### The Eon Lux

### A dive computer with a bright idea

For the eight years I've been reviewing dive computers for *In Depth*, I've been whining about how hard they are to read at night. Now I can whine no more — there's a dive computer that you can actually read in the dark without a flashlight. In one fell swoop, Finish manufacturer Suunto has made every other airintegrated dive computer — and all but one nonintegrated dive computer — a distant second choice for night or low-visibility diving. Sea Quest has just intro-

duced Suunto's Eon Lux to the American dive market. I think it's going to fly off the shelves.

[Editor's note: This isn't a complete review of the Eon. We gave the Eon two thumbs up in the August 1994 issue. The standard Eon and the Lux model are nearly identical except for the Lux's lighting.]

The Lux has a pressure switch on one side of the console, inside the boot and out of sight. You don't have to fumble for it in the dark — just grip the console boot and squeeze or tap gently on the side. The entire display lights up for about 10 seconds with a soft blue glow that displays all the information clearly. Unlike every other dive computer on the market, the Lux's high-contrast display is quite legible in low-light situations, such as dawn or dusk dives, as well as in total darkness.

The Lux uses the patented electroluminescent (EL) panel system that puts that blue glow into Timex Indiglo® watch faces. It's expensive technology to rent — list price for the Lux (\$875) is about \$100 more than for the standard Eon — but nothing else comes close in terms of both brightness and power conservation. Dive computers (especially air-integrated units) present a lot of crucial information; to be useful, lighting needs to be bright enough to illuminate all the essential elements and remain on long enough to read the entire display without killing the battery prematurely. EL displays are characterized by their high output and very low power consumption.

During my series of test dives, the Eon Lux loaner ran continuously for 240 hours. I switched on the lighting dozens of times on each dive, but the low-battery warning never came on. The test series doesn't approach the maximum rated battery life, but it does confirm that the Lux can handle a two-week dive trip with a lot of night diving. Robbert Bruins of Sea Quest told me that turning on the Lux lighting system 200 times will decrease battery life by only half an hour. Since the battery is already rated at more than 2,000 hours, the drain is essentially insignificant.

Several other dive computers have built-in night lighting, but for the most part their lighting is either ineffective or useless. Some

# Out of Air, or Just Low?

Both the Eon and the Eon Lux have a quirk that is not documented in the current owner's manual (Sea Quest says it will be noted in subsequent printings): when tank pressure falls into the 120–140 psi range, the readout drops to zero,

whether or not you're using your regulator. I discovered this while hanging out at a safety stop 15 feet beneath the boat after a long, hard dive, and I didn't much like it.

I had done a long midwater safety stop on the way back to the boat and was swimming to the hang tank at 20 feet. It seemed safer to run my tank down a bit lower than normal than to surface, since I had a pony bottle on my rig and could see the boat all the way from the bottom. I read 150 psi on the Lux, took one breath, and looked again. The Lux was ticking down before my eyes: 120, 100, 80, 60, 40, 20, 0 psi. In less than 10 seconds, I was out of air — or was I? My first thought was that I had blown a hose or fitting. I reached for the pony, but when I sucked on my main second stage, air came through as usual. When I climbed back on the boat I checked the "empty" tank with another SPG. It still had 130 psi in it.

Now, I'll be the first to admit that, in general, running a tank down below 300 psi isn't a good idea. However, I want to fire a shot at Suunto about this incident. Sea Quest says my loaner wasn't defective; that's the way they all work. This isn't good. There's absolutely no reason for a contents gauge to read zero when there's still air in the tank. I can easily conceive of a situation in which someone might mistakenly believe he was completely out of air and streak for the surface in panic. The appropriate self-rescue technique when there's at least a little air available is to milk the tank while making a normal ascent.

Dealing with this problem by putting a warning in the owner's manual is only a stopgap. If the Eon/Lux can't accurately display the difference between 140 psi and 0 psi, the readout should be revised to say "LESS THAN 140" or some equivalent. Is this too picky? I don't think so. Would you buy a car whose speedometer read zero miles per hour when you were going ten? If so, please stay out of the parking lot at my office, and don't follow me in traffic.

D. M.

manufacturers tout glowing ("phosphorescent") background displays. After being brightly illuminated by an external light source, they give off a faint greenish light, theoretically making the screen visible later in the dive when your eyes have recovered from the blast from your dive light. In practice, though, the glow fades out after a minute or two, making the feature essentially useless (except for marketing purposes).

If you have to reenergize your display with your flashlight nearly every time you want to read it, why not just illuminate it with a low-power pen light instead? When you're dark-adapted, the last thing you need is a bright reflection from your 100,000-candlepower flashlight beam

squirting you in the eye. Besides, dive computers with phosphorescent displays are typically murky and dark, thus difficult to read even in the daytime.

Other manufacturers have tried partial backlighting (the Tekna/Ocean Edge Computek) and side lighting (the new Mares Divemate). The Computek's backlit display is actually pretty good, but it doesn't show the surrounding mask. At night all you can see is a bunch of unlabeled red numbers. The numbers are easy to read, but if you don't have the daytime display memorized, you're likely to have serious trouble interpreting the numbers in the dark.

The Divemate (which we'll review in the near future) is excellent at night when its audio

system is turned on and reading times and depths out loud, but the built-in side lighting for the visual display is essentially useless. You can see a red glow on the screen, but unless you're one of those people who can read an old, dimmed-out Casio watch after dark, you'll need a flashlight to read the Divemate's numbers. In any case, the Divemate isn't air-integrated, so even if you're listening to its audio you'll still need your flashlight to see how much air you have left.

Bottom line: The lighting system on the Eon Lux is so useful that for anyone who regularly goes night diving there's no better choice of dive computer. Two thumbs up!

Delmar Mesa

## The Lammer Law, Galapagos

### A great trip, but not perfect

Dear Fellow Diver:

It was New Year's Eve, 1985. Our little group of eight, including captain, mate, and six passengers, had just gotten off the *Trespasser*, a small trimaran, the baby of Duncan and Annie Muirhead's famous British Virgin Islands fleet. Eagerly we boarded a floating mansion to celebrate.

After a week aboard the *Trespasser*, I was intimidated by the palatial salon of the 95-foot trimaran*Lammer Law*. I peeked into the cabins -- excuse me, STATErooms -- and was astonished. So much space, so many luxuries! This was the live-aboard I wanted to do.

Fast forward to fall 1994. Several years and many live-aboards later, I finally made the dream come true. I was going to Mecca! Imagine: the magnificentLammer Law -- and now she was no longer in the British Virgin Islands, but in the Galapagos.

Our reviewer, who has dived nearly every hot spot in the world, and the Galapagos more than once, describes the diving there as exhilarating, high-voltage, intense, and unpredictable.

But her report is not about the diving, it's about the Lammer Law, a live-aboard she had dreamed about diving on for years . . .

J. Q.