



Guidelines for Preservation of Evidence and Data in Case of Accident or Incident

1. CONTACT INFORMATION

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2. SCOPE

These guidelines apply only to dive computers made by Shearwater Research Inc. (SRI) that were involved in an accident or incident.

The SRI dive computer may be connected to a rebreather. SRI does not manufacture rebreathers, only electronic control systems for rebreathers. Please consult the rebreather manufacturer for guidelines on preserving important information from the rebreather itself.

3. PROCEDURE

Record Observations

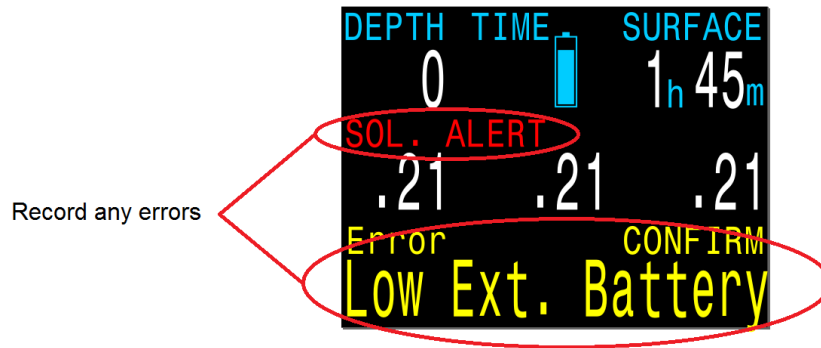
- 1) It is recommended to photograph the dive computer immediately to document its condition.
- 2) Record the physical condition of the dive computer and note any damage or concerns. If in good condition, note this as well.
- 3) Record any relevant information, such as:
 - Was the unit recovered on the surface or underwater? If underwater, how long was the unit submerged before recovery?
 - Was the unit powered on when recovered?
 - Has the dive computer flooded?
 - Is the dive computer cable in good condition (no breaks or cuts)?

Power On and Record Any Errors

- 4) If the dive computer is not powered on, turn it on by pressing both buttons at the same time.
- 5) Once the unit reaches the main screen (note that a liability screen must be confirmed on some models), record any errors that may be displayed on the screen. Yellow errors that appear on the bottom row can be cleared by pressing the right button. You may need to clear more than one error, record them all.



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The main screen showing some example errors. Record them before confirming with right button.

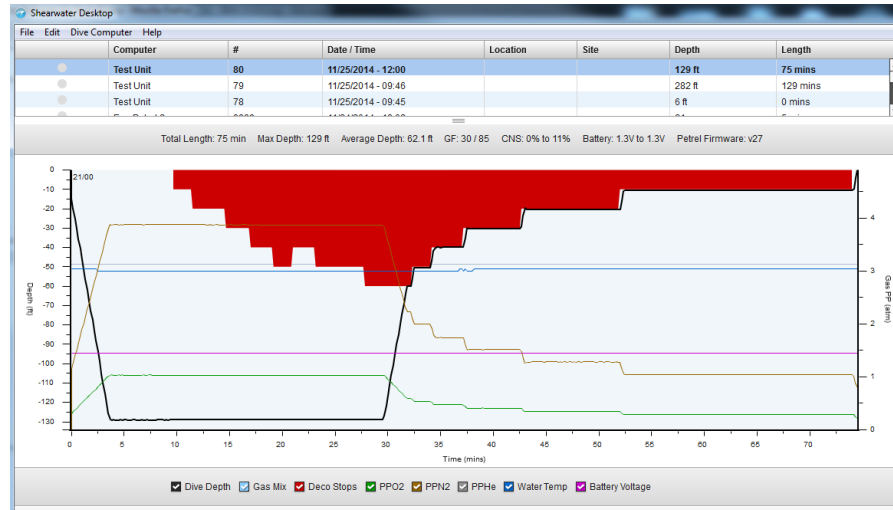
- 6) If the unit does not power-on, the battery may be dead. Replace the battery as follows:
 - Predator model – must use a Saft LS14500 model battery.
 - Petrel model – can use almost any AA size battery with voltage from 0.9V to 4.3V. For example, a standard AA alkaline battery can be used.
 - NERD model – Same as Petrel, any AA.
- 7) Do not replace the battery on a flooded unit. Instead remove the battery and contact SRI at info@shearwater.com as it may still be possible to recover the dive log data.

Download Dive Logs

- 8) You will need a desktop or laptop computer with either Windows (XP, Vista, 7, or 8) or Mac OS (10.6 or above) installed. The computer must have Bluetooth communications (either built-in or via a USB dongle).
- 9) Download the Shearwater Desktop program from www.shearwater.com and install it.
- 10) On the dive computer, press the left button until “Dive Log” is displayed, and then press the right button to enter the sub-menu. Press the left button until “Upload Log” is displayed and then press the right button. This will enable Bluetooth and start a 3 minute countdown.
- 11) In the Shearwater Desktop software, go to the “Dive Computer” menu and choose “Download Dive Log”.
- 12) Follow the on-screen instructions to download the dive logs.
 - On the Predator, the last 20 hours of diving will be downloaded.
 - On the Petrel or NERD, you must select which dives to download. Most recent dives will be listed first (up to 1000 hours is stored).
- 13) This will download the dive information and display it in a graph. This includes such information as:
 - Time and date.
 - Depth and duration of dive.
 - Partial pressure of breathing gases (oxygen, nitrogen, and helium)
 - Decompression stops.



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Example dive log graph

- 14) If you have any problems downloading dives, please contact SRI at info@shearwater.com or 1-604-669-9958.
- 15) More detailed information than is shown in the dive graph can be extracted from the log files by sending the log files to SRI for data extraction. Please contact SRI for more information. Depending on the model, this additional information can include:
 - All errors and warnings, the time they were displayed, and the time acknowledged by diver.
 - Detailed decompression tissue loading.
 - Every button press made by the user.
 - PPO2 calibration information (time, date, results).
 - Surface interval events and PPO2.
- 16) NOTE: If the dive log has been deleted, either accidentally or maliciously, it may still be possible to recover the data. Please contact SRI at info@shearwater.com or 1-604-669-9958.

REVISION HISTORY

DocRev	Description	Date (yyyy-mm-dd)	Author
A	First revision	2015-01-19	Tyler Coen