PRO PLUS 3

DIVE COMPUTER

OPERATING MANUAL

CONTENTS

NOTICES

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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PATENT NOTICE
U.S. Patents have been issued, or applied for, to protect the following design features:
Data Sensing and Processing Device (U.S. Patent No. 4,882,678), Air Time Remaining (U.S. Patent No. 4,586,136 and 6,543,444), Variable Ascent Rate Indicator (U.S. Patent No. 5, 156, 055). 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 Pro Plus 3 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 Pro Plus 3 dive computer model is based upon the latest research and experiments in decompression theory. **Still, using the Pro Plus 3, 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.

Welcome

to

OCEANIC

and

THANK YOU

for choosing the

PRO PLUS 3

FEATURES

AND

FUNCTIONS

DISPLAY COMPONENTS

Tissue Loading Bar Graph

Variable Ascent Rate Indicator

Gas in use

Descend, Ascend, or Stop

Temp

Low Batt

A   S
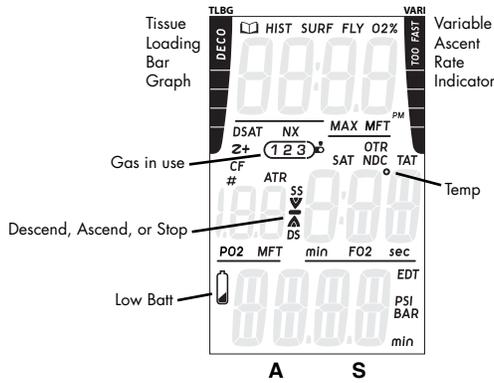
ICONS			ICONS	
HIST =	History Mode		OTR =	O2 Time Remaining
SURF =	Surface Time		SAT =	Desaturation Time
FLY =	Time to Fly		NDC =	No Deco Time Remaining
O2% =	% Saturation		TAT =	Total Ascent Time (Deco)
DSAT =	Algorithm		SS =	Safety Stop
Z+ =	Algorithm		DS =	Deep Stop
CF =	Conservative Factor		PO2 =	Partial Pressure of O2
# =	Dive Number		min =	Minutes
ATR =	Air Time Remaining		sec =	Seconds
NX =	Nitrox Mode		FO2 =	Fraction of O2 (%)
MAX =	Maximum		EDT =	Elapsed Dive Time
M =	Meters		PSI =	Pressure units (imperial)
FT =	Feet		BAR =	Pressure Units (metric)

OVERVIEW

Features >>

- 2 Control Buttons (A, S)
- User Replaceable Battery
- 6 Menus
- 27 Set Selections
- Variable Set Values
- Fresh/Sea Water selection
- 2 Operating Modes
- 3 Gas
- Warnings/Alarms
- Dual Algorithm

- No Deco Deep Stop
- No Deco Safety Stop
- Gauge Depths to 400 FT/120 M
- Altitude Compensation
- NDL Conservative Factor
- Variable Ascent Rate
- PC Settings Upload/Data Download
- Audible Alarm with flashing LED
- User Upgradable Firmware

INTERACTIVE CONTROL CONSOLE
The Interactive Control Console utilizes 2 control buttons that allow you to maneuver through the Pro Plus 3's unique system of menus.

The buttons are referred to as S and A.

- Left Front >> Advance (A)
- Right Front >> Select (S)

MENU SYSTEM
The LCD viewing area is used to display alpha numeric messages and measured values as well as Menu (group) type systems for selection of settings and various auxiliary functions.

The Menus (groups) include -

- NORM Main
- GAUG Main
- Set Gas
- Set Alarms
- Set Utilities
- Set Time
- Set Operating Mode

Each Menu sequence has a start (first) selection and a stop (last) selection. Upon entering a Menu, movement through it begins at the start (first) selection, then continues in a rolling manner showing one selection at a time.

- The sample at the right shows how a menu would look if all of the selections would be displayed on one screen.

Menu button action >>
A (< 2 sec) - to access and step forward through menu selections
A (hold) - to scroll forward through menu selections
S (< 2 sec) - to access or save selections

A (< 2 sec), while viewing the last selection in the menu, will revert to the first selection (such as Surface Main).

At any time while on the surface, depressing A and S simultaneously (2 sec) will revert operation to the Surface Main. Exception is during the first 10 minutes after surfacing from a dive.

**MAIN MENU
(group sequence)**

MAIN

ALT 1

ALT 2

ALT 3

FLY/SAT

PLAN

LOG

Set GAS

Set ALARMS

Set UTILITIES

Set TIME

SELECT OP MODE

HISTORY

SN

Sample Menu
(all selections shown)

SMARTGLO® Backlight

The Pro Plus 3 is configured with a sensor capable of measuring the intensity of ambient light.

The Backlight will only come on when light level is low.

To activate the SMARTGLO Backlight >> press the S (right) button.

- If ambient light level is low, the Backlight will activate and illuminate the display for button depression time* plus the Duration time set (5, 10, or 15 seconds), for a maximum of 25 seconds.

  *The Backlight will turn Off if S is depressed for more than 10 seconds.

- Press S again to activate as desired.

Extensive use of the Backlight reduces estimated Battery life. Also, the Backlight does not operate during a Low Battery Condition or when the Pro Plus 3 is connected to a PC.

AUDIBLE ALARM

When alarms strike, the Audible will beep 10 times, unless set Off. The Audible can be acknowledged and silenced by pressing S (< 2 sec).

An LED Warning Light, on end of the housing, is synchronized with the Audible and flashes as the Audible sounds. It will turn Off when the Alarm is silenced. The Audible and LED will not be active if the Audible is Set OFF.

Situations that will activate the Audible include -
** Items activate only in NORM mode.

- Descent deeper than the value set.
- Dive Time Remaining at the value set**.
- Air Time Remaining at 5 then 0 minutes.
- Tank Turn Pressure at the value set.
- Tank End Pressure at the value set.
- Elapsed Dive Time at the value set.
- PO2 at the value set for the Gas in use**.
- O2 at allowed limit for a single dive or day of diving, 300 OTU (100%)**.
- TLBG at the value set**.
- Ascent Rate exceeds 60 FPM (18 MPM) when deeper than 60 FT (18 M), or 30 FPM (9 MPM) at 60 FT (18 M) and shallower.
- Entry into Decompression**.
- Conditional Violation (above a required Deco Stop Depth for less than 5 minutes)**.
- Delayed Violation 1 (above a required Deco Stop Depth for more than 5 minutes)**.
- Delayed Violation 2 (a Deco Stop Depth greater than 60 FT/18 M is required)**.
- Delayed Violation 3 (Operating Depth of 330 FT/100 M is exceeded in NORM mode, or 400 FT/120 M in GAUG mode).

A single short beep (which cannot be disabled) sounds when -
- After 10 minutes on the surface after the Violation dive.

3 short beeps (which cannot be disabled) sound when -
- Ascent Rate is 51 to 60 FPM (15.1 to 18 MPM) when deeper than 60 FT (18 M), or 26 to 30 FPM (7.5 to 9 MPM) at 60 FT (18 M) and shallower.

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 -
- Ascent above a Deco Stop for more than 5 minutes.
- Deco requires a Stop Depth deeper than 60 FT/18 M or deeper.
- On the Surface during a Conditional Violation.

PC INTERFACE

Interface with a PC, to allow uploading settings and downloading data, is accomplished by connecting the Pro Plus 3 to a PC USB Port using the special Pro Plus 3 USB Interface Cable.

The software program together with the USB Driver required is on the Oceanlog CD, and can be downloaded from the OceanicWorldwide web site. The program's HELP** serves as the user manual which can be printed for personal use.

   ** Prior to attempting to Download data from your Pro Plus 3 or Upload Settings to it, review the HELP section of the Oceanlog program. Recommended is to print those sections of HELP that you consider appropriate for your Interface activities.

The Settings Upload portion of the Oceanlog program can be used to set/change Alarms, Utilities, and Time/Date, using the same Interface System. Gas related items (FO2, PO2 alarms) must be set using the control buttons.

Information available for retrieval (download) from the Pro Plus 3 to the PC Download portion of the program includes dive data such as dive number, surface interval time, maximum depth, elapsed dive time, no deco status, start date/time, start/end pressure, lowest temperature under water, sampling rate, dive profile, and set points.

The Oceanlog program also allows upgrade of select versions of the Pro Plus 3's firmware (operating system software) after which the Pro Plus 3 resets all operating data. Since the upgrades require reset of the Pro Plus 3, they are blocked during 24 hours after dives.

- *Refer to page 32 for more details relating to Oceanlog and PC Interface.*

POWER SUPPLY
- Battery >> (1) 3 vdc, CR2, Lithium battery
- Shelf life >> up to 5 years depending on specific battery
- Use life >> 50 dive hours if (1) 1 hour dives per dive day to 150 dive hours if (3) 1 hour dives per dive day
- Replacement >> by user (annual recommended)

BATTERY CHANGE

While the battery is being replaced, calculations and settings will be held in non volatile memory. Time and Date may need to be adjusted after the battery is installed.

PSM (POWER SAVER MODE)

Once 10 minutes elapse while the unit is activated and on the surface prior to conducting any dives, or once 10 minutes elapse after the post dive transition period* has ended, the unit enters PSM (Power Saver Mode).

PSM turns the display off until a button is pressed at which time it turns back on, restoring the screen displayed when it shut off.

During the time that the screen is off, all operations continue as normal in the background with current updated information displayed as soon as the screen comes on again.

*Transition Period (upon surfacing) -
- Operation shifts from Dive Mode to Surface Mode upon ascent to 2 FT (0.6 M) for 1 second.
- Making a descent during the first 10 minutes after surfacing from a dive is a continuation of that dive.
- A descent made after the 10 minute interval has elapsed is then considered a new dive.
- During the first 10 minutes after surfacing, the Surface Main screen will be displayed with Surface Interval time. Surface ALTs can be accessed to view other information pertaining to that dive.
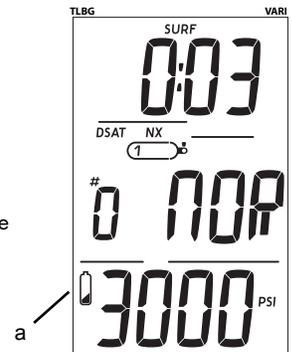
Fig. 1 - LOW BATTERY

LOW BATTERY WHILE ON THE SURFACE

<= 2.75 volts (warning level)
- DC functions continue, Backlight is disabled.
- Battery icon appears solid (Fig. 1a).

<=2.50 volts (Too Low - alarm level)
- All operations cease.
- Battery icon flashes for 5 seconds then the unit shuts off.

LOW BATTERY DURING A DIVE

<= 2.75 volts (warning level)
- DC functions continue, Backlight is disabled.
- Battery icon appears solid upon entry into Surface Mode.

<= 2.50 volts (Too Low - alarm level)
- DC functions continue, Backlight is disabled.
- Battery icon with graphics CHG >> BATT displayed flashing upon entry into Surface Mode (Fig. 2), then after 5 seconds the unit shuts off until the battery is changed.
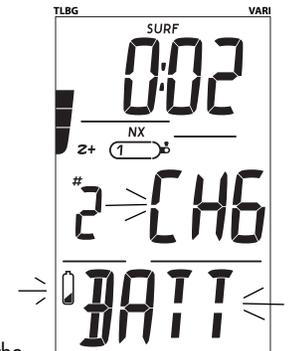
Fig. 2 - CHANGE BATTERY

OPERATING MODES

NORM Mode >> for Air and Nitrox SCUBA activity
GAUG Mode >> for SCUBA activity

If no previous dive has been taken within the past 24 hours, NORM is the default upon activation. Others accessed using the Surface Menu.

At any time while operating in Surface Modes, operation will enter the Dive Mode selected upon descent to 5 FT (1.5 M) for 5 seconds.

- When Wet Activation is set Off, Dive Mode will not be activated unless the unit is turned On while on the surface.
- When Wet Activation is set On, immersion in water will activate the unit which will then enter the Dive Mode selected upon descent.

Operation will revert from Dive Mode to Surface Mode upon ascent to 2 FT (0.6 M) for 1 second. During the first 10 minutes after a dive, the Surface ALT screens an be accessed, with access to other modes or screens allowed only after the 10 minutes elapse.

- A descent during the first 10 minutes after surfacing from a dive is a continuation of that dive.
- After the 10 minute interval has elapsed, the normal Surface Main will be displayed and a descent is then considered a new dive.
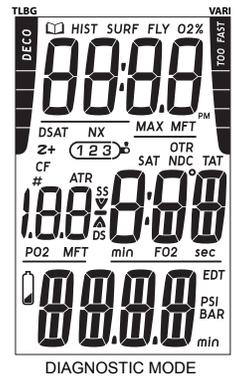
NORM

SURFACE MODES

ACTIVATION

To activate the Pro Plus 3, press/release either button.
- The unit will enter Diagnostic Mode displaying all segments of the LCD as 8's, followed by dashes (- -), then a countdown from 9 to 0. It checks the display and voltage to ensure that everything is within tolerance.
- After manual activation, it will also check the ambient barometric pressure, and calibrate its present depth as 0.
- At elevations of 3,001 feet (916 meters) or higher, it will adjust depth calibration for the higher altitude.

The Pro Plus 3 is configured with contacts located on the stems of the buttons and pins of the PC Data Port that will automatically activate the unit and cause it to enter dive mode when the contacts become wet and it senses depth of 5 FT (1.5 M).

After activation and diagnostics, the Pro Plus 3 will enter NORM Surface Mode displaying the Main screen and allow access to the NORM Surface Menu.

DIAGNOSTIC MODE

NORM Surface Main Menu, button action -
- A (< 2 sec) >> step forward through Menu items.
- A (hold) >> scroll forward through Menu items.
- S (press) >> activate the SMARTGLO Backlight.
- 2 min (of no button action) >> revert to Main.

NORM SURF MAIN, information includes (Fig. 3):
> Surface Interval time (hr:min) with SURF icon; if no dive yet, this is time since activation.
> Z+ (or DSAT) icon, algorithm selected.
> CF icon, if Conservative Factor is set On.
> NX icon, if FO2 for any gas is set for Nitrox.
> Gas (tank) 1 icon, default on surface.
> Dive number with # icon, up to 24 for that operating period; #0 if no dive made yet.
> Graphic NOR (operating mode).
> Tank 1 Pressure with PSI or BAR) icon.
> TLBG with icon, if any after a dive
> Battery icon, if voltage is low

- A (< 2 sec) to access ALT 1.
- A (hold) to scroll forward through Menu items.
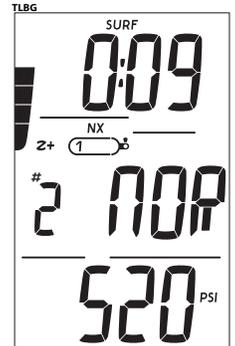- S (press) to activate SMARTGLO Backlight.

Fig. 3 - NORM SURF MAIN
(> 10 min after dive 1)

NORM SURF ALT 1, information includes (Fig. 4):
> Max Depth* with MAX and FT (or M) icons.
> Graphic LAST, indicating that data is for the dive previously conducted while still in NORM mode
> EDT* (Elapsed Dive Time up to 999 min) with EDT and min icons

dashes if no previous dive conducted

- A (< 2 sec) to access ALT 2.
- A (hold) to scroll forward through Menu items.
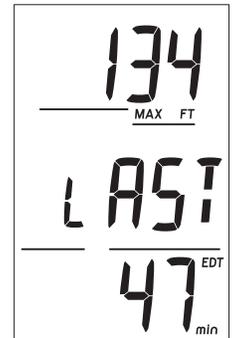- S (press) to activate SMARTGLO Backlight.

Fig. 4 - NORM SURF ALT 1
(Last dive's data)

NORM SURF ALT 2, information includes (Fig. 5):
> Time of Day (hr:min) with AM or PM icon if 12 Hour Format; no icon if 24 Hour Format.
> Temperature with °F (or °C).
> Altitude graphic, if EL2 (to EL7), blank if Sea level.

- A (< 2 sec) to access ALT 3 (if a Nitrox dive has been conducted, bypassed to Fly/Sat if Air).
- A (hold) to scroll forward through Menu items.
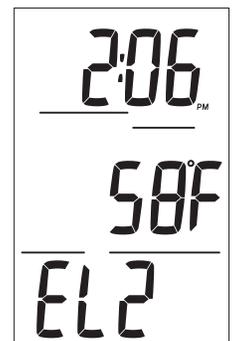- S (press) to activate SMARTGLO Backlight.

Fig. 5 - NORM SURF ALT 2

NORM SURF ALT 3, information includes (Fig. 6):
> Current O2 (%) with icon.
> NX and Gas (tank) 1 icons.
> PO2 alarm value set for Gas 1 with. icon.
> FO2 set for Gas 1 with icon.

- A (< 2 sec) to access Fly/Sat.
- A (hold) to scroll forward through Menu items.
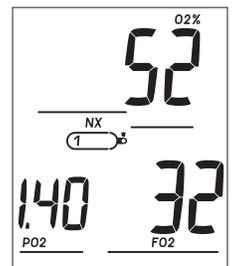- S (press) to activate SMARTGLO Backlight.

Fig. 6 - NORM SURF ALT 3
(only if Nitrox)

FLY/SAT TIME

Time to Fly is a countdown timer that begins counting down from 23:50 to 0:00 (hr:min) 10 minutes after surfacing from a dive.

Time to Desaturate, also a countdown timer, provides calculated time for tissue desaturation at sea level taking into consideration the Conservation Factor setting. It also begins counting down 10 minutes after surfacing from a NORM dive, counting down 9:59 to 0:00 (hr:min).

When the SAT countdown reaches 0:00, which will generally occur prior to the FLY countdown reaching 0:00, it will remain on the display until the FLY countdown reaches 0:00.

> When other screens are accessed, the FLY and SAT countdowns continue in the background.
> Dsat is not displayed after a Gauge or Violation dive.
> Desaturation requiring times greater than 24 hours will display 24 - until it decreases to 9:59 (hr:min) .
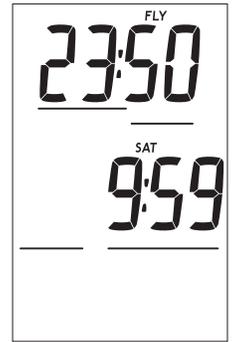> In the event that Time to Desaturate still remains at the end of 24 hours, any remaining time will be cleared.

Fly/Sat, information includes (Fig. 7):
> Time to Fly (hr:min) with icon, - : - - if no dive yet.
> Time to Desaturation (hr:min) with SAT icon; - : - - if no dive yet, 0:00 if no time remaining.

• A (< 2 sec) to access Plan.
• A (hold) to scroll forward through Menu items.
• S (press) to activate SMARTGLO Backlight.

Fig. 7 - FLY/SAT
(10 min after dive)

PLAN MODE (NORM)

No Deco Dive Times (NDLs/OTLs) in Plan Mode are based on -
> the algorithm selected (DSAT or Z+).
> the FO2 set for Gas 1.
> the setting for the Conservative Factor (Off or On*)
> any residual nitrogen or oxygen remaining from previous NORM dives.

When the Conservative Factor is set On, Dive times are reduced to the values of the next higher 3000 foot (915 meter) Altitude. Refer to tables in back.

Plan Lead-in, information includes (Fig. 8A, B):
> Max Depth allowed for the PO2 alarm value set for Gas 1 with MAX and FT (or M) icons, blank if FO2 is set for Air.
> Z+ (or DSAT) icon, algorithm selected.
> NX icon, if Nitrox.
> CF icon, if set On.
> Gas 1 icon.
> PO2 alarm value set for Gas 1 with icon, blank if Air
> FO2 set for Gas 1 with icon, graphic Air or numeric value (21 to 100).
> Graphic PLAN.

• A (< 2 sec) to access Log.
• A (hold) to scroll forward through Menu items.
• S (< 2 sec) to access PDPS.
• S (press) to activate SMARTGLO Backlight.

Fig. 8A - PLAN LEAD-IN
(Gas 1 set for Air)

PDPS (Pre Dive Planning Sequence)

The PDPS displays Depths and allowable No Deco Dive Times (up to 999 minutes), NDLs if nitrogen is in control or OTLs if O2 is in control.

It will sequence through PDPS screens displaying Depths from 30 to 190 FT (9 to 57 M) with Plan times* based upon the previous dive profiles in a series of repetitive dives and taking into account descent and ascent rates of 60 FPM (18 MPM).

If less than 1 minute time is available, dashes will be displayed for time, and Depth values will flash.

Fig. 8B - PLAN LEAD-IN
(Gas 1 set for Nitrox)

PDPS, information includes (Fig. 9):
> Plan Depth value with FT (or M) icon.
> Z+ (or DSAT) icon, algorithm selected.
> NX icon, if Nitrox.
> CF icon, if set On.
> Gas 1 icon.
> Dive Time (minutes) allowed with NDC (or O2) and min icons.
> Graphic PLAN.

• A (< 2 sec) to step up through PDPS screens.
• A (hold) to scroll up through PDPS screens at 8 per second from 30 to 190 FT (9 to 57 M) in increments of 10 FT (3 M).
• S (< 2 sec) to revert to the Lead-in after the last screen.
• S (2 sec) to revert to the Lead-in screen.
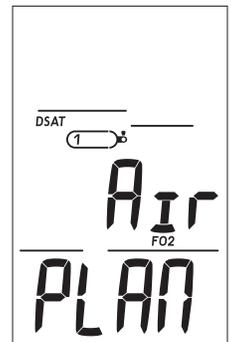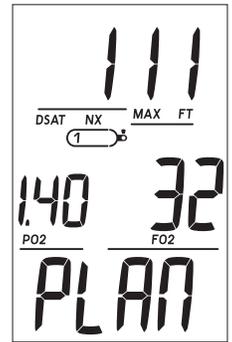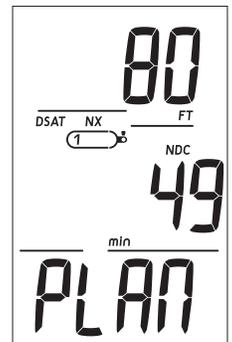• S (press) to activate SMARTGLO Backlight.

Fig. 9 - PDPS
(nitrogen control)

LOG MODE (NORM/GAUG)

Information from the latest 24 NORM and/or GAUG dives is stored for viewing.

> After exceeding 24 dives, the most recent dive is stored while the oldest is deleted.
> Dives are numbered from 1 to 24 starting each time NORM (or GAUG) Dive Mode is activated. After the post dive 24 hour period has elapsed and the unit shuts off, the first dive of the next activation period will be #1.
> In the event that a dive's elapsed time (EDT) exceeds 599 (min), the data at the 599 interval is recorded in the Log upon surfacing of the unit.

Log sequence >> Lead-in >> Preview >> Data 1 >> Data 2 >> Data 3

Log Lead-in, information includes (Fig. 10):

> Log (book) icon.
> Graphics Goto LOG.

• A (< 2 sec) to access Set Gas Lead-in.
• S (< 2 sec) to access Log Preview screen of the most recent dive.
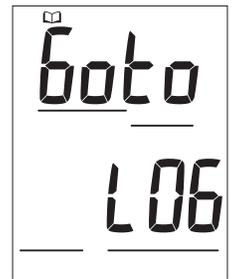• S (press) to activate SMARTGLO Backlight.

Fig. 10 - LOG LEAD-IN

Log Preview, information includes (Fig. 11):

> Log (book) icon.
> Time of Day the dive began (hr:min) with AM (or PM) icon if 12 Hour Format; or graphics NONE YET.
> Dive number (1 to 24, 0 if no dive yet) with # icon.
> Graphic NOR (or GAU or VIO).
> Date (month.day or day.month), the dive was conducted; or blank if none recorded.

• A (< 2 sec) to step through Preview screens from the most recent to the oldest recorded.
• A (hold) to scroll through Preview screens from the most recent to the oldest recorded at a rate of 8 per second.
• S (< 2 sec) to access Data 1 for the dive Preview displayed.
• S (2 sec) to revert to the Lead-in screen.
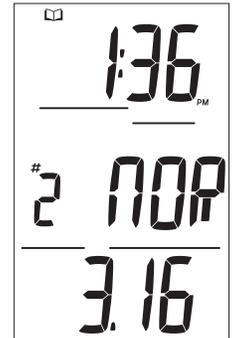• S (press) to activate SMARTGLO Backlight.

Fig. 11 - LOG PREVIEW
(after NORM dive 2)

Log Data 1, information includes (Fig. 12):

> Log (book) icon.
> Pre dive SI (hr:min), dashes (- : - -) if no previous dive that activation period, with SURF icon.
> Temperature (minimum that dive) with °F (or °C).
> Graphic SEA (or EL2 to EL7), indicating the Altitude at which the dive was conducted.

• S (< 2 sec) to access Data 2 for that dive.
• S (2 sec) to revert to the Data 1 screen.
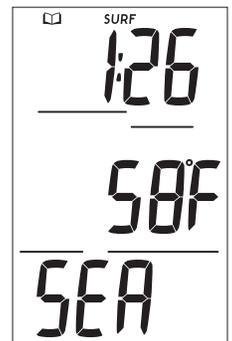• S (press) to activate SMARTGLO Backlight.

Fig. 12 - LOG DATA 1

Log Data 2, information includes (Fig. 13):

> Log (book) icon.
> Max Depth with MAX and FT (or M) icons.
> NX, Z+ (or DSAT), CF icons - those that apply.
> Total Ascent Time (min) with TAT and min icons, if Deco; blank if No Deco.
> EDT with EDT and min icons.
> TLBG with the max accumulation segment flashing, others fixed up to end of dive accumulation. All segments flashing if a Delayed Violation. No TLBG if Gauge Mode.
> VARI, max Ascent Rate sustained for 4 sec.

• S (< 2 sec) to access Data 3 for that dive; or revert to Preview if a GAUG dive.
• S (2 sec) to revert to the Data 2 screen.
• S (press) to activate SMARTGLO Backlight.
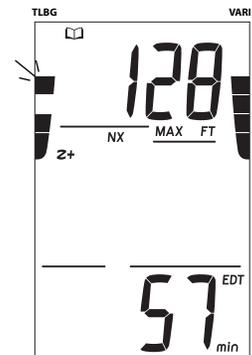
Fig. 13 - LOG DATA 2

Log Data 3, information includes (Fig. 14):

> Log (book) icon
> O2% at end of dive with icon, 2 dashes if Violation Gauge Mode.
> NX, Z+ (or DSAT), CF icons - those that apply.
> Gas 1 icon, default start gas.
> PO2 (ATA) with icon, max level reached during the dive.
> FO2 for Gas 1 with icon.

• S (< 2 sec) to revert to the Preview screen.
• S (2 sec) to revert to the Data 2 screen.
• S (press) to activate SMARTGLO Backlight.

Fig. 14 - LOG DATA 3

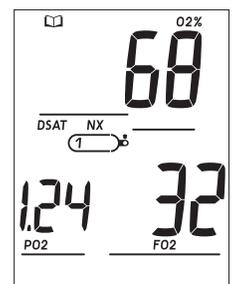## SET GAS (NORM FO2 & PO2 ALARMS)
Sequence >> Gas 1 >> Gas 2 >> Gas 3 >> FO2 50% Default.

With the FO2 50% Default selection set Off, the Pro Plus 3 will remain set at the last FO2 set point for that period of activation.

When the FO2 50% Default is set On and FO2 is set for a numerical value, 10 minutes on the surface after that dive the FO2 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 FO2 is set before the dive.

FO2 will continue 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 set Off.

FO2 set to Air
The default FO2 settings for Gas 1, 2, and 3 each new activation period will be Air with Gas 2 and 3 also set Off.

When FO2 is set for Air -
> calculations are the same as when FO2 is set for 21%.
> it will remain set for Air until set for a numerical FO2 value (21 to 50%).
> O2 data (such as PO2, O2%) will not be displayed at any time during the dive, on the surface, or during the PDPS.
> MODs (Max Operating Depths) affected by the PO2 limit will not be displayed on the FO2 set screen.
> internally, it will keep track of O2 data in case FO2 is subsequently set for Nitrox for repetitive dives.

FO2 set for Nitrox
When FO2 is set for a numerical value (21 to 100%), the dive is considered Nitrox and the NX icon will be displayed.
> The Air option will not be displayed as a FO2 set selection until 24 hours elapse after the last dive.

Set FO2 GAS LEAD-IN, information includes (Fig. 15):
> Graphics Goto Set GAS.

• A (< 2 sec) to step forward to Set Alarms Lead-in.
• S (< 2 sec) to access Set Gas 1.

Set Gas 1, information includes (Fig. 16, 17):
> Max Depth allowed for the PO2 alarm set with MAX and FT (or M) icons, blank if Air.
> NX, Z+ (or DSAT), CF icons - those that apply.
> Gas 1 icon.
> PO2 alarm value set (ATA) for Gas 1 with icon, blank if Air.
> Graphic Air or FO2 Nitrox value, flashing, with icon.
> Graphic GAS 1.

• A (hold) to scroll upward through FO2 set points at a rate of 8 per second from Air (default) to 21 through 100 (%) in increments of 1%.
> The scroll will stop when A is released, or at 32, then 50, then 80%, (even if A is held depressed). Press/hold A again will resume the scroll through 100, then stop at Air (or 21%).
• A (< 2 sec) to step upward through FO2 set points one at a time.
• S (< 2 sec) to save the FO2 setting and flash the PO2 digits if Nitrox, or access Set Gas 2 if Air.
• S (2 sec) to revert to Set Gas Lead-in.

• A (< 2 sec) to step upward through PO2 Alarm set points one at a time from 1.00 to 1.60 in increments of .05.
• S (< 2 sec) to save the PO2 Alarm setting and access Set Gas 2.
• S (2 sec) to revert to Set Gas Lead-in.

Set Gas 2 (3 similar), information includes (similar to Fig. 16, 17):
> Max Depth allowed for the PO2 alarm set with MAX and FT (or M) icons, blank if OFF or Air.
> NX, Z+ (or DSAT), CF icons - those that apply.
> Gas 2 icon.
> PO2 alarm value set (ATA) for Gas 2 with icon, blank if OFF or Air.
> Graphic OFF* or Air or FO2 Nitrox value, flashing, with icon.
> Graphic GAS 2.

OFF prevents the Gas from being displayed as a switch option during dives. If Gas 2 is set Off, Gas 3 is automatically set Off. An OFF setting does not affect the FO2 or PO2 Alarm values set.

• A (hold) to scroll upward through FO2 set points at a rate of 8 per second from OFF to Air to 21 through 100 (%) in increments of 1%.
> The scroll will stop when A is released, or at 32, then 50, then 80%, (even if A is held depressed). Press/hold A again will resume the scroll through 100, then stop at OFF or Air (or 21%).
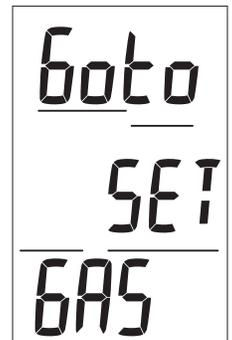• A (< 2 sec) to step upward through FO2 set points one at a time.
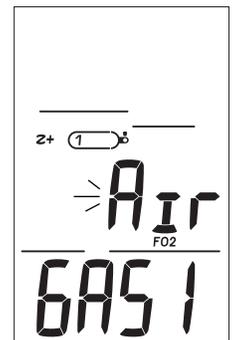

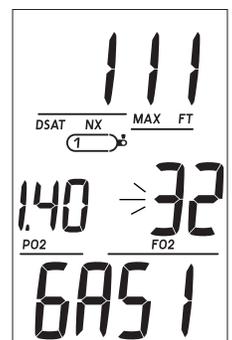Fig. 15 - Set F LEAD-IN

Fig. 16 - Set FO2 (Air)

Fig. 17 - Set FO2 (Nitrox)

- S (< 2 sec) to save the FO2 setting and flash the PO2 digits if Nitrox, or access Set Gas 3 if OFF or Air.
- S (2 sec) to revert to Set Gas Lead-in.

- A (< 2 sec) to step upward through PO2 Alarm set points one at a time from 1.00 to 1.60 in increments of .05.
- S (< 2 sec) to save the PO2 Alarm setting and access Set Gas 3. *After setting Gas 3, access is to Set FO2 Default if OFF.*
- S (2 sec) to revert to Set Gas Lead-in.

Set FO2 Default, information includes (Fig. 18):
> Graphics FO2 DFLT.
> Graphic OFF (or ON) flashing.

- A (< 2 sec) to toggle between OFF and ON.
- S (< 2 sec) to save the setting and revert to Set Gas Lead-in.
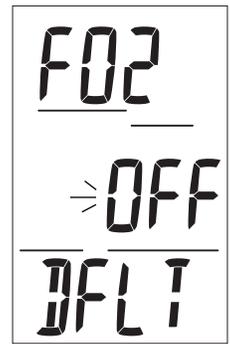- S (2 sec) to revert to Set Gas 3.

Fig. 18 - Set FO2 DEFAULT

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SET ALARMS (**NORM/GAUG ALARMS)**
Sequence >> Lead-in >> Aud >> Depth >> EDT >> TLBG* >> DTR* >> Turn >> End.

*Items apply to NORM only

Set points remain as set until changed.

Set Alarms Lead-in, information includes (Fig. 19):
> Graphics Goto Set ALRM.

- A (< 2 sec) to step forward to Set Utilities Lead-in.
- S (< 2 sec) to access Set Audible Alarm.

Fig. 19 - Set ALARMS LEAD-IN

Set Audible Alarm, information includes (Fig. 20):
> Graphic OFF (or ON) flashing.
> Graphic AUD.

- A (< 2 sec) to toggle between OFF and ON.
- S (< 2 sec) to save the setting and access Set Depth Alarm.
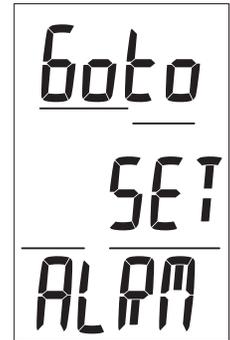- S (2 sec) to revert to Set Alarms Lead-in.

Fig. 20 - Set AUD AL

Set Depth Alarm, information includes (Fig. 21):
> Graphic OFF (or ON) flashing.
> Depth value with MAX and FT (or M) icons, last value saved.
> Graphic DPTH.

- A (< 2 sec) to step through selections OFF, ON, and Set, one at a time.
- S (< 2 sec) to save the selection and flash the Depth digits, if Set is saved; or access Set EDT Alarm, if OFF or ON is saved.
- S (2 sec) to step back to Set Audible Alarm.

- A (hold) to scroll upward through Depth set points at a rate of 8 per second from 30 to 330 FT (10 to 100 M) in increments of 10 FT (1 M).
- A (< 2 sec) to step through Depth set points one at a time.
- S (< 2 sec) to save the setting and flash Set, allowing ON or OFF to be selected/saved.
- S (2 sec) to step back to Set Audible Alarm.

Fig. 21 - Set DEPTH AL

Set EDT Alarm, information includes (Fig. 22):
> Graphic OFF (or ON) flashing.
> Time with EDT and min icons, last value saved.

- A (< 2 sec) to step through selections OFF, ON, and Set, one at a time.
- S (< 2 sec) to save the selection and flash the Time digits, if Set is saved; or access Set TLBG Alarm, if OFF or ON is saved.
- S (2 sec) to step back to Set Depth Alarm.

- A (hold) to scroll upward through Time set points at a rate of 8 per second from 10 through 180 (min) in increments of 5 min.
- A (< 2 sec) to step through Time set points one at a time.
- S (< 2 sec) to save the setting and flash Set, allowing ON or OFF to be selected/saved.
- S (2 sec) to step back to Set Depth Alarm.

Fig. 22 - Set EDT AL

Set TLBG Alarm, information includes (Fig. 23):
> Graphic OFF (or ON) flashing.
> TLBG, last value saved (number of segments).
> Graphic TLBG.

- A (< 2 sec) to step through selections OFF, ON, and Set, one at a time.
- S (< 2 sec) to save the selection and flash the TLBG segments, if Set is saved; or access Set DTR Alarm, if OFF or ON is saved.
- S (2 sec) to step back to Set EDT Alarm.

- A (< 2 sec) to step through TLBG set points one segment at a time.
- S (< 2 sec) to save the setting and flash Set, allowing ON or OFF to be selected/saved.
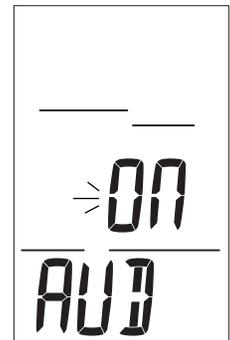- S (2 sec) to step back to Set EDT Alarm.

Fig. 23 - Set TLBG AL

Set DTR Alarm, information includes (Fig. 24):
> Graphic OFF (or ON) flashing.
> Time with NDC, OTR, and min icons, last time value saved.
> Graphic DTR.

- A (< 2 sec) to step through selections OFF, ON, and Set, one at a time.
- S (< 2 sec) to save the selection and flash the Time digits, if Set is saved; or access Set Turn Alarm, if OFF or ON is saved.
- S (2 sec) to step back to Set TLBG Alarm.

- A (hold) to scroll upward through Time set points at a rate of 8 per second from 5 through 20 (min) in increments of 1 min.
- A (< 2 sec) to step through Time set points one at a time.
- S (< 2 sec) to save the setting and flash Set, allowing ON or OFF to be selected/saved.
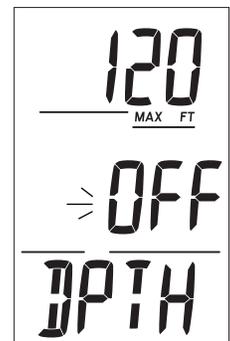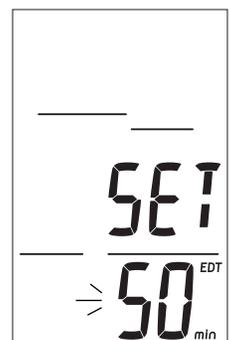- S (2 sec) to step back to Set TLBG Alarm.
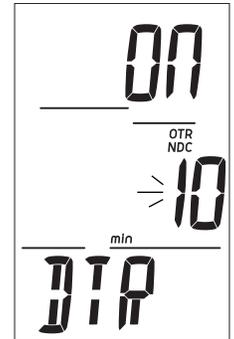
Fig. 24 - Set DTR AL

Set Turn Pressure Alarm, information includes (Fig. 25):
> Graphic turn.
> Graphic OFF (or ON) flashing.
> Tank Pressure with PSI (or BAR) icon, last value saved.

- A (< 2 sec) to step through selections OFF, ON, and Set, one at a time.
- S (< 2 sec) to save the selection and flash the Pressure digits, if Set is saved; or access Set End Alarm, if OFF or ON is saved.
- S (2 sec) to step back to Set DTR Alarm.

- A (hold) to scroll upward through Pressure set points at a rate of 8 per second from 1000 through 3000 PSI (70 to 205 BAR) in increments of 250 PSI (5 BAR).
- A (< 2 sec) to step through set points one at a time.
- S (< 2 sec) to save the setting and flash Set, allowing ON or OFF to be selected/saved.
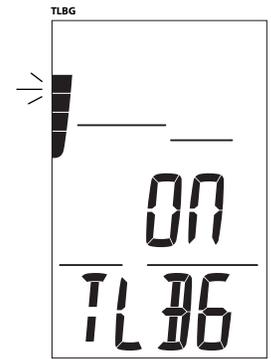- S (2 sec) to step back to Set DTR Alarm.

Fig. 25 - Set TURN AL

Set End Pressure Alarm, information includes (Fig. 26):
> Graphic turn.
> Graphic OFF (or ON) flashing.
> Tank Pressure with PSI (or BAR) icon, last value saved.

- A (< 2 sec) to step through selections OFF, ON, and Set, one at a time.
- S (< 2 sec) to save the selection and flash the Pressure digits, if Set is saved; or revert to Set Alarms Lead-in, if OFF or ON is saved.
- S (2 sec) to step back to Set Turn Alarm.

- A (hold) to scroll upward through Pressure set points at a rate of 8 per second from 500 through 1500 PSI (20 to 105 BAR) in increments of 100 PSI (5 BAR).
- A (< 2 sec) to step through set points one at a time.
- S (< 2 sec) to save the setting and flash Set, allowing ON or OFF to be selected/saved.
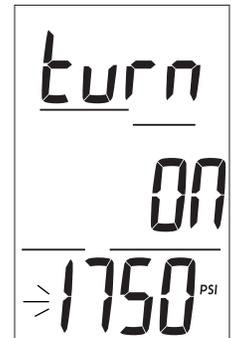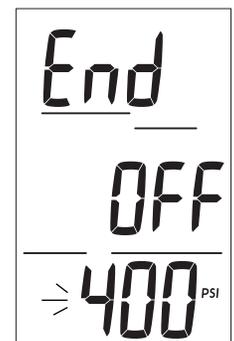- S (2 sec) to step back to Set Turn Alarm.

Fig. 26 - Set END AL

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SET UTILITIES (NORM/GAUG)

Sequence >> Lead-in >> Water Type >> Units >> DS* >> SS* >> Algo* >> CF* >> Glo >> SR.

Items apply to NORM only.

Set points remain as set until changed.

Set Utilities Lead-in, information includes (Fig. 27):
> Graphics Goto Set UTIL.

• A (< 2 sec) to step forward to Set Time Lead-in.
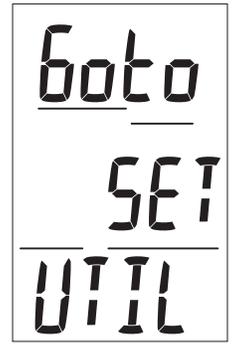• S (< 2 sec) to access Set Water Type.

Fig. 27 - Set UTILITIES LEAD-IN

Set Water Type, information includes (Fig. 28):
> Graphics H2O TYPE.
> Graphic FrESH (or SEA) flashing.

• A (< 2 sec) to toggle between Fresh and Sea.
• S (< 2 sec) to save the setting and access Set Units.
• S (2 sec) to step back to Set Utilities Lead-in.
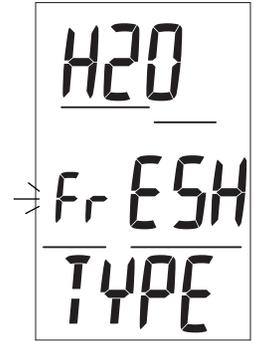
Fig. 28 - Set WATER TYPE

Set Units, information includes (Fig. 29):
> Graphic UNIT.
> Graphic °F (or °C) with FT and PSI (or M and BAR) icons, flashing.

• A (< 2 sec) to toggle between Imperial and Metric units..
• S (< 2 sec) to save the setting and access Set DS.
• S (2 sec) to step back to Set Water Type.

Fig. 29 - Set UNITS

Set Deep Stop (DS), information includes (Fig. 30):
> Graphics dEEP STOP with Stop arrow/bar and DS icons.
> Graphic OFF (or ON) flashing.

• A (< 2 sec) to toggle between OFF and ON.
• S (< 2 sec) to save the setting and access Set SS.
• S (2 sec) to step back to Set Units.

Set Safety Stop (SS), information includes (Fig. 31A/B):
> Graphics SAFE STOP with Stop arrow/bar and SS icons.
> Graphic OFF (or ON) flashing, or graphic TMR with ON flashing

• A (< 2 sec) to step through the selections OFF, ON, Set.
• S (< 2 sec) to save the setting.
• S (2 sec) to step back to Set DS.

>> If OFF or ON is selected, operation will access Set Algorithm.
>> If Set is selected, Stop Depth with FT (or M) icon and Time (min:sec) with min icon are displayed with the Time digits flashing.

• A (< 2 sec) to toggle Stop Time between 3:00 and 5:00 (min:sec).
• S (< 2 sec) to save the Stop Time setting and flash the Stop Depth digits.
• A (< 2 sec) to step through Depth settings of 10, 15, and 20 FT (or 3, 4, 5, and 6 M) one at a time
• S (< 2 sec) to save the setting and flash Set, allowing ON or OFF to be selected/saved.

Fig. 30 - Set DS

Fig. 31A - Set SS

Fig. 31B - Set SS
TIME/DEPTH

Set Algorithm, information includes (Fig. 32):
> Graphics SEL and ALGO.
> Z+ (or DSAT) icon, flashing.

- A (< 2 sec) to toggle Z+ and DSAT.
- S (< 2 sec) to save the setting and access Set CF.
- S (2 sec) to step back to Set SS.

This feature allows selection of the algorithm to be used for nitrogen and oxygen calculations for Plan and DTR values. The setting locks in for 24 hours after NORM dives.
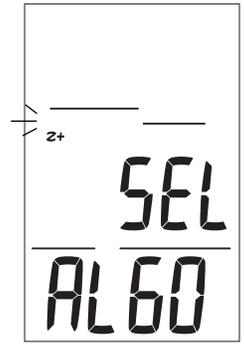
Fig. 32 - Set ALGORITHM

Set Conservative Factor (CF), information includes (Fig. 33):
> Graphics CONS FACT with CF icon.
> Graphic OFF (or ON), flashing.

- A (< 2 sec) to toggle between OFF and ON.
- S (< 2 sec) to save the setting and access Set Glo.
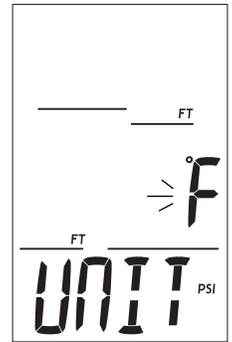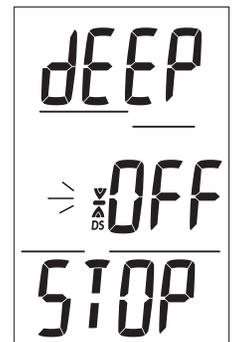- S (2 sec) to step back to Set Algorithm.

When CF is set On, NDLs are reduced to values equivalent to those that would be available at the next higher 3000 foot (915 meter) Altitude. Refer to tables in the back of this manual.
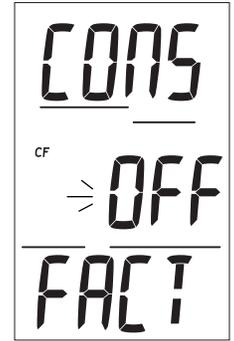
Fig. 33 - Set CF

Set Backlight Duration (Glo), information includes (Fig. 34):
> Graphics GLO DURA.
> Graphic OFF (or ON), flashing.

- A (< 2 sec) to step through the selections OFF, ON, Set.
- S (< 2 sec) to save the setting.
- S (2 sec) to step back to Set CF.

>> If OFF or ON is selected, operation will access Set SR.
>> If Set is selected, Duration Time (seconds) will flash in place of Set with sec icon.

- A (< 2 sec) to step through Time settings of 5, 10, and 15 (sec).
- S (< 2 sec) to save the setting and flash Set, allowing ON or OFF to be selected/saved.

Backlight (Glo) Duration is the time the backlight will remain On after S is released (OFF = no additional time.).
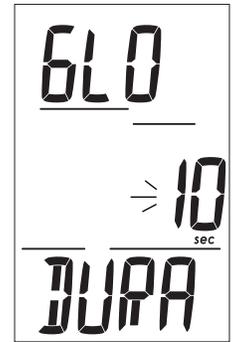
Fig. 34 - Set GLO

Set Sampling Rate (SR), information includes (Fig. 35):
> Graphics PC SAMP.
> Time interval (sec), flashing.

- A (< 2 sec) to step through Time settings of 2, 15, 30, and 60 (sec).
- S (< 2 sec) to save the setting and revert to Set Utilities Lead-in.
- S (2 sec) to step back to Set Glo Duration.

Sampling Rate is the frequency at which data is sampled and stored for download to the OceanLog PC Interface program.

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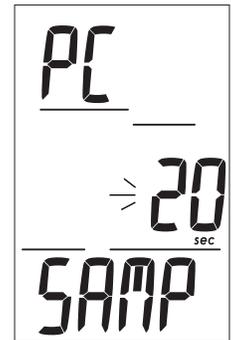
Fig. 35 - Set SAMPLING

SET TIME
Sequence >> Lead-in >> Date Format >> Hour Format >> Time >> Date.

Set points remain as set until changed.

Set Time Lead-in, information includes (Fig. 36):
> Graphics Goto Set TIME.

- A (< 2 sec) to step forward to Set Mode Lead-in.
- S (< 2 sec) to access Set Date Format.
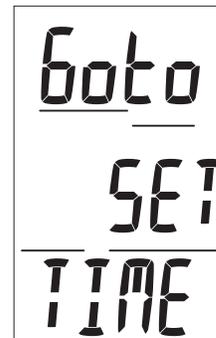
Fig. 36 - Set TIME LEAD-IN

Set Date Format, information includes (Fig. 37):
Date Format establishes the location that the Month (M) digits are displayed relative to the Day (D) digits, on the left or right.

> Graphics dAtE FORM.
> Graphic M.D (or D.M), flashing.

• A (< 2 sec) to toggle between M.D and D.M.
• S (< 2 sec) to save the setting and access Set Hour Format.
• S (2 sec) to step back to Set Time Lead-in.
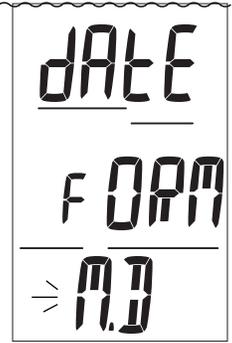
Set Hour Format, information includes (Fig. 38):
> Graphics Hour FORM.
> Graphic 12 (or 24), flashing.

• A (< 2 sec) to toggle between 12 and 24.
• S (< 2 sec) to save the setting and access Set Time.
• S (2 sec) to step back to Set Date Format.
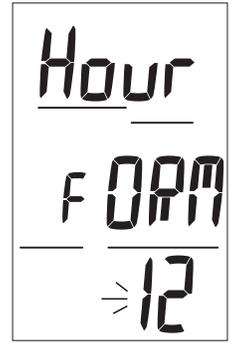
Set Time, information includes (Fig. 39):
> Graphic TIME.
> Time of Day (hr:min), Hour digits flashing, with AM (or PM) icon if 12 Hour Format.

• A (hold) to scroll upward through Hour set points at a rate of 8 per second from 12: (AM) to 11: (PM), or 0: to 23: if 24
  Hour Format, in increments of 1: (hr).
• A (< 2 sec) to step upward through Hour set points one at a time.
• S (< 2 sec) to save the Hour setting and flash the Minute digits.
• A (hold) to scroll upward through Minute set points at a rate of 8 per second from :00 to :59 in increments of :01 (min).
• A (< 2 sec) to step upward through Minute set points one at a time.
• S (< 2 sec) to save the Time set point and access Set Date.
• S (2 sec) to revert to Set Hour Format.
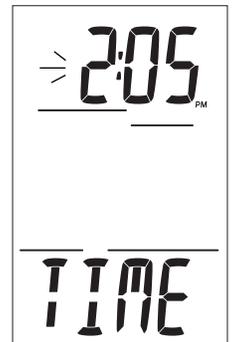
Set Date, information includes (Fig. 40):
The sequence for setting date is Year, then Month, then Day, regardless of the Date Format set.

> Year flashing.
> Month.Day (or Day.Month).

• A (hold) to scroll upward through Year set points at a rate of 8 per second from 2012 to 2055, in increments of 1.
• A (< 2 sec) to step upward through Year set points one at a time.
• S (< 2 sec) to save the Year setting and flash the Month digits.
• A (hold) to scroll upward through Month set points at a rate of 8 per second from 1 to 12 in increments of 1.
• A (< 2 sec) to step upward through Month set points one at a time.
• S (< 2 sec) to save the Month setting and flash the Day digits.
• A (hold) to scroll upward through Day set points at a rate of 8 per second from 1 to 31 (max) in increments of 1.
• A (< 2 sec) to step upward through Day set points one at a time.
• S (< 2 sec) to save the Date setting and revert to Set Time Lead-in.
• S (2 sec) to revert to Set Time Lead-in.

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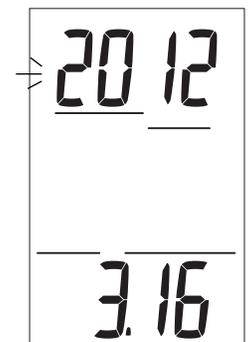
SET OPERATING MODE
Sequence >> Lead-in >> NOR (or GAU).

The mode selected remains as set until changed.

Select Mode Lead-in, information includes (Fig. 41):
> Graphics Goto SEL MODE.

• A (< 2 sec) to step forward to History.
• S (< 2 sec) to access Select Dive Op Mode.

Fig. 37 - Set DATE FORMAT

Fig. 38 - Set HOUR FORMAT

Fig. 39 - Set TIME

Fig. 40 - Set DATE
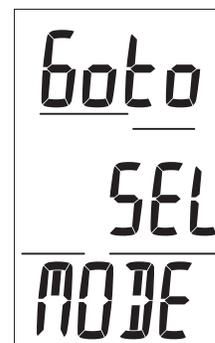
Fig. 41 - Set M LEAD-IN

Set Dive Operating Mode, information includes (Fig. 42):
> Graphics OP and MODE.
> Graphic NOR (or GAU), flashing.

- A (< 2 sec) to toggle between NOR and GAU.
- S (< 2 sec) to save the setting and access that mode's Surface Main screen.
- S (2 sec) to step back to Set Mode Lead-in.

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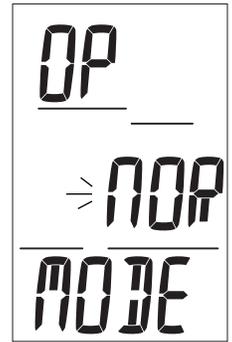
Fig. 42 - Set DIVE OP MODE

HISTORY MODE (NORM/GAUG)
History is a summary of basic data recorded during all NORM and GAUG dives conducted.

History 1, information includes (Fig. 43):
> HIST icon with graphic tot (= total).
> Total number dives recorded (up to 9999) with # icon, 0 if no dive yet.
> Total hours of Elapsed Dive Time recorded (up to 9999 hours) with EDT icon.

- A (< 2 sec) to step forward to Serial Number.
- S (< 2 sec) to access History 2.
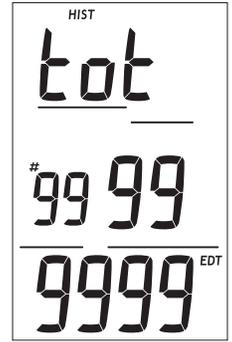
Fig. 43 - HISTORY 1

History 2, information includes (Fig. 44):
> HIST icon with graphic EVER.
> Max Depth ever recorded with MAX and FT (or M) icons.
> Longest Elapsed Dive Time ever recorded during a single dive (up to 599 min) with EDT and min icons.

- S (< 2 sec) to access History 2.
- S (2 sec) to step back to History 1.
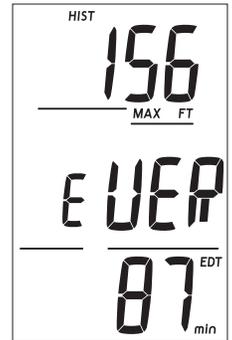
History 3, information includes (Fig. 45):
> HIST icon with graphic EVEr.
> Lowest Temperature ever recorded with graphic F (or C).
> Graphic SEA, or EL2 to EL7, highest Altitude at which a dive was ever conducted

- S (< 2 sec) to revert to History 1.
- S (2 sec) to step back to History 2.

Fig. 44 - HISTORY 2
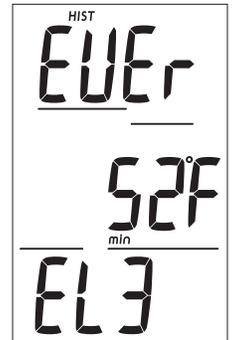
SERIAL NUMBER
Information displayed on this screen should be recorded and kept with your sales receipt, it will be required in the event that your Pro Plus 3 requires factory service.

Serial Number, information includes (Fig. 46):
> Graphic SN with the factory programmed serial number (up to 199999).
> Graphic R1A (or higher), indicating the revision level of the firmware (Pro Plus 3's current operating software).

- A (< 2 sec) to revert to Surface Main.
- S (< 2 sec) to access Clear (Reset), NORM only. *Refer to page 22.*

Fig. 45 - HISTORY 3
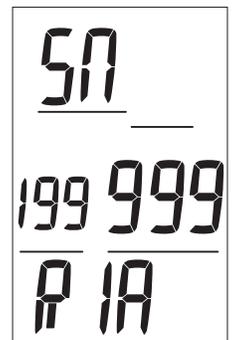
Fig. 46 - SN

DIVE MODE

FEATURES

BAR GRAPHS
The Pro Plus 3 features 2 specific bar graphs.

> The one on the left (Fig. 47a) represents nitrogen loading. It is referred to as the TLBG (Tissue Loading Bar Graph).
> The one on the right (Fig. 47b) represents ascent rate. It is referred to as the VARI (Variable Ascent Rate Indicator).

TLBG (NORM only)
The TLBG represents your relative No Deco or Deco status. The first 4 (lower) segments represent No Deco status and all 5 indicates a Decompression condition.

As your Depth and Elapsed Dive Time increase segments add, and as you ascend segments recede indicating that additional no decompression time is available.

The Pro Plus 3 monitors 12 different nitrogen compartments simultaneously and the TLBG displays the one that is in control of your dive at any given time.

VARI (NORM/GAUG)
The VARI provides a visual representation of ascent speed (i.e., an ascent speedometer).

The segments represent two sets of speeds which change at a reference depth of 60 FT (18 M). *Refer to the chart.*

When ascent is too fast, all segments will be displayed flashing until ascent is slowed.

⚠️ **WARNING: When deeper than 60 FT (18 M), ascent rates should not exceed 60 FPM (18 MPM). At depths of 60 FT (18 M) and shallower, ascent rates should not exceed 30 FPM (9 MPM).**
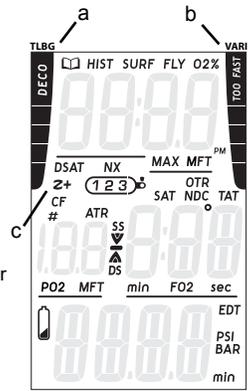
Fig. 47 - BAR GRAPHS & ICONS

Deeper than 60 FT (18 M)			**60 FT (18 M) & Shallower**		
VARI	Ascent Rate		VARI	Ascent Rate	
Segments	FPM	MPM	Segments	FPM	MPM
0	0 - 20	0 - 6	0	0 - 10	0 - 3
1	21 - 30	6.1 - 9	1	11 - 15	3.1 - 4.5
2	31 - 40	9.1 - 12	2	16 - 20	4.6 - 6
3	41 - 50	12.1 - 15	3	21 - 25	6.1 - 7.5
4	51 - 60	15.1 - 18	4	26 - 30	7.6 - 9
5	60 +	18 +	5	30 +	9 +

ALGORITHM
The Pro Plus 3 is configured with 2 algorithms which allows you to choose which set of NDLs (No Deco Limits) will be used for nitrogen/oxygen calculations and displays relating to Plan and DTR (Dive Time Remaining).

You can select to use either the DSAT or the Z+ (Fig. 47c). The selection will lock in for 24 hours after the last dive.

DSAT had been the standard used by Oceanic in all of its dive computers until recently. It features NDLs that are based on exposures and test data which also formed validation for the PADI RDP. It imposes restrictions for repetitive Deco dives, considered more risky.

Z+ (Pelagic Z+) performance is based on Buhlmann ZHL-16c. It features NDLs that are considerably more conservative especially at shallower depths.

To create even greater margins of safety with respect to decompression,
***a Conservative Factor as well as No Deco Deep and Safety Stops can be included for No Deco dives.***

CONSERVATIVE FACTOR (CF)
When the CF is set On, the NDLs (No Decompression Limits), which are based on the algorithm selected and used for Ni/O2 (nitrogen/oxygen) calculations and displays relating to Plan and DTR (Dive Time Remaining), will be reduced to the values available at the altitude level that is 3,000 feet (915 meters) higher. *Refer to the charts in the back of this manual for times.*

DEEP STOP (DS), No Deco only
When the DS selection is set On, it will trigger during NORM No Deco dives when you descend to 80 FT (24 M), then calculate (and continually update) a Stop Depth equal to 1/2 the Max Depth.

While 10 FT (3 M) deeper than the calculated DS, you will be able to access a DS Preview screen that will display the current DS Stop Depth/Time.

Upon initial ascent to within 10 FT (3 M) below the calculated Stop Depth, a DS screen displaying a Stop Depth at 1/2 the Max Depth will appear with a Countdown Timer beginning at 2:00 (min:sec) and counting down to 0:00.

> If you descend 10 FT (3 M) below, or ascend 10 FT (3 M) above, the calculated Stop Depth for 10 seconds during the countdown, the No Deco Main will replace the DS Main display and the DS feature will be disabled for the remainder of that dive. There is no Penalty if the DS is ignored.
> In the event that you enter Deco, exceed 190 FT (57 M), or a High O2 condition (=> 80%) occurs, the DS will be disabled for the remainder of that dive.
> The DS is disabled during a High PO2 Alarm condition (=> set point).

SAFETY STOP (SS), No Deco only

Upon ascent to within 5 FT (1.5 M) deeper than the SS Depth set for 1 second on a No Deco dive in which Depth exceeded 30 FT (9 M) for 1 second, a beep will sound and a SS at the Depth set will appear on the Main display with a countdown beginning at the SS Time set and counting down to 0:00 (min:sec).

- If the SS was set for OFF, the display will not appear.
- In the event that you descend 10 FT (3 M) deeper than the Stop Depth for 10 seconds during the countdown, or the countdown reaches 0:00, the No Deco Main screen will replace the SS Main screen which will reappear upon ascent to within 5 FT (1.5 M) deeper than the Safety Stop Depth set for 1 second.
- In the event that you enter Deco during the dive, complete the Deco obligation, then descend below 30 FT (9 M); the SS Main will appear again upon ascent to within 5 FT (1.5 M) deeper than the SS Depth set for 1 second.
- If you ascend 2 FT (0.6 M) shallower than the SS Depth for 10 seconds prior to completing it, the SS will be canceled for the remainder of that dive.
- There is no Penalty if you surface prior to completing the SS or ignore it.

Fig. 48 - NO DECO MAIN
(DTR is NDC)

DIVE TIME REMAINING (DTR)

The Pro Plus 3 constantly monitors No Deco status and O2 Accumulation, and will display whichever Time is the least amount available as DTR on the No Deco Dive Main screen. The Time being displayed will be identified by the NDC or OTR icon.

NDC (No Deco DTR)

NDC is the maximum amount of time that you can stay at your present Depth before entering Decompression. 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 (NDC) will be displayed as DTR (Fig. 48a). It will also be displayed graphically as the TLBG (Fig. 48b).

As you ascend, the TLBG segments will recede as control shifts to slower compartments. *This is a feature of the decompression model that is the basis for multilevel diving, one of the most important advantages that Oceanic dive computers offer.*

Fig. 49 - NO DECO ALT 3
(O2 data)

OTR (O2 DTR)

When set for Nitrox operation, O2 during a dive is displayed on an ALT screen as a % of allowed saturation (Fig. 49a) identified by the O2% icon.

The limit for O2 exposure (100%) is set at 300 OTU (oxygen tolerance units) per dive or 24 hour period. As time before reaching the limit decreases, % O2 increases and OTR (O2 DTR) decreases.

When OTR time becomes less than the NDC time, calculations for the dive will be controlled by O2 and OTR time will be displayed as DTR on the Dive Main (Fig. 50a), identified by the OTR icon.

Fig. 50 - NO DECO MAIN
(OTR is < NDC)

CLEAR (RESET)

The Pro Plus 3 is configured with a feature that clears nitrogen and oxygen calculations. This is intended for facilities using the Pro Plus 3 for rental or training activities, not for general use by individual divers.

⚠️ **WARNING: Reset after a dive and subsequent use for a repetitive dive conducted by the same diver could result in serious injury or death.**

Upon access, a factory assigned code number is displayed with the graphics CLR and ID, all solid (Fig. 51).

Reset procedure:
- S (2 sec), at any time, to cancel the procedure and revert to the SN screen.

- S (< 2 sec) to start the first 2 digits (left) flashing.
- A (hold) shall scroll upward through the first digits (left) at a rate of 8 per second from 00 to 49.
- A (< 2 sec) shall step upward through the digits (left) one at a time.
- S (< 2 sec) shall save the first 2 digits (left) and flash the second 2 digits (right(.
- A (hold) shall scroll upward through the second digits (right) at a rate of 8 per second from 00 to 49.
- A (< 2 sec) shall step upward through the digits (right) one at a time.
- S (< 2 sec) shall save the Reset Code, Clear the unit, and turn it Off. If the 4 digits do not match the code required to initiate the Clear, S (< 2 sec) will cancel the operation and revert to the SN screen.
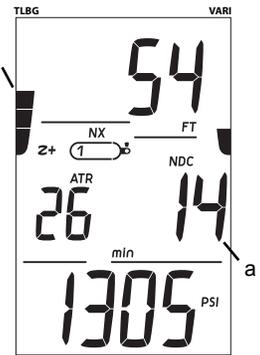
Fig. 51 - CLEAR

NORM

DIVE MODES

***Dive Mode is activated when a descent is made to 5 FT (1.5 M) for 5 seconds
and continues until ascent is made to 2 FT (0.6 M) for 1 second.***

NO DECO DIVE MAIN, information includes (Fig. 52A/B) -
> Current Depth with FT (or M) icon.
> NX, DSAT (or Z+), Gas 1 (2, 3), CF, DS icons - those that apply.
> Dive Time Remaining (DTR), with NDC (or OTR) and min icons.
> Air Time Remaining, with ATR icon, 2 dashes (- -) if Gas 2 or 3 is in use.
> Pressure, with PSI (or BAR) icon, graphic SPG (Submersible Pressure Gauge) if Gas 2 or 3 is in use.
> TLBG, if any.
> VARI, while ascending.

- A (< 2 sec) to access ALT 1.
- A (2 sec) to access Gas Switch routine, unless Gas 2 is set Off.
- S (< 2 sec) to acknowledge alarms.
- S (press) to activate SMARTGLO Backlight.

NO DECO ALT 1, information includes (Fig. 53):
> Max Depth with MAX and FT (or M) icons.
> Elapsed Dive Time with EDT and min icons.

- A (< 2 sec) to access ALT 2.
- Revert to Main in 10 sec, if A not pressed.
- S (press) to activate Backlight.

NO DECO ALT 2, information includes (Fig. 54):
> Time of Day (hr:min), with AM (or PM) icon if 12 Hour Format, no icon if 24 Hour Format.
> Temperature with °F (or °C).

- A (< 2 sec) to access ALT 2 (if Nitrox).
- Revert to Main in 5 sec, if A not pressed.
- S (press) to activate Backlight.

NO DECO ALT 3 (only if Nitrox), information includes (Fig. 55):
> O2 with O2% icon, % of allowable accumulation for a dive or day.
> NX, DSAT (or Z+), Gas 1 (2, 3), CF icons - those that apply.
> Current PO2 value (ATA) with icon.
> FO2 setting for the Gas in use with icon.

- A (< 2 sec) to access Deep Stop Preview, if triggered; revert to Main if not.
- 10 sec or A (< 2 sec) to revert to Main.
- S (press) to activate Backlight.

DEEP STOP (DS) PREVIEW information includes (Fig. 56):
> Current Depth with FT (or M) icon.
> Calculated Stop Depth with FT (or M) icon, DS icon, and Stop Time as 2:00 with min and sec icons.
> Graphic DSP (meaning Deep Stop Preview).

- Revert to Main after 10 sec or A (< 2 sec).
- S (press) to activate Backlight.
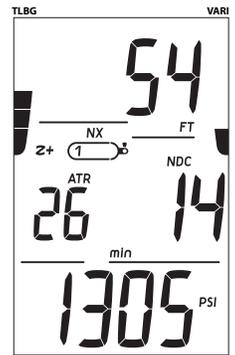
Fig. 52A - NO DECO MAIN
(Gas 1 in use, with Pressure)
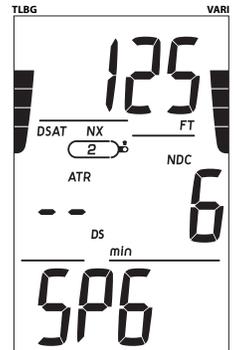
Fig. 52B - NO DECO MAIN
(Gas 2 in use, no Pressure)

Fig. 53 - NO DECO ALT 1

Fig. 54 - NO DECO ALT 2
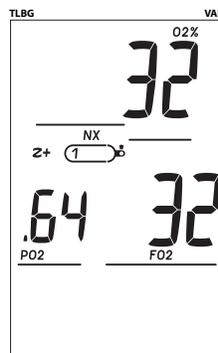
Fig. 55 - NO DECO ALT 3

Fig. 56 - DS PREVIEW

DEEP STOP MAIN, information includes (Fig. 57):
> Current Depth with FT (or M) icon.
> NX, DSAT (or Z+), Gas 1 (2, 3), CF, DS icons - those that apply.
> Stop Depth with FT (or M) icon.
> Stop icon (arrows/bar) and DS icon.
> Stop Time with min and sec icons, counting down.
> Pressure, with PSI (or BAR) icon, graphic SPG (Submersible Pressure Gauge) if Gas 2 or 3 is in use.
> TLBG.

• A (< 2 sec) to access ALT 1.
• A (2 sec) to access Gas Switch routine, unless Gas 2 is set Off.
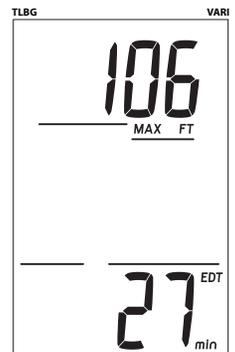• S (< 2 sec) to acknowledge alarms.
• S (press) to activate SMARTGLO Backlight.

Fig. 57 - DS MAIN

DEEP STOP ALT 1, information includes (Fig. 58):
> Max Depth with MAX and FT (or M) icons.
> NX, DSAT (or Z+), Gas 1 (2, 3), CF icons - those that apply.
> Dive Time Remaining (DTR), with NDC (or OTR) and min icons.
> Air Time Remaining, with ATR icon, 2 dashes (- -) if Gas 2 or 3 is in use.
> Elapsed Dive Time with EDT and min icons.

• A (< 2 sec) to access ALT 2.
• Revert to Main in 10 sec, if A not pressed.
• S (press) to activate Backlight.
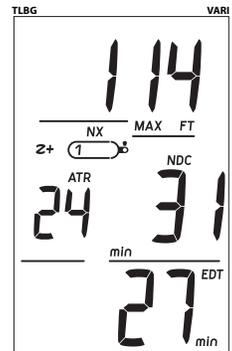
DS ALT 2 & 3 are similar to No Deco ALT 2 & 3.

Fig. 58 - DS ALT 1

SAFETY STOP MAIN, information includes (Fig. 59) -
> Current Depth with FT (or M) icon.
> NX, DSAT (or Z+), Gas 1 (2, 3), CF icons - those that apply.
> Stop Depth with FT (or M) icon.
> Stop icon (arrows/bar) and SS icon.
> Stop Time with min and sec icons, counting down.
> Pressure, with PSI (or BAR) icon, graphic SPG (Submersible Pressure Gauge) if Gas 2 or 3 is in use.
> TLBG.

• A (< 2 sec) to access ALT 1.
• A (2 sec) to access Gas Switch routine, unless Gas 2 is set Off.
• S (< 2 sec) to acknowledge alarms.
• S (press) to activate SMARTGLO Backlight.
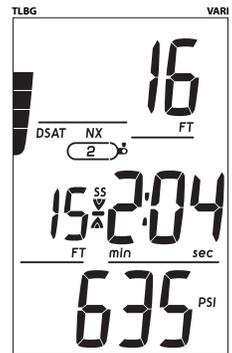
SS ALT 1 similar to DS ALT 1.
SS ALT 2 & 3 are similar to No Deco ALT 2 & 3.

Fig. 59 - SS MAIN

GAS SWITCHING
> Can only switch when Dive Main screens are displayed.
> Cannot switch on surface, except during first 10 minutes.
> Cannot switch during alarms.
> All dives begin with Gas 1 and operation reverts to Gas 1 ten minutes after surfacing.

• A (2 sec), while a Dive Main is displayed - to access.
• No button action (10 sec) - to revert to Dive Main.

NORM Switch Preview, information includes (Fig. 60):
> Graphics Goto and GAS 1 (or 2, 3).
> NX, Gas 1 (2, 3), icons - those that apply.
> Graphic AIR, or PO2 calculated and FO2 set for that Gas with icons.

• A (2 sec) - to step through Gas Preview screens.
• S (< 2 sec) - to flash the graphic GAS1 (2, 3).
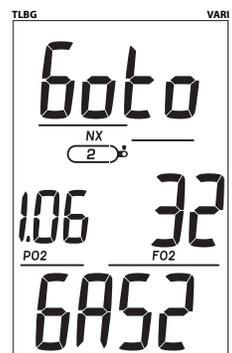
Fig. 60 - GAS SWITCH PREVIEW

Gas Switch Warning
If the switch to a new Gas would result in PO2 => 1.60, the audible will sound and a warning message will flash (Fig. 61) until it is silenced.

Due to the possibility that sufficient air may not be available (in the switch from tank), the switch will still be allowed.

If the switch is made, the PO2 alarm will strike. If in Deco, Up indication will not be given (you control action to be taken).
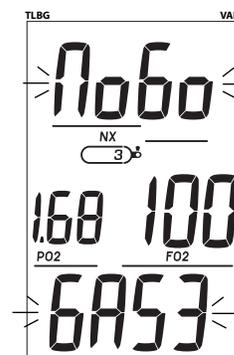
Fig. 61 - GAS SWITCH WARNING

DECOMPRESSION

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

Upon entry into Deco, the audible will sound and the alarm LED will flash. The full TLBG, Stop Bar with Up Arrow icon, and graphic DECO will flash (Fig. 62) until the audible is silenced.

- S (< 2 sec) to silence Audible.

> Once within 10 FT (3 M) below the required Stop Depth (in the stop zone), the full Stop icon (both Arrows with Stop Bar) will be displayed solid.

To fulfill your decompression obligation, you should make a safe controlled Ascent to a depth slightly deeper than, or equal to, the required Stop Depth indicated and decompress for the Stop Time indicated.

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 Stop Depth.

Fig. 62 - DECO ENTRY
(during audible)

DECO STOP MAIN, information includes (Fig. 63):
> Current Depth with FT (or M) icon.
> NX, DSAT (or Z+), Gas 1 (2, 3) icons - those that apply.
> Stop Depth with FT (or M) icon.
> Stop icon (arrows with bar).
> Stop Time with min icon.
> Pressure, with PSI (or BAR) icon, graphic SPG (Submersible Pressure Gauge) if Gas 2 or 3 is in use.
> Full TLBG.

- A (< 2 sec) to access ALTs.
- A (2 sec) to access Gas Switch routine, unless Gas 2 is set Off.
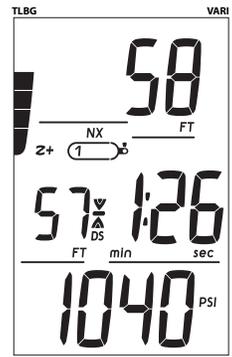- S (< 2 sec) to acknowledge alarms and activate Backlight.

Fig. 63 - DECO STOP MAIN

DECO STOP ALT 1, information includes (Fig. 64):
> Max Depth with MAX and FT (or M) icons.
> NX, DSAT (or Z+), Gas 1 (2, 3), CF icons - those that apply.
> Air Time Remaining, with ATR icon, 2 dashes (- -) if Gas 2 or 3 is in use.
> Total Ascent Time with TAT and min icons.
> Elapsed Dive Time with EDT and min icons.

- A (< 2 sec) to access ALT 2.
- Revert to Main in 10 sec, if A not pressed.
- S (press) to activate Backlight.

TAT includes Stop Times at all required Deco Stops plus vertical Ascent Time based on the max rate allowed.

Deco Stop ALT 2 & 3 are similar to No Deco ALT 2 & 3.

Fig. 64 - DECO STOP ALT 1

CV (CONDITIONAL VIOLATION)

Upon ascent above the required Deco Stop Depth, operation will enter CV during which no off gassing credit will be given.

The Audible will sound and the alarm LED will flash. The Stop Bar with Down Arrow icon and graphic DOWN will flash (Fig. 65) until the audible is silenced, then the TLBG will be solid.

- S (< 2 sec) to silence audible and activate Backlight.

> Down Arrow icon continues to flash until descent to below required Stop Depth (within stop zone), then full Stop icon (Stop Bar with both Arrows) will be on solid.

If you descend deeper than the required Deco Stop before 5 minutes elapse, Deco operation will continue with no off gassing credit given for time above the Stop. Instead, for each minute above the Stop 1-1/2 minutes of penalty time will be added to required Stop Time.

> The added penalty (deco) time will have to be worked off before obtaining off gassing credit.
> Once the penalty time is worked off, and off gassing credit begins, required Deco Stop Depths and Time will decrease toward zero. The TLBG will recede into the No Deco zone and operation will revert to No Deco mode.
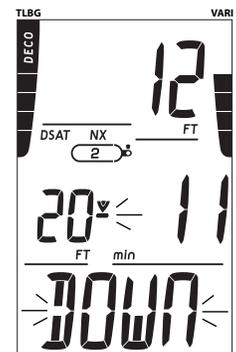
Fig. 65 - CV MAIN
(after Audible)

DV 1 (DELAYED VIOLATION 1)

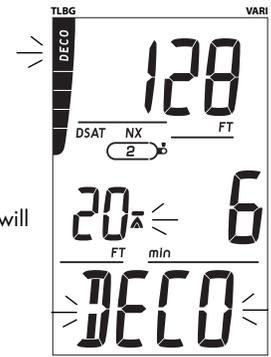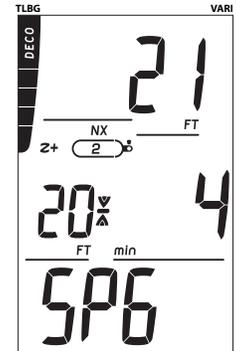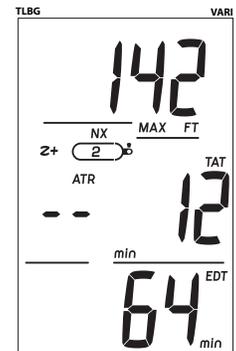If you remain shallower than a Deco Stop Depth for more than 5 minutes, operation will enter DV1* which is a continuation of CV with penalty time still being added. The audible will sound and the full TLBG will flash (Fig. 66) until it is silent.

The difference is that 5 minutes after surfacing from the dive, operation will now enter Violation Gauge Mode.

- S (press) to activate the Backlight.

- > Down Arrow icon continues to flash until descent to below required Stop Depth, then full Stop icon will be on solid.
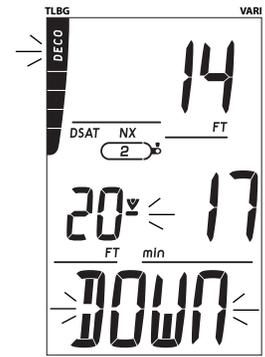
Fig. 66 - DV1 MAIN
(during Audible)

DV 2 (DELAYED VIOLATION 2)

If the calculated Deco obligation requires a Stop Depth between 60 FT (18 M) and 70 FT (21 M), operation will enter DV2.

The Audible will sound and the alarm LED will flash. The full TLBG will flash until the audible is silent.

- S (press) to activate the Backlight.

- > Up Arrow icon flashes if 10 FT (3 M) deeper than the required Stop Depth.
- > Once within 10 FT (3 M) of and below the required Stop Depth, the Stop icon (both Arrows with Stop Bar) will be displayed solid (Fig. 67).
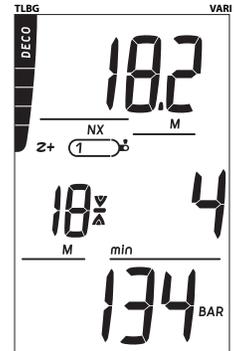
Fig. 67 - DV2 MAIN
(at the stop)

DV 3 (DELAYED VIOLATION 3)

If you descend deeper than the MOD*, the audible will sound and the alarm LED will flash. Also, the graphic UP and Up Arrow icon will flash (Fig. 68), and Current Depth, DTR (NDC), and Max Depth will only display dashes (- -) signifying that you are Too Deep.

MOD is the Max Operating Depth at which the Pro Plus 3 can properly perform calculations or provide accurate display information. Refer to the Specifications in the back.

Upon ascending above the MOD, Current Depth will be restored, however, Max Depth will continue to be displayed as dashes for the remainder of that dive. The Log for that dive will also display dashes for Max Depth.
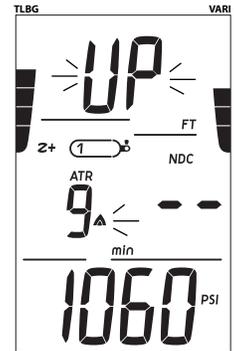
Fig. 68 - DV 3 MAIN
(during Audible)

VGM (VIOLATION GAUGE MODE)

Operation will enter VGM when Deco requires a Stop Depth greater than 70 FT (21 M).

Operation would then continue in VGM during the remainder of that dive and for 24 hours after surfacing. VGM turns the Pro Plus 3 into a digital instrument without any decompression or oxygen related calculations or displays.

Upon activation of VGM, the Audible will sound and the alarm LED will flash.

VGM Dive Main, information includes (Fig. 69) -
- > Current Depth with FT (or M) icon.
- > Graphics UP VIOL (in place of Max Depth which moves to Alt 1) with Up Arrow icon, flashing until on surface
- > EDT with DIVE and min icons
- > NX, Gas icons - if they apply
- > VARI while ascending

- A (< 2 sec) to access ALTs (similar to those for Deco).
- A (2 sec) to access Gas Switch routine, unless Gas 2 is set Off.
- S (press) to activate Backlight.

Fig. 69 - VGM DIVE MAIN
(during Audible)

VGM on Surface

Upon surfacing, the VGM Dive Main will remain on display for 10 minutes with Surface Interval Time displayed in place of Current Depth with the SURF icon flashing. The graphic VIO will also still be displayed flashing (Fig. 70).

Operation will also enter VGM 5 minutes after surfacing from a dive in which a Delayed Violation occurred.

After 10 minutes elapse, VIO alternates with NOR until the unit shuts off after 24 hours with no dives.

- > A full 24 hour continuous surface interval must then be served before all functions are restored.
- > During that 24 hours, VGM does not allow access to the Set Gas or Plan, or provide Time to Dsat.
- > The Fly countdown indicates time remaining before normal operation can resume with full features and functions.

Fig. 70 - VGM SURF MAIN

HIGH PO2 (NORM only)

   Warning >> at .20 less than the Alarm value set for the Gas in use.
   Alarm >> at the value set for the Gas in use (1.00 to 1.60), except in Deco then at 1.60 only.

When PO2 (partial pressure of oxygen) increases to the Warning level; the audible sounds, the Up Arrow icon will flash, and the PO2 value will flash (in place of ATR) until the audible is silenced (Fig. 71).

- • S (< 2 sec) to acknowledge/silence the audible.

- > When the audible is silenced, ATR is restored.

The Up Arrow remains on solid until PO2 decreases below the Warning level.

If PO2 continues to increase and reaches the Alarm value set for the Gas in use, the audible sounds again.

- • S (< 2 sec) to acknowledge/silence the audible.

- > The PO2 value and Up Arrow icon will flash until PO2 decreases below the Alarm setting.
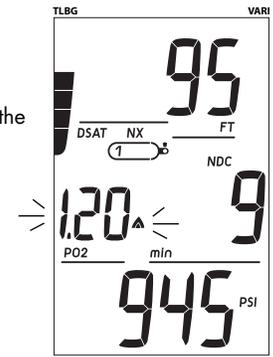
Fig. 71 - PO2 WARNING
(during audible)

PO2 Alarm Main, during No Deco, information includes (Fig. 72):
   > Current Depth with FT (or M) icon.
   > NX, DSAT (or Z+), Gas 1 (2, 3), CF icons - those that apply.
   > DTR with NDC (or OTR) and min icons.
   > PO2 value with PO2 icon, flashing until < setting, then ATR restored.
   > Up Arrow icon, flashing until < setting, then solid until < Warning level then ATR restored.
   > TLBG.
   > VARI while ascending.

- • A (< 2 sec) to access ALTs (similar to those for No Deco).
- • A (2 sec) to access Gas Switch routine, unless Gas 2 is set Off.
- • S (press) to activate Backlight.
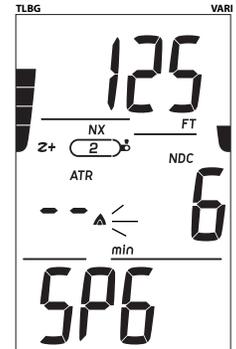
Fig. 72 - PO2 ALARM MAIN

High PO2, during Deco (Fig. 73)
The PO2 alarm setting for the Gas in use does not apply when in Deco.

- > If PO2 reaches 1.60 while at a Deco Stop, the PO2 value (1.60) with icon will alternate with Deco Stop Depth/Time once each minute*. No indication will be given suggesting ascent which is the diver's option pending conditions of the dive.

   *PO2 on for 10 seconds, Deco Stop Depth/Time on for 50 seconds until PO2 decreases below 1.60, then PO2 will not be displayed.

HIGH O2 (NORM only)
   Warning >> at 80 to 99% (240 OTU).
   Alarm >> at 100% (300 OTU).

When O2 reaches the Warning Level; the audible sounds and the O2 value will flash in place of Depth (Fig. 74), until the audible is silenced, then Depth will be restored.

- • S (< 2 sec) to acknowledge/silence the audible.

If O2 reaches the Alarm level; the audible sounds during which the Up Arrow icon and the O2 value will flash. After the Audible is silent, Depth will be restored, the Up Arrow icon and graphic UP will continue to flash until on the surface (Fig. 75).

- • S (< 2 sec) to acknowledge/silence the Audible.
- • A (< 2 sec) to access ALTs (similar to those for No Deco).

Fig. 73 - PO2 ALARM
(while in Deco)
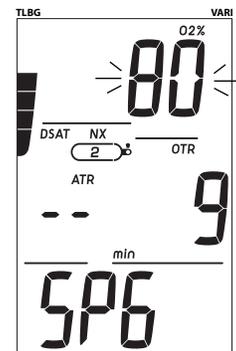
High O2 during Deco
When O2 reaches the Warning Level; the audible sounds and the O2 value will flash (in place of Depth) until the audible is silenced, then Depth will be restored.

- • S (< 2 sec) to acknowledge/silence the Audible.
- • A (< 2 sec) to access ALTs (similar to those for Deco).

If O2 reaches the Alarm level; the audible sounds and the Up Arrow icon and graphic UP will flash until on the surface (Fig. 76).

- • S (< 2 sec) to acknowledge/silence the Audible.
- • A (< 2 sec) to access ALTs (similar to those for Deco).

Fig. 74 - O2 WARNING
(during audible)
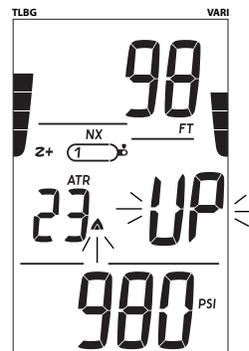
Fig. 75 - O2 ALARM
(No Deco, after Audible)
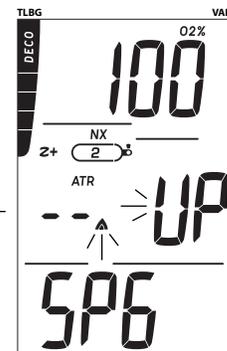
Fig. 76 - O2 ALARM
(Deco, during Audible)

DIGITAL GAUGE

MODE

GAUG SURF MAIN, information includes (Fig. 77):
> Surface Interval time (hr:min) with SURF icon; if no dive yet, this is time since activation.
> Dive number with # icon, up to 24 for that operating period; #0 if no dive made yet.
> Graphic GAU (operating mode).
> Tank 1 Pressure with PSI (or BAR) icon.
> Battery icon, if voltage is low

• A (< 2 sec) to access ALT 1.
• A (hold) to scroll forward through Menu items.
• S (press) to activate SMARTGLO Backlight.

GAUG SURF ALT 1 & 2 are similar to NORM SURF ALT 1 & 2.
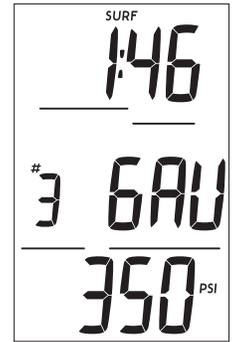
Fig. 77 - GAUG SURF MAIN

GAUG SURF MENU

In addition to the Main and ALT screens, the Gauge Surface Menu provides access to most other selections that are similar to those described previously for NORM Mode.

Button operations are also similar to those in NORM.

• A (< 2 sec) >> step forward through Menu items.
• A (hold) >> scroll forward through Menu items.
• S (press) >> activate the SMARTGLO Backlight.
• 2 min (of no button action) >> revert to Main.

_____
_____
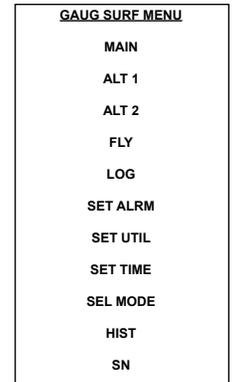
Upon descent to 5 FT (1.5 M) for 5 seconds, operation will enter Gauge Dive Mode.

Once a dive is completed in Gauge Mode, operation will lock into Gauge Mode for 24 hours.

GAUG SURF MENU
MAIN
ALT 1
ALT 2
FLY
LOG
SET ALRM
SET UTIL
SET TIME
SEL MODE
HIST
SN

GAUG DIVE MAIN, information includes (Fig. 78) -
> Current Depth with FT (or M) icon.
> Air Time Remaining (minutes), with ATR icon.
> Graphic GAU (mode).
> Pressure, with PSI (or BAR) icon.
> VARI, while ascending.

• A (< 2 sec) to access ALT 1.
• S (< 2 sec) to acknowledge alarms.
• S (press) to activate SMARTGLO Backlight.

GAUG SURF ALT 1 & 2 are similar to NORM SURF ALT 1 & 2.
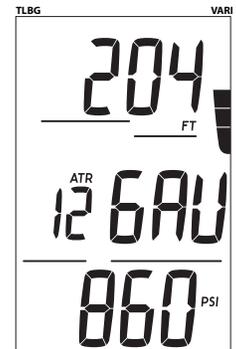
Fig. 78 - GAUG DIVE MAIN

REFERENCE

PC INTERFACE
The Pro Plus 3 is configured with a Data Port that enables it to be connected to a PC through a USB port using a special Interface Cable available as an optional accessory.

A USB Driver is provided on the OceanLog CD. This must be installed on the PC with the program.

The Settings Upload feature can be used to set/change all of the unit's settings except FO2 which must be entered using the unit's control buttons and menu system.

Information available for retrieval (DownLoad) from the Pro Plus 3 to the PC OceanLog program includes items such as dive number, surface interval time, max depth, elapsed dive time, start date and time, lowest temperature underwater, sampling rate, dive profile, Set Points, ascent rate, and TLBG.

The Pro Plus 3 checks for the presence of an interface device connection to the Data Port once every second while in Surface Mode. Checks are not made if the Wet Activation contacts are wet. Upon sensing an interface connection, the requesting device (PC) connects to the Pro Plus 3 and is prepared for Upload of settings or Download of data which is then initiated using the PC OceanLog program.

Fig. 79 - PC Interface

Prior to attempting to Download data from your Pro Plus 3 or Upload settings to it, review the Help section of the OceanLog program. Recommended is to print those sections of Help that you consider appropriate for your interface activities.

The Pro Plus 3 checks for a connection to the Data Port once every second while the Surface Main is displayed. Checks are not made if the Wet Activation contacts are wet.

When the PC Interface cable is plugged in, the graphic PC is displayed (Fig. 79) with a 120 second countdown timer that runs until the connection is confirmed, then the full LCD is displayed until completion of the upload or download operation.

The Oceanlog program also allows upgrade of select versions of the Pro Plus 3's firmware (operating system software) after which the Pro Plus 3 resets all operating data. Since the upgrades require reset of the Pro Plus 3, they are blocked during 24 hours after dives.

PC requirements:
- IBM®, or compatible, PC with USB Port
- Intel® Pentium 200 MHz or better microprocessor
- Microsoft® Windows® XP, Vista, or 7
- 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

For software updates, refer to the Oceanic web site at ->> www.OceanicWorldwide.com

For support, call OceanLog Support toll free at ->> (866) 732-7877, 8 Am to 5 Pm USA Pacific time.

CARE AND CLEANING
Protect your Pro Plus 3 from shock, excessive temperatures, chemical attack, and tampering. Protect the lens against scratches with a transparent Instrument Lens Protector. Small scratches will naturally disappear underwater.
- Soak and rinse the Pro Plus 3 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. 80a), Download Interface Port (Fig. 80b), and Buttons are free of debris or obstructions.
- To dissolve salt crystals, use lukewarm water or a slightly acidic white vinegar/water bath. After removal from the bath, place the unit under gently running water and towel dry before storing.
- Transport your unit cool, dry, and protected.

Fig. 80 - Case Back

INSPECTIONS AND SERVICE
Your Pro Plus 3 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 this 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 Pro Plus 3 to an Authorized Oceanic Dealer or send it to the nearest Oceanic Regional Service Facility (page 40).

To return your Pro Plus 3 to Oceanic:
- Record all dive data in the Log and/or download the data in memory. All data will be erased when it receives factory service.
- Package it using a protective cushioning material.
- Include a legible note stating specific reason for return, your name, address, daytime phone number, serial number, 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 (page 40), or to Oceanic USA.
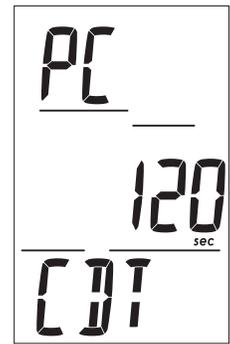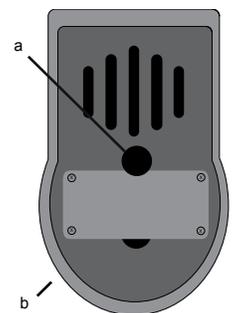
- If shipping to Oceanic USA, obtain an RA (Return Authorization) number by contacting Oceanic at 510/562-0500 or send an e-mail to service@oceanicusa.com.
- Non-warranty service must be prepaid. COD is not accepted.
- Additional information is available at the Oceanic web site OceanicWorldWide.com

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

BATTERY REPLACEMENT
The Battery Compartment 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, it is recommended that the Battery be changed in an environment equivalent to the local outdoor temperature and humidity (e.g., do not change the Battery in an air conditioned environment then take it outside during a hot sunny day).

Inspect the Buttons, Lens, and Housing to ensure they are not cracked or damaged. If there is any sign of moisture in the module, DO NOT use the Pro Plus 3 until it receives proper service by an Authorized Oceanic Dealer, or the Oceanic factory.

Data Retention
When the battery is removed, settings* and calculations for repetitive dives are retained in volatile memory until a new battery is installed.

    *Date will have to be set, Time may require adjustment for the time duration that the battery remains out of the unit.

Fig. 81 - Battery Cover

Battery Removal

Examine the Case Back to locate the Battery Cover (Fig. 81a):
- Remove the 4 screws that secure the Battery Cover to the Housing by turning counter clockwise.
- Lift the Cover up and away from the Housing.
- Lift the Battery, positive (+) end first, out of the Battery Compartment.
- Remove the Battery Cover O-ring and inspect it for any signs of deterioration or deformity. DO NOT use tools to remove the O-ring.
- O-ring replacement is highly recommended to ensure proper sealing.
- Closely examine the sealing surfaces of the Battery Cover and Housing for any signs of damage that might prevent proper sealing. If found, return the Pro Plus 3 to an Authorized Oceanic Dealer, and DO NOT attempt to use it until it has received factory service.
- Closely examine the inside of the Battery Compartment for any signs of corrosion indicating entrance of moisture into the unit.
- If corrosion is found, return the Pro Plus 3 to an Authorized Oceanic Dealer, and DO NOT attempt to use it until it has received factory service.

Fig. 82 - O-ring Installation

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

Battery Installation
- Replace the Cover O-ring with a new one. This 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.
- Lightly lubricate the new Cover O-ring with silicone grease and place it on the beveled outer edge of the Battery Compartment (Fig. 82a). Ensure that it is evenly seated.
- Place a new 3 volt, CR2, .75 AHr, Lithium Battery (Duracell model DL-CR2 or equivalent) negative end first into the Battery Compartment with the negative end toward the spring (Fig. 83a).

Fig. 83 - Battery Orientation

Battery Hatch Installation
- Ensure that the Battery is properly oriented and the Cover O-ring is evenly seated.
- Carefully place the Battery Cover into position so that it seats on top of the O-ring, and while holding it in place, secure it with the 4 screws by turning them clockwise. DO NOT attempt to use any other screws.
- Carefully tighten the screws by alternately turning them each one turn at a time (Fig. 84). Turn the upper left one (a), then the lower right (b), then the lower left (c), then the upper right (d).
- Repeat the sequence until all of the screws are evenly secure. The outer surface of the Battery Cover should be flush with the outer surface of the Housing. DO NOT overtighten.

Inspection
- Activate the unit and watch carefully as it performs a full diagnostic and battery check, and enters Surface Mode. Observe the LCD display to ensure it is consistently clear and sharp in contrast throughout the screen.

- If any portions of the display are missing or appear dim, or if a Low Battery Condition is indicated, return your Pro Plus 3 to an Authorized Oceanic Dealer for a complete evaluation before attempting to use it.

Fig. 84 - Cover Installation

ALTITUDE SENSING AND ADJUSTMENT
Altitude (i.e., ambient pressure) is measured upon activation and every 15 minutes until a dive is made.

> 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.

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

> When diving in high altitude waters from 3,001 to 14,000 feet (916 to 4,270 meters), the Pro Plus 3 automatically adjusts to these conditions providing corrected Depth, and reduced No Deco and O2 Times at intervals of 1,000 feet (305 meters).

> When the Conservative Factor is set On, NDLs are calculated based upon the next higher 3,000 foot (915 meter) Altitude.

> At Sea Level, calculations are based upon an Altitude of 6,000 feet.

> 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).

> The Pro Plus 3 will not function as a Dive Computer above 14,000 feet (4,270 meters).

Z+ ALGORITHM >> NDLS (minutes) at ALTITUDE (Imperial)

Altitude (feet)	0 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 (FT)												
30	197	150	141	134	128	122	117	112	107	99	94	89
40	109	81	75	71	68	65	62	60	57	55	53	51
50	65	53	51	49	47	44	42	39	37	35	34	33
60	48	37	35	33	32	30	28	26	24	23	22	21
70	35	26	24	23	21	20	19	18	17	16	16	14
80	26	19	18	17	16	15	14	13	12	11	11	10
90	19	15	14	13	12	11	10	10	9	9	8	8
100	16	11	10	10	9	9	8	8	7	7	7	7
110	12	9	8	8	8	7	7	7	6	6	6	5
120	10	8	7	7	7	6	6	6	5	5	5	5
130	8	7	6	6	6	6	5	5	5	5	4	4
140	7	6	5	5	5	5	5	4	4	4	4	4
150	6	5	5	5	5	4	4	4	4	4	4	3
160	6	5	5	4	4	4	4	4	4	3	3	3
170	5	4	4	4	4	4	3	3	3	3	3	3
180	5	4	4	4	3	3	3	3	3	3	3	3
190	4	4	4	3	3	3	3	3	3	3	3	3

Z+ ALGORITHM >> NDLS (minutes) at ALTITUDE (Metric)

Altitude (meters)	0 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 (M)												
9	217	161	151	143	136	130	124	119	114	110	103	97
12	115	87	81	75	72	68	65	63	60	58	55	54
15	68	55	53	51	49	47	44	42	39	37	36	34
18	50	39	37	35	33	32	30	28	26	24	23	22
21	36	28	26	24	23	21	20	19	18	17	16	16
24	27	20	19	18	17	16	15	14	13	12	11	11
27	20	16	15	13	12	11	11	10	9	9	9	8
30	16	12	11	10	9	9	9	8	8	7	7	7
33	13	9	9	8	8	7	7	7	6	6	6	6
36	10	8	7	7	7	6	6	6	5	5	5	5
39	9	7	6	6	6	5	5	5	5	5	4	4
42	8	6	6	5	5	5	5	5	4	4	4	4
45	6	5	5	5	5	4	4	4	4	4	4	4
48	6	5	5	4	4	4	4	4	4	3	3	3
51	5	4	4	4	4	4	4	3	3	3	3	3
54	5	4	4	4	3	3	3	3	3	3	3	3
57	5	4	4	3	3	3	3	3	3	3	3	3

DSAT ALGORITHM >> NDLS (minutes) at ALTITUDE (Imperial)

Altitude (feet)	0 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 (FT)												
30	260	201	187	175	165	156	148	141	135	130	124	118
40	137	103	96	90	85	80	76	72	69	66	63	61
50	81	63	60	58	55	52	48	45	43	41	39	37
60	57	43	40	38	36	34	33	31	30	29	28	27
70	40	31	30	28	27	26	24	23	22	20	19	18
80	30	24	23	21	20	19	18	17	16	16	14	13
90	24	19	18	17	16	15	14	13	12	11	10	10
100	19	15	14	13	12	11	10	10	9	9	8	8
110	16	12	11	10	9	9	8	8	8	7	7	7
120	13	9	9	8	8	8	7	7	7	6	6	6
130	11	8	8	7	7	7	6	6	6	6	5	5
140	9	7	7	6	6	6	6	5	5	5	5	5
150	8	6	6	6	5	5	5	5	5	4	4	4
160	7	6	5	5	5	5	5	4	4	4	4	4
170	7	5	5	5	4	4	4	4	4	4	3	3
180	6	5	5	4	4	4	4	4	4	3	3	3
190	5	4	4	4	4	4	4	3	3	3	3	3

DSAT ALGORITHM >> NDLS (minutes) at ALTITUDE (Metric)

Altitude (meters)	0 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 (M)												
9	283	217	204	190	178	168	159	151	144	138	132	127
12	144	112	104	97	90	85	81	77	73	70	67	64
15	85	66	63	60	57	55	52	49	46	43	41	39
18	59	45	42	40	38	36	34	32	31	30	29	28
21	41	33	31	29	28	27	26	24	23	21	20	19
24	32	26	24	22	21	20	19	18	17	16	15	14
27	25	19	18	17	16	15	14	13	12	12	11	10
30	20	16	15	13	12	12	11	10	10	9	9	8
33	17	12	11	11	10	9	9	8	8	7	7	6
36	14	10	9	9	8	8	7	7	7	6	6	6
39	11	8	8	7	7	7	6	6	6	6	5	5
42	9	7	7	7	6	6	5	5	5	5	5	5
45	8	6	6	6	6	5	5	5	5	5	4	4
48	7	6	6	5	5	5	4	4	4	4	4	4
51	6	5	5	5	5	4	4	4	4	4	4	4
54	6	5	5	4	4	4	4	4	3	3	3	3
57	5	4	4	4	4	4	3	3	3	3	3	3

OXYGEN EXPOSURE LIMITS
(from NOAA Diving Manual)

PO2 (ATA)	Max Duration Single Exposure (min)	(hr)	Max 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

SPECIFICATIONS

CAN BE USED AS
- Dive Computer (Air or Nitrox).
- Digital Depth Gauge/Timer.

DIVE COMPUTER PERFORMANCE
- Buhlmann ZHL-16c based PZ+, or DSAT based, algorithm.
- No Deco limits closely follow PADI RDP.
- Decompression in agreement with Buhlmann ZHL-16c and French MN90.
- No Deco Deep Stops - Morroni, Bennett.
- Deco Deep Stops (not recommended) - Blatteau, Gerth, Gutvik.
- Altitude - Buhlmann, IANTD, RDP (Cross).
- Altitude corrections and O2 limits based on NOAA tables.

OPERATIONAL PERFORMANCE

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

Dive Counter:
- 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 when inactive, upon activation, every 15 minutes while activated.
- Does not measure ambient pressure when wet.
- Compensates for Altitudes above sea level beginning at 3,001 feet (916 meters) elevation and every 1,000 feet (305 meters) higher.

Power:
- (1) 3 volt, type CR2, Lithium battery.
- Shelf life   Up to 5 years, dependent on battery manufacturer.
- Replacement   User, annual recommended.
- Use Life   100 dive hours if (1) 1 hour dives per dive day to 300 hours if (3) 1 hour dives per day.

Battery Icon:
- Warning - icon on solid at 2.75 volts, battery change recommended.
- Alarm - icon on flashing at 2.50 volts, change the battery.

Activation:
- Manual - push button (recommended), required prior to dive if Wet Activation is set OFF.
- Automatic - by immersion in water if Wet Activation is set ON.
- Cannot be manually activated deeper than 4 FT (1.2 M), if Wet Activation is set OFF.
- Cannot operate at elevations higher than 14,000 feet (4,270 meters).

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).

TLBG

TLBG	segments
• No Deco Normal zone	1 to 3
• No Deco Caution zone	4
• Decompression zone	5 (all)

VARI

VARI	60 FT (18 M) & Shallower			Deeper than 60 FT (18 M)		
	segments	FPM	MPM	segments	FPM	MPM
	0	0 - 10	0 - 3	0	0 - 20	0 - 6
• Normal zone	1	11 - 15	3.5 - 4.5	1	21 - 30	6.5 - 9
Normal zone	2	16 - 20	5 - 6	2	31 - 40	9.5 - 12
Normal zone	3	21 - 25	6.5 - 7.5	3	41 - 50	12.5 - 15
• Caution zone	4	26 - 30	8 - 9	4	51 - 60	15.5 - 18
• Too Fast zone (flashing)	5 (all)	> 30	> 9	5 (all)	> 60	> 18

SPECIFICATIONS (CONTINUED)

NUMERIC DISPLAYS:	Range:	Resolution:
• Time of Day	0:00 to 23:59 hr:min	1 minute
• Temperature	0 to 99°F (-18 to 60°C)	1°
• Altitude Level	Sea, EL2 to EL7	1 level
• Surface Interval Time	0:00 to 23:59 hr:min	1 minute
• Time to Fly & Desaturate	0:00 to 23:50 hr:min *(starting 10 min after dives)*	1 minute
• Dive Number	0 to 50	1
• Depth	0 to 330 FT (100 M)	1 FT (.1 M)
• FO2 Nitrox Value	21 to 100 %	1 %
• PO2 Value	0.00 to 1.99 ATA *(1. - - when => 2.00)*	.01 ATA
• O2 Saturation	0 to 100 %	1 %
• Pressure	0 to 5000 PSI (345 BAR)	5 PSI (1 BAR)
• Elapsed Dive Time	0 to 599 min	1 minute
• Dive Time Remaining	0 to 599 min	1 minute
• Air Time Remaining	0 to 199 min	1 minute
• Deep Stop Time	0:00 to 2:00 min:sec	1 second
• Safety Stop Time	0:00 to 5:00 min:sec	1 second
• Deco Stop Time	0 to 599 min	1 minute
• Total Ascent Time	0 to 599 min	1 minute
• Violation Countdown Timer	0:00 to 23:00 hr:min	1 minute
• PC Countdown Timer	0 to 120 sec	1 second

MOD (Max Operating Depth):	Limit:
• Norm	330 FT (100 M)
• Gaug	330 FT (100 M)

INSPECTION / SERVICE RECORD

Pro Plus 3 Serial Number: _____

Pro Plus 3 Firmware Rev: _____

Date of Purchase: _____

Purchased from: _____

Below to be filled in by an Authorized Oceanic Dealer:

Date	Service Performed	Dealer/Technician

OCEANIC WORLD WIDE

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NOTES

PRO PLUS 3

DIVE COMPUTER

OPERATING MANUAL