

designed and manufactured by





MAVs (Manual Add Valves)

OXY MAV

is used to easily add oxygen to the breathing loop. It is connected with a short LP hose to the 1st stage Regulator on the on-board Oxygen Cylinder.

DIL MAV

is used to easily add diluent to the breathing loop. It is connected to the on-board diluent cylinder or to an off-board stage cylinder using a quick connect QC6. DIL MAV has two additional outlets to supply ADV and SM BOV.



has an integrated ADV (Automatic Diluent Valve) and the inlet for manual addition of diluent. The ADV is designed in a similar way like a 2nd stage regulator, it is activated by a negative pressure in the breathing loop and automatically adds diluent when needed. It is connected via the shut-off valve allowing to shut off the diluent if necessary. The ADV L-piece is connected to the inhale counterlung with a Click-lock bayonet coupler.





Primary controller

The Shearwater Petrel 3 DiveCAN ppO2 controller is connected to the FX head by the watertight X-connector rated up to 300m.

Main features:

- Two PPO2 set-points, each can be set between 0.5 and 1.5
- Depth, time, ppO2 readings and deco display
- Stack-Timer for the scrubber
- Trimix decompression with 5 CC and 5 OC preset gases
- Strong **vibration alert** system
- Up to 4 pressure transmitters for gas pressure monitoring
- Digital compass tilt compensated
- No lockout from violating deco stops.

Head Up Display

The Shearwater DiveCAN HUD is a compact 3x4 LEDs display showing ppO2 readings from each sensor. It is completely independent of the controller and is connected to the head by the watertight X-connector rated up to 300m. The HUD is attached to the BOV using the adjustable holder.

NERD 2

The Petrel 3 Controller can be replaced with **Shearwater NERD 2 Controller**.

The HUD can be replaced with **Shearwater NERD 2 Monitor** as a secondary ppO2 monitor and full Trimix deco computer.



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4/4



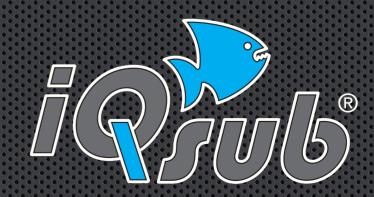
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CE certified
Compact chest-mount Rebreather
powered by SHEARWATER

DESIGNED AND MANUFACTURED BY







Powered by **SHEARWATER**

Main features

- * BOV Shrimp
- * Radial Scrubber
- * Weight only 11kg
- * User-friendly design
- * Variable configuration
- * **C** certified

FX-CCR is a flexible chest-mount rebreather with Shearwater electronics and Trimix decompression. Compact and ergonomically designed hardware facilitates very low weight, user-friendly design with tool-less assembly and maintenance. variable configurations, flexibility and reliability.

FX-CCR unit consists of:

- * horizontally mounted canister with radial scrubber
- * FX-head with the control electronics, three O2 sensors and solenoid valve
- * Battery Container powering the control electronics, solenoid and Head-Up Display
- * 3D-shaped Counterlungs
- * FX Case made of Cordura
- * L-pieces with integrated ADV
- * Comfortable Breathing hoses
- * BOV Shrimp
- * MAVs -the Manual Adding Valves
- * Primary Controller Handset and Head-Up Display
- * Oxygen cylinder and 1st stage regulator.

FX Case

is a soft bag made of Cordura that holds all parts together. It allows the unit to be attached to the diver's body. The case covers the Canister with FX-head, Battery Container and Counterlungs and carries the on-board oxygen cylinder with 1st stage regulator, breathing hoses and clamping carabiners.

FX Canister

is made of white Delrin and carries the radial scrubber, the FX-head and the canister lid with a small water trap. The canister is placed horizontally in the FX Case and secured with a Velcro strap.

Radial Scrubber contains 2.2 kg of Sofnolime and guarantees comfortable breathing even in extreme conditions such as cold water and depth of 100m with a minimum operating time of 4 hours.

The scrubber has the lid with a spring loaded plate to ensure self-packing feature.



2/4 © iQsub 2025

3D-shaped Counterlungs

with a useable volume of 7L are placed above the canister and connected to the canister and breathing hoses with the unique and secure Click-Lock Bayonet Couplers for easy connection and disconnection.

The Counterlungs are equipped with

- * adjustable OPV (over pressure valve)
- * inner snorkel to prevent water from direct flowing to the canister and scrubber.



FX-Head

carries a removable holder with three oxygen sensors, Shearwater control electronics, low power Solenoid, watertight connectors for the external devices and the click-lock bayonet connector for connection to the inhalation counterlung.

Shearwater control electronics is built in the hermetic compartment inside the Head, it serves ppO2 readings, setpoint maintaining, solenoid firing and HUD control.

Primary and secondary ppO2 readings are electronically separated one from another. In the event of a short circuit on any sensor or cable, this doesn't affect the ppO2 readings on the other side while the electronics still working and maintain the ppO2

The entire Shearwater electronics has very low power consumption and is powered by two independent replaceable Li-lon batteries. The batteries 18650 ensure continuous operation of the unit for dozens of hours.

Three O2-sensors are placed in the easily removable holder making it easy to dry up, check or replace the sensors.



Battery Container

up to surfacing.

contains two independent and replaceable 18650 Li-lon rechargeable batteries that power the electronics board, solenoid and Head-Up Display. The battery container is placed on top of the canister and secured with a Velcro strap.

Solenoid is rated up to 17 bar.

3/4



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