



Cochran Undersea Technology

www.DiveCochran.com

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Task Loading

While scuba diving, the diver wants to focus on his Mission whether it be cruising a reef, photographing fish, cave diving, disarming a mine, or just diving with a buddy for the fun of it. The diver doesn't need or want to be distracted or concerned by equipment tasks that could be easily avoided. Cochran dive computers have the lowest task loading of any unit on the market today. This is one reason why Cochran is the only dive computer used by NATO, the US Navy, and other international militaries. Cochran's goal is to allow Cochran dive computer owners to maximize their diving experience. Toward this goal, Cochran has addressed the following issues:

No Buttons – no Worries

Regardless of how well a product is designed, having pushbuttons is always less reliable than not having pushbuttons. Pushbuttons can be troublesome when wearing gloves. Trying to press a pushbutton or combination of pushbuttons while carrying a camera and taking a picture is at best, challenging. Cochran dive computers are fully automatic and have no pushbuttons. If desired to change any settings in a Cochran dive computer while on the surface, the diver uses the three permanent stainless contacts on the side or bottom of the unit.

Batteries

Cochran dive computers have the longest battery life. By checking for battery warnings just before a dive, the diver can be assured that when he starts a dive there is sufficient battery power to complete it. Constantly checking the battery while in a dive is not necessary with a Cochran dive computer.

Hands-free Gas Switching

Cochran invented and patented (US 5,794,616) automatic gas switching and refers to it as "Hands-free Gas Switching". For air integrated units like the Cochran Gemini switches are based on gas flow and depth and time. For other Cochran units, switches are based of depth and time. Sophisticated firmware within the Cochran dive computers manages the gas switching so the diver doesn't need to.

Missed Deco Stops

With Cochran dive computers the diver does not need to be concerned about it shutting off or stopping to compute decompression. The diver no longer must focus exclusively on the depth to prevent straying into a zone that causes the unit to stop.

During decompression dives while ascending it is important to precisely follow the ceiling recommendations of the dive computer. Realistically, this is extraordinarily difficult. If the diver is at or deeper than the recommended ceiling, Cochran dive computers continue to properly compute gas residuals based on the diver's current depth. If the diver is shallower than the recommended ceiling, Cochran dive computers continue to properly compute gas residuals based on the diver's current depth. However, as long as the diver is too shallow, the dive computer will issue a unique audible alarm every second. If the diver stays too shallow, eventually that ceiling will be satisfied. Cochran dive computers never shut down or leave the diver hanging.

Audible Warnings

Cochran dive computers are the only ones that have different audible warnings to indicate to the diver a warning condition exists. With experience the diver can identify a specific warning based on this sound without looking at the display. The seven different warning tones can be seen below. All tones are issued once per second. The ascent rate warning is issued every second the diver is ascending too fast. The Ceiling-depth warning is issued every second the diver is shallower than the Ceiling. Other warnings are issued once per second for five seconds and then repeated for as long as the warning condition exists.

➤ General Purpose Alarm	Long Beep	1000hz tone	for 300ms
➤ Altitude/Firmware/RAM/ Error	Short Beep	1000hz tone	for 100ms
➤ Depth is less than ceiling	Up Sweep	rising tone	for 300ms
➤ Ascent Rate too fast	Down Sweep	falling tone	for 300ms
➤ CNS, OTU, High/Low PO2	Double Chirp	1000hz & ,500hz	for 300ms
➤ Sensor Failure	Two Tone Beep	1000hz,1000hz	for 300ms
➤ Low/Bad Battery	Low Tone	333hz	for 300ms

For more information:

- email: Support@DiveCochran.com
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- See Cochran Tech Pub: "**Stealthy Diving**"