1 SAFETY

Types of safety precautions

WARNING: THERE IS ALWAYS A RISK OF DECOMPRESSION

⚠ *WARNING: SET THE CORRECT PERSONAL SETTING! Whenever it is believed that factors that tend to increase the possibility of DCS exist, it is recommended that you use this option to make the calculations more conservative. Failure to select the correct personal setting will result in erroneous dive and planning data.*

⚠ *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*

⚠ *WARNING: ENSURE THE WATER RESISTANCE OF THE DEVICE!*

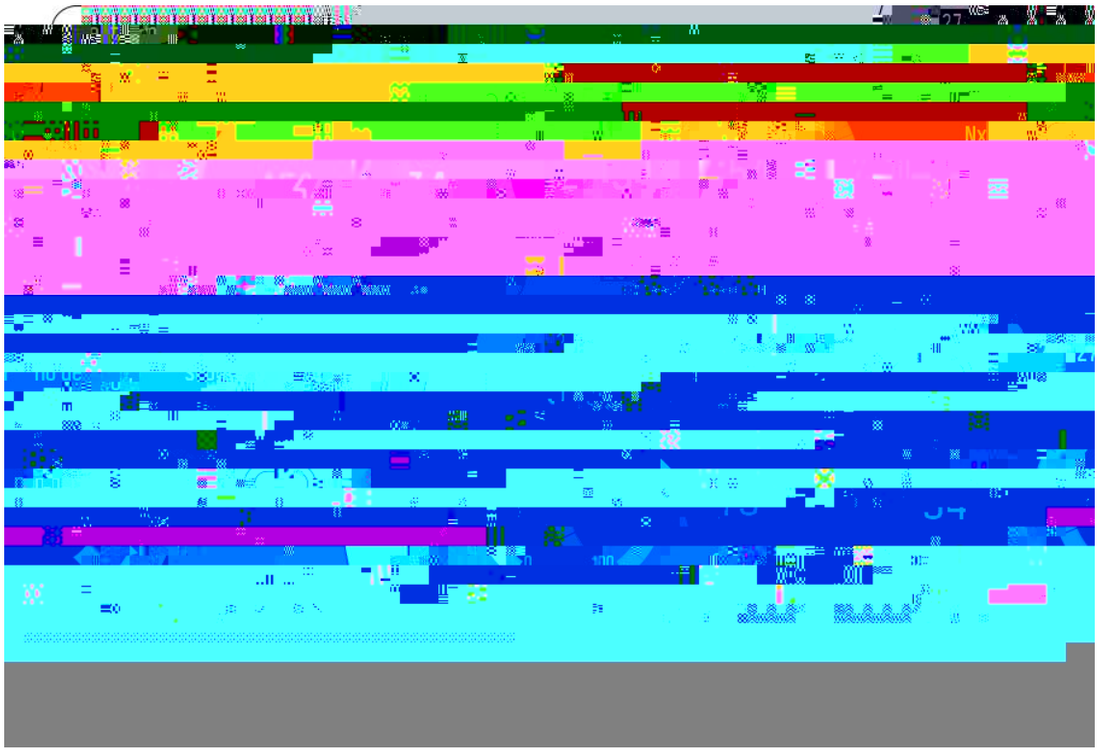
⚠ *CAUTION: Only attach Suunto USB Cable to the data transfer contact on the Suunto dive computer.*

⚠ *CAUTION: Never lift or carry your cylinder by holding the wireless tank pressure transmitter as this may break the cover and cause flooding of the unit. If your cylinder falls down with the transmitter attached to the regulator first stage, ensure that the transmitter has not been damaged before diving with it.*

2 GETTING STARTED

2.1 Display states and views

Suunto EON Steel has two main views in surface and dive states: time/no deco, and compass. Change the view by pressing the middle button.



3. Fully charge before first dive.

The startup wizard guides you through:

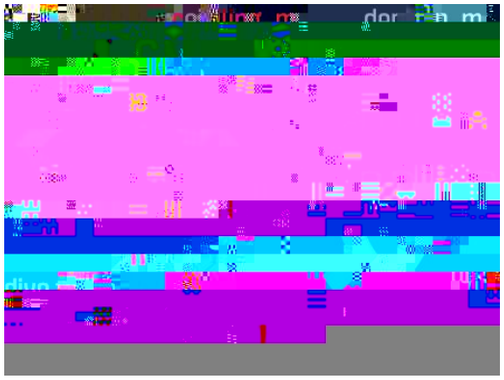
- Units settings
- Time format (12h/24h)
- Date format (dd.mm / mm.dd)

3 FEATURES

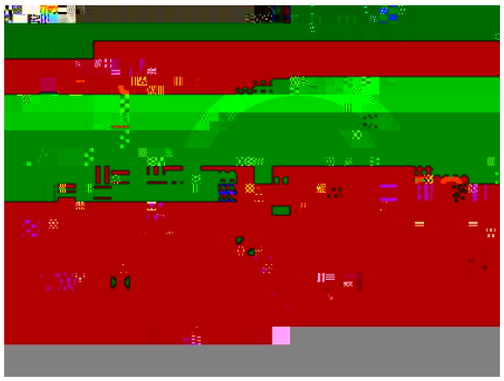
3.1 About Suunto EON Steel

Warning	Explanation
DEPTH	

Notification



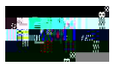
In such a condition, you should descend back below the ceiling level to continue the decompression. If you fail to do so within three (3) minutes, Suunto EON Steel locks the algorithm calculation and displays ERROR instead, as shown below. Note that the ceiling value is no longer present.

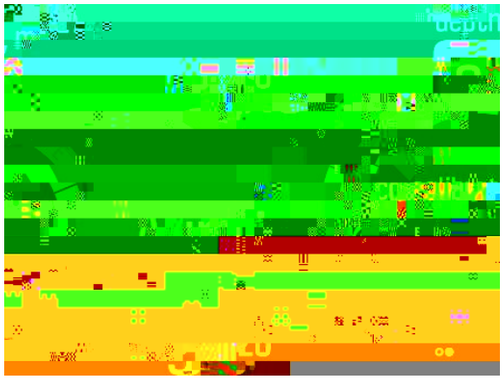


In this state, you significantly increase your risk of decompression sickness (DCS). Decompression information is not available for the next 48 hours after surfacing.

It is possible to dive with the device when the algorithm is locked, but instead of the decompression information, ERROR is shown. Going to dive mode when algorithm is locked resets the algorithm lock time back to 48 hours when you surface.

The battery icon in the upper-left corner of the display shows the battery status. To the right of the battery icon is the estimated remaining dive time in hours.

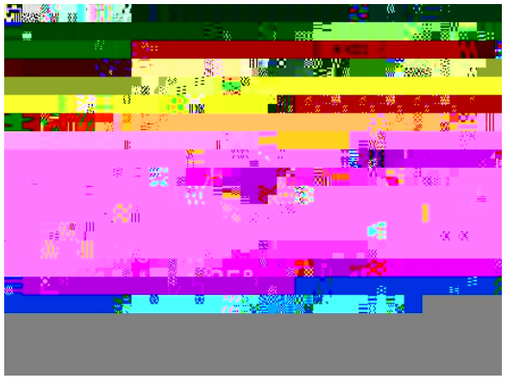
Icon	Explanation
	Estimated remaining dive time is 27 hours; no immediate need to recharge
	Estimated remaining dive time is three (3) hours or less; recharge needed remaini 1 -53.0.4E ted remaining dive tli Wn 1 0 0 1 2 4.196 cr

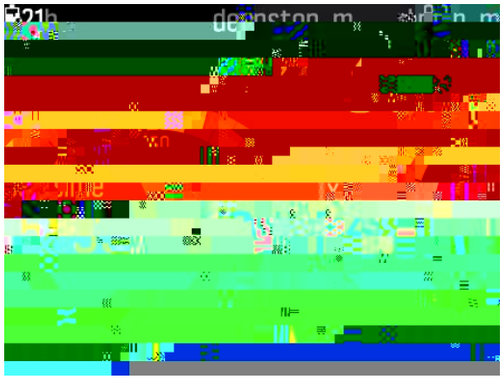


Because of changes in the surrounding magnetic field, it is recommended to re-calibrate the compass before each dive.

To manually start calibration:

1. Keep the middle button pressed to enter the menu.
2. Browse to General / Compass.
3.





On a decompression dive, there could be three kinds of stops:

- Safety stop
- Deepstop
- Decompression stop

Though not recommended, you may break (ignore) deepstops and safety stops. Suunto EON Steel penalizes such actions with

includes the number of dives, cumulative dive hours and maximum depth.

By default the decompression algorithm used in Suunto EON Steel is Suunto Fused™ RGBM. For more information about the algorithm, see *3.23 Suunto Fused RGBM*.

Gauge is a bottom timer mode and thus has no decompression information or calculation included.

3.15 Logbook

Dive logs can be found under Menu / Logs. By default, they are listed by date and time.

Dive log details and profile can be browsed by scrolling through the log with upper or lower button and selecting it with the middle button.

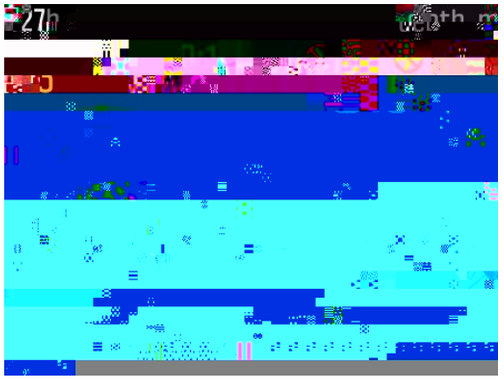
Each dive log contains data samples with fixed 10-second intervals. The dive profile includes a cursor for browsing the logged data, scrollable by scrollij 0 .80eon. 2. /o 60ve logerollgd data,

⚠ *WARNING: When diving with multiple gases, remember that the ascent time is always calculated with the assumption that you use all the gases found in the Gas(es) menu. Always check that you have only the gases for your current planned dive defined before you dive. Remove the gases that are not available for the dive.*

3.17 Oxygen calculations

During a dive, Suunto EON Steel calculates partial pressure of oxygen (pO2), central nervous system toxicity (CNS%) and

The personal factors which tend to increase the possibility of DCS



No-fly time is always at least 12 hours and equals desaturation time when it is more than 12 hours. For desaturation times shorter than 70 minutes, no no-fly time is displayed.

If decompression is omitted during a dive so that Suunto EON Steel enters permanent error mode (see *3.3 Algorithm lock*), the no-fly time is always 48 hours. Similarly, if dive is done in gauge mode (bottom timer), the no-fly time is 48 hours.

3.22 Suunto DM5 and Movescount

The Suunto DM5 software program allows you to track and analyze all of your dive logs and plan your future dives. With DM5 you can customize your Suunto EON Steel and update the device firmware. Download Suunto DM5 from www.suunto.com/dm5.

3. Click update and wait for the update process to complete. This may take 10 minutes or more.

Oxygen related information displayed by the dive computer is also designed to ensure that all warnings and displays occur at the appropriate phases of a dive. For example, the following information is provided before and during a dive when the computer is set in Air/Nitrox or Trimix:

- The selected O2% (and possible helium %)
- CNS% and OTU
- Audible notification when CNS% reaches 80%, then notification when 100% limit is exceeded
- Notifications when OTU reaches 250 and then again when 300 limit is exceeded
- Audible alarm when pO2 value exceeds the preset limit (pO2 high alarm)
- Audible alarm when pO2 value is < 0.18 (pO2 low alarm)

3.23.4 Isobaric counterdiffusion (ICD)

3.24 Tank pressure

Your Suunto EON Steel can be used with multiple Suunto Tank PODs for wireless tank pressure transmission.

To install and pair a Suunto Tank POD:

1. Install the Tank POD and open the valve.

2. Wait for green LED on Tank POD to flash.
3. If your Suunto EON Steel has a blank screen, press any key to activate it.
4. Hold your Suunto EON Steel close to the Tank POD as shown.

5. After a few seconds, a menu pops up on the screen showing the

3.25 Timer

Suunto EON Steel has a timer that can be used for timing specific actions during surface or dive. The timer is shown in bottom-right corner as scrollable item.

4.4 Charging battery

Fully charged, Suunto EON Steel provides min. 20 hours of dive time. The expected lifetime of the rechargeable lithium-ion battery is 500 cycles.

Charge Suunto EON Steel with the supplied USB cable. Connect the cable to a USB wall charger or a computer USB port. If the battery is very low, the display remains dark while charging until the battery has reached an adequate charge level.

2. If you cannot find an answer to your question online, try emailing Suunto at 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.

5 REFERENCE

5.1 Technical specifications

Dimensions and weight:

- Length: 104.6 mm / 4.12 in
- Width: 60.5 mm / 2.38 in
- Height: 23.1 mm / 0.91 in
- Weight: 347 g / 12.2 oz

Compass

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

Timer

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

Logbook

- Sample rate. 10 seconds
- Memory capacity: approximately 200 hours of diving

Tissue calculation model

- Suunto Fused™ RGBM algorithm (developed by Suunto and Bruce R. Wienke, BSc, MSc, PhD)
- 15 tissue compartments
- Tissue compartment halftimes for nitrogen: 1, 2, 5, 10, 20, 40, 80, 120, 160, 240, 320, 400, 480, 560 and 720 min. The on-gassing and off-gassing halftimes are the same.
- Tissue compartment halftimes are divided by a constant factor to obtain helium halftimes.
- Reduced gradient (variable) M-values based on diving habit and dive violations. The M-values are tracked up to 100 hours after a dive

- The exposure calculations (CNS% and OTU) are based on recommendations by R.W. Hamilton, PhD and currently accepted exposure time limit tables and principles.

Battery

- Type: rechargeable lithium-ion
- Battery life: fully charged, min. 20h dive time

The following conditions have an effect on the expected battery lifetime:

- The conditions in which the unit is operated and stored (for example, temperature/cold conditions). Below 10°C/50°F the expected battery lifetime is about 50- 75% of that at 20°C/68°F.

parts, including but not limited to chargeable batteries, chargers, docking stations, straps, cables and hoses.

Exclusions and Limitations

This Limited Warranty does not cover:

1. a) normal wear and tear, b) defects caused by rough handling, or c) defects or damage caused by misuse contrary to intended or recommended use;
2. user manuals or any third-party items;
3. defects or alleged defects caused by the use with any product, accessory, software and/or service not manufactured or supplied by Suunto;

This Limited Warranty is not enforceable if item:

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;
4. has been exposed to chemicals including but not limited to mosquito repellents.

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

and/ma otherwise communicated, disclosed or reproduced without contents shall not be used or distributed rma any other purpose informatio-92 regarding the operio-92 of Suunto products. Its

Term	Explanation
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
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.
Decompression	Time spent at a decompression stop, or range, before surfacing, to allow absorbed nitrogen to escape naturally from tissues.
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.

Term	Explanation
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.

Term	

Term	

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SUUNTO CUSTOMER SUPPORT

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