AQUA LUNG®

i300

Dive Computer Owner's Manual

Doc. 12-7823-r06 (12/10/15)

NOTICES

LIMITED TWO-YEAR WARRANTY

For warranty details and to register your product, refer to www.aqualung.com.

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i300 Dive Computer Owner's Manual, Doc. No. 12-7823
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Vista, CA USA 92081

TRADEMARK, TRADE NAME, AND SERVICE MARK NOTICE

PATENT NOTICE

U.S. Patents have been issued to protect the following design features: GTR/Air Time Remaining (U.S. Patent no. 4,586,136 and 6,543,444) and Data Sensing and Processing Device (U.S. Patent no. 4,882,678). Set N2 Bar Graph Alarm (NIBG Alarm) and other patents pending. User Setable Display (U.S. Patent no. 5,845,235) is owned by Suunto Oy (Finland).

DECOMPRESSION MODEL

The program within the i300 simulates the absorption of inert gases 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 i300 dive computer model is based upon the latest research and experiments in decompression theory. Still, using this dive computer, just as using any 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.

DANGERS, WARNINGS, CAUTIONS, AND NOTES

Pay attention to the following symbols when they appear throughout this document. They denote important information and tips.

DANGERS: are indicators of important information that if ignored **would** lead to severe injury or death.

WARNINGS: are indicators of important information that if ignored **could** lead to severe injury or death.

CAUTIONS: indicate information that will help you avoid faulty assembly, leading to an unsafe condition.

NOTES: indicate tips and advice that can inform of features, aid assembly, or prevent damage to the product.

RESPONSIBLE COMPUTER DIVING

- Always plan each dive.
- Always limit your dive to the level of your training and experience.
- Always make your deepest dive first.
- Always make the deepest part of every dive first.
- Check your computer often during the dive.
- Do a safety stop on every dive.
- Allow adequate surface interval between each dive.
- Allow adequate surface interval between each day of diving (12 Hours or until your computer clears).
- Read and understand this manual thoroughly before using the i300.

⚠ WARNINGS:

- **The i300 is intended for use by recreational divers who have successfully completed a nationally recognized course in scuba diving (for air use) and diving with enriched nitrogen-oxygen (nitrox) breathing gas mixtures (for nitrox use).**
- **It is intended only for no decompression diving, NOT intentional decompression diving.**
- **It must not be used by untrained persons who may not have knowledge of the potential risks and hazards of scuba diving and diving with enriched nitrogen-oxygen (nitrox) mixtures.**
- **You must obtain scuba certification in diving with enriched nitrogen-oxygen mixtures (nitrox) before using the i300 for nitrox diving.**
- **It is NOT for use by military and commercial divers.**
- **It should NOT be utilized for any competitive or repetitive square wave or decompression diving, as it is intended solely for recreational use and no decompression multilevel diving.**
- **As with all underwater life support equipment, improper use or misuse of this product can cause serious injury or death.**
- **Never participate in sharing or swapping of a dive computer.**
- **Conduct your dives in such a manner so as to insure that you continuously check the computer's proper function.**
- **Read and understand this owner's manual completely before diving with the i300.**
- **If you do not fully understand how to use this dive computer or if you have any questions, you should seek instruction in its use from your authorized Aqua Lung dealer before you utilize this product.**
- **If your i300 stops working for any reason while operating, it is important that you have anticipated this possibility and are prepared for it. This is an important reason for not pushing the tables, oxygen exposure limits, or entering decompression without proper training. If you dive in situations where your trip would be ruined or your safety would be jeopardized by losing the use of your i300, a backup instrument system is highly recommended.**
- **Each numeric and graphic display represents a unique piece of information. It is imperative that you understand the formats, ranges, and values of the information represented to avoid any possible misunderstanding that could result in error.**
- **Remember that technology is no substitute for common sense. The dive computer only provides the person using it with data, not the knowledge to use it. Remember also that the dive computer does not actually measure and test the composition of your body tissue and blood. Using an Aqua Lung dive computer, just as using the U.S. Navy (or other) Decompression Tables, is no guarantee of avoiding decompression sickness. 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.**
- **Diving at high altitude requires special knowledge of the variations imposed upon divers, their activities, and their equipment by the decrease in atmospheric pressures. Aqua Lung recommends completion of a specialized altitude training course by a recognized training agency prior to diving in high altitude lakes or rivers.**
- **Repetitive dives in a series should only be conducted at the same altitude as that of the first dive of that series. Repetitive dives made at a different altitude will result in an error equal to the difference in barometric pressure, and possibly a false dive mode with erroneous data.**
- **If the i300 is activated at an elevation higher than 14,000 feet (4,270 meters), it will immediately shutdown.**
- **Decompression diving or diving deeper than 130 ft (39 m) will greatly increase your risk of decompression sickness.**
- **Using an i300 is no guarantee of avoiding decompression sickness.**
- **The i300 enters Violation Mode when a situation exceeds its capacity to predict an ascent procedure. These dives represent gross excursions into decompression that are beyond the boundaries and spirit of the i300's design. If you are following these dive profiles, Aqua Lung advises that you should not use an i300.**
- **If you exceed certain limits, the i300 will not be able to help you get safely back to the surface. These situations exceed tested limits and can result in loss of some functions for 24 hours after the dive in which a violation occurred.**

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GETTING STARTED

BASICS

Welcome to your new i300. The i300 is an easy to use dive computer utilizing a two button interface. Divers may choose between three modes of functionality consisting of Dive, Gauge, and Free Mode. Though the i300 is easy to use, you will get the most out of your new i300 if you take some time to familiarize yourself with its displays and operation. Information has been organized into easy to follow sections to aid you in learning all you need to know. There is also a glossary at the end of this guide for any terms that may sound unfamiliar.

ACTIVATION

To activate the i300, press and release either button. The i300 will also turn on if its metal contacts become wet. The H2O ACT (water activation) feature may be disabled if that is your preference. Disabling the H2O ACT feature is described in the Dive Surface Mode chapter, p. 23.

- Upon activation The unit will enter a Diagnostic Mode. The i300 checks the display and voltage at this time to ensure that everything is within tolerance.
- It will also check ambient barometric pressure, and calibrate present depth as 0 ft (m). When at 3001 ft (916 m), or higher, it will adjust depth for the higher altitude.
- After the Diagnostic check, the i300 will display the surface screen in Dive Mode.

NOTE: The i300 has no off button or command. If no buttons are pressed or dives made within 2 hours, the unit will shut itself off. However, the i300 will stay on for a 24 hour period after the dive, counting down FLY (time to fly) and SAT (desaturation time) if a dive has been made.

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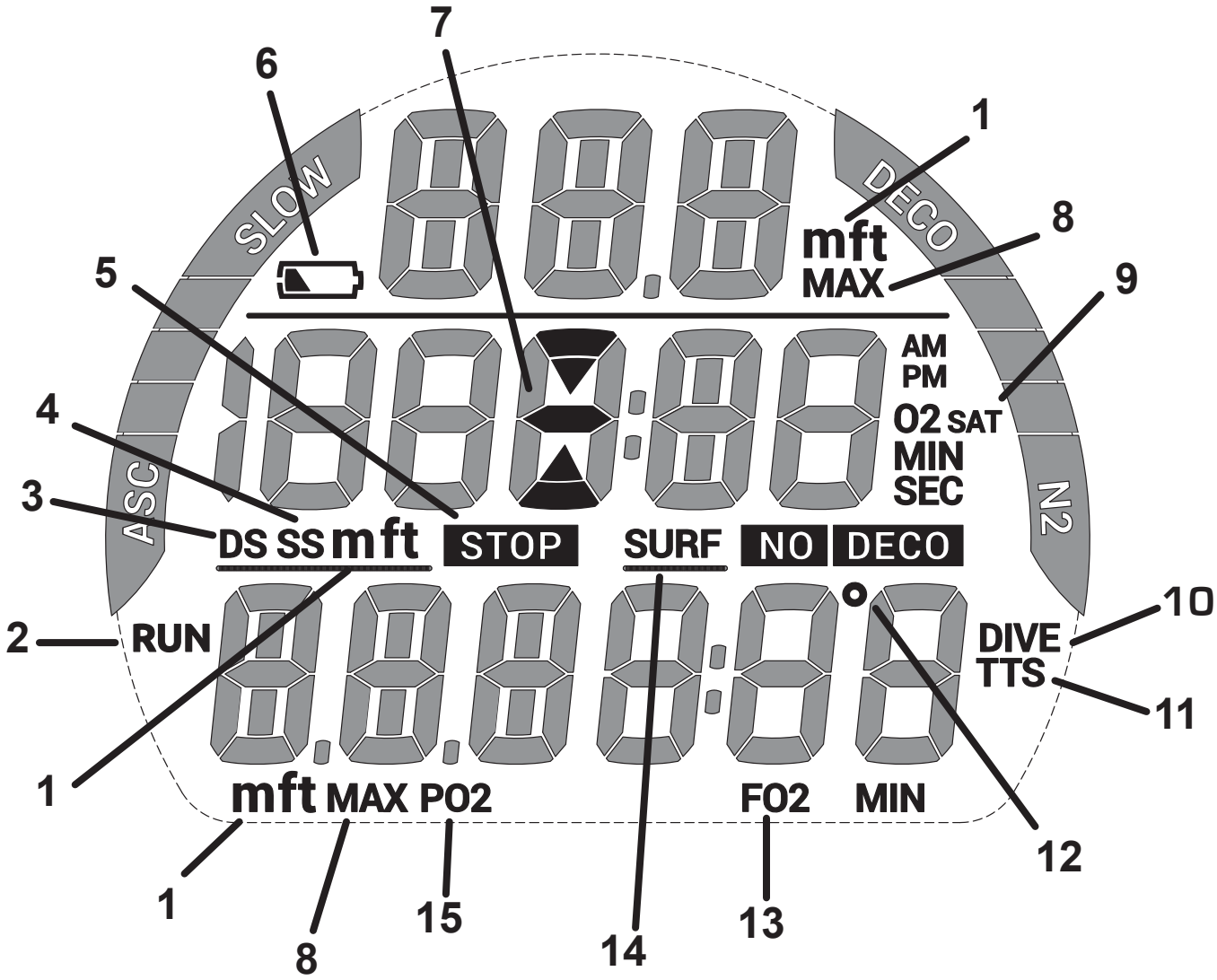
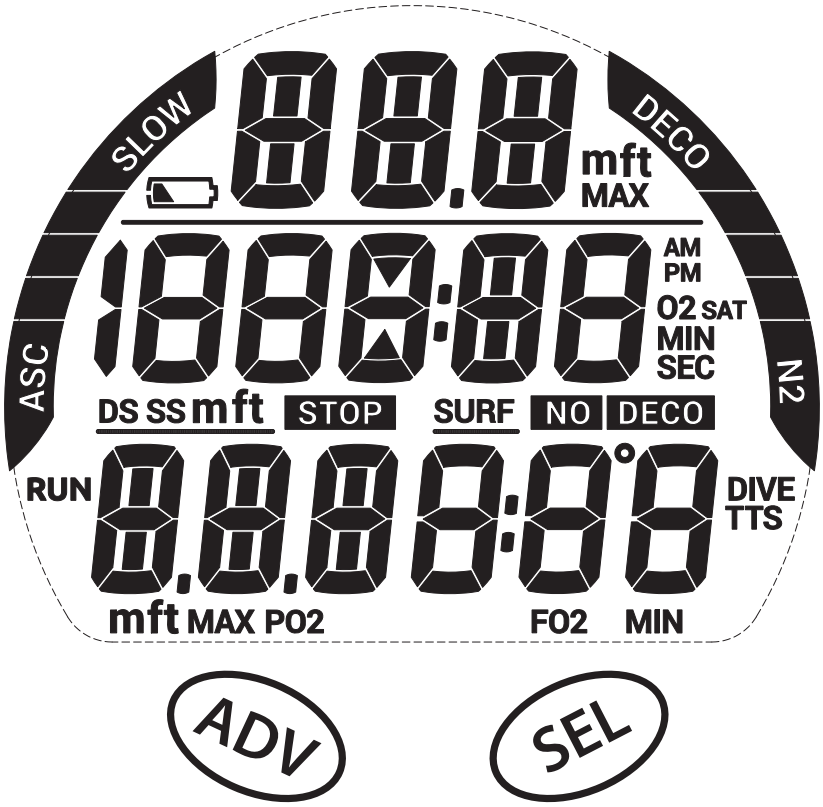
DISPLAY ICONS



1	Depth ID (units)
2	Run Timer
3	Deep Stop
4	Safety Stop
5	Deco Stop Triggered
6	Low Battery
7	Descend, Ascend, or Stop
8	Value is Maximum

9	Oxygen Saturation
10	Dive Time or #
11	Time To Surface
12	Temperature
13	Fraction of Oxygen
14	Surface Time
15	Partial Pressure of Oxygen



BUTTONS

The i300 utilizes 2 control buttons called the ADV (Advance) and SEL (Select) buttons. They allow you to select mode options and access specific information. They are also used to enter settings, activate the backlight, and acknowledge the audible alarm. Throughout this manual they will be referred to as the ADV and SEL buttons.

Pressing different combinations of these buttons will navigate through different menus and options of the i300. The symbols in the table below will illustrate how to proceed through the menus.

SYMBOL	MEANING
	**PRESS BUTTON LESS THAN 2 SECONDS**
	**HOLD BUTTON GREATER THAN 2 SECONDS**

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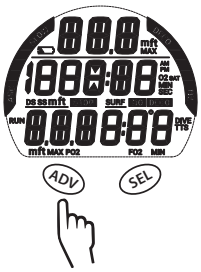
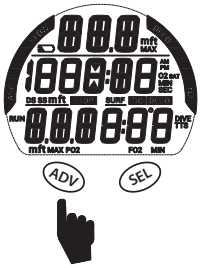
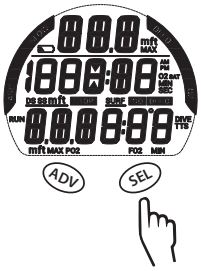
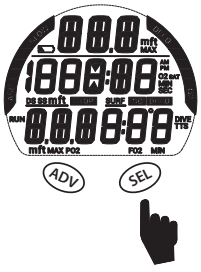
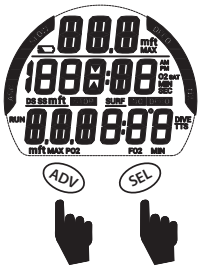
BUTTON FUNCTIONS

ACTION	BUTTON	FUNCTION
Press Button	ADV **or** SEL	• to activate the i300
	ADV	• to access Alt screens • to advance or step through menus • to toggle or change setpoints • to activate the backlight
	ADV	• to scroll quickly, changing setpoints • to scroll quickly through menu lead-in screens (selections)
	SEL	• to select, access, step forward through selections, or save a setting • to activate the backlight without leaving a surface or underwater main screen
	SEL	• to step backwards through selections or menu screens
	ADV + SEL	• to exit a menu directly to the main screen

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DIVE FEATURES

DTR (DIVE TIME REMAINING)

The i300 constantly monitors No Deco status and O2 Accumulation, and will display whichever Time is the least amount available as DTR on the No Deco Dive Main screen. The Time being displayed will be identified by the NO DECO or O2 MIN icons.

NO DECO

No Deco is the maximum amount of time that you can stay at your present depth before entering Deco. 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 compartment is closest to this maximum level is the controlling compartment for that depth. Its resulting value (NO DECO) will be displayed as DTR. It will also be displayed graphically as the N2 Bar Graph, see Bar Graphs below.

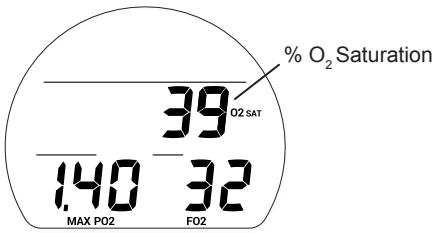
As you ascend, the N2 Bar Graph segments will recede as control shifts to slower compartments. This is a feature of the decompression model that is the basis for multilevel diving, one of the most important advantages that Aqua Lung dive computers offer.

O2 MIN (OXYGEN TIME REMAINING)

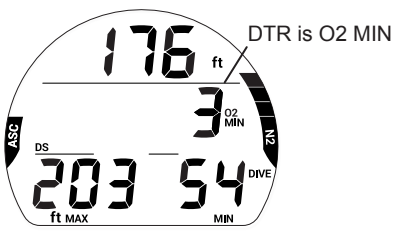
When set for nitrox operation, O2 SAT (Oxygen Saturation) during a dive is displayed on an ALT screen as a percentage of allowed saturation identified by the O2 SAT icon. The limit for O2 SAT (100%) is set at 300 OTU (Oxygen Tolerance Units) per dive or 24 hour period. See the chart at the back of this manual for specific times and allowances. O2 SAT and O2 MIN values are inversely related; as the O2 SAT value increases the O2 MIN value decreases.

When the O2 MIN value becomes less than the No Deco calculations for the dive, DTR (Dive Time Remaining) will be controlled by O2 SAT and the O2 MIN value will be displayed as the DTR on the Dive Main screen, identified by the O2 MIN icon.

ALT 3



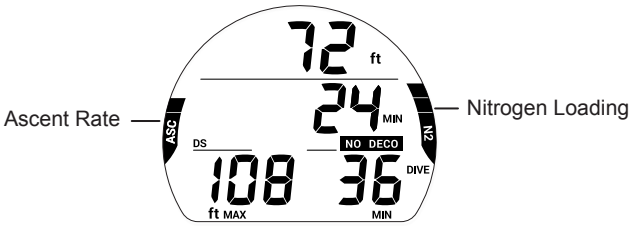
DIVE MAIN



BAR GRAPHS

The i300 features two specific bar graphs.

1. The one on the left represents ascent rate. It is referred to as ASC Bar Graph.
2. The one on the right represents nitrogen loading. It is referred to as the N2 Bar Graph.

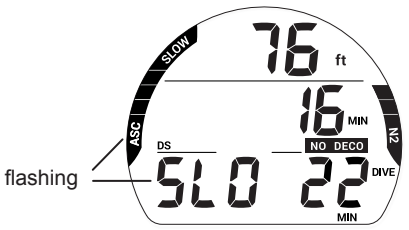


ASC BAR GRAPH

The ASC Bar Graph provides a visual representation of ascent speed (i.e., an ascent speedometer). When the ascent is faster than the recommended 30 fpm (9 m), all segments and the message SLO (slow) flash until the ascent is slowed.

# OF SEGMENTS	ASCENT RATE, FPM (MPM)
0	0 - 10 (0 - 3)
1	11 - 15 (3.1 - 4.5)
2	16 - 20 (4.6 - 6)
3	21 - 25 (6.1 - 7.5)
4	26 - 30 (7.6 - 9)
5	> 30 (> 9)

ASC ALARM TRIGGERED



N2 BAR GRAPH

The N2 Bar Graph represents your relative No Deco or Deco status. The first four segments represent No Deco status and the fifth indicates a Deco condition. As your Depth and Elapsed Dive Time increase segments are added. As you ascend segments recede, indicating that additional No Deco time is available. The i300 monitors twelve different nitrogen compartments simultaneously and the N2 Bar Graph displays the one that is in control of your dive at any given time.

ALGORITHM

The i300 utilizes the PZ+ to calculate nitrogen tissue loading. Performance is based on Bühlmann ZHL-16C algorithm model. 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.

CF (CONSERVATIVE FACTOR)

When the CF is set to On, the dive time remaining, No Deco/O2 MIN, which are based on the algorithm and used for N2/O2 calculations and displays relating to Plan Mode, will be reduced to the values available at the altitude level that is 3,000 ft (915 m) higher than the actual altitude at activation. Refer to the charts in the back of this manual for dive times.

DS (DEEP STOP)

When the DS selection is set to ON, it will trigger after descending deeper than 80 ft (24 m). The i300 then calculates (continually updating) a Stop Depth equal to ½ the Max Depth.

NOTE: The DS feature only works in DIVE Mode while within No Deco times.

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

> Upon initial ascent to within 10 ft (3 m) below the calculated Stop Depth, a DS screen displaying a Stop Depth at ½ the Max Depth will appear with a countdown timer beginning at 2 min and counting down to 0. If you descend 10 ft (3 m) below, or ascend 10 ft (3 m) above, the calculated Stop Depth for 10 seconds during the countdown, the No Deco Main will replace the DS Main display and the DS feature will be disabled for the remainder of that dive. There is no Penalty if the DS is ignored.

> In the event that you enter Deco, exceed 190 ft (57 m), or a High O2 SAT (Oxygen Saturation) condition, ≥ 80%, occurs, the DS will be disabled for the remainder of that dive.

> The DS is disabled during a High PO_2 Alarm condition, ≥ set point.

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SS (SAFETY STOP)

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

> If the SS was set for OFF, the display will not appear.

> In the event that you descend 10 ft (3 m) deeper than the Stop Depth for 10 seconds during the countdown, or the countdown reaches 0, the No Deco Main screen will replace the SS Main screen which will reappear upon ascent to within 5 ft (1.5 m) deeper than the Safety Stop depth set for 1 second.

> In the event that you enter Deco during the dive, complete the Deco obligation, then descend below 30 ft (9 m); the SS Main will appear again upon ascent to within 5 ft (1.5 m) deeper than the SS depth set for 1 second.

> If you ascend 2 ft (0.6 m) shallower than the SS depth for 10 seconds prior to completing it, the SS will be canceled for the remainder of that dive.

> There is no penalty if you surface prior to completing the SS or choose to ignore it.

LOW BATTERY WHILE ON THE SURFACE

Warning Level

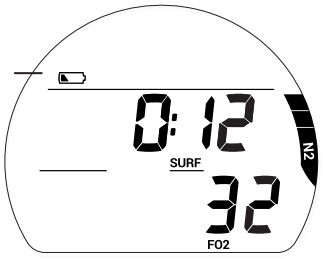
- The i300 functions continue but the backlight is disabled.
- The Battery icon appears solid.

Alarm Level

- All operations cease.
- The Battery icon flashes for 5 seconds then the unit shuts off.

⚠ **WARNING: Change the battery before diving if your i300 indicates the Battery Low Warning or Alarm.**

low battery,
solid = warning
flashing = alarm



LOW BATTERY DURING A DIVE

Warning Level

- The i300 functions continue but the backlight is disabled.
- The battery icon appears solid upon entry into Surface Mode.

Alarm Level

- The i300 functions continue but the backlight is disabled.
- The Battery icon appears flashing. 5 seconds after entering Surface Mode the i300 will shut down.

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AUDIBLE ALARM

While operating in Dive or Gauge mode, the audible alarm will emit 1 beep per second for 10 seconds when alarms strike, unless it is set Off. During that time, the audible alarm can be acknowledged and silenced by pressing the SEL button. An LED Warning Light, on the lower end of the housing, is synchronized with and flashes as the audible alarm sounds. It will turn off when the alarm is silenced. The audible and LED alarm will not be active if the audible alarm is set to OFF (Set AL Menu 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 Dive/Gauge 10 second Alarm include -
*** Items activate only in Dive 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.
• PO_2 at the set point selected**.
• High O_2 of 300 OTU (100%)**.
• N2 Bar Graph at the set point selected**.
• Ascent rate exceeds 30 FPM (9 MPM) for 8 seconds or more.
• Entry into Decompression Mode (Deco)**.
• 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 of 330 ft/100 m is exceeded in Dive or Free mode, or 399 ft/120 m in Gauge mode).

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

3 short beeps (which cannot be disabled) sound when -
• 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 N2 Bar Graph 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 Dive mode situations, the 10 second continuous tone will be followed by a 5 second steady beep that will not turn off when acknowledged -
• Ascent above a Deco Stop for more than 5 minutes.
• Deco requires a Stop Depth deeper than 60 ft (18 m) or deeper.
• On the Surface during a Conditional Violation.

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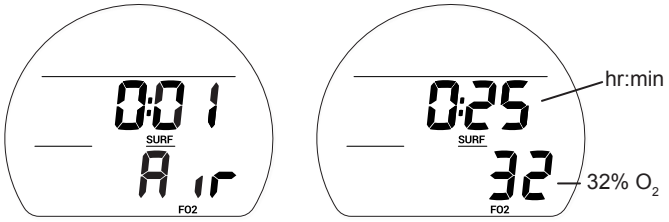
DIVE SURFACE MODE

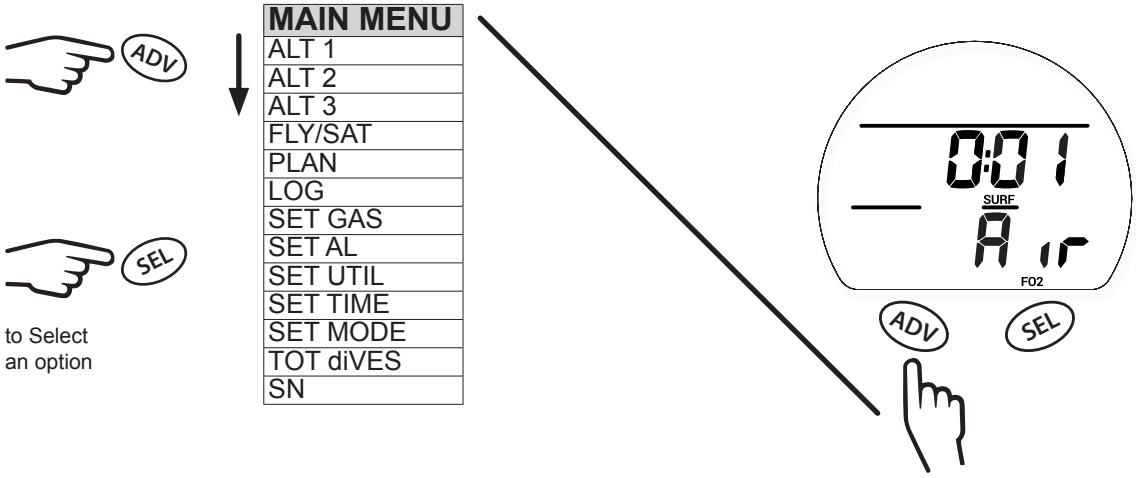
ON THE SURFACE BEFORE A DIVE

The Dive Main screen will display the SURF (Surface) time and the selected FO_2 of the breathing gas. The SURF time displayed is the time since activation or the surface interval after a dive.



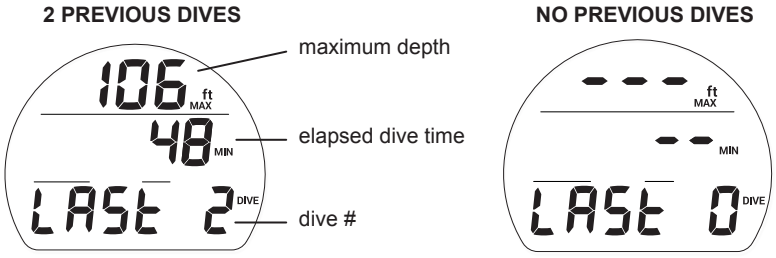
DIVE SURF MAIN MENU

To view i300 logs, change settings, or switch modes you must navigate through the Surf Main Menu. Enter the menu by pressing the ADV button. When you reach the end of the menu the i300 will return to the Dive Surface Main screen. You may hold the ADV button to scroll quickly through the selections. Some screens simply display data. While other screens are lead-ins to sub menus and settings. Press the SEL button to choose menus or options from the Main Menu when available. All Main Menu screens and options will be discussed in the order they appear in the menu below.



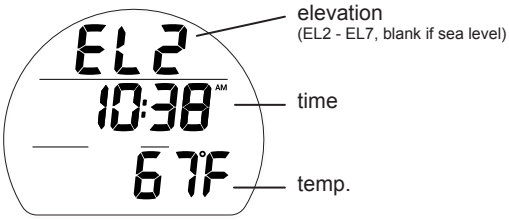
ALT 1 (LAST)

The ALT 1 screen displays essential data from the last dive. If there has been no dive within the current activation cycle, the dive number will display zero and dashes for the max depth and elapsed dive time will be displayed.



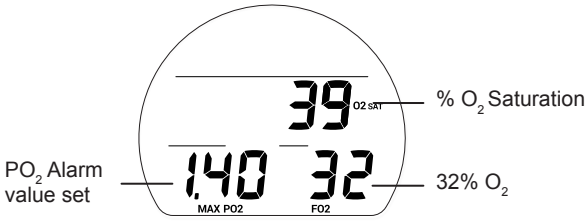
ALT 2

The ALT 2 screen displays current elevation readings, time of day, and temperature.



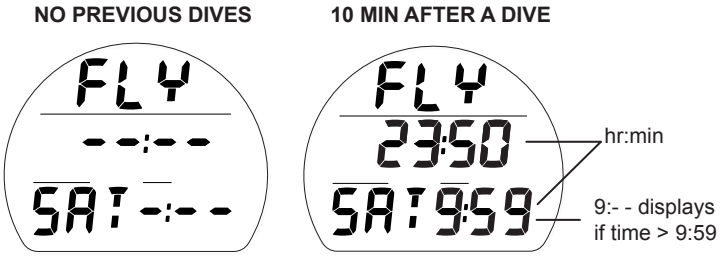
ALT 3

The ALT 3 screen displays only after a nitrox dive. It displays the current oxygen saturation level, the programmed PO_2 Alarm setpoint, and the current gas mix.



FLY/SAT (DESAT)

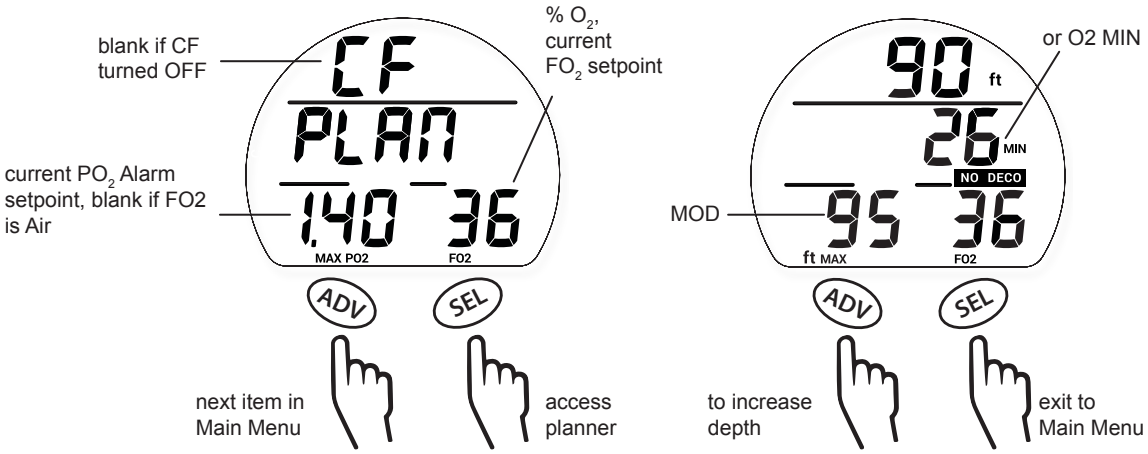
The FLY/SAT screen displays the Time to Fly and the SAT (desaturation) countdown. The Time to Fly countdown shall begin counting from 23:50 to 0:00 (hr:min), 10 minutes after surfacing from a dive. The SAT (Desat) counter shall provide calculated time for Tissue Desatuation at sea level taking into consideration the CF (Conservative Factor) if it was set on. It shall begin counting down 10 minutes after surfacing from DIVE or FREE dives counting down from a maximum of 23 to 10 (hr only), then 9:59 to 0:00 (hr:min). When the SAT countdown reaches 0:00 (hr:min), which will generally occur prior to the FLY countdown reaching 0:00 (hr:min), the SAT time is to remain on the screen as 0:00 until the FLY counter shuts the i300 off, 24 hours after the last dive.



PLAN

Pressing the SEL button while viewing the PLAN Lead-in screen accesses the dive planner mode. This mode calculates dive depth and time limits. To do so, it accounts for any residual nitrogen, oxygen, surface intervals, the programmed gas mix, and PO_2 alarm setting. Either NO DECO MIN or O_2 MIN limits are displayed, depending on whether nitrogen or oxygen levels will be the limiting factor. The time limit will display as 1-99 minutes, all times greater than 99 display as 99.

NOTE: Depths exceeding the MOD (Maximum Operating Depth), if nitrox, or that have less than 1 minute allowed dive time will not be displayed.



LOG

Pressing the SEL button while viewing the LOG Lead-in screen accesses the dive log. The log stores Information from the latest 24 DIVE and/or GAUGE mode dives for viewing.

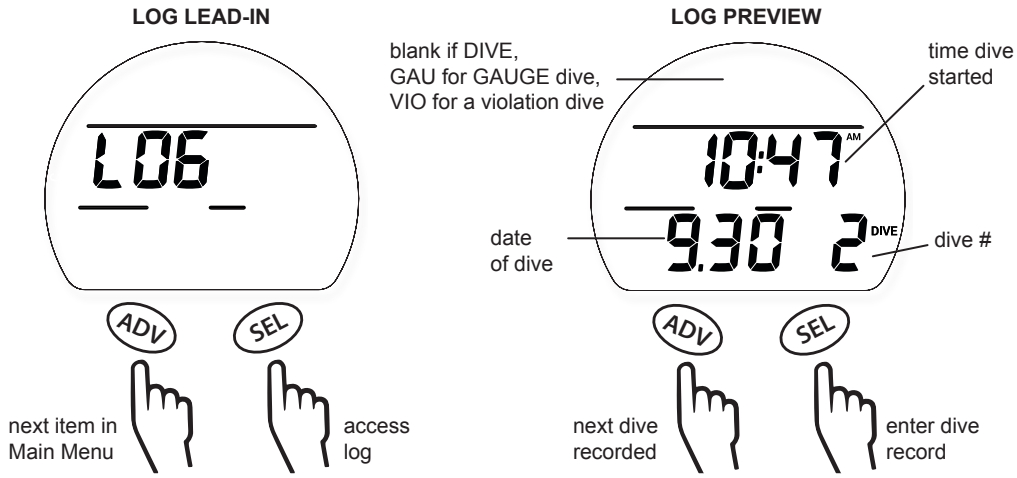
> If no dives are recorded, the message NONE YET 0 DIVE will be displayed in the log.

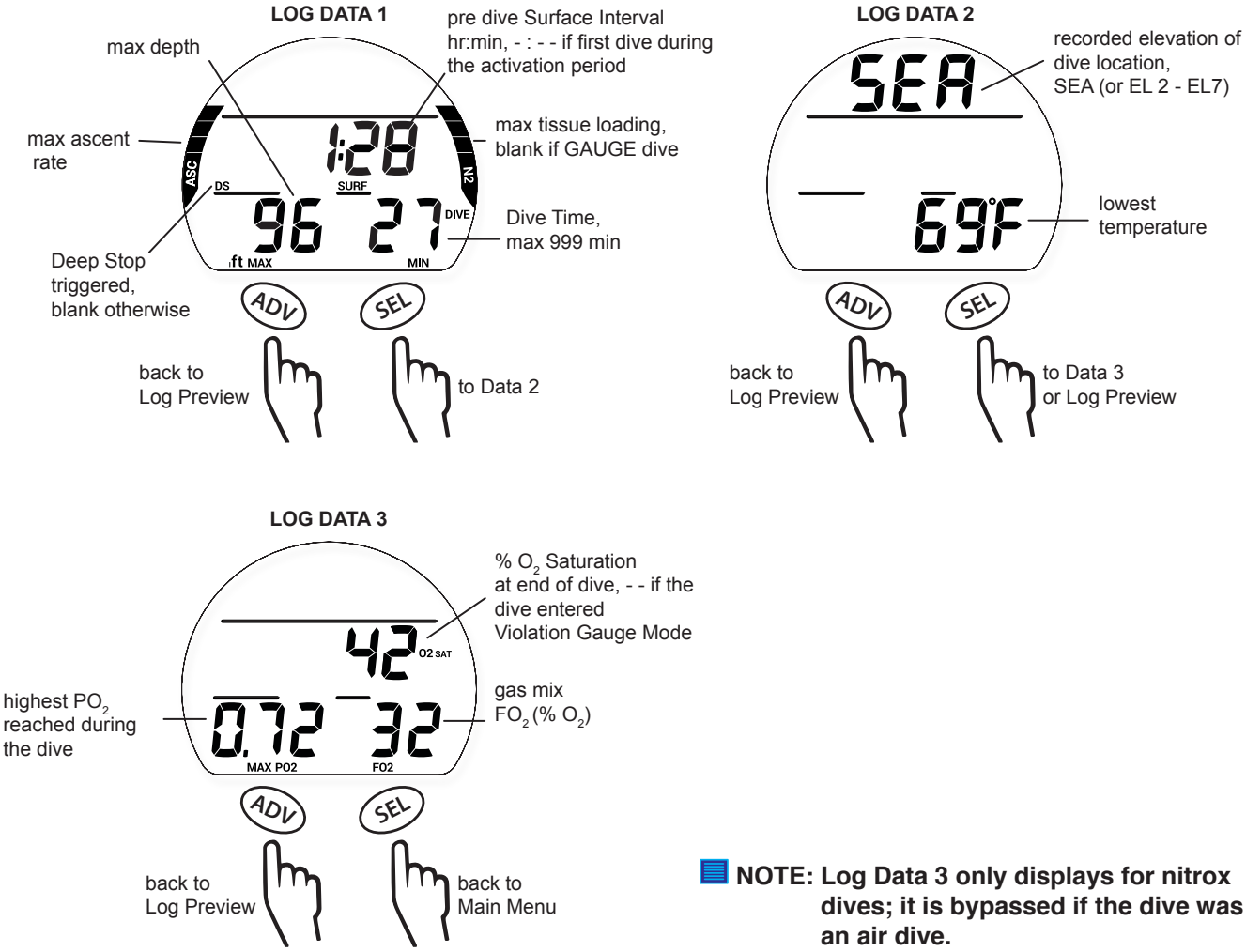
> After exceeding 24 dives, the most recent dive is stored while the oldest is deleted.

> Dives are numbered from 1 to 24 starting each time a dive is activated in either Dive (or Gauge) mode. After the post dive 24 hour period has elapsed and the unit shuts off, the first dive of the next activation period will be recorded as dive #1.

> In the event that dive time (DIVE MIN) exceeds 999 min, the data at the 999 interval is recorded in the Log upon surfacing of the unit.

NOTE: New data will automatically overwrite the oldest data in memory when the memory becomes full. If you do not remember to log or download your dives, they will be lost when the memory overwrites. See the PC Download section of this manual for instructions on downloading dives.



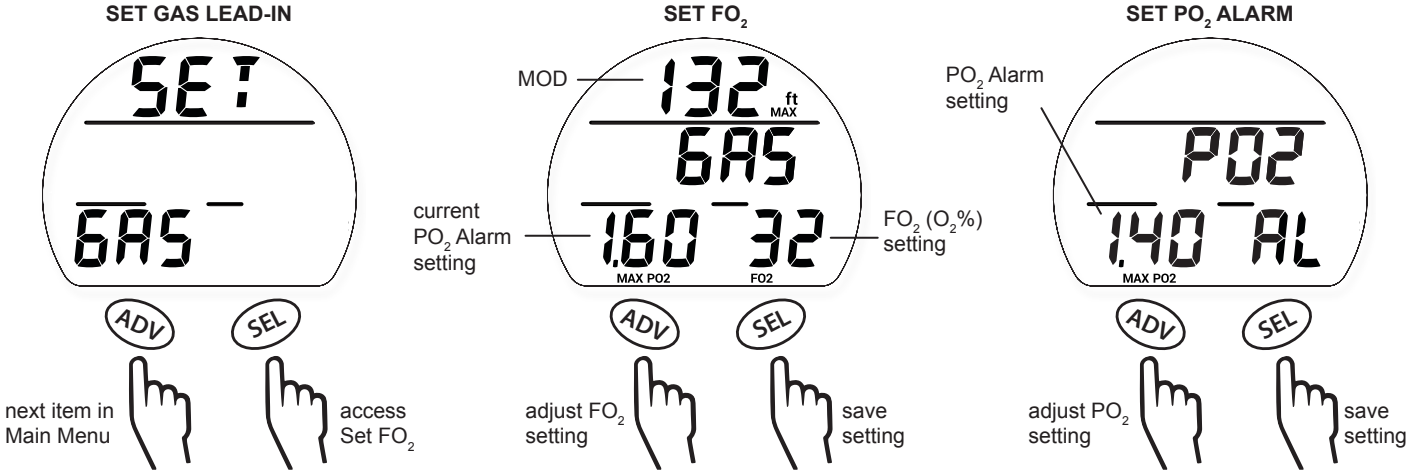


NOTE: Log Data 3 only displays for nitrox dives; it is bypassed if the dive was an air dive.

SET GAS

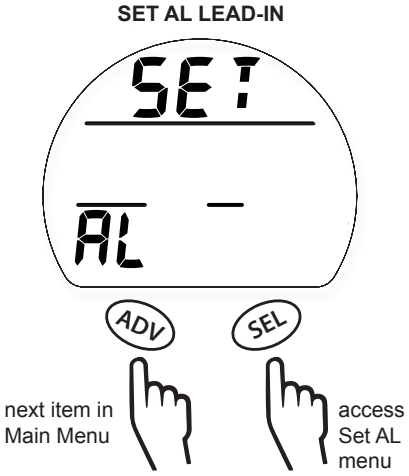
Pressing the SEL button while viewing the Set Gas Lead-in screen accesses the Set FO_2 screen. Within this screen you can change the gas mix from Air to any nitrox mix between 21 - 50 FO_2 (% O_2). Nitrox mixes are displayed with their corresponding MOD (Maximum Operating Depth) and the current PO_2 Alarm setting. If you do not like the current PO_2 Alarm setting, it can be changed in the screen that follows after saving a nitrox gas mix setting.

NOTE: Once a nitrox dive is made, the Air option will not be displayed in the Set Gas menu until 24 hours elapse after the last dive. If subsequent Air dives are made during this period, an FO_2 value of 21 should be chosen.



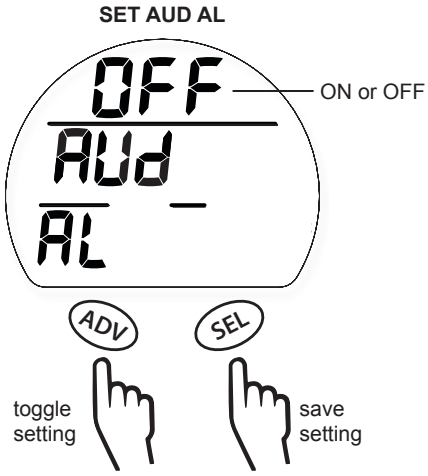
SET AL (ALARMS)

Pressing the SEL button while viewing the Set AL Lead-in screen accesses the Set AL Sub Menu. Within this menu you can customize the following five alarm settings.



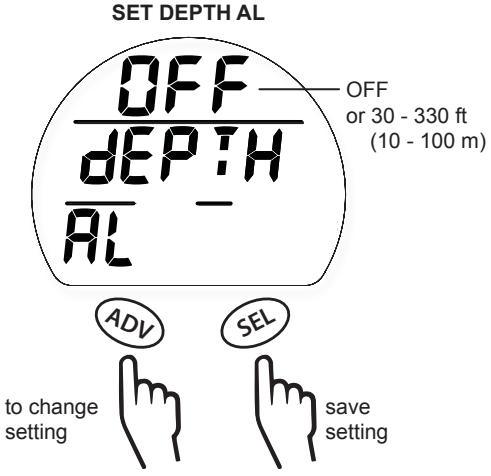
1. AUd AL (Audible Alarms)

The Audible Alarm feature allows you to set audible alarms ON or OFF.



2. dEPTH AL (Audible Alarms)

The Depth Alarm feature allows you to set a maximum depth alarm.



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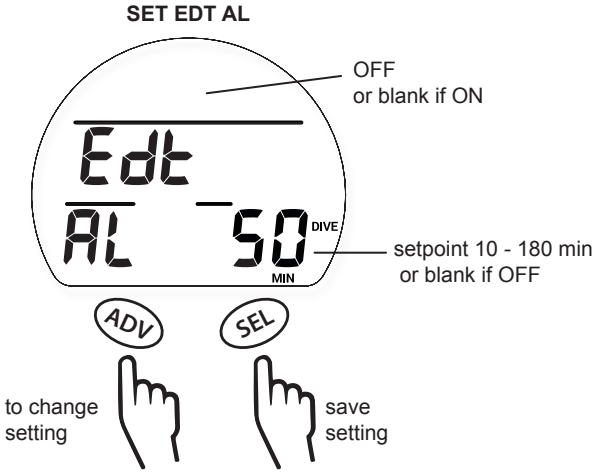
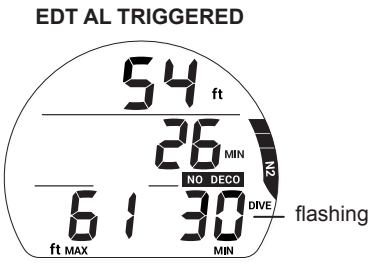
3. Edt AL (Elapsed Dive Time Alarm)

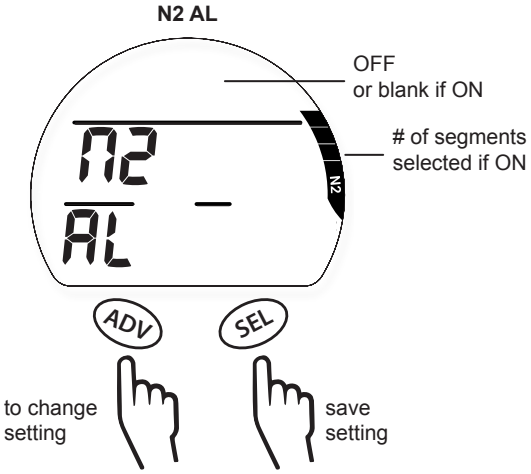
This feature allows you to set an alarm to go off at a predetermined amount of dive time.

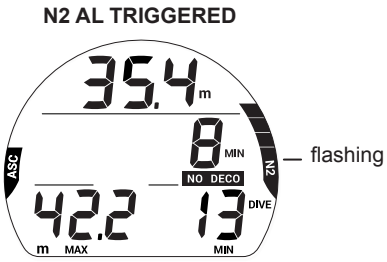




4. N2 AL (Nitrogen Alarm)

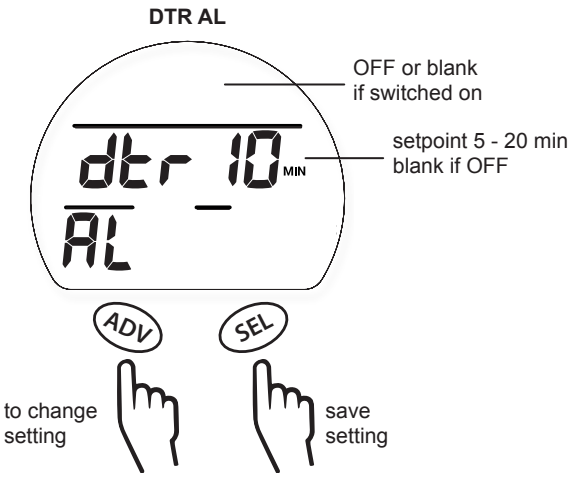
This feature allows you to set an alarm to go off at a predetermined number of N2 bar graph segments.

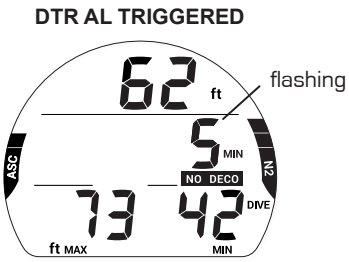




5. dtr AL (Dive Time Remaining Alarm)

This feature allows you to set an alarm to go off with a designated reserve of dive time remaining.

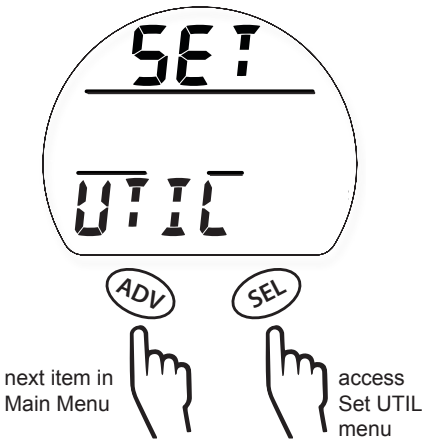




SET UTIL (UTILITIES)

Pressing the SEL button while viewing the Set UTIL Lead-in screen accesses the Set UTIL Sub Menu. Within this menu you can customize the following eight operational functions.

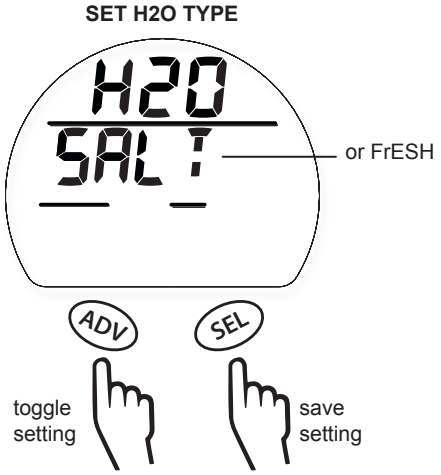
SET UTIL LEAD-IN



1. H2O TYPE (Water Type)

The H2O Type feature allows you to set SALT or FrESH water environment for accurate depth calculations.

SET H2O TYPE

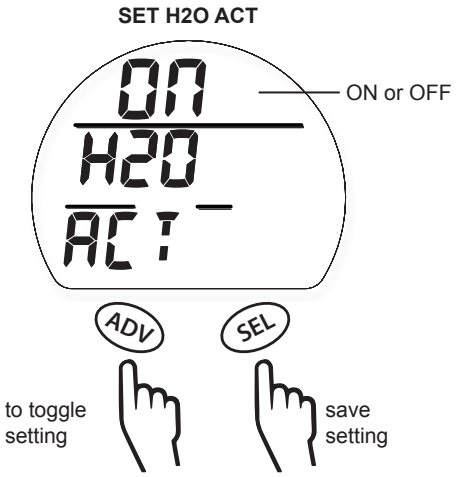


2. H2O ACT (Water Activation)

The H2O ACT feature allows you to turn OFF water contact activation.

⚠ **WARNING: With H2O ACT turned OFF, you MUST remember to manually activate the i300 before any dive.**

SET H2O ACT



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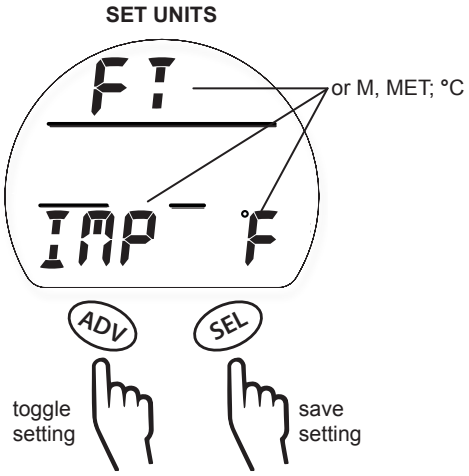
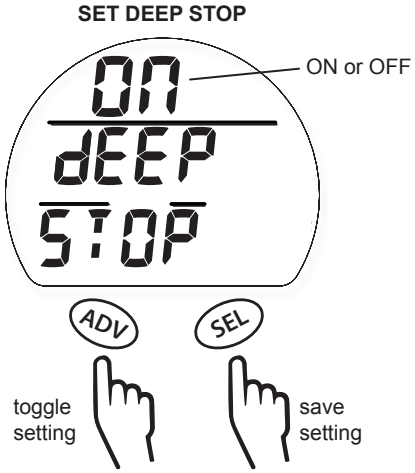
3. UNITS (IMP/MET)

The Units feature allows you to select whether IMP (imperial) or MET (metric) units of measure will be displayed.



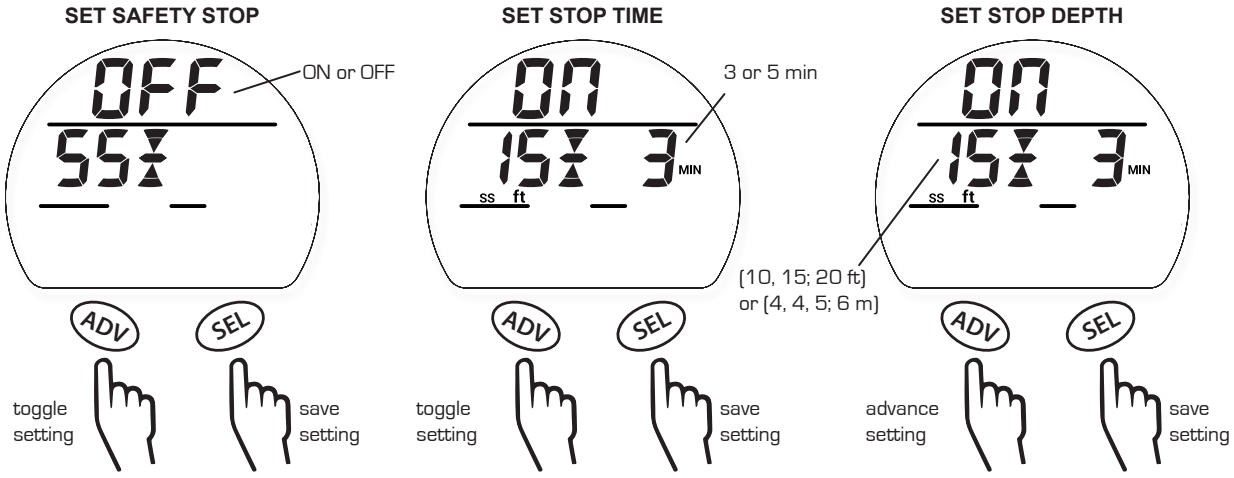
4. dEEP STOP

The Deep Stop feature can be set ON or OFF.



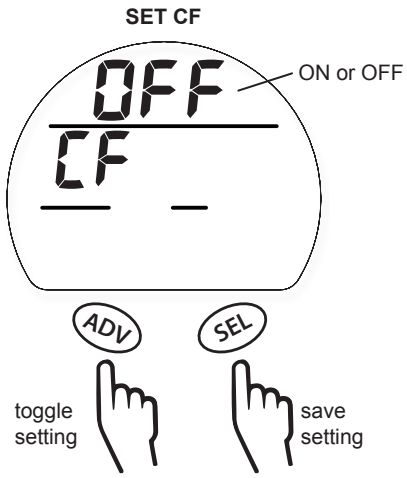
5. SS (SAFETY STOP)

The Safety Stop feature can be set ON or OFF. If ON is selected, you may choose from an available 3 or 5 min Safety Stop at depths of 10, 15, or 20 ft (3, 4, 5, or 6 m).



6. CF (Conservative Factor)

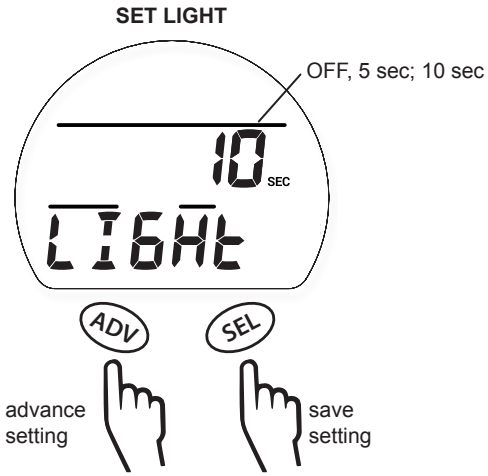
The CF feature can be set ON or OFF.



7. LIGHt (BACKLIGHT) DURATION

This setting is the duration the backlight stays on after releasing the buttons. The options are OFF, 5 sec, or 10 sec.

NOTE: The Backlight utilizes an ambient light sensor. If there is sufficient light, the backlight will not turn on regardless of this setting.



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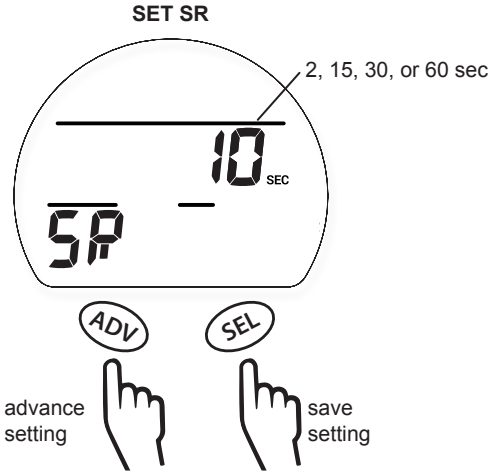
8. SR (SAMPLE RATE)

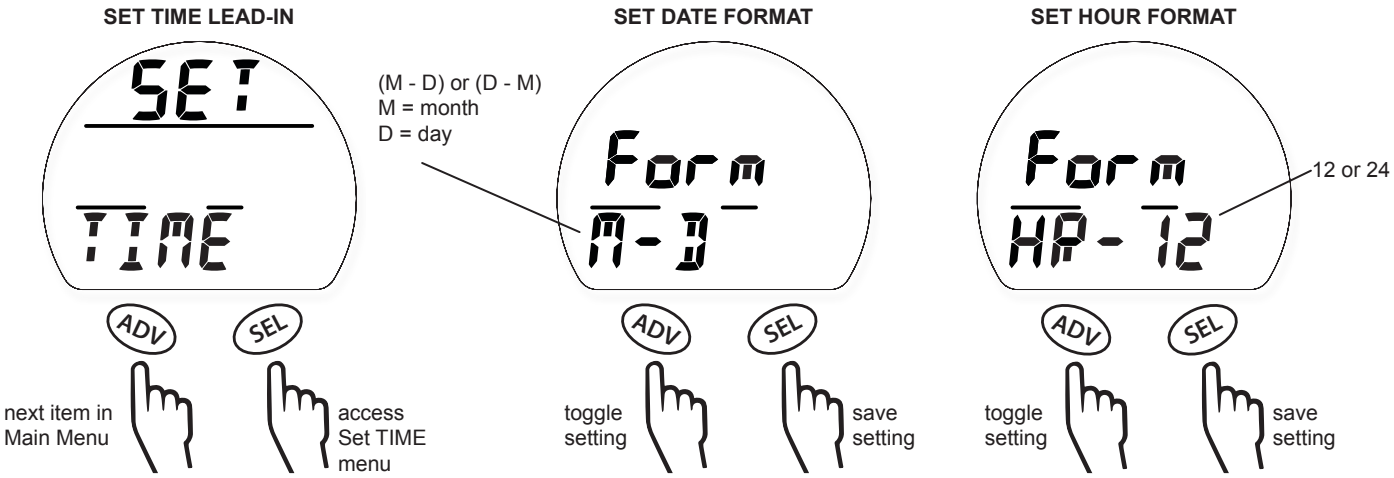
The Sample Rate controls how frequently the i300 stores a data snapshot for PC Download during a dive. Setting options are 2, 15, 30, or 60 second intervals. Shorter intervals will provide a more precise record of your dives.

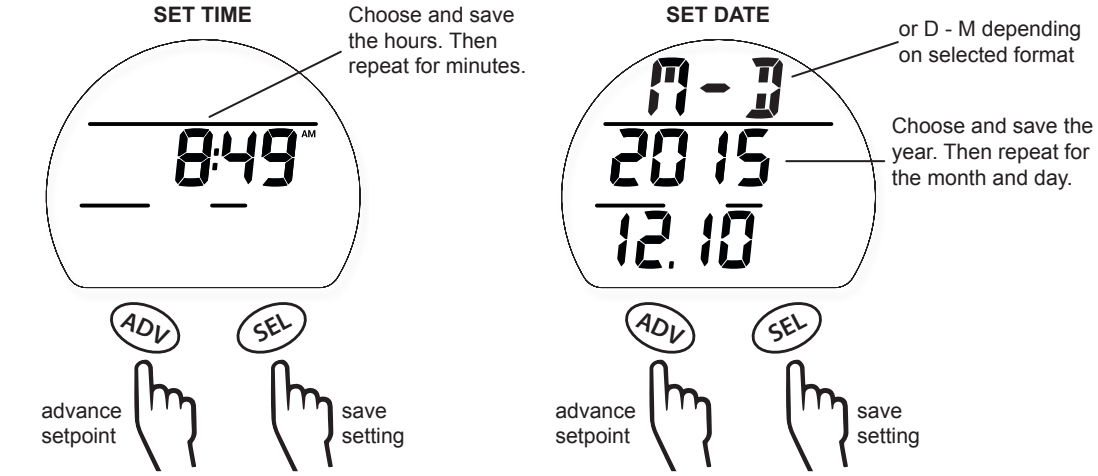
NOTE: New data will automatically overwrite the oldest data in memory when the memory becomes full. The i300 Log and PC Download data is stored separately in different partitions of the memory. The Log only stores a short summary of each dive. Alternately, the PC Download function stores much larger files for each dive. Depending on the chosen settings and dive durations, it is possible to see dives stored in the i300's onboard Log that have already been overwritten in the PC Download Partition. Choosing a longer Sample Rate interval will consume less memory per dive. Remember to download your dives more frequently if you are using a shorter Sample Rate interval.



SET TIME

Pressing the SEL button while viewing the Set TIME Lead-in screen accesses the Set TIME Sub Menu. Within this menu you can set the time formats, date, and time of day.

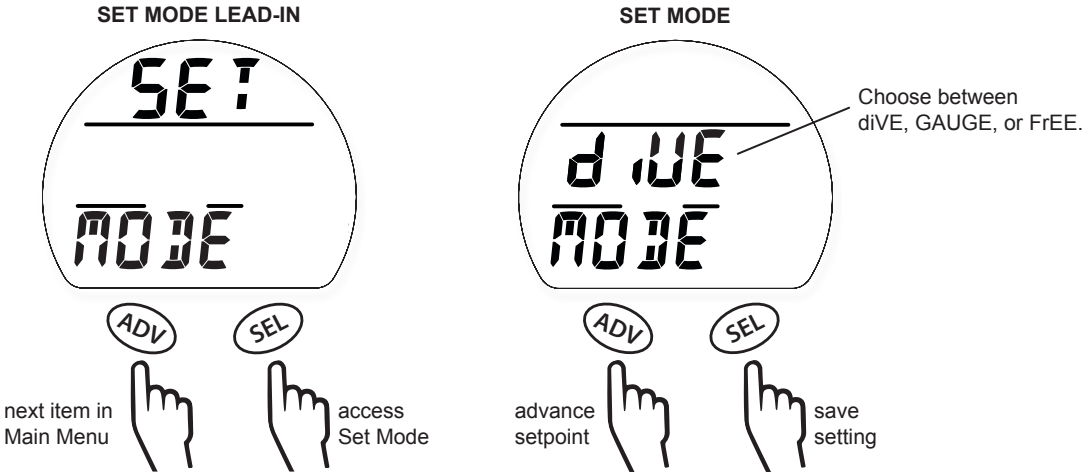




SET MODE

Set Mode allows you to choose between diVE (standard recreational dive), GAUGE, and FrEE (free diving) modes of operation.

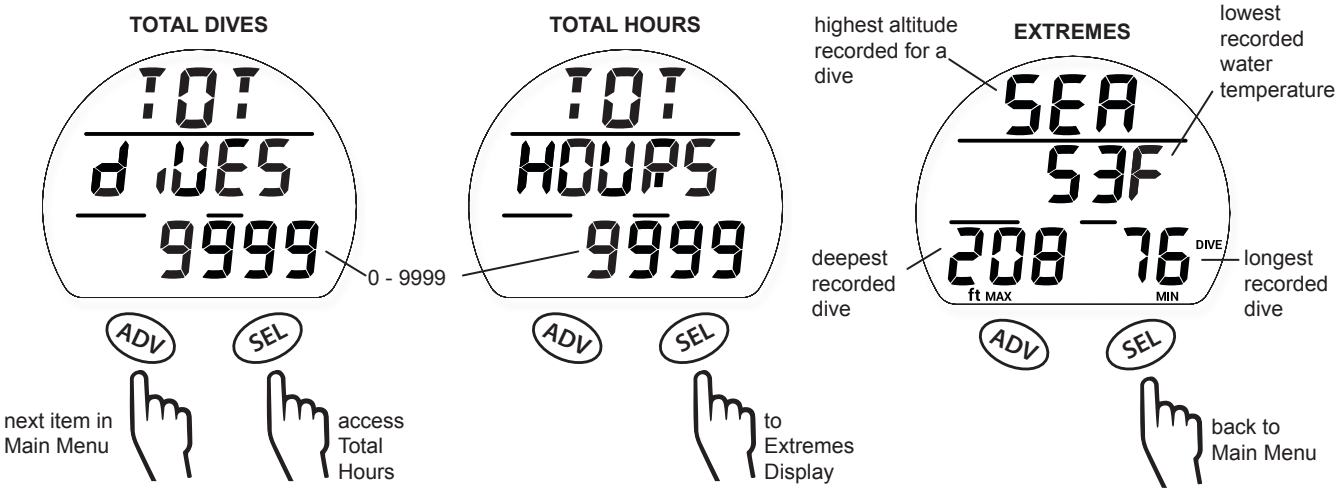
NOTE: The i300 will be locked in Gauge mode for 24 hours after surfacing from any Gauge or Violation Dive. Otherwise, you may switch modes freely while in any Surface Mode.



HISTORY

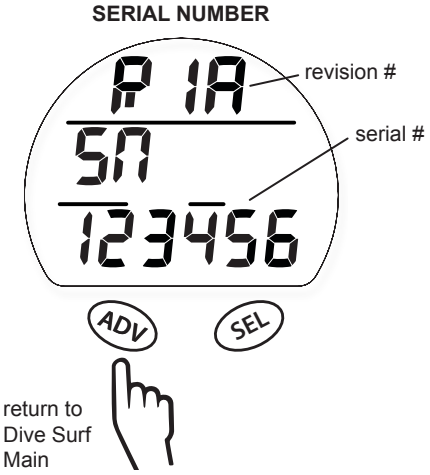
History is a summary of basic data recorded during all diVE and GAUGE dives.

NOTE: Dives made in Free mode are not shown in History or the Log Mode. Free dive data is only visible using the PC Download software.



SN (SERIAL NUMBER)

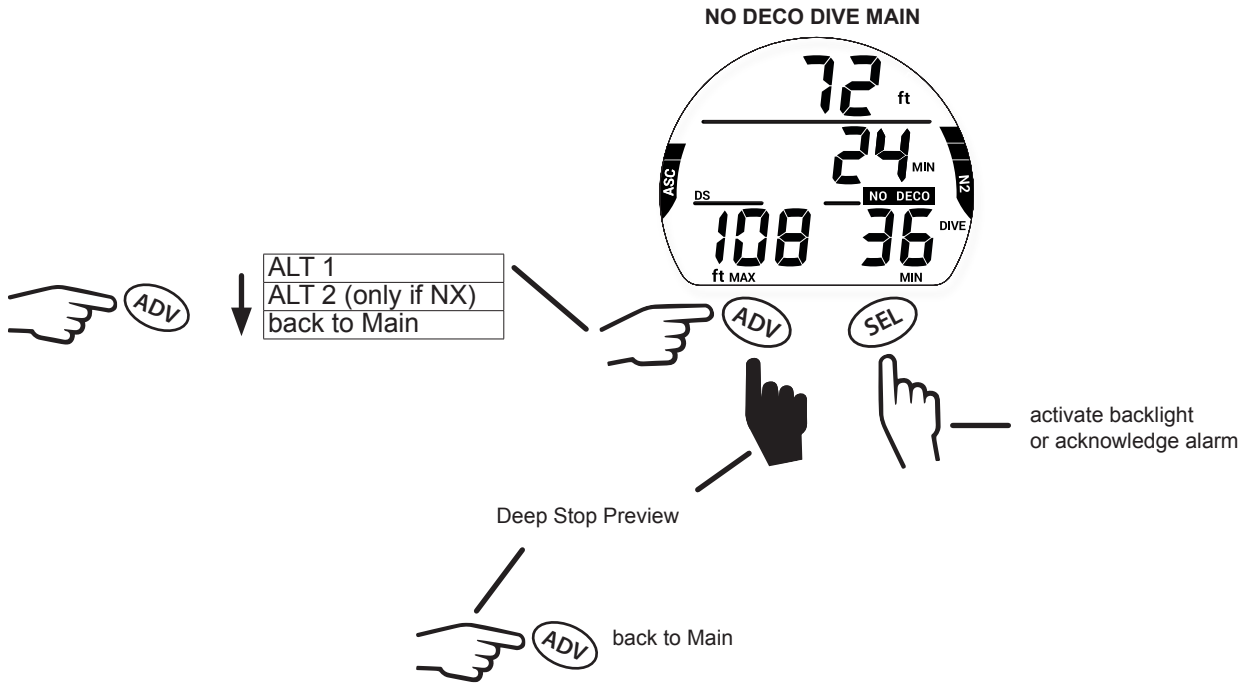
Information displayed on the Serial Number screen should be recorded and kept with your sales receipt; it will be required in the event that your i300 requires factory service.



DIVE OPERATION

INITIATING A DIVE

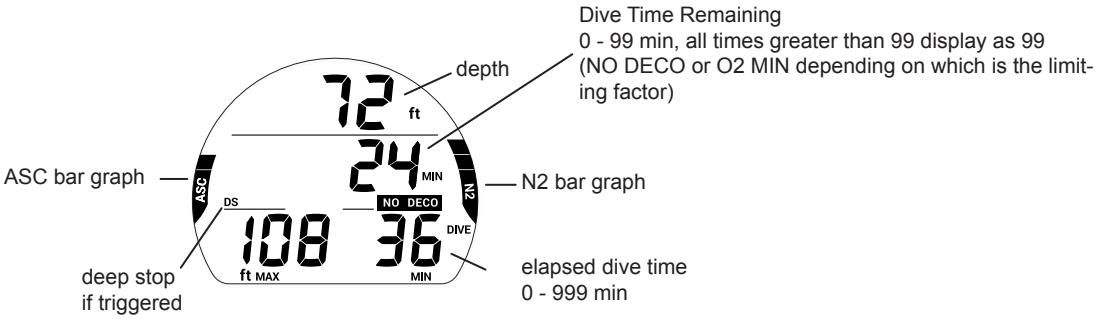
With the i300 activated, a dive will commence upon descending to 5 ft (1.5 m) for at least 5 seconds. Below is a diagram to help you navigate Dive Mode functions.



NO DECO DIVE MAIN

From the Main screen you can see all critical dive parameters. During a dive an audible alarm may sound and the priority of information displayed may change. This is to indicate a safety recommendation, warning, or alarm. The following information in this chapter demonstrates and describes an uneventful dive, in terms of safety. Alarms are described in the Complications section of this chapter.

⚠ **WARNING: Before diving with the i300 take time to familiarize yourself with both normal and alarm conditions of operation.**

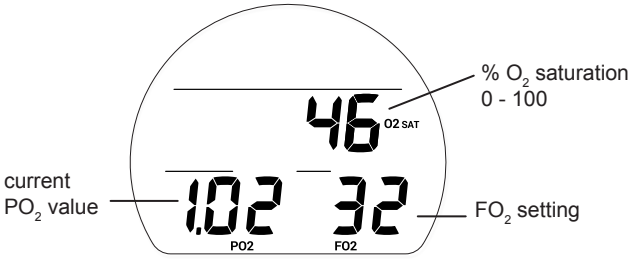


DIVE ALT 1

This screen simply tells you the current time of day and ambient temperature.

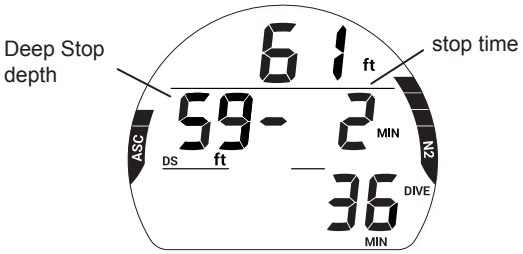
DIVE ALT 2

The ALT 2 screen displays information pertaining to nitrox; it is bypassed if the i300 is set for air.



DEEP STOP PREVIEW

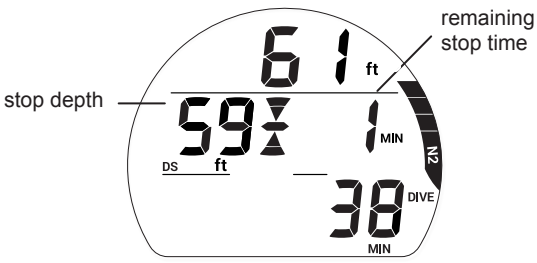
If Deep Stop was set to ON in the UTIL Menu, the Deep Stop preview screen is available after exceeding 80 ft (24 m) of depth. The Deep Stop is always at a depth half that of your maximum depth during the dive. This preview screen keeps track of that depth for you.



DEEP STOP MAIN

If triggered, the Deep Stop will activate upon ascending to within 10 ft (3 m) below the calculated Deep Stop depth. The stop time will be displayed and count down to 0 min as long as you stay within 10 ft (3 m) above or below the stop. While Deep Stop Main is displayed, you may access up to 3 ALT displays by pressing the ADV button to cycle through them. They are similar to the No Deco Main, Dive ALT 1, and Dive ALT 2 displays, respectively. See Deep Stop in the Dive Features chapter for further details.

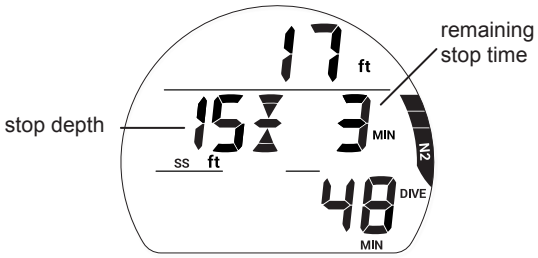
NOTE: The i300 does not penalize for a missed Deep Stop.



SAFETY STOP MAIN

If triggered, the Safety Stop will activate upon ascent to within 5 ft (1.5 m) deeper than the Safety Stop depth on a No Deco dive. The stop time will then countdown to 0 min. While Safety Stop Main is displayed, you may access up to 3 ALT displays by pressing the ADV button repeatedly. They are similar to the No Deco Main, Dive ALT 1, and Dive ALT 2 displays, respectively. See Safety Stop in the Dive Features chapter for further details.

NOTE: The i300 does not penalize for a missed Safety Stop.

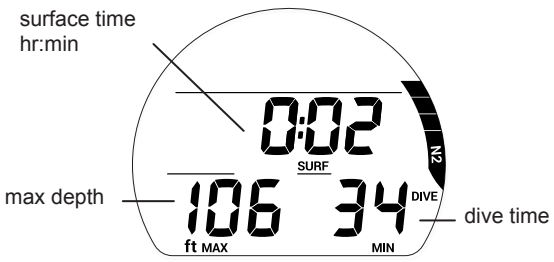


SURFACING

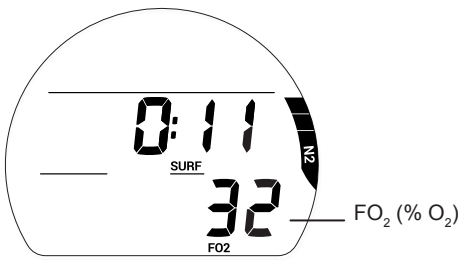
Upon ascending to 3 ft (0.9 m) the i300 transitions to Dive Surface mode. For the first 10 minutes after a dive the i300 will continue to display the maximum depth and elapsed dive time. Once the surface time reaches 10 minutes the i300 will display the standard Dive Surface screen.

NOTE: The i300 requires a 10 minute surface interval to record a subsequent dive as a separate dive in the Log. Otherwise, the dives will be combined and recorded as a single dive in the i300 memory.

< 10 MIN ON SURFACE



≥ 10 MIN ON SURFACE



COMPLICATIONS

The preceding information has described stress free casual dive operations. Your new i300 is also designed to help you to the surface in less than ideal situations. The following is a description of these. Take some time to familiarize yourself with these operations before diving your i300.

DECOMPRESSION

Decompression mode activates when theoretical No Decompression time and depth limits are exceeded. Upon entry into Deco, the audible alarm will sound and the alarm LED will flash. The full N2 bar Graph and Up Arrow icon will flash until the audible alarm is silenced.

> 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.

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.

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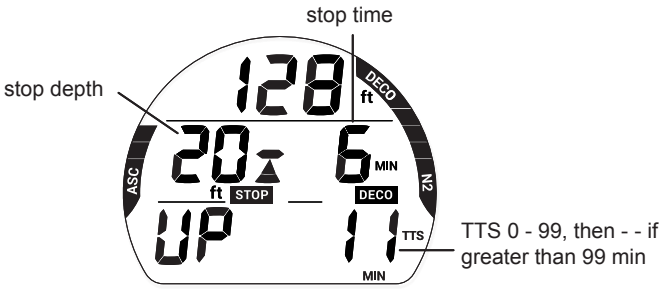
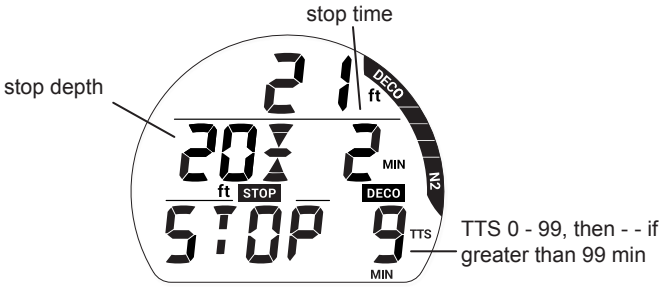
DECO ENTRY

Upon entry into decompression the audible alarm will sound and the alarm LED will flash until the audible alarm is silenced. The message UP, Up Arrow, and full N2 Bar Graph icons will flash. Additionally, the stop depth, stop time, and the TTS (Time To Surface) values will be displayed. TTS includes stop times at all required Deco Stops plus vertical ascent time based on the max rate allowed.



DECO STOP MAIN

Deco Stop Main will display upon ascending to within 10 ft (3 m) below the Deco Stop depth. The message STOP, the Full Stop icon (both Arrows with Stop Bar) will be displayed solid. While Deco Stop Main is displayed, you may access up to 3 ALT displays by pressing the ADV button to cycle through them. They are similar to the No Deco Main, Dive ALT 1, and Dive ALT 2 displays, respectively.

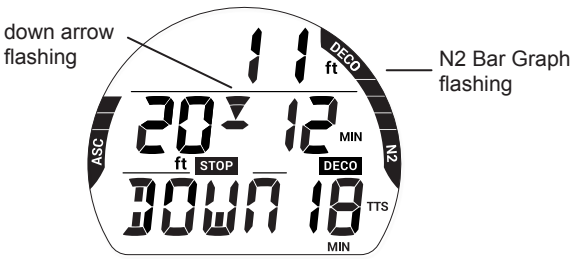


CV (CONDITIONAL VIOLATION)

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

The audible alarm will sound and the alarm LED will flash. The full N2 Bar Graph, Down Arrow icon, and DOWN message will flash until the audible alarm is silenced, then the N2 Bar Graph will be solid.

> The Down Arrow icon continues to flash until descending below required Stop Depth (within stop zone), then full Stop icon (Stop Bar with both Arrows) will be on solid.
> If you descend deeper than the required Deco Stop before 5 minutes elapse, Deco operation will continue with no off gassing credit given for time above the Stop. Instead, for each minute above the Stop 1-½ 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 N2 Bar Graph will recede into the No Deco zone, and operation will revert to No Deco mode.



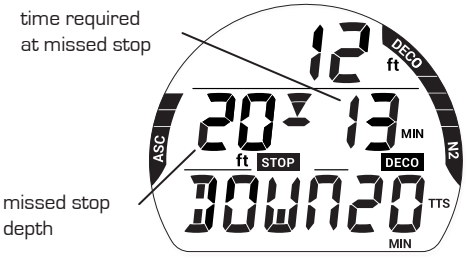
DV 1 (DELAYED VIOLATION 1)

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 alarm will sound and the full N2 Bar Graph will flash until it is silenced. ALT screens are accessed and appear similar to Deco ALT screens.

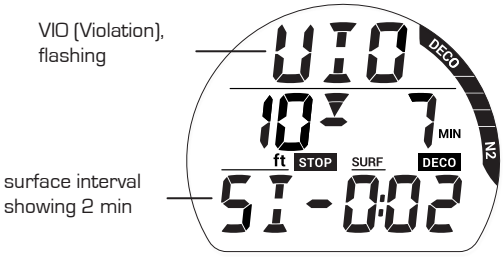
**The difference is that 5 minutes after surfacing from the dive, operation will now enter Violation Gauge Mode.*

> Down Arrow icon and DOWN message continues to flash until descent to below required Stop Depth, then full Stop icon will be on solid.
> If the DV1 status is ignored, the i300 will enter DV1 Surface mode for 5 minutes upon surfacing from the dive. VIO (Violation), Down Arrow icon, and SURF icon will be flashing. After 5 minutes on the surface in DV1 mode, the unit will enter VGM (Violation Gauge Mode).

DV1 DIVE MAIN



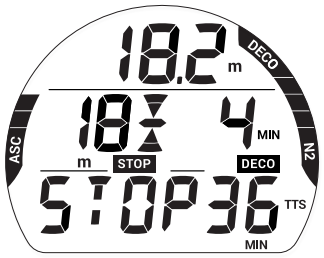
DV1 < 5 MIN ON SURFACE



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 alarm will sound and the alarm LED will flash. The full N2 Bar Graph will flash until the audible alarm is silenced.

> 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 message and Stop icon (both Arrows with Stop Bar) will be displayed solid.



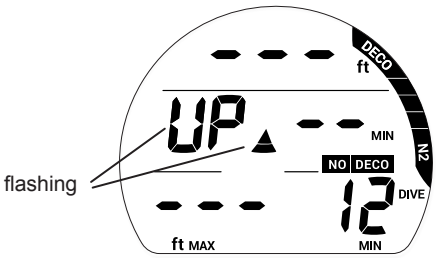
DV 3 (DELAYED VIOLATION 3)

If you descend deeper than the maximum functional depth*, the audible alarm will sound and the alarm LED will flash. Also, the Up Arrow icon, UP message will flash, and Current Depth/Max Depth/DTR will only indicate dashes signifying that you are too deep.

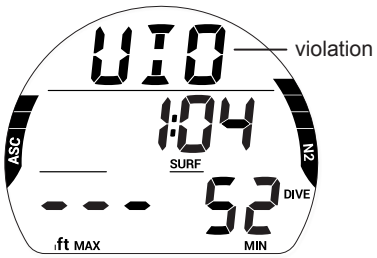
**The maximum functional depth {Dive/Free Mode 330 FT (100 M), Gauge Mode 399 FT (120 M)} is the depth at which the i300 can properly perform calculations or provide accurate display information.*

Upon ascending above the maximum functional depth, 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.

DV3 DIVE



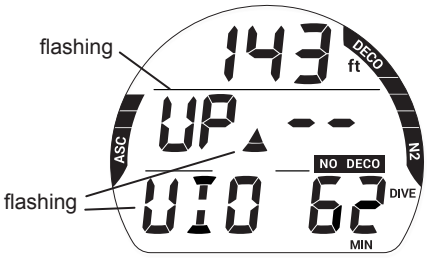
LOG, DV3 DIVE



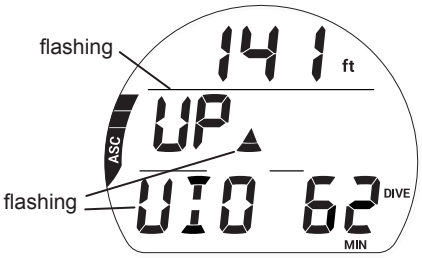
VGM (VIOLATION GAUGE MODE) DURING A DIVE

During Dive mode 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 i300 into a digital instrument without any decompression or oxygen related calculations or displays. Upon activation of VGM, the audible alarm will sound and the alarm LED will flash. The graphic VIO (violation) and Up Arrow icon will flash. After the audible alarm becomes silent, the NO DECO and N2 Bar Graph will be removed from the display.

VGM DURING AUDIBLE ALARM



VGM AFTER AUDIBLE ALARM

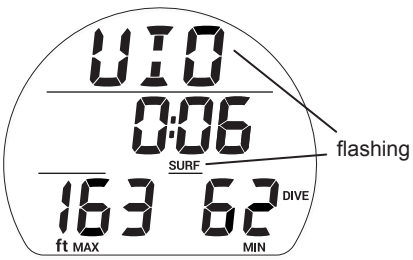


VGM (VIOLATION GAUGE MODE) ON THE SURFACE

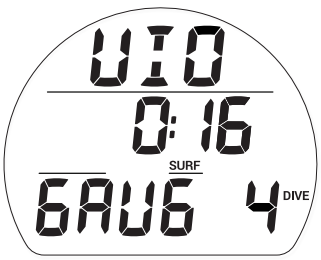
Upon surfacing, the VGM Dive Main will remain on display for 10 minutes with Surface Interval time displayed with the SURF icon flashing. The graphic VIO will also still be displayed flashing. Operation will also enter VGM 5 minutes after surfacing from a dive in which a Delayed Violation occurred.

> A full 24 hour continuous surface interval must then be served before all functions are restored.
> During that 24 hours, VGM does not allow access to the SET GAS, PLAN, FLY/SAT (Desat), and FREE Mode features/screens.
> The FLY countdown indicates time remaining before normal operation can resume with full features and functions.

VGM SURFACE < 10 MIN



VGM SURFACE > 10 MIN

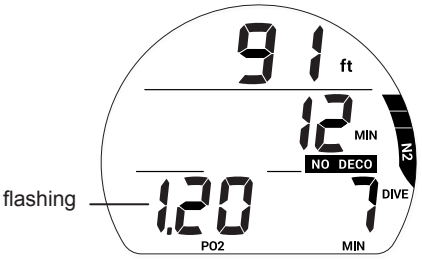


HIGH PO_2

Warning >> at Alarm Set Point value minus .20
Alarm >> at Set Point value, except in Deco then at 1.60 only

Warning

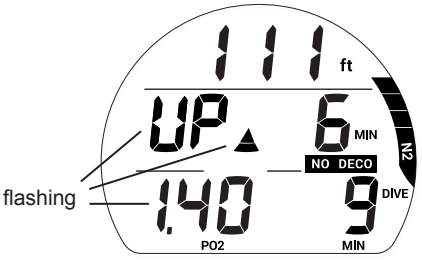
When PO_2 (partial pressure of oxygen) increases to the Warning level; the audible alarm sounds and the PO_2 value will flash (in place of max Depth) until the audible alarm is silenced.



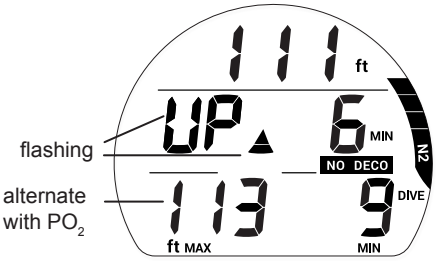
Alarm

If PO_2 continues to increase and reaches the alarm set point, the audible alarm sounds again. The PO2 value, UP message, and Up Arrow icon will flash until PO_2 decreases below the alarm set point. After the audible alarm is silenced, the PO_2 will alternate with max depth.

DURING AUDIBLE ALARM



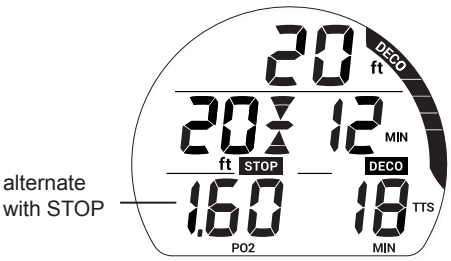
AFTER AUDIBLE ALARM



PO_2 During Deco

The PO_2 alarm setting does not apply when in Deco. If PO_2 reaches 1.60 while at a Deco Stop, the PO_2 value (1.60) with icon will alternate with STOP message once each minute*.

**PO_2 on for 10 seconds, Deco Stop Depth/Time on for 50 seconds until PO_2 decreases below 1.60, then PO_2 will not be displayed.*

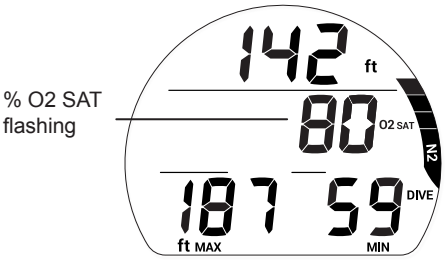


HIGH O2 SAT (OXYGEN SATURATION)

Warning >> at 80 to 99% (240 OTU)
Alarm >> at 100% (300 OTU)

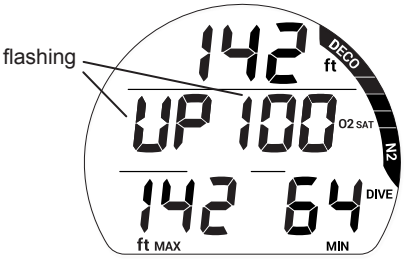
Warning

When O_2 reaches the Warning Level, the audible alarm sounds and the O2 SAT (saturation) value will flash in place of the DTR. The DTR will be restored when the audible alarm is silenced.



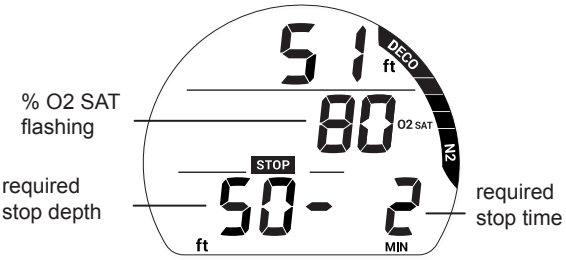
Alarm

If O2 SAT reaches the Alarm level, the audible alarm sounds and the UP message and the O2 SAT value will flash in place of DTR until surfacing.



Warning During Deco

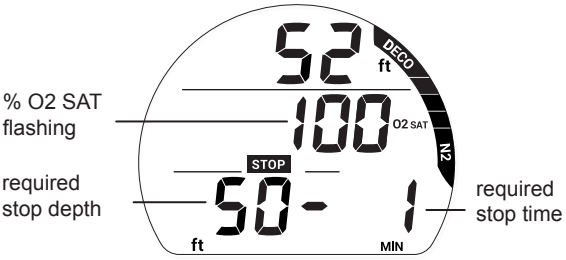
When O2 SAT reaches the Warning Level, the audible alarm sounds and the O2 SAT value will flash in the middle of the screen. The Stop Depth and Stop Time moves to the lower portion of the screen. When the audible alarm is silenced, the standard Deco Dive screen is restored with max depth and TTS (Time To Surface) restored.



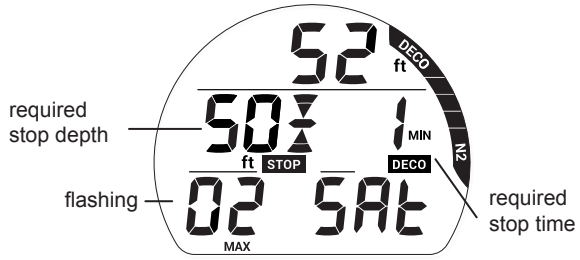
Alarm During Deco

If O2 SAT reaches the Alarm level, the audible alarm sounds and the O2 SAT value will flash in the middle of the screen. The Stop Depth and Stop Time moves to the lower portion of the screen. When the audible alarm is silenced, the message MAX O2 SAT (100% O2 SAT) will flash (in place of max depth and TTS) until on the surface.

DURING AUDIBLE ALARM



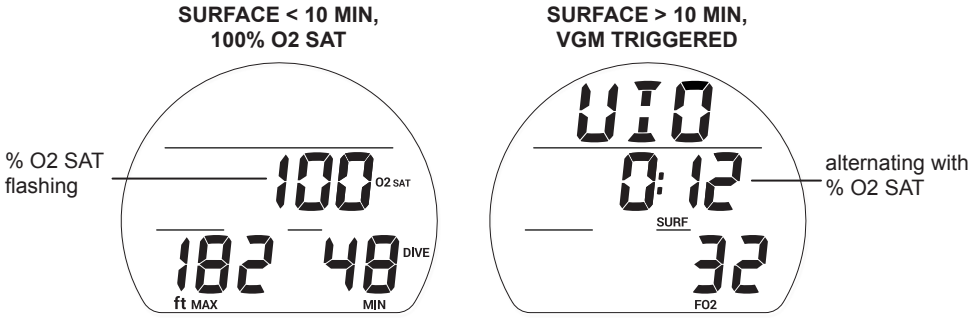
AFTER AUDIBLE ALARM



Alarm On Surface

Upon surfacing, the Dive Main screen is displayed for 10 minutes with access to the Dive ALTs allowed.

- If O2 SAT is 100%, the value will alternate with SURF time on the Main Screen until it is < 100%, then it will be replaced with VGM (if Violation) or SURF time.
- If you surface due to 100% O2 SAT without completing the Deco obligation, the full N2 Bar Graph and O2 SAT value (100) will flash with O2 SAT icons for the first 10 minutes, then operation will enter VGM (Violation Gauge Mode).
- Access to Dive ALT screens is allowed during the first 10 minutes, then access to the Dive Surface Menu is allowed.

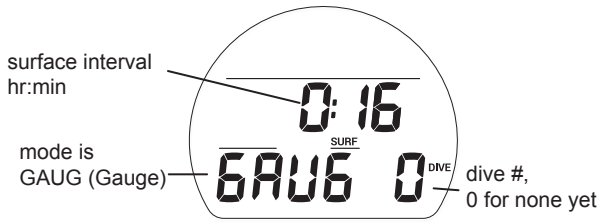


GAUGE MODE

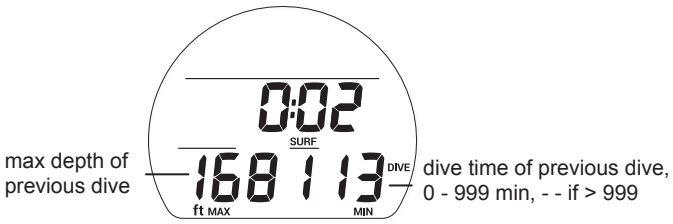
ON THE SURFACE BEFORE A DIVE

There are two main Gauge Surface Main screens. The first screen displays when there have been no dives yet or the surface interval after a dive has been greater than 10 min. The second screen displays only during the first ten minutes after a dive.

GAUGE SURF MAIN
(no dive yet or > 10 min SI)

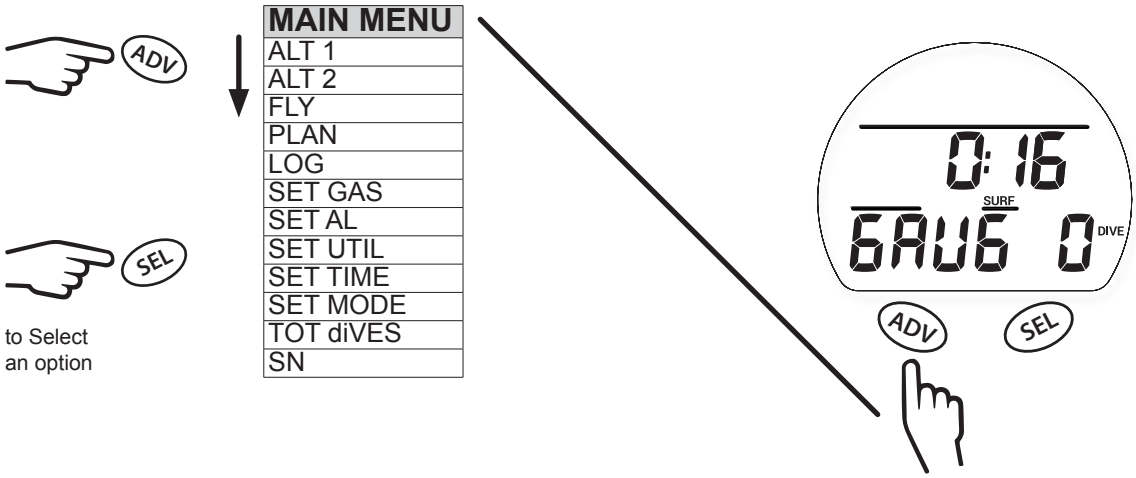


GAUGE SURF MAIN
(< 10 min post dive)



DIVE SURF MAIN MENU

To view i300 logs, change settings, or switch modes you must navigate through the Surf Main Menu. Enter the menu by pressing the ADV button. When you reach the end of the menu the i300 will return to the Dive Surface Main screen. You may hold the ADV button to scroll quickly through the selections. Some screens simply display data. While other screens are lead-ins to sub menus and settings. Press the SEL button to choose menus or options from the Main Menu when available.



NOTE: The Gauge Surface Main, ALT screens, and Menu options are similar to those described previously for Dive Mode. See the Dive Surface Mode chapter for further details.

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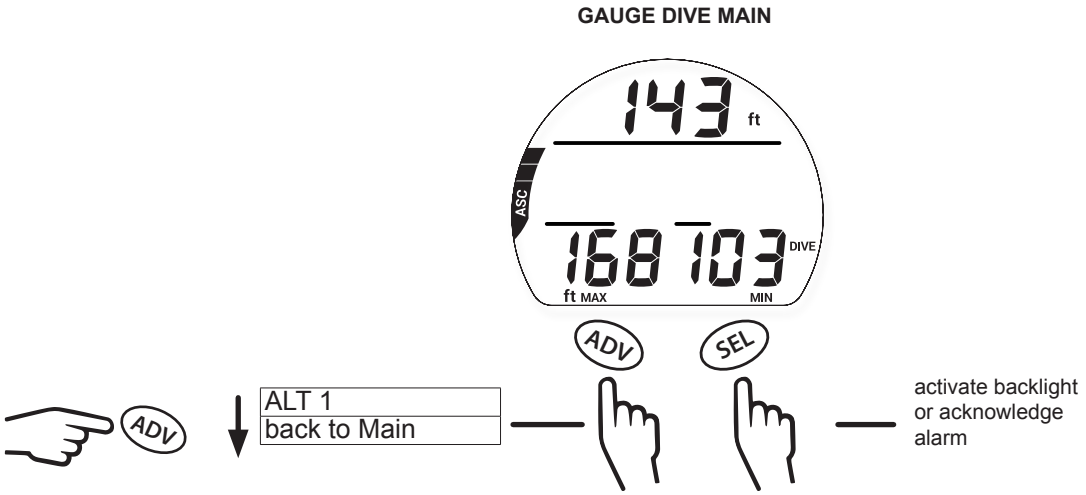
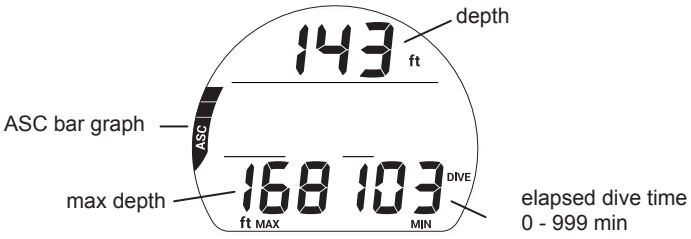
INITIATING A DIVE

With the i300 activated, a Gauge dive will commence upon descending to 5 ft (1.5 m) for at least 5 seconds. Below is a diagram to help you navigate Gauge Dive Mode functions.



GAUGE DIVE MAIN

The Gauge Dive Main provides basic information including depth, dive time, and ascent rate during the dive.



GAUGE DIVE ALT 1

This screen simply tells you the current time of day and ambient temperature.

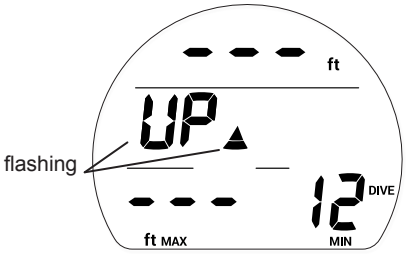
DV 3 (DELAYED VIOLATION 3)

If you descend deeper than the maximum functional depth*, the audible alarm will sound and the alarm LED will flash. Also, the Up Arrow icon, UP message will flash, and Current Depth/Max Depth will only indicate dashes signifying that you are Too Deep.

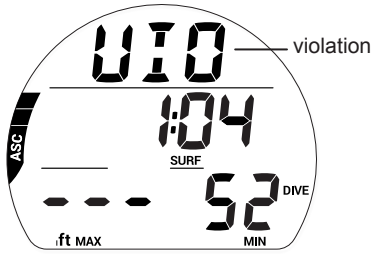
**The maximum functional depth {Dive/Free Mode 330 FT (100 M), Gauge Mode 399 FT (120 M)} is the depth at which the i300 can properly perform calculations or provide accurate display information. Refer to the Specifications in the back.*

Upon ascending above the maximum functional depth, 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.

DV3 GAUGE



LOG, DV3 GAUGE



FREE MODE

FREE DIVE MODE DETAILS

- Although breathing apparatus is not utilized for free dive activities, nitrogen tissue loading remains a factor. Nitrogen loading is calculated based upon a fixed FO_2 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 are carried over from one operating mode to the other, which permits the user to maintain awareness of nitrogen absorption and off-gassing status.
- The mathematical models currently used in the i300 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.

⚠ WARNINGS:

- **Ensure that you know which Operating Mode is selected (DIVE, GAUGE, 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.**

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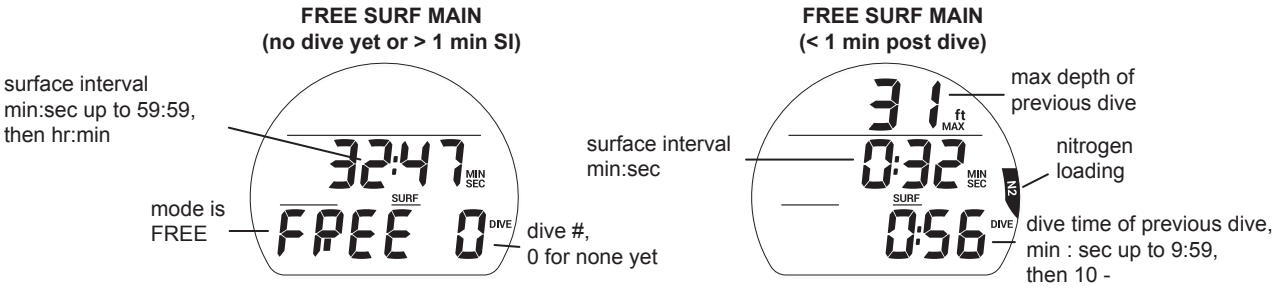
ON THE SURFACE BEFORE A DIVE

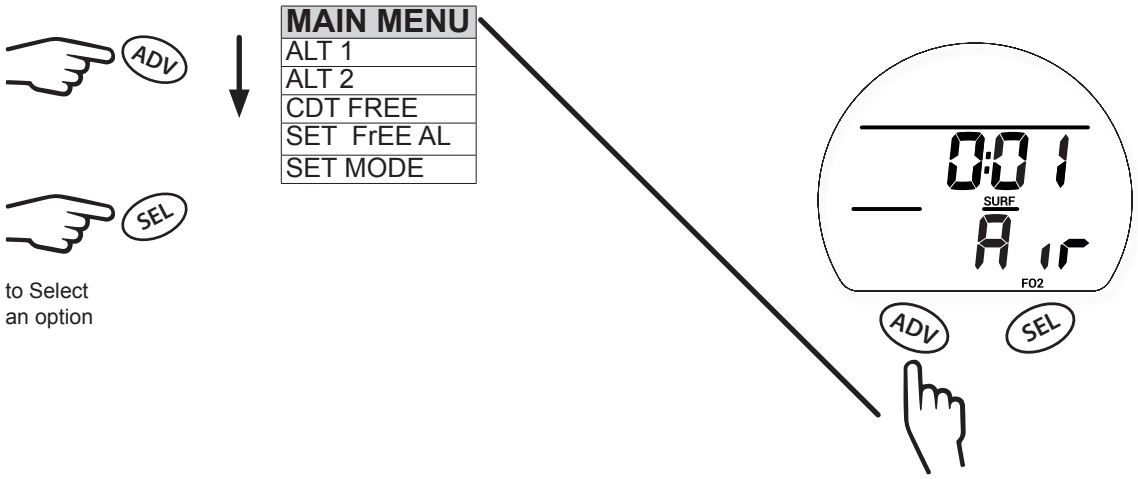
There are two main Free Surface Main screens. The first version displays when there have been no dives yet or the surface interval after a dive has been greater than 1 min. The second version displays only during the first minute after a free dive.



FREE SURF MAIN MENU

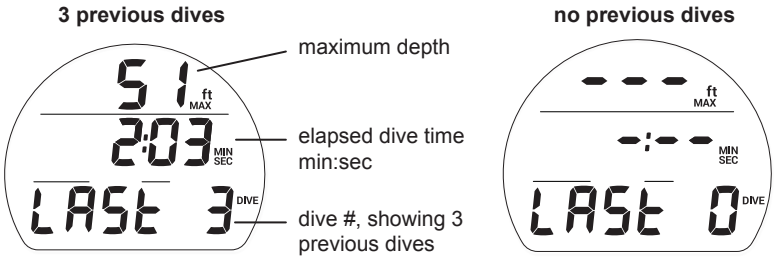
To view ALT screens, change settings, or switch modes you must navigate through the Surf Main Menu. Enter the menu by pressing the ADV button. When you reach the end of the menu the i300 will return to the Free Surface Main screen. You may hold the ADV button to scroll quickly through the selections. Some screens simply display data. While other screens are lead-ins to sub menus and settings. Press the SEL button to choose menus or options from the Main Menu when available. All Main Menu screens and options will be discussed in the order they appear in the menu below.

NOTE: Free Dive mode has no Log mode. Free Dive information is only available using the PC Download software.



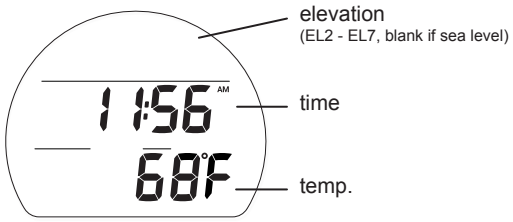
ALT 1 (LAST)

The ALT 1 screen displays essential data from the last dive. If there has been no dive within the current activation cycle, the dive number will display zero and dashes for the max depth and elapsed dive time will be displayed.



ALT 2

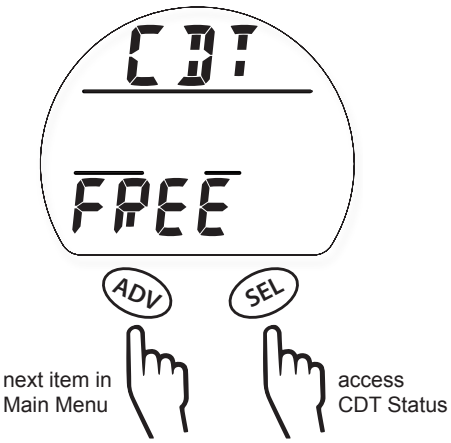
The ALT 2 screen displays current elevation readings, time of day, and temperature.



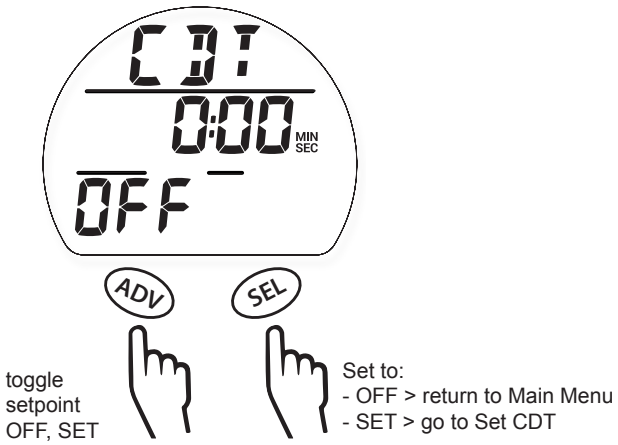
CDT FREE (COUNTDOWN TIMER)

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 and becomes available as an ALT display. When a set Countdown Time reaches 0:00, the audible alarm will sound. During which time, the graphic CDT will be flashed on the Surface or Dive Main screens until the audible alarm is silent.

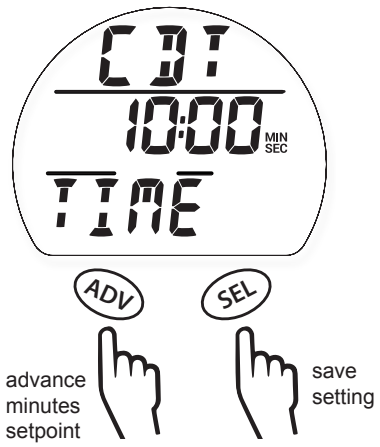
CDT LEAD-IN



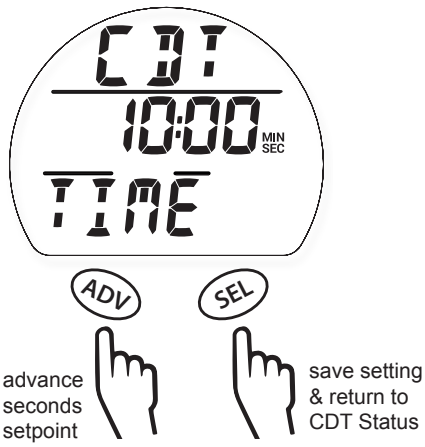
CDT STATUS



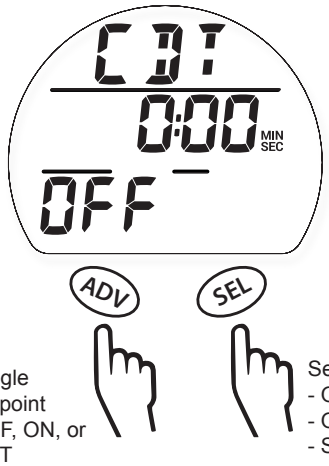
CDT SET MINUTES



CDT SET SECONDS



CDT STATUS



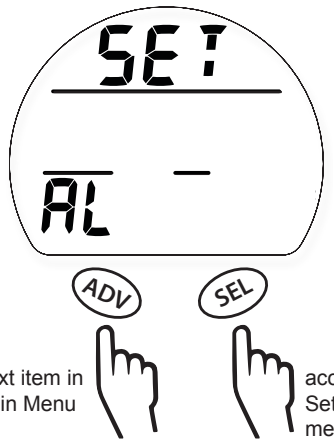
toggle setpoint OFF, ON, or SET

Set to:
- OFF > return to Main menu
- ON > return to Main menu
- SET > go to CDT Set

SET FREE AL (ALARMS)

Pressing the SEL button while viewing the Set AL Lead-in screen accesses the Set Free AL sub menu. Within this menu you can customize the following two alarm settings.

SET FREE AL LEAD-IN



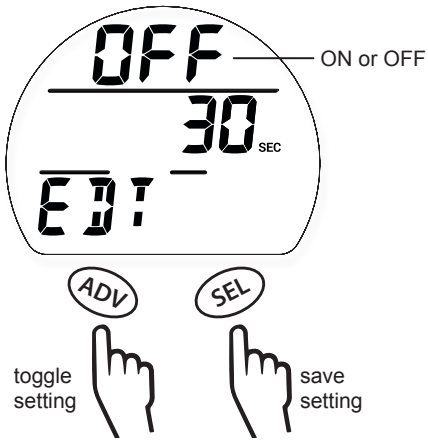
Next item in Main Menu

access Set Free AL menu

1. EDT (Elapsed Dive Time) Alarm

Factory set for a fixed 30 seconds, the EDT alarm sounds the audible alarm every 30 seconds while underwater in Free Dive Mode.

SET EDT AL



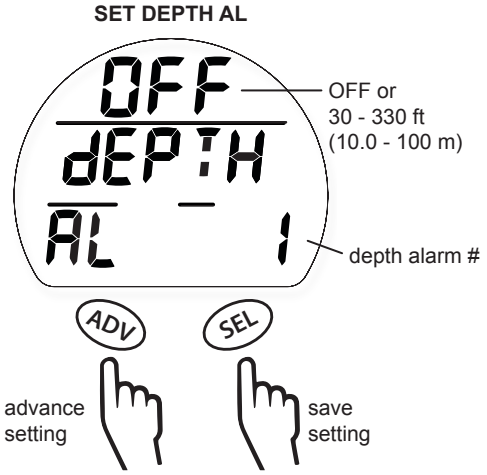
toggle setting

save setting

2. dEPtH AL (ALARM) 1-3

There are 3 Free DA's (Depth Alarms) that can be set at progressively deeper depths, in intervals of 10 ft (1 m).

NOTE: Each successive DA can only be set deeper than the DA that proceeds it. For example: If DA 1 is set for 100 ft then DA 2 settings start at 110 ft.



NOTE: DA 2 and DA 3 are set the same way as DA 1. Press select to save settings and to return to the Main menu from Set DA 3 screen.

SET MODE

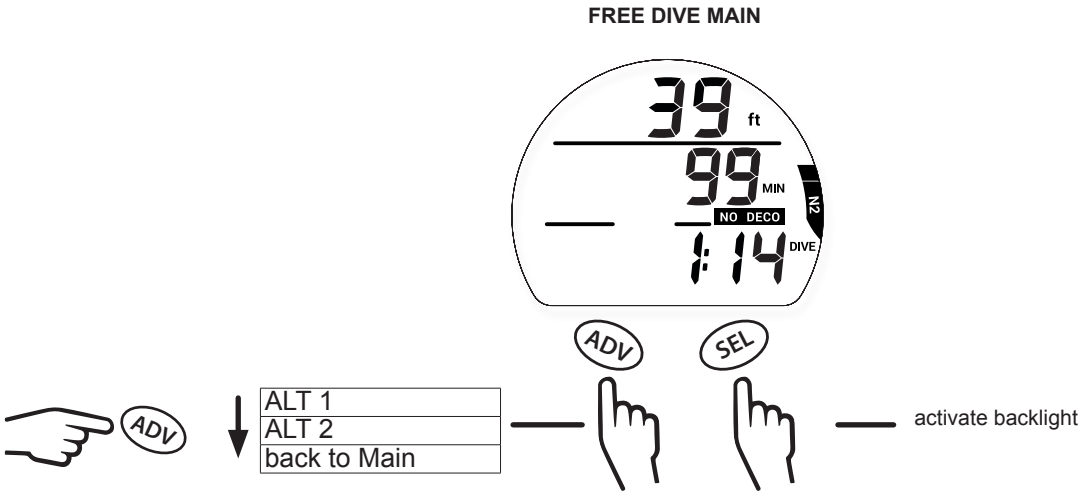
Set Mode operates the same way as previously described for Dive mode, see the Dive Surface Mode chapter.

SHARED SETTINGS

To change items that Free Mode shares with Dive Mode, access the Dive Main Menu, then SET UTIL, then -
> H2O ACT
> Units
> CF (Conservative Factor)
> LIGHt

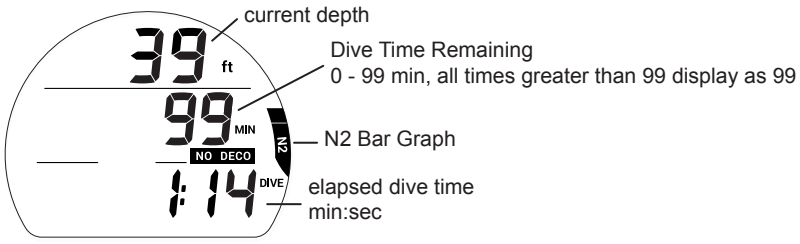
INITIATING A DIVE

With the i300 activated, a Free dive will commence upon descending to 5 ft (1.5 m) for at least 5 seconds. Below is a diagram to help you navigate Free Dive Mode functions.



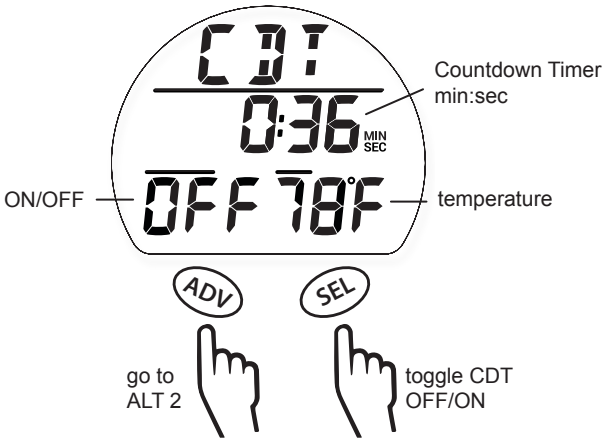
FREE DIVE MAIN

The Gauge Dive Main provides basic information including depth, dive time, and ascent rate during the dive.



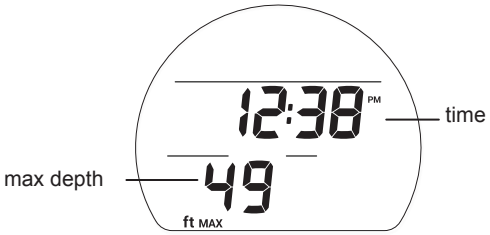
ALT 1

This screen displays the current status of the CDT (Countdown Timer) and the ambient temperature. Pressing the SEL button will start (ON) and stop (OFF) the CDT.



ALT 2

This screen displays the current time of day and the maximum dive depth reached during the dive.

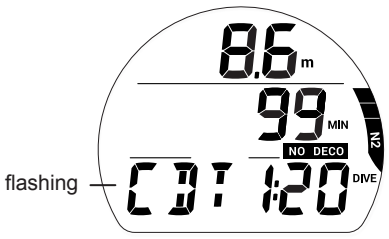


FREE DIVE ALARMS

Free mode alarms, which are separate from Dive (or Gauge) alarms, sound either 1 or 3 times as 3 beeps. They cannot be manually acknowledged or silenced.

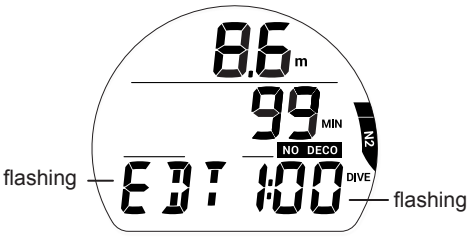
FREE CDT (COUNTDOWN TIMER) ALARM

When a set Countdown Time reaches 0:00, the audible alarm will sound. During which time, the graphic CDT will flash on the Free Dive Main screen.



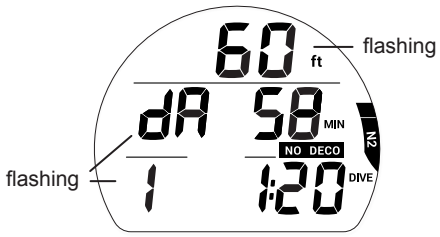
FREE EDT (ELAPSED DIVE TIME) ALARM

When set ON, the EDT alarm activates every 30 seconds during a dive. The audible alarm will sound. During which time, the graphic EDT and time digits will flash on the Free Dive Main screen.



FREE DEPTH ALARMS

When set ON, the Depth alarms (1, 2, 3) activate at their respective set depths. The audible alarm will sound. During which time, the depth digits and the graphic dA 1 (2, 3) will flash on the Free Dive Main screen.



HIGH NITROGEN ALARMS

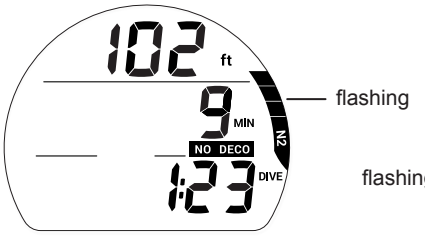
When nitrogen increases to the caution level (4 N2 Bar Graph segments), the N2 Alarm will sound. During which time, the N2 Bar Graph segments will flash on the Free Dive Main screen.

In the event that nitrogen continues to increase and reaches the Deco level, the VIO (violation) Alarm will sound. During which time, all 5 N2 Bar Graph segments, the UP message, Up Arrow icon, and the graphic VIO will flash. Additionally, the NO DECO will display 0 min.

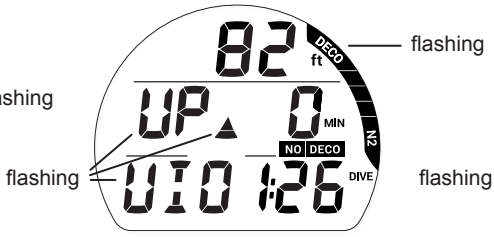
When the audible alarm is silent, the N2 Bar Graph and NO DECO digits are removed. The graphic VIO, UP message, and Up Arrow icon flash until on the surface. Then the UP message and Up Arrow icon are removed.

The graphic VIO flashes until 1 minute elapses on the surface. Then it alternates with FREE and operation reverts to Violation Gauge Mode for 24 hours.

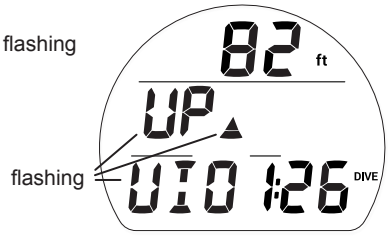
N2 ALARM



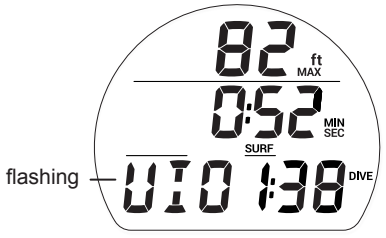
VIO ALARM (during audible alarm)



VIO ALARM (after audible alarm)

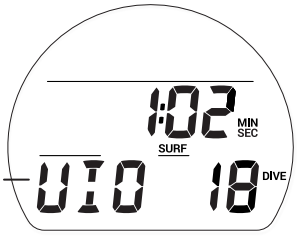


VIO < 1 MIN ON SURFACE



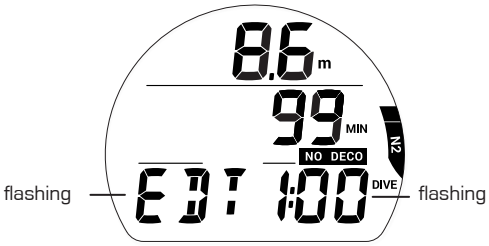
alternating with FREE

VIO > 1 MIN ON SURFACE



FREE EDT (ELAPSED DIVE TIME) ALARM

When set ON, the EDT alarm activates every 30 seconds during a dive. The audible alarm will sound. During which time, the graphic EDT and time digits will flash on the Free Dive Main screen.



REFERENCE

PC INTERFACE

The i300 is configured with a Data Port located on the side of the module that enables it to be connected to a PC through a USB port using a special interface cable that is available as an optional accessory. The USB Driver required for the interface system is downloadable from www.aqualung.com.

The Settings Upload portion of the program can be used to set/change the Set AL group (Alarms), Set UTIL group (Utilities), and Set TIME group (Time/Date) using the same Interface System. The FO_2 and Mode settings must be entered using the i300 button controls.

Information available for retrieval* (download) from the i300 to the PC Download portion of the program includes items such as dive number, surface interval time, depth, dive time, start dates/time, lowest temperature, sampling rate, set points, N2 Bar Graph, and ASC Bar Graph.

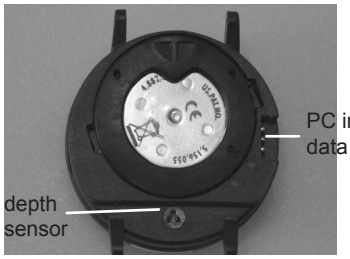
**FREE Dive information is only available using the PC Interface system.*

The i300 checks for the presence of an interface device connection to the Data Port once every second* while in Surface Mode.

**Checks are not made if the H2O ACT (water activation) contacts are wet.*

Upon sensing an interface connection, the requesting device (PC) connects to the i300. It is then prepared for uploading settings or downloading data, which is initiated using the PC program. During the process there is a PC countdown (2 minutes) screen displayed on the i300.

Prior to attempting to download data from your i300 or upload settings to it, review the HELP section of the interface program. It is recommended to print those sections of HELP that you consider appropriate for your interface activities.



PC COUNTDOWN

NOTE: The PC Countdown screen will not appear if the cable is attached upside down.

CARE AND CLEANING

Protect your i300 from shock, excessive temperatures, exposure to chemicals, and tampering. Protect the lens against scratches with an Instrument Lens Protector. Small scratches will naturally disappear underwater.

- Soak and rinse the i300 in fresh water at the end of each day of diving, and check to ensure that the areas around the Low Pressure (Depth) Sensor, PC Interface Data Port, 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 i300 under gently running fresh water. Towel dry before storing.
- Keep your i300 cool, dry, and protected during transport.

SERVICE

⚠ **WARNING: At a minimum, annually check the altitude reading on the ALT 2 screen (p. 18, 59) and Pre-Dive Planner (p. 58) for accuracy. If your i300 is ever out of calibration (incorrect elevation reading, incorrect No Deco Dive Times in the planner, or showing a depth reading at the surface) or displays an error code message (EEP, ALT, CAL, ERR, CSM, A-D), it must be serviced at the factory before use.**

If required to return your i300 to the USA factory:

- Obtain an RA (Return Authorization) number by contacting http://www.aqualung.com/us/support/contact-us or (760) 597-5000
- Record all dive data in the Log and/or download the data stored in memory. All data will be erased during factory service.

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- 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.
- Send freight prepaid and insured using a traceable method.
- Non-warranty service must be prepaid. COD is not accepted.
- Additional information is available on the Aqua Lung web site AquaLung.com or on the local Aqua Lung web site that serves your global region.

⚠ **CAUTION: The procedures that follow must be closely adhered to. Damage due to improper battery replacement is not covered by the i300's warranty.**

MODULE REMOVAL FROM A BOOT

If the module is in a console, bend the rubber console boot back to expose the edge of the module. If the boot is flexible enough to permit, you may bend it back far enough to scoop the module out with your finger. Otherwise, it may be necessary to insert a blunt screwdriver until the tip rests just underneath the module. DO NOT pry the module from the console! Slowly increase the pressure under the module by releasing the tension on the rubber boot. The module will slide up the screwdriver and exit the console.

If the module is in a wrist boot, it will be necessary to peel the lips of the boot downward off the module while applying pressure from underneath, working it out slowly.

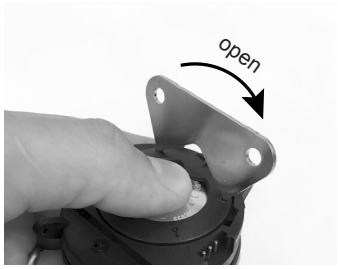
BATTERY REPLACEMENT

NOTE: When the battery is removed, settings and calculations for repetitive dives are retained in the unit's memory while a new battery is installed.

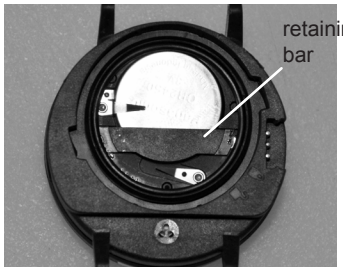
The battery compartment should only be opened in a dry and clean environment with extreme care taken to prevent the entrance of moisture or dust. To prevent formation of moisture in the battery compartment, it is recommended that the battery be changed in an environment equivalent to the local outdoor temperature and humidity (e.g., do not change the battery in an air conditioned environment, then take it outside during a hot sunny day).

Battery Cover Removal

- Turn the module over to expose the battery cover.
- While applying steady inward pressure on the clear battery cover, rotate the cover ring clockwise 10 degrees (using a battery key).
- Lift the ring up and away from the housing, or turn the module over to allow the ring to drop out into your hand.
- Remove the battery cover.



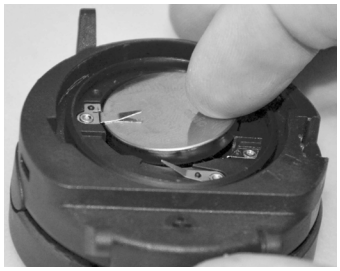
Battery Removal
• Remove the retaining bar located across the lower portion of the battery.
• Remove the cover O-ring. DO NOT use tools.
• Slide the battery up and out of the battery compartment.

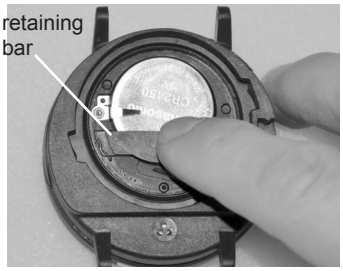


Inspection
• Closely check all of the sealing surfaces for any signs of damage that might impair proper sealing.
• Inspect the button, lens, and housing to ensure they are not cracked or damaged.

⚠ **WARNING: If damage or corrosion is found, return your i300 to an authorized Aqua Lung dealer, and DO NOT attempt to use it until it has received factory prescribed service.**

Battery Installation
• Slide a new 3 volt type CR2450 lithium battery, (-) negative side down into the battery compartment. Slide it in from the right side and ensure that it slides under the contact clip on the left rim.
• Orient the retaining bar across the lower portion of the battery and carefully push it down into position.

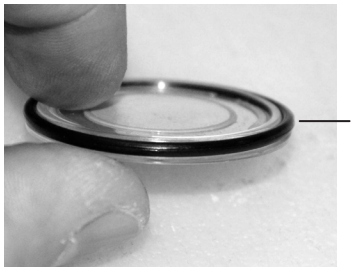


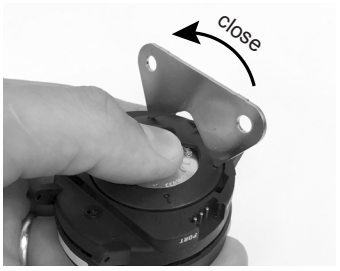


Battery Cover and Retaining Ring Installation
• Lightly lubricate a new cover O-ring with silicone grease and place it on the inner rim of the battery cover. Ensure that it is evenly seated.

⚠ **Caution: The O-ring must be a genuine Aqua Lung part that can be purchased from an authorized Aqua Lung dealer. Use of any other O-ring will void the warranty.**

• Slide the cover ring, top portion first (small opening), onto your thumb.
• Carefully place the cover (with O-ring) into position on the rim of the battery compartment, then press it completely and evenly down into place with your same thumb.
• Maintain the cover securely in place and, using your other hand, slide the cover ring off your thumb and into position around the battery compartment. The tabs on the ring fit down into the slots located at the 2 and 9 o'clock positions.
• Using your fingers, turn the ring counter clockwise 5 degrees until the tabs engage, then tighten it 5 more degrees by turning it counter clockwise with the aide of a battery key.
• While tightening the retaining ring, exert continuous inward pressure on it until it is secured in the proper position. A small key symbol located on the ring should be aligned with the locked symbol located on the housing.





Inspection

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

⚠ **WARNING: If there are any portions of the display missing or appearing dim, or if a low battery condition is indicated, return the unit to an authorized Aqua Lung dealer for a complete evaluation before attempting to use it.**

RETURNING THE MODULE TO A BOOT

- If the boot was fitted with a spacer and it was previously removed, replace the spacer into the boot.
- Orient the module over the opening in the boot. Then dip the bottom edge into it while pressing the top edge with the palm of your hand. Stop pressing when the bottom edge of the module has just entered the boot.
- Correct the alignment of the module as needed so that it is straight.
- While watching the alignment, press the module completely into place with your thumbs until it snaps into place.

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 i300 automatically adjusts to these conditions providing corrected depth, and reduced NO DECO and O2 MIN (O_2 saturation) times at intervals of 1,000 feet (305 meters).
- When the Conservative Factor is set ON, NDLs are calculated based upon the next higher 3,000 foot (915 meter) altitude.
- At sea level, calculations are based upon an altitude of 6,000 feet.
- All adjustments for altitudes greater than 11,000 feet (3,355 meters) are then made to allowable dive times for 14,000 feet (4,270 meters).
- The i300 will not function as a dive computer above 14,000 feet (4,270 meters).

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TECHNICAL DATA

NO DECO TIME LIMITS

PZ+ ALGORITHM >> NDLS (HR:MIN) AT ALTITUDE (IMPERIAL)

Altitude (feet)	0 to 3000	3001 to 4000	4001 to 5000	5001 to 6000	6001 to 7000	7001 to 8000	8001 to 9000	9001 to 10000	10001 to 11000	11001 to 12000	12001 to 13000	13001 to 14000
Depth (FT)												
30	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

PZ+ ALGORITHM >> NDLS (HR:MIN) AT ALTITUDE (METRIC)

Altitude (meters)	0 to 915	916 to 1220	1221 to 1525	1526 to 1830	1831 to 2135	2136 to 2440	2441 to 2745	2746 to 3050	3051 to 3355	3356 to 3660	3661 to 3965	3966 to 4270
Depth (M)												
9	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

ALTITUDE LEVELS

DISPLAY	RANGE: FEET (METERS)
SEA	0 to 3,000 (915)
EL2	3,001 to 5,000 (916 to 1,525)
EL3	5,001 to 7,000 (1,526 to 2,135)
EL4	7,001 to 9,000 (2,136 to 2,745)
EL5	9,001 to 11,000 (2,746 to 3,355)
EL6	11,001 to 13,000 (3,356 to 3,965)
EL7	> 13,000 (3,965)

OXYGEN EXPOSURE LIMITS

(from NOAA Diving Manual)

PO2 (ATA)	MAX DURATION SINGLE EXPOSURE (MIN)	MAX TOTAL DURATION 24 HOUR DAY (MIN)
0.60	720	720
0.70	570	570
0.80	450	450
0.90	360	360
1.00	300	300
1.10	240	270
1.20	210	240
1.30	180	210
1.40	150	180
1.50	120	180
1.60	45	150

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SPECIFICATIONS

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

DIVE COMPUTER PERFORMANCE
- Bühlmann ZHL-16C based PZ+ algorithm
- Decompression in agreement with Bühlmann ZHL-16C
- No Deco Deep Stops - Morroni, Bennett
- Deco Deep Stops (not recommended) - Blatteau, Gerth, Gutvik
- Altitude - Buhlmann, IANTD, RDP (Cross)
- Altitude corrections and O2 limits based on NOAA tables

OPERATIONAL PERFORMANCE

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

Dive Counter:
- DIVE/GAUGE 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 DIVE/GAUGE dives in memory for viewing
- After 24 dives, adds 25th dive in memory and deletes the oldest dive

Altitude:
- Operational from sea level to 14,000 feet (4,270 meters) elevation
- Measures ambient pressure every 30 minutes when inactive, upon activation, every 15 minutes while activated.
- Does not measure ambient pressure when Wet.
- Compensates for Altitudes above sea level beginning at 3,001 feet (916 meters) elevation and every 1,000 feet (305 meters) higher.

Power:
- (1) 3 vdc, CR2450, Lithium battery (Panasonic or equivalent)
- Shelf life Up to 5 years (dependent on battery manufacturer)
- Replacement User (annual recommended)
- Use Life 100 dive hours if (1) 1 hour dives per dive day to 300 hours if (3) 1 hour dives per day

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

Activation:
- Manual - push button (recommended), required prior to dive if H2O ACT (activation) is set OFF.
- Automatic - by immersion in water (if H2O ACTis set ON)
- Cannot be manually activated deeper than 4 FT (1.2 M), if H2O ACT is set OFF.
- Cannot operate at elevations higher than 14,000 feet (4,270 meters)

Operating Temperature:
- Out of the water - between 20 °F and 140 °F (-6.6 and 60 °C).
- In the water - between 28 °F and 95 °F (-2.2 and 35 °C).

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N2 Bar Graph	**segments**
• No Deco Normal Zone	1 to 3
• No Deco Caution Zone	4
• Decompression Zone	5 (all)

ASC (Ascent) Rate

	segments	FPM	MPM
• Normal zone	0	0 - 10	0 - 3
• Normal zone	1	11 - 15	3.5 - 4.5
• Normal zone	2	16 - 20	5 - 6
• Normal zone	3	21 - 25	6.5 - 7.5
• Caution zone	4	26 - 30	8 - 9
• Too Fast zone (flashing)	5 (all)	> 30	> 9

NUMERIC DISPLAYS:	**Range:**	**Resolution:**
• Dive Number	0 to 24	1
• Depth	0 to 400 FT (120 M)	1 FT (.1/1 M)
• FO_2 Set Point	Air, 21 to 50 %	1 %
• PO_2 Value	0.00 to 5.00 ATA	0.01 ATA
• Dive Time Remaining	0 to 99 min, display 99 if >99 min	1 minute
• Time To Surface	0 to 99 min, display - - if >99 min	1 minute
• No Deco Deep Stop Time	2 to 0 min	1 minute
• No Deco Safety Stop Time	5 to 0 min	1 minute
• Deco Stop Time	0 to 999 min	1 minute
• DIVE/GAUGE Elapsed Dive Time	0 to 999 min	1 minute
• Free Elapsed Dive Time	0:00 to 9:59 min:sec	1 second
• Surface Interval Time	0:00 to 23:59 hr:min	1 minute
• Free Surface Interval Time	0:00 to 59:59 min:sec, then 1:00 to 23:59 hr:min	1 second 1 minute
• Time to Fly & Desaturate	23:50 to 0:00 hr:min* ** starting 10 min after the dive*	1 minute
• Temperature	0 to 99°F (-18 to 60°C)	1°
• Time of Day	0:00 to 23:59 hr:min	1 minute
• Free Countdown Timer	59:59 to 0:00 min:sec	1 second
• Violation Countdown Timer	23:50 to 0:00 hr:min	1 minute

Max Functional Depth:	**Limit:**
• DIVE/FREE	330 FT (100 M)
• GAUGE	399 FT (120 M)

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ABBREVIATIONS/TERMS

ACT = Activation
AL = Alarm
ALT = Alternate
ASC Bar Graph = Ascent Rate
ATA = Standard Atmosphere (unit)
AUD = Audible Alarm
BATT = Battery
CDT = Countdown Timer
CF = Conservative
CLR = Clear
DA/dA = Depth Alarm (Free Dive)
DCS = Decompression Sickness
DECO = Decompression
DFLT = Default
DS = Deep Stop
DTR = Dive Time Remaining
DURA = Duration (backlight)
EDT = Elapsed Dive Time
EL = Elevation (altitude)
FLY = Time To Fly
FO2 = Fraction of Oxygen (%)
FORM = Format (date, time)
FREE = Free Dive Mode
FT = Feet (depth)
GAU/GAUG/GAUGE = Digital Gauge Dive Mode
GTR = Gas Time Remaining
H2O = Water
HIST = History
IMP = Imperial (measure)
LAST = Previous (dive)
LO = Low (battery)
M = Meters (depth)
MET = Metric
MFD = Maximum Functional Depth (equipment limits)
MIN = Minutes (time)
MOD = Maximum Operating Depth
N2 = Nitrogen
N2 Bar Graph = Tissue Loading Bar Graph
NDL = No Deco Limit
NO DECO = No Deco DTR
O2 = Oxygen
O2 MIN = Oxygen Time Remaining (DTR)
O2 SAT = Oxygen Saturation
PC = Personal Computer (download)
PLAN = Dive Planner
PO2 = Partial Pressure of O2 (ATA)
SAFE = Safety (stop)
SAT = Desaturation Time
SEA = Sea Level
SEC = Seconds (time)
SLO = Slow Down
SN = Serial Number
SR = Sample Rate
SS = Safety Stop
SURF = Surface
TOT = Total
TTS = Time To Surface
VIO/VIOL = Violation

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