

The Villages Scuba Club



Why Dive with a Computer?

WARREN GROSS, 02 FEBRUARY 2022

Why Dive with a Computer?

- Pre-dive planning -
 - Maximum Depth and Bottom Time based on your settings (Air or Nitrox).
 - Tracking of surface interval time to calculate Residual Nitrogen Time (RNT) for pre-dive planning of subsequent dives.
 - During the dive -
 - Computers dynamically track depth and dive time to calculate No Decompression Time Limits (NDLs). Using the actual dive profile is a much more accurate *estimate* of nitrogen in the diver's body. **NDL Stop Time** cues allow the alert diver to adjust depth to extend NDL Stop Time.
 - **Ascent Rate Indicator** cues are an extremely useful safety feature. Following your slowest bubbles cannot compare to an ascent rate indicator as a safety device.
 - **Safety Stop Reminder/Timer** including depth and time remaining.
 - Some computers support air integration either through wireless transmitters or via a high pressure hose connected to the 1st Stage. Air integrated computers typically calculate the diver's air consumption and provides an **Air Time Remaining (ATR)**, **Gas Time Remaining (GTR)** or **Remaining Bottom Time (RBT)** cue. This cue allows the alert diver to adjust depth to extend bottom time.
 - Most air-integrated computers also provide additional safety and dive planning alerts such as Turn Around Tank Pressure Reached, Ascent Tank Pressure Reached.
 - Post-dive -
 - Dive Logging
 - Tracking of **No Fly Time**
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Key Indicators on Dive Computers



Why Dive with a Computer?

- Reduces risk of human error
 - Calculating Nitrox MOD
 - Monitoring No Deco Limits
 - Monitoring Air Time Limits (if Air-Integrated)
 - Monitoring Ascent Rate
 - Safety Stop Reminder/Timer
 - While dive computers can fail, they don't miscalculate
 - However, dive computers are only useful if you understand how to use it and what it is telling you.
 - Dive computers also aren't aware of other DCS risk factors such as physical condition and hydration level.
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