

User Manual

...designed to **protect**



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Scuba Capsule Installation

Scuba Capsule app is available free on the App Store. It comes with a core set of essential tools for divers, and the additional features and add-ons are available via in-app purchases.

The important references throughout this manual have been prioritized by the following classes of importance:

WARNING	the highest importance reference to a situation that might result in serious injury or death
CAUTION	high importance reference to a situation that might result in damage to the product
NOTE	reference to a non critical nor dangerous practice or situation of moderate importance



<https://itunes.apple.com/us/app/scuba-capsule-pro/id1059230461?ls=1&mt=8>

Follow the on-screen instruction to install the app. Your permission to use the camera, your location and microphone is required to unlock all the app features and modes. The app will ask for your permission when opened for the first time. To change the privacy settings go to your iPhone Settings – ScubaCapsulePro.

To increase the battery life we recommend to close all the apps running in the background.

If you have any questions about this User Manual or about Scuba Capsule in general, please contact Scuba Capsule Customer Support.

Telephone: +49 4421 7472482

Email: info@scuba-capsule.de

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Safety Precautions

BEFORE DIVE

- Make sure the o-rings are securely placed, and undamaged.
- It is a good practice to lubricate the o-rings with a silicone grease periodically.
- Make sure the housing is 100% dry inside before inserting your smartphone.
- Insert the right fitting frame for your iPhone model.
- Fasten the draw latch until the safety locks clicks.

The iPhone battery should always be fully charged before your dive trip. The battery will use about 25% charge per dive-hour (in Dive Mode), although this will also be dependent on temperature of the environment. Also, constant use of video recording or multimedia modes may significantly decrease battery life.

We recommend putting your iPhone into Flight Mode before your dives.

WARNING

Scuba Capsule is not a life critical device. As every other dive computer, Scuba Capsule is designed to provide an information about your dive, and among other helpful information, calculate the decompression time limits that are based on commonly used decompression algorithms. Every diver must know his or her own individual limits, and it's crucial to know how to dive safely without a use of dive computers. In case of device failure - rely on the procedures learned during your dive certification training, and/or end your dive safely.

CAUTION

The proper use of the top hatch o-rings is crucial to avoid a leakage of the housing. To ensure proper sealing and durability of the o-rings it's important to periodically monitor the condition of o-rings and regularly replace them in case of visible mechanical damage (abrasion, cuts, degradation of rubber).

NOTE

Scuba Capsule is offered with a 1-Year Manufacturer's Warranty. Additional warranty and insurance provided by Scuba Capsule authorized distributors may be available in your territory.

Scuba Capsule housing is made of anodized 6000 series aluminum - the same material used in aerospace and marine industries, as well as in Apple notebooks. Machined with the highest level of precision the housing guarantees the best 100% pressure sealed protection to the extreme depths in the harsh salt water environment.

The dive modes, such as camera with heads-up display, underwater multimedia, as well as custom apps and add-ons are designed to enhance your scuba diving experience, eliminating the same time a need to carry multiple different devices.

What's included:

- Scuba Capsule device
- Bumper fitting frame
- Depth rating certificate: 150M / 500ft
- Spare o-rings
- Quick start guide



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Technical Specification



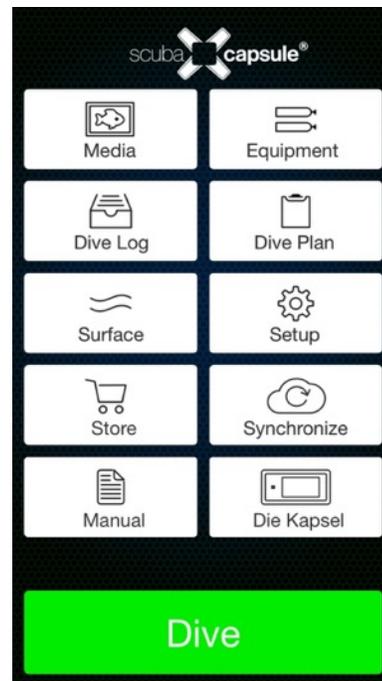
- Dimensions Scuba Capsule 5:
166 x 90 x 22 [mm]
- Dimensions Scuba Capsule 6:
180 x 96 x 22 [mm]
- Weight: 450g (SC5), 500g (SC6)
- Depth rating: 150 Meters / 330FT
Custom version available with 300M pressure-test certificate.
- Material: 6000-series Aluminum, CNC-machined from a solid billet of salt water resistant alloy.
- Connector: Apple Lightning connector inside the housing
- Glass: scratch-proof Gorilla glass permanently sealed on front and back
(premium aluminosilicate glass, made in USA by Corning)
- Pressure sensor: premium Swiss-made 30-Bar depth sensor with stainless steel membrane. Resolution 0-300M @0.1M intervals
- Temperature sensor: operating temperature 0-70°C / 32-120°F
- Gyro-sensor
- 3-Axis accelerometers
- Infrared touch sensor with ambient light sensor and LED
- Two stainless steel accessory mounts with standard thread 1/4" UNC-20
- iPhone battery power consumption estimated to 20% per hour during normal use underwater.
- User-friendly touch & punch controls



MAX



- User-replaceable bumper frame inserts - compensate size differences between Apple devices and provide shock-resistant protection for your iPhone.
- Top hatch designed with the smallest circumference possible, sealed with two o-rings and secured with stainless steel latch and safety push-pin.
- Highest quality surface finish - CNC milled and deeply anodized aluminum. Laser engraving.
- LF radio antenna embedded inside the housing.
- Air-integrated. Scuba Capsule works with Suunto transmitters.
- Dive computer for Air, Nitrox, Trimix, with CCR support.
- Gas mixtures available:
Oxygen 5-99%
Helium 0-95%
PPO2 0.0 - 9.9 Bar
- User Interface:
- dive time: 0-999 min
- surface interval: 99h:59m
- no decompression limit (NDL): 0-999 min
- ascent time: 0-999 min
-deco depth range: 3-150m
- Date & Time synchronized with cellular network in 12 or 24h format (iPhone setting)
- Log book sampling and recording rate: 1s
- Data storage capacity requirement: ~1MB per dive-hour.
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Core Functionality

The app will switch to the Surface Mode when the iPhone is installed in the capsule. The Dive Mode and will automatically trigger underwater (at 1m/3ft depth).

To control the device, use the touch sensor and punching gestures (accelerometer controls):

- Photo/video mode - touch once to take a photo (or start/stop recording); hold for 3 sec to switch between photo and video modes
- Dive computer mode - touch once to lock bearings; hold for 3 sec to change the gas mix (touch once to confirm selection)
- Multimedia player - touch once to play / pause selected audio or video track; hold 3sec to change volume
- Punch top or bottom of the housing to select option or an item from a list
- Punch either side of the housing to switch mode

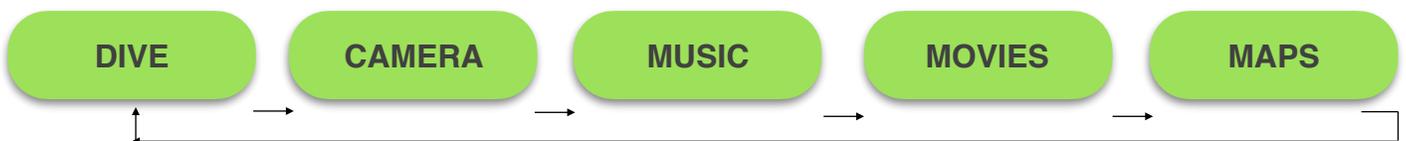


Double punch the housing to get back directly to main dive screen.

If the capsule is positioned face-down for 4+ seconds it will automatically switch back to main dive mode.

The capsule will go into a power-saving sleep mode 5 minutes after no user activity is detected. Dive critical information is visible on the screen at all time. Shake or punch the housing to wake up the device.

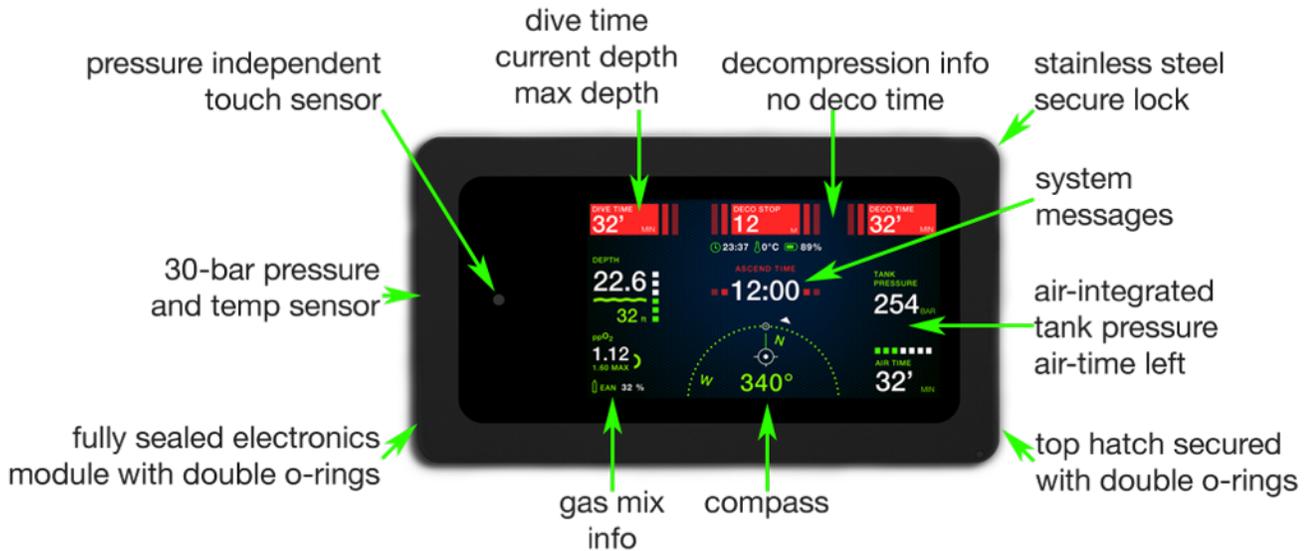
The modes available underwater:



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Quick Start

The Scuba Capsule all-in-one user interface design.

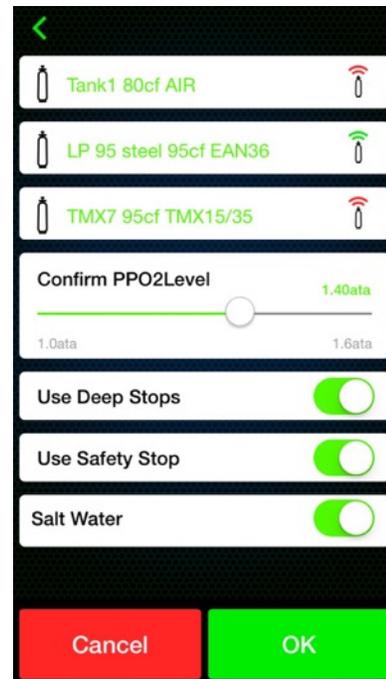


When you start the Scuba Capsule Pro app and tap “Dive”, the “Quick Setup” screen is displayed. You can use this screen to select pre-configured tanks with your gas mixtures.

When the tank description text color is green, then it’s available for your next dive. Tap to select/unselect.

The following Quick Setup settings can be configured: oxygen partial pressure limits, use of deep stop and safety stop, and whether the dive is in saltwater or fresh water.

When you tap “OK”, the app performs a self-check routine. Afterwards, the iPhone can be inserted into Scuba Capsule.



With the app running, insert the phone into the capsule and close the hatch.

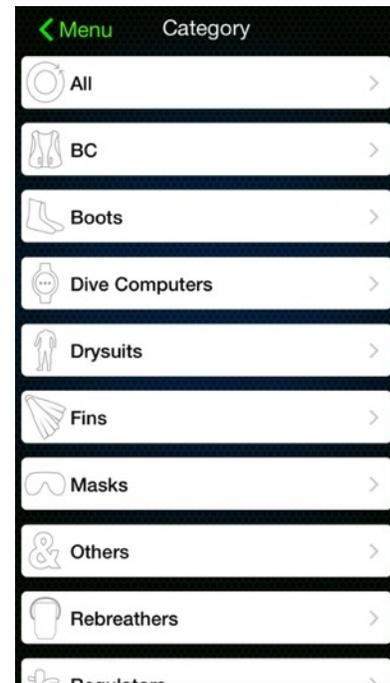
Always make sure the hatch is securely locked with the safety push-pin. To unlock the hatch, push the pin down first and then lift the latch.

The blinking LED next to the touch sensor indicates the capsule is ready for a dive.

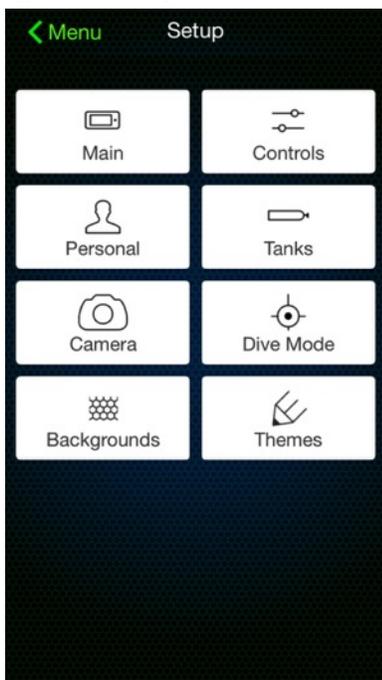
To add more tanks and choose correct gas mixes, go to Setup - Tanks. The default tank available initially is filled with Air (21% O2) - it's a standard Aluminum 80CF.

You can also manage your tanks as well as any other dive gear items in the Equipment management tool. If you provide the equipment service/inspection schedule to any gear item, the app will notify you couple of weeks before your maintenance service due date.

You can define an unlimited number of gas mixes and tanks that you might use. The tanks selected for the next dive can be switched underwater in Dive Mode (hold touch-sensor for 3+ sec).



go to Setup-Tanks



enter tank details



choose gas mix



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Dive Plan

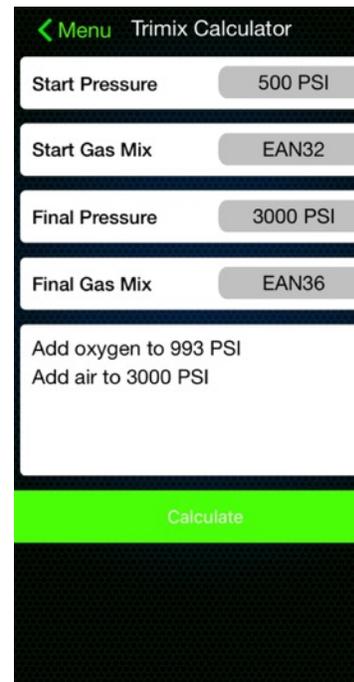
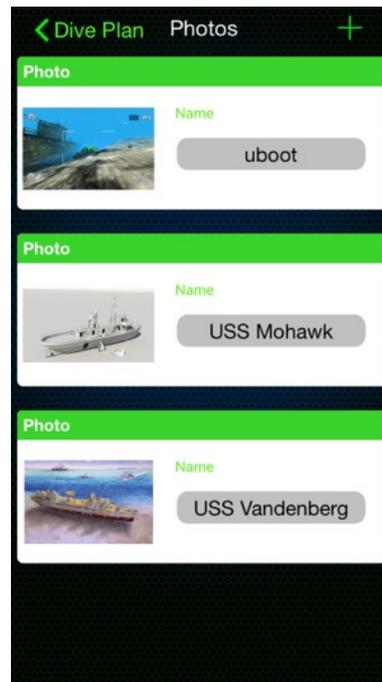
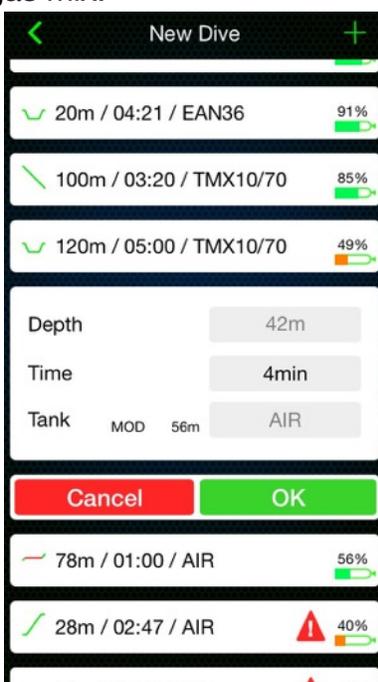
The Scuba Capsule Dive Plan is a set of tools useful for planning the next dive adventure. The Repetitive Dive Planner will estimate your gas consumption and decompression limits on the multi-level, and multiple tank dive simulated profiles. You can define the max depth and planned time for each consecutive dive, select tanks / gas mixes, and add the surface intervals between dives - the RDP will calculate your dive profile. Go to RDP Settings to customize your profile and pick a decompression algorithm of your choice.

The Messages tab allows you to set up a list of pre-defined notification that will occur on given time or depth. The ascent / descent option is useful to setup reminders about a gas change for your decompression profile.

The Nitrox / Trimix calculator is a tool that quickly calculates the gas proportions for tank refills. Just enter the remaining pressure and gas mix of the used tank, then enter your full tank pressure and expected gas mix.



Use the “Location photos” to upload dive site maps and local marine life charts that you can review underwater.



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App Setup

You can deeply customize your diving experience in the Scuba Capsule Setup.

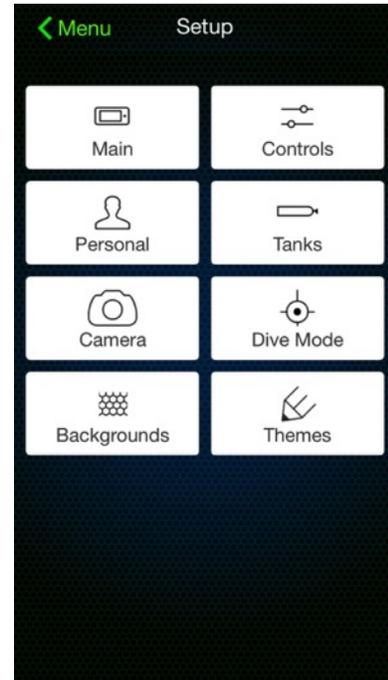
The Main tab allows you to change the units [Metric/Imperial], and general preferences.

In the Personal tab you can store your Emergency Contact Information and update your dive history record.

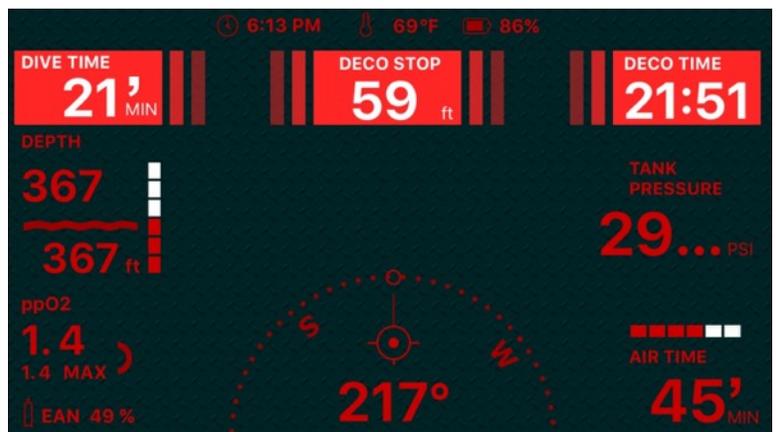
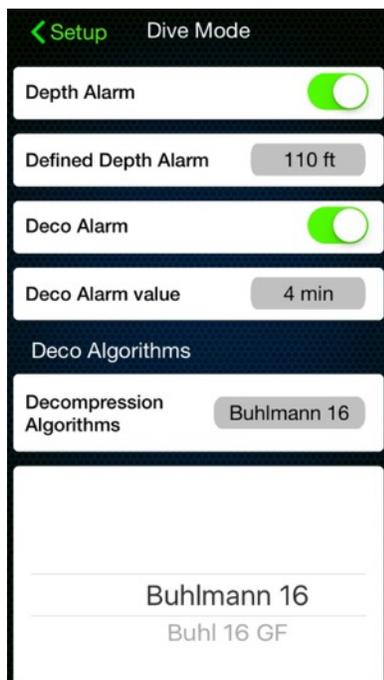
To configure your Head-Up-Display go to Camera setup and select which indicators you would like to have on-screen in the Camera Mode.

The Controls will let you adjust the power saving mode activation time and the audio volume.

In Dive Mode setup tab, the following options can be configured and personalized: Depth Alarm, Deco Alarm, Decompression Algorithm and its presets (Neutral / Conservative), Deep Stops, Safety Stops (duration and depth), PPO2 limits, Reserve Pressure, and Surface Air Consumption details.



Additionally you can personalize your capsule's display with custom Backgrounds and Themes.



Dive Mode interface in Night Theme

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Equipment

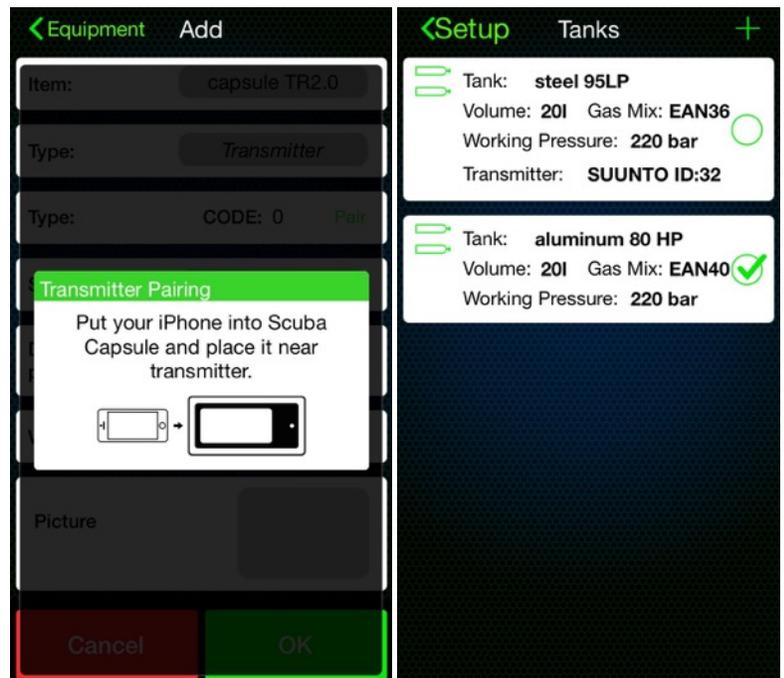
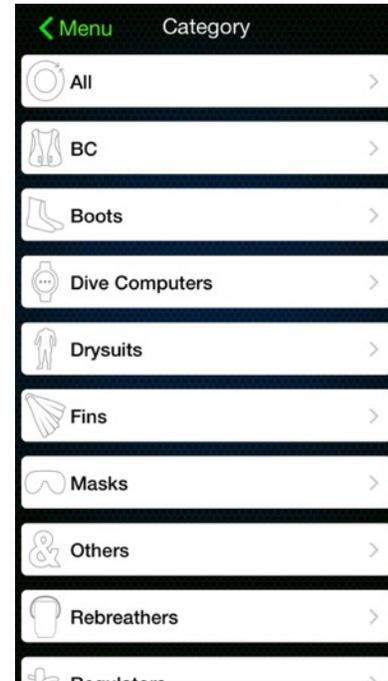
The Equipment management tool allows keeping track of any dive gear you own and / or use. To add dive gear - select a category and tap “+” . If a gear item is selected as “Active” (bottom of the form), it is available for the next dive.

Analyze your peak performance buoyancy against different equipment configurations to calculate the most optimal weight ballast. If you schedule periodical gear maintenance service, the app will remind you via notifications 2 weeks ahead of schedule. To change the reminder time - go to Setup—Main—Equipment check alert.

The air-integration of the Scuba Capsule and a wireless tank pressure transmitter is available with a use of Scuba Capsule Wireless Transmitter, and Suunto wireless transmitters. To activate air-integration you must add a transmitter to the Equipment—Transmitters

You can pair up to 32 transmitters with Scuba Capsule, and assign each transmitter to a different tank, so when you change the tank underwater, the transmitter ID will switch accordingly to give you the actual tank pressure readings.

To pair a transmitter, tap the green “Pair” button and follow on-screen instruction. You will be notified when the pairing is complete, and the Transmitter ID will show up next to named transmitter. It can be now assigned to any tank from your list.



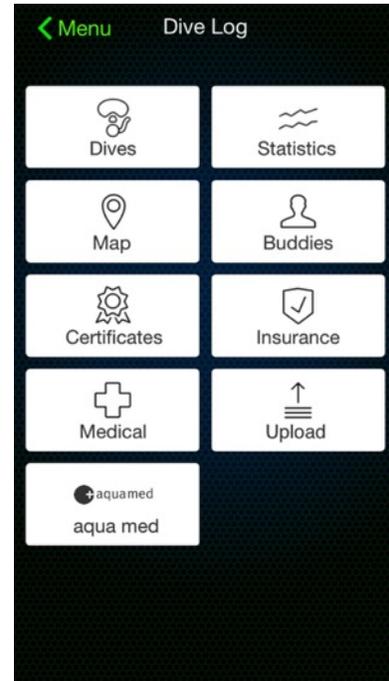
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Dive Log

Scuba Capsule Dive Log records full dive profile information, including depth graphs, dive time, max depth, visibility, water temperature on the bottom, air temperature, GPS coordinates, weather conditions, dive gear used, gas mix and tank information, tank pressure before and after dive, equipment used, visibility, water entry, conditions, and more..

The dive graph features photos, videos, warnings and gas changes marked with green dots - tap a dot to see a photo taken or warning recorded at given depth and time.

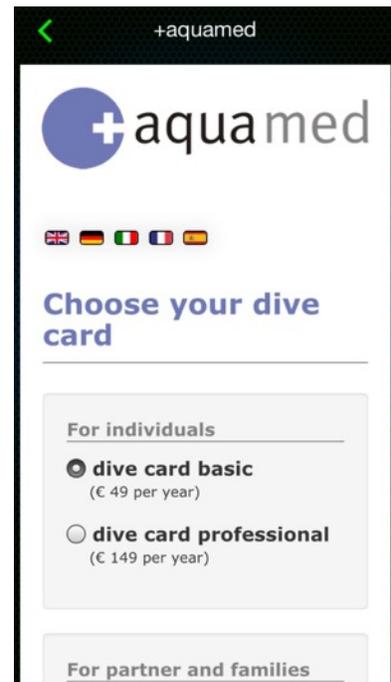
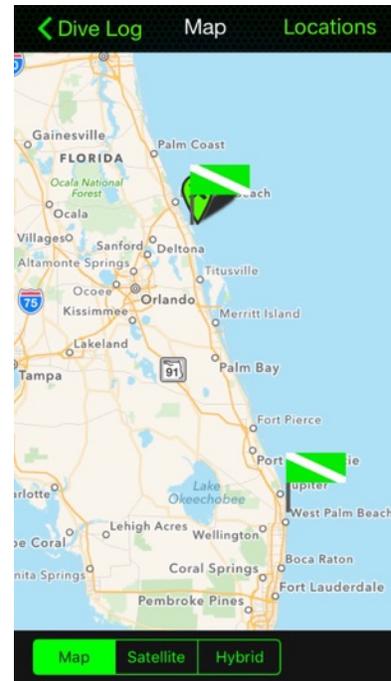
To edit a dive log data, tap the edit icon on the bottom-left corner of the selected log details screen, then tap on any the green-marked icons, indicating the data is unlocked for editing.



Scuba Capsule dive log comes with useful set of tools that store scanned photos of important documents and cards, such as medical notes, dive certificates, insurance cards and similar.

Additional features and offers related to travel and diving insurance, certification, medical and emergency information or other legal documents are available with constant updates in Dive Log section.

Third party app add-ons, such as the +Aquamed may be available and offered directly within the app, under the Scuba Capsule authorized distributors and licensed solution providers program.



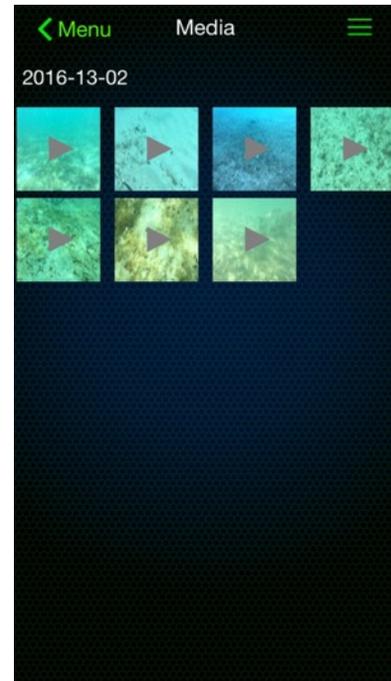
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Camera & Media

Scuba Capsule offers unique camera features, including an ability to save an actual depth on a photo or video. All media files recorded by Scuba Capsule are stored in iTunes library (iOS-native folders), with linked preview available directly under Media tab in the Scuba Capsule app.

Go to Setup—Camera to activate / deactivate HUD information on your photos and videos. If you like to have the video mode as a default screen underwater, then activate the “Start in video mode” option. The “Photo Preview”, if active, will freeze the camera screen with the last still photo taken for a few seconds..

Scuba Capsule will save exact dive site coordinates and a photo with compass bearings to your entry point. The last photo you shot in the Surface Interval mode is available as a thumbnail memoire in the dive site maps with corresponding compass heading. With the GPS coordinates and photo orientation you can easier find the way back to the entry point.



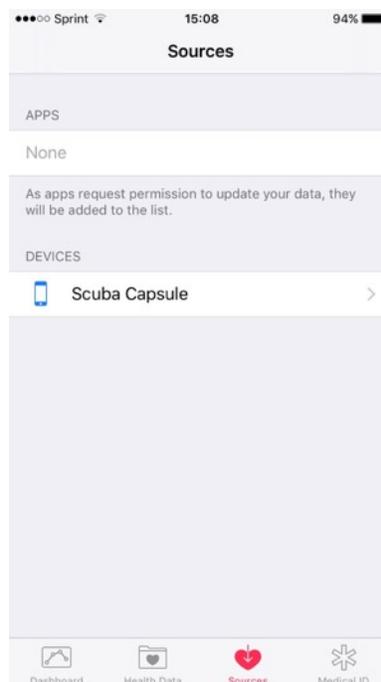
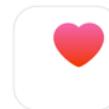
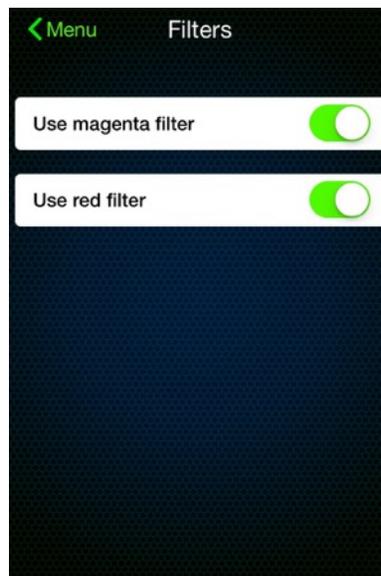
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Add-ons & Updates

Go to Scuba Capsule in-app Store for an updated list of add-ons.

The Photo&Video filter add-on uses software algorithms to correct overly green or blue water color gamma with the virtual Red and Magenta lenses.

The Apple Health has been integrated with the Scuba Capsule app, so now you can have your tank lifting, dragging, boat loading, and diving calorie-burn activities logged in the Health Data of Apple Health app. To gather activity data make sure you have the Scuba Capsule device added to your Health app Sources.

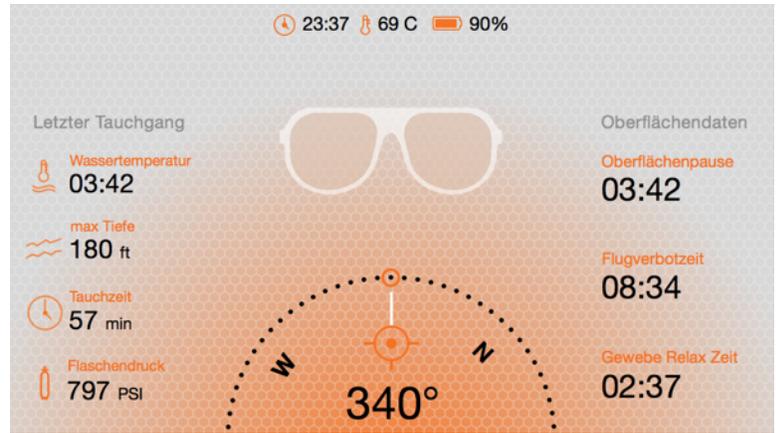


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After Dive

The capsule will automatically switch to the surface interval mode after your dive. The Surface Interval screen provides core information about the last dive, such as Max Depth, Dive Time, remaining Tank Pressure (of last tank used), and water temperature on the bottom. Additionally the surface time, no-fly time, and full tissue relaxation time are displayed on the Surface Interval screen.

All dive log data and media files are available for sharing and file transfer. Use Synch button to upload your backup to the Scuba Capsule cloud, where further data processing and extra functionality are available via any web browser.



AFTER DIVE

- Push-in the safety pin on the tension latch and pull to unlock.
- With the hatch open, punch the housing's opening and pull the iPhone out.
- Securely close the hatch and rinse the capsule in fresh water.

CAUTION

Always soak and rinse the housing in fresh water after salt water dive. The salt water residue can cause damage to the housing over time. Always securely lock the hatch before rinsing the device with water. If any water got inside the housing, you should completely dry the housing before the next use.

