





# THE JJ-CCR IS **BUILT FOR WHATEVER DIVE YOU HAVE IN MIND**

The JJ-CCR Rebreather is designed and built to exceed the expectations of demanding technical divers, but the simplicity of the apparatus makes it ideal for all skilled divers that want to go silent! The JJ-CCR Rebreather has been called "the 4 x 4 of the Rebreather community" which is in many ways the perfect description as it is built for all types of terrain and can be adapted to handle the most demanding adventures.

# SIMPLICITY AND VERSATILITY ARE THE KEY FACTORS



The XRC canister in as optional component providing the skilled exploration diver with extended runtime...





The JJ-CCR Rebreather DiveCAN International Edition 2014

#### GENERAL INFORMATION

The JJ-CCR has been designed and built as a versatile and adaptable Closed Circuit Rebreather platform. It is ready to dive right out of the box, but also simple to adapt to whatever dive you have in mind! The JJ-CCR has been developed and built by highly skilled divers and technicians. All components can be justified and the JJ-CCR as a whole is designed with simplicity, versatility and functionality in mind!

The main construction consist of a robust aluminum housing and a stainless steel stand where all components such as counter lungs, wings and harness are attached. This provides the user with comfort on land when donning the rebreather as well as in water when diving it. All hoses and gas paths are made for optimal performance both in water and for maintenance purposes.

The JJ-CCR is built to be controlled by YOU, a focused and skilled diver! But to help you do that, we have provided the JJ-CCR with state of the art electronics for unparalleled control and dive computing

#### **JJ-CCR** Rebreather editions

The JJ-CCR Rebreather DiveCAN is currently available in a CE edition and an International edition.

The CE edition for the European market (CE certified July 2014) has a diluent inline shutoff valve and a manual supplemental diluent valve.

These are the only differencies



## ADAPT TO MISSION SPECS.

The JJ-CCR Rebreather can be adapted for whatever dive you are planning.

Through the tank attachment consoles on the canister, you will be able of using a great variety of configurations suited for your specific needs.















#### DILUENT INLINE SHUT OFF VALVE

Standard component on the JJ-CCR Rebreather DiveCAN CE-edition. Can be ordered as an optional item for the International edition.



# SUPPLEMENTAL MANUAL DILUENT INFLATION

Standard component on the JJ-CCR Rebreather DiveCAN CE-edition. Can be ordered as an optional item for the International edition.

## SUPPLEMENTAL MANUAL 02 INFLATION

Standard component on both JJ-CCR Rebreather DiveCAN editions.

#### CONTROLLER & COMPUTER

Reliable controller with an integrated multi-gas decompression computer (based on the Shearwater Petrel)



#### JJ-CCR OXYGEN SENSORS





The JJ-CCR Rebreather is supplied as standard with an HUD (Head Up Display). The HUD functions fully independently of the controller. This means that it uses its own DiveCAN® bus, electronic and power supply.

#### THE ESSENTIAL FEATURES ARE

- PPO2 display from 3 oxygen sensors.
- Modified Smither's code blink pattern.
- Bright light emitting diodes with vibrant colors.
- Color-blind blink pattern (optional setting).
- Wet contacts for automatic turn-on.
- DiveCAN® communications interface for robust data transmission and easy upgrades, disassembly and repairs.
- Bright red end-cap LED for buddy warnings.
- Automatic brightness control optimizes viewing in all conditions.
- Red color only used for unsafe PPO2 warnings.



One battery for the controller, one battery for the HUD and two parallel batteries for the solenoid. None of the batteries

are integrated into the loop.

REDUNDANT POWER SUPPLY:

**OXYGEN SENSORS & SUPPLY** 

solenoid.

3 JJ-CCR oxygen sensors are

located inside of the top lid

together with the low power



# INDUSTRY LOW WORK OF BREATHING



The JJ-CCR Rebreather has a industry low work of breathing. With its back mounted counter lungs that follows the contours of your shoulders it will help you to keep a smooth and comfortable breathing pattern.



T-pieces milled out of delrin connects to heavy duty breathing hoses that ends up in a sturdy DSV (dive surface valve).

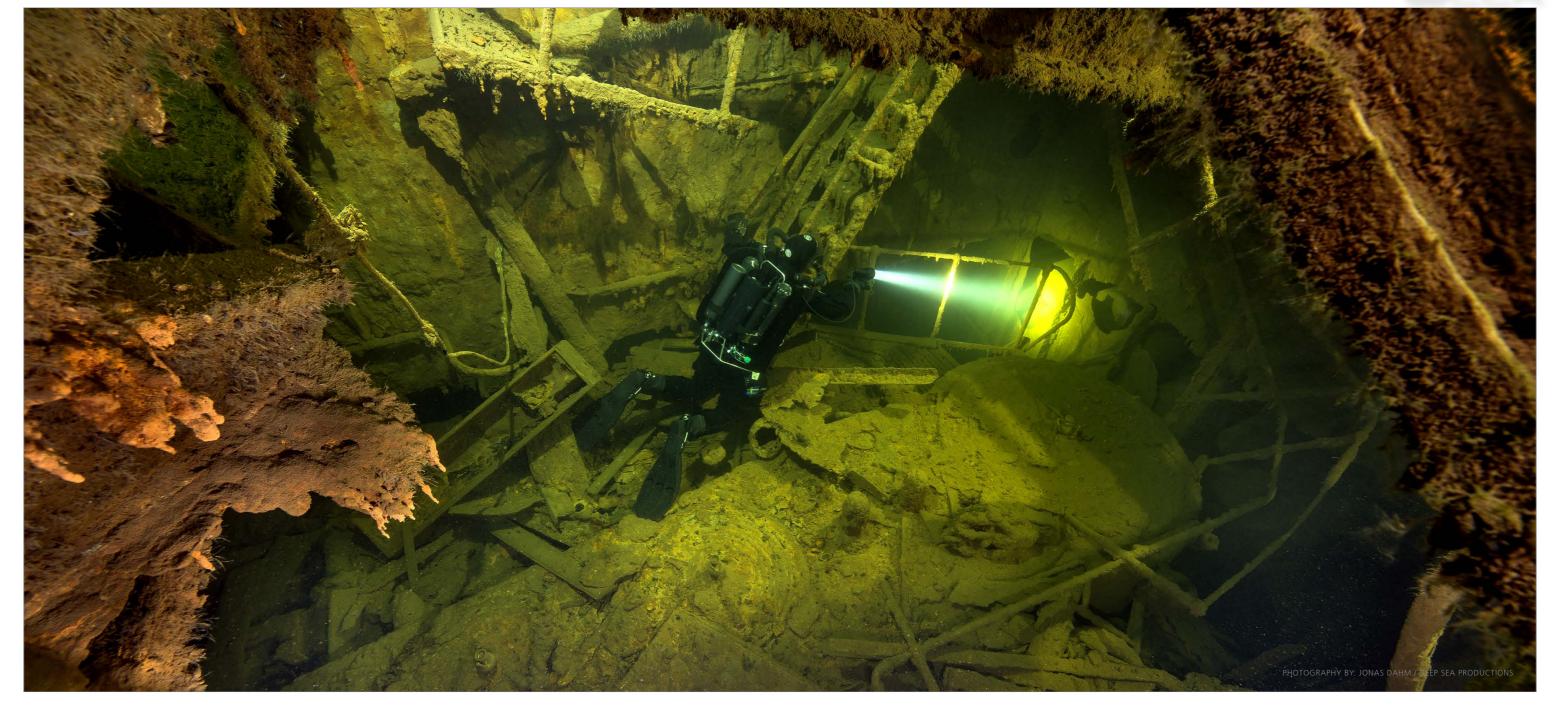
### SIMPLICITY

The JJ-CCR was never intended as a rebreather for the sports diving market. It is a tool for skilled divers in need of a sturdy machine to do the job. The environment in which the JJ-CCR is most commonly used demands a rebreather that is simple in regards to handling, independent of the situation.



All components have been carefully selected and are there for a reason! Clean and simple, usable and sturdy.





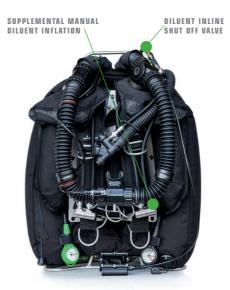


## TECHNICAL SPECIFICATIONS - JJ-CCR Rebreather DiveCAN CE + additional information (International)

Dimensions	70cm x 40cm x 26cm including the handle		
Weight	34.2 kg – Ready for operation with 2 x 3 litre tanks $19.8 kg$ – Without tanks and soda lime		
Soda lime canister	Type: Soda lime: Running time:	Axial Average 2.5kg (Sofnolime 797) 180 min with dive profile (40 m) 180 min with dive profile (100 m)	
	Dive profile: (40 m)	40 min at 40 m, 5 min at 15 m, 9 m for the remaining time	
	Dive profile: (100 m)	10 min at 100 m, 1 min at 39 m, 1 min at 36 m, 2 min at 36 m, 2 min at 33 m, 2 min at 30 m, 2 min at 27 m, 3 min at 24 m, 4 min at 21 m, 4 min at 18 m, 6 min at 15m, 7 min at 12 m, 10 min at 9 m, 6 m for the remaining time	
	Test parameter:	40l/min air, 1.6l/min CO2, 4°C water temperature	
	Used diluent:	40 m - Air 100 m - Trimix 11/65	
Soda lime	The only supported soda lime is: Sofnolime® 797 manufactured by Molecular Products.		
Oxygen Cylinder	3 Liter steel cylinder (200 bar)		
Diluent Cylinder	3 Liter steel cylinder (200 bar)		
On board gas duration	Oxygen: The on board oxygen supply will last 252 minutes, if the diver consumes 1.78 liter of oxygen per minute.		
	3 liter x 200 bar = 600 liter - 25% reserve = 450 liter		
	Diluent: The duration depends on the depth and activity of the diver.		
	3 liter x 200 bar = 600 liter		
Batteries	2 x 3.6v lithium (SAFT 14500). One battery for the controller and one battery for the HUD.		
	2 x 9v block lithium (Parallel operation for the solenoid)		
Volume of the counter lungs	8 litres		
Maximum application depth	Max. 40 m with air as diluent Max. 100 m with trimix as diluent		
	Warning: Dives exceeding a depth of 100 m are associated with numerous additional risks		
Purity of the gases	Air:         DIN EN 12021           Oxygen:         >99.5% (medicinal oxygen)           Helium:         >99.996		
Atmospheric pressure range	800 – 1050mbar		
1st stage "oxygen"	Connection: M26x2 -	nedium pressure: 7.0 to 7.5 bar	(CE-edition)
1st stage "diluent"	Connection: DIN 5/8"-	medium pressure: 9.0 to 10.0 bar	

(International-edition)

Oxygen control	Two oxygen setpoints (low and high). Can be switched as many times as required, also changeable under water.		
Oxygen setpoint range	From 0.4 to 1.5 bar (low and high)		
Oxygen warnings	Low 0.4 bar High 1.6 bar		
Oxygen sensors	3 galvanic cells (type: R17JJ-CCR)		
Operating temperatures	When diving:         +4°C to +34°C           Short-term (air):         -10°C to +50°C           Long-term (storage)         +5°C to +20°C		



JJ-CCR Rebreather DiveCAN
CE Edition 2014



JJ-CCR Rebreather DiveCAN
International Edition 2014

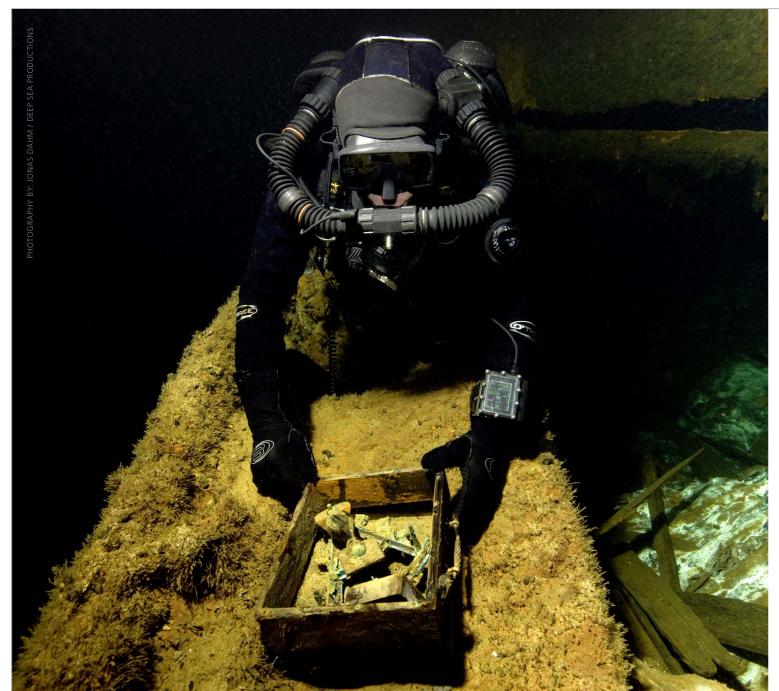


JJ-CCR Rebreather DiveCAN



Controller built on the Shearwater Petrel





# **SCOPE OF FUNCTIONALITY**

- Highly robust aluminum housing to which it is possible to secure up to 4 diving tanks using conventional tank belts.
- User repackable soda lime canister (axial).
- Heavy duty stand
- Integrated handle
- Back-mounted counter lungs
- Redundant power supply: One battery for the controller, one battery for the HUD and two parallel batteries for the solenoid.
   None of the batteries are integrated into the loop
- Integrated ADV (Automatic Diluent valve)
- DSV (Dive Surface Valve)
- Valve for manual oxygen supply with the option to feed in external gases
- Valve for manual diluent supply with the option to feed in external gases (Standard on CE edition, Optional for Intl. edition)
- Independant digital HUD (Head Up Display) with real time display of PPO2 for all three oxygen sensors
- Reliable controller with an integrated Shearwater multi-gas decompression computer





#### **ABOUT THE COMPANY**

JJ-CCR ApS is a Danish company located near the village of Praestø (90 km south of Copenhagen). We are proud of delivering a handcrafted product in small numbers, designed to exceed the expectations of divers with high demands on diveability, versatility, functionality and simplicity!

We manufacture almost all of the hardware inhouse.

Milling, turning, welding and assembly are examples of manufacturing processes we operate at our factory.

All components are controlled to highest standards and each JJ-CCR is carefully tested before delivery.

### NEWS & UPDATES

For latest information about whats happening in the world of JJ-CCR's, please check; www.jj-ccr.com





