ODYSSEY dive computer

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Simplified user manual

Updated on 04/01/2023

ODYSSEY

DANGER
The Odyssey dive computer has been designed to monitor your dive profile and to calculate decompression stop(s) requirements based on its internal model and the parameters you provide. These calculations are, at best, an estimate of actual physiological desaturation requirements and do not guarantee a safe ascent profile. Decompression sickness (DCS) is intrinsically linked to the gas load dissolved in the diver's body as a result of diving and to be off-gassed by the body during the ascent and after surfacing. In scuba diving, there is no such thing as zero risk.
THE ONLY WAY NOT TO EXPOSE YOURSELF TO A PROBABILITY OF DCS IS NOT TO DIVE.

WARNING
Although we make a continuous effort to ensure that your computer is functioning properly, **it is certain that your computer's firmware contains undetected bugs. Your computer may fail at any time without warning, before or during a dive**, due to software or hardware failure.
Never risk your life on a single source of information. Plan all dives carefully, use a second computer or tables and be prepared to execute your backup plan at any time.
You are risking your life by scuba diving and no dive computer can eliminate this risk. The dive computer is not a substitute for the proper training, knowledge, or skills necessary to dive.

SUPPORT-CONTACT
We are looking forward to hearing from you regarding the quality, functionalities or use of this product.
We are committed to reply to you without delay: **contact@o-dive.com**
You can download the updated complete user's manual on our website: **https://o-dive.com/**

TECHNICAL SPECIFICATIONS

Weight	< 200 g
Dimensions	90mm x 76mm x 36mm
Display	TFT 2.4" 240 x 320 px
Endurance	20 hours in dive mode
Battery	User-replaceable AA battery
Wireless connectivity	Bluetooth Low Energy
Maximal depth	225 m
Operation temperature range	0 °C – 40 °C
Storage temperature range	-30 °C – 65 °C
Conformity	CE – UKCA – FCC – ISED/ISDE EN13319

Rinse the unit with fresh water after use.
Improper use of the system may cause shock or injury and may damage your unit.

BATTERY REPLACEMENT

• Your Odyssey operates on a standard user-replaceable AA battery. Any AA battery with a voltage rating between 1.2V and 4.5V is compatible.

• The battery compartment is sealed with a cap on the right side of the unit. This cap can be unscrewed (counterclockwise) with a coin.

• **The new battery must be inserted with the positive terminal first (see diagram on the case).**

• The appearance of the cap seal should be checked and greased if necessary. The cap should be screwed on until it stops.

• **The minimum operating time of the unit is approximately 15 hours of diving** at maximum screen intensity. This time may vary depending on the type of battery, water temperature and the length of time the Bluetooth is used.

STARTING YOUR ODYSSEY

• Your Odyssey will automatically start when submerged. This feature may not function correctly.

We recommend that you always start your computer manually and check the settings carefully before diving.

• Your Odyssey starts with a simultaneous press of the two piezo buttons located on the right and left side of the computer.

TURNING OFF YOUR ODYSSEY

• When not in the water, your Odyssey automatically shuts off after 15 minutes of inactivity.

• When out of the water, your Odyssey shuts off manually by pressing the 2 side buttons simultaneously.

Start and stop with simultaneous pressing of the left and right buttons

PRESENTATION OF THE BUTTONS

• Your Odyssey is equipped with three piezoelectric buttons.

• The side buttons allow you to navigate through the elements of a page:
  o **Left button:** navigation to the left / up
  o **Right button:** navigation to the right / down

• The **central button** is used to:
  o Validate / Enter a menu
  o Modify a value / Scroll a field

Left / up

Right / down

17 days
OC 21/00
50/70

System
Settings
Transfer
Dive

Enter

SURFACE HOMEPAGE

• The homepage shows:
  - Surface interval since last dive
  - Dive mode and current gas
  - Current conservatism
  - Battery power level

• Four pages are accessible from the homepage:
  - *System*
  - *Settings*
  - *Transfer*
  - *Dive*

• To enter the desired menu:
  - Scroll the highlight on the icons using the left / right buttons
  - Press the central button to open the desired page.

surface interval

dive mode & gaz

conservatism

battery indicator

"SYSTEM" PAGE

• The "System" page contains three tabs: *System*, *Personal* and *Logs*

"SYSTEM" TAB

• The "System" tab allows you to:
  - o Check and update the clock and date

  - o Check and update the battery type
  - o Display the installed firmware
  - o Access to the "Bootloader" mode to update the firmware
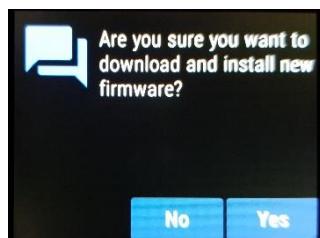
back to homepage

Move up / down with the left and right buttons
Select / open with the central button

"SYSTEM" PAGE
"PERSONAL" TAB

• The "Personal" tab allows you to:
- Set the language and the unit system

- Set the colours
- Check and modify the pP, Gas, Ascent Rate and Gas Density alerts

back to homepage

Move up / down with the left and right buttons
Select / open with the central button

"SYSTEM" PAGE
"LOGS" TAB

back to homepage

• The "Logs" tab contains the list of dives recorded in the logbook
• To view the details of a dive, select and activate the item from the list:
  o This opens a new page with two tabs

"OVERVIEW" TAB

• The "Overview" tab allows you to view information associated with the dive, including:
  o Deepest stop
  o Maximum TTS reached
  o Temperature

"PROFILE" TAB

• The "Profile" tab allows you to view the profile of the dive.
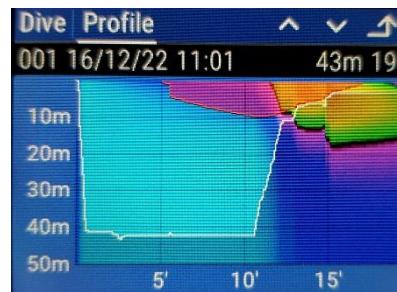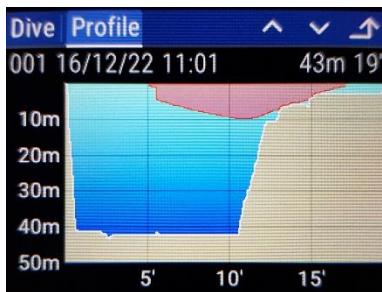
Move up / down with the left and right buttons
Select / open with the central button

"SETTINGS" PAGE

• The "Settings" page contains four tabs: *Dive*, *Deco* , *Gases* and *Plan*

"DIVE" TAB

• The "Dive" tab allows you to:
  - ○ Set the dive mode (open-circuit *OC* or closed-circuit *CC*)
  - ○ Select the type of water (*Salt*, *Fresh* or *ISO*)
  - ○ Adjust the brightness of the display

back to homepage
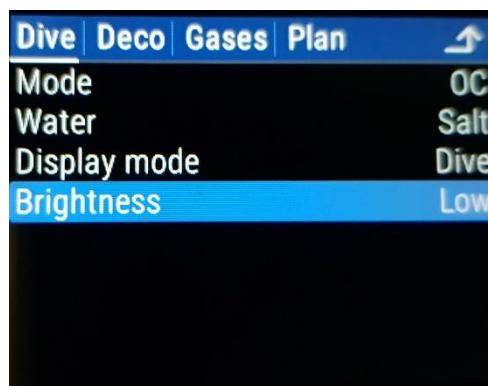
When diving at night, use the "Cave" or "Low" setting

WARNING
The "*High*" intensity setting results in higher consumption!

Move up / down with the left and right buttons
Select / open with the central button

"SETTINGS" PAGE
"DECO" TAB

back to homepage

• The "Deco" tab allows you to:
  ○ Modify the conservatism by adjusting the GF (Gradient Factors)

  ○ Set the depth of the last stop
  ○ Adjust the duration of the additional stop
  ○ Monitor the sixteen current Bühlmann ZHL-16C tissue statuses
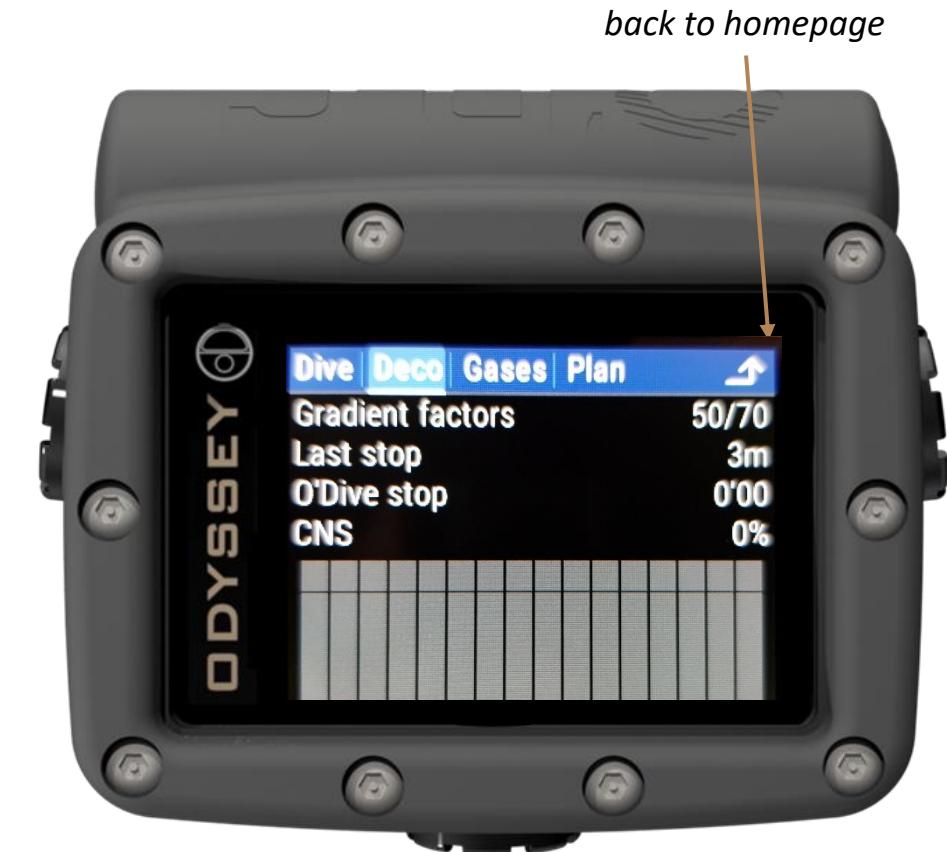
For more information and a better understanding of the background, consult the document:
Clearing Up The Confusion About "Deep Stops" by Erik C. Baker, P.E

Move up / down with the left and right buttons
Select / open with the central button

"SETTINGS" PAGE
"GASES" TAB

back to homepage

• The "Gases" tab allows you to:
  - Modify and select the gases (up to 8) that will be used for the dive (in OC or CC mode) : " **%O$_2$** / **%He** "
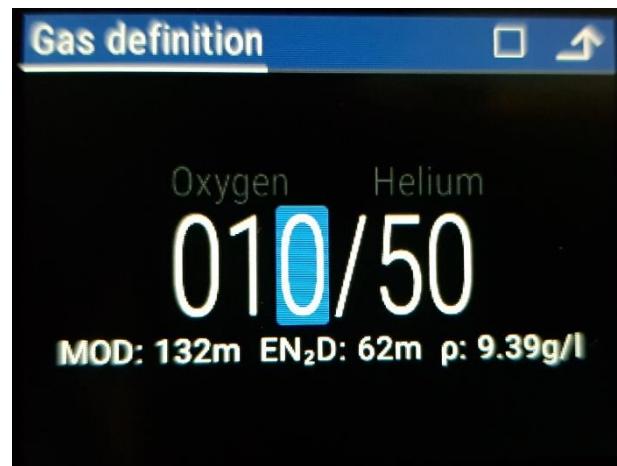
WARNING
Only activate the gases that are actually available and intended for the dive.
Example: for a dive with Air, deactivate all other gases.

Move up / down with the left and right buttons
Select / open with the central button

"SETTINGS" PAGE
"PLAN" TAB

back to homepage

• The "Plan" tab allows you to:
  o Simulate square dive plans using the current settings, displaying the ascent profile with stops, gas switches and time to surface
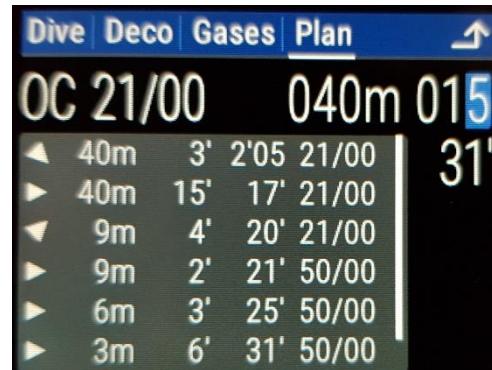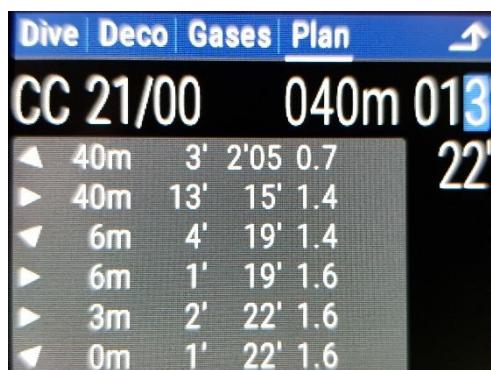
Examples of dive plans

Move up / down with the left and right buttons
Select / open with the central button

"DIVE" PAGE

- To change the information displayed in the "Dive" page, you must :
  - o Highlight the desired field using the side buttons
  - o Cycle through the different options by pressing the central button

Ascent rate (AR) indicator
as a bar graph and numerical value

Indicator for
Additional O'Dive stop in progress

Dive mode,
current gas and gas switch

« *Dive status* » row
Duration, Depth, GF / Tissues / Ceiling

« *Decompression* » row
NDL or Stops, TTS, TTS+5'

Temperature and instantaneous PPO$_2$

ODYSSEY

"DIVE" PAGE

- The TTS is calculated predictively according to the gases available (see p. 13) for optimized decompression. It is also possible to display the **BG/TTS** (Back Gas), which calculates the ascent time without changing gas.

- The ascent rate indicator contains several zones. The target ascent rate can be set in the "*System*" page / "*Personal*" tab

AR = 0

AR = 10
Ascent at target speed

AR = 17
Too fast ascent

- The central field of the bottom line may be configured to display:
  - %CNS
  - Temperature
  - Battery charge level

and will be automatically replaced by alerts that occur during the dive

"DIVE" PAGE

- *Example:* Ascent with gas change and O'Dive additional stop

Maximum depth reached and instantaneous PPO_2

Available and recommended decompression gas

Gas switch performed

O'Dive additional stop (deco stop outside the Bühlmann calculation)

TTS 6' (with switch to OXY)
BG TTS 9' (keeping Air)

TTS = BG TTS

Additional stop indicator

"DIVE" PAGE
ACCESS TO THE "SETTINGS" PAGE DURING A DIVE

- It is possible to **access the "Settings" page during a dive** in order to modify parameters (GF, gas, ...).
  To do this, press the central button without having selected a field (if necessary, navigate with the side buttons so that no field is highlighted).

- To return to the "*Dive*" page, select the "back" symbol
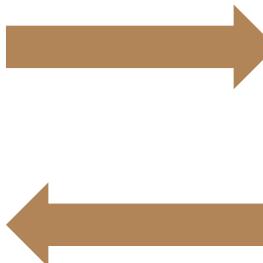
"DIVE" PAGE
CCR DIVE MODE

- It is possible to switch from the *OC* (open-circuit) mode to the *CC* (closed-circuit) mode in the "*Settings*" page / "*Dive*" tab.
  In this case you must :
    - Define the 3 PPO$_2$ Set Points
    - Choose the diluent gas from the gases selected in the "*Gases*" tab
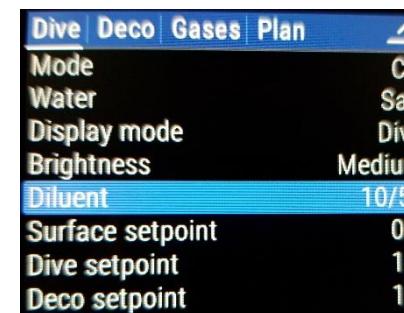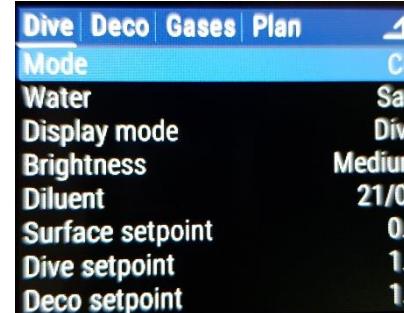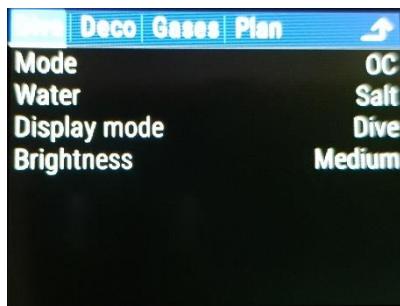
- During a CCR dive, it is possible to **perform a bailout procedure**:
   - Select the "**Diving mode**" field
    - Confirm the bailout switch
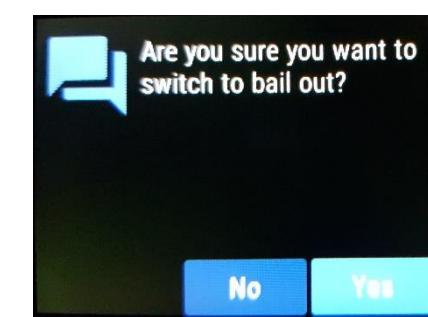
Switching to open-circuit mode (**BO**) activated

"DIVE" PAGE
DIVING IN CONSECUTIVE MODE

• For surface intervals of less than 3' the computer remains in the "Dive" mode, recording any new dive in the same profile.

• After 3', a new dive in repetitive mode will be recorded.

"TRANSFER" PAGE
UPLOADING THE DIVE PROFILE TO THE O'DIVE APPLICATION

• Once the dive is recorded in the logbook, it is possible to import the profile into the O'Dive application via the Bluetooth connection.
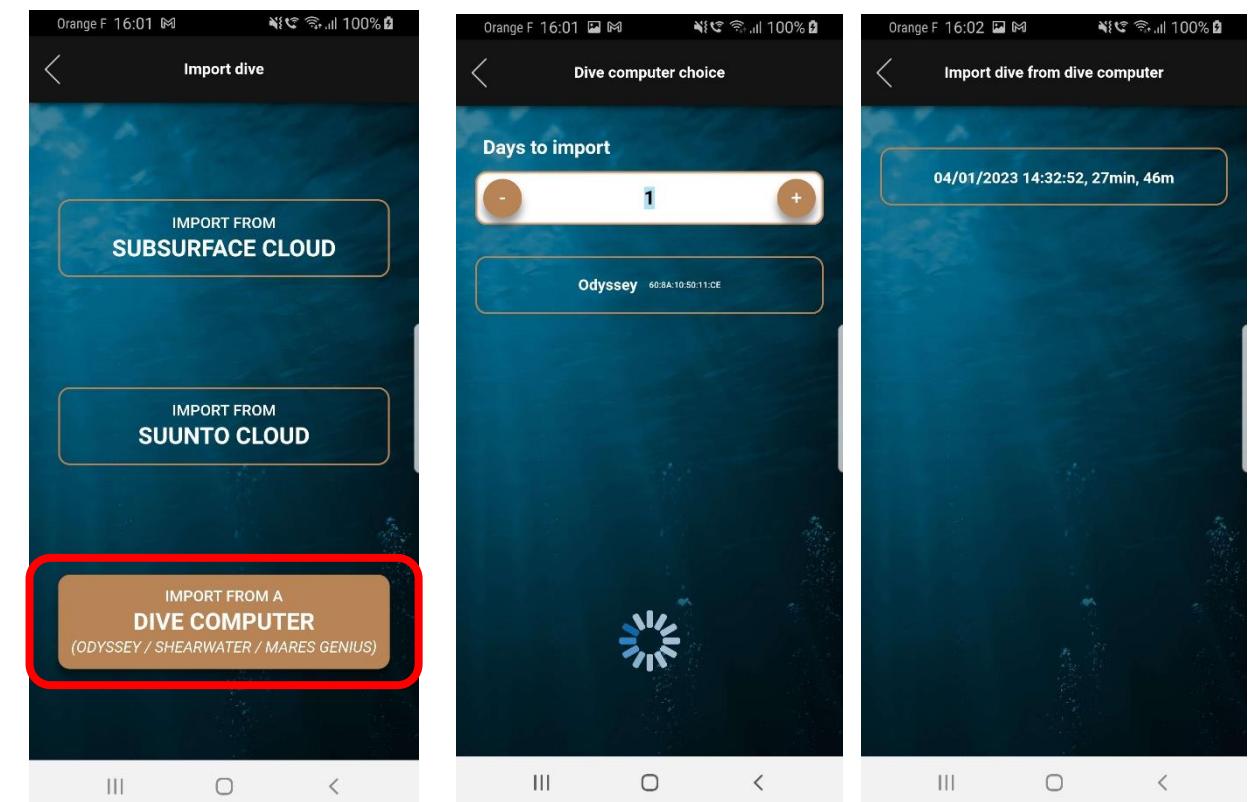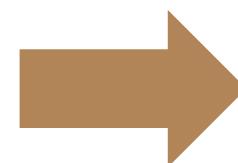

O'Dive app

"TRANSFER" PAGE
IMPORTING O'DIVE SETTINGS INTO THE ODYSSEY

• After having performed a simulation in the O'Dive app, it is possible to automatically set up your Odyssey :
- o Set the Odyssey to "*Transfer*" mode
- o Press "Send to Odyssey" in the O'Dive app to modify the settings (GF, Gas, PPO$_2$ and O'Dive additional stop).


O'Dive app
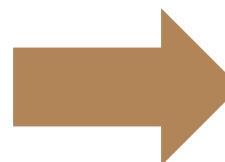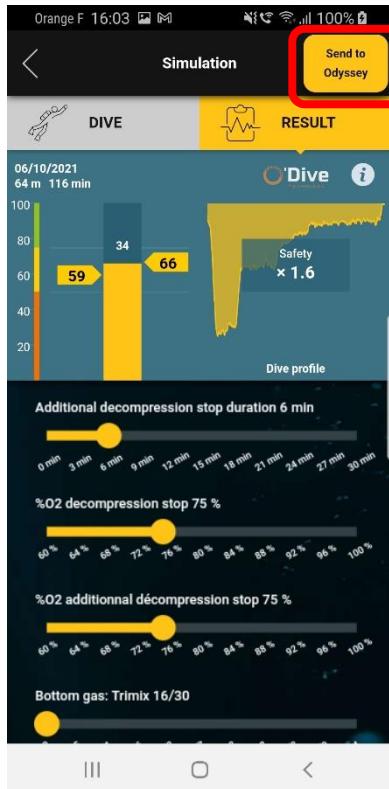
INSTALLING FIRMWARE UPGRADES (1/2)

• Firmware is upgraded via the built-in wireless Bluetooth connection to a PC or Android telephone

WARNING
Before starting the firmware upgrade process, you should ensure that your Odyssey has a fully charged battery and that you have enabled Bluetooth and internet access on PC or telephone.

• Put your Odyssey into firmware upgrade mode by selecting the currently installed firmware in the "*System*" page / "*System*" tab
• After confirmation, your Odyssey will turn off and then restart in firmware upgrade mode
If you decide not to install new firmware, you may simply turn off your Odyssey; the next time you turn it on it will resume with the currently installed firmware.
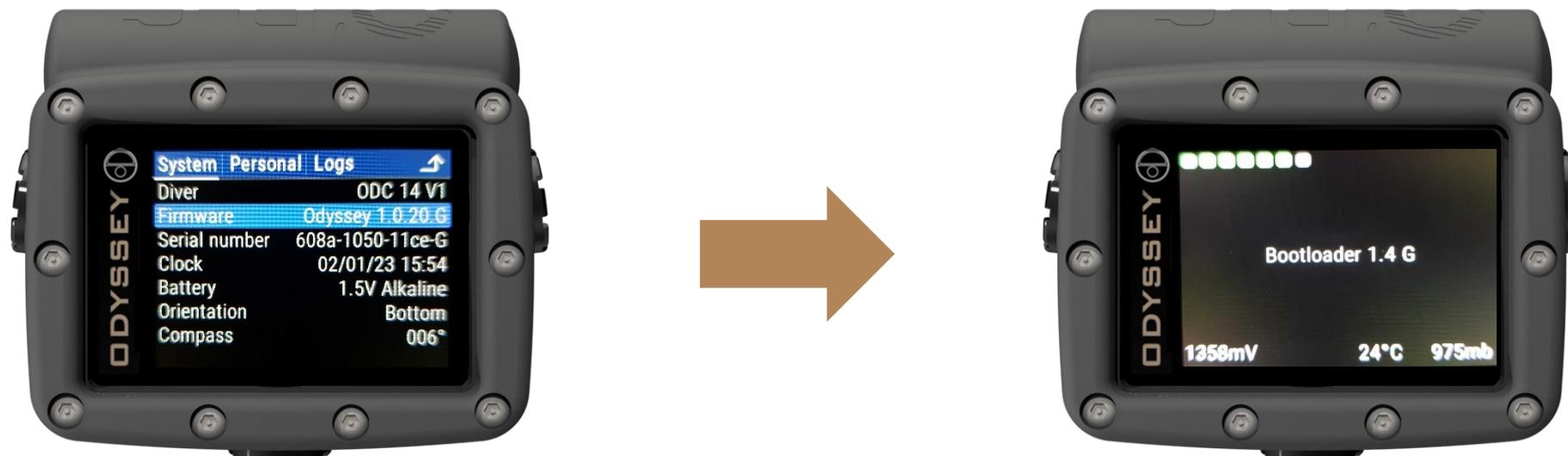
INSTALLING FIRMWARE UPGRADES (2/2)

• Start the firmware manager on your PC or telephone (available for download on our website https://o-dive.com)
• The firmware manager will scan for your Odyssey and then automatically connect and download a list of available firmware. You can select any of the available firmware, including previous versions, for installation by double clicking or tapping one of them
• The firmware manager will prepare your Odyssey for installation then install the firmware
• After the installation completes, your Odyssey will automatically restart

Some problems have been reported when attempting to connect using an external Bluetooth dongle
If you encounter any problems, your first steps should be to retry on a PC with a built-in Bluetooth adapter and to ensure that its Bluetooth is enabled
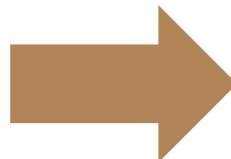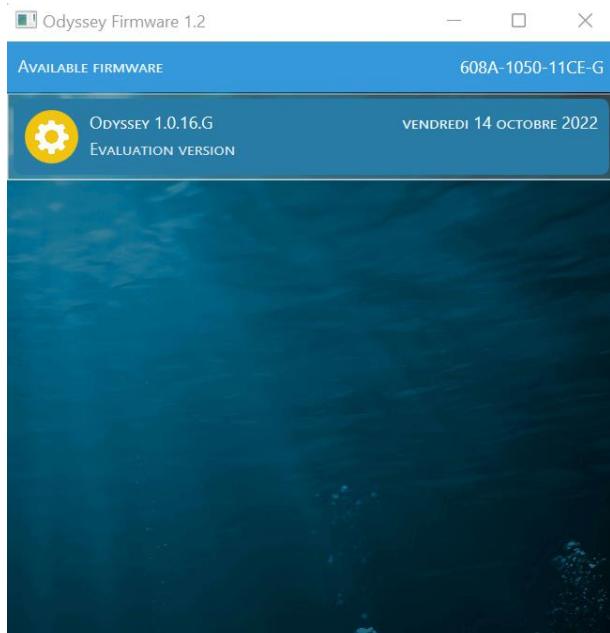
EU - SIMPLIFIED EU DECLARATION OF CONFORMITY

Hereby, **Azoth Systems SAS**, declares that the radio equipment Odyssey is in conformity with the EN 13319 standard. The full text of the EU declaration of conformity is available at the following internet address: https://o-dive.com/en/declaration-of-conformity/

Made in France by:
AZOTH SYSTEMS
Technopôle de la Mer
93, Forum de la Méditerranée
83190 Ollioules
FRANCE
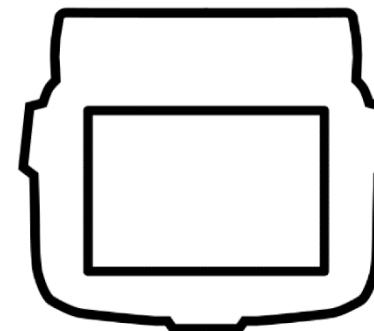
This product and its battery pack cannot be discarded in the domestic waste. They require separate collection. Ensure that you dispose of your O'Dive electronic product and batteries in a sensible and considerate manner, at a collective recycling point. This recycling of your electrical waste contributes to protect the environment and your health.