

reliability, flexibility, durability and user-friendly design



X-CCR is an expedition grade rebreather developed using years of our experience with respect to the needs of divers and explorers.

X-CCR combines a well proven rebreather chassis with the most innovative electronics package to form the most fault tolerant rebreather, provides outstanding reliability, ruggedness and yet the easiest maintenance.

Unit

Compact and ergonomically designed hardware facilitates easy tool-less assembly and maintenance.

Industry unique Quick Bayonet Lock on the head, with easy access to the O-ring.

Two canister models - made of Delrin or marine grade hard anodized Aluminum.

Radial Scrubber as standard, guaranteed 6 hour duration, three optional sizes - Full, Middle, Hobo.

Capable of **multiple cylinder sizes** from 2L to 7L, quick release fasteners for easy and quick cylinder replacement.

Diluent manifold with up to 8 outlets and Oxygen manifold with up-to 5 outlets.

Off-board gases connected directly via Swagelok QC6 9/16".



X-CCR Head is designed to have advanced air flow paths to eliminate condensation on the O2 cells.

The Main Controller Board is built in the hermetic compartment inside the Head, it serves three O2-sensors ppO2 readings, setpoint control, solenoid firing, HUD control, **CO2 reading, HP reading** on Oxygen and Diluent, sensors calibration, ambient temperature measurement.

The Primary and Secondary hansets and HUD are connected via specially developed **watertight connector** on the head, rated to 300m (housing made of AISI 316). If any cable is cut, the unit will still carry on working and maintain the ppO2 up to surfacing.

The X-electronics has very **low power consumption** and provides long term battery life.



O2-sensors and built-in CO2 sensor

placed in the easily removable cartridge making it easy to dry up, check or replace the sensors. PPO2 readings are electronically separated one from another, in the event of a short circuit on any sensor or cable, this will not affect the ppO2 reading on the other computer.

Two independent replaceable **Li-Ion batteries 18650** located in the sealed compartments on the head out of the breathing loop. Batteries are discharged one after the other and ensure continuous operation of the unit for dozens of hours. You never have to miss a dive due to battery problems.

User serviceable low power Solenoid of AISI 316 Stainless steel with swivel fitting with built-in **O2-filter**.

USB connector for easy firmware upgrade.



Primary handset

has 2,8" **OLED display**, ambient light sensor, flip screen, two Piezos, Compass, Stack timer, Log-book, sensors and calibration timer, Black-box memory.

Primary handset has Color coding to display the values:
 Green = OK ... the values are within the limits
 Yellow = Warning ... the value is still in acceptable deviation
 Red = Alert ... the value is out of allowed limits.

Head Up Display

is compact 3-LED display, double sided for buddy signal.

Secondary computer

The unit can be configured with any suitable computer available on the market like OSTC-cR, SeaBear T1, NERD, Shearwater Petrel, Divesoft Freedom, etc.

Secondary computer is connected via cable with the watertight connector, convertible by user.



Breathing loop

Optional Front-mounted or Back-mounted Counterlungs BOV Shrimp as standard (our long time tested design). Easy to use click bayonet locks on all the breathing loop.



T-pieces with the side outlet for easy hose connecting to Manual Add Valve for the Back-mounted counterlungs. ADV is integrated in the low profile T-piece, shut-off valve. Compact and reliable swivel Manual Add Valves, low profile Over Pressure Valve.

Other features

Every unit is tested to 150m before it leaves the factory CE approval in process