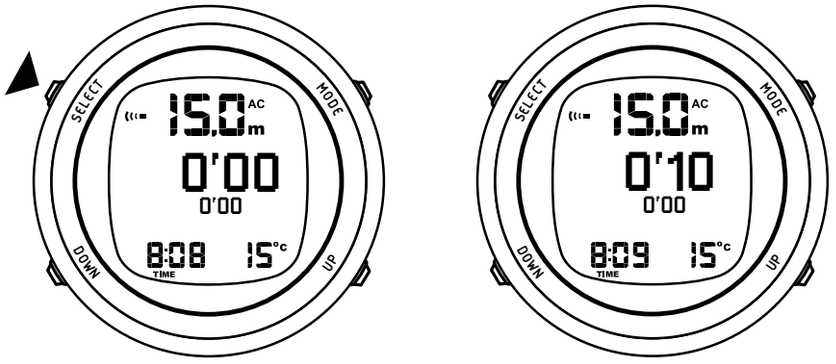
3. The software version is displayed along with the battery voltage.

3.17 Stopwatch

The stopwatch can be used to measure elapsed and split times.

To activate the stopwatch:

1. While in time mode, scroll through the bottom row view by pressing [UP] or [DOWN] until the stopwatch is displayed.
2. Press [UP] to start and [DOWN] to stop the stopwatch.
3. Press [UP] to take split times.
4. Keep [UP] pressed to reset the stopwatch.



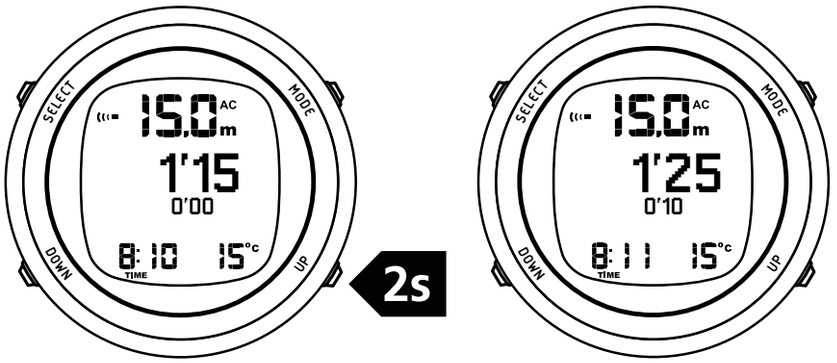
After stopping the stopwatch, you can scroll through the split times with [UP].

You can also use the stopwatch while diving for various timing purposes. To start/stop the stopwatch in dive mode, press [SELECT]. To reset the stopwatch keep the [DOWN] button pressed.

The start/stop function of the primary stopwatch during a dive also creates a bookmark with dive information that can be viewed in the dive log.

There is a second timer that can be used in dive mode. To start/stop the second timer long press [UP]. This stopwatch cannot be reset

during the dive but will reset automatically once the dive has ended.



3.18 Surface and no-fly time

Once back at the surface, Suunto D6M continues to provide post-dive safety information and alarms. If, after your dive, you need to wait until flying, the no-fly symbol displays in all modes.

To access further information about your surface and no-fly times, enter dive mode.

Suunto D6M shows the time since you surfaced in the **Surf t.** field. The airplane symbol indicates that you should not fly. The countdown until you will be safe to fly is shown in the **No Fly** field.

After using the dive mode in Suunto D6M the no-fly time recommendation is always 48 hours.

⚠ ***WARNING:*** *YOU ARE ADVISED TO AVOID FLYING ANY TIME THE COMPUTER COUNTS DOWN THE NO-FLY TIME. ALWAYS ACTIVATE THE COMPUTER TO CHECK THE REMAINING NO-FLY TIME PRIOR TO FLYING! Flying or traveling to a higher altitude within the no-fly time can greatly increase the risk of DCS. Review the recommendations given by Divers Alert Network (DAN). There can never be a flying-after-diving rule that is guaranteed to completely prevent decompression sickness!*

The Divers Alert Network (DAN) recommends the following on no-fly times:

- A minimum surface interval of 12 hours would be required in order to be reasonably assured a diver will remain symptom free upon ascent to altitude in a commercial jetliner (altitude up to 2,400 m (8,000 ft)).
- Divers who plan to make daily, multiple dives for several days, or make dives that require decompression stops, should take special precautions and wait for an extended interval beyond 12 hours before a flight. Further, the Undersea and Hyperbaric Medical Society (UHMS) suggests divers using standard air cylinders and exhibiting no symptoms of decompression sickness wait 24 hours after their last dive to fly in an aircraft with cabin pressure up to 2,400 m (8,000 ft). The only two exceptions to this recommendation are:

- If a diver has less than two (2) hours total accumulated dive time in the last 48 hours, a 12 hour surface interval before flying is recommended.
- Following any dive that required a decompression stop, flying should be delayed for at least 24 hours, and if possible, for 48 hours.

Suunto recommends that flying is avoided until all the DAN and UHMS guidelines, as well as the dive computer's no-fly conditions, are satisfied.

3.19 Tank pressure

When using the optional Suunto Wireless Transmitter, the pressure of your tank is shown in the lower left of the display.

Whenever you start a dive, the remaining air time calculation begins. After 30-60 seconds, the first estimation of remaining air time is shown in the left center of the display.

The calculation is always based on the actual pressure drop in your tank and automatically adapts to your tank size and current air consumption.

The change in your air consumption is based on constant one second interval pressure measurements over periods of 30–60 seconds. An increase in air consumption decreases the remaining air time rapidly, while a drop in air consumption increases the air time slowly. In this way, an overly optimistic air time estimate, caused by a temporary drop in air consumption, is avoided.

The remaining air time calculation includes a 35 bar (500 psi) safety reserve. This means that when the instrument shows the air time to be zero, there is still a small reserve.

NOTE: *Filling your BCD affects the air time calculation due to the temporary increase in air consumption.*

The remaining air time is not displayed when either deepstops or the decompression ceiling has been activated. You can check remaining air time by keeping [DOWN] pressed.

Temperature changes affect the tank pressure and consequently the air time calculation.

Low air pressure warnings

The dive computer warns you with two (2) audible double beeps and a blinking pressure display when the tank pressure reaches 50 bar (700 psi).

Two (2) double beeps sound when the tank pressure reaches the defined alarm pressure and when the remaining time reaches zero.

3.19.1 Wireless transmission

To enable wireless transmission of tank pressure data to Suunto D6M requires:

1. Installation of Suunto Wireless Transmitter onto your regulator.
2. Pairing the transmitter to your Suunto D6M.
3. Enabling the wireless integration in your Suunto D6M settings.

The transmitter enters power saving mode with slower data transmission rate if the tank pressure remains unchanged for more than five (5) minutes.

The optional transmitter sends out a low battery (**batt**) warning when its battery voltage is getting low. This is shown intermittently instead of the pressure reading. When you get this warning, the tank pressure transmitter's battery needs to be replaced.

3.19.2 Installing and pairing transmitter

When purchasing the Suunto Wireless Transmitter, we strongly recommend that you have your Suunto representative attach the transmitter to the first stage of your regulator.

The unit needs to be undergo a pressure test after installation and typically this requires a trained technician.

In order to receive wireless data, the transmitter and the Suunto D6M need to be paired.

The wireless transmitter activates when the tank pressure exceeds 15 bar (300 psi). The transmitter then starts sending pressure data together with a code number.

When your Suunto D6M is within 0.3 m (1 ft) of the transmitter, it receives and stores that code. The transmitter and Suunto D6M are now paired. Suunto D6M will then display the pressure data it receives with this code. This coding procedure prevents data mix-up from other divers also using a Suunto Wireless Transmitter.

NOTE: *The pairing procedure normally only needs to be done once. You may need to redo the pairing procedure if another diver in your group uses the same code.*

To assign a new transmitter code:

1. Slowly open the tank valve fully to pressurize the system.
2. Immediately close the tank valve.
3. Quickly depressurize the regulator so that the pressure is reduced to less than 10 bar (145 psi).
4. Wait about 10 seconds, and slowly open the tank valve again to re-pressurize above 15 bar (300 psi).

The transmitter assigns a new code automatically. To re-pair the transmitter with your Suunto D6M:

1. While in a dive mode other than **Free** or **Gauge**, keep [DOWN] pressed to enter the settings.
2. Press [DOWN] to scroll to **Tank Press Pairing** and press **SELECT**.
3. Make sure **TANK PRESS PAIRING** is set to **ON** and press [SELECT].
4. A code number is displayed. Press [UP] to clear the code.
5. Press [SELECT].
6. Press [MODE] to exit.

With the system pressurized to above 15 bar (300 psi), bring your Suunto D6M close to the transmitter. When pairing is completed, the dive computer displays the new code number and the transmitted tank pressure.

The wireless transmitter indicator is displayed every time a valid signal is received.

3.19.3 Transmitted data

After pairing, your Suunto D6M receives tank pressure data from the transmitter.

Any time the Suunto D6M receives a signal, one of the following symbols is shown in the lower left corner of the display.

Display	Indication
Cd:--	No code stored, the dive computer is ready for pairing with the transmitter.
Cd:10	Current code number. Code number can be from 01 to 40.
- - -	The flash symbol is blinking. Pressure reading exceeds allowed limit (over 360 bar (5220 psi)).
no conn	Text **no conn** is displayed when the unit receives no data from the transmitter. The pressure reading has not been updated for over a minute. The last received pressure blinks on and off. The flash symbol is not displayed. This state may be caused by the : 1. Transmitter being out of range (>1.2 m (4 ft)) 2. Transmitter is in power saving mode

Display	Indication
	3. Transmitter is on another channel. To correct this:
batt	Pressure transmitter battery voltage is low. Change the transmitter battery!

3.19.4 Tank pressure alarm

There are two tank pressure alarms. The first is fixed at 50 bar (700 psi) and cannot be changed.

The second is user configurable. It can be turned on or off and can be used for a pressure range of 10–200 bar (200-3000 psi).

To set the tank pressure alarm value:

1. While in a dive mode, keep [DOWN] pressed to enter settings.
2. Press [DOWN] to scroll to **Tank Press Alarm** and press [SELECT].
3. Press [UP] to turn the alarm on and confirm with [SELECT].
4. Adjust the pressure level with [UP] or [DOWN] and confirm with [SELECT].
5. Press [MODE] to exit.

3.20 Tones

Device tones can be turned on or off. When tones are off, there are no audible alarms.

To set tones:

1. While in time mode, keep [DOWN] pressed.
2. Press [DOWN] or [UP] to scroll to **Tones** and press [SELECT].

3. Press [DOWN] or [UP] to toggle on/off and confirm with [SELECT].
4. Press [MODE] to exit.

3.21 Water contact

The water contact is located on the side of the case. When submerged, the water contact poles are connected by the conductivity of the water. Suunto D6M switches to dive state when water is detected and the depth gauge senses water pressure at 1.2 m (4 ft).

The **AC** is shown until the water contact deactivates. It is important to keep the water contact area clean. Contamination or dirt can prevent automatic activation/deactivation. See *4.1 Handling guidelines*.

NOTE: *Moisture build-up around the water contact may cause the dive mode to activate. This can happen, for example, when washing your hands or sweating. To save battery power, deactivate the water contact by cleaning it and/or drying it with a soft towel.*

4 CARE AND SUPPORT

4.1 Handling guidelines

The Suunto D6M dive computer is a sophisticated precision instrument. Although it is designed to withstand the rigors of diving, you must treat it with the same proper care and caution as any other precision instrument.

Handle the unit with care – do not knock or drop it.

Do not fasten the strap of your dive computer too tightly. You should be able to insert your finger between the strap and your wrist.

After use, rinse it with fresh water, mild soap, and carefully clean the housing with a moist soft cloth or chamois.

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

Keep the water contact and depth sensors areas on the sides of the watch clean using fresh water and a soft brush, such as a toothbrush.

Never try to open the case of the dive computer. Have your Suunto D6M serviced every two years or after 200 dives (whichever comes first) by an authorized Suunto service center.

This service includes a general operational check, replacement of the battery, and water resistance check. The service requires special tools and training. Do not attempt to do any servicing yourself.

Should moisture appear inside the case or battery compartment, immediately have the instrument checked by your Suunto service center.

The optional scratch guard for Suunto D6M is designed to help prevent the display from getting scratched. Scratch guards can be purchased separately from your authorized Suunto dealer.

Should you detect scratches, cracks or other such flaws on the display that may impair its durability, immediately contact your authorized Suunto dealer.

Protect the unit from shock, extreme heat, direct sunlight, and chemicals.

Store your dive computer in a dry place when you are not using it.

4.2 Water resistance

Suunto D6M is water resistant to 150 meters (492 ft) in compliance with the dive watch standard ISO 6425.

⚠ ***WARNING:*** *Water resistance is not equivalent to maximum operating depth. The maximum operating depth of this dive computer is 120 meters (393 ft).*

To maintain water resistance, it is recommended to:

- never use the device for other than intended use.
- contact an authorized Suunto service center, distributor or retailer for any repairs.
- keep the device clean from dirt and sand.
- never attempt to open the case yourself.

- avoid subjecting the device to rapid air and water temperature changes.
- always clean your device with fresh water if subjected to salt water.
- never knock or drop the device.

4.3 Battery replacement

Suunto D6M displays a battery symbol as a warning when the power gets too low. When this happens, your Suunto D6M should not be used for diving until the battery has been replaced.

Contact an authorized Suunto service center for battery replacement. It is imperative that the change is made in a proper manner to avoid any leakage of water into the battery compartment or computer.

Defects caused by improper battery installation are not covered by the warranty.

All history and logbook data, as well as the altitude, personal and alarm settings, remain in the dive computer memory after the battery change. Other settings revert back to default values.

5 REFERENCE

5.1 Technical specifications

Dimensions and weight

- Length: 50 mm (1.97 in)
- Width: 50 mm (1.97 in)
- Height: 16.0 mm (0.61 in)
- Weight: 113 g (3.98 oz)

Operating conditions

- Water resistance: 150 m (492 ft) (complying with ISO 6425)
- Normal altitude range: 0 to 3,000 m (0 to 10,000 ft) above sea level
- Operating temperature: 0 °C to 40 °C (32 °F to 104 °F)
- Storage temperature: -20 °C to +50°C (-4 °F to +122 °F)
- Maintenance cycle: 200 hours of diving or two years, whichever comes first

Depth gauge

- Temperature compensated pressure sensor
- Accurate to 100 m (328 ft) complying with EN 13319
- Depth display range: 0 to 300 m (0 to 984 ft)
- Resolution: 0.1 m from 0 to 100 m (1 ft from 0 to 328 ft)

Temperature display

- Resolution: 1 °
- Display range: -20 °C to +50 °C (-4 °F to +122 °F)

- Accuracy: ± 2 °C (± 3.6 °F) within 20 minutes of temperature change

Other displays

- Dive time: 0 to 999 min
- Surface time: 0 to 99 h 59 min
- Dive counter: 0 to 99 for repetitive dives

Calendar clock

- Accuracy: ± 25 s/month (at 20 °C (68 °F))
- 12/24 h display

Compass

- Accuracy: +/- 15°
- Resolution: 1°
- Max. tilt: 45 degrees
- Balance: global

Stopwatch

- Accuracy: 1 second
- Display range: 0’00 – 99’59
- Resolution: 1 second

Logbook

- Sample rate in air and nitrox modes: default 20 seconds
- Sample rate in free diving mode: default 2 seconds
- Memory capacity: approximately 140 hours with 20-second recording interval and without transmitter data. In free dive mode, maximum capacity is 35 hours.

5.2 Compliance

5.2.1 CE

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

5.2.2 EN 13319

EN 13319 is a European diving depth gauge standard. Suunto dive computers are designed to comply with this standard.

5.2.3 EN 250 and FIOH

The tank pressure gauge and dive instrument parts used in measuring the tank pressure meet the requirements set in the section of the European Standard EN 250 that concern tank pressure measurements. FIOH, notified body no.0430, has EC type-examined this type of personal protective equipment.

5.3 Trademark

5.4 Patent notice

This product is protected by pending patent applications and their corresponding national rights: US 5,845,235, US 7,349,805, US 8,660,826. Additional patent applications may be filed.

5.5 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, 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.

5.6 Copyright

5.7 Terms

Term	What it means
Altitude dive	A dive made at an elevation greater than 300 m (1000 ft) above sea level.
Ascent rate	The speed at which the diver ascends toward the surface.
Ascent time	The minimum amount of time needed to reach the surface on a decompression stop dive.
Ceiling	On a decompression stop dive, the shallowest depth to which a diver may ascend based on computed inert gas load.
CNS	Central nervous system toxicity. Toxicity is caused by oxygen. Can cause a variety of neurological symptoms. The most important of which is an epileptic-like convulsion which can cause a diver to drown.
CNS%	Central nervous system toxicity limit fraction.
Compartment	See "Tissue group".
DM5	Suunto DM5 with Movescount, a software for managing your dives.
Decompression	Time spent at a decompression stop, or range, before surfacing, to allow absorbed nitrogen to escape naturally from tissues.

Term	What it means
Decompression range	On a decompression stop dive, the depth range between the floor and the ceiling within which a diver must stop for some time during ascent.
DCS	Decompression sickness/illness. Any of a variety of maladies resulting either directly or indirectly from the formation of nitrogen bubbles in tissues or body fluids, as a result of inadequately controlled decompression.
Dive series	A group of repetitive dives between which the dive computer indicates some nitrogen loading is present. When nitrogen loading reaches zero the dive computer deactivates.
Dive time	Elapsed time between leaving the surface to descend, and returning to the surface at the end of a dive.
Floor	The deepest depth during a decompression stop dive at which decompression takes place.
He%	Helium percentage or helium fraction in the breathing gas.
MOD	Maximum operating depth of a breathing gas is the depth at which the partial pressure of oxygen (PO_2) of the gas mix exceeds a safe limit.

Term	What it means
Multi level dive	A single or repetitive dive that includes time spent at various depths and whose no decompression limits are therefore not determined solely by the maximum depth attained.
Nitrox (Nx)	In sports diving, refers to any mix with a higher fraction of oxygen than standard air.
No deco (No decompression stop time)	Any dive which permits a direct, uninterrupted ascent to the surface at any time.
No dec time	Abbreviation for no decompression time limit.
OC	Open-circuit. Scuba that exhausts all exhaled gas.
OLF%	Oxygen limit fraction. The diver's current oxygen toxicity exposure.
O_2%	Oxygen percentage or oxygen fraction in the breathing gas. Standard air has 21% oxygen.
Partial pressure of oxygen (O2)	Limits the maximum depth to which the nitrox mixture can be safely used. The maximum partial pressure limit for enriched air diving is 1.4 bar (20 psi). The contingency partial pressure limit is 1.6 bar (23 psi). Dives beyond this limit risk immediate oxygen toxicity.

Term	What it means
Reduced gradient bubble model (RGBM)	Modern algorithm for tracking both dissolved and free gas in divers.
Repetitive dive	Any dive whose decompression time limits are affected by residual nitrogen absorbed during previous dives.
Residual nitrogen	The amount of excess nitrogen remaining in a diver after one or more dives.
Scuba	Self-contained underwater breathing apparatus.
Surface time	Elapsed time between surfacing from a dive and beginning a descent for the subsequent dive.
Tissue group	Theoretical concept used to model bodily tissues for the construction of decompression tables or calculations.
Trimix	A breathing gas mix of helium, oxygen and nitrogen.

INDEX

SUUNTO CUSTOMER SUPPORT

1. **www.suunto.com/support**
   www.suunto.com/mysuunto
2.

AUSTRALIA	**+61 1800 240 498**
AUSTRIA	**+43 720 883 104**
CANADA	**+1 800 267 7506**
CHINA	**+86 010 84054725**
FINLAND	**+358 9 4245 0127**
FRANCE	**+33 4 81 68 09 26**
GERMANY	**+49 89 3803 8778**
ITALY	**+39 02 9475 1965**
JAPAN	**+81 3 4520 9417**
NETHERLANDS	**+31 1 0713 7269**
NEW ZEALAND	**+64 9887 5223**
RUSSIA	**+7 499 918 7148**
SPAIN	**+34 91 11 43 175**
SWEDEN	**+46 8 5250 0730**
SWITZERLAND	**+41 44 580 9988**
UK	**+44 20 3608 0534**
USA	**+1 855 258 0900**