

a tool for the citizen scientist revolution

Rebreather Day 1 (RD1) is a simple oxygen rebreather purpose built for long duration shallow water dive excursions.

- simple enough to dive from 'day 1'
- one day of training
- practical applications for marine harvesting, aquaculture, photography, science
- a newly immersive underwater experience
- Intuitive upgrade path to SCR or mCCR



RD1 units are available fully assembled, or in kit form – you build it, you dive it.

Now available at www.underseatools.com



RD1 [rebreather day 1]

The RD-1 (Rebreather Day 1) is an automatically regulated closed circuit oxygen rebreather permitting long duration shallow water dives.

The system's open architecture provides an easy future upgrade path to SCR or mixed-gas CCR with simple aftermarket upgrade kits.

Training is a simple one-day program that sets the diver on the proper path to understand rebreather fundamentals and easily move on to more advanced rebreather applications.

Units are available, with training provided directly by the manufacturer.



Regulatory & Compliance Notice:

- All critical subsystem components are manufactured to ISO 9001:2015.
- Regulators meet CE EN250.
- More than 200 hours of manned testing has been performed.

Features & Specifications

Chassis & Build Materials

- system is back mounted via an aluminum 'spine', which is fitted to any standard backplate/harness or conventional backpack

Breathing Loop

- DSV breathes right to left
- 1.5" breathing hoses (ISO 9001:2015)
- Reinforced TPU counterlung, two x 4L, one each on inhale and exhale side of scrubber

Scrubber

- variable volume Axial design (to 5.5lbs/2.25kg)
- water dump on exhale side of scrubber (optional)

Oxygen Side Gas Distribution

- AL13 cylinder, RH DIN valve, green knob
- Piston first stage (CE EN250), depth compensated (not modified) with OPRV and HP gauge
- Oxygen introduced to exhalation side of breathing loop via automatic addition valve

Diluent Side Gas Distribution (bailout only)

- AL13 cylinder, LH DIN valve, black knob
- Piston first stage (CE EN250), depth compensated (not modified) with OPRV and HP gauge
- Not introduced directly into the loop
- Provides OC bailout only and BC inflation if/as needed
- Balanced 2nd stage (CE EN250)

Electronics & Monitoring (Optional)

- Accommodates 1, 2, or 3 oxygen cells.
- Users choice of monitoring device can be easily incorporated.

Upgrades

- easy upgrade to SCR, or mCCR

For more information, contact Michael Lombardi.
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