OCL

WATCH 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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TRADEMARK, TRADE NAME, AND SERVICE MARK NOTICE

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), Dive Computer with Free Dive Mode (U.S. Patent no. 8,600,701). 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 OCL 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 OCL dive computer model is based upon the latest research and experiments in decompression theory. **Still, using the OCL, 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

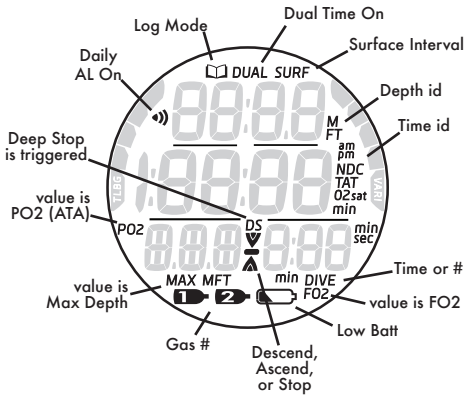
OCL

FEATURES/FUNCTIONS

AND

WATCH MODE

DISPLAY ICONS



ABBREVIATIONS/TERMS

ACTIV	= Activation
AL	= Alarm
ALT	= Alternate
ATA	= Atmospheres Absolute
AUD	= Audible
BATT (BAT)	= Battery
CDT (CD)	= Countdown Timer
CHG	= Change
CONSERV	= Conservative Factor
CV	= Conditional Violation
DA	= Depth Alarm
DECO	= Decompression
DFLT	= Default
DS	= Deep Stop
DSAT	= Algorithm type
DTR	= Dive Time Remaining
DURA	= Duration (backlight)
DV	= Delayed Violation
EDT	= Elapsed Dive Time
EL	= Elevation (altitude)
FO2	= Fraction of Oxygen (%)
FORM	= Format (date, time)
FPM	= Feet Per Minute
FREE	= Free Dive Mode
FT	= Feet (depth)
GAUG	= Digital Gauge Dive Mode
GLO	= Glow (backlight)
HR	= Hour
HIST	= History
LO	= Low (battery)
M	= Meters (depth)
MAX	= Maximum
MIN (min)	= Minutes (time)
MPM	= Meters Per Minute
NDC	= No Deco DTR
NDL	= No Deco Limit
NO	= Number
NO-D	= No Decompression
NORM	= Normal Dive Mode
O2	= Oxygen
O2SAT	= % O2
OTL (OTR)	= O2 Limit (DTR)
PDPS	= Pre Dive Planning Sequence
PO2	= Partial Pressure of O2 (ATA)
PZ+	= Algorithm type
SAFE	= Safety (stop)
SAT	= Time to Desaturate
SEC (sec)	= Seconds (time)
SEL	= Select
SI	= Surface Interval
SN	= Serial Number
SS	= Safety Stop
SR	= Sampling Rate
SURF	= Surface
SWCH	= Switch (gas)
TAT	= Total Ascent Time (deco)
TLBG (TBG)	= Tissue Loading Bar Graph
TMR	= Timer
VARI	= Variable Ascent Rate Indcator
VGM	= Violation Gauge Mode
VIO	= Violation

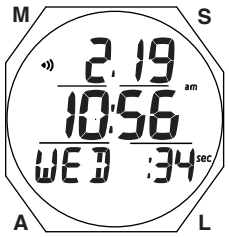
OVERVIEW

The OCL is a unique Watch/Dive Computer featuring >>

- 4 Control Buttons
- multiple Menus
- numerous Set Selections
- increase/decrease Set Values
- 4 Operating Modes
- 2 Nitrox Gas Mixes
- numerous Warnings/Alarms
- Dual Watch Time
- Dual Algorithm
- No Deco Deep Stop
- No Deco Safety Stop
- Gauge Depths to 400 FT/120 M
- Gauge Dive Run Timer
- Altitude Compensation
- NDL Conservative Factor
- Variable Ascent Rate
- PC/Mac Settings Upload/Data Download
- Audible Alarm with flashing LED
- User Replaceable Battery
- User Upgradeable Firmware

INTERACTIVE CONTROL CONSOLE

The Interactive Control Console utilizes 4 control buttons that allow you to maneuver through the OCL's unique system of menus.



The buttons will be referred to as M, S, A, and L.

- Upper/Left >> M (mode, minus, decrease)
- Upper/Right >> S (select, save)
- Lower/Left >> A (advance, access, increase)
- Lower/Right >> L (light)

MENU SYSTEM

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

Menus include the -

- Watch Menu
- Set T (Time) Menu
- NORM Surface Menu
- GAUG Surface Menu
- FREE Surface Menu
- Set G (Gas) Menu
- Set A (Alarms) Menu
- Set U (Utilities) Menu
- Set M (Mode) Menu
- Set FA (Free Alarms) Menu

Each Menu 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.

GAUG SURF MENU
SURF MAIN
SURF ALT 1
SURF ALT 2
FLY
LOG
SET A
SET U
SET M
HISTORY
SN

Sample Menu
(all selections shown)

Menu button action >>
A (< 2 sec) - to access and step forward through menu selections.
A (hold) - to scroll forward through menu selections.
M (< 2 sec) - to step backward through menu selections.
M (2 sec) - to revert to Main screen for the mode in use.
S (< 2 sec) - to access or save selections.
S (2 sec) - to step back to the previous selection.

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

Pressing M (< 2 sec), while viewing the Surface Main, will jump to the last menu selection (such as Set T or SN), then continued presses will step back through menu items.

BACKLIGHT

To activate the Backlight at any time >> press the L button.

- The Backlight will activate and illuminate the display for button depression time* plus the Duration time set (0, 5, or 10 seconds), for a maximum of 20 seconds.

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

- Press L 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 OCL is connected to a PC or Mac.

AUDIBLE ALARM

While operating in NORM or GAUG Mode, the Audible will emit 1 beep per second for 10 seconds when alarms strike unless it is set Off. During that time, the Audible can be acknowledged and silenced by pressing the S button (less than 2 seconds).

An LED Warning Light, on the edge 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 (a group A setting).

FREE Dive Mode has its own set of Alarms which emit 3 short beeps either 1 or 3 times which cannot be acknowledged or set Off.

Situations that will activate the NORM/GAUG 10 second Alarm include -

*** Items activate only in NORM mode.*

- Descent deeper than the Depth Alarm Set Point selected.
- Dive Time Remaining at the Set Point selected**.
- Elapsed Dive Time at the Set Point selected.
- PO2 at the Set Point selected for the Gas in use**.
- High O2 of 300 OTU (100%)**.
- TLBG at the Set Point selected**.
- 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 Mode**.
- Conditional Violation (above a required Deco Stop Depth for less than 5 minutes)**.
- Delayed Violation (above a required Deco Stop Depth for more than 5 minutes)**.
- Delayed Violation (a Deco Stop Depth greater than 60 FT/18 M is required)**.
- Delayed Violation (Max Operating Depth is exceeded).
- A Gas Switch would expose the diver to PO2 => 1.60 ATA**.
- Watch Daily Alarm reaches time set (disabled during Dive Modes).
- Watch Mode Countdown Timer reaches 0.

A single short beep (which cannot be disabled) sounds when -

- After 5 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.
- FREE Dive Elapsed Dive Time Alarm (3 beeps every 30 seconds if set On).
- FREE Dive Depth Alarms 1, 2, 3 (set sequentially deeper) - each 3 beeps 3 times.
- FREE Dive TLBG Alarm (Caution zone, 4 segments) - 3 beeps 3 times.
- Entry into Deco during a FREE Dive (Violation) - 3 beeps 3 times.
- Free Dive Mode Countdown Timer reaches 0:00 - 3 beeps 3 times.

During the following NORM Dive 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.
- Upon Surfacing during a Conditional Violation.

PC/MAC INTERFACE

Interface with a PC or Mac, to allow uploading settings and downloading data, is accomplished by connecting the OCL to a PC or Mac USB Port using the special Oceanic 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 OCL 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 PC and Mac programs can be used to set/change the selections in the Watch Time group, NORM/GAUG Set A (Alarms) groups, NORM/GAUG Set U (Utilities) groupd\s, and FREE Set FA (Free Alarms) group. NORM Set Gas items must be set using the control buttons.

Information available for retrieval (download) from the OCL to the PC/Mac programs includes dive data such as number, surface interval time, maximum depth, elapsed dive time, no deco status, start date/time, lowest temperature under water, sampling rate, dive profile (with Earmarks), and set points.

The PC/Mac programs also allow upgrade of select versions of the OCL's firmware (operating system software) after which the OCL resets all operating data. Since the upgrades require reset of the OCL, they are blocked during 24 hours after dives.

POWER SUPPLY
- Battery >> (1) 3 vdc, CR2032, Lithium battery.
- Shelf life >> up to 7 years (when shipped from factory in Deep Sleep mode).
- Use life >> 1 year or 300 dive hours if (2) 1 hour dives per dive day.
- Replacement >> user replaceable (annual recommended).

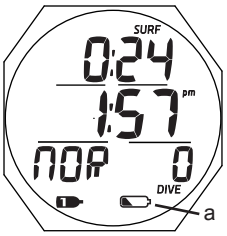


Fig. 1 - SURFACE MAIN
(low battery warning)

Low Battery on surface
<= 2.75 volts (warning level)
- Backlight is completely disabled.
- Battery icon (shell with inner bar) appears solid (Fig. 1a).
- Watch and DC functions continue to be available.

<=2.50 volts (Too Low - alarm level)
- All Dive Computer operations cease and the unit operates only as a Watch.
- If in DC mode, the battery icon flashes for 5 seconds and operation reverts to Watch Main Time with the icon flashing (Fig. 2) until the Battery is changed or voltage cannot sustain operation (< 2.35 volts), then the graphics CHG bAt flash until the Battery is changed or voltage drops to the level at which operation cannot be maintained.

Fig. 2 - WATCH MAIN
(low battery alarm)

Low Battery during dive
<= 2.75 volts (warning level)
- Backlight is completely disabled.
- All DC functions continue to be available.
- Battery icon is not displayed on the dive mode screens.
- Battery icon (shell with inner bar) appears solid upon entry into Surface Mode.

<= 2.50 volts (Too Low - alarm level)
- Backlight is completely disabled.
- All DC functions continue to be available during the dive.
- Battery icon is not displayed on the dive mode screens.
- Upon entry into Surface Mode, the Battery icon (shell only with no inner bar) and the graphics CHG bAt flash for 5 seconds (Fig. 3) then operation reverts to Watch Main Time.

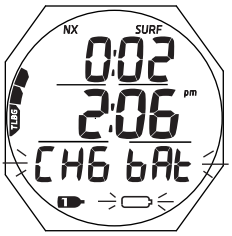


Fig. 3 - SURF MAIN
(low battery alarm during dive)

WATCH MODE

WATCH MAIN TIME
Selection of Main Time is a Set T (Time) menu item.

Time of Day and Date can be set when either Home or Away time is selected as the Watch Main.

Home Time is the current time at your home location and is normally selected as the Watch Main Time.

Away Time, set by Hour Differential, is the current Time at a remote travel location. Upon arrival at the location, Away Time can be interchanged with Home Time to make it the Watch Main Time while visiting the travel location.

Dual Time is the second time (Away or Home) that can be displayed simultaneously with Watch Main Time with set On. It is a +/- Hour Differential based on the Watch Main Time that is selected (Home or Away).

Once a differential is set, it will automatically change when Time of Day is changed. Also, when Away Time is selected to be the Watch Main Time (while at a travel location), it can be changed by changing the differential instead of the Time of Day.

Fig. 4A - WATCH MAIN
(Home with Date)

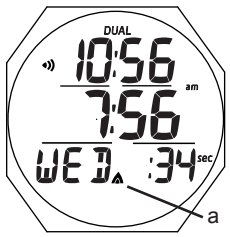


Fig. 4B - WATCH MAIN
(Home with Away as Dual)

MAIN TIME, information includes (Fig. 4A/B/C):
- > Alarm (speaker) icon, if the Daily Alarm is set On.
- > Date (month.day or day. month); or Dual Time (hr:min) with DUAL icon, if Show is set for Yes.
- > Time of Day (hr:min:sec) with AM (or PM) and sec icons, Home or Away, whichever is selected to be Main Time.
- > Up Arrow icon (Fig. 4Ba) if Away is selected as Main Time.
- > Day of Week graphic (MON, TUE, etc.)
- > Battery icon, if a Low Battery.
- > TLBG, if any after NORM/FREE dives.

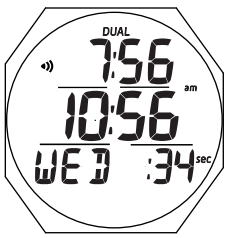


Fig. 4C - WATCH MAIN
(Away with Home as Dual)

- A (< 2 sec) - to access the Watch Menu displaying the first selection, Watch ALT.
- M (< 2 sec) - to access the Watch Menu displaying the last selection, Set T.
- M (2 sec) - to access the NORM Surface Main screen.
- S (< 2 sec) - to silence the Daily Alarm.
- L (press) - to activate the Backlight.

WATCH MENU

A (< 2 sec) - to step forward through selections one at a time.
S (< 2 sec) - to access the selection displayed.
M (< 2 sec) - to step back through selections one at a time.
M (2 sec, any time) - to revert to the Watch Main.
No button action (2 min) - revert to the Watch Main.
L (press) - to activate the Backlight.

WATCH ALT, information includes (Fig. 5A/B):

> Dual Time (hr:min) with DUAL icon, if Show is set for No, or Date as month.day (or day.month)
> Temperature with graphic F (or C)
> Altitude graphic EL2 (to EL 7), blank if Sea level

- A < 2 sec - to step forward to the CDT Lead-in.
- M (< 2 sec) - to step back to the Watch Main.

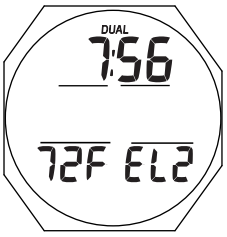


Fig. 5A - WATCH ALT
(differential set)

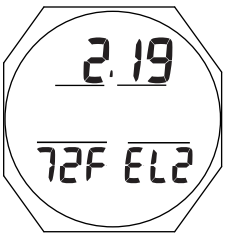


Fig. 5B - WATCH ALT
(Dual Time on Main)

CDT (COUNTDOWN TIMER)

This selection provides access to a CDT for use in Watch mode.

Upon accessing a dive computer mode, Watch CDT operation will be terminated and the time reset to the previous setting.

> *Free Mode has a separate (min:sec) CDT.*

CDT Lead-in, information includes (Fig. 6):

> Graphics Goto and CDT.

- S (< 2 sec) - to access CDT Status.
- A (< 2 sec) - to step forward to the Chrono Lead-in.
- M (< 2 sec) - to step back to the ALT.

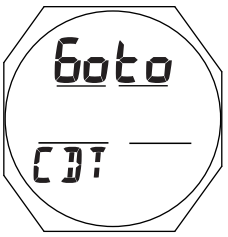


Fig. 6 - CDT LEAD-IN

CDT Status, information includes (Fig. 7):

> Remaining CDT (hr:min) with ON, if in progress; or
0:00 with OFF if the CD is complete or hasn't been set; or
CDT previously set with OFF
> Graphic CDT - OFF (or ON)

- A (< 2 sec) - to step forward through selections of OFF, ON, and SET.
- M (< 2 sec) - to step back through selections.
- S (< 2 sec) - to save the selection.

>> If OFF or ON is selected, revert to the Lead-in screen.
>> If SET is selected, access the Set CDT screen.

Fig. 7 - CDT STATUS

Set CDT, information includes (Fig. 8):

> Graphics SEt and CDT
> CDT (hr:min) with Hour digits flashing

- A (hold) - to scroll upward through Hour Set Points at a rate of 8 per second from 0: to 23: in increments of 1: (hr).
- A (< 2 sec) - to step upward through Set Points one at a time.
- M (< 2 sec) - to step back through Set Points one at a time.
- S (< 2 sec) - to save the Hour Set Point 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 Set Points one at a time.
- M (< 2 sec) - to step back through Set Points one at a time.
- S (< 2 sec) - to save the CDT setting and revert to the CDT Status screen with the graphic SEt flashing.

> *Selecting ON will then start the countdown and revert to the Lead-in screen.*
> *Selecting OFF will save the setting and revert to the Lead-in screen.*

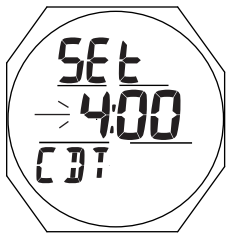


Fig. 8 - SET CDT

The CDT will run in the background, while in Watch mode, until it counts down to 0:00, or it is set OFF, or DC Mode is accessed or a Dive is started in which case the countdown will terminate and revert to OFF.

When a set Countdown Time reaches 0:00, the Audible Alarm will sound during which time the graphic CDT and 0:00 will flash on the Watch Main Time screen (Fig. 9).

Fig. 9 - WATCH MAIN
(when CDT alarm strikes)

CHRONOGRAPH

The Chronograph is a stop watch timer for use in Watch mode.

While the Chronograph is running, it remains on the screen until another screen is accessed, it will then continue to run in the background while on the surface.

Upon activation of dive mode, Chrono operation will be terminated and the time will reset to 0:00:00_00.

Fig. 10 - CHRONO LEAD-IN

Chrono Lead-in, information includes (Fig. 10):
> Graphics GoTo and CHR

- S (< 2 sec) - to access Chrono Status.
- A (< 2 sec) - to step forward to the Daily Alarm Lead-in.
- M (< 2 sec) - to step back to the CDT Lead-in.

Fig. 11 - CHRONO STATUS
(Lap 1 started)

Chrono Status, information includes (Fig. 11):
> Graphics LAP1 (or 2 to 9) and CHR
> Elapsed run time counting up (if previously started), or 0:00_00 (hr:min:sec_1/100th sec), flashing

- If stopped, S (< 2 sec) - to start the Timer counting up from 0:00_00 to 1:59:59_99 max in increments of .01 sec. After the first 4.99 seconds, the .01 digits display 2 dashes.
- S (< 2 sec) - to save that Lap and display the next (up to 9, then restart with 1), with the time continuing to count up.
- A (< 2 sec) - to stop the Timer and recall Lap 1 displaying it's time, repeat to recall other Lap times.
- A (2 sec) - to reset time to 0:00_00.
- S (2 sec) - to exit and revert to the Chrono Lead-in screen.

DAILY ALARM

When set On, the Daily Alarm will -
> be synchronized with the Watch Main Time selected,
> sound the Audible at the Time set every day,
> not sound the Audible while operating in DC Modes,
> run in the background until set Off.

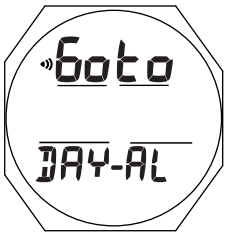


Fig. 12 - DAILY ALARM
LEAD-IN

Daily Alarm Lead-in, information includes (Fig. 12):
> Graphics Go To and DAY - AL with alarm (speaker) icon

- S (< 2 sec) - to access Daily Alarm Status.
- A (< 2 sec) - to step forward to the Set T Lead-in.
- M (< 2 sec) - to step back to the Chrono Lead-in.

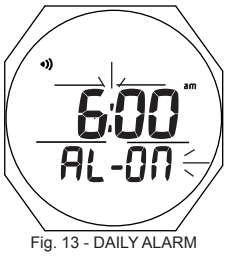


Fig. 13 - DAILY ALARM
STATUS

Daily Alarm Status, information includes (Fig. 13):
> Alarm (speaker) icon
> Alarm Time set (hr:min) with colon flashing and AM (or PM) icon if 12 Hour Format
> Graphic AL - with ON (or OFF) flashing

- A (< 2 sec) - to step forward through the selections of OFF, ON, and SET.
- M (< 2 sec) - to step back through the selections.
- S (< 2 sec) - to save the selection.

>> If OFF or ON is selected, S (< 2 sec) - to revert Set Daily Alarm Lead-in.
>> If SET is selected, S (< 2 sec) - to access the Set screen.

Fig. 14 - SET DAILY ALARM

Set Daily Alarm, information includes (Fig. 14):
> Graphics SEt and AL with alarm icon
> Alarm Time (hr:min), Hour digits flashing, with AM (or PM) icon if 12 Hour Format

- A (hold) - to scroll upward through Hour Set Points 8 per second from 0: to 23: in increments of 1: (hr).
- A (< 2 sec) - to step upward through Hour Set Points one at a time.
- M (< 2 sec) - to step back through 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 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.
- M (< 2 sec) to step back through Set Points one at a time.
- S (< 2 sec) - to save the Alarm setting and revert to the Daily Alarm Status screen with OFF flashing.

Fig. 15 - WATCH MAIN
(when Daily alarm strikes)

To turn the alarm function On -
- A (< 2 sec) - to step through the selections (of OFF, ON, SET) to ON.
- M (< 2 sec) - to step back through the selections.
- S (< 2 sec) - to save the ON* selection and revert to the Set Daily Alarm Lead-in.

**Selecting and saving OFF will retain the time set and revert to the Lead-in. It can then be turned On when ready.*

Each day, at the Time of Day set, the Audible Alarm will sound (if operating in Watch Mode) during which time the hour:minute digits will flash on the Watch Main Time screen (Fig. 15).

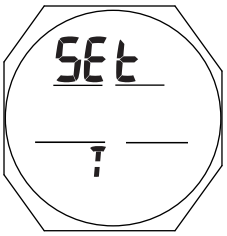


Fig. 16 - SET T LEAD-IN

SET T MENU (TIME)
Sequence >> Lead-in >> Date Format >> Hour Format >> Time of Day >> Date >> Away Time >> Select Main >> Show Dual.

Set Points remain as set until changed.

Set T Lead-in, information includes (Fig. 16):
> Graphics SEt and T

- S (< 2 sec) - to access Set Date Format.
- A (< 2 sec) - to step forward to Watch Main Time.
- M (< 2 sec) - to step back to the Daily Alarm Lead-in.

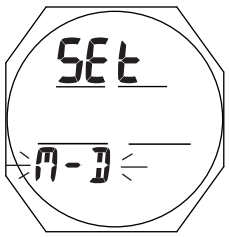


Fig. 17 - SET DATE FORMAT

Set Date Format, information includes (Fig. 17):
Date Format establishes the location that the Month (M) digits are displayed relative to the Day (D) digits, on the left or right.

> Graphic SEt
> Graphics M - D (or D - M) flashing

- A or M (< 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 the Set T Lead-in.

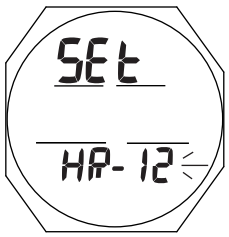


Fig. 18 - SET HOUR FORMAT

Set Hour Format, information includes (Fig. 18):
Hour Format establishes the number of hours displayed for Time of Day, 1 to 12 (AM and PM) or 1 to 24.

> Graphics SEt and HR -
> 12 (or 24) flashing

- A or M (< 2 sec) - to toggle between 12 and 24.
- S (< 2 sec) - to save the setting and access Set Time of Day.
- S (2 sec) - to step back to Set Date Format.

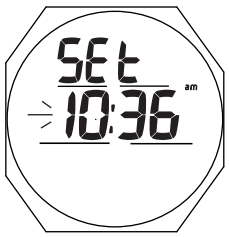


Fig. 19 - SET TIME OF DAY

Set Time of Day, information includes (Fig. 19):
This setting directly changes the Time of Day that is selected to be the Watch Main Time, whether it is Home Time or Away (travel location) Time. The other will be changed by the hour differential set for Away Time.

> Graphic SEt
> Time of Day (hr:min) with the Hour digits flashing, with AM (or PM) icon if 12 Hour Format
> Away (Up Arrow) icon, if Away Time is seleced to be Watch Main Time

- A (press/hold) - to scroll upward through Hour Set Points 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.
- M (< 2 sec) - to step back through Hour Set Points one at a time.
- S (< 2 sec) - to save the Hour Set Point and flash the Minute digits.
- S (2 sec) - to step back to Set Hour Format without saving an Hour change.
- A (press/hold) - to scroll upward through Minute Set Points 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.
- M (< 2 sec) - to step back through Minute Set Points one at a time.
- S (< 2 sec) - to save the Time Time of Day setting and access Set Date.
- S (2 sec) - to step back to the Hour digits flashing without saving a Minutes change.

Fig. 20 - SET DATE

Set Date, information includes (Fig. 20):
The sequence for setting date is Year, then Month, then Day, regardless of the Date Format set.

> Month.Day (or Day.Month) digits
> Year digits flashing
> Graphics M - D (or D - M), identifying top row digits

- A (press/hold) to scroll upward through Year Set Points 8 per second from 2014 to 2057, in increments of 1.
- A (< 2 sec) - to step upward through Year Set Points one at a time.
- M (< 2 sec) - to step back through Year Set Points one at a time.
- S (< 2 sec) - to save the Year setting and flash the Month digits.
- S (2 sec) - to step back to Set Time of Day without saving a Year change.
- A (press/hold) - to scroll upward through Month Set Points 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.
- M (< 2 sec) - to step back through Month Set Points one at a time.
- S (< 2 sec) - to save the Month setting and flash the Day digits.
- S (2 sec) - to step back to the Year digits flashing without saving a Month change.
- A (press/hold) - to scroll upward through Day Set Points 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.
- M (< 2 sec) - to step back through Day Set Points one at a time.
- S (< 2 sec) - to save the Date setting and access Set Away Time.
- S (2 sec) - to step back to the Month digits without saving A Day change.

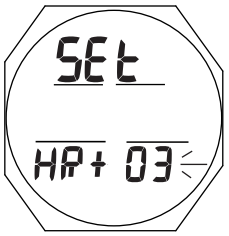


Fig. 21 - SET AWAY TIME
(by hour differential)

Set Away Time (Differential), information includes (Fig. 21):
This feature allows you to set an Hour based numeric time Differential that determines a second (Dual) Time equal to Watch Home Time +/- the Hours selected.

> Graphics SEt and HR
> Graphic OFF or the Differential numeric digits with + (or -) icon flashing

- A (press/hold) - to scroll upward through the Set Points 8 per second from OFF to + 1 through + 23 then - 23 through - 1 in increments of 1 (hour).
- A (< 2 sec) - to step upward through Set Points one at a time.
- M (< 2 sec) - to step back through Set Points one at a time.
- S (< 2 sec) - to save the Differential setting and access Select Main Time.

If OFF is selected, operation will revert to the Set T Lead-in screen bypassing the Select Main Time and Show Dual Time selections.

Once set and saved, the differential will remain as set until changed.

Changing Time of Day will not alter the differential set.

Hint: When Away Time is selected to be the Watch Main Time changing this differential will change Away Time based on Home Time +/- the hours set with this feature.

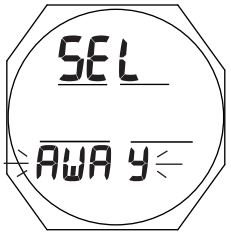


Fig. 22 - SELECT WATCH
MAIN TIME

Select Main Time, information includes (Fig. 22):
This feature selects which Time, Home or Away, is to be displayed as the Watch Main Time (in the center of the Watch Time screen)*. The Time selected will also be displayed in dive computer modes and Log data.

**The other (Dual) will be displayed at the top of the Watch Main Time screen when an Away Time (differential) is set and Show Dual Time is set for YES.*

> Graphic SEL
> Graphic HOME (or AWAY) flashing

- A or M (< 2 sec) - to toggle between HOME and AWAY.
- S (< 2 sec) - to save the setting and access Show Dual Time.
- S (2 sec) - to step back to Set Away Time without changing the setting.

HOME is the time where you live, work, spend most of your time.
AWAY is the time set for a travel destination.

MAIN is the time you choose to be the Watch's primay time (Home or Away).
DUAL is the time you want as a secondary time at the other location (Away or Home).

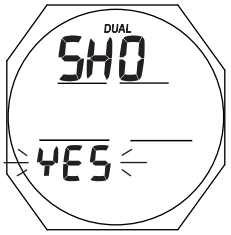


Fig. 23 - SET SHOW DUAL
(with Watch Main Time)

Show Dual Time, information includes (Fig. 23):
This selection determines whether the differential (Dual) time set will be displayed on the Watch screen with Main Time.

> Graphic SHO with DUAL icon
> Graphic YES (or NO) flashing

- A or M (< 2 sec) - to toggle between YES and NO.
- S (2 sec) - to step back to Select Main Time without changing the setting.
- S (< 2 sec) - to save the setting and revert to the Set T Lead-in screen.

DIVE COMPUTER OPERATING MODES

NORM Mode >> for Air and Nitrox SCUBA activity with 1 or 2 Gases.

GAUG Mode >> for SCUBA activity.

FREE Mode >> for breath hold diving activity with Depth/Time indication and decompression calculations shared with NORM Mode.

If no previous dive has been taken within the past 24 hours, NORM is the default upon access from Watch Mode. Others can be accessed while on the surface using the Set M (Dive Operating Mode) selection.

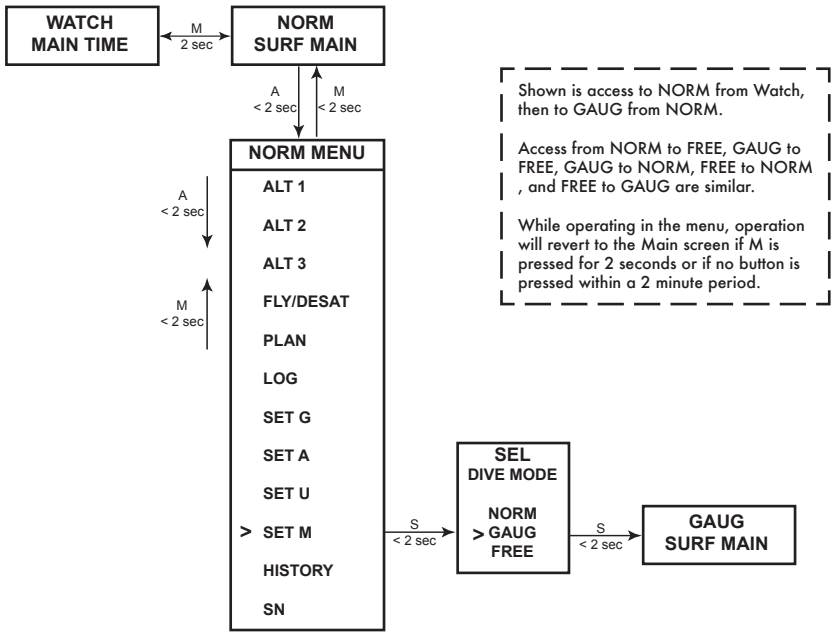
At any time while operating in Surface Modes, operation will enter the Dive Mode selected upon descent to 5 FT (1.5 M) for 5 seconds.

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 NORM/GAUG dive, or 1 minute after a FREE dive, the Dive Main screen will remain on displaying Max Depth and Elapsed Dive together with Surface Interval Time in place of Current Depth.

- During the first 10 minutes (or 1 minute), Dive ALT screens can be viewed.
- A descent during the first 10 minutes after surfacing from a NORM or GAUG dive, or the BDSI (Betwen Dive Surface Interval) time set after surfacing from a FREE dive, is a continuation of that dive.
- After the 10 minute (or BDSI) interval has elapsed, a descent is then considered a new dive. Also, operation will revert to the Watch Main Time.

DIVE COMPUTER MODE ACCESS



NORM

SURFACE MODES

NORM SURF MAIN, information includes (Fig. 24A):
> Surface Interval time (hr:min) with SURF icon; if no dive yet, this is time since activation
> Time of Day (hr:min) with AM or PM icon if 12 Hour Format; no icon if 24 Hour Format
> Graphic NOR
> Dive number with DIVE icon, up to 24 for that operating period (0 if no dive made yet)
> Gas 1 icon, default in Surface Mode
> TLBG with icon, if any after a NORM or FREE dive
> Battery icon, if voltage is low

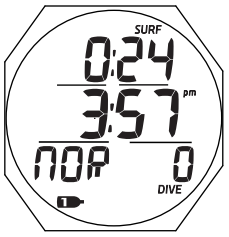


Fig. 24A - NORM SURF MAIN
(no dive yet)

- A (< 2 sec) - to access ALT 1.
- A (hold) - to scroll forward through NORM Surface Menu items.
- M (< 2 sec) - to access the SN (serial number).
- M (2 sec) - to access the Watch Main Time screen.
- L (< 2 sec) - to toggle the Backlight On/Off.
- L (2 sec), while the Backlight is On - to reset the timer and keep it On for the duration set.

Upon surfacing during dives, the Dive Main will remain on display for the first 10 minutes with Surface Interval time (SI) in place of Depth (Fig. 24B) after which the post dive Surface Main will be displayed (Fig. 24C).

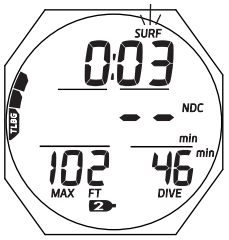


Fig. 24B - NORM DIVE MAIN
(3 min after surfacing)

NORM SURF ALT 1, information includes (Fig. 25):
> Surface Interval* (hr:min) with SURF icon, prior to Last dive
> Graphic LAST, indicating data is for dive previously conducted while still in NORM mode
> Max Depth* of dive previously conducted while still in NORM mode with MAX and FT (or M) icons
> EDT* (Elapsed Dive Time up to 599 min) with DIVE and min icons

**Dashes if no previous dive conducted.*

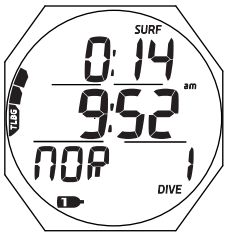


Fig. 24C - NORM SURF MAIN
(14 min after dive 1)

- A (< 2 sec) - to access ALT 2.
- A (hold) - to scroll forward through Menu items.
- M (< 2 sec) - to step back to Surface Main.
- L (press) - to operate the Backlight.

NORM SURF ALT 2, information includes (Fig. 26):
> Temperature with graphic F (or C)
> Altitude graphic, if EL2 (to EL7), blank if Sea level

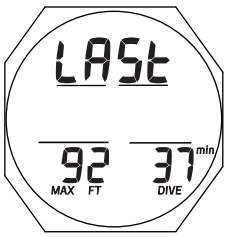


Fig. 25 - NORM SURF ALT 1
(Last dive's data)

- A (< 2 sec) - to access ALT 3 (if a Nitrox dive has been conducted, bypassed to Fly/Sat if not).
- A (hold) - to scroll forward through Menu items.
- M (< 2 sec) - to step back to ALT 1.
- L (press) - to operate the Backlight.

NORM SURF ALT 3, information includes (Fig. 27):
> Current O2 (%) with O2sat icon
> PO2 alarm value set (ATA) with PO2 and MAX icons
> FO2 set for Gas 1 with FO2 icon
> NX icon, if FO2 is set for Nitrox
> (PZ+) icon, if selected, no icon if DSAT is selected
> CF icon, if Conservative Factor is set On
> Gas 1 icon, default on surface

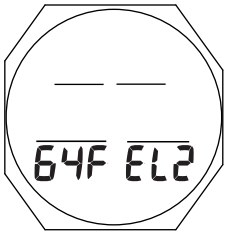


Fig. 26 - NORM SURF ALT 2

- A (< 2 sec) - to access Fly/Sat.
- A (hold) - to scroll forward through Menu items.
- M (< 2 sec) - to step back to ALT 2.
- L (press) - to activate Backlight.

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 (NORM, GAUG, or FREE).

Time to Desaturate (SAT), 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 dive (NORM or FREE), counting down from 23 to 10 (hr only), then 9:59 to 0:00 (hr:min).

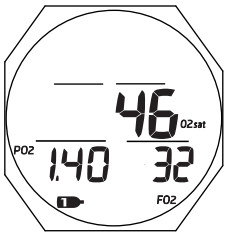


Fig. 27 - NORM SURF ALT 3
(only if Nitrox)

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.
> SAT is not displayed after a Gauge or Violation dive.
> Desaturation requiring Times greater than 24 hours will display 24 - until it decreases to 23 (hr) .
> In the event that Time to Desaturate still remains at the end of 24 hours, operation as a dive computer will be canceled and any Nitrogen/oxygen calculation and remaining SAT time will be cleared.

FLY/SAT, information includes (Fig. 28A, B):
> Graphic FLY with Time to Fly (hr:min), - : - - if no dive yet
> Graphic SAT with Time to Desat (hr:min), - : - - if no dive yet, 0:00 if no time remaining

- A (< 2 sec) - to access Plan.
- A (hold) - to scroll forward through Menu items.
- M (< 2 sec) - to step back to ALT 3 (if Nitrox), or ALT 2 (if not).
- L (press) - to operate the Backlight.

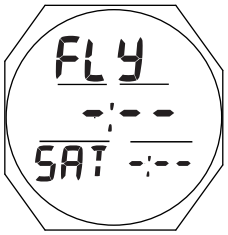


Fig. 28A - FLY/SAT
(no dive yet)

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

**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.*

Fig. 28B - FLY/SAT
(after a dive)

Plan Lead-in, information includes (Fig. 29A, B):
> Graphic PLAN
> Graphic dSAt or PZ, the algorithm selected (DSAT or PZ+)
> PO2 alarm value set (ATA) for Gas 1 with icon, blank if Air
> FO2 set for Gas 1 with icon, graphic Air or numeric value (21 to 100)
> Gas (tank) 1 icon, default gas for Plan

- A (< 2 sec) - to access Log.
- A (hold) - to scroll forward through Menu items.
- M (< 2 sec) - to step back to FLY/SAT.
- S (< 2 sec) - to access the Pre Dive Planning Sequence.
- L (press) - to operate the Backlight.

Fig. 29A - 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), as NDLs (nitrogen based limits) if nitrogen is in control or OTLs (oxygen based limits) if O2 is in control.

It will sequence through depth/time 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 then 1 minute time is available, dashes will be displayed for time, and depth values will flash.*

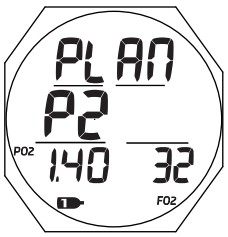


Fig. 29B - PLAN LEAD-IN
(Gas 1 set for Nitrox)

PDPS, information includes (Fig. 30A, B):
> Plan Depth value with FT (or M) icon
> Dive Time allowed with NDC (or OTL) and min icons
> 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
> FO2 set for Gas 1 with icon, graphic Air or numeric value (21 to 100)
> Gas (tank) 1 icon, default gas for Plan

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

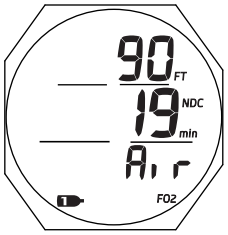


Fig. 30A - PDPS
(nitrogen control)

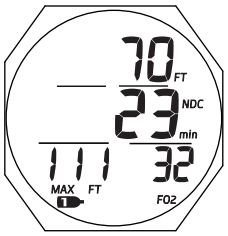


Fig. 30B - PDPS
(oxygen control)

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.

***FREE Dive information is only available using the OceanLog PC or Diverlog for Mac Interface program.*

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

Log Lead-in, information includes (Fig. 31):
> Log Mode (book) icon
> Graphics NOR - GAU

- A (< 2 sec) - to access Set G Lead-in.
- M (< 2 sec) - to step back to Plan Lead-in.
- S (< 2 sec) - to access Log Preview.
- L (press) - to operate the Backlight.

Fig. 31 - LOG LEAD-IN

Log Preview, information includes (Fig. 32):
> Log Mode (book) icon
> Date (month.day or day.month), the dive was conducted; or blank if none recorded
> Time dive began (hr:min) with AM (or PM) icon if 12 Hour Format, no icon if 24 Hour Format; or graphic NONE
> Graphic NOR (or GAU or VIO or YET)
> Dive number (1 to 24, 0 if no dive yet) with DIVE icon

- A (< 2 sec) - to step through Preview screens from the most recent to the oldest recorded.
- A (hold) - to scroll through Preview screens 8 per second from the most recent to the oldest recorded.
- M (< 2 sec) - to step through Preview screens in the opposite direction.
- S (< 2 sec) - to access Data 1 for the dive Preview displayed.
- S (2 sec) - to revert to the Lead-in screen.
- L (press) - to operate the Backlight.

Fig. 32 - LOG PREVIEW
(after NORM dive 1)

Log Data 1, information includes (Fig. 33A, B):
> Log Mode (book) icon
> Pre dive Surface Interval (hr:min), - : - - if no pevious dive that activation period, with SURF icon
> Total Ascent Time (min) with TAT and min icons, if Deco; blank if No Deco
> Max Depth with MAX and FT (or M) icons
> Elapsed Dive Time with DIVE 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 seconds

- S (< 2 sec) - to access Data 2 for that dive.
- S (2 sec) - to revert to Preview screen.
- L (press) - to operate the Backlight.

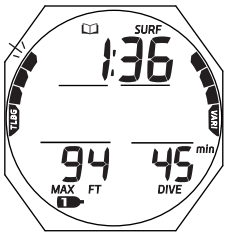


Fig. 33A - LOG DATA 1

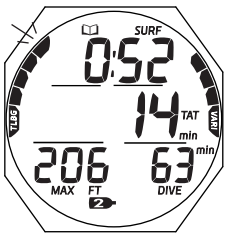


Fig. 33B - LOG DATA 1
(Deco during dive)

Log Data 2, information includes (Fig. 34):
> Log Mode (book) icon
> Temperature (minimum that dive) with graphic F (or C)
> Graphic SEA (or EL2 to EL7), indicating the Altitude at which the dive was conducted

- 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 1 screen for that dive.
- L (press) - to activate Backlight.

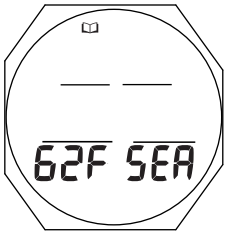


Fig. 34 - LOG DATA 2

Log Data 3, information includes (Fig. 35):
> Log Mode (book) icon
> O2% at end of dive, 2 dashes if Violation Gauge Mode, with O2sat icon
> Highest PO2 (ATA) reached during the dive with PO2 and MAX icons
> FO2 set point for the gas in use when the dive ended, with icon
> Gas 1 (or 2) icon, one in use when the dive ended

- S (< 2 sec) - to revert to the Preview screen.
- S (2 sec) - to revert to the Data 2 screen for that dive.
- L (press) - to activate Backlight.

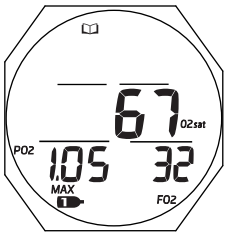


Fig. 35 - LOG DATA 3

SET GAS MENU
Each Gas has an individual FO2 setting and an associated PO2 Alarm setting.

Default settings are FO2 Air with no PO2 value for Gas 1, and Off for Gas 2. Settings revert to the defaults when 24 hours elapse without conducting a dive.

When FO2 is set for Air -
> calculations are the same as when FO2 is set for 21%.
> it remains set for Air until set for Nitrox (21 to 100%).
> O2 data (such as PO2, O2%) will not be displayed at any time during the dive, on the surface, or in Plan mode.

> MODs (Max Operating Depths) will not be displayed on the FO2 set screen.
> internally, it will keep track of O2 data for use if FO2 is subsequently set for Nitrox for repetitive dives.

When FO2 is set for Nitrox -
> The Air option will not be displayed as an FO2 setting until 24 hours elapse after the last dive.

When FO2 is set for OFF (Gas 2 only) -
> The Gas Switch routine will not be available during dives.

FO2 50% Default -
> When set OFF, FO2 values will remain set at their last settings saved until 24 hours elapse without conducting a dive.
> When set ON and FO2 is set for Nitrox, 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 Default after repetitive dives until 24 hours elapse with no dive, or the Default is set OFF.

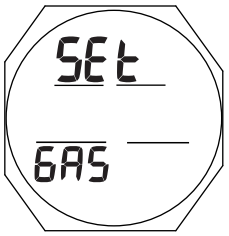


Fig. 36 - SET G LEAD-IN

Set Gas Lead-in, information includes (Fig. 36):
> Graphics SEt and GAS

- A (< 2 sec) - to step forward to Set A Lead-in.
- M (< 2 sec) - to step back to Log Lead-in.
- S (< 2 sec) - to access Set FO2 Gas 1.

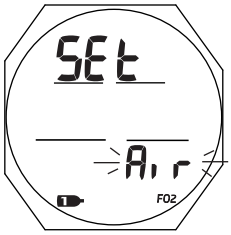


Fig. 37A - SET GAS 1
(FO2 for Air)

Set Gas 1, information includes (Fig. 37A, B, C):
> Graphic SEt if Air; or Max Depth allowed for the PO2 alarm set with FT (or M) icon if Nitrox
> Gas 1 icon
> PO2 alarm value set (ATA) with PO2 icon if Nitrox, blank if Air
> Graphic Air, or numeric FO2 value if Nitrox, flashing, with FO2 icon

- A (press/hold), while the FO2 Set Point digits are flashing - to scroll upward through the Set Points from Air to 21 through 100 in 1% increments, at a rate of 8 per second. *The scroll will stop when the button is released, or momentarily at 32, then at 50, the at 80 %.*
- A (< 2 sec) - to step upward through FO2 Set Points.
- M (< 2 sec) - to step back through FO2 Set Points.
- S (< 2 sec) - save the FO2 setting and flash the PO2 digits if Nitrox (a numerical value), or access Set Gas 2 if Air.
- S (2 sec) - to step back to the Set Gas Lead-in screen without changing the Gas 1 FO2 setting.

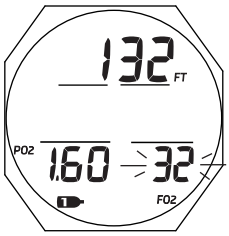


Fig. 37B - SET GAS 1
(FO2 for Nitrox)

- A (< 2 sec) - to step upward through PO2 Alarm Set Points from 1.00 to 1.60 (ATA) in .05 increments.
- M (< 2 sec) - to step back through PO2 Set Points.
- S (< 2 sec) - to save the PO2 setting and access Set Gas 2.
- S (2 sec) - to step back to the FO2 digits flashing without changing the PO2 Alarm setting.
- M (2 sec), or if no button is pressed during a 2 minute period - to revert to the Surface Main.

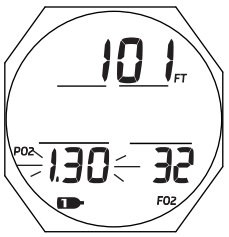


Fig. 37C - SET GAS 1
(PO2 Alarm)

Set Gas 2, information includes (Fig. 38A, B):
> Graphic SEt if OFF or Air; or Max Depth allowed for the PO2 alarm set with FT (or M) icon if Nitrox
> Gas 2 icon
> PO2 alarm value set (ATA) with PO2 icon if Nitrox, blank if Air
> Graphic OFF or Air, or numeric FO2 value if Nitrox, flashing, with FO2 icon

- A (press/hold), while the FO2 Set Point digits are flashing - to scroll upward through the Set Points from OFF to Air to 21 through 100 in 1% increments, at a rate of 8 per second. *The scroll will stop when the button is released, or momentarily at 32, then at 50, then at 80 %.*
- A (< 2 sec) - to step upward through FO2 Set Points.
- M (< 2 sec) - to step back through FO2 Set Points.
- S (< 2 sec) - save the FO2 setting and flash the PO2 digits if Nitrox (a numerical value), or revert to the Set Gas Lead-in screen if OFF or Air.
- S (2 sec) - to step back to the Set Gas 1 screen without changing the Gas 2 FO2 setting.

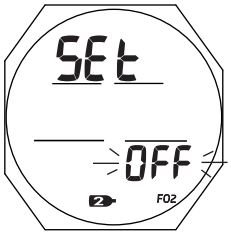


Fig. 38A - SET GAS 2

- A (< 2 sec) - to step upward through PO2 Alarm Set Points from 1.00 to 1.60 (ATA) in .05 increments.
- M (< 2 sec) - to step back through PO2 Set Points.
- S (< 2 sec) - to save the PO2 setting and access Set Gas 2.
- S (2 sec) - to step back to the FO2 digits flashing without changing the PO2 Alarm setting.
- M (2 sec), or if no button is pressed during a 2 minute period - to revert to the Surface Main.

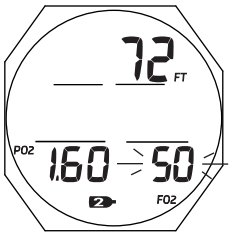


Fig. 38B - SET GAS 2
(FO2, then PO2 Alarm)

SET A MENU (NORM/GAUG ALARMS)
Sequence >> Lead-in >> Aud >> Depth >> EDT >> TBG (= TLBG)* >> DTR*

**Items apply to NORM only.*

Set Points remain as set until changed.

Set A (Alarms) Lead-in, information includes (Fig. 39):
> Graphics SEt and A

- A (< 2 sec) - to step forward to Set U Lead-in.
- M (< 2 sec) - to step back to Set Gas Lead-in.
- S (< 2 sec) - to access Set Audible Alarm.

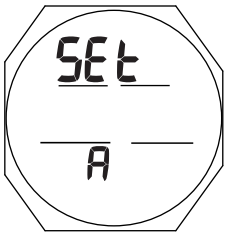


Fig. 39 - SET A LEAD-IN (Alarms)

Set Audible Alarm, information includes (Fig. 40):
> Graphics SEt and AUD -
> Graphic OFF, or ON, flashing

- 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 step back to Set A Lead-in without changing the Audible Alarm setting.
- M (2 sec), or if no button is pressed during a 2 minute period - to revert to the Surface Main.

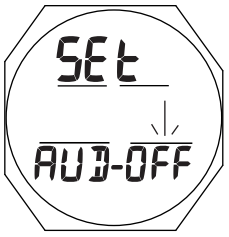


Fig. 40 - SET AUDIBLE ALARM

Set Depth Alarm (DA), information includes (Fig. 41):
> Graphics SEt and - dA
> Graphic OFF, or Depth value, flashing with MAX and FT (or M) icons

- A (hold) to scroll upward through Set Points 8 per second from 30 to 330 FT (10 to 100 M) in increments of 10 FT (1 M).
- A (< 2 sec) - to step upward through Set Points one at a time.
- M (< 2 sec) - to step back through Set Points one at a time.
- S (< 2 sec) - to save the setting and access Set EDT Alarm.
- S (2 sec) - to revert to Set Audible Alarm without changing the Depth Alarm setting.

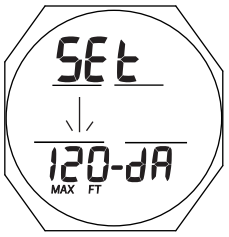


Fig. 41 - SET DEPTH ALARM

Set EDT (Elapsed Dive Time) Alarm, information includes (Fig. 42):
> Graphics SEt and EDT -
> Time value flashing with DIVE and min icons

- A (hold) - to scroll upward through Set Points 8 per second from OFF to 10 through 180 (min) in increments of 5 min.
- A (< 2 sec) - to step upward through Set Points one at a time.
- M (< 2 sec) - to step back through Set Points one at a time.
- S (< 2 sec) - to save the setting and access Set TLBG Alarm.
- S (2 sec) - to revert to Set Depth Alarm without changing the EDT Alarm setting.

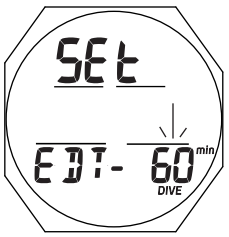


Fig. 42 - SET EDT ALARM

Set TLBG Alarm, information includes (Fig. 43):
> Graphics SEt and TBG (= TLBG, Tissue Loading Bar Graph)
> Graphic OFF, or TLBG segments with icon, flashing

- A (< 2 sec) - to step upward through Set Points from OFF to 1 through 4 segments one at a time.
- M (< 2 sec) - to step back through Set Points one at a time.
- S (< 2 sec) - to save the setting and access Set DTR Alarm.
- S (2 sec) - to revert to Set EDT Alarm without changing the TLBG Alarm setting.

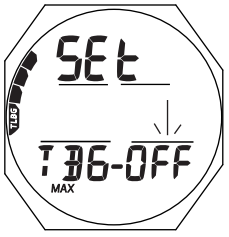


Fig. 43 - SET TLBG ALARM

Set DTR (Dive Time Remaining) Alarm, information includes (Fig. 44):
> Graphics SEt and DTR -
> Time Value (min) flashing with min icon

- A (hold) - to scroll upward through Set Points 8 per second from OFF to 5 through 20 (min) in increments of 1 min.
- A (< 2 sec) - to step upward through Set Points one at a time.
- M (< 2 sec) - to step back through Set Points one at a time.
- S (< 2 sec) - to save the setting and revert to Set A Lead-in.
- S (2 sec) - to revert to Set TLBG Alarm without changing the DTR Alarm setting.

Fig. 44 - SET DTR ALARM

SET U MENU (UTILITIES)
Sequence >> Lead-in >> Wet >> Units >> DS* >> SS* >> Algo* >> CF* >> Glo >> SR

**Items apply to NORM only.*

Set Points remain as set until changed.

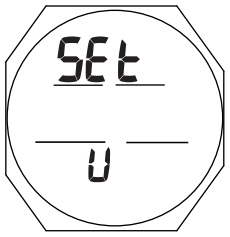


Fig. 45 - SET U LEAD-IN

Set U (Utilities) Lead-in, information includes (Fig. 45):
> Graphics SEt and U

- A (< 2 sec) - to step forward to Select Op Mode Lead-in.
- M (< 2 sec) - to step back to Set A Lead-in.
- S (< 2 sec) - to access Set Water Type.

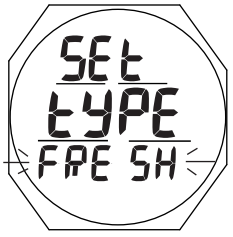


Fig. 46 - SET WATER TYPE

Set Water Type, information includes (Fig. 46):
> Graphics SEt and tYPE
> Graphic FRESH (or SEA) flashing

- A or M (< 2 sec) - to toggle between FRESH and SEA.
- S (< 2 sec) - to save the setting and access Set Wet Activation.
- S (2 sec) - to step back to the Set U Lead-in without changing the Water Type setting.

Fig. 47 - SET WET ACTIVATION

Set Wet Activation, information includes (Fig. 47):
> Graphics SEt and WET -
> Graphic ON (or OFF) flashing

- A or M (< 2 sec) - to toggle between ON and OFF.
- S (< 2 sec) - to save the setting and access Set Units.
- S (2 sec) - to step back to Set Water Type without changing the Wet Activation setting.

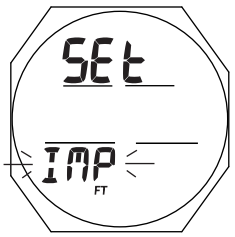


Fig. 48 - SET UNITS

Set Units, information includes (Fig. 48):
> Graphic Set
> Graphic IMP (or MET) flashing with FT (or M) icon

- A or M (< 2 sec) - to toggle between IMP and MET.
- S (< 2 sec) - to save the setting and access Set Deep Stop.
- S (2 sec) - to step back to Set Wet Activation without changing the Units setting.

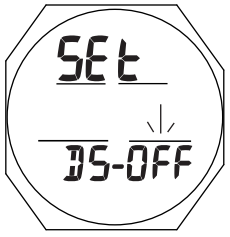


Fig. 49 - SET DEEP STOP

Set Deep Stop (DS), information includes (Fig. 49):
> Graphics SEt and DS -
> Graphic ON (or OFF) flashing

- A or M (< 2 sec) - to toggle between ON and OFF.
- S (< 2 sec) - to save the setting and access Set Safety Stop.
- S (2 sec) - to step back to Set Units without changing the Deep Stop setting.

Fig. 50 - SET SAFETY STOP (Time then Depth)

Set Safety Stop (SS), information includes (Fig. 50):
> Graphic SEt
> Graphic SS - with OFF flashing; or Stop Depth with FT (or M) icon, and Stop Time (min:sec) flashing with icons

- A (< 2 sec) - to step forward through the Time Set Points of OFF, 3:00, and 5:00.
- M (< 2 sec) - to step back through the Time Set Points one at a time
- S (< 2 sec) - to save the Time setting and .
- S (2 sec) - to step back to the Set Deep Stop without changing the Safety Stop setting.

>> If SS OFF is saved, operation shall access Set Algorithm.
>> If 3:00 or 5:00 is saved, the Stop Depth digits will flash.

- A (< 2 sec) - to step up through Depth Set Points of 10, 15, and 20 FT (or 3, 4, 5, and 6 M) one at a time.
- M (< 2 sec) - to step back through Depth Set Points one at a time.
- S (< 2 sec) - to save the Stop Depth setting and access Set Algorithm.
- S (2 sec) - to step back to the Stop Time value flashing without changing the Stop Depth.

Set Algorithm, information includes (Fig. 51):
> Graphics SEt and ALGO
> Graphic PZ+ (or DSAT) flashing

- A or M (< 2 sec) - to toggle between DSAT and PZ+.
- S (< 2 sec) - to save the setting and access Set Conservative Factor.
- S (2 sec) - to step back to Set Safety Stop without changing the Algorithm setting.

This feature allows selection of the algorithm to be used for nitrogen and oxygen calculations for Plan and DTR values.

After NORM or FREE dives, the setting can be changed once Desat Time decreases to 0:00 or after 24 hours.

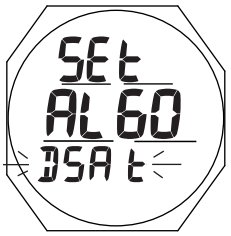


Fig. 51 - SET ALGORITHM

Set Conservative Factor (CF), information includes (Fig. 52):
> Graphics SEt and CF -
> Graphic ON (or OFF) flashing

- A or M (< 2 sec) - to toggle between ON and OFF.
- S (< 2 sec) - to save the setting and access Set Backlight Duration.
- S (2 sec) - to step back to Set Algorithm without changing the Conservative Factor setting.

When the Conservative Factor 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 back of manual.

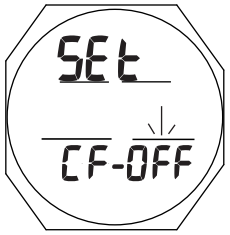


Fig. 52 - SET CONSERVATIVE FACTOR

Set Backlight Duration (Glo), information includes (Fig. 53):
> Graphics SEt and GLO -
> Time Set Point flashing with sec icon

- A (< 2 sec) - to step upward through Set Points of 0, 5, and 10 (sec) one at a time.
- M (< 2 sec) - to step back through Set Points one at a time.
- S (< 2 sec) - to save the setting and access Set Sampling Rate.
- S (2 sec) - to step back to Set Conservative Factor without changing the Backlight Duration setting.

Backlight (Glo) Duration is the time the backlight will remain On after L is released (0 = no additional time).

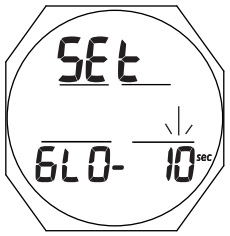


Fig. 53 - SET BACKLIGHT DURATION

Set Sampling Rate (SR), information includes (Fig. 54):
> Graphics SEt and SR -
> Time Set Point flashing with sec icon

- A (< 2 sec) - to step upward through Set Points of 2, 15, 30, and 60 (sec) one at a time.
- M (< 2 sec) - to step back through Set Points one at a time.
- S (< 2 sec) - to save the setting and revert to Set U Lead-in.
- S (2 sec) - to step back to Set Backlight Duration without changing the Sampling Rate setting.

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

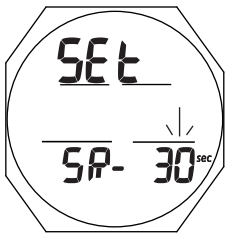


Fig. 54 - SET SAMPLING RATE

SELECT DIVE OPERATING MODE
Sequence >> Lead-in >> NOR >> GAU >> FRE.

Set Point remains as set until changed.

Select Operating Mode Lead-in, information includes (Fig. 55):
> Graphics SEL OP MODE

- A (< 2 sec) - to step forward to History.
- M (< 2 sec) - to step back to Set U Lead-in.
- S (< 2 sec) - to access Select Op Mode.

Fig. 55 - SET M LEAD-IN

Select Operating Mode, information includes (Fig. 56):
> Graphics SEL and OP
> Graphic NOR (or GAU, or FRE) flashing

- A (< 2 sec) - to step forward through selectionss of NOR, GAU, and FRE.
- M (< 2 sec) - to step back through selections.
- S (< 2 sec) - to save the selection and access that mode's Surface Main screen.
- S (2 sec) - to to step back to Select OP Mode Lead-in without changing the Mode.

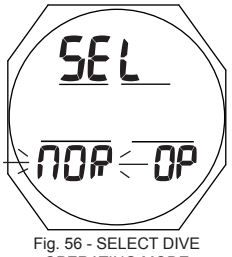


Fig. 56 - SELECT DIVE OPERATING MODE

HISTORY MODE (NORM/GAUG)

History is a summary of basic data recorded during all NORM and GAUG dives conducted.

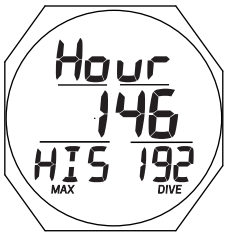


Fig. 57 - HISTORY 1

History 1, information includes (Fig. 57):

> Graphic Hour with Total hours of Elapsed Dive Time (EDT) ever recorded (up to19999), 0 until > 1 hour
> Graphic HIS with Total number dives ever recorded (up to 999) with MAX and DIVE icons, 0 if no dive yet

- A (< 2 sec) - to step forward to Serial Number.
- M (< 2 sec) - to step back to Set OP Mode Lead-in.
- S (< 2 sec) - to access History 2.
- L (press) - to operate the Backlight.

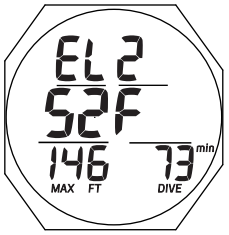


Fig. 58 - HISTORY 2

History 2, information includes (Fig. 58):

> Graphic SEA, or EL2 to EL7, highest Altitude at which a dive was conducted
> Temperature with graphic F (or C), lowest recorded
> Max Depth ever reached (to 330 FT/100 M) with MAX and FT (or M) icons
> Longest Elapsed Dive Time (EDT) recorded during a single dive (up to 599 min) with DIVE and min icons

- S (< 2 sec) - to revert to History 1.
- L (press) - to operate the Backlight.

SERIAL NUMBER (SN)

Information displayed on this screen should be recorded and kept with your sales receipt, it will be required in the event that your OCL requires factory service.

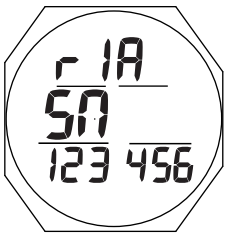


Fig. 59 - SERIAL NUMBER

Serial Number, information includes (Fig. 59):

> Graphic r1A (or higher), indicating the revision level of the firmware (OCL's active operating software)
> Graphic SN with the factory programmed serial number

- A (< 2 sec) - to step forward to the Surface Main.
- M (< 2 sec) - to step back to History 1.
- L (press) - to operate the Backlight.
- S (< 2 sec) - to access Clear (if NORM mode) {see pg. 46} , or revert to the Main Menu (if GAUG or FREE Modes).

DIVE MODE

FEATURES

BAR GRAPHS
The OCL features 2 specific bar graphs.

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

TLBG (NORM/FREE)
The TLBG represents your relative No Deco (Fig. 60a) or Deco status (Fig. 61a). The first 4 segments represent No Deco status and the fifth indicates a Deco condition.

As your Depth and Elapsed Dive Time increase segments add.

As you ascend segments recede, indicating that additional no deco time is available.

The OCL 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 (Fig. 63a) 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, the audible will sound, and all VARI segments will flash (Fig. 63) 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).**

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 OCL 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 PZ+. After dives, the selection can be changed once Desaturation time decreases to 0:00 or 24 hours pass without a dive.

DSAT was the standard used by Oceanic in all of its dive computers until it adopted the Dual Algorithm function several years ago. 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.

PZ+ (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 Conservative Factor is set On, the No Deco Limits which are based on the algorithm selected and used for Ni-O2 calculations and displays relating to Plan and 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 Deep Stop 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 Deep Stop, you will be able to access a Deep Stop Preview screen that will display the current Stop Depth/Time.

Upon initial ascent to within 10 FT (3 M) below the calculated Stop Depth, a Deep Stop 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 Deep Stop Main display and the Deep Stop feature will be disabled for the remainder of that dive. There is no Penalty if the Deep Stop is ignored.
> In the event that you enter Decompression, exceed 190 FT (57 M), or a High O2 condition (=> 80%) occurs, the Deep Stop will be disabled for the remainder of that dive.
> The Deep Stop is disabled during a High PO2 Alarm condition (=> Set Point).

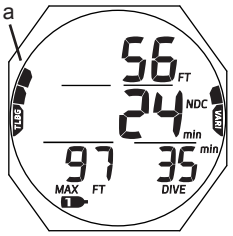


Fig. 60 - NO DECO MAIN

Fig. 61 - DECO MAIN

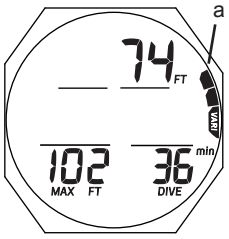


Fig. 62 - DIVE MAIN
(Ascent normal)

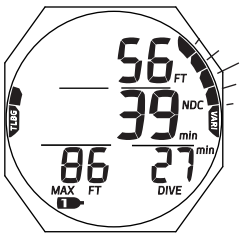


Fig. 63 - DIVE MAIN
(Ascent Too Fast)

SAFETY STOP (SS), No Deco only
Upon ascent to within 5 FT (1.5 M) deeper than the Safety Stop 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 Safety Stop at the Depth set will appear on the Main display with a countdown beginning at the Safety Stop Time set and counting down to 0:00 (min:sec).

- If the Safety Stop was set 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 Safety Stop 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 Safety Stop Main will appear again upon ascent to within 5 FT (1.5 M) deeper than the Safety Stop Depth set for 1 second.
- If you ascend 2 FT (0.6 M) shallower than the Safety Stop Depth for 10 seconds prior to completing it, the Safety Stop will be canceled for the remainder of that dive.
- There is no Penalty if you surface prior to completing the Safety Stop or ignore it.

DIVE TIME REMAINING (DTR)
The OCL constantly monitors No Deco status and O2 Accumulation, and will display whichever Time is the least amount available as Dive Time Remaining on the No Deco Dive Main. The Time being displayed will be identified by the NDC or O2 icon.

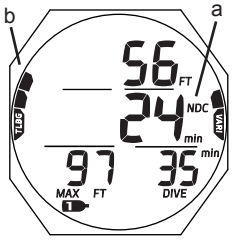


Fig. 64 - NO DECO MAIN

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. 64a). It will also be displayed graphically as the TLBG (Fig. 64b).

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.

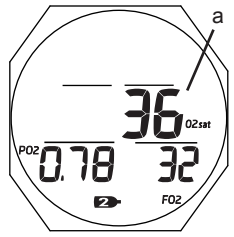


Fig. 65 - NO DECO ALT 2

OTR (O2 DTR)
When set for Nitrox operation, O2 during a dive is displayed on an ALT screen as a % of allowed saturation (Fig. 65a) identified by the O2sat 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 becomes less than the NDC, calculations for the dive will be controlled by O2 and OTR will be displayed as DTR on the Main (Fig. 66a), identified by the O2 and min icons.

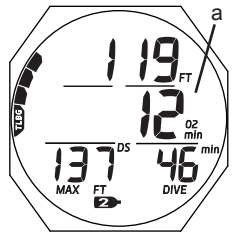


Fig. 66 - NO DECO MAIN

OXYGEN EXPOSURE LIMITS
(from NOAA Diving Manual)

PO2	Max Duration Single Exposure		Max Total Duration 24 Hour Day	
(ATA)	(min)	(hr)	(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

NORM

DIVE MODE

NO DECO DIVE MAIN, information includes (Fig. 67):
- > Current Depth with FT (or M) icon
- > DTR (Dive Time Remaining) with NDC (or O2) and min icons
- > Max Depth with MAX and FT (or M) icons
- > EDT (Elapsed Dive Time) with DIVE and min icons
- > TLBG
- > VARI while ascending
- > Gas 1 (or 2) icon - the one in use

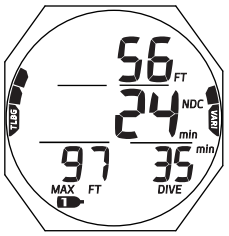


Fig. 67 - NO DECO MAIN

- A (< 2 sec) - to access ALTs.
- M (< 2 sec) - to apply a snapshot Earmark to the PC/Mac interface data recorded at that time. *The graphics EAr MAR will be displayed for 3 seconds (Fig. 68).*
- A (2 sec) - to access Deep Stop Preview, if triggered.
- M (2 sec) - to access Gas Switching.
- S (< 2 sec) - to acknowledge alarms.
- L (press) - to operate the Backlight.

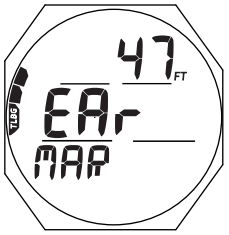


Fig. 68 - EARMARK
(shown for 3 seconds)

On the surface < 10 minutes -
Upon ascending to 2 FT (0.6 M) during a dive, Surface Interval time will be displayed with the SURF icon flashing for the first 10 minutes and NDC will be displayed as 2 dashes (refer to page 16).

- >> After 10 minutes elapse, operation will revert to the Watch Main Time screen.
- >> If a descent is made to 5 FT (1.5 M) for 5 seconds, the dive will be continued. Surface time will not be added to Dive Time.

No Deco Alt 1, information includes (Fig. 69):
- > Time of Day (hr:min), with AM (or PM) icon if 12 Hour Format, no icon if 24 Hour Format
- > Temperature with graphic F (or C)

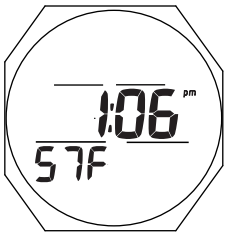


Fig. 69 - NO DECO ALT 1

- A (< 2 sec) - to access ALT 2 (if Nitrox), or access DS Preview if not.
- Revert to the Main in 10 seconds, if A is not pressed.
- L (press) - to operate the Backlight.

No Deco Alt 2 (only if Nitrox), information includes (Fig. 70):
- > % O2 with O2sat icon
- > Current PO2 value (ATA) with icon
- > FO2 value set for the Gas in use with icon
- > Gas 1 (or 2) icon, the one in use

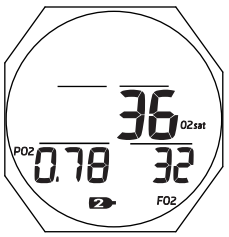


Fig. 70 - NO DECO ALT 2

- A (< 2 sec) - to revert to access DS Preview.
- Revert to the Main in 10 seconds, if A is not pressed.
- L (press) - to operate the Backlight.

Deep Stop Preview, information includes (Fig. 71):
- > Graphic PrEV
- > Stop Depth with FT (or M) icon, DS icon, and Stop Time as 2:00 with min and sec icons

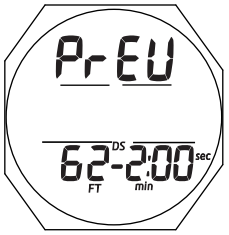


Fig. 71 - DS PREVIEW

- A (< 2 sec) - to revert to the Main.
- Revert to the Main in 10 seconds, if A is not pressed.
- L (press) - to operate the Backlight.

DEEP STOP MAIN, information includes (Fig. 72):
- > Current Depth with FT (or M) icon
- > DTR (min) with NDC (or O2) and min icons
- > Stop Depth with FT (or M) icon
- > Stop icon (arrows/bar) with DS icon
- > Stop Time with min and sec icons, counting down
- > TLBG
- > Gas 1 (or 2) icon, the one in use

Fig. 72 - DS MAIN

- A (< 2 sec) - to access ALTs**.
- M (2 sec) - to access Gas Switching.
- S (< 2 sec) - to acknowledge alarms.
- L (press) - to operate the Backlight.

*** DS features up to 3 ALT displays which are similar to the No Deco Main, ALT 1, and ALT 2 displays, respectively.*

SAFETY STOP MAIN, information includes (Fig. 73):
> Current Depth with FT (or M) icon
> DTR (min) with NDC (or O2) and min icons
> Stop Depth set with FT (or M) icon
> Stop icon (arrows/bar)
> Stop Time set with min and sec icons, counting down
> TLBG
> Gas 1 (or 2) icon, the one in use

Fig. 73 - SS MAIN

- A (< 2 sec) - to access ALTs**.
- M (2 sec) - to access Gas Switching.
- S (< 2 sec) - to acknowledge alarms.
- L (press) - to operate the Backlight.

** SS features up to 3 ALT displays which are similar to the No Deco Main, ALT1, and ALT2 displays, respectively.

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

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 and Up Arrow/Stop Bar icons will flash.

- S (< 2 sec) - to silence Audible. The TLBG will stop flashing.
> Once within 10 FT (3 M) below the required Stop Depth (stop zone), the full Stop icon (both Arrows with Stop Bar) will be displayed solid.

Fig. 74 - DECO ENTRY
(during audible)

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. 75 - DECO STOP MAIN

DECO STOP MAIN, information includes (Fig. 75) -
> Current Depth with FT (or M) icon
> TAT (Total Ascent Time)* with TAT and min icons
> Stop Depth with FT (or M) icon
> Stop icon (arrows/bar)
> Stop Time with min icon
> Full TLBG with icon
> Gas 1 (or 2) icon, the one in use

- A (< 2 sec) - to access ALTs.
- M (< 2 sec) - to apply a snapshot Earmark to the PC/Mac interface data recorded at that time. *The graphics EAr MAR will be displayed for 3 seconds (Fig. 76).*
- M (2 sec) - to access Gas Switching.
- S (< 2 sec) - to acknowledge alarms.
- L (press) - to operate the Backlight.

Fig. 76 - EARMARK
(shown for 3 seconds)

Deco Stop Alt 1, information includes (Fig. 77) -
> Max Depth with MAX and FT (or M) icons
> EDT (Elapsed Dive Time) with DIVE and min icons

- A (< 2 sec) - to access ALT 2.
- Revert to the Main in 10 seconds, if A is not pressed.
- L (press) - to operate the Backlight.

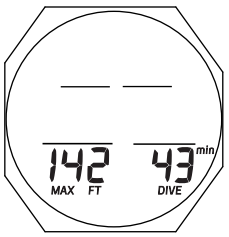


Fig. 77 - DECO STOP ALT 1

Deco Stop Alt 2, information includes (Fig. 78) -
> Time of Day (hr:min)
> Temperature with ° icon and graphic F (or C)

- A (< 2 sec) - to access ALT 3 (if Nitrox), or revert to the Main if not.
- Revert to the Main in 10 seconds, if A is not pressed.
- L (press) - to operate the Backlight.

Fig. 78 - DECO STOP ALT 2

Deco Stop Alt 3 (if Nitrox), information includes (Fig. 79) -
> % O2 with O2sat icon
> Current PO2 value (ATA) with icon
> FO2 value set for the Gas in use with icon
> Gas 1 (or 2) icon, the one in use

- A (< 2 sec) - to revert to the Main.
- Revert to the Main in 10 seconds, if A is not pressed.
- L (press) - to operate the Backlight.

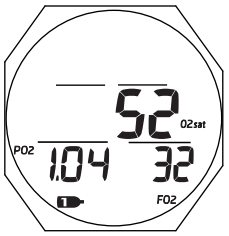


Fig. 79 - DECO STOP ALT 3

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 full TLBG and Down Arrow with Stop Bar icon will flash (Fig. 80) until the audible is silenced, then the TLBG will be solid.

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

> Down Arrow with Stop Bar icon continues to flash until descent to below required Stop Depth (within stop zone), then the 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.

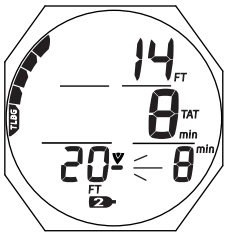


Fig. 80 - CV MAIN
(after Audible)

ALTs are similar to those for Deco.

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. Again, the audible will sound and the full TLBG will flash for 10 seconds (Fig. 81).

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

> Down Arrow icon continues to flash until descent to below required Stop Depth, then full Stop icon will be on solid.

Fig. 81 - 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, the alarm LED will flash, and the full TLBG will flash for 10 seconds (Fig. 82).

> 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. 82 - DV2 MAIN

DV 3 (DELAYED VIOLATION 3)
If you descend deeper than the MOD*, the audible will sound and the alarm LED will flash. Also, the Up Arrow will flash, and Current Depth and Max Depth will only indicate 3 dashes (- - -) signifying that you are Too Deep (Fig. 83).

**MOD is the Max Operating Depth at which the unit 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.

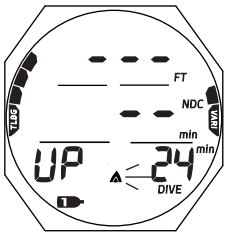


Fig. 83 - DV 3 MAIN

VGM (VIOLATION GAUGE MODE)
During NORM dives, operation will enter VGM when Deco requires a Stop Depth greater than 70 FT (21 M). It will also enter VGM if Deco is activated during a dive in FREE mode, described later.

Operation would then continue in VGM during the remainder of that dive and for 24 hours after surfacing. VGM turns the unit 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. The graphic VIO and Up Arrow icon will flash.

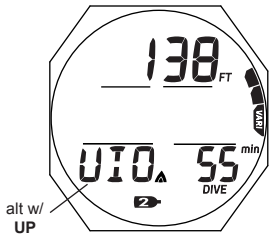


Fig. 84 - VGM MAIN
(after Audible)

VGM Dive Main, information includes (Fig. 84) -

> Current Depth with FT (or M) icon
> Graphic VIO (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).
- M (2 sec) - to access Gas Switching.
- L (press) - to operate the Backlight.

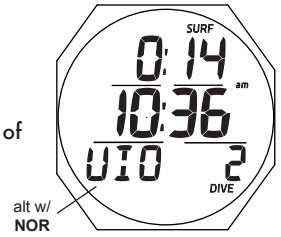


Fig. 85 - VGM MAIN
(on surface)

VGM on the 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.

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 (Fig. 85) until 24 hours elapse with no dives. Watch functions are as normal.

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

HIGH PO2 (NORM ONLY)

Warning >> at Alarm value minus .20 (1.00 to 1.40).
Alarm >> at the value set for the gas in use, except in Deco then at 1.60 only.

When PO2 (partial pressure of oxygen) increases to the Warning level; the audible sounds and the PO2 value will flash (in place of Max Depth) until the audible is silenced (Fig. 86).

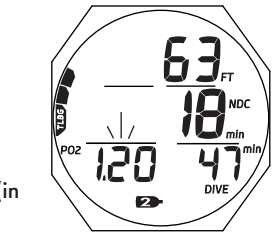


Fig. 86 - PO2 WARNING
(during audible)

- S (< 2 sec) - to acknowledge the alarm.

> When the audible is silenced, Max Depth is restored.

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 the alarm.

> The PO2 value will alternate with Max Depth and Up Arrow icon will flash until PO2 decreases below the Alarm value set.

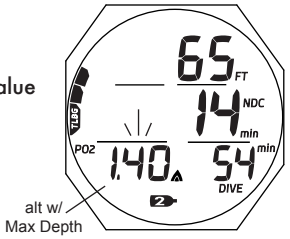


Fig. 87 - PO2 ALARM
(after audible)

PO2 Alarm Main, information includes (Fig. 87) -

> Current Depth with FT (or M) icon
> DTR with NDC (or O2) and min icons
> PO2 value (ATA) with PO2 icon, flashing until < Alarm value set, then alternate with Max Depth
> Up Arrow icon, flashing until < Alarm value set, then removed
> TLBG
> VARI while ascending
> Gas 1 (or 2) icon, the one in use

- A (< 2 sec) - to access ALTs (similar to those for No Deco).
- M (2 sec) - to access Gas Switching.
- L (press) - to operate the Backlight.

High PO2 during Deco (Fig. 88)
The PO2 alarm settings do not apply when in Deco which has a fixed alarm of 1.60 (ATA).

> 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*.

**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.*

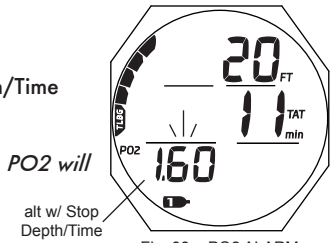


Fig. 88 - PO2 ALARM
(Deco, after audible)

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

When O2 reaches the Warning Level; the audible sounds and the O2 value with icon will flash in place of DTR (Fig. 89) until the audible is silenced, then DTR will be restored.

- S (< 2 sec) - to acknowledge alarm.

If O2 reaches the Alarm level; the audible sounds again and the Up Arrow icon and the O2 value with icon will flash in place of DTR (Fig. 90) until on the surface.

- S (< 2 sec) - to acknowledge alarm.
- A (< 2 sec) - to access ALTs (similar to those for No Deco).
- M (< 2 sec) - to access Gas Switching.
- L (press) - to activate Backlight.

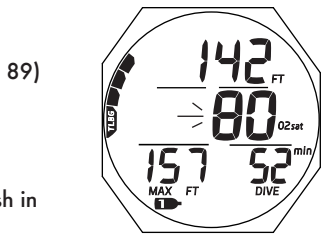


Fig. 89 - O2 WARNING
(during audible)

High O2 during Deco
When O2 reaches the Warning Level; the audible sounds and the O2 value with icon will flash in place of TAT (Fig. 91) until the audible is silenced, then TAT will be restored.

- S (< 2 sec) - to acknowledge alarm.

If O2 reaches the Alarm level; the audible sounds again and the Up Arrow icon and the O2 value with icon will flash in place of TAT until on the surface. Max Depth and EDT will be displayed in place of Deco Stop Depth/Time (similar to Fig. 90).

- S (< 2 sec) - to acknowledge alarm.
- A (< 2 sec) - to access ALTs (similar to those for No Deco).
- M (< 2 sec) - to access Gas Switching.
- L (< 2 sec) - to operate the Backlight.

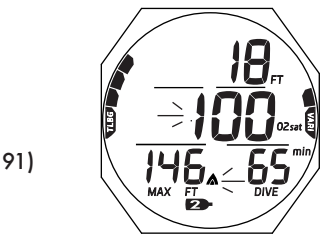


Fig. 90 - O2 ALARM

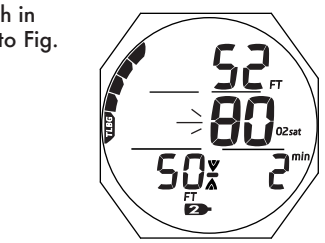


Fig. 91 - O2 WARNING
(Deco, during audible)

High O2 on Surface
Upon ascent to 2 FT (0.6 M) for 1 second (surfacing), the Dive Main screen is displayed for 10 minutes with access to the Dive ALTs allowed.

- If O2 is 100%, the value will flash on the Main until it is < 100%, then it will be replaced with dashes (if Violation) until 10 minutes elapse, then Time of Day.
- If you surface due to 100% O2 without having completed the Deco obligation, the full TLBG and O2 value (100) will flash with O2sat icon for the first 10 minutes, then operation will enter VGM.
- Access to Dive ALTs and Gas Switching is allowed during the first 10 minutes, then access to the NORM Surface Menu is allowed.

GAS SWITCHING
> Switching changes FO2 related displays and calculations from one Gas (FO2) setting to another.
> Dives begin with Gas 1 and default to Gas 1 after 10 minutes on the surface following dives.
> Switching is blocked while on the surface, except during the first 10 minutes after surfacing from a dive.
> Switch is only allowed when Dive Main screens are displayed.
> Switching is blocked during sounding of alarms.
> Switch can be performed regardless of depth.

To Switch Gas, while viewing a NORM Dive Main:

- M (2 sec) - to access the Preview screen for the Gas currently in use (Fig. 92).
- M (2 sec)* again - to access other Gas' Preview (similar).
- S (< 2 sec)* - to flash the graphic GAS 1 (or 2).
- S (< 2 sec), while the graphic is flashing* - to Switch to that Gas, after a 3 second delay.

**Operation reverts to the Main in 10 seconds if M or S is not pressed.*

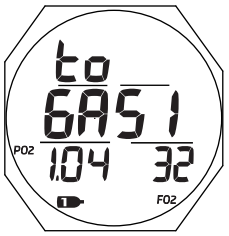


Fig. 92 - GAS 1 SWITCH PREVIEW

Gas Switch Alarm

If the Switch to a Gas would result in PO2 => 1.60, the audible will sound and after 2 seconds a Don't Change warning message will flash (Fig. 93) until acknowledged by S (< 2 sec) or 10 second time out, then the Preview screen will be restored.

Due to the possibility that there may be insufficient air available in the tank associated with that Gas, the switch is still allowed.

If the switch is made, the PO2 alarm will strike. If in Deco, the Up Arrow icon will not flash (you control action to be taken).

Fig. 93 - GAS SWITCH ALARM (all flash)

DIGITAL GAUGE

MODE

GAUG SURF MAIN, information includes (Fig. 94):
> Surface Interval time (hr:min) with SURF icon; if no dive yet, this is time since activation
> Time of Day (hr:min) with AM or PM icon if 12 Hour Format; no icon if 24 Hour Format
> Graphic GAU
> Dive number with DIVE icon, up to 24 for that operating period (0 if no dive made yet)
> Gas 1 icon, default in Surface Mode
> Battery icon, if voltage is low

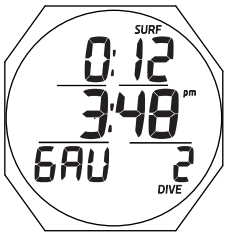


Fig. 94 - GAUG SURF MAIN
(after dive # 2)

- A (< 2 sec) - to access ALT 1.
- A (hold) - to scroll forward through GAUG Surface Menu items.
- M (< 2 sec) - to access the SN (serial number).
- M (2 sec) - to access the Watch Main Time screen.
- L (< 2 sec) - to toggle the Backlight On/Off.
- L (2 sec), while the Backlight is On - to reset the timer and keep it On for the duration set.

Upon surfacing during dives, the Dive Main will remain on display for the first 10 minutes with Surface Interval time (SI) in place of Depth after which the post dive Surface Main will be displayed.

GAUG SURF ALT 1, information includes (Fig. 95):
> Surface Interval* (hr:min) with SURF icon, prior to Last dive
> Graphic LAST, indicating data is for dive previously conducted while still in GAUG mode
> Max Depth* of dive previously conducted while still in GAUG mode with MAX and FT (or M) icons
> EDT* (Elapsed Dive Time up to 599 min) with DIVE and min icons

**Dashes if no previous dive conducted.*

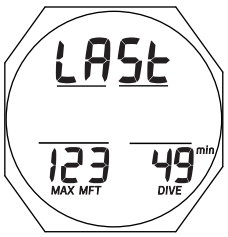


Fig. 95 - GAUG SURF ALT 1
(Last Dive's Data)

- A (< 2 sec) - to access ALT 2.
- A (hold) - to scroll forward through Menu items.
- M (< 2 sec) - to step back to Surface Main.
- Revert to the Main in 10 seconds, if A or M is not pressed.
- L (press) - to operate the Backlight.

GAUG SURF ALT 2, information includes (Fig. 96):
> Temperature with graphic F (or C)
> Altitude graphic, if EL2 (to EL7), blank if Sea level

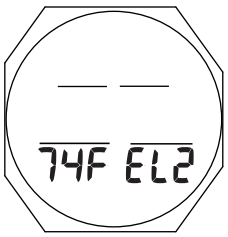


Fig. 96 - GAUG SURF ALT 2

- A (< 2 sec) - to access Fly mode.
- A (hold) - to scroll forward through Menu items.
- M (< 2 sec) - to step back to ALT 1.
- Revert to the Main in 10 seconds, if A or M is not pressed.
- L (press) - to operate the Backlight.

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. *Refer to NORM Mode for descriptions of those menu items.*

Button operations are also similar to those in NORM.

- A (< 2 sec) >> step forward through Menu items.
- A (hold) >> scroll forward through Menu items.
- M (< 2 sec) >> step back through Menu items.
- L (press) >> operate the Backlight.
- M (2 sec) or 2 min (of no button action) >> revert to the Surface Main.

GAUG SURF MENU
MAIN
ALT 1
ALT 2
FLY
LOG
SET A
SET U
SET M
HISTORY
SN

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

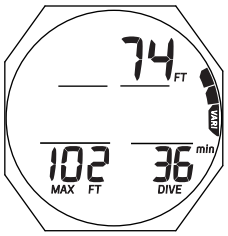


Fig. 97A - GAUG DIVE MAIN (without Run Timer)

GAUG DIVE MAIN, information includes (Fig. 97A, B) -
> Current Depth with FT (or M) icon
> Max Depth with MAX and FT (or M) icons and EDT (Elapsed Dive Time) with DIVE and min icons; or graphic TMR - (run time) with min icon
> VARI while ascending

- A (< 2 sec) - to access ALTs.
- M (< 2 sec) - to apply a snapshot Earmark to the PC/Mac interface data recorded at that time. *The graphics EAr MAR will be displayed for 3 seconds.*
- M (2 sec) - to replace Max Depth & EDT with the Run Timer, moving Max Depth & EDT to the ALT 1 screen.
- A (2 sec) - to reset the Run Timer to 0 min (when displayed).
- S (< 2 sec) - to start/stop the Run Timer (when displayed), or acknowledge alarms (which will not toggle the Timer).
- L (press) - to operate the Backlight.

** The Run Timer can only be started, stopped, or reset while it is displayed on the Main. When it is running and moved to the ALT 1 display, it will continue running until brought to the Main and stopped.*

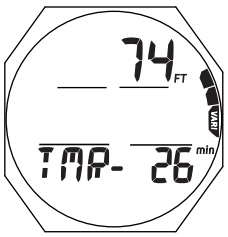


Fig. 97B - GAUG DIVE MAIN (with Run Timer)

Upon ascending to 2 FT (0.6 M) during a dive, Surface Interval time will be displayed with the SURF icon flashing for the first 10 minutes (Fig. 98).

If a descent is made to 5 FT (1.5 M) for 5 seconds, the dive will be continued. Surface time will not be added to Dive Time.

After 10 minutes elapse, operation will revert to the Watch Main Time screen.

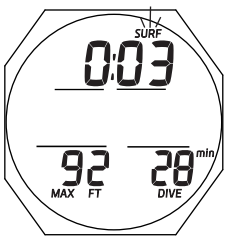


Fig. 98 - GAUG DIVE MAIN (during < 10 min on surface)

GAUG DIVE ALT 1, information includes (Fig. 99A, B):
> Graphic TMR - (run time) with min icon; or Max Depth with MAX and FT (or M) icons and EDT (Elapsed Dive Time) with DIVE and min icons.

- A (< 2 sec) - to access ALT 2.
- Revert to the Main in 10 seconds, if A is not pressed.
- L (press) - to operate the Backlight.

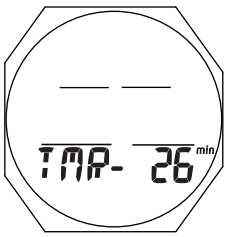


Fig. 99A - GAUG DIVE ALT 1 (if Timer is on Main)

GAUG DIVE ALT 2, information includes (Fig. 100):
> Time of Day (hr:min), with AM (or PM) icon if 12 Hour
> Temperature with graphic F (or C)

- 10 sec or A (< 2 sec), revert to Main.
- L (press) - to operate the Backlight.

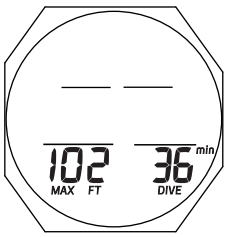


Fig. 99B - GAUG DIVE ALT 1 (if Timer is on Main)

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

Fig. 100 - GAUG DIVE ALT 2

DV 3 (DELAYED VIOLATION 3)
Upon descent deeper than the MOD**, the audible will sound and the alarm LED will flash. Also, the Up Arrow will flash, and Current Depth and Max Depth will only indicate 3 dashes (- - -) signifying that you are too deep (Fig. 101).

***MOD is Max Operating Depth. Refer to the Specifications in the back.*

Upon ascending above the MOD, Current Depth will be restored. Max Depth will display dashes for the remainder of that dive and will be recorded in the Log.

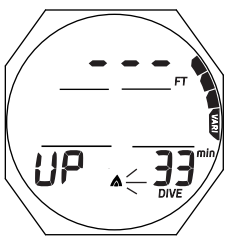


Fig. 101 - GAUG DIVE DV 3

FREE DIVE

MODE

FREE SURF MAIN, information includes (Fig. 102):
> Surface Interval time (min:sec up to 59:59, then hr:min) with SURF icon; if no dive yet, this is time since activation
> Time of Day (hr:min) with AM (or PM) icon
> Graphic FRE
> Dive number with DIVE icon, up to 99 for that operating period (0 if no dive made yet)
> Battery icon - if low battery warning
> TLBG, if any after a NORM or FREE dive

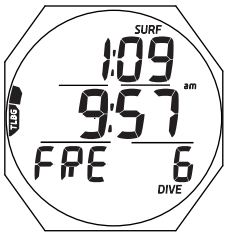


Fig. 102 - FREE SURF MAIN
(after dive # 6)

- A (< 2 sec) - to access ALT 1.
- A (hold) - to scroll forward through Menu items.
- M (< 2 sec) - to access Set M Lead-in.
- L (press) - to operate the Backlight.

Upon surfacing during dives, the Dive Main will remain on display for the first 1 minute (with SI in place of Depth) after which the Surface Main will be displayed.

Fig. 103 - FREE SURF ALT 1
(Last Dive Data)

FREE SURF ALT 1, information includes (Fig. 103):
> SI (min:sec or hr:min) with SURF icon, prior to the Last dive
> Graphic LASt, indicating the data is for the dive previously conducted while still in FREE mode
> Max Depth of the dive previously conducted while still in FREE mode with MAX and FT (or M) icons
> EDT (min:sec) with DIVE and min sec icons

- A (< 2 sec) - to access ALT 2.
- M (< 2 sec) - to step back to the Main.
- L (press) - to operate the Backlight.

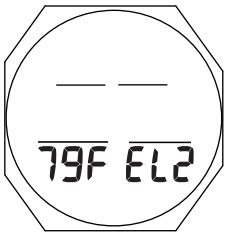


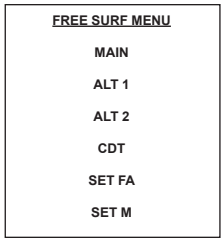
Fig. 104 - FREE SURF ALT 2

FREE SURF ALT 2, information includes (Fig. 104):
> Temperature with graphic F (or C)
> Altitude graphic, if EL2 (to EL7), blank if Sea level

- A (< 2 sec) - to access CDT Lead-in.
- M (< 2 sec) - to step back to ALT 1.
- L (press) - to operate the Backlight.

FREE SURF MENU

Button operations. -
- A (< 2 sec) >> step forward through Menu items.
- A (hold) >> scroll forward through Menu items.
- M (< 2 sec) >> step back through Menu items.
- L (press) >> operate the Backlight.
- M (2 sec) or 2 min (of no button action) >> revert to the Surface Main.



CDT (Countdown Timer)
While on the surface, the CDT can be set, started, and stopped.

Once set and started, it continues to run in the background when a dive is started then it becomes available as an ALT display.

The CDT will run in the background, while on the surface and during dives, until it counts down to 0:00, or it is turned OFF.

When a set Countdown Time reaches 0:00, the audible will sound during which time the graphic CDT will be displayed flashing on the Surface or Dive Main until the audible is silent.

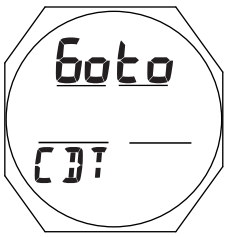


Fig. 105 - CDT LEAD-IN

CDT Lead-in, information includes (Fig. 105):
> Graphics GoTo and CDT

- A (< 2 sec) - to step forward to Set FA Lead-in.
- M (< 2 sec) - to step back to ALT 2.
- S (< 2 sec) - to access CDT Status.
- L (press) >> operate the Backlight

Fig. 106A - CDT STATUS
(On, running)

CDT Status, information includes (Fig. 106A):
> Countdown Time with icons (min:sec), remaining time, or time set & ready to start, 0:00 if countdown is complete
> Graphics CDT - OFF (or ON) flashing

- A (< 2 sec) - to step up through the selections OFF, ON, SET (Fig. 106B, next page).
- M (< 2 sec) - to step back through the selections.
- S (< 2 sec) - to save the setting.

>> If On is saved and a CDT was set, the CDT will start counting down and operation will revert to the Lead-in.
>> If Off is saved, the Timer will stop counting down and operation will revert to the Lead-in.
>> If Set is saved, the Set CDT screen will be displayed.

- S (2 sec) - to revert to CDT Lead-in.

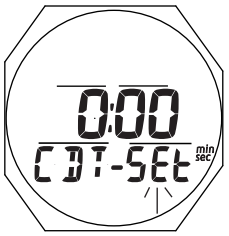


Fig. 106B - CDT STATUS
(to access Set)

Set CDT, information includes (Fig. 107):
> Graphics SEt and CDT
> CDT (min:sec) with Minute digits flashing
> min and sec icons

- A (hold) - to scroll upward through Minute Set Points at a rate of 8 per second from 0: to 59: in increments of 1: (min).
- A (< 2 sec) - to step upward through Set Points one at a time.
- M (< 2 sec) - to step back through Set Points one at a time.
- S (< 2 sec) - to save the Minute Set Point and flash the Seconds digits.
- A (hold) - to scroll upward through Seconds Set Points at a rate of 8 per second from :00 to :59 in increments of :01 (sec).
- A (< 2 sec) - to step upward through Set Points one at a time.
- M (< 2 sec) - to step back through Set Points one at a time.
- S (< 2 sec) - to save the CDT min:sec setting and revert to the CDT Status screen with OFF flashing.

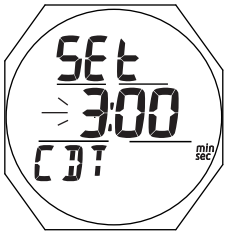


Fig. 107 - SET CDT

SET FA (FREE ALARMS) MENU
Sequence >> Lead-in >> EDT >> DA1 >> DA2 >> DA3

Set Points remain as set until changed.

Set FA Lead-in, information includes (Fig. 108):
> Graphics SEt and FA

- A (< 2 sec) - to step forward to Set M Lead-in.
- M (< 2 sec) - to step back to CDT Lead-in.
- S (< 2 sec) - to access Set EDT Alarm.

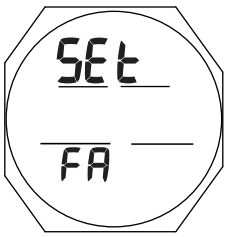


Fig. 108 - SET FA LEAD-IN

EDT (ELAPSED DIVE TIME) ALARM
Factory set for a fixed 30 seconds, the EDT alarm sounds the audible every 30 seconds during FREE dives.

Set EDT Alarm, information includes (Fig. 109):
> Graphics SEt and EDT -
> OFF (or ON) flashing

- A or M (< 2 sec) - to toggle between ON and OFF.
- S (< 2 sec) - to save the setting and access Set DA1.
- S (2 sec) - to step back to Set FA Lead-in.

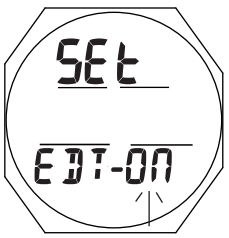


Fig. 109 - SET EDT ALARM

DA (DEPTH ALARMS)
There are 3 Free Depth Alarms (DAs) that can be set at progressively deeper depths*.

**The DA2 setting must be deeper than DA1 and DA3 must be deeper than DA2.*

Set DA1 Alarm, information includes (Fig. 110A):
> Graphics SEt and - dA1
> Graphic OFF, or Depth value with MAX and FT (or M) icons, flashing

- A (hold) - to scroll upward through settings at a rate of 8 per second from OFF to 30 to 330 FT (10 to 100 M) in increments of 10 FT (1 M).
- A (< 2 sec) - to step upward through settings one at a time.
- M (< 2 sec) - to step back through settings one at a time.
- S (< 2 sec) - to save the setting.

> If OFF is saved, operation reverts to Set FA Lead-in.
> If a Depth value is saved, Set DA 2 is accessed.

- S (2 sec) - to step back to Set EDT Alarm.

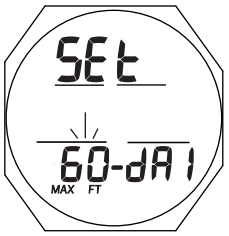


Fig. 110A - SET DA1

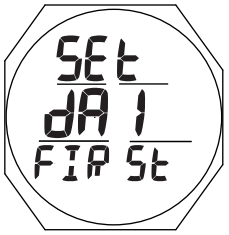


Fig. 110B - SET DA1
FIRST MESSAGE

Set DA 2 and DA 3 are similar with Depth values beginning 1 increment higher (deeper) than the previous selection set. Example: If DA 1 is set for 100 FT, DA 2 settings start at 110 FT.

If DA 1 (or DA 2) is set OFF, a Set DA 1 (or 2) First message will be displayed (Fig. 110B) when attempt is made to access Set DA 2 (or 3).

SELECT OP MODE
The Lead-in screen (Fig. 111) and selecting a Dive Operating Mode are similar to that previously described for NORM. Refer to page 22.

Fig. 111 - SET M LEAD-IN

SHARED SETTINGS
To change items that FREE Mode shares with NORM Mode, first access the NORM Menu, then Set U, then select Set -

> Water Type
> Wet Activation
> Units
> Algorithm
> Conservative Factor
> Glo Duration

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

FREE DIVE MAIN, information includes (Fig. 112) -
> Current Depth with FT (or M) icon
> Dive Time Remaining (min) with NDC and min icons
> Temperature with graphic F (or C)
> Elapsed Dive Time (min:sec) with DIVE and min sec icons
> TLBG

- A (< 2 sec) - to access ALT 1.
- L (press) - to operate the Backlight.

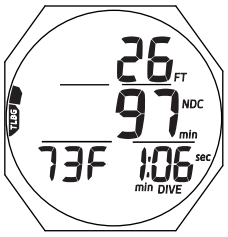


Fig. 112 - FREE DIVE MAIN

Upon ascending to 2 FT (0.6 M) during a dive, Surface Interval time will be displayed with the SURF icon flashing for the first 1 minute and NDC will be displayed as 2 dashes (Fig. 113).

After 1 minute elapses, operation will revert to Surface Mode and full access given to the FREE Surface Menu items.

If a descent is made to 5 FT (1.5 M) for 5 seconds, the dive will be continued. Surface time will not be added to Dive Time.

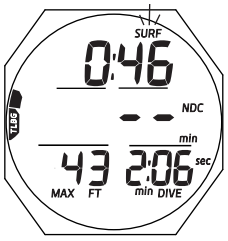


Fig. 113 - FREE DIVE MAIN
(during first 1 min on surface)

FREE DIVE ALT 1, information includes (Fig. 114) -
> Remaining Countdown Time (min:sec) if On and a CD is in progress or 0:00 if On and the CD is complete, with colon flashing. If Off, the CD Time previously set is displayed with colon solid indicating it is ready to start.
> Graphics CDT - , and OFF (or ON) flashing

- S (< 2 sec) - to toggle between ON and OFF (start/stop the timer).
- A (2 sec), when OFF - to reset the timer to the min:sec set.
- A (< 2 sec) - to access ALT 2.
- Revert to Main in 10 sec, if S or A is not pressed.
- L (press) - to operate the Backlight.

When On, the CDT will run in the background while the Main is displayed until it counts down to 0:00, or it is turned Off.

Fig. 114 - FREE DIVE ALT 1

FREE DIVE ALT 2, information includes (Fig. 115) -
> Time of Day (hr:min), with AM (or PM) icon if 12 Hour
> Max Depth with MAX and FT (or M) icons

- 10 sec or A (< 2 sec), revert to Main.
- L (press) - to operate the Backlight.

Fig. 115 - FREE DIVE ALT 2

FREE DIVE ALARMS
FREE mode alarms, which are separate from NORM (or GAUG) alarms, sound either 1 or 3 times as 3 beeps then clear.

They cannot be acknowledged or silenced.

Fig. 123 - CDT ALARM

FREE COUNTDOWN TIMER (CDT) Alarm
When a set Countdown Time reaches 0:00, the audible will sound during which time the graphics CDT - 0:00 will flash on the Main in place of Temperature and EDT (Fig. 123).

FREE ELAPSED DIVE TIME (EDT) Alarm
When set On, the EDT alarm activates every 30 seconds during a dive. The audible will sound during which time the graphic EDT (in place of Temperature) and time digits will flash on the Main (Fig. 124).

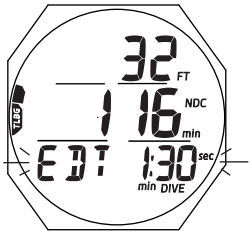


Fig. 124 - EDT ALARM

FREE Depth Alarms
When set On, the Depth alarms (1, 2, 3) activate at their respective set Depths during descent. The audible will sound during which time the Depth digits, and graphic DA1 (2, 3) will flash on the Main in place of Temperature (Fig. 125).

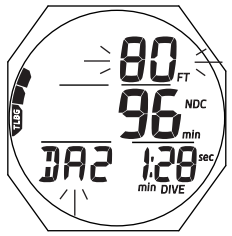


Fig. 125 - DEPTH ALARM

High Nitrogen Alarms
When nitrogen increases to the caution level (4 TLBG segments), the audible will sound during which time the TLBG segments will flash on the Main (Fig. 126).

In the event that nitrogen continues to increase and reaches the Deco level, the audible will sound again during which time all 5 TLBG segments, the Up Arrow icon, and the graphic VIO (in place of Temperature), will all flash; and NDC will display 0 min.

When the audible is silent, the TLBG and NDC digits are removed. The graphic VIO and Up Arrow icon flash (Fig. 127) until on the surface, then the Up Arrow is removed.

The graphic VIO flashes until 1 minute elapses on the surface, then it alternates with FRE (Fig. 128) and operation reverts to Violation Gauge Mode for 24 hours.

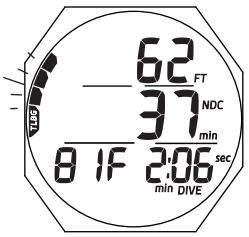


Fig. 126 - TLBG ALARM
(during audible)

Fig. 127 - VIOLATION
(Deco entry, during audible)

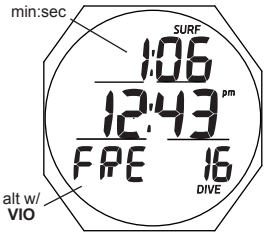


Fig. 128 - FREE VIOLATION
(after 1 min on surface)

REFERENCE

PC/MAC INTERFACE

The Settings Upload portion of the OceanLog or DiverLog program can be used to set/change the Watch Time selections, Set A group selections (Alarms), and Set U group selections (Utilities).

Fig. 129 - PLACING OCL

Information available for retrieval (download) from the OCL to the OceanLog or DiverLog program includes dive number, surface interval, max depth, dive time, start date/time, lowest temperature, sampling rate, dive profile, set points, and bar graphs.

Prior to attempting to download data from your OCL or upload settings to it, review the Help section of the OceanLog or DiverLog program. Recommended is to print those sections of Help that you consider appropriate for your Interface activities.

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

The OCL is configured with a data contacts located on the side that enables it to be connected to a PC or Mac USB port using the special Interface Cable.

Fig. 130 - SECURE CABLE

To connect the interface cable to the OCL:

> With the watch facing upwards, angle the electrical contact side into the cradle of the USB interface (Fig. 129). Ensure that the electrical contacts line up correctly.
> Then press the opposite side of the watch until it snaps securely into the cradle (Fig. 130).

⚠ **CAUTION: Avoid damage to the contact pins of the USB Interface by installing the contact side of the watch first. Removal should be the reverse order, removing the contact side last.**

The OCL must be in Watch Mode to interface with a PC or MAC computer. The OCL checks for a connection to the Data Port once every second while the Watch Main Time is displayed. Checks are not made if the Wet Activation contacts are wet.

When the interface cable is plugged in, the graphic PC CDT is displayed (Fig. 131) with a 2 minute countdown timer that runs until the connection is confirmed, then all the segments of the OCL screen are displayed (Fig. 132).

Fig. 131 - TIMER
(counting down)

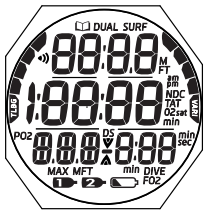


Fig. 132 - PCI CABLE
(connection sensed)

PC requirements:

- IBM®, or compatible, PC with USB Port
- Intel® Pentium 4 or better microprocessor
- Microsoft® Windows® XP, Vista, 7, or 8
- Super VGA card or compatible video graphics adaptor (256 color or greater) with a minimum 800 X 600 pixel screen area of display settings
- 128MB of available RAM
- 64MB of available hard drive storage
- Mouse
- CD Rom drive
- Printer

MAC requirements:

- Mac with USB Port
- OSX 10.5 or later
- Super VGA card or compatible video graphics adaptor (256 color or greater) with a minimum 800 X 600 pixel screen area of display settings
- 128MB of available RAM
- 64MB of available hard drive storage
- Mouse
- Printer
- Internet connection to download App from the Apple App Store

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

- Soak and rinse the OCL in fresh water at the end of each day of diving, and check to ensure that the areas around the Low Pressure (Depth) Sensor (left side), PC Interface contacts (right side), and Buttons are free of debris or obstructions.
- To dissolve salt crystals, use lukewarm water or a slightly acidic bath (50% white vinegar/50% fresh water). After removal from the bath, place the OCL under gently running fresh water and towel dry before storing.
- Transport your OCL cool, dry, and protected.

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

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

To Obtain Service:
Take your OCL to an Authorized Oceanic Dealer or send it to the nearest Oceanic Regional Facility.

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

BATTERY REPLACEMENT

⚠ **CAUTION: The procedures that follow must be closely adhered to avoid entrance of water into the unit. Damage due to improper Battery replacement (or subsequent leakage of moisture into the unit) is not covered by the OCL's 2 year warranty.**

⚠ **NOTE: The OCL can be sent to Oceanic Worldwide, Regional Distributor, or Authorized Dealer Service for proper battery change service which includes pressure (depth) and leak testing to the max operating depth. Standard charges for service will apply**

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 OCL, DO NOT attempt to use it for diving (NORM, GAUG, or FREE) until it receives proper service by the Oceanic factory or an Authorized Regional Distributor.

Data Retention
When the battery is removed, settings and nitrogen/oxygen calculations for repetitive dives will be retained in volatile memory.

All parts needed for the battery change that follows are provided in the OCL Battery Kit available from your Oceanic Dealer.

Battery Removal

- There is no need to remove the straps.
- Remove the (4) retaining screws located on the back of the case (Fig. 133) by turning them counter clockwise with a small flat tip 3mm screw driver.
- Carefully separate the front and back sections. If necessary, insert a small flat tip screw driver in the slot machined into the Cover at the 5 or 11 O'clock position (Fig. 134) and gently pry the Battery Cover loose, then lift it off the case.
- Carefully, remove the battery insulator shim (Fig. 135).
- Release the securing battery contact (Fig. 136a), and turn the case to one side to drop the Battery into your hand. If necessary, gently loosen it with the tip of your finger. DO NOT use tools to pry it out, or short the positive (+) top of the Battery to the negative (-) contact under it.
- Discard the Battery according to local regulations governing disposal of Lithium batteries.


Fig. 133 - CASE BACK

Inspection

- 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.

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

- Remove the cover O-ring with your fingernail or by pinching along one side of its circumference (Fig. 137). Discard, and do not attempt to reuse it.
  > DO NOT use tools to remove the O-ring.
  > To ensure proper sealing, O-ring replacement is required each time the Battery is replaced.


Fig. 134 - TO LOOSEN BATTERY COVER

Battery Installation

⚠ **NOTE: The O-ring must be a genuine Oceanic part available at an Authorized Oceanic Dealer. Use of any other O-ring will void the warranty.**

- Very lightly lubricate the new O-ring with silicone grease and seat it into the O-ring groove.
- Place a new 3 volt type CR2430 Lithium Battery, negative side down into the Battery cavity and ensure that it is evenly positioned.
- Replace the battery shim insulator. Ensure that it is fitted correctly. The contact spring should be running through the small hole (Fig. 138a) and the tab (Fig. 138b) lined up with the watch housing.
- Carefully position the Battery Cover over the battery compartment. Use the OCL logo as a guide for top/bottom. Also, a small arrow has been engraved on the top of the Cover to serve as a guide. The arrow should be pointing towards the strap with a metal clasp.
- While ensuring that the cover and back of the case are properly aligned, firmly press them evenly and completely together.
- While holding the Battery Cover firmly in position against the back of the case, insert the (4) retaining screws and tighten them until secure by turning them clockwise with a small flat tip 3mm screw driver (Fig. 140). DO NOT over tighten.

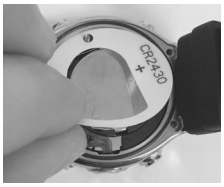


Fig. 135 - REMOVE SHIM

Fig. 136 - RELEASE BATTERY TERMINAL


Fig. 137 - REMOVE O-RING

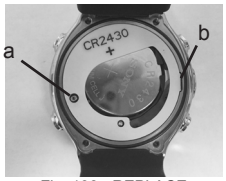


Fig. 138 - REPLACE SHIM

Testing

> Activate the unit and ensure that the LCD is clear and sharp in contrast. If any portions are missing or appear dim, or if a Low Battery condition is indicated, return the OCL to an Authorized Oceanic Dealer for evaluation before use.


Fig. 140 - REPLACE SCREWS

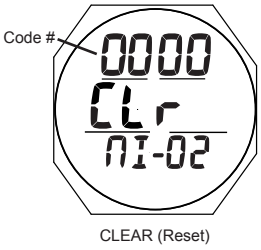
CLEAR (RESET)

The OCL is configured with a feature that allows nitrogen and oxygen calculations to be cleared. ***This is intended for facilities using the OCL 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.**

From the SN-ID Screen {see pg. 23} press S (< 2 sec) to access the Clear screen (if in NORM mode).
>> the graphics CLr NI-O2 with an arbitrary invalid code number entered by the factory will display, all solid.
>> 2002 is the correct reset code to use.

Proceed as follows, or press S (2 sec) to return to the SN screen



CLEAR (Reset)

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) to scroll upward through the first digits (left) at a rate of 8 per second.
- A (< 2 sec) to step upward through the digits (left) one at a time.
- M (< 2 sec) to step back through the digits (left) one at a time.
- S (< 2 sec) to save the first 2 digits (left) and start the second 2 digits (right) flashing.
- A (hold) to scroll upward through the second digits (right) at a rate of 8 per second.
- A (< 2 sec) to step upward through the digits (right) one at a time.
- M (< 2 sec) to step back through the digits (right) one at a time.
- S (< 2 sec) to save the reset code, clear the NI-O2 calculations, and revert to Watch mode.

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

ADDITIONAL INFORMATION PERTAINING TO FREE DIVE MODE

- Although breathing apparatus is not utilized for Free Dive activities, nitrogen tissue loading remains a factor. Nitrogen loading is calculated based upon a fixed FO2 of Air.
- Since a user has the option of alternating between SCUBA and Free Dive activities within a 24 hour period, nitrogen calculations and the displayed value of No Deco Dive Time Remaining (NDC time) are carried over from one operating mode to the other, which permits the user to maintain awareness of nitrogen absorption and offgasing status.
- The mathematical models currently used in the OCL are based on no decompression/decompression multilevel repetitive dive schedules.
- These algorithms do not take into account the physiological changes associated with the high pressures that competitive type Free diving can expose a diver to.

⚠ **ADDITIONAL WARNINGS**

- **Ensure that you know which Operating Mode is selected (NORM, GAUG, or FREE) prior to commencing any dive.**
- **Conducting Free dives within a 24 hour period after conducting SCUBA dives, combined with the effects of multiple rapid Free Dive ascents, increases your risk of decompression sickness. Such activities may result in accelerated entry into decompression which could cause serious injury or death.**
- **Combining competitive type Free dive activities that involve multiple descents/ascents with activities utilizing SCUBA during the same 24 hour period is not recommended. Presently, there is no data relating to such activities.**
- **It is highly recommended that anyone planning to become involved in competitive type Free dive activities obtain proper instruction and training from a recognized Free Diving trainer. It is imperative that the physiological affects be understood and the diver is physically prepared.**

TECHNICAL DATA

DSAT BASED NDLS (HR:MIN)
(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	4:20	3:21	3:07	2:55	2:45	2:36	2:28	2:21	2:15	2:10	2:04	1:58
40	2:17	1:43	1:36	1:30	1:25	1:20	1:16	1:12	1:09	1:06	1:03	1:01
50	1:21	1:03	1:00	0:58	0:55	0:52	0:48	0:45	0:43	0:41	0:39	0:37
60	0:57	0:43	0:40	0:38	0:36	0:34	0:33	0:31	0:30	0:29	0:28	0:27
70	0:40	0:31	0:30	0:28	0:27	0:26	0:24	0:23	0:22	0:20	0:19	0:18
80	0:30	0:24	0:23	0:21	0:20	0:19	0:18	0:17	0:16	0:16	0:14	0:13
90	0:24	0:19	0:18	0:17	0:16	0:15	0:14	0:13	0:12	0:11	0:10	0:10
100	0:19	0:15	0:14	0:13	0:12	0:11	0:10	0:10	0:09	0:09	0:08	0:08
110	0:16	0:12	0:11	0:10	0:09	0:09	0:08	0:08	0:08	0:07	0:07	0:07
120	0:13	0:09	0:09	0:08	0:08	0:08	0:07	0:07	0:07	0:06	0:06	0:06
130	0:11	0:07	0:07	0:07	0:06	0:06	0:06	0:06	0:05	0:05	0:05	0:05
140	0:09	0:07	0:07	0:06	0:06	0:06	0:06	0:05	0:05	0:05	0:05	0:05
150	0:08	0:06	0:06	0:06	0:05	0:05	0:05	0:05	0:05	0:04	0:04	0:04
160	0:07	0:06	0:05	0:05	0:05	0:05	0:05	0:04	0:04	0:04	0:04	0:04
170	0:07	0:05	0:05	0:05	0:04	0:04	0:04	0:04	0:04	0:04	0:04	0:03
180	0:06	0:05	0:05	0:04	0:04	0:04	0:04	0:04	0:04	0:03	0:03	0:03
190	0:05	0:04	0:04	0:04	0:04	0:04	0:04	0:03	0:03	0:03	0:03	0:03

DSAT BASED NDLS (HR:MIN)
(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	4:43	3:37	3:24	3:10	2:58	2:48	2:39	2:31	2:24	2:18	2:12	2:07
12	2:24	1:52	1:44	1:37	1:30	1:25	1:21	1:17	1:13	1:10	1:07	1:04
15	1:25	1:06	1:03	1:00	0:57	0:55	0:52	0:49	0:46	0:43	0:41	0:39
18	0:59	0:45	0:42	0:40	0:38	0:36	0:34	0:32	0:31	0:30	0:29	0:28
21	0:41	0:33	0:31	0:29	0:28	0:27	0:26	0:24	0:23	0:21	0:20	0:19
24	0:32	0:26	0:24	0:22	0:21	0:20	0:19	0:18	0:17	0:16	0:15	0:14
27	0:25	0:19	0:18	0:17	0:16	0:16	0:14	0:13	0:12	0:12	0:11	0:10
30	0:20	0:16	0:15	0:13	0:12	0:12	0:11	0:10	0:10	0:09	0:09	0:08
33	0:17	0:12	0:11	0:11	0:10	0:09	0:09	0:08	0:08	0:08	0:07	0:07
36	0:14	0:10	0:09	0:09	0:08	0:08	0:07	0:07	0:07	0:06	0:06	0:06
39	0:11	0:08	0:08	0:07	0:07	0:07	0:06	0:06	0:06	0:06	0:05	0:05
42	0:09	0:07	0:07	0:07	0:06	0:06	0:06	0:05	0:05	0:05	0:05	0:05
45	0:08	0:06	0:06	0:06	0:06	0:05	0:05	0:05	0:05	0:05	0:04	0:04
48	0:07	0:06	0:06	0:05	0:05	0:05	0:05	0:04	0:04	0:04	0:04	0:04
51	0:06	0:05	0:05	0:05	0:05	0:04	0:04	0:04	0:04	0:04	0:04	0:04
54	0:06	0:05	0:05	0:04	0:04	0:04	0:04	0:04	0:04	0:03	0:03	0:03
57	0:05	0:04	0:04	0:04	0:04	0:04	0:04	0:03	0:03	0:03	0:03	0:03

ALTITUDE LEVELS

Display:	**Range:**
• SEA = Level 1 (Sea Level)	0 to 3,000 feet (0 to 915 meters)
• L2 = Level 2	3,001 to 5,000 feet (916 to 1,525 meters)
• L3 = Level 3	5,001 to 7,000 feet (1,526 to 2,135 meters)
• L4 = Level 4	7,001 to 9,000 feet (2,136 to 2,745 meters)
• L5 = Level 5	9,001 to 11,000 feet (2,746 to 3,355 meters)
• L6 = Level 6	11,001 to 13,000 feet (3,356 to 3,965 meters)
• L7 = Level 7	> 13,000 feet (3,965 meters)

Z+ BASED NDLS (HR:MIN)
(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	3:17	2:30	2:21	2:14	2:08	2:02	1:57	1:52	1:47	1:39	1:34	1:29
40	1:49	1:21	1:15	1:11	1:08	1:05	1:02	1:00	0:57	0:55	0:53	0:51
50	1:05	0:53	0:51	0:49	0:47	0:44	0:42	0:39	0:37	0:35	0:34	0:33
60	0:48	0:37	0:35	0:33	0:32	0:30	0:28	0:26	0:24	0:23	0:22	0:21
70	0:35	0:26	0:24	0:23	0:21	0:20	0:19	0:18	0:17	0:16	0:16	0:14
80	0:26	0:19	0:18	0:17	0:16	0:15	0:14	0:13	0:12	0:11	0:11	0:10
90	0:19	0:15	0:14	0:13	0:12	0:11	0:10	0:10	0:09	0:09	0:08	0:08
100	0:16	0:11	0:10	0:10	0:09	0:09	0:08	0:08	0:07	0:07	0:07	0:07
110	0:12	0:09	0:08	0:08	0:08	0:07	0:07	0:07	0:06	0:06	0:06	0:05
120	0:10	0:08	0:07	0:07	0:07	0:06	0:06	0:06	0:05	0:05	0:05	0:05
130	0:08	0:07	0:06	0:06	0:06	0:05	0:05	0:05	0:05	0:05	0:04	0:04
140	0:07	0:06	0:05	0:05	0:05	0:05	0:05	0:04	0:04	0:04	0:04	0:04
150	0:06	0:05	0:05	0:05	0:05	0:04	0:04	0:04	0:04	0:04	0:04	0:03
160	0:06	0:05	0:05	0:04	0:04	0:04	0:04	0:04	0:04	0:03	0:03	0:03
170	0:05	0:04	0:04	0:04	0:04	0:04	0:03	0:03	0:03	0:03	0:03	0:03
180	0:05	0:04	0:04	0:04	0:03	0:03	0:03	0:03	0:03	0:03	0:03	0:03
190	0:04	0:04	0:04	0:03	0:03	0:03	0:03	0:03	0:03	0:03	0:03	0:00

Z+ BASED NDLS (HR:MIN)
(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	3:37	2:41	2:31	2:23	2:16	2:10	2:04	1:59	1:54	1:50	1:43	1:37
12	1:55	1:27	1:21	1:15	1:12	1:08	1:05	1:03	1:00	0:58	0:55	0:54
15	1:08	0:55	0:53	0:51	0:49	0:47	0:44	0:42	0:39	0:37	0:36	0:34
18	0:50	0:39	0:37	0:35	0:33	0:32	0:30	0:28	0:26	0:24	0:23	0:22
21	0:36	0:28	0:26	0:24	0:23	0:21	0:20	0:19	0:18	0:17	0:16	0:16
24	0:27	0:20	0:19	0:18	0:17	0:16	0:15	0:14	0:13	0:12	0:11	0:11
27	0:20	0:16	0:15	0:13	0:12	0:11	0:11	0:10	0:09	0:09	0:09	0:08
30	0:16	0:12	0:11	0:10	0:09	0:09	0:09	0:08	0:08	0:07	0:07	0:07
33	0:13	0:09	0:09	0:08	0:08	0:07	0:07	0:07	0:07	0:06	0:06	0:06
36	0:10	0:08	0:07	0:07	0:07	0:06	0:06	0:06	0:05	0:05	0:05	0:05
39	0:09	0:07	0:06	0:06	0:06	0:06	0:05	0:05	0:05	0:05	0:05	0:04
42	0:08	0:06	0:06	0:05	0:05	0:05	0:05	0:05	0:04	0:04	0:04	0:04
45	0:06	0:05	0:05	0:05	0:05	0:04	0:04	0:04	0:04	0:04	0:04	0:04
48	0:06	0:05	0:05	0:04	0:04	0:04	0:04	0:04	0:04	0:03	0:03	0:03
51	0:05	0:04	0:04	0:04	0:04	0:04	0:04	0:03	0:03	0:03	0:03	0:03
54	0:05	0:04	0:04	0:04	0:04	0:03	0:03	0:03	0:03	0:03	0:03	0:03
57	0:05	0:04	0:04	0:03	0:03	0:03	0:03	0:03	0:03	0:03	0:03	0:03

SPECIFICATIONS

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

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 Mode Activation:
- Must be in Dive Computer mode, 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 as a DC at elevations higher than 14,000 feet (4,270 meters)

Dive Counter:
- NORM/GAUG displays Dives #1 to 24, FREE displays #1 to 99 (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 NORM/GAUG dives in memory for viewing.
- After 24 dives, adds 25th dive in memory and deletes the older dive.

Altitude:
- Operational from sea level to 14,000 feet (4,270 meters) elevation.
- Measures ambient pressure every 30 minutes in Watch mode, when Dive Computer mode is accessed, and every 15 minutes while in DC Surface modes.
- 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 vdc, CR2032, Lithium battery (Panasonic or equivalent)
- Shelf life Up to 7 years when shipped from factory in deep sleep mode.
- Replacement User (annual recommended).
- Use Life 1 year or 300 dive hours if (2) 1 hour dives per day.

Battery Indicator:
- Warning - icon on solid when <= 2.75 volts, Battery change recommended.
- Alarm - icon on flashing when <= 2.50 volts, change the Battery, will not function as a DC.

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).

BAR GRAPHS:

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

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:
• Main Time of Day	00:00:00 to 23:59:59 hr:min:sec	1 second
• Dual Time of Day	00:00 to 23:59 hr:min	1 minute
• Dual Time Differential	OFF, + 01 to + 23, - 23 to - 01 hr	1 hour
• Watch Countdown Timer	23:59 to 0:00 hr:min	1 minute
• Watch Chrono Lap Time	0:00 to 1:59:59.99 (hr:min:sec_.01 sec)	.01 second
• PC/Mac Countdown Timer	1:59 to 0:00 min:sec	1 second
• Temperature	0 to 140 F (-18 to 60 C)	1 degree
• Altitude Level	Sea, EL2 to EL7	1 level
• Depth, Max Depth	0 to 330 FT (100 M)	1 FT (0.1 M)
• Time to Fly	23:50 to 0:00 hr:min* (* starting 10 min after the dive)	1 minute
• Time to Desaturate	23:50 to 0:00 hr:min* (* starting 10 min after the dive)	1 minute

NUMERIC DISPLAYS:	Range:	Resolution:
NORM & GAUG Modes -		
• Surface Interval	0:00 to 23:59 hr:min	1 minute
• Dive No.	0 to 24	1
• Elapsed Dive Time	00 to 599 min	1 minute
• FO2 Set Points	Air, 21 to 100 %	1 %
• PO2 Value	0.00 to 5.00 ATA	.01 ATA
• O2 Saturation	0 to 100 %	1 %
• Dive Time Remaining	0 to 599 min	1 minute
• No Deco Deep Stop Time	2:00 to 0:00 min:sec	1 second
• No Deco Safety Stop Time	5:00 to 0:00 min:sec	1 second
• Safety Stop Run Timer	0:00 to 9:59 min:sec	1 second
• GAUG Dive Run Timer	0 to 599 min	1 minute
• Deco Stop Time	0 to 599 min	1 minute
• Total Ascent Time	0 to 599 min	1 minute
• Violation Countdown Timer	23:50 to 0:00 hr:min	1 minute
FREE Mode -		
• Surface Interval (< 1 hr)	0:00 to 59:59 min:sec	1 second
	1:00 to 23:59 hr:min	1 minute
• Dive No.	0 to 99	1
• Elapsed Dive Time	0:00 to 9:59 min:sec	1 second
• Countdown Timer	9:59 to 0:00 min:sec	1 second

INSPECTION / SERVICE RECORD

Serial Number: _____

Firmware Rev: _____

Date of Purchase: _____

Purchased from: _____

Below to be filled in by an Authorized Oceanic Dealer:

Date	Service Performed	Dealer/Technician

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OCL

WATCH DIVE COMPUTER

OPERATING MANUAL