



NiTEK® Q4

Quick Start Guide

www.DiveRite.com

CO8400 NiTek Q4 Computer Q5 Guide_Feb 2, 2012

Congratulations on your Dive Rite NiTek Q4 purchase.

This Quick Start Guide is intended to familiarize you with the basic functions of this computer. It is not a substitute for the user manual found in our library at www.DiveRite.com. You **MUST** read the NiTek Q4 user manual in its entirety before diving this product.

The NiTek Q4 is an electronic device and electronic devices can fail. **NEVER dive this computer without a back up device or dive tables.**

Before you dive your Q4, you will need to fully charge the battery. The computer can be charged with the included AC charger or from any USB connector. To access the charging port, use a coin and turn the cap 1/4 turn counter clockwise to align the grooves on the battery cap and the computer case. Remove the cap. Plug the charger into an AC outlet or USB connection and then into the computer port. The animated battery symbol indicates charging. When fully charged, reinsert the battery cap and using a coin turn the cap 1/4 turn clockwise to seal. **Do not dive the computer unless the battery cap is sealed.**

Getting Started

- The NiTek Q4 has an always-on OLED screen that returns to a sleep mode (hibernation) after 10 minutes.

PRESS either A or B button to bring it out of hibernation.

- The Home screen shows the serial number, all unlocked features, and the software version.
- The Surface screen is the default screen, which will appear ten seconds following activation.
- The Surface screen displays battery charge status, date, time, choice of FRESH water or SEA calibration, choice of O/C (open circuit) or C/C (closed circuit) mode, and the first gas mix you will use when diving.

- Navigating the menus of the Q4 is intuitive: the left (A) button and right (B) button are used in the same way across all screens.

PRESS A to scroll

PRESS B to select

PRESS A to confirm the choice and advance to the next option.

- To return to the Surface Mode Screen:

PRESS and hold the A button for 2-3 seconds.

- To switch from O/C to C/C modes:

PRESS the A and B buttons simultaneously for 5 seconds.

- If no buttons are pressed within about 20 seconds, the screen will return to the surface mode.

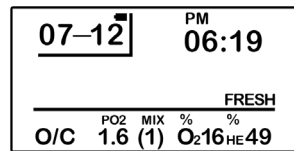
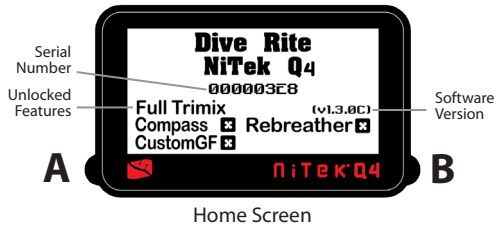
- To return the computer to hibernation:

PRESS the B button for 2-3 seconds.

Menus

Dive Option SET Mode

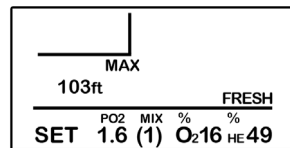
The dive option SET and display mode is where all "dive" settings are programmed including your PO₂ alarm for each gas (either 1.4 or 1.6), %O₂, %HE, an optional maximum depth alarm,



a maximum dive time alarm, conservatism/custom gradient factor options, a sampling rate for the log book (either 15 or 30 second intervals), the FRESH or SEA water option, and brightness control.

- To get to the SET Mode Screen from the Surface Mode Screen:

PRESS the A button.



Programming Gas Mixes

PRESS the B button. The MIX number will be flashing "1." To select Mix 1:

PRESS the A button, which will lock in your first mix and then scroll to the PO₂ alarm option.

PRESS the B button to toggle between 1.4 and 1.6 PO₂ alarm.

Menu: SET Mode continued

PRESS the A button to set your PO₂ alarm. The computer will automatically advance to your %O₂ gas option.

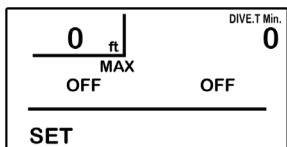
PRESS the B button to select your %O₂. The computer will then advance to your %HE option.

PRESS the A button to select your %HE.

NOTE: Up to 7 different gas mixes can be programmed, but if you are only using 1 mix, you only need to set MIX 1.

Additional Settings

- Maximum Depth Alarm
- Maximum Dive Time Alarm
- Conservatism/Gradient Factor
- Metric/Imperial
- Dive Profile Sampling Rate
- Fresh/Sea Water
- Brightness Control



SET Mode Screen

Maximum Depth and Time Alarms

If you do not wish to set a Maximum Depth Alarm, continue to press the A button to scroll through this menu. If you wish to set a depth alarm:

PRESS the B button until you reach your desired maximum depth.

PRESS the A button to select the depth, and

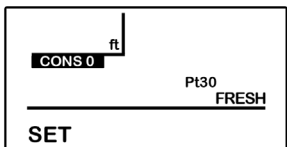
PRESS the B button to select "ON." The computer will advance to the Maximum Dive Time Alarm option.

If you do not wish to set a Maximum Dive Time Alarm, continue to press the A button to scroll through this menu. If you wish to set a Dive Time alarm:

PRESS the B button until you reach your desired dive time.

PRESS the A button to select the time, and

PRESS the B button to select "ON." The computer will scroll to the Conservatism/Gradient Factor option.



SET Mode Screen

Conservatism/Gradient Factors

The NiTek Q4 uses the Buhlmann ZLH16 algorithm, a default gradient factor of 30/75, and two additional pre-set GF settings to choose from that

allow for deep stops or shallow stops. An optional upgrade allows for custom gradient factors to be set.

PRESS the B button to choose your GF:
CONS 2= 30/75 (default)
CONS 1= 40/100
CONS 0= 75/95
Custom GF

PRESS the A button to select your GF. The computer will then scroll to the flashing Imperial/Metric option.

Imperial/Metric

PRESS the B button to toggle to either ft (Imperial) or m (Metric).

PRESS the A button to set your option. The computer will then scroll to the sampling rate option for your dive log.

Sampling Rate (for Log Book and Profile)

PRESS the B button to toggle to either 15 seconds or 30 seconds.

PRESS the A button to set your selection. The computer will then scroll to the calibration option for either FRESH or SEA water.

FRESH or SEA

PRESS the B button to toggle to either FRESH water or SEA.

PRESS the A button to set your option. The computer will then advance to additional screens.

Brightness Control

Upon entering the SET screen, MIX 1 is flashing.

PRESS the A button repeatedly until the Brightness number is flashing.

PRESS the B button to change the brightness. When finished, press the A button to advance to the next SET option.

Additional Screens

- PLAN
- LOG
- PROFILE
- OXY
- PC
- COMPASS
- TIME/DATE

PRESS the A button to scroll to additional screens.

PLAN displays the NDL (no decompression limit) based on your programmed gasses for a dive.

PRESS the B button to activate the screen.

Continue pressing the B button to change depths for your NDL.

LOG is where your logged dives are stored.

PRESS the B button to activate the screen. Continue pressing the B button to scroll through logged dives.

PROFILE is where graphic profiles of each dive are stored.

PRESS the **B** button to activate the screen.

Continue pressing the **B** button to scroll through your logged profiles.

OXY - The NiTek Q4 allows you to set an internal set point and plug in an external 4th cell to directly monitor the rebreather loop O₂.^{*} To use the 4th cell, it must first be calibrated. This is done on the surface, exposing the cell to pure O₂.

PRESS the **B** button to activate the screen.

"0 mV Uncalibrated" is displayed.

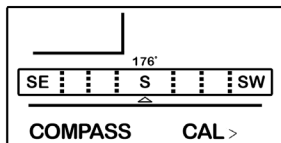
PRESS the **A** button. "CAL O₂" is displayed on the screen.

PRESS the **B** button to enter the calibrate mode of the oxygen cell, using a source of 100% oxygen for reference. "xx mV calibrated" (where xx is the mV reading of your oxygen cell) and the oxygen percentage is displayed on the screen.

PRESS the **A** button for 2-3 seconds to return to the Surface mode.

PRESS both the **A** and **B** buttons for 3-4 seconds to set the computer to the C/C (closed-circuit) mode. It will display "EXT" instead of "SP" (set-point), indicating that it's reading the P_{O₂} level of the external oxygen cell.

PC - Workbench dive software allows the Q4 diver to perform dive planning or gas mixes on either a PC or MAC. An optional upgrade to the Workbench Logbook, which allows you to upload dive data and view dive profiles, is due to be released in mid-2012.



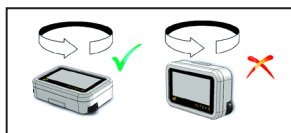
COMPASS Mode Screen

COMPASS - This optional upgrade gives you a digital compass that must be calibrated before using.

PRESS the **A** button to scroll to the Compass screen.

PRESS and hold the **B** button while holding the computer in a horizontal position. Holding the unit flat, smoothly rotate the computer twice in a 20-second period. Following this exercise, a "calibration complete" message will be displayed.

Go to www.DiveRite.com for a step-by-step video showing compass calibration on Dive Rite TV.



^{*} See your local Dive Rite dealer to purchase the Fischer connection cable required to plug into the CCR unit.

TIME - From the Surface Mode Screen scroll through the menus using the **A** button to the **TIME** screen. The seconds will be flashing.

PRESS the **B** button to reset to 00.

PRESS the **A** button to scroll to minutes.

PRESS the **B** button to set the accurate time.

Continue setting hours, year, day, and month using the **A** and **B** buttons as directed above. To change to 24-hour time:

PRESS the **B** button when "PM" flashes.

Dive Mode

Dive Computer Mode: The Dive Computer Mode is automatically entered when the computer enters the water. It begins performing its dive calculations once you descend below 5 feet (1.5m). While in diving mode, the computer calculates and displays information about your dive and prompts you with safety stop information and warnings, if needed. When diving, there are two screens you can toggle between, and you can switch to different gas mixes, when needed.

To switch to the Second Underwater screen:

PRESS the **B** button

Primary Underwater Screen: Displays depth, remaining no-decompression time, dive time, max depth, mix P_{O₂}, O₂ and HE percentages, mix number, and PGT (pressure gas in tissue) and OLI (oxygen limit indicator) bar graphs (graphic representations of your "CNS clock").

Second Underwater Screen: Displays current depth, dive time, temperature and conservatism (gradient) factor.

Changing Gas Mixes:

PRESS the **A** button and the **MIX** number will flash.

PRESS the **B** button as needed to select mix number. O₂, HE, and P_{O₂} will change per the programmed mix.

PRESS the **A** button to lock the mixture and return to the primary screen. A mix cannot be locked in if it causes you to exceed pre-programmed 1.4 or 1.6 ATM.

WARNINGS: There are several visual warnings you should be alert to and become familiar with. Refer to your NiTek Q4 user manual at www.DiveRite.com for additional information. These include:

- Ascent-Rate Warning
- P_{O₂} Limit Warning
- PGT Visual Alarm
- OLI Warning
- Decompression Warning
- Deco-Stop Violation Warning

Using Your NiTek Q4

The following is a checklist of general things you should pay attention to before, during, and after a dive.

Before A Dive:

- Be sure the computer is charged. The Q4 can be charged from any USB connection or from its included charger.
- Ensure that the USB and 4th cell caps are secure.
- Check that the proper time and date are set.
- Check that the proper mixes and modes are set; be sure you're in the appropriate O/C or C/C mode when programming.
- Review the dive plan for maximum depth, times, and for mixes you plan to use.

During A Dive:

- Monitor your NiTek Q4 throughout the dive for depth and time.
- Monitor the Pressure Gas In Tissue (PGT) and Oxygen Limit Indicator (OLI) bar graphs.
- Heed all alarms or warnings.
- Follow the no-decompression limits, or complete any displayed decompression schedule.

After A Dive:

- Monitor Surface Interval Time if making another dive.
- Follow desaturation and no-fly guidelines.
- Review your dive using the log book and profile modes.

NOTE: The Q4 defaults to a sleep mode (or hibernation) after 10 minutes. The screen display is the biggest drain on the battery. You can put the computer back to sleep by pressing the B button for 3-5 seconds. To reawaken the computer press either A or B button.



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