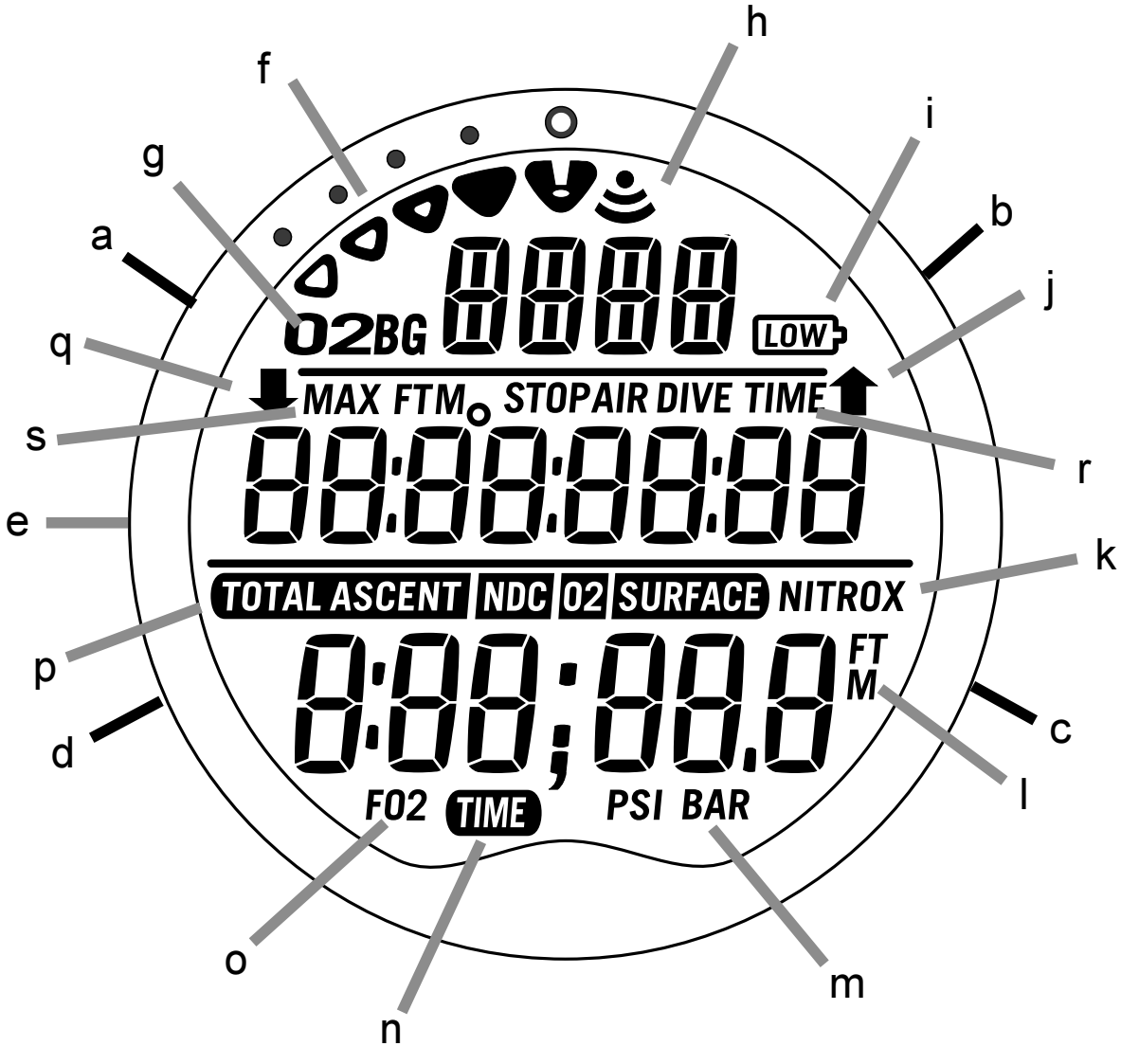
Pay special attention to items marked with this Warning symbol.



ATOM FULL LCD

Components:

a. Mode (M) Button
b. Select (S) Button
c. Light (L) Button
d. Advance (A) Button
e. LED Warning Light
f. Bar Graph
g. Icon - O2BG
h. Icon - Daily Alarm, or - Transmitter Link
i. Icon - Low Battery
j. Icon - Ascend Arrow
k. Symbol - NITROX (Mode)
l. Symbol - FT or M (Depth)
m. Symbol - PSI or BAR (Pressure)
n. Symbol - TIME
o. Symbol - FO2
p. Symbol - TOTAL ASCENT, or - NDC (No Deco), or - O2, or - SURFACE
q. Icon - Descend Arrow
r. Symbol - DIVE TIME, or - AIR TIME, or - STOP TIME
s. Symbol - MAX FT, or - MAX M

CONTENTS

LIMITED TWO-YEAR WARRANTY

For details, refer to the Product Warranty Registration Card provided. Register on-line at www.OceanicWorldWide.com

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ATOM Operating Manual, Doc. No. 12-2489
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San Leandro, Ca. USA 94577

TRADEMARK, TRADE NAME, AND SERVICE MARK NOTICE

PATENT NOTICE

U.S. Patents have been issued, or applied for, to protect the following design features:
Air Time Remaining (U.S. Patent no. 4,586,136 and 6,543,444) and Data Sensing and Processing Device (U.S. Patent no. 4,882,678). Set TLBG Alarm and other patents pending. User Setable Display (U.S. Patent no. 5,845,235) is owned by Suunto Oy (Finland).

DECOMPRESSION MODEL

The programs within the ATOM simulate the absorption of nitrogen into the body by using a mathematical model. This model is merely a way to apply a limited set of data to a large range of experiences. The ATOM dive computer model is based upon the latest research and experiments in decompression theory. **Still, using the ATOM, just as using the U.S. Navy (or other) No Decompression Tables, is no guarantee of avoiding decompression sickness, i.e. "the bends."** Every diver's physiology is different, and can even vary from day to day. No machine can predict how your body will react to a particular dive profile.

FCC ID: MH8A

FCC COMPLIANCE:
This equipment complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: 1.) this equipment may not cause harmful interference, and 2.) this equipment must accept any interference received, including interference that may cause undesired operation.

FCC INTERFERENCE STATEMENT:
This equipment has been tested and found to comply with the limits for an Intentional Radiator, a Class B Digital Device, pursuant to Part 15 of FCC Rules, Title 47 of the Code of Federal Regulations. These rules are designed to provide reasonable protection against harmful interference in a commercial or residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

There is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician.

⚠ **Warning: Changes or modifications to this unit not expressly approved by Oceanic/2002 Design could void the user's authority to operate the equipment.**

WARNING: Prior to diving with the ATOM, you must also read and understand the Oceanic Dive Computer Safety and Reference Manual, Doc. No. 12-2262, which provides Important Warnings and Safety Recommendations as well as general product information.

INTRODUCTION

INTRODUCTION

Welcome to OCEANIC and thank you for choosing the ATOM !

It is extremely important that you read this Operating Manual in sequence and understand it completely before attempting to use the ATOM as a dive computer.

It is equally important that you read the Oceanic Dive Computer Safety and Reference Manual (Doc. No. 12-2262) provided with your ATOM. It contains information that you must become familiar with prior to diving with your ATOM.

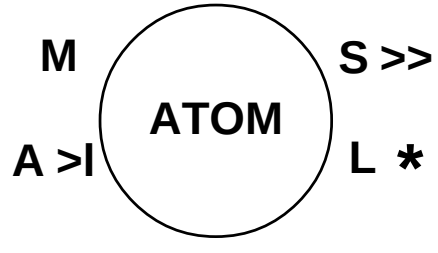
Remember that technology is no substitute for common sense, and a dive computer only provides the person using it with data, not the knowledge to use it.

INTERACTIVE CONTROL CONSOLE

The Interactive Control Console consists of four Control Buttons that allow you to select mode options and access specific information. They are also used to link the Transmitter(s), enter Settings, activate the Backlight, and acknowledge the Audible Alarm.

Throughout this manual they will be referred to as the M, S, L, and A buttons.

- Upper/Left - Mode (M) button
- Upper/Right - Select (S) button
- Lower/Right - Light (L) button
- Lower/Left - Advance (A) button



OPERATING MODE STRUCTURE

Unless it is operating in Dive Computer mode, the ATOM will be On in the default MAIN TIME (home time) mode (Fig. 1), like a standard Watch, until the Mode is changed.

The M button is used to access 5 other Modes that include Alternate Time Mode, Countdown Timer, Chronograph (stop watch/lap timer), Daily Alarm, and Dive Computer Surface Mode. It is also used to revert to the Local Default Time display.

The screens of the Main Modes and Sub Modes will remain on display until a button is pressed to access another screen or Mode, activate a sequence, or for 2 minutes if no button is pressed. The Chronograph remains on display as long as it is running unless another Mode is accessed.

When Wet Activation is set On, the ATOM will enter Dive Mode upon descent below 4 feet/1.2 meters, regardless of what operating Mode it is in.

⚠ WARNING: When Wet Activation is set OFF, the ATOM must be in Dive Surface Mode prior to the first dive of a new series. Commencing a dive while in Watch modes will not activate Dive Mode unless Wet Activation is set ON.

Main Sequence
(while at home)
Main Time
Alternate Time
Countdown Timer
Chronograph
Daily Alarm
Dive Surface Mode
Alternate Sequence
(at a travel location)
Alternate Time
Main Time (home)
Countdown Timer
Chronograph
Daily Alarm
Dive Surface Mode

Fig. 1 - Main Time

PC INTERFACE

Interface with a PC is accomplished by connecting the ATOM (Watch) to a PC USB port using the USB Interface Cable provided. The same Cable is used for Upload and Download.

There are 2 software programs on the CD together with a USB Driver and a separate User Manual that can be printed for personal use. The Settings Upload program is a convenient method for entering Time, Alarm, and Utility settings into the ATOM. The Data Download program is used to retrieve Data that was sampled during dives and stored in the ATOM's memory.

The ATOM checks for an External Access request once every second while in the Watch Main Time. Checks are not made if the unit is WET. For a connection to be made, the Interface Cable is clipped onto the ATOM's Data Port and plugged into a PC USB Port. To establish the connection, the PC program must be running asking RUTHERE. When the connection is made, all segments of the ATOM appear on the display (Fig. 2) until completion of the Upload or Download operation.

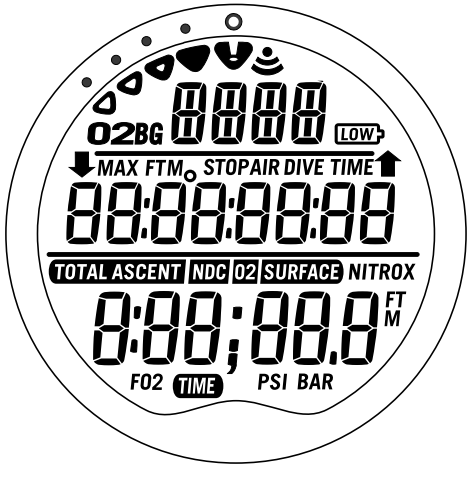


Fig. 2 - PC Interface

- The ATOM reverts to the Main Time screen after completion of the Upload or Download operation, or after 2 minutes if no PC action was taken.

⚠ WARNING: Prior to diving with the ATOM, you must also read and understand the Oceanic Dive Computer Safety and Reference Manual, Doc. No. 12-2262, which provides Important Warnings and Safety Recommendations as well as general product information.

GENERAL FEATURES AND DISPLAYS

SYMBOLS AND ALPHA NUMERIC GRAPHICS

The upper line of digits on the LCD screen is used to convey alpha Messages such as Day of the Week, Operating Modes, items being Set, Gas and Transmitter identification, Altitude level, and Alarm identification. At times, the second line is also used to display alpha numeric graphics such as PO2 and On/Off. See Figure 3. The FO2 setting of Air will appear in the lower line.

Symbols that appear on the various displays are described throughout this manual and summarized on page 86.

AUDIBLE ALARM

When warning situations activate the Audible Alarm, the ATOM will emit 1 beep per second for 10 seconds, or until the situation is corrected, or it is acknowledged by momentarily pressing and releasing the S button (< 2 seconds). After being acknowledged and the situation corrected, the Alarm will sound again upon reentry into the warning situation, or entry into another type of warning situation.

A red LED Warning Light, located on the left side of the housing, is synchronized with the Audible Alarm. It will flash as the Audible Alarm sounds. It will turn off when the Alarm is acknowledged or the situation is corrected. The Audible and LED will not be active if the Alarm is Set OFF (a group A setting).

Fig. 3 - Sample Messages

Situations that will sound the Alarm include -

- Watch Daily Alarm reaches time set (disabled during Dive Modes).
- Watch Countdown Timer reaches 0:00.
- Air Time Remaining at 5 minutes, then again at 0 minutes.
- Air Time Remaining becomes less than No Deco and O2 Time Remaining for 1 minute.
- Turn Pressure at the Set Point selected (Transmitter 1).
- End Pressure at the Set Point selected (active Transmitter).
- Descent deeper than the Max Depth Set Point selected.
- Dive Time Remaining at the Set Point selected.
- Elapsed Dive Time at the Set Point selected.
- High PO2 of 1.60 ATA or the Set Point selected.
- High O2 of 300 OTU (single or daily exposure).
- Tissue Loading Bar Graph at the segment Set Point selected.
- Ascent Rate exceeds 60 feet/minute (18 meters/minute) when deeper than 60 feet (18 meters), or 30 feet/minute (9 meters/minute) at 60 feet (18 meters) and shallower.
- Loss of the active Transmitter Link signal for more than 15 seconds during a dive.
- Entry into Decompression Mode.
- Conditional Violation (above a required Decompression Stop Depth for less than 5 minutes).
- Delayed Violation (above a required Decompression Stop Depth for more than 5 minutes).
- Delayed Violation (a deco Stop Depth greater than 60 feet/18 meters is required).
- Delayed Violation (Maximum Operating Depth of 330 feet/100 meters is exceeded).
- Breathing has changed to another tank without a manual Gas Switch.
- A Gas Switch to another tank would expose the diver to a PO2 greater than 1.60 ATA.

A single short beep (which cannot be disabled) is emitted for the following -

- Upon completion of a Hot Swap battery change.
- Change from Delayed to Full Violation 5 minutes after the dive.

3 short beeps (which cannot be disabled) are emitted for the following -

- Air Time Remaining becomes less than No Deco and O2 Time Remaining.

During the following situations, the 10 second continuous tone will be followed by a 5 second steady beep that will not turn off when acknowledged -

- Ascending above a required Decompression Ceiling Stop Depth for more than 5 minutes (referred to as a Delayed Violation).
- Decompression requires a Ceiling Stop Depth of 70 feet/21 meters or deeper.
- Being on the Surface for 5 minutes after a Conditional Violation (Permanent Violation).

BACKLIGHT

To activate the Backlight - press the L button.

- The Backlight will activate and illuminate the display for button depression time* plus the user set Duration time of 0, 5, or 10 seconds, for a maximum of 20 seconds. (*The Backlight will turn Off if the button is held depressed for more than 10 seconds.)
- Press the button again to activate as desired.

△ **NOTE: Extensive use of the Backlight reduces estimated Battery life. Also, the Backlight does not operate during a Low ATOM Battery Condition or when the ATOM is connected to a PC.**

POWER SUPPLY

The ATOM (Watch) utilizes 1 - 3 volt CR2430 Lithium Battery. Transmitters use 1 - 3 volt, CR2 Lithium Battery. When used as a Dive Computer, the ATOM's battery should provide over 100 dive hours of operation if 2 dives are conducted during each dive period. The Transmitter's battery should provide over 1000 dive hours of operation.

Transmitters check battery voltage when they are pressurized and will send a Low Battery signal to the Receiver in the ATOM when the voltage drops below the Warning level. The ATOM checks its battery voltage every 2 minutes during surface operation.

- If voltage of the ATOM decreases to the Warning level (2.75 volts), the Battery icon will appear (Fig. 4a) as an indication that the Battery should be changed prior to commencing a series of dives.
- If voltage decreases to the Alarm level (2.50 volts), the Battery icon will flash and operation will revert to Main Time. The ATOM would then operate in Watch modes until the Battery becomes completely depleted.
- Battery Status cannot be checked during Dive Modes.
- If a Low Battery Condition was not displayed prior to starting a Dive, and a Low Battery Condition occurs during the dive, there will be sufficient Battery power remaining in the ATOM to maintain it's operation for the remainder of that dive.

Fig. 4 - Low Battery

Fig. 5 - Battery Status (Good)

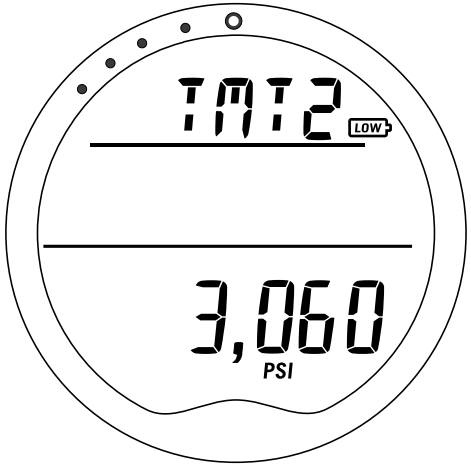


Fig. 6A - Transmitter 2 Battery Status (Low)

Fig. 6B - Transmitter 3 Status (Not Available)

To check the condition of the ATOM or a Transmitter's Battery, depress the S button for 2 seconds while in Dive Computer Surface Mode then release it.

- As the button is depressed, the ATOM's Receiver will activate.
- 2 seconds later, the ATOM (Watch)'s Battery status will be displayed for 3 seconds (Fig. 5), then -
- if active and linked, Transmitter 1's Battery status will be displayed for 3 seconds, then -
- if active and linked, Transmitter 2's Battery status will be displayed for 3 seconds (Fig. 6A), then -
- if active and linked, Transmitter 3's Battery status will be displayed for 3 seconds, then -
- the display will then revert to Surface Mode.
- If a Transmitter is not active and linked, the message NotAvAil (not available) will be displayed (Fig. 6B).

Tank Pressure (described later) will also appear on the active Transmitters Battery Status displays.

WATCH FEATURES

LOCAL DEFAULT TIME

The normal screen sequence accessed with the M button is -

Main Time > Alternate Time > Countdown Timer > Chrono-graph > Daily Alarm > Dive Computer Surface Mode .

Main Time (Fig. 7) is the current Time at your home location and is normally selected as the Local Default Time.

Fig. 7 - Main Time

Alternate Time (Fig. 8), which is set by hour differential, is the current Time at a remote travel location. Upon arrival at the location, Alternate Time can be interchanged with Main Time to make it the Local Default Time while visiting the travel location. The M button will then access the screens in the following se-quence -

Alternate Time > Main Time > Countdown Timer > Chrono-graph > Daily Alarm > Dive Computer Surface Mode.

While viewing Alternate Time, depressing and holding the S button for 2 seconds will replace MainTime with Alternate Time that will then become the Local Default Time until changed.

While viewing any of the Watch Mode displays, pressing and holding the M button for 2 seconds or if no button is pressed for 2 minutes, the ATOM will revert to the Local Default Time screen.

Fig. 8 - Alternate Time

MAIN TIME

Information includes:

- > Alarm icon - if the Daily Alarm is set On (Fig. 9a)
- > Day of the Week graphic MON (or TUE, WED, THU, FRI, SAT, SUN), or the graphic WET (if the unit is wet).
- > Battery icon - if a Low Battery Condition exists.
- > Month and Day (Day and Month if set for Metric)
- > Time of Day (hours, minutes, seconds*)
  (*seconds appear in the middle row, Fig. 9b)

- Pressing and releasing the M button momentarily and repeatedly (< 2 seconds) will step through the Main Modes.
- Pressing and releasing the S button (< 2 seconds) will silence and acknowledge the Daily Alarm (if set and it sounds).
- Pressing the L button will activate the Backlight.
- Pressing both the A and S buttons simultaneously for 2 seconds will access the SET MAIN TIME Mode.

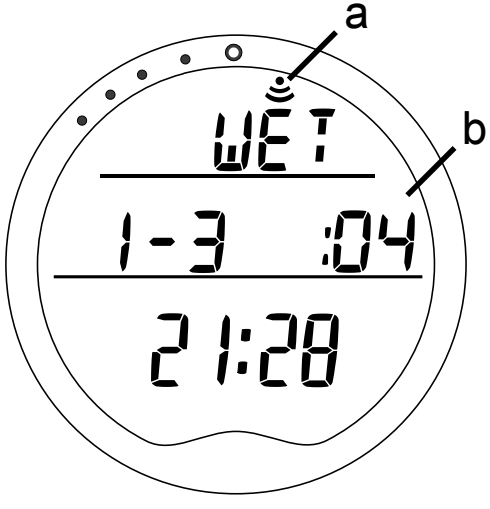


Fig. 9 - Main Time Wet
(24 Hour Format)

SET MAIN TIME

This Mode will allow the Date and Time to be set which will also serve as the basis for ALTERNATE TIME values.

There are 3 Time Set screens - Set Hour Format, Set Time, and Set Date.

NOTE: MAIN TIME must be selected as the Local Default Time in order to set the Time and Date.

Sequence of Time/Date settings:
Hour Format screen > Time screen (Hour > Minute) > Date screen (Year > Month > Day)

Day of the Week is set automatically when the Date is set.

- Depressing and holding the M button at any time for 2 seconds will revert to the MAIN TIME screen.

If no button is pressed during a period of 2 minutes, the unit will revert to the MAIN TIME screen.

- While the MAIN TIME screen is being displayed, pressing the A and S buttons simultaneously for 2 seconds will access the SET HOUR FORMAT screen.

The **Set Hour Format** screen will display the graphic HOUR, symbol TIME, and Hour Format 12 (or 24) flashing (Fig. 10).

- Pressing and releasing the S button momentarily (< 2 seconds) will toggle the flashing setting between 12 and 24.
- Pressing the A button momentarily (< 2 seconds) will save the Hour Format Set Point and access the SET TIME screen with the HOUR Set Point flashing.

Fig. 10 - Set Hour Format

Fig. 11 - Set Hour

- HINT - Pressing the A button repeatedly (< 2 seconds each time) will step through the Time/Date Settings, bypassing those that don't require setting.

Set Hour (Fig. 11)
The graphic Am or Pm will be displayed when setting Time in 12 Hour format.

- Depressing and holding the S button while the HOUR Set Point is flashing will scroll through the Set Points in 1 Hour increments at a rate of 4 per second from 12: Am to 11: Pm (or 0: to 23: if set for 24-hour format).
- Pressing and releasing the A button momentarily (< 2 seconds) will save the Hour Set Point and/or advance to SET MINUTE with the MINUTE Set Point flashing.

Fig. 12 - Set Minute

Set Minute (Fig. 12)

- Depressing and holding the S button while the MINUTE Set Point is flashing will scroll through the Set Points in 1 minute increments at a rate of 4 per second from :00 to :59.
- Pressing and releasing the A button momentarily (< 2 seconds) will save the Minute Set Point and/or advance to the SET DATE screen with the YEAR Set Point flashing.

Displayed on the SET DATE screen will be the graphic YEAR, Month and Day (or Day and Month if set for metric), and the YEAR set point flashing.

Fig. 13 - Set Year

Set Year (Fig. 13)

- Depressing and holding the S button while the YEAR Set Point is flashing will scroll through the Set Points in 1 year increments at a rate of 4 per second from 2004 to 2049 (with leap year corrections).
- Pressing and releasing the A button momentarily (< 2 sec) will save the Year Set Point and/or advance to SET MONTH with the Set Point flashing and the graphic MNTH.

NOTE: The YEAR will not be displayed in any Mode other than SET DATE. The DATE will reset to 1-1 2004 when the Battery is replaced.

Set Month (Fig. 14)

- Depressing and holding the S button while the MONTH Set Point is flashing will scroll through the Set Points in 1 month increments at a rate of 4 per second from 1 to 12.

- Pressing and releasing the A button momentarily (< 2 seconds) will save the Month Set Point and/or advance to SET DAY with the Set Point flashing and the graphic DAY.

Fig. 14 - Set Month

Fig. 15 - Set Day

Set Day (Fig. 15)

- Depressing and holding the S button while the DAY Set Point is flashing will scroll through the Set Points in one-day (01) increments at a rate of 4 per second from 1 to 31.

- Pressing and releasing the A button momentarily (< 2 seconds) will save the Set Point and/or advance to the MAIN TIME screen.

NOTE: DAY of the WEEK is set automatically based upon the Date that has been set.

Fig. 16 - Alternate Time

ALTERNATE TIME (Fig. 16)

- Pressing and releasing the M button momentarily 1 time (< 2 seconds) while the MAIN TIME screen is displayed will access the ALTERNATE TIME screen.

ALTERNATE TIME (such as the Time at a travel destination) is identified by a lazy 8 symbol located to the left of the Day of the Week graphic in the upper row (Fig. 16a).

ALTERNATE TIME information includes:

> Alarm icon - if the Daily Alarm is set On.
> Lazy 8 symbol and Day of the Week graphic MON (or TUE, WED, THU, FRI, SAT, SUN), or WET (if the unit is wet).
> Battery icon, if a Low Battery Condition exists.
> Month and Day (Day and Month if set for Metric).
> Time of Day (hour, minute, second).

- Pressing and releasing the M button momentarily and repeatedly (< 2 seconds) will step through the other Main Modes.
- Pressing and releasing the S button (< 2 seconds) will silence and acknowledge the Daily Alarm (if set and it sounds).
- Depressing the S button for 2 seconds will replace MAIN TIME with ALTERNATE TIME as the Local Default Time screen.
- Pressing the L button will activate the Backlight.
- Depressing both the A and S buttons simultaneously for 2 seconds will access the SET ALTERNATE TIME Mode with the Set Point flashing.
- Pressing and holding the M button for 2 seconds will revert to the MAIN TIME screen.

SET ALTERNATE TIME

ALTERNATE TIME can be set OFF, or to an Hour based numeric time zone Differential ranging from + 1 through +23 through - 23 through -1 (hours).

Once the Differential is selected and saved, Alternate Time/Date values will be based upon the MAIN TIME Set Points.

Set ALTERNATE TIME information includes (Fig. 17):

> Lazy 8 symbol and graphic OFF, or the +/- numeric Hour Differential Set Point, flashing.

- Depressing and holding the S button while the Set Point is flashing will scroll through the Set Points in increments of 1 Hour at a rate of 4 per second.
- Pressing and releasing the A button momentarily (< 2 seconds) will save the Set Point and/or advance to the ALTERNATE TIME screen.
- Depressing and holding the M button for 2 seconds will revert to the MAIN TIME screen.

If no button is pressed during a period of 2 minutes, the unit will revert to the MAIN TIME screen.

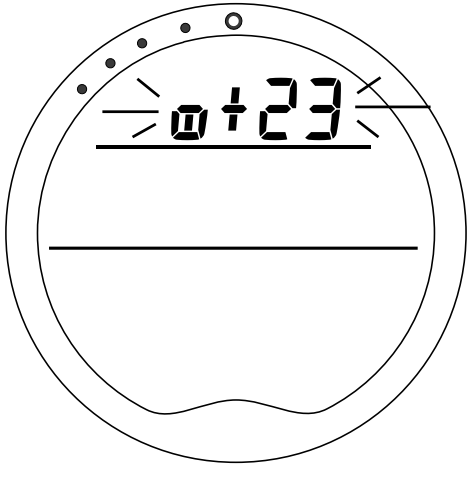


Fig. 17 - Set Alternate Time

COUNTDOWN TIMER

Pressing the M button momentarily 2 times (< 2 seconds each) while the Local Default Time screen is displayed will access the Countdown TIMER screen, displaying the remaining Countdown Time (hr:min) if running, or OFF (flashing) and the previously set Countdown Time if the set Countdown started and has ended, or OFF (solid) and 0:00 if no time was previously set.

Once set ON, a Countdown will run in the background until it counts down to 0:00, or it is set OFF, or a Dive is made at which time it will default to OFF and the value previously set.

When a set Countdown Time reaches 0:00, the Audible Alarm will beep 10 times and the red LED warning light will flash.

- Pressing and releasing the S button (< 2 seconds) will acknowledge and silence the Alarm.

<u>COUNTDOWN TIMER information includes (Fig. 18):</u>

> Graphics TIMR and ON if running (or OFF).
> TIME symbol and Countdown progress time (hr:min) or Time previously set if the Count Down ended, or 0:00 (if no time was previously set).

- Pressing and releasing the S button (< 2 seconds) will silence and acknowledge the Daily Alarm (if set and it sounds).
- Pressing the L button will activate the Backlight.
- Depressing and holding the M button for 2 seconds will revert to the Local Default Time screen (MAIN or ALTERNATE TIME).
- Depressing both the A and S buttons simultaneously for 2 seconds will access the TIMER Set screen indicated by the graphic SEt in the second row, and HOUR Set Point flashing.
- If no button is pressed during a period of 2 minutes, the unit will revert to the Local Default Time screen.

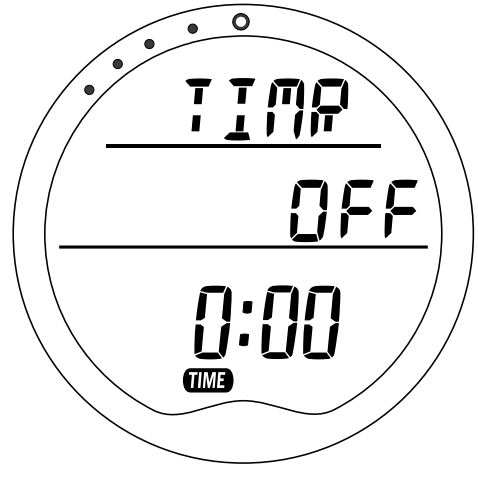


Fig. 18 - Countdown Timer

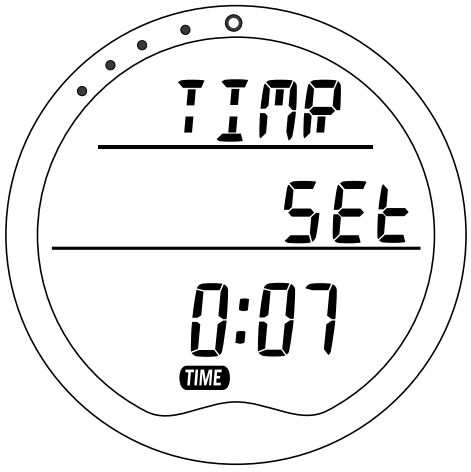


Fig. 19 - Set Timer

SET COUNTDOWN TIMER

Information includes (Fig. 19):

> Graphics TIMR and SEt.
> TIME symbol and HOUR Set Point (hr:) flashing.

- Depressing and holding the S button while the HOUR Set Point is flashing will scroll through the Set Points in 1 hour increments at a rate of 4 per second from 0: to 23: (hr).
- Pressing and releasing the A button momentarily (< 2 seconds) will save the HOUR Set Point and/or advance to Set MINUTES with the Set Point flashing.
- Depressing and holding the S button while the MINUTES Set Point is flashing will scroll through the Set Points in 1 minute increments at a rate of 4 per second from :00 to :59 (min).
- Pressing and releasing the A button momentarily (< 2 seconds) will save the MINUTES Set Point and/or advance to the COUNTDOWN TIMER screen indicated by the graphic OFF (flashing) in place of the graphic SEt.
- Pressing and releasing the S button momentarily (< 2 seconds) will toggle from OFF to ON and Start the Timer (Fig. 20).
- Depressing and holding the M button for 2 seconds will revert to the Local Default Time screen.
- If no button is pressed during a period of 2 minutes, the unit will revert to the Local Default Time screen.

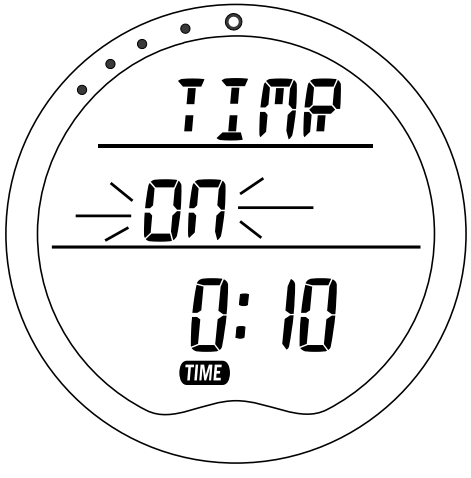


Fig. 20 - Timer Started

CHRONOGRAPH (Stop Watch/Lap Timer) (Fig. 21)

- Pressing and releasing the M button momentarily 3 times (< 2 seconds each) while the MAIN TIME screen is displayed will access the CHRONOGRAPH displaying the elapsed time if previously started or 0:00:00.00 (hr:min:sec.1/100th sec), flashing (Fig. 21).
- Pressing and releasing the S button momentarily (< 2 seconds) will start the TIMER which will begin counting up from 0:00:00.00 to 99:59:59.99 (hr:min:sec.1/100th sec) in increments of .01 (1/100th sec).
- During the first 4 seconds the 1/100th second values will be displayed, then 2 dashes (. - -) will be displayed. The 1/100th values will be recorded and displayed when Laps are frozen and when later recalled.
- Subsequent pressing and releasing of the S button (< 2 seconds each) will freeze Lap Times (LAP1 through LAP9). After 9 Laps are recorded, additional Laps will replace LAP9, shift the others to lower Lap numbers, while discarding LAP1.
- If is Timer reaches 99:59:59.99, it will stop and save that number as a Lap. Subsequent presses of the S button will then have no effect.
- Pressing and releasing the A button momentarily (< 2 seconds) will Stop the Timer and Recall LAP1, displaying the graphic LAP1 (flashing) and the Lap 1 Time. Repeat presses will display other Laps/Times (Fig. 22).

(continued on page 30)

Fig. 21 - Chronograph

Fig. 22 - Lap Recall

- Depressing and holding the A button for 2 seconds will stop the Timer and reset the Time to 0:00:00.00 (flashing).
- Pressing and releasing the M button momentarily (< 2 seconds) will advance to DAILY ALARM.
- Depressing and holding the M button for 2 seconds will revert to the Local Default Time screen.

While the Chronograph is running, it will remain on the screen until a button operation is performed. If another screen is accessed, it will then continue to run in the background.

Upon descending on a dive, the Chronograph operation will be terminated and reset to 0:00:00.0.

DAILY ALARM

- Pressing the M button momentarily 4 times (< 2 seconds each time) while the MAIN TIME screen is displayed will access the DAILY ALARM, displaying the graphics ALRM and ON or OFF (flashing) and Alarm Time previously set.

Fig. 23 - Daily Alarm

Information includes (Fig. 23):

> Alarm icon and graphics ALRM and ON (or OFF).
> Alarm Time Set Point (hr:min).

- Pressing and releasing the S button momentarily (< 2 seconds) will toggle between ON and OFF.

- Upon being toggled to ON, the Alarm will be set to sound every day at the Time indicated.
- Depressing both the A and S buttons simultaneously for 2 seconds will allow setting a new Time as indicated by the graphic SEt and the HOUR Set Point flashing.
- Depressing and holding the M button for 2 seconds will revert to the Local Default Time screen.
- Pressing the L button will activate the Backlight.

- If no button is pressed during a period of 2 minutes, the unit will revert to the Local Default Time screen.

SET DAILY ALARM

Information includes (Fig. 24):

> Alarm icon and graphics TIMR and SEt.
> Alarm Time previously set (hr:min) with the HOUR Set Point flashing.

- Depressing and holding the S button while the HOUR Set Point is flashing will scroll through the Set Points in 1 hour increments at a rate of 4 per second from 12: Am to 11: Pm (or 0: to 23: if 24 hour format). The graphic Am or Pm will be displayed when setting Time.

(continued on page 32)

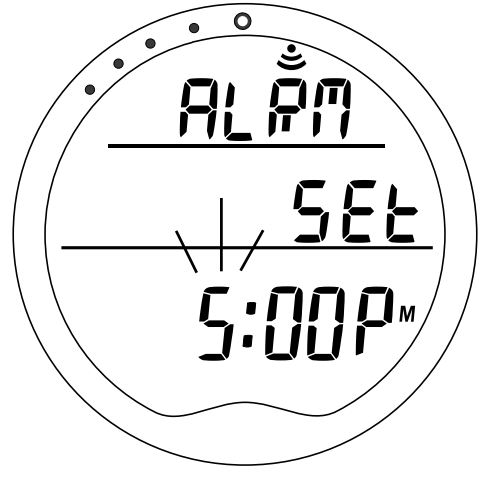


Fig. 24 - Set Daily Alarm

- Pressing and releasing the A button momentarily (< 2 seconds) will save the HOUR Set Point and/or advance to SET MINUTE with the Set Point flashing.
- Depressing and holding the S button while the MINUTE Set Point is flashing will scroll through the Set Points in 1 minute increments at a rate of 4 per second from :00 to :59.
- Pressing and releasing the A button momentarily (< 2 seconds) will save the MINUTE Set Point and/or advance to the DAILY ALARM screen indicated by the graphic ON (or OFF) flashing.
- Depressing and holding the M button for 2 seconds will revert to the Local Default Time screen.

- If no button is pressed during a period of 2 minutes, the unit will revert to the Local Default Time screen.

UPLOADING WATCH SETTINGS FROM A PC

In addition to setting Main Time and Date utilizing the push buttons as previously described, they can also be set using the PC Settings Upload program included on the ATOM's Dive Log Explorer software CD.

Prior to shipment from the factory, error of the ATOM's Main Time is determined and corrected.

⚠ WARNING: Prior to diving with the ATOM, you must also read and understand the Oceanic Dive Computer Safety and Reference Manual, Doc. No. 12-2262, which provides Important Warnings and Safety Recommendations as well as general product information.

DIVE COMPUTER FEATURES AND DISPLAYS

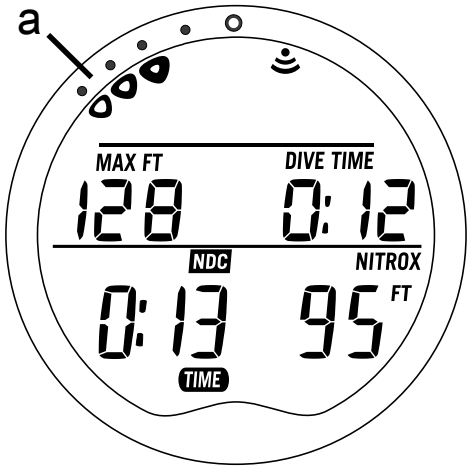


Fig. 25 - Nitrogen Bar Graph

BAR GRAPH

The Bar Graph is used as a visual representation of nitrogen loading, or when accessed, oxygen accumulation. By default the Bar Graph (Fig. 25a) represents tissue loading of nitrogen, showing your relative no decompression or decompression status. This is referred to as the Tissue Loading Bar Graph (TLBG).

When the ATOM is set to operate in Nitrox mode, the Bar Graph will represent oxygen accumulation when the oxygen data screen (Alternate Display) is accessed temporarily. The O2BG icon (Fig. 26a) will appear as an indication.

Regardless of which parameter the Bar Graph is representing at the time, nitrogen and oxygen calculations will continue to be performed in the background.

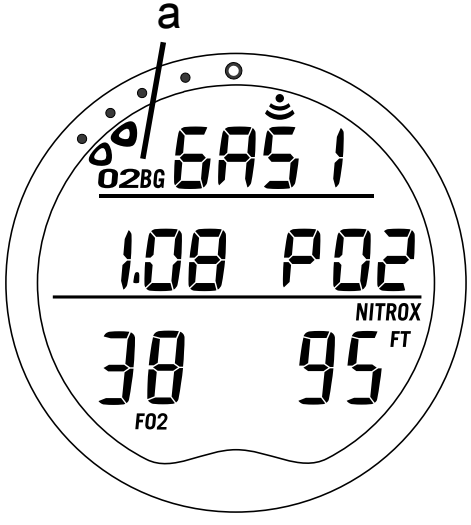


Fig. 26 - O2 Bar Graph

As your Depth and Elapsed Dive Time increase, segments will add to the TLBG, and as you ascend to shallower depths, the segments of the TLBG will begin to recede, indicating that additional no decompression time is allowed.

The Tissue Loading Bar Graph monitors 12 different nitrogen compartments simultaneously and displays the one that is in control of your dive. It consists of 5 segments, the lower 4 represent No Decompression status and the fifth at the top indicates a Decompression condition.

Displays associated with oxygen and the O2 Bar Graph will appear if FO2 for any Gas has been set at a value other than 'Air' (e.g., a numerical value) and the Alternate screen that displays oxygen related data is accessed.

When the oxygen data screen is accessed during a dive, the Bar Graph will show the maximum of either per dive accumulated oxygen or 24 hour period accumulated oxygen.

As your oxygen exposure (accumulation) increases during a dive, segments will add to the O2 Bar Graph, and as saturation decreases, it will begin to recede, indicating that additional exposure is allowed for that dive and 24 hour period.

The ATOM will store oxygen accumulation calculations for up to 10 dives conducted during a 24 hour period. If the maximum limit for oxygen loading has been exceeded for that day (24 hour period), all of the segments of the O2 Bar Graph will be displayed flashing (Fig. 27).

Depth/Time values will not appear in Plan Mode until the O2 Bar Graph recedes into the normal zone (lower 4 segments) indicating that your daily oxygen dosage has decreased an amount equivalent to the amount accumulated during the latest dive completed.

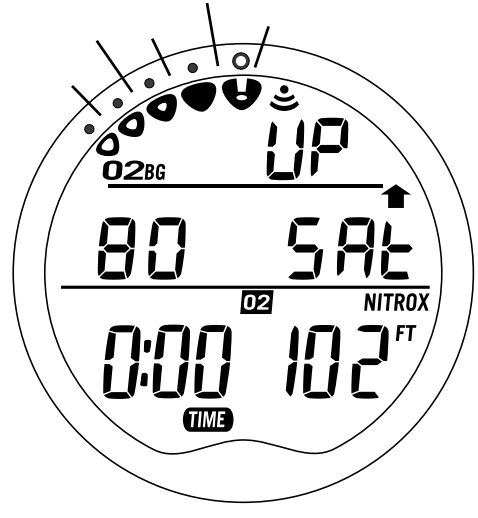


Fig. 27 - Max O2 Exceeded

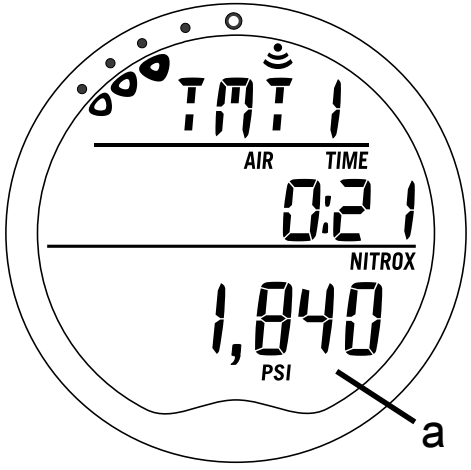


Fig. 28 - Tank Pressure

While you cannot provide a guarantee against the occurrence of decompression sickness, you may choose your own personal zone of caution based upon age, physique, excessive weight, etc., to reduce the statistical risk.

Within the available parameters that can be set (described later) are a TLBG Alarm and a Conservative Factor which if set ON reduces No Decompression times allowed.

ALPHA / NUMERIC DISPLAYS

Tank Pressure Display

When the ATOM's Receiver is set ON and active, Tank Pressure from each active Transmitter that is properly linked will be displayed when accessed (Fig. 28a).

Values of pressure are displayed numerically from 0 PSI (BAR) up to 5,000 PSI (352 BAR) in increments of 5 PSI (.5 BAR).

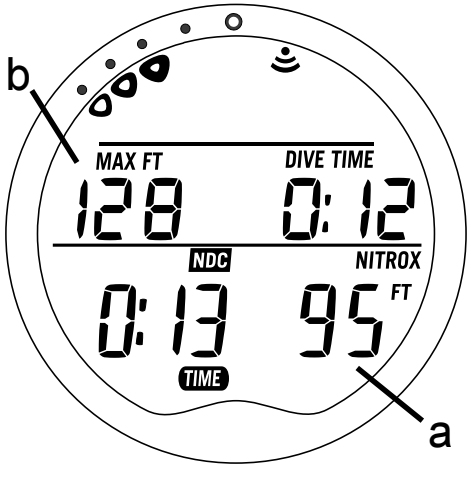


Fig. 29 - Depth Displays

Depth Displays

During a dive, the **Current Depth** display (Fig. 29a) and **Maximum Depth** display (Fig. 29b) indicate Depths from 0 to 330 feet (100 meters) in increments of 1 foot (.1 meters).

During a No Decompression Safety Stop, the set **Stop Depth** (Fig. 30a) is displayed and during a Decompression condition, the required **Ceiling Stop Depth** is displayed.

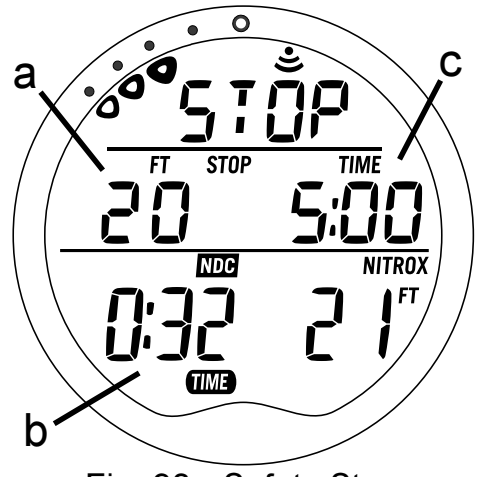


Fig. 30 - Safety Stop

Time and Date Displays

Time displays are shown in hour:minute format (i.e., 1:16 represents 1 hour and 16 minutes, not 116 minutes!). The colon that separates hours and minutes blinks once per second when the display is indicating real time (e.g., Surface Interval, Elapsed Dive Time), and is solid (non-blinking) when times are calculated projections (e.g., Time to Fly).

The **Primary Time** display, at the bottom of the screen, has the largest digits of the display (Fig. 30b). A **second time** display (Fig. 30c) is located in the middle row. Both displays are identified by the symbol TIME.

When the ATOM is operating in Dive Computer mode, **Date** is displayed only to identify dive data while it is viewed in the Log Mode (Fig. 31a). When Units of Measure are set for Imperial, Month appears to the left of Day. When set for Metric units, the Month appears to the right of Day.

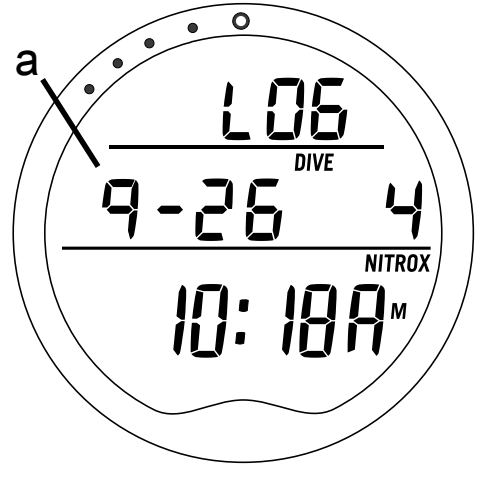


Fig. 31 - Log Mode (Date)

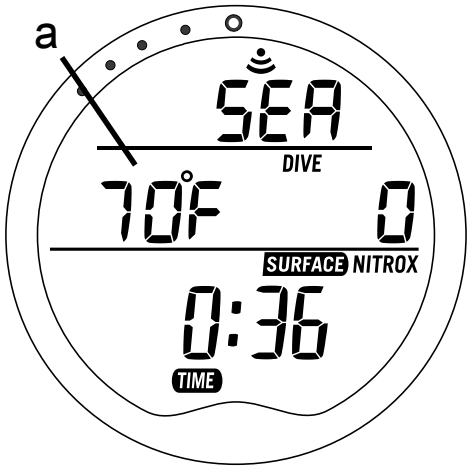


Fig. 32A - Temperature (Surface Mode)

Temperature Display

Ambient Temperature is displayed in Surface Mode (Fig. 32Aa) and in Log Mode, and can be viewed on a Secondary Display when accessed during dive modes (Fig. 32Ba).

NOTE: Each display represents unique pieces of information. It is imperative that you understand the formats, ranges, and values of the information represented to avoid any possible misunderstanding that could result in error.

You must also understand the icons, symbols, and alpha/numeric messages presented.

The Informational Displays are described in detail as the various operating modes they appear in are presented throughout this manual.

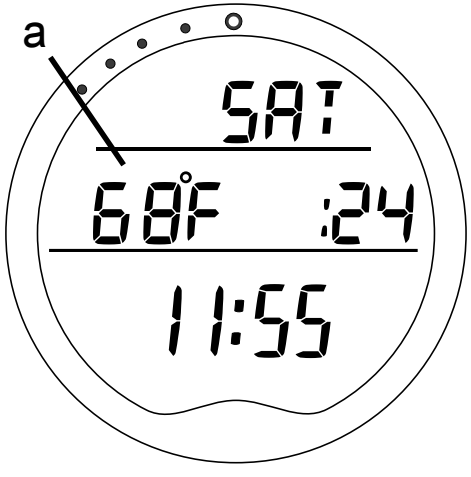


Fig. 32B - Temperature (Dive Mode)

WARNING: Prior to diving with the ATOM, you must also read and understand the Oceanic Dive Computer Safety and Reference Manual, Doc. No. 12-2262, which provides Important Warnings and Safety Recommendations as well as general product information.

DIVE COMPUTER SURFACE SEQUENCE AND MODES

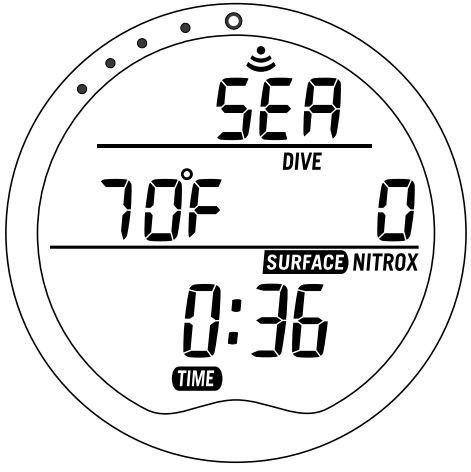


Fig. 33 - Surface Mode
(Pre Dive)

DIVE COMPUTER (DC) SURFACE MODE

Pressing and releasing the M button momentarily 5 times (< 2 seconds each time) while the Watch Local Default Time screen (Main Time or Alternate Time, whichever was selected as the Default) is displayed accesses the DIVE COMPUTER (DC) SURFACE MODE.

Once accessed by preesing the M button, DC SURFACE MODE (Fig. 33) will remain on display for 2 hours during which time the ATOM will enter Dive Mode upon descent below 4 feet (1.2 meters).

- During the 2 hour period, if the M button is pressed to access other screens in the Watch Mode sequence, DC Surface Mode must again be accessed prior to the first dive of a series (if the WET ACTIVATION is set OFF).

- When WET ACTIVATION is set ON, the Wet Contacts will activate Dive Mode regardless of what Mode the ATOM is operating in at the time of the descent.

The ATOM will enter POST DIVE SURFACE MODE (Fig. 34) following a dive upon ascent shallower than 4 feet (1.2 meters). The Surface Interval time symbol SURFACE will flash during the first 10 minutes after a dive.

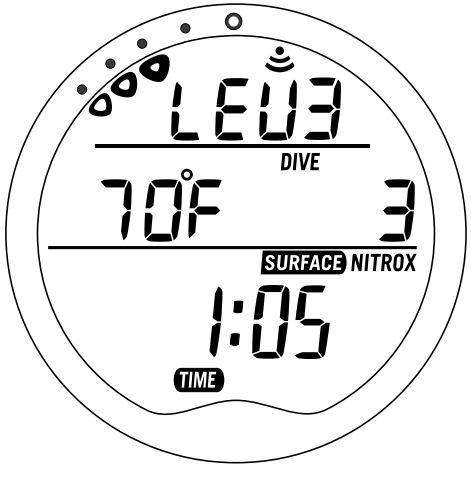


Fig. 34 - Surface Mode
(Post Dive)

During the first 10 minutes after a dive, DC SURFACE MODE remains on display as the DEFAULT screen. Main Time can be viewed for 3 seconds during that period by pressing the M button for 2 seconds.

When the 10 minute Surface Time has elapsed, the Local Default Time screen (Main Time or Alternate Time) will replace the DC Surface Mode display. DC Surface Mode can then be accessed by pressing the M button 5 times (< 2 seconds each time).

DC SURFACE MODE (MAIN), information includes (Fig. 35):

- LINK symbol (if the Receiver is successfully Linked with a Transmitter). Note that this is the same icon used in Watch Mode to signify that the Daily Alarm is set On.
- Altitude Level graphic SEA (or LEV2 through LEV7), or WET (if the unit is wet)
- Battery icon (if a Low Battery Warning Condition exists), flashing if Too Low
- Ambient Temperature with icon and graphic F (or C)
- Symbol DIVE and Number of that dive (0 if no dive has been made yet)
- Symbols SURFACE and TIME, and Surface Interval Time (hour:minutes)
- NITROX symbol (if set for a Nitrox dive)
- Tissue Loading Bar Graph (TLBG), if any after a dive

Altitude Level Graphics Represent the Following

SEA = 0 to 2,000 feet (0 to 610 meters)
LEV2 = 2,001 to 4,000 feet (611 to 1,220 m)
LEV3 = 4,001 to 6,000 feet (1,221 to 1,830 m)
LEV4 = 6,001 to 8,000 feet (1,831 to 2,440 m)
LEV5 = 8,001 to 10,000 feet (2,441 to 3,050 m)
LEV6 = 10,001 to 12,000 feet (3,051 to 3,660 m)
LEV7 = 12,001 to 14,000 feet (3,661 to 4,270 m)

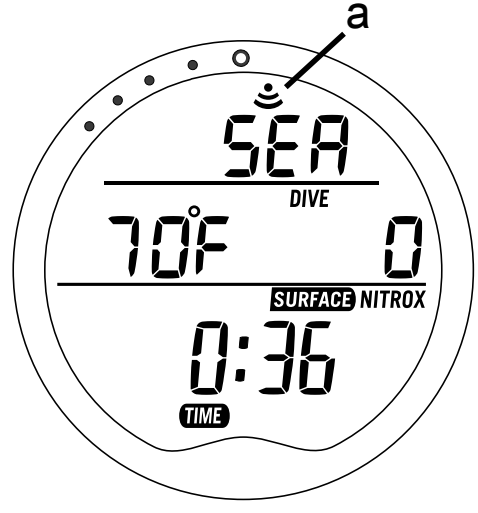
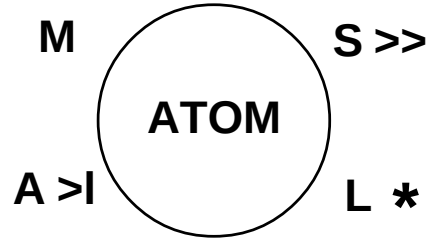


Fig. 35 - Surface Mode (Main)

SURFACE MODE - Button Operations:

> Upper/Left - Mode (M) button
> Upper/Right - Select (S) button
> Lower/Right - Light (L) button
> Lower/Left - Advance (A) button



- Pressing the L button will activate the Backlight.
- Pressing and releasing the A button repeatedly (< 2 seconds each time) will step through the Dive Surface Sequence of modes (SURFACE > PLAN > FLY > SAT > LOG > HISTORY).
- Depressing and holding the A button for 2 seconds will replace the Nitrogen Bar Graph with the O2 Bar Graph and the O2BG icon for 3 seconds (Fig. 36).
- Depressing both the A and S buttons simultaneously will access SET Modes D, A, U, and a Serial Number display. (SURFACE > SET Dive Data > SET Alarms > SET Utilities > SN)
- Pressing and releasing the M button momentarily and repeatedly (< 2 seconds each time) will step through the sequence of Watch Modes.
- Depressing and holding the M button for 2 seconds will revert to the Local Default Time screen.

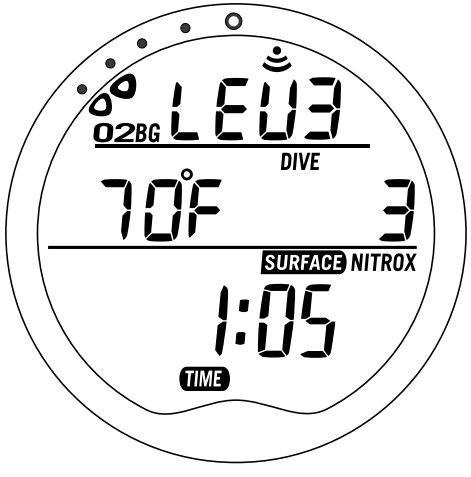


Fig. 36 - Surface Mode (O2)

SYSTEM STATUS

- Depressing and holding the S button for 2 seconds while in Surface Mode will activate the ATOM's Receiver and access a series of screens that will indicate the Status of the system's Batteries and Pressures of the Tanks in use.
- If a Transmitter is not active and linked to the ATOM, the message NotAvAil (Not Available) will appear.
- Each screen will be displayed for 3 seconds. ATOM Battery Status, then Transmitter 1 Battery Status and Tank Pressure, then Transmitter 2 Battery Status and Tank Pressure, then Transmitter 3 Battery Status and Tank Pressure.
- The screen will then revert to Surface Mode.

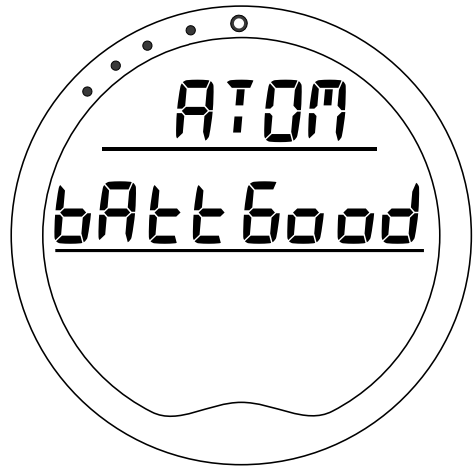


Fig. 37 - ATOM Battery Good

<u>ATOM (Watch) BATTERY STATUS, information includes (Fig. 37):</u>

> Graphic ATOM, refering to the Wrist Watch module
> Graphic bAtt Good (if good), or the Battery icon (if a Low Battery Warning Condition exists), flashing if Too Low (alarm)

<u>TRANSMITTER STATUS, information includes:</u>

> Graphic TMT1 (or TMT2 or TMT3), identifying the Transmitter
> Graphic bAtt Good (if linked and good) or NotAvAil (Fig. 38), or the Battery icon (if a Low Battery Warning Condition exists), flashing if Too Low (alarm)
> Tank Pressure (for the Transmitter indicated) and symbol PSI (or BAR).

Fig. 38 - TMT3 Not Available

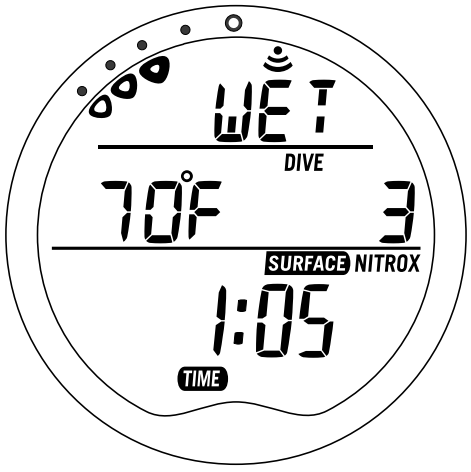


Fig. 39 - Wet
(DC Surface Mode)

WET CONTACTS

The Wet Contact Dive Mode Activation feature is active any time WET ACTIVATION is set ON.

The ATOM is configured with contacts that will automatically activate Dive Mode when the space between the contacts is bridged by a conductive material (immersed in water) and it senses a Depth greater than 4 feet (1.2 meters).

The contacts are the pins of the PC Interface Data Port and one or more of the Push Buttons.

As long as the contacts are bridged on the Surface, the graphic WET will appear on the DC SURFACE MODE (Fig. 39), MAIN TIME (Fig. 40), and ALTERNATE TIME displays as an alert the that the unit is Wet.

Fig. 40 - Wet
(Watch Time Mode)

Upon removing the bridge between the contacts (drying the ATOM), the graphic WET will be replaced with the Altitude graphic SEA (or LEV2 through LEV7) during Dive Surface Mode or Week Day (MON - SUN) during Main and Alternate Time Modes.

The ATOM will continue checking for Depth, until a dive is made or it reverts to the Local Default Time screen after 2 hours.

DIVE COMPUTER SET MODES

Set Mode Sequence:
Surface Mode > SET D > SET A > SET U > SERIAL No. screen.

Access is gained by simultaneous 2 second presses of the A and S buttons.

Alarms (Set A) and Utilities (Set U) can also be set/changed using the PC Settings Upload program. Dive Data (Set D) entries must be made using only the push buttons.

SET D GROUP (DIVE DATA)

Set D Sequence:
SET D > FO2 (GAS 1) > FO2 (GAS 2) > FO2 (GAS 3) > FO2 50% Default > Receiver > Digital Gauge

- > The ATOM reverts to the Default Settings when 24 hours elapse without a dive or after a dive.
- > Depressing the A and S buttons simultaneously for 2 seconds while in the SURFACE MODE will access SET D identified by the graphic SETD (Fig. 41).
- > Pressing and releasing the A button momentarily (< 2 seconds) while SET D is displayed will advance to SET FO2 (GAS 1) with the Set Point flashing.

SET D DEFAULT SETTINGS
FO2 GAS1 > AIR
FO2 GAS2 > AIR
FO2 GAS3 > AIR
FO2 50% DEFAULT > ON
RECEIVER > OFF
DIG GAUGE MODE > OFF

Fig. 41 - Set D

Setting FO2 for Nitrox Dives:

For each value of FO2, the Maximum Operating Depth (MOD) that can be achieved with either the default maximum PO2 value of 1.6 ATA, or the PO2 Alarm limit previously set, will be displayed.

When the FO2 50% DEFAULT is set ON and FO2 GAS 1 is set for a numerical value, 10 minutes on the surface after that dive, the FO2 for GAS 1 will be displayed as 50 and further dives will be calculated based on 50% O2 for oxygen calculations and 21% O2 for Nitrogen calculations (79% Nitrogen) unless the FO2 for GAS 1 is set before the dive.

FO2 for GAS 1 continues to reset to the FO2 50% DEFAULT after subsequent repetitive dives until 24 hours elapse after the last dive, or the FO2 50% DEFAULT is turned OFF in the Set FO2 50% DEFAULT ON/OFF MODE.

When the FO2 50% DEFAULT is set OFF, the ATOM will remain set at the last FO2 GAS 1 Set Points for that series of repetitive dives.

The default FO2 for GAS 1 each new dive period is AIR.

When FO2 for GAS 1 is set for AIR, the calculations are the same as when it is set to an FO2 of 21%. When FO2 for GAS 1 is set to AIR, it remains set for AIR until it is set for a numerical FO2 value (21 to 50%).

When FO2 is set only to AIR, the O2 Bar Graph is not displayed at any time during a dive or on the surface. PO2 values and/or warnings will not be displayed during the dive.

Maximum Operating Depths affected by the PO2 limit set will not be displayed when FO2 for GAS 1 is set to AIR.

Internally, the ATOM keeps track of the oxygen loading so that if FO2 for GAS 1 is subsequently set for a numerical value, the oxygen loading for previous AIR dives will be accounted for in the next Nitrox dive (during that dive period and series of repetitive dives).

Once FO2 GAS 1 is set for a numerical value (21 to 50%) and a dive is made, the AIR option is disabled until 24 hours elapse after the last dive. The AIR option will not be displayed in Set FO2 GAS 1 until a full 24 hour Surface Interval has elapsed.

If FO2 for GAS 1 is set for 21%, it will remain set for 21% for that series of dives until set for a higher numerical value.

If the FO2 50% DEFAULT is set OFF, FO2 for GAS 2 and 3 will remain at their respective Set Points previously selected until they are changed. If the FO2 50% DEFAULT is set ON, FO2 for GAS 2, and 3 will Default to 50% after the dive.

The ATOM is programmed to prevent FO2 for GAS 2 and GAS 3 from being set at values lower than the FO2 Set Point for GAS 1. GAS 2 and GAS 3 can only be set to values equal to or higher than the FO2 Set Points of GAS 1 and GAS 2, respectively.

When setting FO2 for GAS 2 and GAS3, the lowest values available will be the Set Point of the previous Gas set (e.g., If FO2 GAS1 is set for 32%, FO2 for GAS2 can only be set at values from 32 to 100%. Likewise, FO2 for GAS3 will depend on the setting for GAS2.).

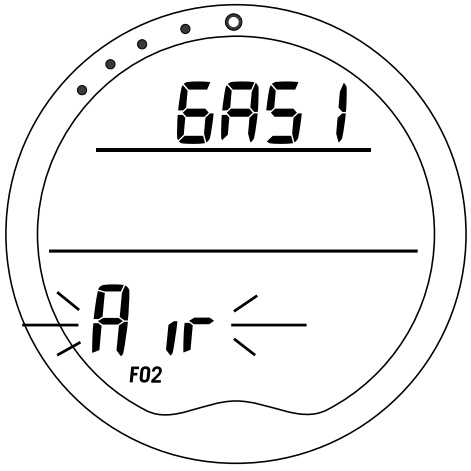


Fig. 42 - Set FO2 GAS1
(Air setting)

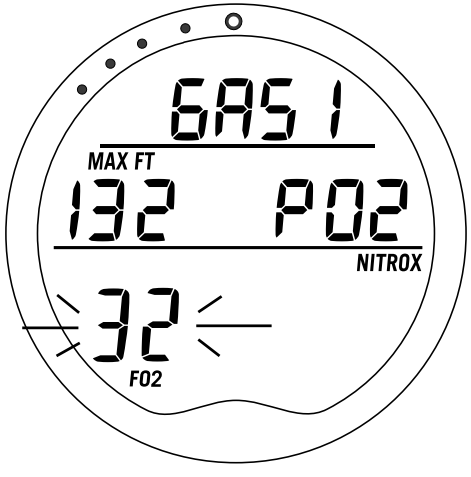


Fig. 43 - Set FO2 GAS1
(32% setting)

SET FO2 GAS 1 information includes (Fig. 42/43):

> Graphic GAS1
> Max Depth allowed for the PO2 Alarm Set (if 21 to 50%)
> FO2 Set Point value, flashing
> Symbols FO2 and NITROX (if set for a numerical value).

- Depressing and holding the S button while the FO2 Set Point is flashing will scroll the Set Point from AIR to 21 through 50% in 1% increments, at a rate of 8 per second.
- Hint: The scroll will stop when the button is released, or momentarily at 32% (even if the button is held depressed).
- Pressing and holding the S button will resume the scroll from 32 through 50%, then stop at AIR (or 21%).
- Pressing and releasing the S button will advance FO2 in increments of 1% per press of the button.
- Pressing and releasing the A button momentarily (< 2 seconds) will save the setting and/or advance to SET FO2 GAS 2 with the Set Point flashing.
- Pressing and releasing the A button momentarily and repeatedly (< 2 seconds) will step through the other SET D screens.
- Depressing the A and S buttons simultaneously for 2 seconds will save the setting and revert back to the SET D screen.
- Depressing and holding the M button for 2 seconds will revert to the Surface Mode screen.
- If no button is pressed during a period of 2 minutes, the unit will revert to the Surface Mode screen.

SET FO2 GAS 2 information includes (Fig. 44/45):

> Graphic GAS2
> Max Depth allowed for the PO2 Alarm Set (if 21 to 100%)
> FO2 value, flashing
> Symbols FO2 and NITROX (if set for a numerical value).

- Depressing and holding the S button while the FO2 Set Point is flashing will scroll the Set Point from AIR to 21 through 100% in 1% increments, at a rate of 8 per second.
- The scroll will stop when the button is released, or momentarily at 50%, then 80% (even if the button is held depressed).
- Depressing and holding the S button will resume the scroll through 100%, then stop at AIR (or 21 or the GAS1 setting).
- Pressing and releasing the S button (< 2 seconds) will advance FO2 in increments of 1% per press of the button.
- Pressing and releasing the A button momentarily (< 2 seconds) will save the setting and/or advance to SET FO2 GAS 3 with the Set Point flashing.
- Pressing and releasing the A button momentarily and repeatedly (< 2 seconds) will step through the other SET D screens.
- Depressing the A and S buttons simultaneously for 2 seconds will save the setting and revert back to the SET D.
- Depressing and holding the M button for 2 seconds will revert to the Surface Mode screen.
- If no button is pressed during a period of 2 minutes, the unit will revert to the Surface Mode screen.

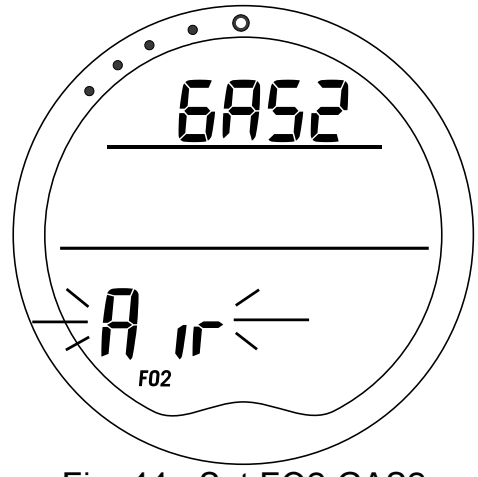


Fig. 44 - Set FO2 GAS2 (AIR setting)

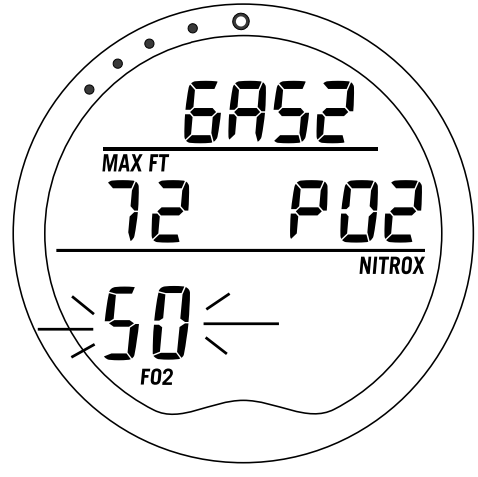


Fig. 45 - Set FO2 GAS2 (50% setting)

Fig. 46 - Set FO2 GAS3
(AIR setting)

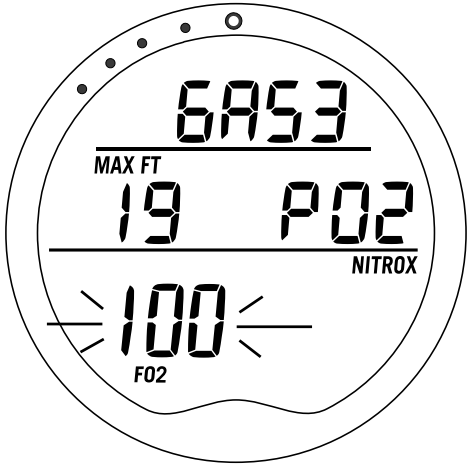


Fig. 47 - Set FO2 GAS3
(100% setting)

SET FO2 GAS 3 information includes (Fig. 46/47):

> Graphic GAS3
> Max Depth allowed for the PO2 Alarm Set (if 21 to 100%)
> FO2 value, flashing
> Symbols FO2 and NITROX (if set for a numerical value).

- Depressing and holding the S button while the FO2 Set Point is flashing will scroll the Set Point from AIR to 21 through 100% in 1% increments, at a rate of 8 per second.
- The scroll will stop when the button is released, or momentarily at 50% then 80% (even if the button is held depressed).
- Depressing and holding the S button will resume the scroll through 100%, then stop at AIR (or 21 or the GAS2 setting).
- Pressing and releasing the S button (< 2 seconds) will advance FO2 in increments of 1% per press of the button.
- Pressing and releasing the A button momentarily (< 2 seconds) will save the setting and/or advance to SET FO2 50% DEFAULT with the Set Point flashing.
- Pressing and releasing the A button momentarily and repeatedly (< 2 seconds) will step through the other SET D screens.
- Depressing the A and S buttons simultaneously for 2 seconds will save the setting and revert back to the SET D screen.
- Depressing and holding the M button for 2 seconds will revert to the Surface Mode screen.
- If no button is pressed during a period of 2 minutes, the unit will revert to the Surface Mode screen.

SET FO2 50% DEFAULT information includes (Fig. 48):

> Refer to page 46 for a description of FO2 50% DEFAULT.

> Graphics DFLT and 50
> Set Point graphic ON (or OFF), flashing.
> Symbols FO2 and NITROX.

- Pressing and releasing the S button (< 2 seconds) will toggle between ON and OFF.
- Pressing and releasing the A button momentarily (< 2 seconds) will save the setting and/or advance to SET RECEIVER with the Set Point flashing.
- Pressing and releasing the A button momentarily and repeatedly (< 2 seconds) will step through the other SET D screens.
- Depressing the A and S buttons simultaneously for 2 seconds will save the setting and revert back to the SET D screen.
- Depressing and holding the M button for 2 seconds will revert to the Surface Mode screen.
- If no button is pressed during a period of 2 minutes, the unit will revert to the Surface Mode screen.

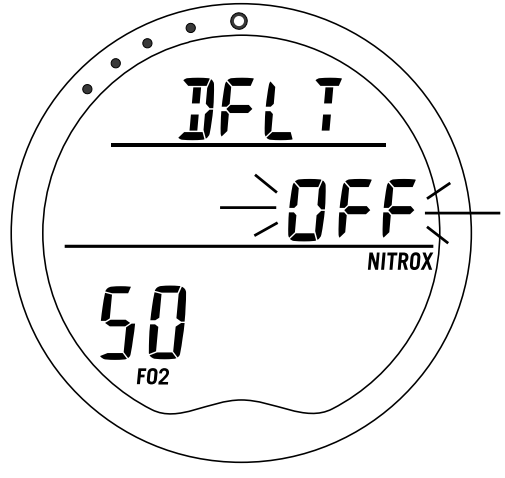


Fig. 48 - Set FO2 Default

SET ATOM's RECEIVER information includes (Fig. 49):

> Graphic RCVR
> Set Point graphic ON (or OFF), flashing.

- Pressing and releasing the S button (< 2 seconds) will toggle between ON and OFF.
- Pressing and releasing the A button momentarily (< 2 seconds) will save the setting and/or advance to SET DIGITAL GAUGE with the Set Point flashing.
- Pressing and releasing the A button momentarily and repeatedly (< 2 seconds) will step through the other SET D screens.
- Depressing the A and S buttons simultaneously for 2 seconds will save the setting and revert back to the SET D screen.
- Depressing and holding the M button for 2 seconds will revert to the Surface Mode screen.
- If no button is pressed during a period of 2 minutes, the unit will revert to the Surface Mode screen.

Fig. 49 - Set Receiver

NOTE: When set OFF, the Receiver is disabled and does not activate to search for Pressure signals or Transmitter Battery Status. Displays and calculations relating to Tank Pressure will not be made until the Receiver is set ON.

SET DIGITAL GAUGE DIVE information includes (Fig. 50):

> Graphic GAUG
> Set Point graphic ON (or OFF), flashing.

- Pressing and releasing the S button (< 2 seconds) will toggle between ON and OFF.
- Pressing and releasing the A button momentarily (< 2 seconds) will save the setting and/or advance to the SET D screen.
- Pressing and releasing the A button momentarily and repeatedly (< 2 seconds each time) will step through the other SET D screens.
- Depressing the A and S buttons simultaneously for 2 seconds will save the setting and revert back to the SET D screen.
- Depressing and holding the M button for 2 seconds will revert to the Surface Mode screen.
- If no button is pressed during a period of 2 minutes, the unit will revert to the Surface Mode screen.

NOTE: When DIGITAL GAUGE Mode is set ON, the setting will default to OFF if a dive is not started within 2 hours or if the Local Default Time display is selected.

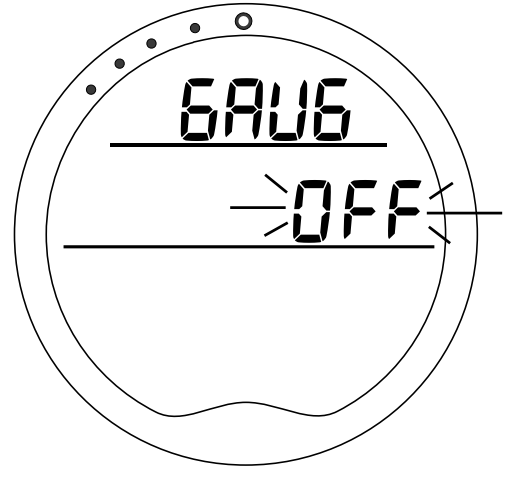


Fig. 50 - Set Digital Gauge

SET A GROUP (ALARMS)

Set A Sequence:
SET A > Audible > Depth > EDT > TLBG > DTR > Turn Pressure > End Pressure > PO2

HINT: The SET A Group can be set/changed using the PC Settings Upload program as well as by using the buttons.

- > SET A Settings remain at the values set until changed.
- > Depressing the A and S buttons simultaneously for 4 seconds while in the SURFACE MODE will access SET A identified by the graphic SETA (Fig. 51).
- > Pressing and releasing the A button momentarily (< 2 seconds) while SET A is displayed will advance to SET AUDIBLE ALARM with the Set Point flashing.

Fig. 51 - Set A

SET AUDIBLE ALARM

This option allows the Audible Alarms and the associated red LED function to be disabled.

As indicated on page 16, some cautionary situations will cause the Audible alarm to sound and the LED to flash even if this feature is set to OFF.

SET AUDIBLE ALARM information includes (Fig. 52):

> Graphic AUD
> Set Point graphic ON (or OFF), flashing.

- Pressing and releasing the S button (< 2 seconds) will toggle between ON and OFF.
- Pressing and releasing the A button momentarily (< 2 seconds) will save the setting and/or advance to the SET DEPTH ALARM screen with the Set Point flashing.
- Pressing and releasing the A button momentarily and repeatedly (< 2 seconds each time) will step through the other SET A screens.
- Depressing the A and S buttons simultaneously for 2 seconds will save the setting and revert back to the SET A screen.
- Depressing and holding the M button for 2 seconds will revert to the Surface Mode screen.
- If no button is pressed during a period of 2 minutes, the unit will revert to the Surface Mode screen.

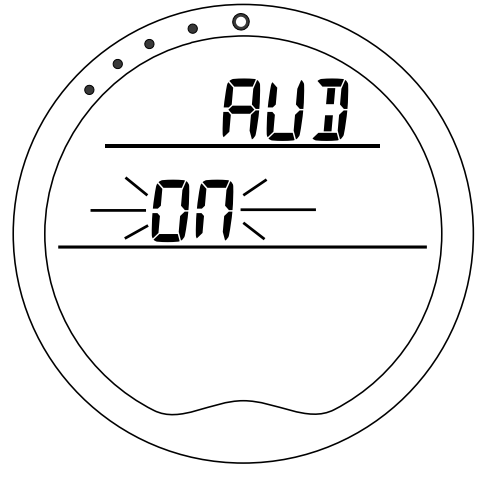


Fig. 52 - Set Audible Alarm

SET DEPTH ALARM information includes (Fig. 53):

> Graphic DPTH
> Symbols MAX and FT (or M)
> Set Point graphic value, flashing.

- Pressing and releasing the S button momentarily (< 2 seconds) will step through the Set Points from 30 to 330 feet (9 to 99 meters) in 10 foot (3 meter) increments at a rate of 1 Set Point per press of the button.
- Depressing and holding the S button will scroll through the Set Points at a rate of 4 Set Points per second until it is released.
- Pressing and releasing the A button momentarily (< 2 seconds) will save the setting and/or advance to the SET ELAPSED DIVE TIME ALARM screen with the Set Point flashing.
- Pressing and releasing the A button momentarily and repeatedly (< 2 seconds each time) will step through the other SET A screens.
- Pressing the A and S buttons simultaneously for 2 seconds will save the setting and revert back to the SET A screen.
- Depressing and holding the M button for 2 seconds will revert to the Surface Mode screen.
- If no button is pressed during a period of 2 minutes, the unit will revert to the Surface Mode screen.

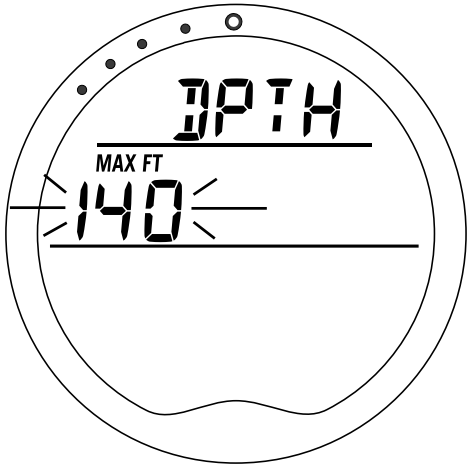


Fig. 53 - Set Depth Alarm

SET ELAPSED DIVE TIME (EDT) ALARM

Information includes (Fig. 54):

> Graphic EDT
> Symbols DIVE and TIME.
> Set Point value, flashing.

- Pressing and releasing the S button momentarily (< 2 seconds) will increase the Set Point from 0:10 to 3:00 (hours:minutes) in 5 minute (:05) increments.
- Depressing and holding the S button will scroll through the Set Points at a rate of 4 Set Points per second until it is released.
- Pressing and releasing the A button momentarily (< 2 seconds) will save the setting and/or advance to the SET TISSUE LOADING BAR GRAPH (TLBG) ALARM screen with the Set Point flashing.
- Pressing and releasing the A button momentarily and repeatedly (< 2 seconds) will step through the other SET A screens.
- Depressing the A and S buttons simultaneously for 2 seconds will save the setting and revert back to the SET A screen.
- Depressing and holding the M button for 2 seconds will revert to the Surface Mode screen.
- If no button is pressed during a period of 2 minutes, the unit will revert to the Surface Mode screen.

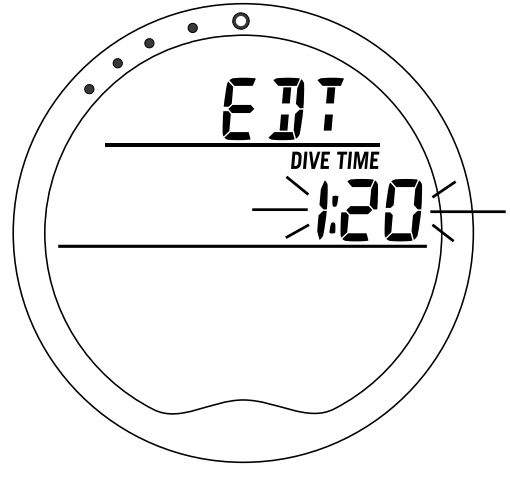


Fig. 54 - Set EDT Alarm

Setting the TLBG Alarm to activate before it enters the DECO is highly recommended.

SET TISSUE LOADING BAR GRAPH (TLBG) ALARM

Information includes (Fig. 55):

> Graphic TLBG
> TLBG Set Point (segments), flashing.

- Pressing and releasing the S button momentarily (< 2 seconds) will decrease the Set Point from All 5 segments (Deco) to 1 in increments of 1 segment.
- Depressing and holding the S button will scroll through the Set Points at a rate of 4 Set Points per second until it is released.
- Pressing and releasing the A button momentarily (< 2 seconds) will save the setting and/or advance to the SET DIVE TIME REMAINING (DTR) ALARM screen with the Set Point flashing.
- Pressing and releasing the A button momentarily and repeatedly (< 2 seconds each time) will step through the other SET A screens.
- Depressing the A and S buttons simultaneously for 2 seconds will save the setting and revert back to the SET A screen.
- Depressing and holding the M button for 2 seconds will revert to the Surface Mode screen.
- If no button is pressed during a period of 2 minutes, the unit will revert to the Surface Mode screen.

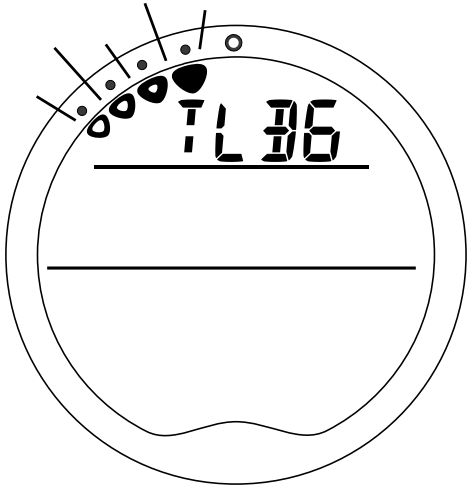


Fig. 55 - Set TLBG Alarm

SET DIVE TIME REMAINING (DTR) ALARM

Information includes (Fig. 56):

> Graphic DTR
> Symbols TIME, NDC, O2, and AIR.
> Set Point value, flashing.

- Pressing and releasing the S button momentarily (< 2 seconds) will increase the Set Point from 0:00 to 0:20 (:minutes) in 1 minute (0:01) increments.
- Depressing and holding the S button will scroll through the Set Points at a rate of 4 Set Points per second until it is released.
- Pressing and releasing the A button momentarily (< 2 seconds) will save the setting and/or advance to the SET TURN PRESSURE ALARM screen with the Set Point flashing.
- Pressing and releasing the A button momentarily and repeatedly (< 2 seconds each time) will step through the other SET A screens.
- Depressing the A and S buttons simultaneously for 2 seconds will save the setting and revert back to the SET A screen.
- Depressing and holding the M button for 2 seconds will revert to the Surface Mode screen.
- If no button is pressed during a period of 2 minutes, the unit shall revert to the Surface Mode screen.

Whichever time (No Decompression, O2, or Air Time Remaining) decreases to the Alarm Set Point will activate the Alarm.

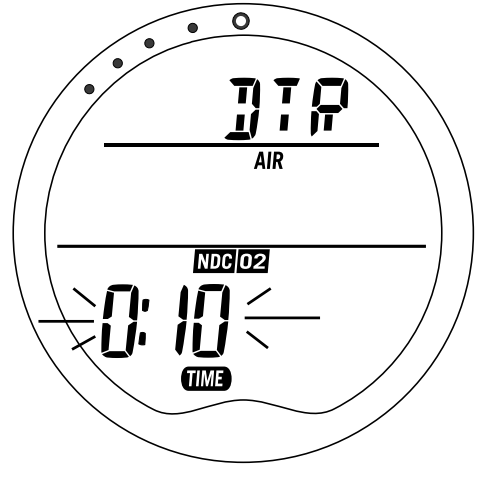


Fig. 56 - Set DTR Alarm

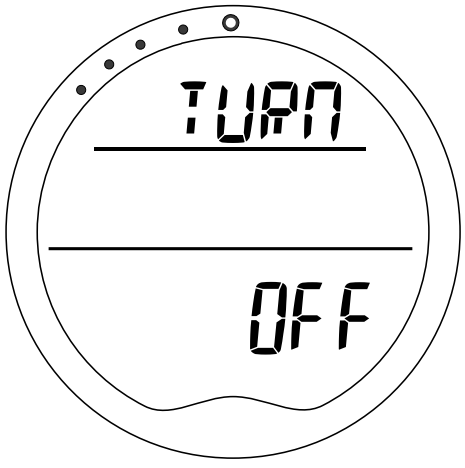


Fig. 57A - Set Turn Pressure Alarm (OFF)

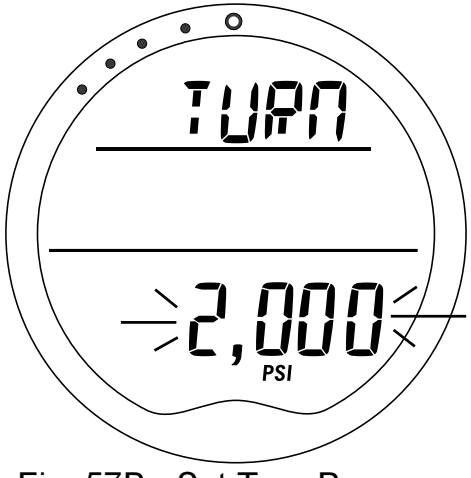


Fig. 57B - Set Turn Pressure Alarm (value)

SET TURN PRESSURE ALARM (for Transmitter 1 only)
Information includes (Fig. 57A/B):

> Graphic TURN
> Set Point OFF or a numeric value, flashing.
> Symbol PSI (or M)

- Pressing and releasing the S button momentarily (< 2 seconds) will step through the Set Points from OFF to 1,000 to 3,000 PSI (69 to 205 BAR) in 250 PSI (17 BAR) increments.
- Depressing and holding the S button will scroll through the Set Points at a rate of 4 Set Points per second until it is released.
- Pressing and releasing the A button momentarily (< 2 seconds) will save the setting and/or advance to the SET END PRESSURE ALARM screen with the Set Point flashing.
- Pressing and releasing the A button momentarily and repeatedly (< 2 seconds each time) will step through the other SET A screens.
- Depressing the A and S buttons simultaneously for 2 seconds will save the setting and revert back to the SET A screen.
- Depressing and holding the M button for 2 seconds will revert to the Surface Mode screen.
- If no button is pressed during a period of 2 minutes, the unit will revert to the Surface Mode screen.

SET END PRESSURE ALARM information includes (Fig. 58):

> Graphic END
> Set Point numeric value, flashing.
> Symbol PSI (or M)

- Pressing and releasing the S button momentarily (< 2 seconds) will increase the Set Point from 300 to 1,500 PSI (20 to 104 BAR) in 100 PSI (7 BAR) increments.
- Depressing and holding the S button will scroll through the Set Points at a rate of 4 Set Points per second until it is released.
- Pressing and releasing the A button momentarily (< 2 seconds) will save the setting and/or advance to the SET PO2 ALARM screen with the Set Point flashing.
- Pressing and releasing the A button momentarily and repeatedly (< 2 seconds each time) will step through the other SET A screens.
- Depressing the A and S buttons simultaneously for 2 seconds will save the setting and revert back to the SET A screen.
- Depressing and holding the M button for 2 seconds will revert to the Surface Mode screen.
- If no button is pressed during a period of 2 minutes, the unit will revert to the Surface Mode screen.

The END PRESSURE Alarm will activate when Pressure in the Tank (TMT 1, 2 , or 3) being used at the time decreases to the Alarm Set Point.

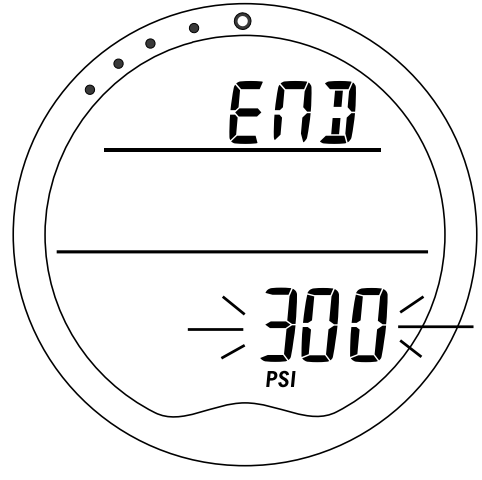


Fig. 58 - Set End Pressure Alarm

Setting the PO2 Alarm to activate before reaching the Max allowed limit of 1.60 ATA is highly recommended.

SET PO2 ALARM information includes (Fig. 59):

> Graphic PO2
> Set Point value, flashing.
> Symbol MAX

- Pressing and releasing the S button momentarily (< 2 seconds) will increase the Set Point from 1.20 (ATA) to 1.60 (ATA) in .10 (ATA) increments.
- Depressing and holding the S button will scroll through the Set Points at a rate of 4 Set Points per second until it is released.
- Pressing and releasing the A button momentarily (< 2 seconds) will save the setting and/or advance to the SET A screen.
- Pressing and releasing the A button momentarily and repeatedly (< 2 seconds each time) will step through the other SET A screens.
- Depressing the A and S buttons simultaneously for 2 seconds will save the setting and revert back to the SET A screen.
- Depressing and holding the M button for 2 seconds will revert to the Surface Mode screen.
- If no button is pressed during a period of 2 minutes, the unit will revert to the Surface Mode screen.

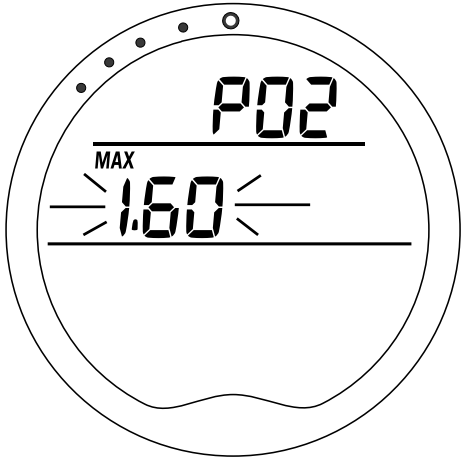


Fig. 59 - Set PO2 Alarm

SET U GROUP (UTILITIES)

Set U Sequence:
SET U > Wet Activation > Units > Safety Stop > Conservative Factor > Backlight Duration > Sampling Rate > Transmitter 1 Code > Transmitter 2 Code > Transmitter 3 Code.

△ **HINT: The SET U Group can be set/changed using the PC Settings Upload program as well as by using the buttons.**

- > SET U Settings remain at the values set until changed.
- > Depressing the A and S buttons simultaneously for 6 seconds while in the SURFACE MODE, will access SET U identified by the graphic SETU (Fig. 60).
- > Pressing and releasing the A button momentarily (< 2 seconds) while SET U is displayed will advance to SET WET ACTIVATION with the Set Point flashing.

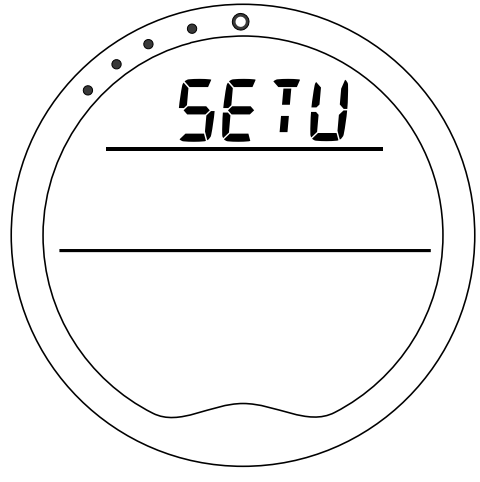


Fig. 60 - Set U

Refer to page 44 for a description of the Wet Activation feature.

SET WET ACTIVATION ON/OFF

Information includes (Fig. 61):

> Graphic WET
> Set Point graphic ON (or OFF) flashing.

- Pressing and releasing the S button will toggle between ON and OFF.
- Pressing and releasing the A button momentarily (< 2 seconds) will save the setting and/or advance to the SET UNITS screen with the Set Point flashing.
- Pressing and releasing the A button momentarily and repeatedly (< 2 seconds each time) will step through the other SET U screens.
- Depressing the A and S buttons simultaneously for 2 seconds will save the setting and revert back to the SET U screen.
- Depressing and holding the M button for 2 seconds will revert to the Surface Mode screen.
- If no button is pressed during a period of 2 minutes, the unit will revert to the Surface Mode screen.

Fig. 61 - Set Wet Activation

SET UNITS information includes (Fig. 62):

> Graphic UNIT
> Set Point symbols/graphics F, FT, and PSI (or C, M, and BAR), flashing.

- Pressing and releasing the S button will toggle between Imperial (F, FT, PSI) and Metric (C, M, BAR).
- Pressing and releasing the A button momentarily (< 2 seconds) will save the setting and/or advance to the SET SAFETY STOP screen with the Time Set Point flashing.
- Pressing and releasing the A button momentarily and repeatedly (< 2 seconds each time) will step through the other SET U screens.
- Depressing the A and S buttons simultaneously for 2 seconds will save the setting and revert back to the SET U screen.
- Depressing and holding the M button for 2 seconds will revert to the Surface Mode screen.
- If no button is pressed during a period of 2 minutes, the unit will revert to the Surface Mode screen.

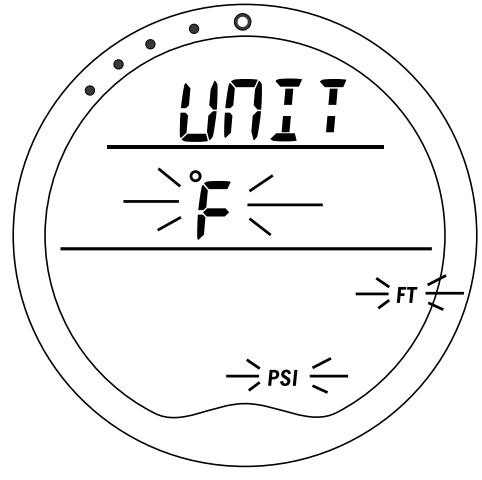


Fig. 62 - Set Units

Refer to page 100 for a description of the No Decompression dive mode Safety Stop feature.

SET SAFETY STOP information includes (Fig. 63):

> Graphic SAFE
> Safety Stop Time Set Point, flashing.
> Symbols STOP and TIME.
> Safety Stop Depth Set Point and symbol FT (or M).

- Pressing and releasing the S button momentarily (< 2 seconds each time) will step through the Set Points of OFF, 3:00, and 5:00 (minutes:seconds).
- Pressing and releasing the A button momentarily (< 2 seconds) will save the Stop Time setting and the Stop Depth Set Point will flash, or if Stop Time is set OFF advance to the SET CONSERVATIVE FACTOR screen with the Set Point flashing.
- Pressing and releasing the S button momentarily (< 2 seconds each time) will step through the Set Points of 10, 15, and 20 FT (or 3, 4.5, and 6 M).
- Pressing and releasing the A button momentarily (< 2 sec) will save the Safety Stop settings and/or advance to the SET CONSERVATIVE FACTOR screen with the Set Point flashing.
- Pressing the A button momentarily and repeatedly (< 2 seconds) will step through the other SET U screens.
- Depressing the A and S buttons simultaneously for 2 seconds will save the settings and revert back to the SET U screen.
- Depressing and holding the M button for 2 seconds will revert to the Surface Mode screen.
- If no button is pressed during a period of 2 minutes, the unit will revert to the Surface Mode screen.

Fig. 63 - Set Safety Stop

SET CONSERVATIVE FACTOR information includes (Fig. 64):

> Use the Conservative Factor option to help reduce your exposure to Decompression Sickness.

> Graphic CONS
> Set Point ON (or OFF), flashing.
> Symbols TIME and NDC.

- Pressing and releasing the S button (< 2 seconds) will toggle between ON and OFF.
- Pressing and releasing the A button momentarily (< 2 seconds) will save the setting and/or advance to the SET BACKLIGHT DURATION screen with the Set Point flashing.
- Pressing and releasing the A button momentarily and repeatedly (< 2 seconds each time) will step through the other SET U screens.
- Depressing the A and S buttons simultaneously for 2 seconds will save the setting and revert back to the SET U screen.
- Depressing and holding the M button for 2 seconds will revert to the Surface Mode screen.
- If no button is pressed during a period of 2 minutes, the unit will revert to the Surface Mode screen.

NOTE: When the Conservative Factor is set ON, the No Decompression Limit times are reduced to values equivalent to those that would be available at the next higher 3000 foot (915 meter) Altitude. Refer to the tables on Pages 139/140.

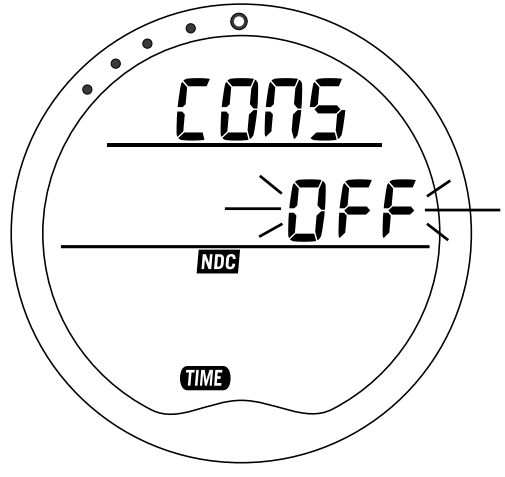


Fig. 64 - Set Conservative Factor

The Backlight will not remain On for the additional Duration time set if the L button is held depressed longer than10 seconds.

SET BACKLIGHT DURATION information includes (Fig. 65):

> Graphic GLOW
> Symbol TIME.
> Set Point, flashing.

- Pressing and releasing the S button momentarily (< 2 seconds each time) will step through the Set Points of 0, 5, and 10 (:XX seconds).
- Pressing and releasing the A button momentarily (< 2 seconds) will save the setting and/or advance to the SET SAMPLING RATE screen with the Set Point flashing.
- Pressing and releasing the A button momentarily and repeatedly (< 2 seconds each time) will step through the SET U screens.
- Depressing the A and S buttons simultaneously for 2 seconds will save the setting and revert back to the SET U screen.
- Depressing and holding the M button for 2 seconds will revert to the Surface Mode screen.
- If no button is pressed during a period of 2 minutes, the unit will revert to the Surface Mode screen.

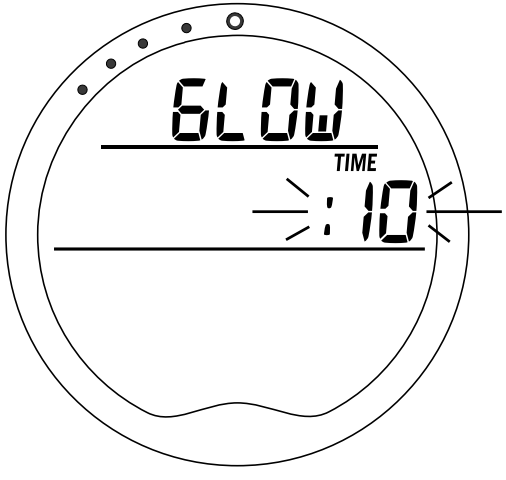


Fig. 65 - Set Backlight Duration

SET SAMPLING RATE information includes (Fig. 66):

> SAMPLING RATE is the frequency (time or depth change) at which data is sampled and stored in memory for subsequent download to the PC OceanLog program.

> Graphic SAMP
> Symbol TIME (or FT/M).
> Set Point, flashing.

- Pressing and releasing the S button momentarily (< 2 seconds) will step through the Set Points of 2, 15, 30, 60 (:XX seconds), and 2 FT, 5 FT, 10 FT (or .5 M, 1.5 M, 3 M).
- Depressing and holding the S button will scroll through the Set Points at a rate of 4 Set Points per second until it is released.
- Pressing and releasing the A button momentarily (< 2 seconds) will save the setting and/or advance to the SET TRANSMITTER 1 LINK CODE screen with the Set Point flashing.
- Pressing and releasing the A button momentarily and repeatedly (< 2 seconds each time) will step through the other SET U screens.
- Depressing the A and S buttons simultaneously for 2 seconds shall save the setting and revert back to the SET U screen.
- Depressing and holding the M button for 2 seconds will revert to the Surface Mode screen.
- If no button is pressed during a period of 2 minutes, the unit will revert to the Surface Mode screen.

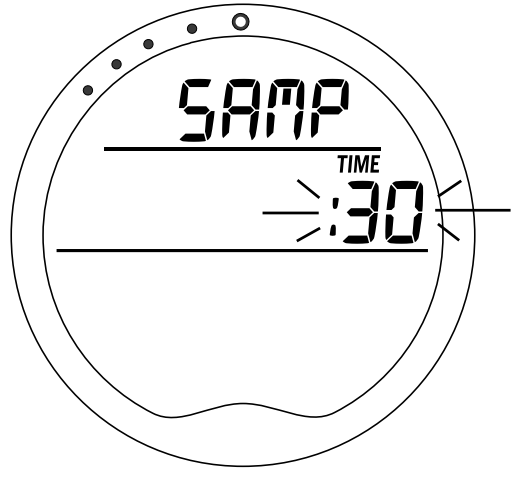


Fig. 66 - Set Sampling Rate

SET TRANSMITTER 1 LINK CODE information includes (Fig. 67):

> Graphics TID1, and ON (or OFF) flashing.
> Set Point (numerical Link Code/transmitter's serial number).

- Pressing and releasing the S button momentarily (< 2 seconds) will toggle between ON and OFF.
- Pressing and releasing the A button momentarily (< 2 seconds) will accept the ON/OFF selection.
- If OFF is selected, SET TID2 and TID3 will be bypassed and the operation reverts to the SET U screen.
- If ON is selected, the first (left) digit of the LINK CODE will flash.
- Pressing and releasing the S button momentarily and repeatedly (< 2 seconds each time) will increase the First Digit from 0 to 9 in increments of 1.
- Depressing and holding the S button will scroll through the Set Points at a rate of 4 per second.
- Pressing and releasing the A button (< 2 seconds) will accept the First Digit of the Code and/or advance to the Second Digit which will be flashing.
- Pressing and releasing the S button shall increase the Second Digit from 0 to 9 in increments of 1.
- Depressing and holding the S button will scroll through the Set Points at a rate of 4 per second.
- Pressing and releasing the A button (< 2 seconds) will accept the Second Digit of the Code and/or advance to the Third Digit which will be flashing.

Fig. 67 - Set TID1

- Pressing and releasing the S button momentarily and repeatedly (< 2 seconds each time) will increase the Third Digit from 0 to 9 in increments of 1.
- Depressing and holding the S button will scroll through the Set Points at a rate of 4 per second.
- Pressing and releasing the A button (< 2 seconds) will accept the Third Digit of the Code and/or advance to the Fourth Digit which will be flashing.
- Pressing and releasing the S button momentarily and repeatedly (< 2 seconds each time) will increase the Fourth Digit from 0 to 9 in increments of 1.
- Depressing and holding the S button will scroll through the Set Points at a rate of 4 per second.
- Pressing and releasing the A button (< 2 seconds) will accept the Fourth Digit of the Code and/or advance to the Fifth Digit which will be flashing.
- Pressing and releasing the S button momentarily and repeatedly (< 2 seconds each time) will increase the Fifth Digit from 0 to 9 in increments of 1.
- Depressing and holding the S button will scroll through the Set Points at a rate of 4 per second.
- Pressing and releasing the A button will accept the Fifth Digit of the Code and/or advance to the Sixth Digit which will be flashing.
- Pressing and releasing the S button momentarily and repeatedly (< 2 seconds each time) will increase the Sixth Digit from 0 to 9 in increments of 1.
- Depressing and holding the S button will scroll through the Set Points at a rate of 4 per second.
- Pressing and releasing the A button (< 2 seconds) will accept the six digit Link Code and/or advance to the SET TRANSMITTER 2 LINK CODE screen with the Set Point flashing.

SET TRANSMITTER 2 LINK CODE information includes (Fig. 68):

> Graphics TID2, and ON (or OFF) flashing.
> Set Point (Link Code/transmitter's serial number).

- Pressing and releasing the S button momentarily (< 2 seconds) will toggle between ON and OFF.
- Pressing and releasing the A button momentarily (< 2 seconds) will accept the ON/OFF selection.
- If OFF is selected, SET TID3 will be bypassed and the operation reverts to the SET U screen.
- If ON is selected, the first (left) digit of the LINK CODE will flash.
- Pressing and releasing the S button momentarily and repeatedly (< 2 seconds each time) will increase the First Digit from 0 to 9 in increments of 1.
- Depressing and holding the S button will scroll through the Set Points at a rate of 4 per second.
- Pressing and releasing the A button (< 2 seconds) will accept the First Digit of the Code and/or advance to the Second Digit which will be flashing.
- Pressing and releasing the S button shall increase the Second Digit from 0 to 9 in increments of 1.
- Depressing and holding the S button will scroll through the Set Points at a rate of 4 per second.
- Pressing and releasing the A button (< 2 seconds) will accept the Second Digit of the Code and/or advance to the Third Digit which will be flashing.

Fig. 68 - Set TID2

- Pressing and releasing the S button momentarily and repeatedly (< 2 seconds each time) will increase the Third Digit from 0 to 9 in increments of 1.
- Depressing and holding the S button will scroll through the Set Points at a rate of 4 per second.
- Pressing and releasing the A button (< 2 seconds) will accept the Third Digit of the Code and/or advance to the Fourth Digit which will be flashing.
- Pressing and releasing the S button momentarily and repeatedly (< 2 seconds each time) will increase the Fourth Digit from 0 to 9 in increments of 1.
- Depressing and holding the S button will scroll through the Set Points at a rate of 4 per second.
- Pressing and releasing the A button (< 2 seconds) will accept the Fourth Digit of the Code and/or advance to the Fifth Digit which will be flashing.
- Pressing and releasing the S button momentarily and repeatedly (< 2 seconds each time) will increase the Fifth Digit from 0 to 9 in increments of 1.
- Depressing and holding the S button will scroll through the Set Points at a rate of 4 per second.
- Pressing and releasing the A button will accept the Fifth Digit of the Code and/or advance to the Sixth Digit which will be flashing.
- Pressing and releasing the S button momentarily and repeatedly (< 2 seconds each time) will increase the Sixth Digit from 0 to 9 in increments of 1.
- Depressing and holding the S button will scroll through the Set Points at a rate of 4 per second.
- Pressing and releasing the A button (< 2 seconds) will accept the six digit Link Code and/or advance to the SET TRANSMITTER 3 LINK CODE screen with ON or OFF flashing.

SET TRANSMITTER 3 LINK CODE information includes (Fig. 69):

> Graphics TID3, and ON (or OFF) flashing.
> Set Point (Link Code/transmitter's serial number).

- Pressing and releasing the S button momentarily (< 2 seconds) will toggle between ON and OFF.
- Pressing and releasing the A button momentarily (< 2 seconds) will accept the ON/OFF selection.
- If OFF is selected, the operation reverts to the SET U screen.
- If ON is selected, the first (left) digit of the LINK CODE will flash.
- Pressing and releasing the S button momentarily and repeatedly (< 2 seconds each time) will increase the First Digit from 0 to 9 in increments of 1.
- Depressing and holding the S button will scroll through the Set Points at a rate of 4 per second.

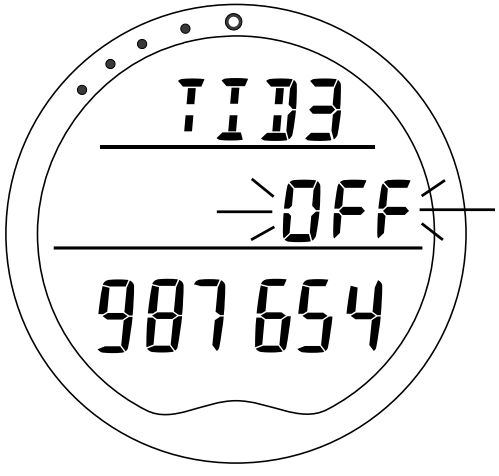


Fig. 69 - Set TID3

- Pressing and releasing the A button (< 2 seconds) will accept the First Digit of the Code and/or advance to the Second Digit which will be flashing.
- Pressing and releasing the S button shall increase the Second Digit from 0 to 9 in increments of 1.
- Depressing and holding the S button will scroll through the Set Points at a rate of 4 per second.
- Pressing and releasing the A button (< 2 seconds) will accept the Second Digit of the Code and/or advance to the Third Digit which will be flashing.

- Pressing and releasing the S button momentarily and repeatedly (< 2 seconds each time) will increase the Third Digit from 0 to 9 in increments of 1.
- Depressing and holding the S button will scroll through the Set Points at a rate of 4 per second.
- Pressing and releasing the A button (< 2 seconds) will accept the Third Digit of the Code and/or advance to the Fourth Digit which will be flashing.
- Pressing and releasing the S button momentarily and repeatedly (< 2 seconds each time) will increase the Fourth Digit from 0 to 9 in increments of 1.
- Depressing and holding the S button will scroll through the Set Points at a rate of 4 per second.
- Pressing and releasing the A button (< 2 seconds) will accept the Fourth Digit of the Code and/or advance to the Fifth Digit which will be flashing.
- Pressing and releasing the S button momentarily and repeatedly (< 2 seconds each time) will increase the Fifth Digit from 0 to 9 in increments of 1.
- Depressing and holding the S button will scroll through the Set Points at a rate of 4 per second.
- Pressing and releasing the A button will accept the Fifth Digit of the Code and/or advance to the Sixth Digit which will be flashing.
- Pressing and releasing the S button momentarily and repeatedly (< 2 seconds each time) will increase the Sixth Digit from 0 to 9 in increments of 1.
- Depressing and holding the S button will scroll through the Set Points at a rate of 4 per second.
- Pressing and releasing the A button (< 2 seconds) will accept the six digit Link Code and/or advance to the SET U screen.

SERIAL NUMBER (ATOM)

- Depressing the A and S buttons simultaneously for 8 seconds while in the SURFACE MODE will access a SERIAL NUMBER screen.

Information includes (Fig. 70):

> Graphic SN
> Factory programmed Serial Number of the ATOM.
> Firmware revision number (e.g., graphic r1A).

- Depressing the A and S buttons simultaneously for 2 seconds will revert to the Surface Mode screen.
- Depressing and holding the M button for 2 seconds will revert to the Surface Mode screen.
- If no button is pressed during a period of 2 minutes, the unit will revert to the Surface Mode screen.

Fig. 70 - Serial Number (of the Watch)

NOTE: The Serial Number and Firmware Revision will be requested in the event that you contact Oceanic regarding the ATOM.

PLAN MODE

Oceanic strongly recommends that you review the Pre Dive Planning Sequence (PDPS) prior to every dive to help you plan your dive as required to avoid exceeding no decompression or oxygen exposure limits. This is especially important for repetitive dives when the PDPS indicates adjusted dive times that are available for the next dive, based on residual nitrogen or oxygen accumulation (whichever is in control) following the last dive and surface interval.

△ **NOTE: No Decompression Dive Times in PLAN MODE are based on the FO2 setting for GAS 1. The FO2 settings for GAS2 and GAS3 are not utilized for Plan calculations.**

- Pressing and releasing the A button momentarily (< 2 seconds) 1 time while in the SURFACE MODE will access the PLAN MODE (SURFACE > PLAN).
- While in the PLAN MODE, pressing and releasing the S button momentarily and repeatedly (< 2 seconds each time) will increase the Planned Depth in increments of 10 feet (3 meters), displaying the information one screen at a time.

Information provided includes Depths and allowable No Decompression Dive Times. The Pre Dive Planning Sequence will sequence through Depths from 30 to 190 feet (9 to 57 meters), or the Maximum Depth that will allow theoretical No Decompression Dive Time of at least 1 minute based upon the previous dive profiles in a series of repetitive dives and taking into account descent and ascent rates of 60 feet (18 meters) per minute.

△ NOTE: When the Conservative Factor is set ON, No Decompression Dive times are reduced to the values of the next 3000 foot (915 meter) higher Altitude. Refer to the charts on pages 139/140.

If FO2 for GAS1 is set for a numerical value (21 to 50%), the NITROX graphic and Maximum Operating Depth defined by the PO2 ALARM Set Point will be displayed.

If the limiting time factor is Oxygen controlled, the symbols TIME and O2 will be displayed.

If Nitrogen controlled, the symbols TIME and NDC will be displayed.

- Prior to a first dive of a series, pressing and releasing the A button momentarily (< 2 seconds) will advance to LOG MODE (PLAN > LOG > HISTORY > SURFACE).
- After a dive is made, it will advance to FLY MODE (PLAN > FLY > SAT > LOG > HISTORY > SURFACE).
- Depressing and holding the M button for 2 seconds will revert to the SURFACE MODE screen.
- If no button is pressed during a 2 minute period, the unit will revert to the SURFACE MODE screen.

Depth feet	(meters)	NDL hours:mins	
30	(9)	4:20	(4:43)
40	(12)	2:17	(2:24)
50	(15)	1:21	(1:25)
60	(18)	:57	(:59)
70	(21)	:40	(:41)
80	(24)	:30	(:32)
90	(27)	:24	(:25)
100	(30)	:19	(:20)
110	(33)	:16	(:17)
120	(36)	:13	(:14)
130	(39)	:11	(:11)
140	(42)	:09	(:09)
150	(45)	:08	(:08)
160	(48)	:07	(:07)
170	(51)	:07	(:06)
180	(54)	:06	(:06)
190	(57)	:05	(:05)

NDLs, Air Dive at Sea Level (no dive made yet)

PLAN MODE information includes (Fig. 71):

> Alpha graphic PLAN.
> Maximum Depth allowed and symbols MAX and FT (or M), if set for a Nitrox dive.
> Symbols TIME and NDC (or O2).
> Dive Time allowed (for the FO2 set for GAS 1).
> Plan Depth values and symbol FT (or M).
> Symbol NITROX, if set for a Nitrox dive.

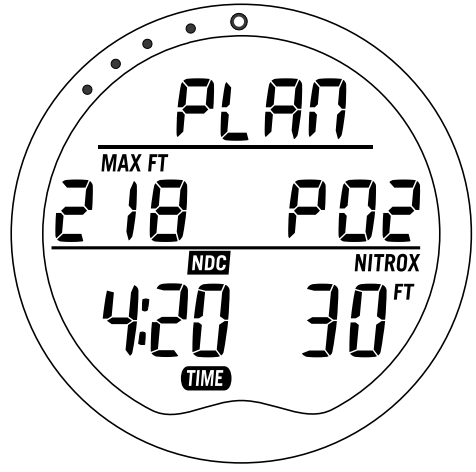


Fig. 71 - Plan Mode

Refer to the charts on pages 139 and 140 for complete listings of No Decompression Limits for Sea Level and Altitudes up to 14,000 feet (4,270 meters).

FLY MODE

The Time to Fly counter begins counting down 10 minutes after surfacing from a dive from 23:50 to 0:00 (hrours:minutes).

Two hours after a dive, the ATOM's operation reverts to the Watch Local Default Time screen (Main or Alternate, whichever one was selected as the Default screen) at which time the Time to Fly Countdown continues in the background. Access to the FLY screen is then gained by first accessing the Surface Mode screen.

- Pressing and releasing the A button 2 times momentarily (< 2 seconds each time) while in the SURFACE MODE will access the FLY MODE (SURFACE > PLAN > FLY).

Fig. 72 - Fly Mode

FLY MODE information includes (Fig. 72):

> Alpha graphic FLY and symbol TIME.
> Countdown Time (hours:minutes).
> Battery icon (if a Low Battery Warning Condition exists), flashing if Too Low

- Pressing and releasing the A button momentarily (< 2 seconds) will advance to SAT MODE.
- Depressing and holding the M button for 2 seconds will revert to the Surface Mode screen.
- If no button is pressed during a 2 minute period, the unit will revert to the Surface Mode screen.
- Pressing the L button will activate the Backlight.

SAT MODE

The Time to Desaturate counter provides calculated time for Tissue Desatuation at sea level taking into consideration the Conservation Factor setting. It begins counting down 10 minutes after surfacing from a dive, counting down from a maximum of 23:50 to 0:00 (hours:minutes).

When the Countdown reaches 0:00 (hours:minutes), which will generally occur prior to the FLY countdown reaching 0:00, the SAT screen remains in the sequence of accessible screens displaying 0:00 until the FLY counter shuts the Dive Computer Mode OFF 24 hours after a last dive.

> The SAT screen is not displayed after a Violation Dive.
> Desaturation requiring Times greater than 24 hours shall display 23: - - .
> In the event that Time to Desaturate still remains at the end of 24 hours, the unit is to shut Off as a Dive Computer.
> Two hours after a dive, the ATOM's operation reverts to the Watch Mode TIME screen (Main or Alternate, whichever one was selected as the Default screen) at which time the Time to Desaturate Countdown continues in the background. Access to the SAT screen is then gained by first accessing the Surface Mode screen.

- Depressing and releasing the A button momentarily and repeatedly 3 times (< 2 seconds each time) while in the SURFACE MODE will access the SAT MODE. (SURFACE > PLAN > FLY > SAT)

SAT MODE information includes (Fig. 73):

> Alpha graphic SAT and symbol TIME.
> Countdown Time (hours:minutes).
> Battery icon (if a Low Battery Warning Condition exists), flashing if Too Low

- Pressing and releasing the A button momentarily (< 2 seconds) will advance to LOG MODE.
- Depressing and holding the M button for 2 seconds will revert to the SURFACE MODE screen.
- If no button is pressed during a 2 minute period, the unit will revert to the SURFACE MODE screen.
- Pressing the L button will activate the Backlight.

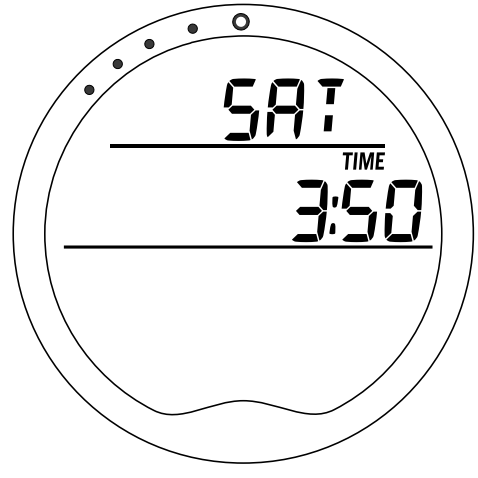


Fig. 73 - SAT Mode

DIVE LOG MODE

LOG MODE displays information from the latest 24 dives sequentially in reverse order (the most recent first). LOG information is retained until deleted by another dive. Battery removal will not affect the LOG data stored for viewing.

After exceeding 24 dives, the most recent Dive will be added and the oldest deleted.

Dives will be numbered 1 to 24. Numbering starts at #1 each time the Dive Computer is Activated. After it shuts off and is reactivated, the first dive of that Activation Period will be #1.

- During the first 10 minutes after a dive, pressing and releasing the A button momentarily (< 2 seconds) 1 time while in SURFACE MODE will access LOG MODE. (SURFACE > LOG)
- 10 minutes after a Non-Violation Dive, pressing and releasing the A button momentarily and repeatedly 4 times (< 2 seconds each time) while in SURFACE MODE will access the LOG MODE (SURFACE > PLAN > FLY > SAT > LOG).
- 10 minutes after a Violation Dive, pressing and releasing the A button momentarily and repeatedly 3 times (< 2 seconds each time) will access LOG MODE (SURFACE > FLY > LOG). PLAN and SAT screens will not be available after a Violation Dive.

Upon entering LOG MODE the most recent dive's LOG PREVIEW screen will be displayed.

- Depressing the S button for 2 seconds will display the previous dive's PREVIEW screen. Subsequent similar button action will step through other previous dive's PREVIEW screens.

- Pressing and releasing the S button momentarily (< 2 seconds) while viewing a PREVIEW screen will display that dive's second LOG screen (Nitrogen Data). If that was a Nitrox dive, pressing/releasing the S button again will display that dive's third LOG screen (Oxygen Data). If in GAUGE MODE (Violated or User Selected), the Oxygen Data screen will not be displayed.
- LOG screens remain on display until further button occurs.
- Pressing and releasing the A button momentarily (< 2 seconds) button will advance to SURFACE MODE.
- Depressing and holding the M button for 2 seconds will revert to the SURFACE MODE screen.
- If no button is pressed during a 2 minute period, the unit will revert to the SURFACE MODE screen.
- Pressing the L button will activate the Backlight.

LOG PREVIEW screen information includes (Fig. 74):

> Alpha graphic LOG.
> Date (month - day or day - month if set for metric).
> Symbol DIVE and dive number (1 to 24) for that series.
> Time of Day the dive began (hr:min) with graphic Am/Pm if 12 Hour Format. This will be the Default Time selected, either Main or Alternate (with lazy 8 symbol if Alternate).
> Operating Mode symbol NITROX, none if AIR or GAUGE.

Fig. 74 - Log Preview

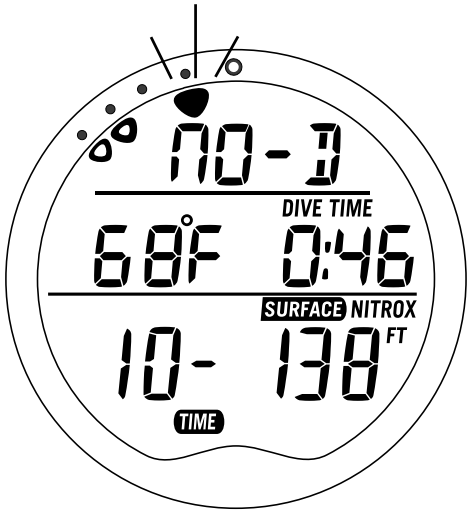


Fig. 75 - Log Nitrogen

LOG NITROGEN DATA information includes (Fig. 75):

> Alpha graphic NO-D, DECO, GAUG, or VIOL.
> TLBG with the maximum accumulation segment flashing, others fixed up to end-of-dive accumulation. All segments flashing for delayed and full violation.
> Temperature (minimum recorded that dive) and graphic F (or C if metric).
> Symbol DIVE TIME and Elapsed Dive Time (hours:minutes).
> Symbols TIME and SURFACE.
> Pre-dive Surface Interval time (hr:min), 10 - through 23 - for times greater than 9 hours and 59 minutes, 'blank' for Dive #1 of a series.
> Maximum Depth and symbol FT (or M).
> Operating Mode symbol NITROX, none if GAUGE or AIR

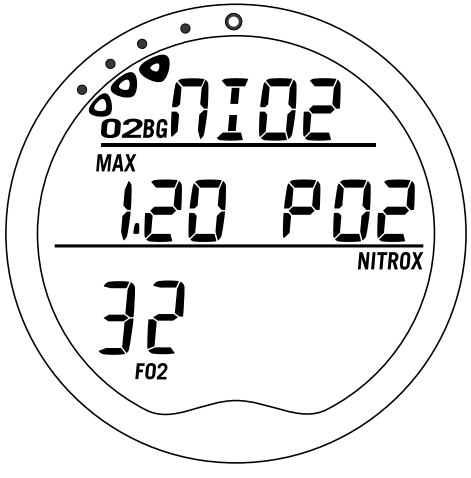


Fig. 76 - Log Oxygen

LOG OXYGEN DATA (only if a Nitrox dive)
Information includes (Fig. 76):

> Alpha graphic NIO2.
> Symbol O2BG and bar graph segments representing Oxygen accumulated at the end of the dive.
> Symbol MAX, value of Max PO2 achieved (ATA), and graphic PO2.
> FO2 set point (% O2) and symbol FO2.
> Symbol NITROX.

HISTORY MODE

HISTORY Mode displays accumulative information for up to 9999 Dives, 9999 Dive Hours, and the Maximum Depth achieved. HISTORY information is retained indefinitely. Battery removal will not affect the HISTORY data stored for viewing.

- 10 minutes after a Non-Violation Dive, pressing and releasing the A button momentarily and repeatedly 5 times (< 2 seconds each time) while in SURFACE MODE will access the HISTORY MODE (SURF > PLAN > FLY > SAT > LOG > HIST).
- 10 minutes after a Violation Dive, pressing and releasing the A button 3 times will access LOG MODE (SURF > FLY > LOG > HIST). PLAN and SAT MODES will not be available after a Violation Dive.
- Pressing and releasing the A button momentarily (< 2 seconds) will advance to Surface Mode.
- Depressing and holding the M button for 2 seconds will revert to the Surface Mode screen.
- If no button is pressed during a 2 minute period, the unit will revert to the Surface Mode screen.
- Pressing the L button will activate the Backlight.

HISTORY screen information includes (Fig. 77):

> Alpha graphic HIST
> Symbols MAX and FT (or M) and Maximum Depth achieved.
> Symbol DIVE and total number of dives recorded (1 to 9999).
> Symbol TIME and total Hours of Elapsed Dive Time (1 to 9,999) after the graphic Hr.

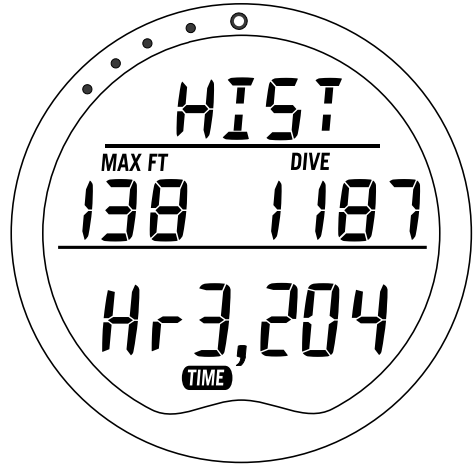
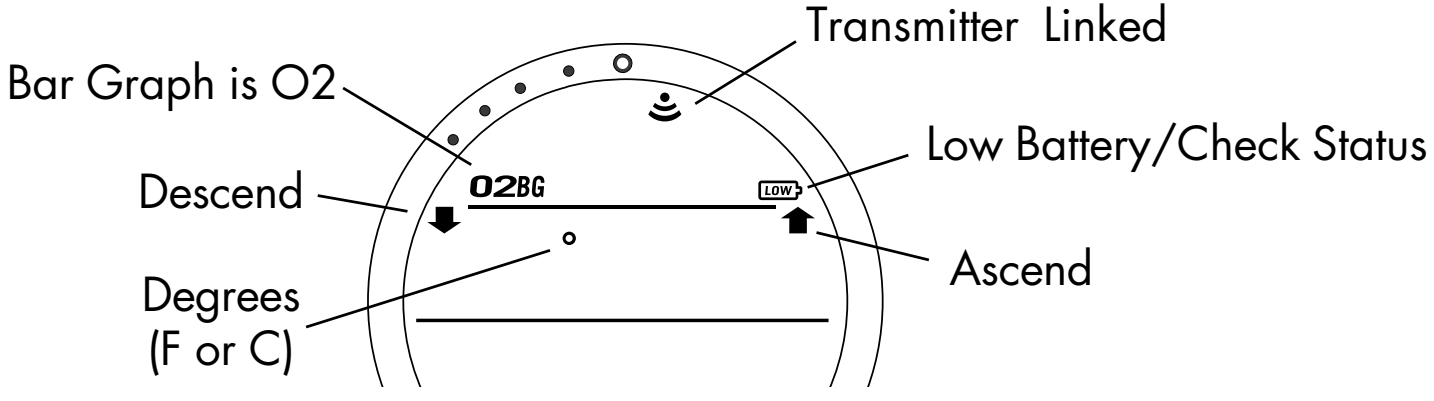


Fig. 77 - History

OVERVIEW OF DISPLAYED SYMBOLS AND ICONS

SYMBOLS	MEANING
MAX FT M	Maximum Depth (Feet or Meters)
FT M STOP TIME	Stop Depth (Feet or Meters) and Time (hours:minutes)
AIR TIME	Air Time Remaining (hours:minutes)
DIVE TIME	Elapsed Dive Time (hours:minutes)
DIVE	Dive Number
TOTAL ASCENT TIME	Ascent Time plus Deco Stop Times (hours:minutes)
NDC TIME	No Decompression Dive Time Remaining (hours:minutes)
O2 TIME	O2 Dive Time Remaining (hours:minutes)
SURFACE TIME	Elapsed Surface Interval Time (hours:minutes)
NITROX	FO2 for any GAS is set at a numerical value (=>21%)
FT M	Current Depth (Feet or Meters)
FO2	FO2 set point for the selected Gas
PSI BAR	Selected Tank's Pressure (PSI or BAR)

ICONS



⚠ WARNING: Prior to diving with the ATOM, you must also read and understand the Oceanic Dive Computer Safety and Reference Manual, Doc. No. 12-2262, which provides Important Warnings and Safety Recommendations as well as general product information.

OVERVIEW OF DIVE MODE INFORMATION

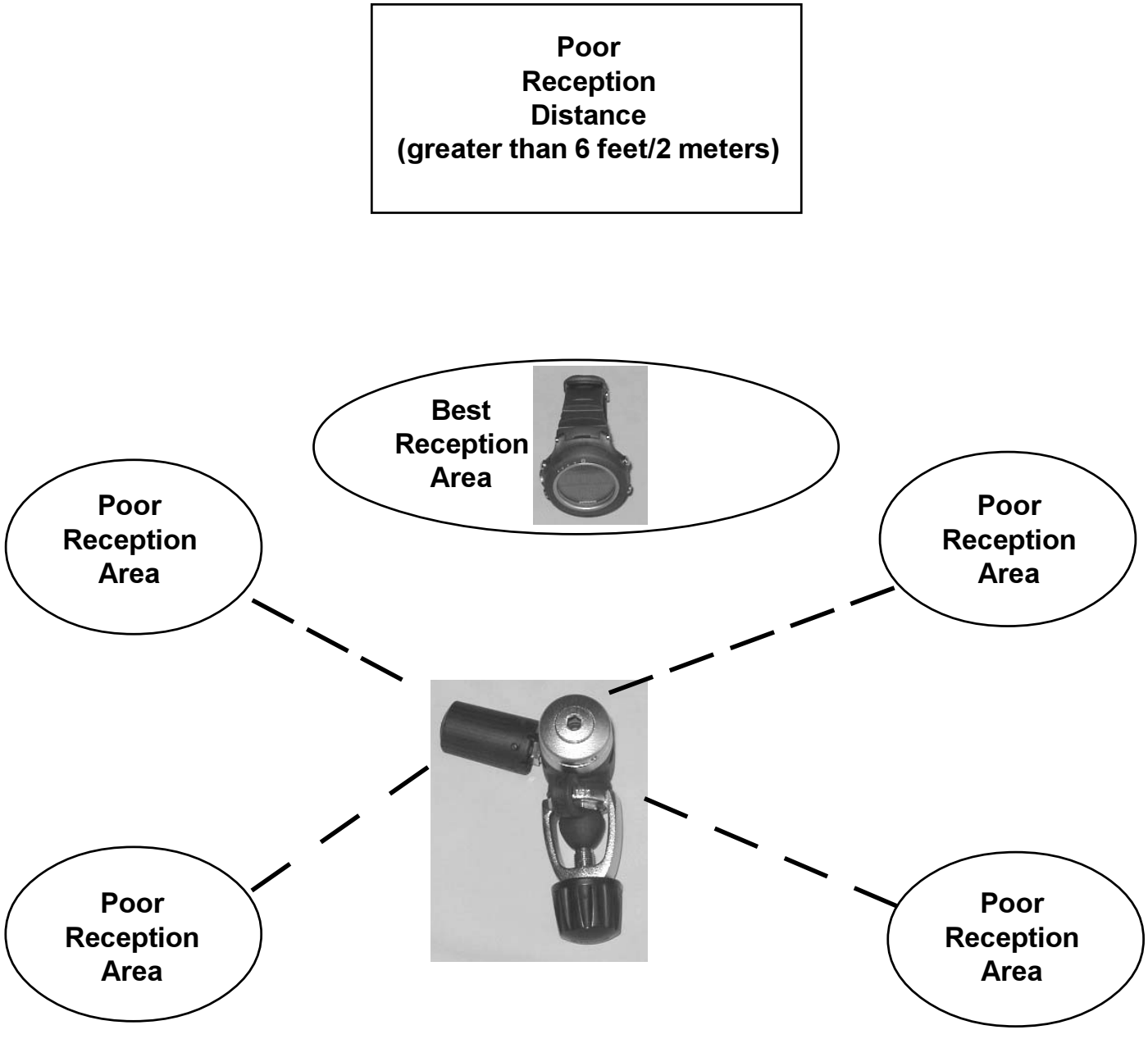


Fig. 78 - Transmitter Signal Reception Guide

POSITIONING OF THE ATOM

The Transmitters emit low frequency signals that radiate outward in semicircular patterns that are parallel to the length dimension of the Transmitter. A coiled antenna inside the ATOM receives the signals when it is positioned within a zone parallel to or at a 45 degree angle to the Transmitters as shown on page 88 Figure 78.

The ATOM cannot effectively receive a signal when it is held out to the sides of the Transmitter(s) or held at distances greater than 6 feet (2 meters) in front of the Transmitter(s).

Best reception is achieved when the ATOM is within 3 feet (1 meter) of the Transmitter(s).

When installed into the high pressure ports of the Regulator First Stages, the Transmitters must be positioned so that they face horizontally outward from the Tank Valves.

Link Interruption Underwater

During a dive, you may at times move the ATOM out of the signal pattern of the Transmitter, resulting in a temporary interruption of the Link signal.

An interruption lasting greater than 15 seconds will cause the Tank Pressure value to flash (on Alternate Display 1), the Link icon to flash, and the Audible Alarm to sound (Fig. 79). The Link will be restored within 4 seconds after the ATOM is moved back into its correct position.

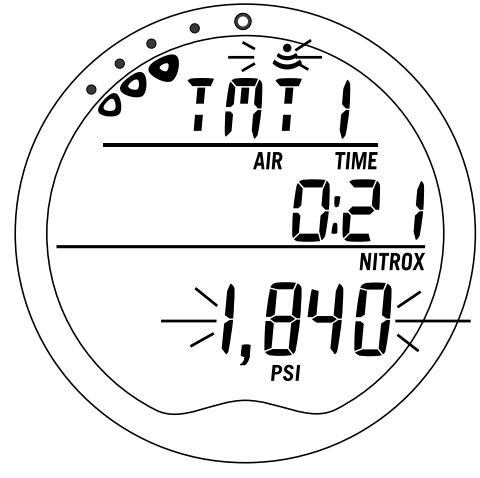


Fig. 79 - Link Interruption Underwater

An interruption of the Link may also occur while the ATOM is in an area within 3 to 4 feet (1 meter) of a running Dive Propulsion Vehicle. The Link will be restored within 4 seconds after the Vehicle is shut off or the ATOM is moved out of that area. When using a Strobe, a temporary interruption may occur shortly after the Strobe flashes. The Link will be restored within 4 seconds.

DIVE TIME REMAINING

One of the most important pieces of information on Oceanic dive computers is the Dive Time Remaining numeric displays. The ATOM constantly monitors No Decompression status, Oxygen Accumulation, and Breathing Gas Consumption Rate.

The Dive Time Remaining display located in the lower portion of the display will indicate the No Decompression or O2 Time, whichever Time is the least amount available. The specific Time being displayed is identified by the symbols NDC (or O2) and TIME.

Air Time Remaining (ATR), identified by the symbols AIR and TIME, appears in the middle row of the display when the Alternate #1 display is accessed during dive modes. In the event that ATR becomes less than NDC and O2 Time, after 1 minute the Audible Alarm will sound, the LED will flash, and the message VIEW > AIR will scroll at the top for 10 seconds as an alert. Alternate Display #1 will appear with the Pressure value flashing.

No Decompression Dive Time Remaining

No Decompression Dive Time Remaining is the maximum amount of time that you can stay at your present Depth before entering a Decompression situation. It is calculated based on the amount of Nitrogen absorbed by hypothetical tissue compartments. The rates each of these compartments absorb and release Nitrogen is mathematically modeled and compared

against a maximum allowable Nitrogen level. Whichever one is closest to this maximum level is the controlling compartment for that Depth. Its resulting value will be displayed numerically along with the symbols NDC and TIME (Fig. 80a) and graphically as the Nitrogen Bar Graph (Fig. 80b).

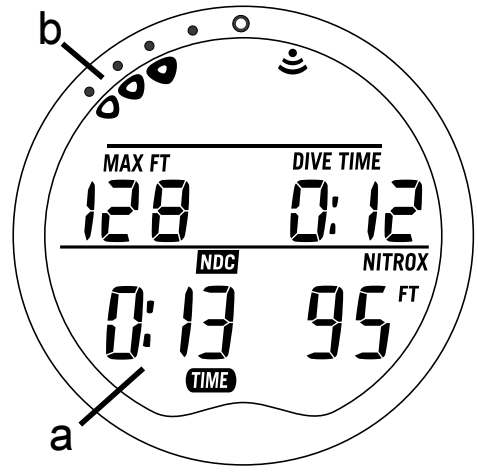


Fig. 80 - Nitrogen Bar Graph

As you ascend from Depth following a dive that has approached the No Decompression Limit, the Nitrogen Bar Graph segments will recede as control shifts to slower compartments. This is a feature of the Decompression Model that is the basis for Multi-level Diving, one of the most important advantages that Oceanic dive computers offer.

The ATOM's algorithm is based upon Haldane's theory using maximum allowable nitrogen levels developed by Merrill Spencer. Repetitive diving control is based upon experiments designed and conducted by Dr. Ray Rogers and Dr. Michael Powell in 1987. Diving Science and Technology® (DSAT), a corporate affiliate of PADI®, commissioned these experiments.

Oxygen Accumulation Time Remaining

Oxygen Accumulation (saturation or exposure) during a dive, or 24 hour period, appears graphically as the O2 Bar Graph when the Alternate #2 (O2) screen is accessed (Fig. 81a). As time remaining before reaching the Oxygen Exposure Limit decreases, segments are added to the O2 Bar Graph.

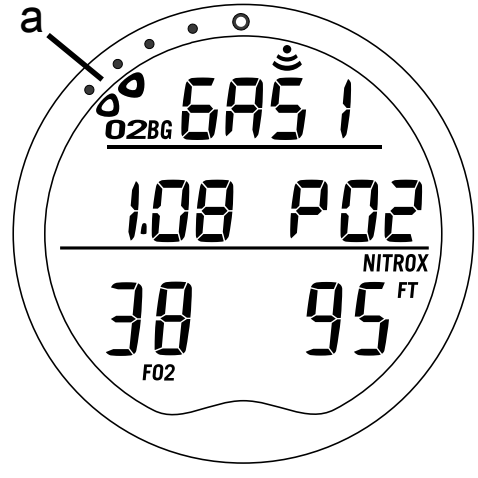


Fig. 81 - O2 Bar Graph

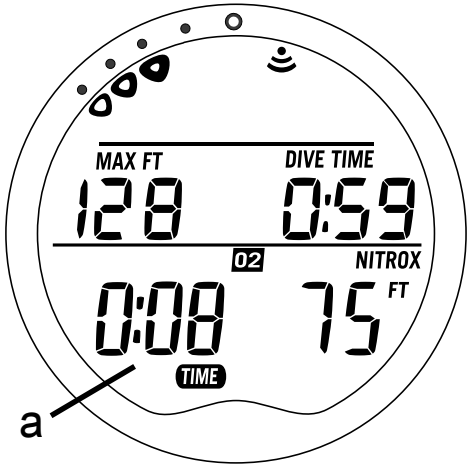


Fig. 82 - O2 Time Remaining

When the amount of time remaining before reaching the Oxygen Limit becomes less than the No Decompression Dive Time Remaining, calculations for that Depth will be controlled by Oxygen. Oxygen Time Remaining will then appear as the Dive Time Remaining display (Fig. 82a) as signified by the symbols O2 and TIME. As Oxygen Accumulation continues to increase, segments will add to the O2 Bar Graph.

Air Time Remaining

The ATOM calculates Air Time Remaining using a patented algorithm that is based on a diver's individual Air Consumption Rate and Current Depth.

Tank Pressure is measured once each second and an average rate of Consumption is calculated over a 60 second period. This Rate of Consumption is then used in conjunction with a knowledge of the Depth dependence to predict the Air required for the diver to make a safe controlled Ascent including any required Decompression Stops.

Air Consumption and Depth are continuously monitored and Air Time Remaining reflects any change in circumstances. For example, when a buddy starts breathing from your Octopus or you suddenly find yourself swimming against a strong current and begin breathing more rapidly, the ATOM will recognize the change and adjust the Air Time Remaining accordingly.

Air Time Remaining is the time you can remain at the present Depth and still safely surface with the Tank Pressure Reserve that you selected during setup (End Pressure Alarm Setting).

Air Time Remaining Alarm

When Air Time Remaining (ATR) decreases to 5 minutes, the Audible Alarm will sound and the LED will flash.

If Air Time Remaining decreases to zero, the Audible will sound again and the LED will flash.

The message LOW > AIR > TIME will scroll at the top of the screen (Fig. 82) until Air Time Remaining becomes greater than 5 minutes.

You should immediately initiate a controlled Ascent while monitoring your Tank Pressure. However, there is no reason to panic, the ATOM has allowed for the Air necessary for a safe Ascent including any emergency Decompression Stops required.

Example:

- You set the End Pressure Alarm for 300 PSI (20.5 BAR)
- You are at a Depth of 60 feet (20 meters)
- Air Time Remaining decreases to 0:00
- You Ascend at a maximum rate of 30 fpm (10 mpm)
- You surface with 300 PSI (20.5 BAR) pressure still in your Tank

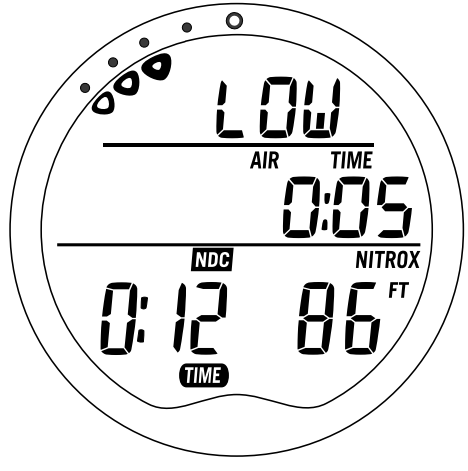


Fig. 82 - ATR Alarm

VARIABLE ASCENT RATE

Alerts associated with Ascent Rate are based upon 2 sets of speeds which change at a reference depth of 60 feet (18 meters).

⚠ WARNING: At depths greater than 60 feet (18 meters), Ascent Rates should not exceed 60 feet per minute (18 mpm). At depths of 60 feet (18 meters) and shallower, Ascent Rates should not exceed 30 feet per minute (9 mpm).

Ascent Rate Warning (Fig. 83)

At depths deeper than 60 feet (18 meters), a Warning will be given when Ascent Rates exceed 50 feet per minute (15 meters per minute).

At 60 feet (18 meters) and shallower, the Warning will be given when Ascent Rates exceed 25 feet per minute (7.5 meters per minute).

The message SLOW > SLOW will scroll on/off at the top of the screen until the Ascent is slowed.

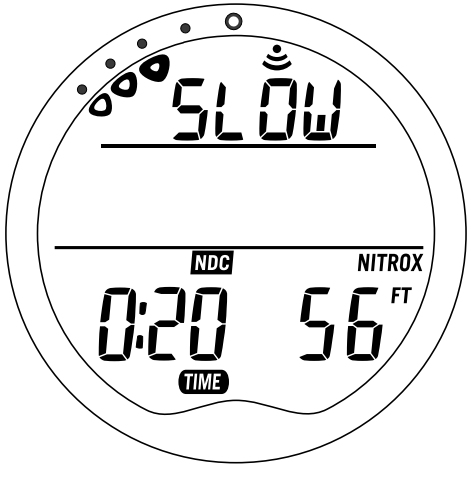


Fig. 83 - Ascent Rate Warning

Ascent Rate Alarm (Fig. 84)

At depths deeper than 60 feet (18 meters), an Alarm will sound when Ascent Rates exceed 60 feet per minute (20 meters per minute).

At 60 feet (18 meters) and shallower, the Alarm will sound when Ascent Rates exceed 30 feet per minute (10 meters per minute).

The Audible will sound, the red LED will flash, and the message SLOW > SLOW will scroll on/off at the top of the screen. The Audible and LED will stop when acknowledged with the S button or when the Ascent is slowed. After acknowledged, the Alpha message SLOW > SLOW will continue to scroll until the Ascent is slowed below the Alarm rate.

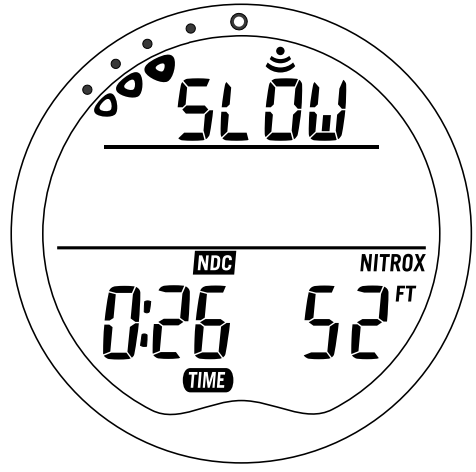


Fig. 84 - Ascent Rate Alarm

ELAPSED DIVE TIME

The maximum duration that Elapsed Dive Time will be displayed is 9 hours and 59 minutes (9:59). In the event that the ATOM is at depth for a greater time, it will cease operation as a Dive Computer and revert to operation as a Watch, displaying the Main Time screen.

CONTROL OF DISPLAYS

During Dive Modes, there is a Main (Default) Display of important information relevant to the specific mode that the ATOM is operating in (No Deco, Deco, Gauge, etc.).

Alternate Displays can be accessed by pressing and releasing the **A** button to view additional information. They will automatically revert to the Main Display after 3 seconds.

- Main > Alternate 1 (Tank Pressure) > Alternate 2 (O2 Data)

A Secondary Display can be accessed by pressing the **A** button for 2 seconds. It will also automatically revert to the Main Display after 3 seconds.

- Main > Secondary (Temperature and Time of Day)

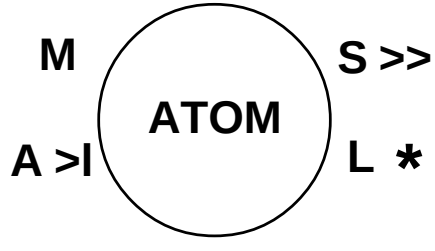
The **S** button is used to acknowledge and silence Alarms.

The **L** button is used to activate the Backlight.

- The display will be illuminated as long as the L button is depressed, plus the Backlight Duration time that has been set (0, 5, or 10 seconds) for a maximum of 20 seconds
- The Backlight will not activate during a Low Battery condition.

The **M** button is used for viewing Gas Switch Preview screens (FO2) and Switching Gas.

- Upper/Left - Mode (M) button
- Upper/Right - Select (S) button
- Lower/Right - Light (L) button
- Lower/Left - Advance (A) button



⚠ WARNING: Prior to diving with the ATOM, you must also read and understand the Oceanic Dive Computer Safety and Reference Manual, Doc. No. 12-2262, which provides Important Warnings and Safety Recommendations as well as general product information.

DIVE MODES

NOTE: During the time that an Alarm is sounding, Alternate, Secondary, and Gas Switch Preview displays cannot be accessed.

⚠ WARNING: The Wet Activation feature will not function unless it is Set ON (a user setting) and the contacts are bridged without interference.

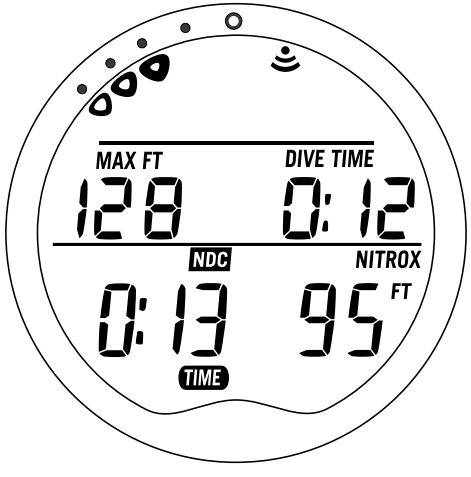


Fig. 85 - No Deco Main

NO DECOMPRESSION DIVE MODE

When the Wet Activation feature is set On, the ATOM will enter the No Decompression Dive Mode any time you descend deeper than 4 feet (1.2 meters).

When the Wet Activation feature is set Off, the ATOM will not enter Dive Mode upon descent unless it is operating in one of the Dive Computer modes at that time. Modes such as Surface Mode, Plan, Fly, etc.

At any time during the dive -

- Depress the L button to activate the Backlight
- Press/release the S button to acknowledge and silence Alarms

Main (Default) Display information includes (Fig. 85) -

> Tissue Loading Bar Graph representing Nitrogen
> Transmitter Link icon (if active and linked)
> Max Depth with symbols MAX and FT (or M)
> Elapsed Dive Time with symbols DIVE and TIME
> Dive Time Remaining with symbols NDC (or O2) and TIME
> Current Depth with symbol FT (or M)
> Symbol NITROX (if set for Nitrox)

- Press/release the A button to view Alternate Display #1
- Press/hold the A button (2 sec) to view Temperature/Time

No Deco Alternate Display #1

Information includes (Fig. 86) -

- If the Reciver is set OFF, this display will be bypassed.

> Tissue Loading Bar Graph
> Transmitter Link icon and graphic TMT1 (or 2 or 3)
> Air Time Remaining with symbols AIR and TIME
- The graphic NotAvAil will appear if there is no Transmitter associated with Tank of Gas being used at the time.

> Tank Pressure with symbol PSI (or BAR)
> Symbol NITROX (if set for Nitrox)

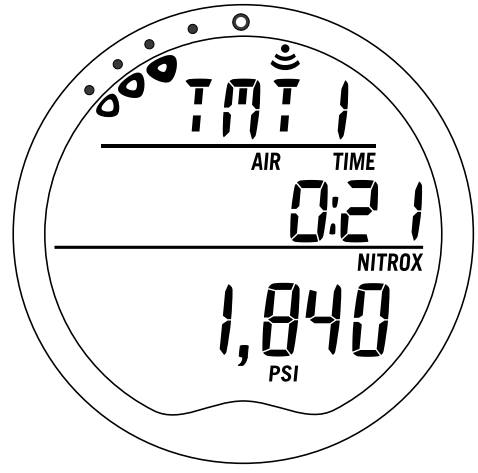


Fig. 86 - No Deco Alt #1

- The display will revert to the Main Display after 3 seconds.
- Press/release the A button to view Alternate Display #2

No Deco Alternate Display #2 (if set for Nitrox)

Information includes (Fig. 87) -

> O2 Bar Graph and symbol O2BG
> Transmitter Link icon
> Graphic GAS1 (or 2 or 3)
> Level of PO2 (ATA) with graphic PO2
> FO2 Setting and symbol FO2
> Current Depth and symbol FT (or M)
> Symbol NITROX
- The display will revert to the Main Display after 3 seconds.

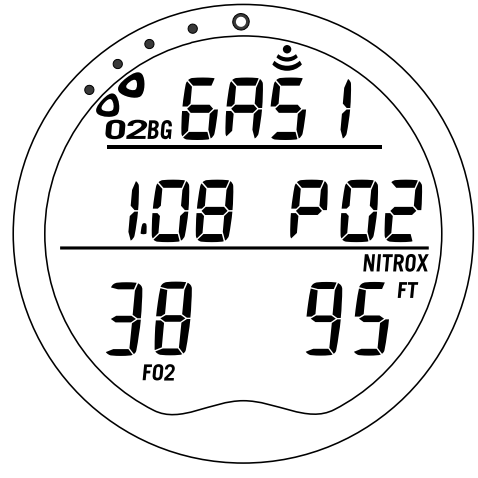


Fig. 87 - No Deco Alt #2

Fig. 88 - No Deco Secondary

No Deco Secondary Display information includes (Fig. 88) -

> Day of the Week graphic (MON, TUE, etc.)
> Temperature with icon and graphic F (or C)
> Time of Day (hour:minute:second).
This will be the Default Time selected (Main or Alternate).

- The display will revert to the Main Display after 3 seconds.

No Deco Dive Mode - SAFETY STOP

Upon ascending to the Safety Stop Depth set on any No Decompression dive in which Depth exceeded 30 feet (9 meters), a short beep will be emitted and a Safety Stop at the Depth set will appear on the display with a countdown timer that begins at the Safety Stop Time set and counts down to 0:00 (minutes:seconds).

The Safety Stop will be displayed until the countdown times out, or you descend below 30 feet (10 meters), or you surface.

There is no Penalty if you surface prior to completing the Safety Stop.

If the Safety Stop was set to OFF, the screen will not appear during the ascent.

No Deco Safety Stop Main Display

Information includes (Fig. 89) -

Fig. 89 - No Deco Safety Stop Main

> Tissue Loading Bar Graph
> Transmitter Link icon
> Graphic STOP
> Stop Depth with symbol FT (or M)
> Countdown Stop Time (min:sec) with symbols STOP and TIME
> Dive Time Remaining with symbols NDC (or O2) and TIME
> Current Depth with symbol FT (or M)
> Symbol NITROX (if set for Nitrox)

- Press/release the A button to view Alternate Displays
- Press/hold the A button (2 sec) to view Temperature/Time
- Press/release the L button to activate the Backlight
- Press /release the S button to acknowledge/silence Alarms

Note that the display showing Max Depth and Elapsed Dive Time will not be available while at the Safety Stop.

DECOMPRESSION DIVE MODE

The ATOM is designed to help you by providing a representation of how close you are to entering Decompression.

Decompression Dive Mode activates when theoretical No Decompression time and depth limits are exceeded.

Upon entering Decompression Mode, the Audible Alarm will sound and the red LED Warning Light will flash for 10 seconds (unless set OFF), or until acknowledged.

A message with the graphics DECO > STOP > xxFT will scroll at the top of the Main screen, each On for 2 seconds and Off for 4.

- Press/release the S button to acknowledge/silence the Audible Alarm (unless set OFF).
- The UP Arrow will flash if you are greater than 10 feet (3 meters) deeper than the Required Stop Depth.
- Once you are within 10 feet (3 meters) of, and below, the Required Stop Depth, the UP Arrow will be removed.

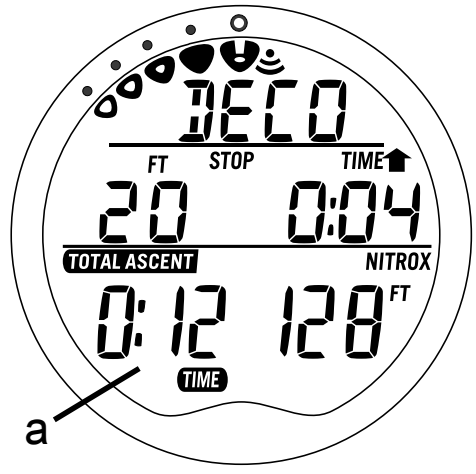


Fig. 90 - Entry into Deco

Total Ascent Time

Total Ascent Time (Fig. 90a) includes Stop Times required at all required decompression ceilings and vertical Ascent Time calculated at 60 feet (18 meters) per minute for depths deeper than 60 feet (18 meters), and 30 feet (9 meters) per minute for depths of 60 feet (18 meters) and shallower.

Managing Decompression Stops

To fulfill your decompression obligation, you should make a safe controlled Ascent to a depth slightly deeper than (Fig. 91a), or equal to, the Required Ceiling Stop Depth indicated (Fig. 91b) and decompress for the Stop Time indicated (Fig. 91c).

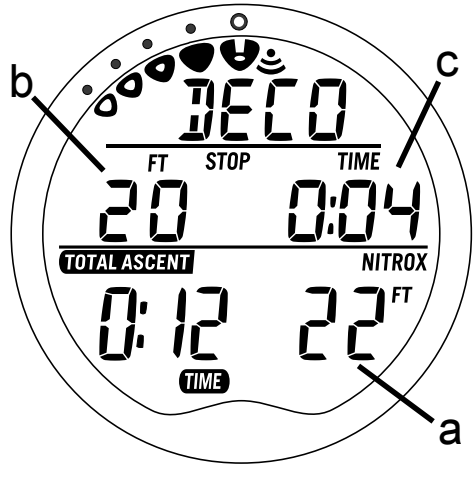


Fig. 91 - Managing a Stop

The amount of decompression Credit Time that you receive is dependent on Depth, with slightly less Credit given the deeper you are below the Stop Depth indicated.

You should stay slightly deeper than the Required Stop Depth indicated until the next shallower Stop Depth appears. Then, you can slowly ascend to, but not shallower than that indicated Ceiling Stop Depth.

Deco Main (Default) Display information includes (Fig. 92) -

> Tissue Loading Bar Graph (all segments)
> Transmitter Link icon
> Graphics DECO > STOP > xxFT, scrolling (see Warning)
> Stop Depth with symbol FT (or M)
> Stop Time (minutes:seconds) with symbols STOP and TIME
> Total Ascent Time with symbols TOTAL ASCENT and TIME
> Current Depth with symbol FT (or M)
> Symbol NITROX (if set for Nitrox)

- Press/release the A button to view Alternate Displays
- Press/hold the A button (2 sec) to view Temperature/Time
- Press/release the L button to activate the Backlight
- Press/release the S button to acknowledge/silence Alarms

⚠WARNING:

If a High PO2 condition occurs while in Deco Mode, the message HIGH > PO2 will replace the DECO message until PO2 < 1.60.

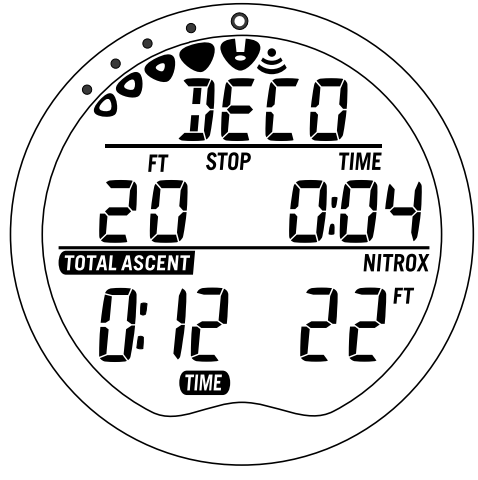


Fig. 92 - Deco Main

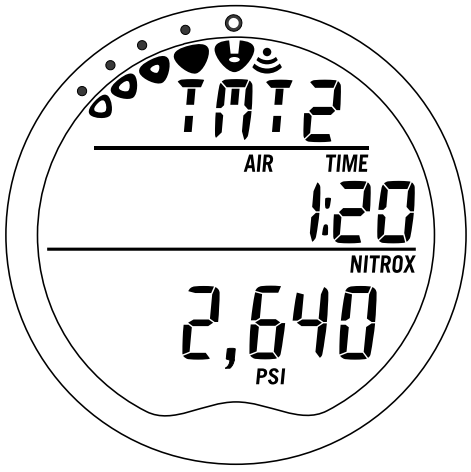


Fig. 93 - Deco Alt #1

Deco Alternate Display #1 information includes (Fig. 93) -

- If the Reciver is set OFF, this display will be bypassed.

> Tissue Loading Bar Graph (all segments)
> Transmitter Link icon and graphic TMT1 (or 2 or 3)
> Air Time Remaining with symbols AIR and TIME
> Tank Pressure with symbol PSI (or BAR)
> Symbol NITROX (if set for Nitrox)

- The display will revert to the Main Display after 3 seconds.
- Press/release the A button to view Alternate Display #2

Deco Alternate Display #2 information includes (Fig. 94) -

> O2 Bar Graph and symbol O2BG
> Transmitter Link icon
> Graphics DECO > STOP > xxFT, scrolling
> Level of PO2 (ATA) with graphic PO2
> FO2 Setting and symbol FO2
> Current Depth and symbol FT (or M)
> Symbol NITROX

- The display will revert to the Main Display after 3 seconds.

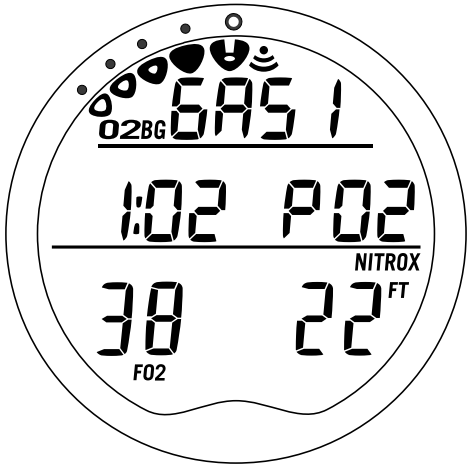


Fig. 94 - Deco Alt #2

Deco Secondary Display information includes (Fig. 95) -
> Day of the Week graphic (MON, TUE, etc.)
> Temperature with icon and graphic F (or C)
> Time of Day (hour:minute:second)
This will be the Default Time selected (Main or Alternate).

Fig. 95 - Deco Secondary

- The display will revert to the Main Display after 3 seconds.

VIOLATION MODES

While in Violation Modes, the Alternate Displays previously described can be accessed using the A button, the Backlight can be activated using the L button, and Alarms can be acknowledged and silenced with the S button.

- The Alternate and Secondary Displays of information will be similar to the Deco screens. They revert to the Main (Default) Display after 3 seconds.

Conditional Violation Mode

If you ascend shallower (Fig. 96a) than a Required Decompression Ceiling Stop Depth displayed (Fig. 96b), the Down Arrow and Total Ascent Time will flash until you descend below the Required Stop Depth. The graphic message DOWN > TO > xxFT (M) will scroll at the top of the display. Also displayed will be Current Depth and the Bar Graph.

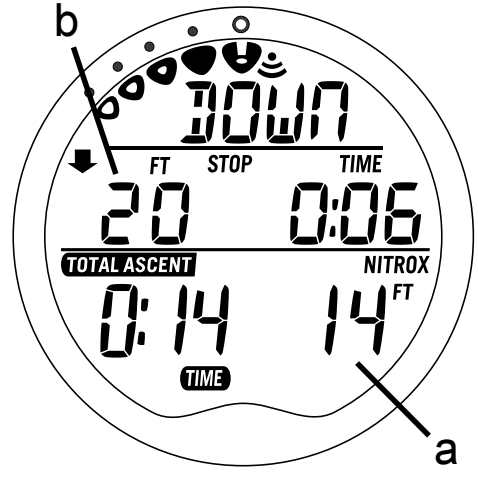


Fig. 96 - Conditional Violation

Unless set OFF, the Audible Alarm will sound and the red LED Warning Light will flash for 10 seconds, or until acknowledged by pressing the S button.

If you descend below the required Decompression Ceiling before 5 minutes have elapsed, the ATOM will continue to function in Decompression Dive Mode. In this case, no off-gassing Credit will be given, and for each minute above the Ceiling $1^{1}/_{2}$ minutes of **Penalty Time** will be added to Required Stop Time. The added Penalty (decompression) Time will have to be 'worked off' first, before obtaining off-gassing credit.

Once the Penalty Time is worked-off, and off-gassing Credit begins, required decompression Stop Depths and Time will decrease toward zero. The Tissue Loading Bar Graph will recede into the No Decompression Zone and the ATOM will revert to the No Decompression Dive Mode.

△ **NOTE: Upon entry into the following 3 Delayed Violation Modes, the red LED warning light will light and the Audible Alarm will sound, <u>even if Set OFF.</u> When these events occur, the Alarm cannot be acknowledged (silenced) by pressing the S button.**

Delayed Violation Mode #1 (Fig. 97)
If you remain above the Required Ceiling Stop Depth for more than 5 minutes, the full Tissue Loading Bar Graph and Total Ascent Time will flash until you descend below the Required Stop Depth. Also, the graphic message DOWN > TO > xxFT (M) will continue to scroll. This is a continuation of a Conditional Violation

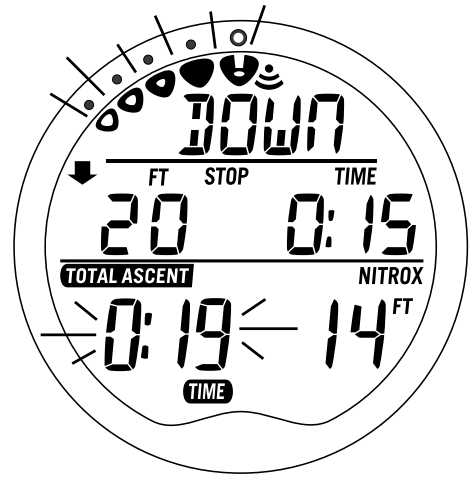


Fig. 97 - Delayed Violation #1

Delayed Violation Mode #2 (Fig. 98)
The ATOM cannot calculate decompression times for Stop Depths much greater than 60 feet (18 meters) and offers no indication of how much time spent underwater would result in the need for a greater Stop Depth.

If the Decompression obligation requires a Ceiling Stop Depth between 60 feet (18 meters) and 70 feet (21 meters), the Tissue Loading Bar Graph will flash. Total Ascent Time will still be displayed. The graphic message DECO > STOP > 60FT (20M) will scroll at the top of the display.

When this occurs, you must make a controlled Ascent to just deeper than, and stay as close as possible to 60 feet (18 meters) without causing the Total Ascent Time digits to flash. When the Required Stop Depth indicates 50 FT/ 15 M, etc., you can ascend to those depths and continue decompressing.

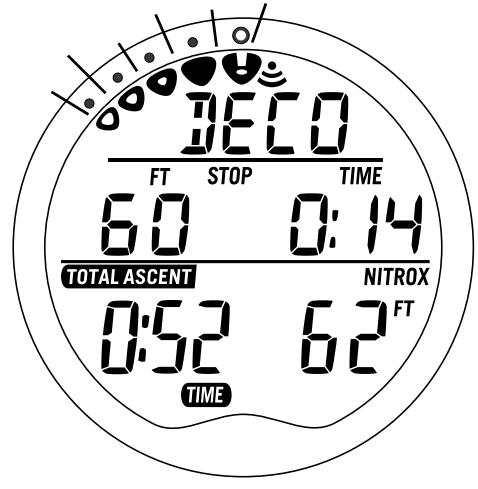


Fig. 98 - Delayed Violation #2

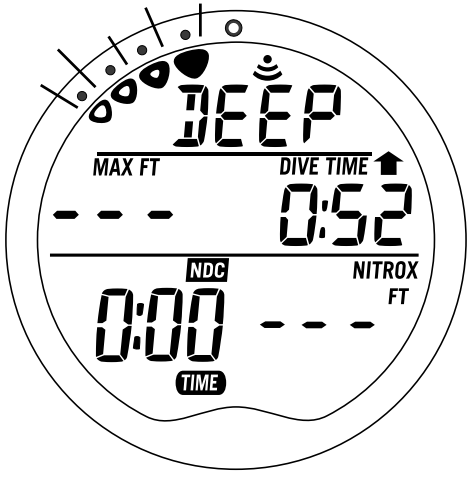


Fig. 99 - Delayed Violation #3

Delayed Violation Mode #3 (Fig. 99)
If you descend deeper than the Maximum Operating Depth of 330 feet (99.9 meters), the accumulated Tissue Loading Bar Graph segments will flash, and the Current Depth and Max Depth displays will only indicate 3 dashes (- - -) signifying that you are Out of Range. The graphic message TOO > DEEP will scroll at the top of the display.

Upon ascending above 330 feet (99.9 meters), the Current Depth display will be restored, however Max Depth will only display 3 dashes for the remainder of that dive. Also, the Log for that dive will display 3 dashes as the Max Depth achieved.

Immediate Violation Mode and Gauge Mode
If a Decompression Ceiling Stop Depth much greater than 60 feet (18 meters) is required, an Immediate Violation Mode will be entered. This situation would be preceded by entering Delayed Violation Mode #2.

The ATOM would then operate with limited functions in Violation Gauge Mode during the remainder of that dive and for 24 hours after surfacing. Gauge Mode turns the ATOM into a digital instrument without any decompression or oxygen monitoring functions.

Violation Gauge Mode has a Main (Default) screen (Fig. 100) that displays -

> Full Bar Graph, flashing
> Transmitter Link icon
> Message UP > VIOL, scrolling
> Max Depth with symbols MAX and FT (or M)
> Elapsed Dive Time with symbols DIVE and TIME
> Current Depth with symbol FT (or M)
> Symbol NITROX (if set for Nitrox)

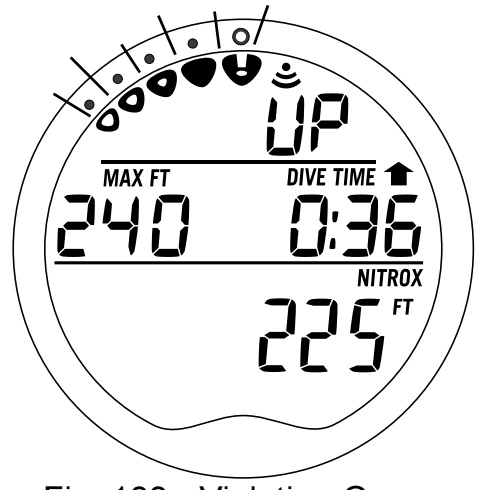


Fig. 100 - Violation Gauge Mode (Underwater)

- Press/release the A button to view the Alternate Display (Air Time Remaining and Tank Pressure
- Press/hold the A button (2 sec) to view Temperature/Time

The ATOM will also enter an Immediate Violation Mode 5 minutes after reaching the surface from a dive in which a Delayed Violation occurred.

Violation Gauge Mode on the Surface displays the Bar Graph flashing, the Transmitter Link icon, the message VIOL, Temperature, Dive Number, and Surface Interval (Fig. 101). It does not provide access to the FO2, Plan, or Time to Fly and Desaturate features.

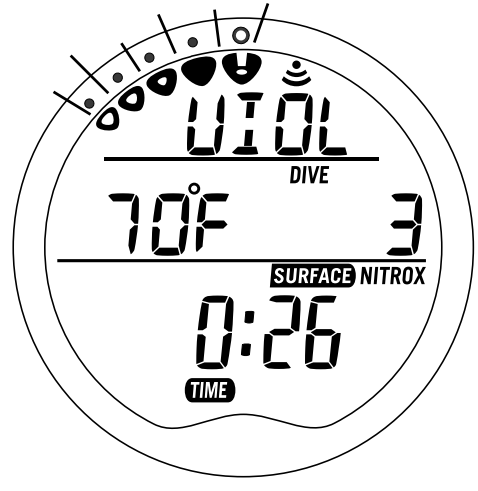


Fig. 101 - Violation Gauge Mode (on Surface)

⚠WARNING:

If a High PO2 condition occurs while in Deco Mode, the PO2 screens described here will not appear. The message HIGH > PO2 will replace the DECO message until PO2 < 1.60.

The countdown timer that appears when you try to access Time to Fly does not represent Time to Fly. It is only provided to inform you of the time remaining before normal ATOM Dive Computer operation can resume with full features and functions.

This condition is a Permanent Violation, and in the event that a dive is made during the 24 hour period, a full 24 hour surface interval must then be served before all functions are restored.

HIGH PO2

High PO2 Warning (Fig. 102)
When partial pressure of oxygen (PO2) becomes equal to, or greater than, 1.40 ATA, or 0.2 ATA less than the PO2 Alarm Set Point (a SET A Group setting); the red LED warning light will flash, the Audible Alarm will sound (unless set OFF).

Fig. 102 - High PO2 Warning

- While in No Decompression Mode, the current PO2 value, graphic PO2, and UP Arrow will appear on the Main Display as a warning until PO2 decreases. The graphic message UP > HIGH > PO2 (scrolling), Bar Graph, Transmitter Link icon, Current Depth, and Dive Time Remaining (0:00) will also be displayed.
- While in Decompression Mode, the High PO2 screens will not replace the Deco screens. PO2 can be viewed on the Alternate 2 Display by pressing the A button 2 times.

If PO2 continues to increase, the value displayed will increase toward a maximum value of 5.00 ATA in increments of .01 ATA.

High PO2 Alarm (Fig. 103)
When PO2 reaches a value of 1.60 ATA, or the PO2 Alarm Set Point (a user setting), the red LED warning light will flash, the Audible Alarm will sound (unless set OFF), and the current PO2 value, graphic PO2, and UP Arrow will flash as a warning until PO2 decreases.

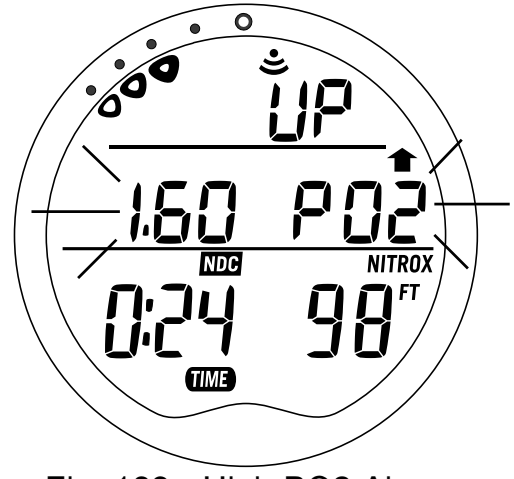


Fig. 103 - High PO2 Alarm

The graphic message UP > HIGH > PO2 will continue to scroll, and the Bar Graph, Transmitter Link icon, Current Depth, and Dive Time Remaining will be displayed.

Refer to the Warning on page110.

- Press the S button to acknowledge/silence the alarms.
- Press the A button to view the Alternate #1 (Air Time Remaining and Tank Pressure, Alternate #2 (O2 data), and Secondary (Temperature/Time) Displays.
- The unit will revert to the Main (Default) Display after 3 seconds.
- Press the L button to activate the Backlight.

HIGH OXYGEN ACCUMULATION

The O2 Bar Graph displays either oxygen accumulated during that nitrox dive, or during the repetitive nitrox dives you conduct during that 24 hour period, whichever of the two is greater at that time. The O2 Bar Graph offers you a convenient way to monitor how close you are coming to the limits of oxygen exposure. **Use it as a visual reference to place a wider margin of protection between you and the Limits.**

If the theoretical amount of oxygen accumulated equals, or exceeds, the limit for a single exposure, or the exposure limit for a 24 hour period (300 OTU), Oxygen Dive Time Remaining becomes zero (0:00) and the full O2 Bar Graph will be displayed flashing (Fig. 104).

The red LED warning will flash, the Audible Alarm will sound (unless set OFF), and the UP Arrow will appear flashing as a warning until the level of oxygen decreases below the limit. The graphic message UP > HIGH > O2 will scroll at the top of the display.

Also displayed will be the Transmitter Link icon, % of O2 Saturation (80 then 100) with the graphic SAt, Current Depth, and Dive Time Remaining as 0:00 with the symbols O2 and TIME.

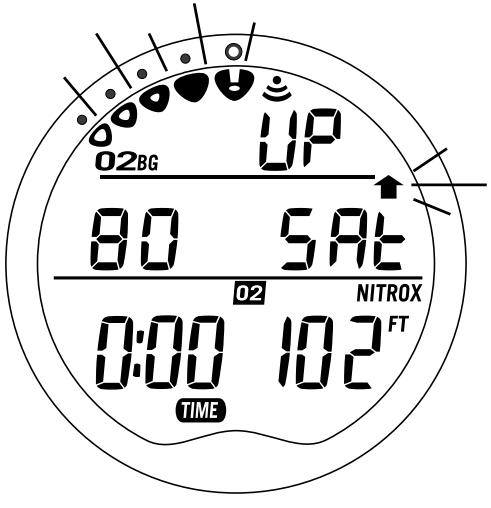


Fig. 104 - High O2 Alarm

- Press the S button to acknowledge/silence the alarm.
- Press the A button to view the Alternate #1 (Air Time Remaining and Tank Pressure, Alternate #2 (O2 data), and Secondary (Temperature/Time) Displays.
- The unit will revert to the Main (Default) Display after 3 seconds.
- Press the L button to activate the Backlight.

Refer to the chart on page 148 for NOAA O2 limits.

USER SET DIGITAL GAUGE MODE

When Digital Gauge Mode is set for ON, the ATOM will operate as a Digital Depth Gauge/Timer without performing nitrogen and oxygen calculations.

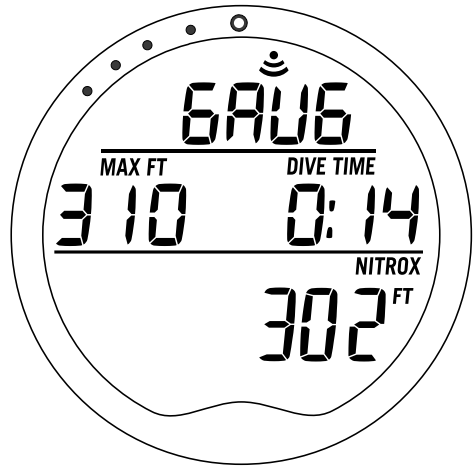


Fig. 105 - Digital Gauge Main

Main (Default) Display information includes (Fig. 105) -

> Transmitter Link icon
> Max Depth with symbols MAX and FT (or M)
> Elapsed Dive Time with symbols DIVE and TIME
> Current Depth with symbol FT (or M)

- Press/release the A button to view the Alternate Display (Air Time Remaining and Tank Pressure).
- Press/hold the A button for 2 seconds to view the Secondary Display (Temperature and Time of Day).
- Press/release the S button to acknowledge/silence Alarms.
- Press the L button to activate the Backlight.

NOTE: Once a dive is made with the ATOM set for Digital Gauge Mode, you must wait 24 hours after surfacing before the ATOM resets and will operate as a dive computer.

SUMMARY OF WARNING AND ALARM MESSAGES

MESSAGE	MEANING
VIEW > AIR	Air Time Remaining is less than No Deco and O2 times.
DECO > STOP > xxFT (M)	Entry into Decompression Mode.
DOWN > TO > xxFT (M)	Above a Required Decompression Stop Depth.
DECO > STOP > 60FT (20M)	Deco Stop greater than 60FT (20M) required.
HIGH > PO2	High PO2 while in Deco Mode.
UP > HIGH > PO2	High PO2 set point alarm while in No Deco Mode.
UP > HIGH > O2	High O2 alarm.
TOO > DEEP	Depth set point Alarm.
UP > VIOL	Deco Stop greater than 70 FT (21 M) required.
SLOW > SLOW	Ascent Rate Too Fast Warning/Alarm.
LOW > AIR > TIME	Air Time Remaining less than 5 minutes alarm.
LOW > DIVE > TIME	Dive Time Remaining (NDC, O2, or ATR) set point alarm.
TURN > GAS > ALRM	TMT1 Turn Pressure set point alarm.
END > GAS > ALRM	TMT End Pressure set point alarm (Transmitter in use).
TIME > TOO > LONG	Elapsed Dive Time set point alarm.
UP > HIGH > Ni	TLBG set point alarm.
TMT1 > LINK > LOST	Active TMT Transmission Link lost (also TMT2 and TMT3).
TMT1 > NotAvAil	TMT not active (also TMT2 and TMT3).
SWCH > GAS	Switch to the new Gas being used.
DONT > SWCH	Don't Switch to the new Gas (exposure to excess PO2).

⚠ WARNING: Prior to diving with the ATOM, you must also read and understand the Oceanic Dive Computer Safety and Reference Manual, Doc. No. 12-2262, which provides Important Warnings and Safety Recommendations as well as general product information.

SWITCHING GAS MIXES

SWITCHING GAS MIXES

During No Decompression and/or Decompression dives, the ATOM can be manually switched from GAS 1 to GAS 2 to GAS 3, changing Pressure related displays and calculations from Transmitter 1 to Transmitter 2 to Transmitter 3 and/or FO2 displays and calculations from the FO2 value set for GAS 1 to the FO2 value set for GAS 2 to the FO2 value set for GAS 3.

△ **NOTE: Switching the ATOM from one Gas to another cannot be performed while on the surface. Every dive begins with GAS 1. 10 minutes after surfacing from a multiple gas dive, the ATOM's operation defaults to the GAS 1 FO2.**

Access to Gas Switching screens can only be accomplished during the time that a Main Dive Display is on the screen and cannot be performed during the time that an Alarm is sounding.

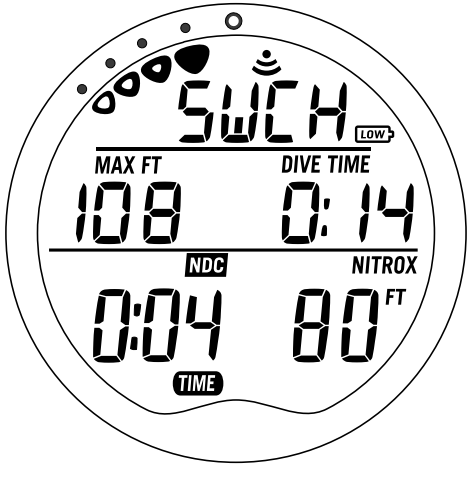


Fig. 106 - Switch Gas Alert

Gas Changeover Alarm

If a Gas is being used that the ATOM is not set for (i.e., the diver starts breathing from another Tank and doesn't switch the ATOM to the new Gas within 60 seconds), the Audible Alarm will sound, the red LED will flash as a warning, and the message SWCH > GAS will scroll at the top of the display (Fig. 106) until acknowledged by pressing and releasing the S button momentarily, or the ATOM is manually Switched to the new Gas being used.

NOTE: If a switch to a new Gas Mix would expose the diver to a prohibitive PO2 level of 1.60 ATA or greater, the Audible Alarm will sound, the red LED will flash as a warning, and the message DONT > SWCH will scroll at the top of the display (Fig. 107) until acknowledged by pressing and releasing the S button momentarily (< 2 seconds).

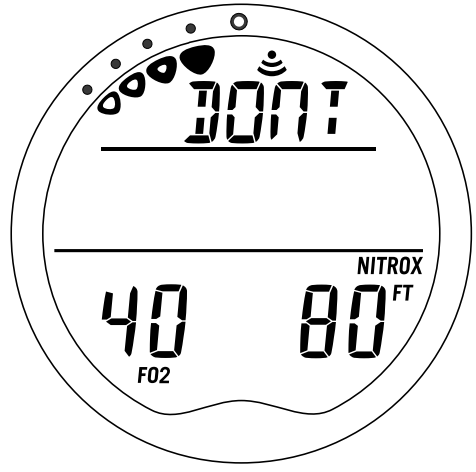


Fig. 107 - Don't Switch Alert

Due to the possibility that sufficient air may not be available in the Switch From tank to complete the dive, the Switch to the prohibitive Mix can still be made. If the Switch is made to the prohibitive Mix while in No Deco Dive Mode, the High PO2 Alarm will activate. If the Switch is made to the prohibitive Mix while in Deco Dive Mode, the message HIGH > PO2 will replace the DECO message.

Switching of Gas Mixes can only to be performed during the time that a Gas Switch Preview Display is being viewed. These are accessed from the Main Dive Display.

- Pressing and releasing the M button momentarily (< 2 seconds) while viewing a Main Display while in Dive modes will access the GAS 1 Switch Preview Display.
- The ATOM will revert to the Main Display after 10 seconds of no M button action.

NOTE: When Switching to a Gas (FO2) associated with a Tank that does not have an active Transmitter, the graphic ANALOG will be displayed. The procedures and displays will be the same without the Transmitter link icon.

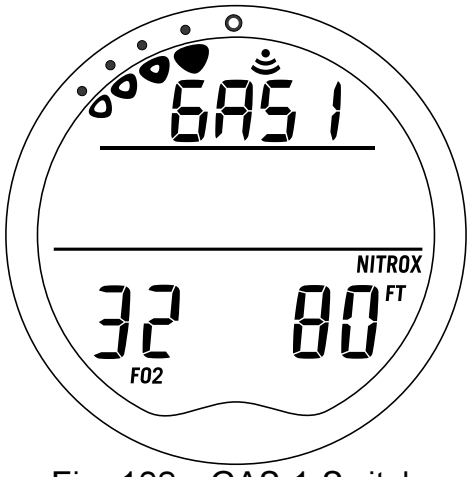


Fig. 108 - GAS 1 Switch Preview

GAS 1 SWITCH PREVIEW DISPLAY

Information includes (Fig. 108) -

> Transmitter Link icon (if the Transmitter is active)
> Bar Graph, representing Nitrogen Loading.
> Alpha graphic GAS1
> Alpha graphic ANALOG, if TMT1 is not available
> FO2 value Set Point for Gas 1 and the symbol FO2
> Current Depth and symbol FT (or M)
> Symbol NITROX

- Press/release the M button momentarily (< 2 seconds) to access the GAS 2 SWITCH PREVIEW DISPLAY for 3 seconds.

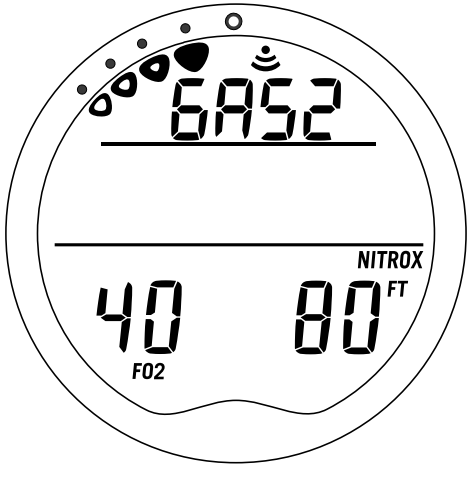


Fig. 109 - GAS 2 Switch Preview

GAS 2 SWITCH PREVIEW DISPLAY

Information includes (Fig. 109) -

> Transmitter Link icon (if the Transmitter is active)
> Bar Graph, representing Nitrogen Loading.
> Alpha graphic GAS2
> Alpha graphic ANALOG, if TMT2 is not available
> FO2 value Set Point for Gas 2 and the symbol FO2
> Current Depth and symbol FT (or M)
> Symbol NITROX

- Press/release the M button momentarily (< 2 seconds) to access the GAS 3 SWITCH PREVIEW DISPLAY (or GAS 1 if GAS 3 is not active) for 3 seconds.

NOTE: When a switch is made to another GAS/ TMT, there may be a delay of 5 to 15 seconds before the Receiver picks up the TMT's signal.

SWITCHING FROM GAS 1 TO GAS 2

- Depressing the M button for 2 seconds while viewing the GAS 2 Switch Preview Display will manually Switch the ATOM from GAS 1 to GAS 2 and the Receiver from Transmitter 1 to Transmitter 2 (if active).
- When the switch is made, the Main Display will represent GAS 2. Alternate Display #1 will then display the alpha graphic TMT2 and the Pressure of Tank 2 (Fig. 110). Air Time Remaining is then calculated based on Tank 2.

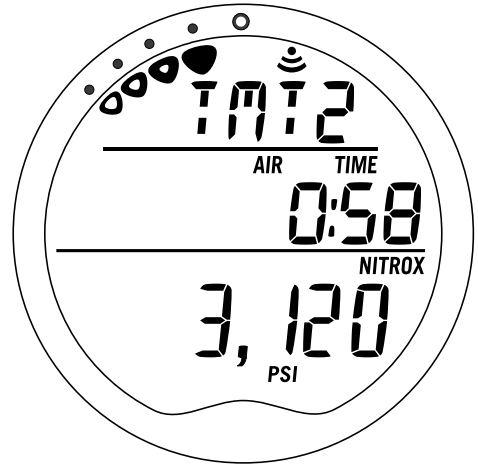


Fig. 110 - Switch from GAS 1 to GAS 2 was made

SWITCHING FROM GAS 2 BACK TO GAS 1

A Switch Back to GAS 1 can be performed, as follows:

- Press/release the M button momentarily (< 2 seconds) to step through the Switch Preview screens.
- Depressing the M button for 2 seconds while the GAS 1 Switch Preview screen is displayed will switch the ATOM from GAS 2 back to GAS 1 and the Receiver from Transmitter 2 back to Transmitter 1.
- When the switch is made, the Main Display will then represent GAS 1. Alternate Display #1 will then display the alpha graphic TMT1 and the Pressure of Tank 1 (Fig. 111). Air Time Remaining is then calculated based on Tank 1.

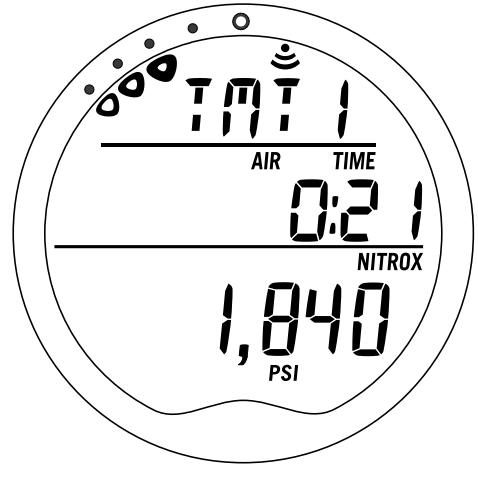


Fig. 111 - Switch from GAS 2 Back to GAS 1 was made

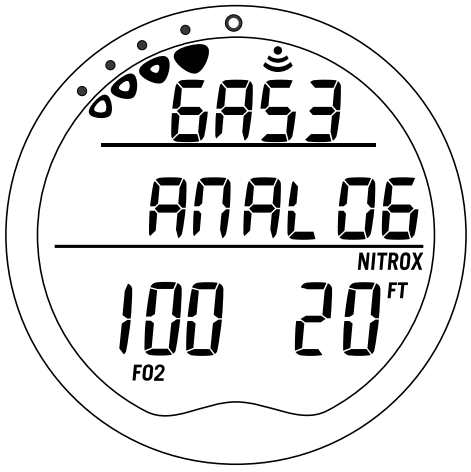


Fig. 112 - GAS 3 Switch Preview

GAS 3 SWITCH PREVIEW DISPLAY

Information includes (Fig. 112) -

> Transmitter Link icon (if the Transmitter is active)
> Bar Graph, representing Nitrogen Loading.
> Alpha graphic GAS3
> Alpha graphic ANALOG, if TMT3 is not available
> FO2 value Set Point for Gas 3 and the symbol FO2
> Current Depth and symbol FT (or M)
> Symbol NITROX

- While viewing the Dive Mode Main Display, press/release the M button momentarily (< 2 seconds) to access the sequence of available Gas Switch Preview Displays.
- Press/release the M button repeatedly (< 2 seconds each time) until the GAS 3 Switch Preview screen is displayed.

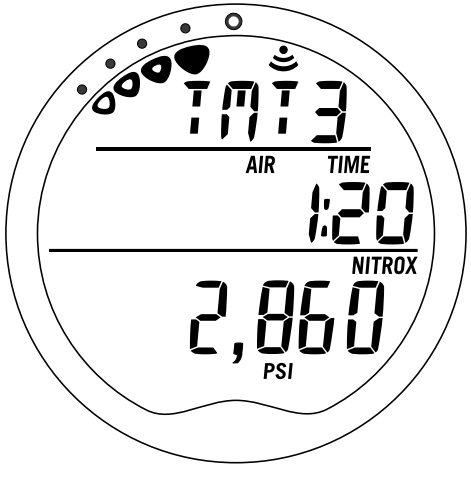


Fig. 113 - Switch from GAS 2 to GAS 3 was made

SWITCHING FROM GAS 2 TO GAS 3

- Depressing the M button for 2 seconds while viewing the GAS 3 Switch Preview display will manually Switch the ATOM from GAS 2 to GAS 3 and the Receiver from Transmitter 2 to Transmitter 3 (if active).
- When the switch is made, the Main Display will then represent GAS 3. Alternate Display #1 will then display the alpha graphic TMT3 and the Pressure of Tank 3 (Fig. 113). Air Time Remaining is then calculated based on Tank 3.
- A Switch Back to GAS 2 can be performed, as previously described for switching GAS 2 Back to GAS 1.

⚠ WARNING: Prior to diving with the ATOM, you must also read and understand the Oceanic Dive Computer Safety and Reference Manual, Doc. No. 12-2262, which provides Important Warnings and Safety Recommendations as well as general product information.

POST DIVE MODES

POST DIVE SURFACE MODE

When you ascend to 4 feet (1.2 meters) or less, the ATOM will enter Surface Mode and begin counting your Surface Interval.

TRANSITION PERIOD

If you descend during the first 10 minutes after surfacing (referred to as the Transition Period), time underwater will be considered a continuation of that dive. The time at the surface (if less than 10 minutes) will not be added as Dive Time.

Information displayed while on the surface includes (Fig. 114):

- > Link icon (if active), and graphic WET
- > Temperature (ambient) and graphic F (or C)
- > Number of that dive (during that series) and icon DIVE
- > Surface Interval time (colon flashing) with SURFACE and TIME icons
- > NITROX icon, if set for Nitrox
- > Tissue Loading Bar Graph indicating current nitrogen loading
- • Press the L button to activate the Backlight.
- • Press the M button less than 2 seconds to view Main Time for 3 seconds, then return to Surface Mode.

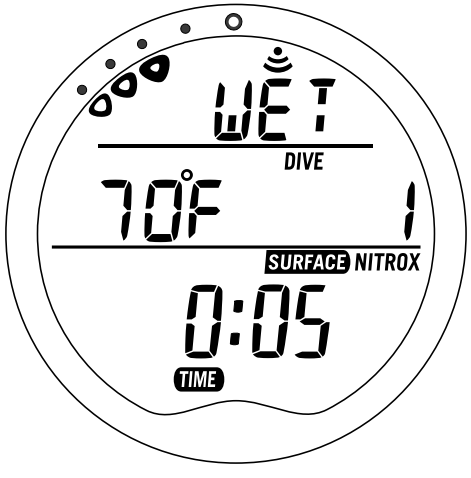


Fig. 114 - Transition Period

During the Transition Period, Alternate displays and the Log for that dive can be accessed. Other modes (e.g., Plan, Fly, Sat, Hist, Set) are accessible after 10 minutes on the surface by first accessing the DC Surface Mode from Main Time Mode.

<u>To view that dive's Log during the Transition Period</u> -

- Press and release the A button (< 2 seconds) to access the Preview screen (Fig. 115).
- Press the S button to view the Nitrogen data screen. See page 84.
- Press the S button again to view the Oxygen data screen (if a Nitrox dive). See page 84.
- Press the S button again to return to Surface Mode.
- The unit will revert to Surface Mode after 2 minutes if no button is pressed.

Fig. 115 - Log Preview
(during Transition Period)

Log Data will not be stored in the unit's memory until the 10 minute Transition Period on the surface is completed.

Once 10 minutes have elapsed, the Surface Interval time display colon stop flashing indicating that the Dive and Transition Period are completed, and a subsequent descent will be considered a new dive. Operation will revert to the Main Time Display.

AFTER THE TRANSITION PERIOD

Once the Transition Period has ended, Dive Surface Mode (Fig. 116) can be accessed from Main Time Mode by pressing the M button 5 times and you will then have full access to other dive computer modes (e.g., Plan, Fly, Sat, Log, Hist, Set, etc.).

- To activate the Backlight at any time, press the L button.

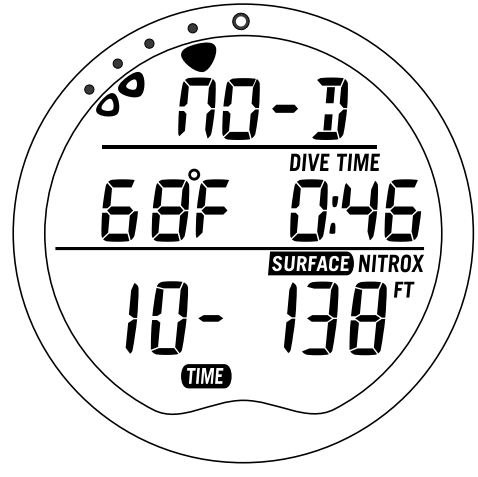


Fig. 116 - Surface Mode
(after Transition Period)

To access Plan Mode (refer to page 77) -

- Press the A button 1 time (while in Surface Mode).

The Planning Sequence now displays adjusted No Decompression Limits based on residual nitrogen and accumulated oxygen calculated to be remaining from the previous dives.

To access the Time to Fly Countdown (refer to page 79) -

- Press/release the A button 2 times (while in Surface Mode).

To access the Time to Desaturation Countdown (refer to page 80) -

- Press/release the A button 3 times (while in Surface Mode).

If a Violation occurred during the dive, Desaturation Time will not be displayed.

The Time to Desaturate counter provides calculated time for tissue desaturation at sea level.

To access the Log Mode (refer to page 82) -

- Press/release the A button 4 times (while in Surface Mode).

To access the History Mode (refer to page 85) -

- Press/release the A button 5 times (while in Surface Mode).

UPLOADING SETTINGS AND DOWNLOADING DATA

The ATOM is configured with a Data Port located on the back of the left side that enables it to be connected to a PC through a USB port using the special Interface Cable supplied.

A USB Driver is provided on the CD as part of the Interface System.

The Settings Upload program provided can be used to set/change the ATOM's Main Time, Date, Set A group (Alarms), and Set U group (Utilities) using the same Interface System.

Information available for retrieval (DownLoad) from the ATOM to the PC Download program includes dive number, surface interval time, maximum depth, elapsed dive time, start date, start time, lowest temperature under water, sampling rate, dive profile, user-defined set points, alarm events, alarm deactivation, OTU, OTS, NiBG, O2BG, and Gas Switching events/pressures/FO2s.

The ATOM checks for the presence of an interface device connection to the Data Port once every second while in Watch Main Time Mode. Checks are not made if the Wet Activation contacts are wet. Upon sensing an interface connection, the requesting device (PC) connects to the ATOM and is prepared for Upload of settings or Download of data which are then initiated using the PC programs.

PC compatibility requirements:

- IBM®, or compatible, Personal Computer with USB Port
- Intel® Pentium 200 MHz or better microprocessor
- Microsoft® Windows® 98 Second Edition, ME, NT, 2000, or XP
- Super VGA card or compatible video graphics adaptor (256 color or greater) with a minimum 800 X 600 pixel screen area of display settings
- 16MB of available RAM
- 20MB of available hard drive storage
- Mouse
- CD Rom drive
- Printer (optional)

Instructions are provided with the PC Interface package that was included with the ATOM. The Personal Log within the Download software program presents dive data, that was sampled throughout the dives at the interval you set, in tabular and graphic profile format.

The Connector on the Interface Cable will be clipped onto the Data Port located on the left back side of the ATOM housing and a USB Port of the PC.

Prior to attempting to Download data from your ATOM, refer to the instructions provided in the User Manual that is incorporated into the CD for the PC Interface package.

For software updates, refer to the OceanicWorldWide.com web site.

For support, call toll free OceanLog Support (866) 732-7877.

⚠ WARNING: Prior to diving with the ATOM, you must also read and understand the Oceanic Dive Computer Safety and Reference Manual, Doc. No. 12-2262, which provides Important Warnings and Safety Recommendations as well as general product information.

REFERENCE

CARE AND CLEANING

Protect your ATOM from shock, excessive temperatures, exposure to chemicals, and tampering. Protect the lens against scratches with a Instrument Lens Protector. Small scratches will naturally disappear underwater.

- Soak and rinse the ATOM in fresh water at the end of each day of diving, and check to ensure that the areas around the Low Pressure (Depth) Sensor (Fig. 117a), PC Interface Data Port (Fig. 117b), and Buttons are free of debris or obstructions. Soak and rinse the Regulator(s) with the Transmitter(s) attached.
- To dissolve salt crystals, use lukewarm water or a slightly acidic bath (50% white vinegar/50% fresh water). After removal from the bath, place the ATOM and the Regulator(s) with Transmitter(s) unit under gently running water and towel dry before storing.
- Transport your ATOM system cool, dry, and protected.

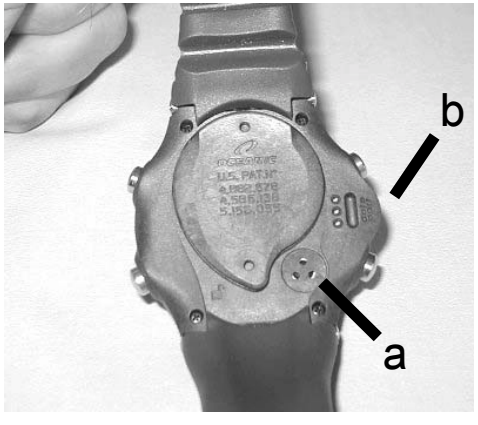


Fig. 117 - ATOM Case Back

INSPECTIONS AND SERVICE

Your ATOM should be inspected annually by an Authorized Oceanic Dealer who will perform a factory prescribed function check and inspection for damage or wear. To keep the 2 year limited warranty in effect, this inspection must be completed one year after purchase (+/- 30 days).

Oceanic recommends that you continue to have an inspection performed every year to ensure it is working properly. The costs of annual inspections are not covered under the terms of the 2 year limited warranty.

To Obtain Service:

Take your ATOM system to an Authorized Oceanic Dealer or send it to the nearest Oceanic Regional Distributor Facility (page 151).

To return your ATOM system to Oceanic:

- Record all dive data in the Log and/or download the data in memory. All data will be erased during factory service.
- Package it using a protective cushioning material.
- Include a legible note stating the specific reason for return, your name, address, day-time phone number, serial number(s), and a copy of your original sales receipt and Warranty Registration Card.
- Send freight prepaid and insured using a traceable method to the nearest Oceanic Regional Service Facility, or to Oceanic USA.
- If shipping to Oceanic USA, obtain an RA (Return Authorization) number by contacting Oceanic at 510/562-0500 or send an e-mail to service@oceanicusa.com.
- Non-warranty service must be prepaid. COD is not accepted.
- Additional information is available at the Oceanic web site OceanicWorldWide.com

BATTERY REPLACEMENT

△ NOTE: The procedures that follow must be closely adhered to. Damage due to improper Battery replacement is not covered by the ATOM's 2 year warranty.

When replacing the Battery in the ATOM, it is recommended that you also replace the Battery(s) in the Transmitter(s), and vice-versa.

The Battery Compartment(s) should only be opened in a dry and clean environment with extreme care taken to prevent the entrance of moisture or dust.

As an additional precautionary measure to prevent formation of moisture in the Battery Compartment(s), it is recommended that the Battery(s) be changed in an environment equivalent to the local outdoor temperature and humidity (e.g., do not change the Battery(s) in an air conditioned environment then take it outside during a hot sunny day).

Inspect the Buttons, Lens, and Housing(s) to ensure they are not cracked or damaged. If there is any sign of moisture in the ATOM or Transmitter(s), DO NOT attempt to use the ATOM as a Dive Computer until it receives proper service by the Oceanic factory or an Authorized Regional Distributor.

Hot Swap

If the new Battery can be inserted into the ATOM within 8 seconds after the old one is removed (referred to as a Hot Swap), settings and nitrogen and oxygen calculations for repetitive dives will be retained.

⚠ CAUTION: Damage due to improper Battery replacement is not covered by the product's limited 2 year warranty.

ATOM (Watch) Battery Removal

- Locate the Battery Compartment on the back of the unit.
- Rotate the Battery Hatch clockwise 10 degrees using the special Battery Hatch tool provided (Fig. 118A), or by pushing the lower portion to the left while pushing the upper portion to the right (Fig. 118B).
- Lift the Hatch with O-ring up and away from the Housing.
- Using care not to damage the Contact (Fig. 119a), slide the Battery up and out of the Left side of the Battery Compartment.
- Discard the Battery according to local regulations governing disposal of batteries.

⚠ CAUTION: DO NOT allow a metal object to short circuit the top of the Battery which is positive (+) to the negative (-) contact of the Battery Compartment.

Fig. 118A - ATOM Battery Hatch Removal

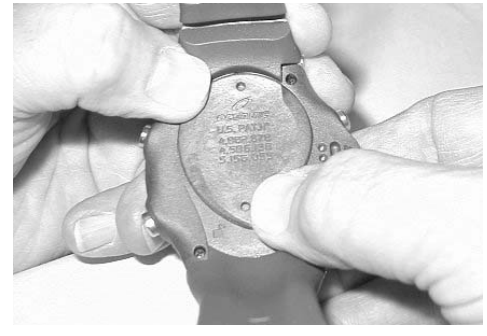


Fig. 118B - Alternate Battery Hatch Removal

Fig. 119 - ATOM Battery Removal

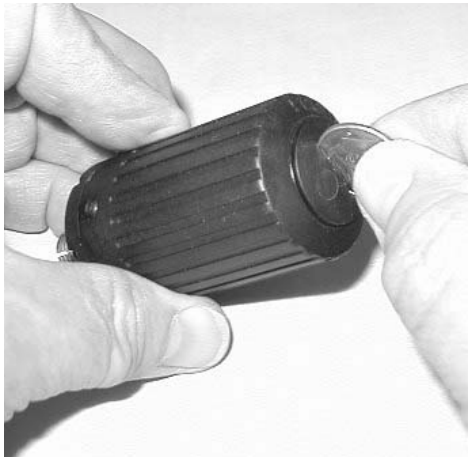


Fig. 120 - Transmitter Battery Hatch

Transmitter Battery Removal

Locate the Battery Hatch on the End of the Housing:

- Apply a coin to the recessed slot of the Hatch (Fig. 120) and turn it counter clockwise out of the Housing.
- Remove the Battery from the Battery Compartment and discard according to local regulations governing disposal of batteries.

Inspection

- Closely check all of the sealing surfaces for any signs of damage that might impair proper sealing.
- Inspect the Buttons, Lens, and Housing(s) to ensure they are not cracked or damaged.

⚠ **WARNING: If damage or corrosion is found, return your ATOM system to an Authorized Oceanic Dealer, and DO NOT attempt to use it until it has received factory prescribed service.**

- Remove the Battery Hatch O-ring(s) and inspect them for any signs of deterioration or deformity. DO NOT use tools to remove the O-ring(s).
- To ensure proper sealing, O-ring replacement is highly recommended each time a Battery is replaced.

Inspection (continued) -

- Closely examine the sealing surfaces of the Battery Hatch(es) and Housing(s) for any signs of damage that might prevent proper sealing. If found, return the ATOM to an Authorized Oceanic Dealer, and DO NOT attempt to use it until it has received factory service.
- Closely examine the threads of the Battery Hatch(es) and Housing(s) for any signs of damage that might prevent proper threading.
- Closely examine the inside of the Battery Compartment(s) for any signs of corrosion indicating entrance of moisture into the unit.
- If corrosion is found, return the ATOM system to an Authorized Oceanic Dealer, and DO NOT attempt to use it until it has received factory service.
- If moisture is found, it is best to have the unit inspected and cleaned by an Authorized Oceanic Dealer.
- If it is necessary to clean the Battery Compartment, flush it and all components with a solution of 50% white vinegar and 50% fresh water. Rinse with fresh water, and allow to dry overnight, or blow dry with a hair dryer (set at 'no heat').

Fig. 121 - ATOM Battery Installation

Fig. 122 - ATOM Battery Hatch O-ring Orientation

Fig. 123A - ATOM Battery Hatch Installation

Fig. 123B - Alternate Battery Hatch Installation

ATOM (Watch) Battery Installation

- Slide a new 3 volt type CR2430 Lithium Battery, negative (-) side down into the Battery Cavity. Slide it in from the Left side (Fig. 121) and ensure that it slides under the contact clip on the lower/right rim of the cavity.
- Lightly lubricate the new Hatch O-ring with silicone grease and place it on the inner rim of the Battery Hatch. Ensure that it is evenly seated (Fig. 122).

△ **NOTE: The O-ring must be a genuine Oceanic part that can be purchased from an Authorized Oceanic Dealer. Use of any other O-ring will void the warranty.**

- Carefully place the Battery Hatch (with O-ring) into position on the rim of the Battery Compartment, then press it evenly and completely down into place.
- Maintain the Battery Hatch securely in place and turn it counter clockwise 10 degrees using the special Battery Hatch tool provided (Fig. 123A), or by pushing the lower portion to the right while pushing the upper portion to the left (Fig. 123B).

Transmitter Battery Installation

- Lightly lubricate the new Battery Cap O-ring with silicone grease and install it onto the Battery Cap. DO NOT roll the O-ring over the Threads, instead stretch it slightly to work it down over the slotted end of the Cap into the Groove at the Base of the Threads (Fig. 124).

Fig. 124 - Transmitter O-ring Installation

△ NOTE: The O-ring must be a genuine Oceanic part that can be purchased from an Authorized Oceanic Dealer. Use of any other O-ring will void the warranty.

- Place a new 3 volt, CR2, Lithium Battery (Duracell model DL-CR2 or equivalent) positive (+) side down into the Battery Compartment with the negative end facing up/out (Fig. 125).
- Ensure that the Battery is properly oriented and the Hatch O-ring is evenly seated around the Battery Hatch.
- Carefully place the Battery Hatch with Spring into the Housing and turn clockwise slowly by hand to ensure proper threading. Apply a coin and tighten until secure. The outer surface of the Battery Hatch should be flush with the outer surface of the Housing (Fig. 126).

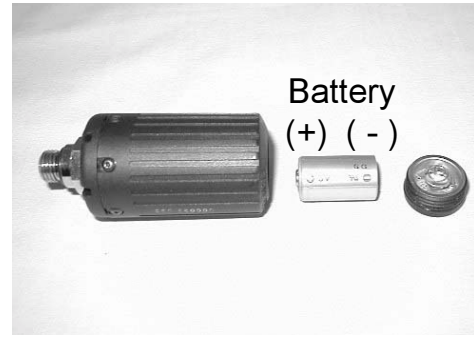


Fig. 125 - Transmitter Battery Orientation

Fig. 126 - Transmitter Battery Hatch Installed

ATOM System Testing

- Observe the LCD display to ensure it is consistently clear and sharp in contrast throughout the screen.
- Set the Date Time, Alternate Time, and Daily Alarm.
- Verify all set Points prior to diving.
- Pressurize the Regulator Assembly (and Transmitter).
- Verify that the Link icon is displayed.
- Press the S button for 2 seconds to check the Status screens.
- If any portions of the display are missing or appear dim, or if a Low Battery Condition is indicated, return your ATOM to an Authorized Oceanic Dealer for a complete evaluation before attempting to use it.

If your ATOM stops working for any reason while operating as a Dive Computer, it is important that you have anticipated this possibility and are prepared for it. This is an important reason for not pushing the no decompression and oxygen exposure limits, and a critical reason to avoid entering decompression. If you dive in situations where your trip would be ruined or your safety would be jeopardized by losing the use of your ATOM, a backup instrument system is highly recommended.

TRANSMITTER INSTALLATION on REGULATOR

To install the Transmitter on the Regulator First Stage:

- Remove the existing Pressure Gauge and High Pressure Hose, or the High Pressure Port Plug from the Port marked HP using the proper size Hex Key.
- Lightly lubricate the O-ring and Threads of the Transmitter fitting with a halocarbon based lubricant such as Christo-Lube MCG111 (provided in Oceanic Battery Kits).
- Thread the Transmitter clockwise by hand into the Regulator's HP Port (Fig. 127) and tighten until secure with a 5/8" open-end wrench.
- Attach the Regulator First Stage to a full Scuba Tank and pressurize by slowly opening the Tank Valve, listening for any indication of air leaking around the Fitting.
- If air leakage is present, DO NOT use, take the complete Regulator Assembly to an Authorized Oceanic dealer for inspection and service.

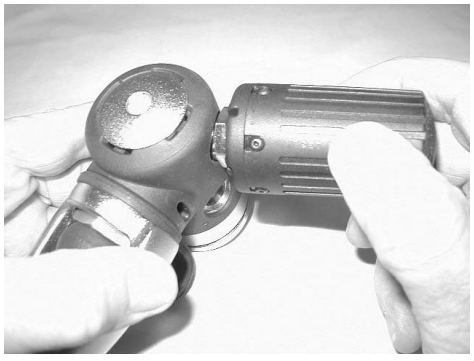


Fig. 127 -Threading Transmitter into Regulator

TRANSMITTER COMPATIBILITY WITH NITROX

When packaged and shipped from the factory, Oceanic ATOM Transmitters are rated for use with compressed Air and/or nitrogen-oxygen (Nitrox) breathing gas mixtures containing up to 99% O2 by volume and with 100% O2.

ALTITUDE SENSING AND ADJUSTMENT

Prior to the first dive of a series of repetitive dives, ALTITUDE (i.e., Ambient Pressure) is measured upon activation of Dive Surface Mode and every 15 minutes until a dive is made or operation reverts to Main Time after 2 hours.

- > While it is operating in Watch Modes after a dive, measurements are taken every 15 minutes during the 24 hour period after surfacing.
- > Measurements are only taken when the unit is dry.
- > Two readings are taken, the second reading 5 seconds after the first. The readings must be within 1 foot (30 cm) of each other to record that Ambient Pressure as the current ALTITUDE.

The Mathematical Model in the ATOM accounts for the reduced No Decompression dive Time available based on National Oceanic and Atmospheric Administration (NOAA) guidelines.

When diving in high altitude waters from 2,000 to 14,000 feet (610 to 4,270 meters), the ATOM automatically adjusts to these conditions providing corrected Depth, reduced No Decompression Times, and reduced Oxygen Accumulation Times at intervals of 1,000 feet (305 meters).

No adjustments are made during any time that the Wet Contacts are bridged.

At an elevation of 2,000 feet (610 meters), Depth Calibration automatically changes from feet of seawater to feet of fresh water. This is the first adjustment to the Algorithm.

NOTE: When the Conservative Factor feature is set ON, allowable dive times are calculated based upon the next higher 3,000 foot (915 meter) Altitude. All adjustments for Altitudes greater than 11,000 feet (3,355 meters)are then made to allowable dive times for 14,000 feet (4,270 meters). If the Conservative Factor is set ON while at Sea Level, calculations are based upon an Altitude of 3,000 feet.

The ATOM will not function as a Dive Computer above 14,000 feet (4,270 meters).

IMPERIAL NO DECOMPRESSION LIMITS (HOURS:MINUTES) AT ALTITUDE

Altitude (feet)	0` to 2000`	2001` to 3000`	3001` to 4000`	4001` to 5000`	5001` to 6000`	6001` to 7000`	7001` to 8000`	8001` to 9000`	9001` to 10000`	10001` to 11000`	11001` to 12000`	12001` to 13000`	13001` to 14000`
Depth (feet)													
30	4:20	3:35	3:21	3:07	2:55	2:45	2:36	2:28	2:21	2:15	2:10	2:04	1:58
40	2:17	1:53	1:43	1:36	1:30	1:25	1:20	1:16	1:12	1:09	1:06	1:03	1:01
50	1:21	1:07	1:03	1:00	0:58	0:55	0:52	0:48	0:45	0:43	0:41	0:39	0:37
60	0:57	0:46	0:43	0:40	0:38	0:36	0:34	0:33	0:31	0:30	0:29	0:28	0:27
70	0:40	0:33	0:31	0:30	0:28	0:27	0:26	0:24	0:23	0:22	0:20	0:19	0:18
80	0:30	0:26	0:24	0:23	0:21	0:20	0:19	0:18	0:17	0:16	0:16	0:14	0:13
90	0:24	0:20	0:19	0:18	0:17	0:16	0:15	0:14	0:13	0:12	0:11	0:10	0:10
100	0:19	0:16	0:15	0:14	0:13	0:12	0:11	0:10	0:10	0:09	0:09	0:08	0:08
110	0:16	0:13	0:12	0:11	0:10	0:09	0:09	0:08	0:08	0:08	0:07	0:07	0:07
120	0:13	0:10	0:09	0:09	0:08	0:08	0:08	0:07	0:07	0:07	0:06	0:06	0:06
130	0:11	0:09	0:08	0:08	0:07	0:07	0:07	0:06	0:06	0:06	0:06	0:05	0:05
140	0:09	0:07	0:07	0:07	0:06	0:06	0:06	0:06	0:05	0:05	0:05	0:05	0:05
150	0:08	0:07	0:06	0:06	0:06	0:05	0:05	0:05	0:05	0:05	0:04	0:04	0:04
160	0:07	0:06	0:06	0:05	0:05	0:05	0:05	0:05	0:04	0:04	0:04	0:04	0:04
170	0:07	0:05	0:05	0:05	0:05	0:04	0:04	0:04	0:04	0:04	0:04	0:04	0:03
180	0:06	0:05	0:05	0:05	0:04	0:04	0:04	0:04	0:04	0:04	0:03	0:03	0:03
190	0:05	0:05	0:04	0:04	0:04	0:04	0:04	0:04	0:03	0:03	0:03	0:03	0:03

METRIC NO DECOMPRESSION LIMITS (HOURS:MINUTES) AT ALTITUDE

Altitude (meters)	0` to 610`	611` to 915`	916` to 1220`	1221` to 1525`	1526` to 1830`	1831` to 2135`	2136` to 2440`	2441` to 2745`	2746` to 3050`	3051` to 3355`	3356` to 3660`	3661` to 3965`	3966` to 4270`
Depth (meters)													
9	4:43	3:51	3:37	3:24	3:10	2:58	2:48	2:39	2:31	2:24	2:18	2:12	2:07
12	2:24	2:03	1:52	1:44	1:37	1:30	1:25	1:21	1:17	1:13	1:10	1:07	1:04
15	1:25	1:10	1:06	1:03	1:00	0:57	0:55	0:52	0:49	0:46	0:43	0:41	0:39
18	0:59	0:49	0:45	0:42	0:40	0:38	0:36	0:34	0:32	0:31	0:30	0:29	0:28
21	0:41	0:34	0:33	0:31	0:29	0:28	0:27	0:26	0:24	0:23	0:21	0:20	0:19
24	0:32	0:27	0:26	0:24	0:22	0:21	0:20	0:19	0:18	0:17	0:16	0:15	0:14
27	0:25	0:21	0:19	0:18	0:17	0:16	0:16	0:14	0:13	0:12	0:12	0:11	0:10
30	0:20	0:17	0:16	0:15	0:13	0:12	0:12	0:11	0:10	0:10	0:09	0:09	0:08
33	0:17	0:14	0:12	0:11	0:11	0:10	0:09	0:09	0:08	0:08	0:08	0:07	0:07
36	0:14	0:11	0:10	0:09	0:09	0:08	0:08	0:07	0:07	0:07	0:06	0:06	0:06
39	0:11	0:09	0:08	0:08	0:07	0:07	0:07	0:06	0:06	0:06	0:06	0:05	0:05
42	0:09	0:08	0:07	0:07	0:07	0:06	0:06	0:06	0:05	0:05	0:05	0:05	0:05
45	0:08	0:07	0:06	0:06	0:06	0:06	0:05	0:05	0:05	0:05	0:05	0:04	0:04
48	0:07	0:06	0:06	0:06	0:05	0:05	0:05	0:05	0:04	0:04	0:04	0:04	0:04
51	0:06	0:06	0:05	0:05	0:05	0:05	0:04	0:04	0:04	0:04	0:04	0:04	0:04
54	0:06	0:05	0:05	0:05	0:04	0:04	0:04	0:04	0:04	0:04	0:03	0:03	0:03
57	0:05	0:05	0:04	0:04	0:04	0:04	0:04	0:04	0:03	0:03	0:03	0:03	0:03

WARNING: Prior to diving with the ATOM, you must also read and understand the Oceanic Dive Computer Safety and Reference Manual, Doc. No. 12-2262, which provides Important Warnings and Safety Recommendations as well as general product information.

SPECIFICATIONS

SPECIFICATIONS

CAN BE USED AS

- Watch
- Dive Computer (Air or Nitrox)
- Digital Depth Gauge/Timer
- With or without up to 3 Transmitters

NO DECOMPRESSION MODEL

Basis:

- Modified Haldanean Algorithm
- 12 tissue compartments

Data Base:

- Diving Science and Technology (DSAT) - Rogers/ Powell

Performance:

- Tissue compartment halftimes (mins.) Spencer's "M" values
  5, 10, 20, 40, 80, 120, 160, 200, 240, 320, 400, 480
- Reciprocal subsurface elimination
- 60 minute surface credit control for compartments faster than 60 minutes
- Tissue compartments tracked up to 24 hours after last dive

Decompression Capabilities (stop ceilings):

- 10, 20, 30, 40, 50, and 60 feet
  (3, 6, 9, 12, 15, and 18 meters)

Altitude Algorithm and Oxygen Exposure Limits:

- Based on NOAA tables

TRANSMITTERS

- Battery and Pressure check
  - > every 2 minutes when asleep
  - > every 2 seconds when awake
- Startup
  - > Pressure equal or greater than 120 PSI
  - > Battery equal or greater than 2.75 volts
- Shutdown
  - > Pressure less than 50 PSI

WATCH MODES

- Main Time (home)
  - > Set Time/Date
- Alternate Time (remote location)
  - > Set Alternate Time (hour differential)
- Countdown Timer
  - > Set Countdown Timer
- Chronograph (Stop Watch/Lap Timer)
  - > Start/Stop/Lap Recall/Reset
- Daily Alarm
  - > Set Time

DIVE COMPUTER SURFACE MODES

- Surface Mode
- Plan (30 to 190 feet / 9 to 57 meters)
- Time to Fly Countdown
- Time to Desaturation Countdown
- Dive Log (Preview, Nitrogen Data, and Oxygen Data)
- History
- Oxygen Data (after Nitrox dives)
- Battery/Tank Pressure Status

SPECIFICATIONS (CONTINUED)

DIVE COMPUTER SURFACE MODES (continued) -

	Factory Settings:
• Set D Group (Dive Data):	
> FO2 GAS1 (Air, 21 to 50%)	> Air
> FO2 GAS2 (Air, 21 to 100%)	> Air
> FO2 GAS3 (Air, 21 to 100%)	> Air
> FO2 Default (On/Off)	> On
> Receiver (On/Off)	> Off
> Digital Gauge Dive Mode (On/Off)	> Off
• Set A Group (Alarms):	
> Audible Alarm / LED Warning (On/Off)	> On
> Max Depth Alarm (30 to 330 feet /9 to 99 meters)	> 330 feet
> Elapsed Dive Time Alarm (:10 to 3:00 hr:min)	> 3:00 (hr:min)
> Max TLBG Alarm (1 to 5 segments)	> 5 segments (Deco)
> Dive Time Remaining Alarm (:00 to :20 min)	> :20 (min)
> Turn Press Alarm (Off, 1000 to 3000 PSI / 69 to 205 BAR)	> Off
> End Press Alarm (300 to 1500 PSI / 20 to 104 BAR)	> 300 PSI
> Max PO2 Alarm (1.20 to 1.60 ATA)	> 1.60 (ATA)
• Set U Group (Utilities):	
> Wet Activation (On/Off)	> On
> Units of Measure (Imperial / Metric)	> Imperial
> Safety Stop Time, Depth (Off/3/5 minutes, 10/15/20 FT, 3/4.5/6 M)	> 3:00 (min:sec)
> Conservative Factor (On/Off)	> Off
> Backlight Duration (0/5/10 seconds)	> :05 (sec)
> Sampling Rate (2/15/30/60 seconds, 2/5/10 feet, .5/1.5/3 meters)	> 15 (sec)
> Transmitter 1 Link Code (Off/On, 000000 to 999999)	> serial no.
> Transmitter 2 Link Code (Off/On, 000000 to 999999)	> serial no.
> Transmitter 3 Link Code (Off/On, 000000 to 999999)	> serial no.
> ATOM (Watch) Serial Number	> actual

SPECIFICATIONS (CONTINUED)

DIVE MODES

No Decompression Dive:
- Main - Current Depth, Dive Time Remaining, Max Depth, Elapsed Dive Time, TLBG
- Alternate #1 - Tank Identifier, Air Time Remaining, Tank Pressure, TLBG
- Alternate #2 - Gas Identifier, Current PO2, FO2 Set Point, Current Depth, O2BG
- Secondary - Time of Day, Day of Week, Temperature
- Safety Stop - Current Depth, Dive Time Remaining, Stop Depth, Stop Time, TLBG

Digital Gauge Mode:
- Main - Identifier, Current Depth, Max Depth, Elapsed Dive Time
- Alternate - Tank Identifier, Air Time Remaining, Tank Pressure
- Secondary - Time of Day, Day of Week, Temperature

Decompression Dive Mode:
- Main - Mode Identifier, Current Depth, Total Ascent Time, Stop Depth / Time, Full TLBG
- Alternate #1 - Tank Identifier, Air Time Remaining, Tank Pressure, Full TLBG
- Alternate #2 - Gas Identifier, Current PO2, FO2 Set Point, Current Depth, O2BG
- Secondary - Time of Day, Day of Week, Temperature

Violation Modes - Conditional, Delayed, and Immediate/Violation Gauge

High PO2 (1.20 to 1.60 ATA)

High Oxygen Accumulation (300 OTU per dive / 24 hr)

Gas Switch Preview - Gas Identifier, FO2 Set Point, Current Depth, TLBG

SPECIFICATIONS (CONTINUED)

DISPLAY RANGE/RESOLUTION

Numeric Displays:	Range:	Resolution:
• Dive Number	0 to 24	1
• Depth	0 to 330 ft (100 m)	1 ft (.1 m)
• Maximum Depth	330 ft (100 m)	1 ft (.1 m)
• Gas 1 FO2 Set Point	Air, 21 to 50 %	1 %
• Gas 2 FO2 Set Point	Air, 21 to 100 %	1 %
• Gas 2 FO2 Set Point	Air, 21 to 100 %	1 %
• PO2 Value	0.00 to 5.00 ATA	.01 ATA
• Dive Time Remaining	0:00 to 9:59 hr:min	1 minute
• Air Time Remaining	0:00 to 9:59 hr:min	1 minute
• Total Ascent Time	0:00 to 9:59 hr:min	1 minute
• Safety Stop Time	5:00 to 0:00 min:sec	1 second
• Decompression Stop Time	0:00 to 9:59 hr:min	1 minute
• Elapsed Dive Time	0:00 to 9:59 hr:min	1 minute
• Surface Interval Time	0:00 to 23:59 hr:min	1 minute
• Dive Log Surface Interval	0:00 to 23:59 hr:min	1 minute
• Time to Fly	23:50 to 0:00 hr:min* (* starting 10 min after the dive)	1 minute
• Time to Desaturate	23:50 max to 0:00 hr:min* (* starting 10 min. after the dive)	1 minute
• Temperature	0 to 140°F (-9 to 60°C)	1°
• Cylinder Pressure	0 to 5000 psi (352 BAR)	5 psi (.5 BAR)
• Time of Day	0:00:00 to 23:59:59 hr:min.sec	1 second
• Countdown Timer	23:59 to 0:00 hr:min	1 minute
• Chronograph	0:00:00.00 to 99:59:59.99 hr:min:sec.1/100 sec	1/100 second

Special Displays:	Occurrence
• Out of Range (- - -)	>330 feet (>100 meters)
• Violation Countdown Timer	23:50 to 0:00 hr:min (after violation)

SPECIFICATIONS (CONTINUED)

BAR GRAPH

Tissue Loading Bar Graph:	segments	**Oxygen (O2) Bar Graph:**	segments
• No Decompression zone	1 to 4	• Normal zone	1 to 4
• Decompression zone	5 (all)	• Danger zone	5 (all)

OPERATIONAL PERFORMANCE

Function:	Accuracy:
• Depth	±1% of full scale
• Timers	1 second per day

Dive Counter:
- Displays Dives #1 to 24, 0 if no dive made yet
- Resets to Dive #1, upon diving (after 24 hours with no dives)

Dive Log Mode:
- Stores 24 most recent dives in memory for viewing
- After 24 dives, adds 25th dive in memory and deletes the older dive

Altitude:
- Operational from sea level to 14,000 feet (4,270 meters) elevation
- Measures ambient pressure every 30 minutes in Watch Mode and when Dive Computer Mode is accessed, every 15 minutes while in Dive Computer Surface Modes.
- Does not measure ambient pressure when Wet.
- Compensates for Altitudes above sea level beginning at 2,000 feet (610 meters) elevation and every 1,000 feet (305 meters) higher.

Conservative Factor:
- Reduces NDLs to those for the Altitude 3,000 feet (915 meters) higher.

SPECIFICATIONS (CONTINUED)

OPERATIONAL PERFORMANCE (continued)

Power:

- ATOM (Watch) Battery 1 - 3 vdc, CR2430, Lithium battery
- Transmitter Battery 1 - 3 vdc, CR2, .75 Ahr, Lithium battery (Duracell model DL-CR2 or equivalent)
- Shelf life Up to 5 years
- Replacement User replaceable (annual recommended)
- Use Life (ATOM) 300 dive hours (if 3 - 1 hour dives per dive day)
- Use Life (Transmitter) 1500 dive hours (if 3 - 1 hour dives per dive day)

Battery Indicator:

- Warning - icon on solid at 2.75 volts, perform Status check routine, Battery change recommended
- Alarm - icon on flashing at 2.50 volts, perform Status check routine, change the reporting Battery

Dive Computer Mode Activation:

- Manual - push button (recommended), required if Wet Activation is set OFF.
- Automatic - by immersion in water (as a backup if set ON)
- Graphic WET indicates Activation Contacts are Wet (unit must be dried prior to transport or storage)
- Cannot be manually activated deeper than 4 feet (1.2 meters), if the Water Activation feature is set OFF.
- Cannot be activated at elevations higher than 14,000 feet (4,270 meters)
- Reverts to Main Time if no dive is made within 2 hours after entry into Surface Mode.
- Reverts to Main Time 2 hours after last dive.

Operating Temperature:

- Out of the water - between 20 °F and 140 °F (-6 and 60 °C).
- In the water - between 28 °F and 95 °F (-2 and 35 °C).
- At extremely low temperatures, the LCD may become sluggish, but this will not affect it's accuracy. If stored or transported in extremely low temperature areas (below freezing), you should warm the unit and its battery with body heat before diving.

Storage Temperature:

- Out of the water (in storage case provided) - between 14 °F and 158 °F (-8 and 70 °C).

OXYGEN EXPOSURE LIMITS
(from NOAA Diving Manual)

PO2 (ATA)	Maximum Duration for Single Exposure (Min)	(Hr)	Maximum Total Duration, 24 Hour Day (Min)	(Hr)
0.60	720	12.0	720	12.0
0.70	570	9.5	570	9.5
0.80	450	7.5	450	7.5
0.90	360	6.0	360	6.0
1.00	300	5.0	300	5.0
1.10	240	4.0	270	4.5
1.20	210	3.5	240	4.0
1.30	180	3.0	210	3.5
1.40	150	2.5	180	3.0
1.50	120	2.0	180	3.0
1.60	45	.75	150	2.0

⚠ WARNING: Prior to diving with the ATOM, you must also read and understand the Oceanic Dive Computer Safety and Reference Manual, Doc. No. 12-2262, which provides Important Warnings and Safety Recommendations as well as general product information.

RECORDS

INSPECTION / SERVICE RECORD

ATOM Serial Number: _____

Transmitter #1 Serial Number: _____

Transmitter #2 Serial Number: _____

Transmitter #3 Serial Number: _____

Date of Purchase: _____ Purchased from: _____

Below to be filled in by an Authorized Oceanic Dealer:

Date	Service Performed	Dealer / Technician

OCEANIC WORLD WIDE

OCEANIC USA
2002 Davis Street
San Leandro, CA 94577
Tel: 510/562-0500
Fax: 510/569-5404
Web site: http://www.OceanicWorldWide.com

Oceanic Germany - Wendelstein, Germany
Tel: 09129-9099780 Fax: 09129-9099789
E-mail: office@oceanic.de

Oceanic South Europe - Genova, Italy
Tel: 0039-010-834-51 Fax: 0039-010-834-52-50
E-mail: info@oceanicse.it

Oceanic SW, Ltd - Devon, United Kingdom
Tel: 44-1-404-89-1819 Fax: 44-1-404-89-1909
E-mail: info@oceanicuk.com

Oceanic France - Marseille, France
Tel: 33-491-25-27-45 Fax: 33-491-25-35-86
E-mail: oceanicfrance@wanadoo.fr

Oceanic International (Pacific) - Kapolei, Hawaii
Tel: 808-682-5488 Fax: 808-682-1068
E-mail: oceanichi@oceanicusa.com

Oceanic Diving Australia Pty. Ltd
Sorrento, Victoria, Australia
Tel: 61-3-5984-4770 Fax: 61-3-5984-4307
E-mail: sales@oceanicaus.com.au

Oceanic Asia-Pacific Pte. Ltd - Singapore
Tel: 65-779-3853 Fax: 65-779-3945
E-mail: info@oceanicasia.com.sg

Oceanic Japan - Yokohama, Japan
Tel: 045-575-6671 Fax: 045-575-6673
E-mail: oceanic@gol.com