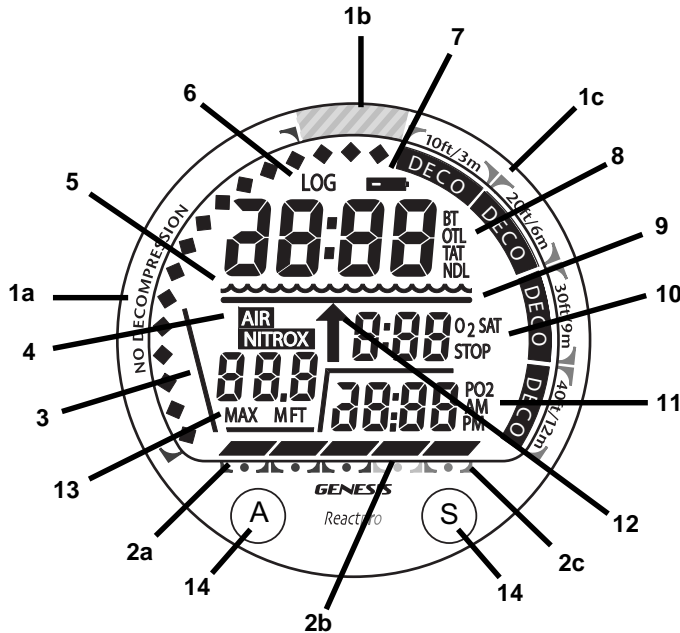


Reactpro

OWNERS MANUAL



FULL LCD DISPLAY



- 1a. NiBG - (No Deco)
- 1b. NiBG - (No Deco Caution)
- 1c. NiBG - (Deco)
- 2a. ARI - (Normal)
- 2b. ARI - (Caution)
- 2c. ARI - (Too Fast)
- 3. Dive Profile icon - Plan or Dive Mode
- 4. Operating Mode icon - AIR or NITROX
- 5. Wave icon - Surface Time or Dive Mode
- 6. Log Mode icon
- 7. Low Battery icon
- 8. Time icon - BT, OTL, TAT, or NDL
- 9. Deco Stop Bar icon (below Wave)
- 10. O2 Saturation or Deco Stop Time icon
- 11. PO2 or AM (PM) icon if 12 hour format
- 12. Up Arrow icon
- 13. Depth icons (MAX and/or FT or M)
- 14. Control Buttons - A (left), S (right)

RESPONSIBLE COMPUTER DIVING

Before you dive using your ReACT Pro, keep these basic rules in mind:

- Plan each dive, and dive your plan - **Your ReACT Pro was not designed to make decisions for you, only to provide you with the information you need to make responsible decisions for yourself. This begins with a dive plan that will help you avoid a low air or decompression situation.**
- Do not plan any dive that exceeds your training or experience level.
- Inspect your computer before every dive - **If it shows any signs of damage or abnormal function, DO NOT dive with it until it has received factory service.**
- Make your deepest dive first - **When making repetitive dives, it is imperative to ensure that each consecutive dive is shallower than the one before. This will allow your body's slower tissues to continue outgassing nitrogen.**
- Make the deepest part of your dive first, and gradually work your way to the surface using a staircase profile - **The ability to perform multilevel diving is one of the most important contributions of a dive computer, and you should take advantage of it. It will increase your bottom time and at the same time decrease your risk of decompression sickness.**
- Ascend slowly by following an ascent line whenever possible, or by ascending diagonally toward the surface - **Watch the Ascent Rate Indicator closely while you ascend, and keep it in the green zone as much as possible.**
- A Safety Stop of 3 minutes or more is recognized as a prudent action to reduce the probability of bubble formation in divers.

The following icons are used throughout this manual to bring your attention to situations that require special consideration.



WARNING - used if serious injury or death could result if the procedure is not followed carefully.



CAUTION - used if a maintenance technique could result in damage to parts if that technique is not followed carefully.



NOTE - used to emphasize important information or maintenance technique.



WARNINGS:

- The ReACT Pro is intended for use by recreational divers who have successfully completed a nationally recognized course in scuba diving, and diving with enriched nitrogen-oxygen (nitrox) breathing gas mixtures.
- 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, and certification in diving with enriched nitrogen-oxygen mixtures (nitrox) before using the ReACT Pro if you have not already done so.
- 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 ReACT Pro.
- 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 Genesis dealer before you utilize this product.
- Never participate in sharing or swapping of a dive computer. Doing so may result in injury or death. The ReACT Pro provides information based upon a diver's personal dive profile, and therefore must not be "shared" between divers. You should never, under any circumstances, swap your computer with another unit between dives, or share your computer with another diver underwater.

LIMITED TWO-YEAR WARRANTY

Genesis Scuba guarantees, to the original purchaser only, that the ReACT Pro will be free of defects in materials and/or craftsmanship under normal recreational multilevel scuba use for two years from date of purchase, provided proper care and annual service are performed as described within this owner's guide. Should your ReACT Pro prove to be defective for any reason (other than those listed in the limitations section below) it will be repaired or replaced (at Genesis Scuba's discretion) free of charge excluding shipping and handling charges.

This warranty will be considered void if the registration card is not filled out completely at the time of purchase and mailed to Genesis Scuba within 30 days of purchase, and/or if the annual inspection is not done according to this owner's manual. This warranty is non-transferrable and applies to the original purchaser only. All correspondence concerning this warranty must be accompanied by a copy of the original sales receipt and a copy of the owner's portion of the warranty registration card including the annual inspection record.

Once each year you must return the ReACT Pro to an Authorized Genesis Dealer within 30 days of the original purchase date anniversary to keep the two year limited warranty in force. Annual inspection includes verification of depth accuracy and proper general function. Labor charges for the annual inspection are not covered by the warranty. You must provide a copy of the original sales receipt and a copy of the owner's portion of the warranty registration card including the annual service record to obtain warranty service.

Statement of Limitations - General:

Warranty does not cover damage from accident, abuse, battery leakage, tampering, lack of proper care and maintenance and/or proper annual servicing, or improper use of the ReACT Pro. Modifications or repair by anyone other than a Genesis Sales and Service Center authorized to service the ReACT Pro will void the warranty. Genesis Scuba will not be responsible for recovery or replacement of the product in the event of loss or theft. Genesis Scuba, its distributors, and retailers make no warranties, either expressed or implied, with respect to this product or its owner's manual except those stated in the preceding paragraphs. **In consideration of the sale of the ReACT Pro to you, you agree and understand that in no event will Genesis Scuba, its distributors or retailers, be held liable for any personal injuries resulting from its operation, or for any other damages whether direct, indirect, incidental, or consequential even if Genesis Scuba is advised of such damages.**

Some states do not allow the exclusion or limitation of implied warranties or liabilities for incidental or consequential damages, so the above limitation may not apply to you.

Warranty does not extend to plastic gauge face, o-rings, batteries, or damage due to accident, abuse, modification, or tampering.

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TRADEMARK NOTICE

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PATENT NOTICE

U.S. Patents have been issued, or applied for, to protect the following design features:

Data Sensing and Processing Device (U.S. Patent no. 4,882,678), Dive Time Remaining (U.S. Patent no. 4,586,136), and Ascent Rate Indicator (U.S. Patent no. 5,156,055).

DECOMPRESSION MODEL

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

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FEATURES and DISPLAYS

INTRODUCTION

Congratulations on your recent purchase of the Genesis ReACT Pro !

Your ReACT Pro presents the information that you need before, during, and after your air (or nitrox) dives using an intuitive combination of easy to read displays and unique identification icons.

Tissue loading of nitrogen and ascent rate are presented as segmented bar graphs alongside color coded reference indicators that bring quick focus to these important status displays.

As you progress through this instructional guide, you will become familiar with all of the unique functions and features available and see examples of the displays that you could expect to see in the various operational modes. Although it will require an initial investment of time to become acquainted with the various icons and icons, you'll soon agree that your ReACT Pro is easy to understand and use.

Due to the importance that you understand the ReACT Pro thoroughly prior to using it, information will be expanded upon and some refreshed as you proceed. Relax and read through the complete owner's manual.

It is extremely important that you:

- **Read this owner's manual in sequence and understand it completely before attempting to use the ReACT Pro.**
- **Check the ReACT Pro frequently during your dive.**
- **You must also be a trained diver, certified by a recognized training agency in SCUBA diving.**
- **Prior to using the oxygen related features of the ReACT Pro, you must also be trained and certified for diving with enriched nitrogen-oxygen (nitrox) breathing gas mixtures by a recognized training agency.**

Remember that the rules you learned in your basic SCUBA certification course still apply to the diving you will do while using a dive computer - some will become even more important. Technology is no substitute for common sense, and a dive computer only provides the person using it with data, not the knowledge to use it.



WARNING: Inspect your ReACT Pro prior to every dive, checking for any signs of the entrance of moisture, damage to the buttons, or damage to the LCD display. If these or other signs of damage are found, return the unit to an Authorized Genesis Scuba Dealer. DO NOT attempt to use it until it has received factory service.

CONTROL BUTTONS

The ReACT Pro is a unique dive computer with interactive controls that allow you to select various display options and access specific information when you choose to see it. These are referred to as the **A (Advance)** and **S (Select)** buttons (Fig. 1).

The buttons can be pressed repeatedly, or held in to scroll and continue as you set or access different display modes.

On the surface the buttons are used to activate the ReACT Pro; activate the backlight; access the Date/Time, Fly, Plan, and Log modes; set variables such as FO2, Date/Time, etc.

During dives, the buttons are used to activate the backlight and view Alternate displays of information.

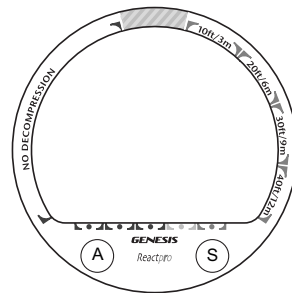


Fig. 1 - Control Buttons

INTUITIVE DISPLAYS

The ReACT Pro uses Genesis Scuba's unique Dive Profile icon (Fig. 2a) and easy to understand icons, displaying information where you would expect it to be when looking at a log profile.

When you enter special situations, such as Decompression, High PO₂, High O₂, and Out of Range modes, an UP Arrow icon (Fig. 2b) will be displayed as a warning that a controlled ascent is required.

It is imperative that you understand the formats, ranges, and values of the information presented by the ReACT Pro's numeric and graphic displays to avoid any possible misunderstanding that could result in error.

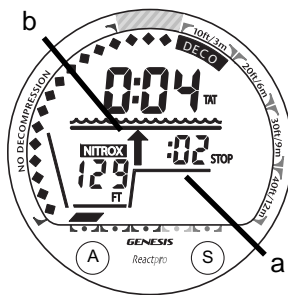


Fig. 2 - Profile & Arrow Icons

N **NOTE:** Throughout this manual reference is made to the term "breathing gas", the rationale being that the ReACT Pro can be used for 'air' dives or 'nitrox' dives. For clarity these terms are defined as -

Breathing Gas - the gaseous mixture breathed during a dive.

Air - a breathing gas that contains approximately 21% oxygen and 79% nitrogen (nature's common nitrogen-oxygen mixture).

Nitrox - a nitrogen-oxygen breathing gas that contains a higher fraction of oxygen (22 to 50%) than air.

BAR GRAPHS

Two segmented Bar Graphs appear around the perimeter of the screen next to green, yellow, and red color coded portions of the peripheral decal that denote normal, caution, and danger zones, respectively.

When underwater, you can quickly focus on the bar graphs to make sure that they are **in the green** and you are not getting too close to the no decompression limit or ascending too fast.

Ascent Rate Indicator (ARI)

The Ascent Rate Indicator located along the bottom of the LCD (Fig. 3a) is provided to help you avoid excessive Ascent Rates by providing a visual representation of ascent speed, rather than just showing that you are ascending too fast.

The LCD displays up to 5 segments that may be considered an Ascent Rate speedometer. Green is a 'normal' rate, yellow a 'caution' rate, and red is 'Too Fast'. The segments of the Ascent Rate Indicator represent 2 sets of speeds which change at a reference depth of 60 FT (18 M). Refer to the chart at the right for segment values.

When your ascent rate exceeds the maximum recommended rate of 60 FPM (18 MPM) when deeper than 60 FT (18 M) or 30 FPM (9 MPM) when shallower than 60 FT (18 M), the bar graph segments will enter the red 'Too Fast' zone at which time the Audible Alarm will sound and all 5 segments will flash once per second until your ascent speed is slowed.

<u>Deeper than 60 FT (18 M)</u>		
Segments	Ascent Rate =	
Displayed	FPM	MPM
0	0-20	0 - 6
1	21-30	6.5-9
2	31-40	9.5-12
3	41-50	12.5-15
4	51-60	15.5-18
5	>60	>18

<u>60 FT (18 M) & Shallower</u>		
Segments	Ascent Rate =	
Displayed	FPM	MPM
0	0-10	0 - 3
1	11-15	3.5-4.5
2	16-20	5-6
3	21-25	6.5-7.5
4	26-30	8-9
5	>30	>9

Ascent Rate Indicator

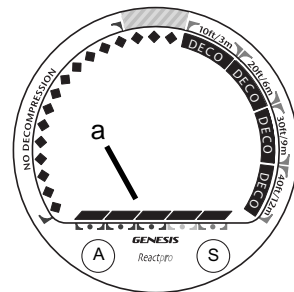


Fig. 3 - ARI

Nitrogen Bar Graph (NiBG)

The Nitrogen Bar Graph located around most of the perimeter of the LCD (Fig. 4a) represents tissue loading of nitrogen, showing your relative no decompression or decompression status. As your depth and bottom time (BT) increase, segments will add to the graph, and as you ascend to shallower depths, the bar graph will begin to recede, indicating that additional no decompression time is allowed for multilevel diving.

The NiBG also assists you with managing decompression by filling red 'ceiling stop required' segments which are described in more detail in the Special Situations section of this manual.

The NiBG monitors 12 different nitrogen compartments simultaneously and displays the one that is in control of your dive at that time. It is divided into a green No Decompression zone, a yellow Caution zone, and a red DECO (decompression) zone.

The yellow Caution zone gives a visual representation of just how close you are to the no decompression limit which allows you to make a decision regarding safety stop duration or necessity.

The red DECO zone alerts you to focus your attention on the current required DECO stop 'ceiling' depth indicated by the bar graph segment. When stop depths of 50 FT (15 M) and 60 FT (18 M) are required, all red segments are displayed and the required stop depth (50 or 60, or 15 or 18) is displayed numerically.

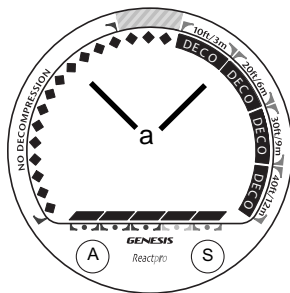


Fig. 4 - Nitrogen BG

DEPTH DISPLAYS

The **Depth** display indicates Depths from 0 to 399 FT (120 M) in 1 FT (.5 M) increments.

During a dive, **Current Depth** is displayed continuously on the Main display with the icon FT (or M) below it (Fig. 5a).

When the LEFT button is pressed 1 time to view the first Alternate display, **Maximum Depth** and the icons MAX and FT (or M) are displayed in place of Current Depth.

In the event that you descend deeper than 330 FT (99.5 M), 399 FT (120 M) when set for Gauge Mode, the Depth display will show three dashes (- - -) to indicate that you have gone 'out of range'. This is described in more detail in the Special Situations section of this manual.

During a Decompression Dive, required **Ceiling Stop Depths** of 50 FT (15 M) and 60 FT (18 M) are displayed in the lower/right portion of the LCD. This is described in more detail in the Special Situations section of this manual.

DATE DISPLAY

The **Date** (Month_Day) is displayed when the ReACT Pro is in Surface Mode (Fig. 6a/b). It is not displayed in any other modes on the surface or during dives.

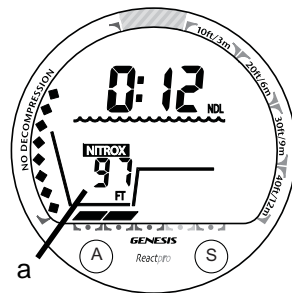


Fig. 5 - Depth (97 FT)

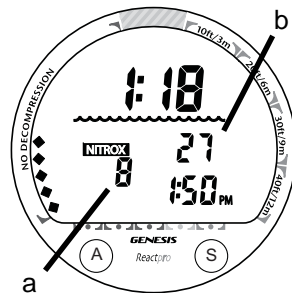


Fig. 6 - Date (August 27)

TIME DISPLAYS

The ReACT Pro has three time displays.

The largest display is the **Main Time** display (Fig. 8 - top row of digits). Indicated are theoretical No Decompression Limit (NDL), Oxygen Tolerance Limit (OTL), Elapsed Dive Time (BT), Total Ascent Time (TAT), or Surface Time (indicated by the Wave icon below it), depending on the operating mode that the ReACT Pro is in.

A second time display (Fig. 8 - middle row of digits) indicates Decompression Stop Time required at the stop depth indicated, or Time to Desaturate after a dive, depending on the operating mode that the unit is in.

The third time display (Fig. 8 - bottom row of digits) indicates Time of Day, or Time to Fly after a dive, depending on the operating mode that the unit is in.

Each display is described in more detail in subsequent sections of this manual.

Time displays are shown in hour:minute format (i.e., 1:09 represents one hour and nine minutes, not 109 minutes!). The colon that separates hours and minutes blinks once per second when the display is indicating real time such as Surface Time, Bottom Time, and Time of Day. NDL, OTL, TAT, Deco Stop Time, Time to Fly, and Time to Desaturate are calculated projections of time and use a solid (non blinking) colon to indicate that they are counting down.

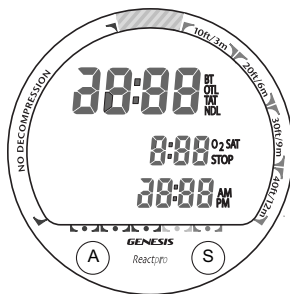


Fig. 8 - Time Displays

TEMPERATURE DISPLAY

While in the Surface Mode, Ambient Temperature (Fig. 9A_a) and Altitude level (Fig. 9A_b) will be displayed when an Alternate display is accessed. During a dive, Water Temperature (Fig. 9B_a) is displayed when an Alternate display is accessed.

If the Temperature exceeds a value of '99', two dashes (- -) will be displayed on the screen until the unit's temperature decreases to '99'.

BACKLIGHT FEATURE

On the surface, while in Surface Mode or Fly Mode, the ReACT's Hydroglow™ Backlight will illuminate the display when the S button is pressed and released. If the button is kept depressed, the Backlight will not come on.

During dives, the Backlight will illuminate the display when the S button is pressed. The display will remain illuminated as long as the Button is pressed, plus 10 seconds after being released.

OPERATING TEMPERATURE

The ReACT Pro will operate in water temperatures from 28° to 95° F (-2 to 35 °C) and out of the water from 20° to 140°F (-6 to 60 °C). At extremely low temperatures, the LCD may become sluggish, but this will not affect its accuracy. If stored or transported in extremely low temperature areas (below freezing), warm the module and battery with body heat before diving.

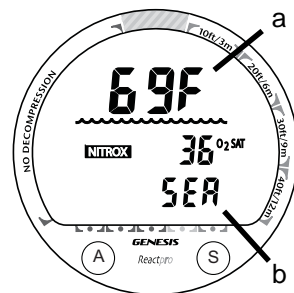


Fig. 9A - Temperature & Altitude (surface)

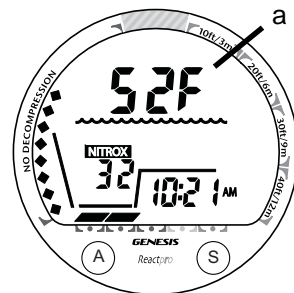


Fig. 9B - Temperature (dive)

AUDIBLE ALARM

When Cautionary situations activate the Alarm, the ReACT Pro will emit a beeping sound as a warning. When the situation corrected, the Alarm will cease. It will sound again if the same condition returns, or another Alarm condition occurs.

A single BEEP is emitted -

- after the unit performs a Diagnostic check upon push button activation.
- upon ascending to the No Deco Safety Stop depth of 20 FT (6 M).

One BEEP per second is emitted for 10 seconds-

- upon entry into Decompression Mode.
- when Elapsed Dive Time, Depth, and/or Dive Time Remaining reach their Alarm Set Points.
- when PO₂ reaches .20 (ATA) < Alarm Set Point value and at the Set Point.
- upon Ascending above a Required Decompression Stop Depth.
- upon Descending deeper than 330 FT (99.9 M), or 399 FT (120 M) when set for Gauge Mode.
- when Ascent rate exceeds 60 FPM (18 MPM) when depth is greater than 60 FT (18 M), or 30 FPM (9 MPM) at 30 FT (9 M) or shallower. The Beeping will continue until the Ascent speed is reduced.
- when O₂ Accumulation becomes equal to or greater than allowable per dive limit, or limit for a 24 hour period.
- when the Decompression obligation requires a Stop Depth greater than 60 FT (18 M).

A single long BEEP is emitted for 3 seconds -

- when above a required Decompression Stop Depth for more than 5 minutes.
- when the Decompression obligation requires a Stop Depth greater than 70 FT (21 M).
- upon being on the surface for 5 minutes after a Delayed Violation (described in the Special Situations section).

ACTIVATION and SETUP

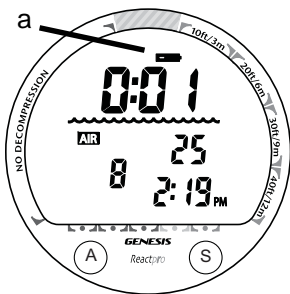


Fig. 10 - Diagnostic Mode

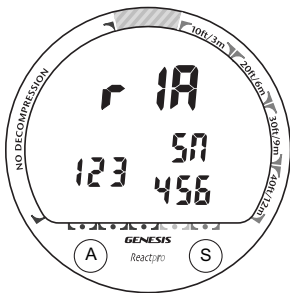


Fig. 11 - Serial Number

ACTIVATION

To Activate the React Pro, press and release either Button.

- Upon manual activation, the unit will enter Diagnostic Mode (Fig. 10), displaying all segments of the LCD as 8's, followed by dashes (- -), then a countdown from 9 to 0. Diagnostic Mode checks the display and Battery voltage to ensure that everything is within tolerance and functioning properly.
- When the S (Right) button is held depressed when the Diagnostic countdown reaches 00, an External Access request is initiated. A Serial Number screen appears displaying the unit's Serial Number and firmware code Revision Number as long as the button is held depressed (Fig. 11). Upon releasing the button, the unit shuts Off.
- After manual activation, it will also check the ambient barometric pressure, and calibrate its present depth as zero. At elevations of 3,000 feet (915 meters) and higher, it will adjust Depth and NDLs every 1,000 feet (305 meters) up to 14,000 feet (4,270 meters).



WARNING: If the unit is activated at elevations higher than 14,000 feet (4,270 meters), it will perform a diagnostic check and immediately shutdown.

Backup Activation (only if Wet Activation is set ON)

As a backup, the React Pro will also automatically activate by water contact. This is accomplished by bridging the gap between contacts located on the button stems and back of the case.

If no dive is made within 2 hours after initial activation, the unit will automatically deactivate. If the wet contacts are still bridged, the unit will reactivate.

SURFACE MODE

The Surface Main screen (Fig. 12), identified by the Surface Time (hr:min with colon flashing) above the Wave icon, follows Diagnostic Mode after Activation and upon surfacing after a dive. Information also includes the Low Battery icon (if low), AIR (or NITROX) icon (blank if set for Gauge Mode), Date (month_day, or day_month), Time of Day (with AM or PM icon if 12 Hour Format, none if 24 Hour Format), and NiBG if any after a dive.

- Press/release the A (left) button momentarily and repeatedly (< 2 sec each time) to access a sequence that includes ALT, Plan, Fly/Desat, and Log Mode.
- Depress both buttons simultaneously for 2 seconds to access the Set menu.
- Press/release the S (right) button momentarily (< 2 sec) to activate the Backlight.

The Surface ALT screen (Fig. 13) includes Temperature with graphic F (or C), Wave icon, AIR (or NITROX) icon, O2 % with O2SAT icon (if any after Nitrox dives), and Altitude graphic SEA (or EL2 through EL7). Press/release the A button (< 2 sec) to access Plan mode (see page 37).

SET MODES

To help simplify the operations you might perform at the dive site, settings are divided into 2 categories. Set group #1 includes several settings that you would change more often and Set group #2 includes those items not likely to change once you set them. Set 2 can be accessed by first entering settings in Set 1, or by bypassing Set 1.

After gaining access to Set 1 or Set 2, settings can be made in sequence one after the other, or you can access a specific item that you want to set, bypassing others.

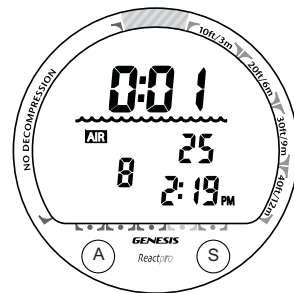


Fig. 12 - Surface Main

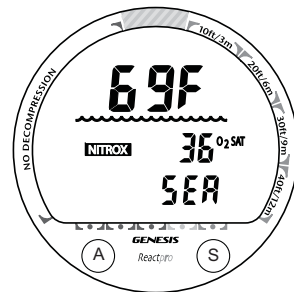


Fig. 13 - Surface ALT

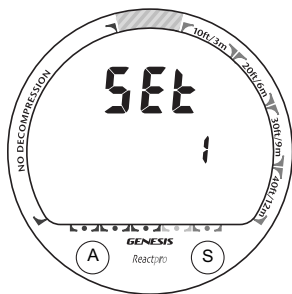


Fig. 14 - Set 1

Set Mode Access/Timing

While in Surface Mode, depress both buttons simultaneously and hold -

- after 2 seconds, the Set 1 screen appears (Fig. 14)
- after 2 more seconds, the Set 2 screen appears (similar to Set 1)
- Access is gained by releasing the buttons during the 2 seconds that the Set 1 or 2 screen is displayed, then pressing/releasing the A button until the selection to be set appears.
- If the buttons are held longer, Set 1 and 2 are bypassed and operation reverts to the Surface Main screen.
- While in Set Mode, if neither button is pressed during a 2 minute period, operation will revert to the Surface Main screen.

SET 1

SET DIGITAL GAUGE MODE

Factory set OFF, Digital Gauge Mode can also be set ON.

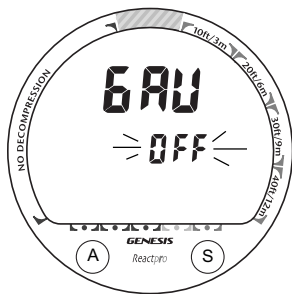


Fig. 15 - Set Digital Gauge Mode

- While viewing the Surface Main, depress both buttons simultaneously, then release when the Set 1 screen appears.
- Press the A (left) button momentarily (< 2 sec), release when the GAU screen appears with the Set Point flashing (Fig. 15).
- Press/release the S (right) button momentarily (< 2 sec each time) to toggle the Set Point between OFF and ON.
- Press the A button momentarily (< 2 sec) to accept the setting and access Set FO2.
- Depress both buttons for 2 seconds to revert to Surface Mode.

SET FO2

Factory set for AIR, FO2 can also be set to values between 21 and 50% in increments of 1%.

- While viewing the Set 1 screen, press/release the A (left) button 2 times (< 2 sec each time), the Set FO2 screen appears with the Set Point flashing (Fig. 15).
- Press/release the S (right) button repeatedly (< 2 sec each time) to increase the Set Point from AIR to 21 up to 50% in increments of 1%, then display AIR again; or depress/hold the S button to scroll upward through the Set Points at a rate of 8 per second from AIR to 21 up to 50%, then AIR (stopping momentarily at 32%).
- For each FO2 value that appears, the Max Depth allowed for the PO2 alarm value set will be displayed (Fig. 15a). If FO2 is set for AIR, no depth is displayed.
- Press/release the A button (< 2 sec) to accept the setting and access Set FO2 Default.
- Depress both buttons for 2 seconds to revert to the Surface Main.

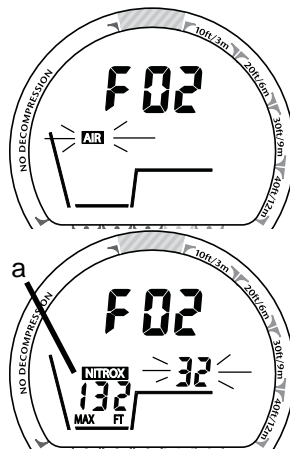


Fig. 15 - Set FO2

SET FO2 50% DEFAULT

Factory set ON, the FO2 50% Default feature can be set to OFF.

- While viewing the Set 1 screen, press/release the A (left) button 3 times (< 2 sec each time), the Set FO2 Default screen appears with the Set Point flashing (Fig. 16).
- Press/release the S (right) button (< 2 sec) to toggle the Set Point between ON and OFF.
- Press/release the A button (< 2 sec) to accept the setting and access Set Audible Alarm.
- Depress both buttons for 2 seconds to revert to the Surface Main.

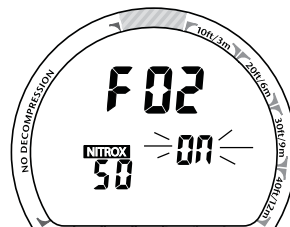


Fig. 16 - Set FO2 Default

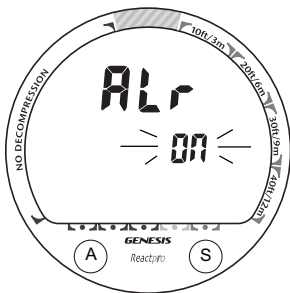


Fig. 17 - Set Units

SET AUDIBLE ALARM

Factory set ON, the Audible Alarm feature can be set to OFF.

- While viewing the Set 1 screen, press/release the A (left) button 4 times (< 2 sec each time), the Set FO2 Default screen appears with the Set Point flashing (Fig. 17).
- Press/release the S (right) button (< 2 sec) to toggle the Set Point between ON and OFF.
- Press/release the A button (< 2 sec) to accept the setting and access Set PO2 Alarm.
- Depress both buttons for 2 seconds to revert to the Surface Main.

SET PO2 ALARM

Factory set for 1.60 (ATA), the PO2 Alarm can be set to values between 1.20 and 1.60.

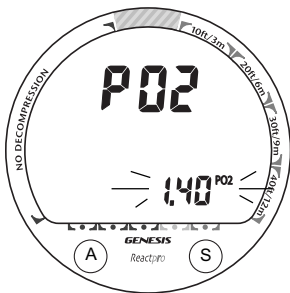


Fig. 18 - Set PO2 Alarm

- While viewing the Set 1 screen, press/release the A (left) button 5 times (< 2 sec each time), the Set PO2 Alarm screen appears with the Set Point flashing (Fig. 18).
- Press/release the S (right) button repeatedly (< 2 sec each time) to increase the Set Point from 1.20 up to 1.60 in increments of .10; or depress/hold the S button to scroll upward through the Set Points at a rate of 8 per second.
- Press/release the A button (< 2 sec) to accept the setting and access Set Depth Alarm.
- Depress both buttons for 2 seconds to revert to the Surface Main.

SET DEPTH ALARM

Factory set for 330 FT, the Alarm can be set to values between 30 FT (3 M) and 330 FT (99 M).

- While viewing the Set 1 screen, press/release the A (left) button 6 times (< 2 sec each time), the Set Depth Alarm screen appears with the Set Point flashing (Fig. 19).
- Press/release the S (right) button repeatedly (< 2 sec each time) to increase the Set Point from 30 FT (9 M) up to 330 FT (99 M) in increments of 10 FT (3 M); or depress/hold the S button to scroll upward through the Set Points at a rate of 8 per second.
- Press/release the A button (< 2 sec) to accept the setting and access Set Bottom Time (Elapsed Dive Time) Alarm.
- Depress both buttons for 2 seconds to revert to the Surface Main.

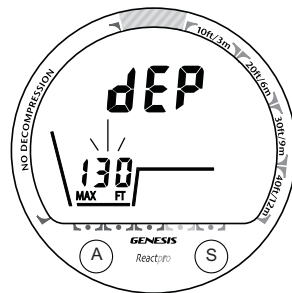


Fig. 19 - Set Depth Alarm

SET BOTTOM TIME (BT) ALARM

Factory set for 3:00 (hr:min), the Alarm can be set to values between 0:10 and 3:00 (hr:min).

- While viewing the Set 1 screen, press/release the A (left) button 7 times (< 2 sec each time), the Set BT Alarm screen appears with the Set Point flashing (Fig. 20).
- Press/release the S (right) button repeatedly (< 2 sec each time) to increase the Set Point from 0:10 (hr:min) up to 3:00 (hr:min) in increments of 0:10 (hr:min); or depress/hold the S button to scroll upward through the Set Points at a rate of 8 per second.
- Press/release the A button (< 2 sec) to accept the setting and access Set Reserve Time (Dive Time Remaining) Alarm.
- Depress both buttons for 2 seconds to revert to the Surface Main.

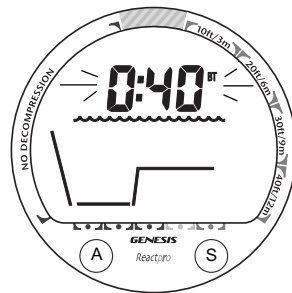


Fig. 20 - Set BT Alarm

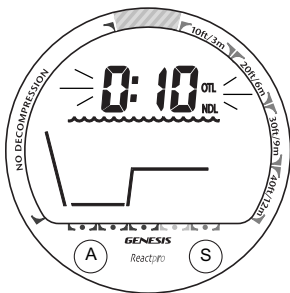


Fig. 21 - Set Reserve Time

SET RESERVE TIME (NDL/OTL) ALARM

Factory set for 0:05 (hr:min), the Alarm can be set to values between 0:01 and 0:30 (hr:min).

- While viewing the Set 1 screen, press/release the A (left) button 8 times (< 2 sec each time), the Set Reserve Time Alarm screen appears with the Set Point flashing (Fig. 21).
- Press/release the S (right) button repeatedly (< 2 sec each time) to increase the Set Point from 0:01 (hr:min) up to 0:30 (hr:min) in increments of 0:01 (hr:min); or depress/hold the S button to scroll upward through the Set Points at a rate of 8 per second.
- Press/release the A button (< 2 sec) to accept the setting and revert to the Surface Main.

SET 2

These settings are ones that are not likely to change. To save time at the dive site, verify the set points and adjust them as desired prior to departing on the day's dive trip.

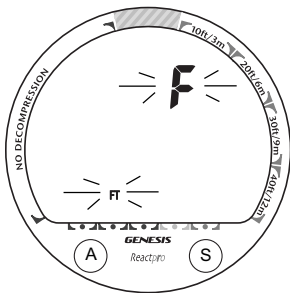


Fig. 22 - Set Units

SET UNITS

Factory set for Imperial, Units of Measure can also be set for Metric.

- While viewing the Set 2 screen, press/release the A (left) button momentarily (< 2 sec), release when the Set Units screen appears with the Set Point flashing (Fig. 22).
- Press/release the S (right) button momentarily (< 2 sec each time) to toggle the Set Point between Imperial and Metric.
- Press the A button momentarily (< 2 sec) to accept the setting and access Set Date Format.
- Depress both buttons for 2 seconds to revert to the Surface Main.

SET DATE FORMAT

Factory set for Month_Day, the Date Format feature can be set to Day_Month.

- While viewing the Set 2 screen, press/release the A (left) button 2 times (< 2 sec each time), the Set Date Format screen appears with the Set Point flashing (Fig. 23).
- Press/release the S (right) button (< 2 sec) to toggle the Set Point between Month_Day and Day_Month. The graphic dAY indicates location of Day on the Date screen.
- Press/release the A button (< 2 sec) to accept the setting and access Set Date.
- Depress both buttons for 2 seconds to revert to the Surface Main.

SET DATE

Factory set for the local Date, the Date can be set to values between 01/01/2008 and 12/31/2051.

- While viewing the Set 2 screen, press/release the A (left) button 3 times (< 2 sec each time), the Set Date screen appears with the Year Set Point flashing (Fig. 24).
- Press/release the S (right) button repeatedly (< 2 sec each time) to increase the Year Set Point up to 2051 in increments of 1 Year; or depress/hold the S button to scroll upward through the Set Points at a rate of 8 per second.
- Press/release the A button (< 2 sec) to accept the Year, the Month Set Point will flash.
- Press/release the S (right) button repeatedly (< 2 sec each time) to increase the Month Set Point from 1 up to 12 in increments of 1 Month; or depress/hold the S button to scroll upward through the Set Points at a rate of 8 per second.
- Press/release the A button (< 2 sec) to accept the Month, the Day Set Point will flash.

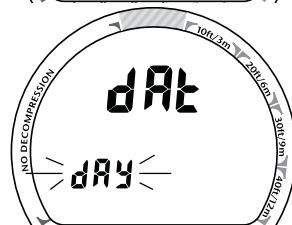
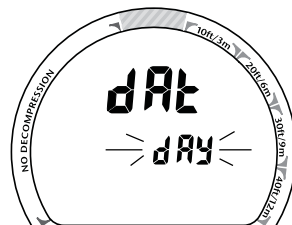


Fig. 23 - Set Date Format

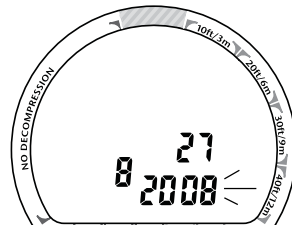
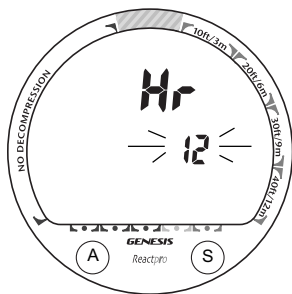


Fig. 24 - Set Date



- Press/release the A button (< 2 sec) to accept the Hour, the Minute Set Point will flash.
- Press/release the S (right) button repeatedly (< 2 sec each time) to increase the Minute Set Point from :00 up to :59 in increments of :01 (min); or depress/hold the S button to scroll upward through the Set Points at a rate of 8 per second.
- Press/release the A button (< 2 sec) to accept the Time and access Set Sampling Rate.
- Depress both buttons for 2 seconds to revert to the Surface Main.

SET SAMPLING RATE

Factory set for 15 (seconds), Sampling Rate can be set to values of 15, 30, or 60 seconds.

- While viewing the Set 2 screen, press/release the A (left) button 9 times (< 2 sec each time), the Set Sampling Rate screen appears with the Set Point flashing (Fig. 27).
- Press/release the S (right) button repeatedly (< 2 sec each time) to step through the Set Points from 15 to 30 to 60.
- Press/release the A button (< 2 sec) to accept the Set Point and access Set Wet Activation.
- Depress both buttons for 2 seconds to revert to the Surface Main.

SET WET ACTIVATION

Factory set ON, the Wet Activation feature can also be set for OFF (disabled) to prevent inadvertent activation during travel or storage. When set ON, the unit will automatically activate and enter Dive Mode upon immersion in water.

- While viewing the Set 2 screen, press/release the A (left) button 10 times (< 2 sec each time), the Set Wet Activation screen appears with the Set Point flashing (Fig. 28).

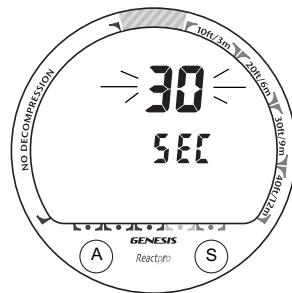


Fig. 27 - Set Sampling Rate

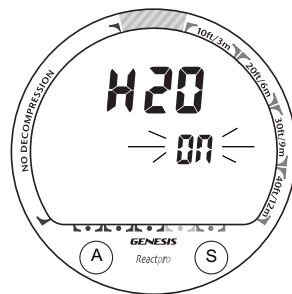


Fig. 28 - Set Wet Activation

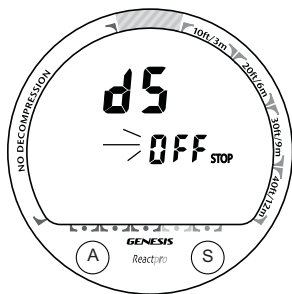


Fig. 29 - Set Deep Stop

- Press/release the S (right) button (< 2 sec) to toggle the Set Point between ON and OFF.
- Press/release the A button (< 2 sec) to accept the setting and access Set Deep Stop.
- Depress both buttons for 2 seconds to revert to the Surface Main.

SET DEEP STOP (DS)

Deep Stop (described in more detail later in the No Deco Dive Mode section) is a completely optional safety stop that, when set ON, will trigger upon descent past 80 FT (24 M) and display a recommended Stop to be taken at 1/2 the calculated Max Depth of that dive.

Factory set OFF, the Deep Stop feature can also be set for ON. When set OFF, the associated screens will not be displayed during dives.

- While viewing the Set 2 screen, press/release the A (left) button 11 times (< 2 sec each time), the Set DS screen appears with the Set Point flashing (Fig. 29).
- Press/release the S (right) button (< 2 sec) to toggle the Set Point between ON and OFF.
- Press/release the A button (< 2 sec) to accept the setting and revert to the Surface Main.

PRE DIVE and DIVE MODES

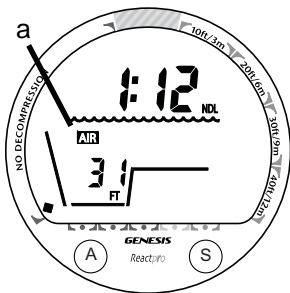


Fig. 30 - Set for Air

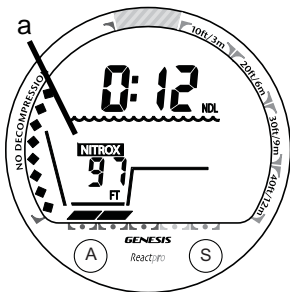


Fig. 31 - Set for Nitrox

BUTTON USE

While viewing the Surface Main screen

- press/release the A (left) button to view the Surface ALT screen (Temperature, O2SAT, Altitude), then again to access Plan, Fly/Dsat, and Log. Fly/Dsat and Log are Post Dive modes described in a later section of this manual.
- press/release the S (right) button to activate the Hydroglow™ Backlight.
- depress both buttons for 2 seconds to access Set 1, then again Set 2.

FO2

The ReACT Pro can be set for use either as an AIR computer or as a NITROX computer. After activation, it will operate as an AIR computer without displaying information associated with oxygen calculations, unless it is set for a percentage of oxygen (FO2) other than Air (e.g., a numerical value between 21 and 50 %).

If set for use with Air as your breathing gas, the icon AIR will be displayed (Fig. 30a) during all modes except the Set, Fly, and Gauge modes. If it is set for use with Nitrox, the icon NITROX will be displayed (Fig. 31a).



WARNING: When set for use with Nitrox, you must verify that the FO2 setting correctly matches the Nitrox gas mix being used prior to each Nitrox dive.

USE WITH AIR

When set for AIR, the ReACT Pro will perform calculations the same as if FO2 were set for 21%, internally accounting for O2 accumulation for any subsequent Nitrox dives.

Once a dive is made with the unit set for NITROX (e.g., FO2 set for a numerical value), the unit cannot be programmed to operate as an AIR computer until 24 hours after the last dive. AIR will not be an option. You can however set FO2 for 21% for use with Air.

USE WITH NITROX

If FO2 is set at a value of 21%, the unit will remain set at 21% for subsequent dives until FO2 is set to a higher value (22 to 50%), or until it automatically turns Off and is reactivated.



WARNING: When the FO2 Default is set On, the FO2 value must be set for each repetitive Nitrox dive, or the value will automatically be 50 and the dives will be calculated based on 50% O2 for oxygen calculations and 21% O2 (79% nitrogen) for nitrogen calculations.

FO2 50% Default

- When the FO2 Default feature is set Off, FO2 will remain as set until another value is selected or the unit shuts Off and reverts to AIR until changed to a Nitrox setting.
- When the FO2 50% Default feature is set On and FO2 is set at a value of 22 to 50% to match the Nitrox mix being used for that dive, the FO2 setting after that dive will automatically default to a value of 50%.



WARNING: If you surface for greater than 10 minutes during a dive and the FO2 Default is set On, a subsequent descent will be considered a new dive and the FO2 value must be reentered.

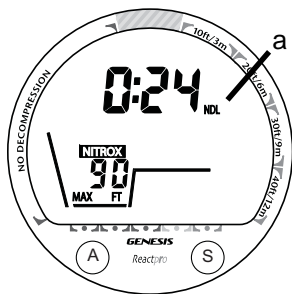


Fig. 32 - Nitrogen Control

PLAN MODE



NOTE: Genesis Scuba strongly recommends that you access and review the Plan Mode prior to every dive to help you plan your dive as required to avoid exceeding no decompression or oxygen exposure limits.

This is especially important for repetitive dives, when the Plan Mode indicates adjusted no decompression limits, or oxygen tolerance limits, available for your next dive, based on any residual nitrogen and oxygen accumulation following your last dive and surface interval.



WARNING: The Plan Mode predicts only no decompression times for subsequent dives. Depending on cylinder size, breathing gas consumption, and oxygen accumulation you may have *less time available* than indicated because of breathing gas quantity or other limitations.

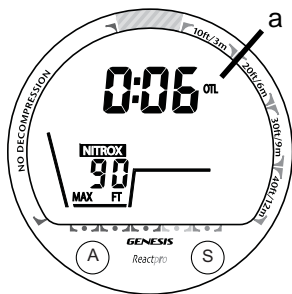


Fig. 33 - Oxygen Control

With each Depth displayed in the Plan Mode, you will see either predicted no decompression limits (NDL) based upon your previous dive profiles, if calculated to be nitrogen controlled, or predicted oxygen tolerance limits (OTL) based upon either a single dive exposure or your 24 hour accumulation of oxygen, if calculated to be oxygen controlled.

When Nitrogen is in control, the icon NDL will be displayed (Fig. 32a). When Oxygen is in control, the icon OTL will be displayed (Fig. 33a).

No decompression times are only displayed for depths where there are at least 3 minutes of dive time available at the depth, taking into account a descent rate of 60 FPM (18 MPM). Depths greater than the Max Depth that can be achieved with a PO₂ = Set Point will not be displayed.

To access and view the Plan Mode while viewing the Surface Main screen:

- press/release the A (left) button 2 times
- press/release the S (right) button repeatedly (< 2 sec each time) to step upward through the sequence of Depths from 30 to 190 FT (9 to 57 M) in 10 FT (3 M) increments
- depress both buttons simultaneously for 2 seconds to revert to the Surface Main



WARNING: If Wet Activation is set Off, the ReACT Pro must be manually activated prior to start of a dive. Dive mode will not activate automatically by immersion in water unless the Wet Activation feature is Set ON.

DIVE MODES

During dives, there is a Main screen that displays information most relevant for conditions at the time. Other information can be viewed by temporarily accessing ALT screens.

During No Deco dives deeper than 80 FT (24 M), a Deep Stop (DS) to be taken at 1/2 Max Depth for 2 minutes (2:00 min:sec) is triggered and displayed as a Preview screen when accessed while 10 FT (3 M) deeper than the calculated Stop Depth and as a Stop screen upon ascent to 10 FT (3 M) below the Stop Depth. When the feature is set OFF, the screen are not displayed.

During an Ascent on No Deco dives deeper than 30 FT (10 M), a Safety Stop to be taken at 20 FT (6 M) for 3 minutes is displayed.

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

NDLs
for an Air Dive
(no dive made yet)

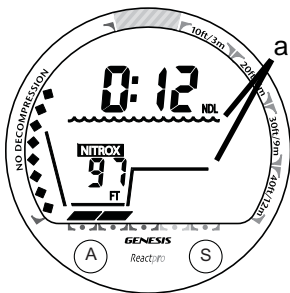


Fig. 34 - No Deco Dive

NO DECO DIVE MAIN (Fig. 34)

The ReACT Pro will enter the No Deco Dive Mode when you descend to 5 FT (1.5 M) for 5 seconds. Dive mode is identified by the Wave and Dive Profile icons (Fig. 34a). Also displayed will be -

- Dive Time Remaining (hr:min) with NDL (or OTL) icon
- AIR (or NITROX) operating mode icon with Wave/Profile icons
- Current Depth with FT (or M) icon
- Bar Graphs indicating nitrogen loading and ascent rate
- > press/release the A (left) button to access the ALT 1 screen
- > depress the A (left) button for 2 seconds to access the DS Preview screen, if triggered
- > press/release the S (right) button to activate the backlight for 10 seconds

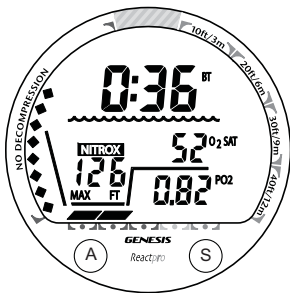


Fig. 35 - No Deco ALT 1

No Deco ALT 1 (Fig. 35)

Displayed will be -

- Bottom Time (hr:min) with BT icon
- AIR (or NITROX) operating mode icon with Wave/Profile icons
- Max Depth with MAX and FT (or M) icons
- O2 (xx %) accumulated with O2SAT icon, if set for Nitrox (blank if set for Air)
- PO2 (x.xx ATA) with PO2 icon, if set for Nitrox (blank if set for Air)
- Bar Graphs indicating nitrogen loading and ascent rate
- > operation will revert to the Main after 5 seconds unless the A button is pressed
- > pressing/releasing the A (left) button will access the ALT 2 screen
- > pressing/releasing the S (right) button will activate the backlight for 10 seconds

No Deco ALT 2 (Fig. 36)

Displayed will be -

- Temperature with graphic F (or C)
 - AIR (or NITROX) operating mode icon with Wave/Profile icons
 - FO2 (% set), if set for Nitrox (blank if set for Air)
 - Time of Day (hr:min) with AM (or PM) icon, no icon if set for 24 Hour Format
 - Bar Graphs indicating nitrogen loading and ascent rate
- > operation will revert to the Main after 5 seconds or if the A button is pressed
- > press/release the S (right) button to activate the backlight for 10 seconds

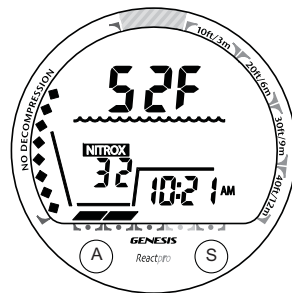


Fig. 36 - No Deco ALT 2

NO DECO DEEP STOP (DS)

During No Deco dives in which Depth exceeds 80 FT (24 M), a Deep Stop Preview screen can be accessed (if set On) that will revert to the No Deco Main after 5 seconds.

- > The intent of this screen is to suggest that a Stop should be made as indicated (at 1/2 Max Depth) to help reduce the probability of DCS (decompression sickness).
- > The Preview screen will not be available for display once you ascend 10 FT (3 M) above the calculated Stop Depth.
- > To access the Preview screen while viewing the No Deco Main screen, depress the A (left) button for 2 seconds. Information displayed includes (Fig. 37) -

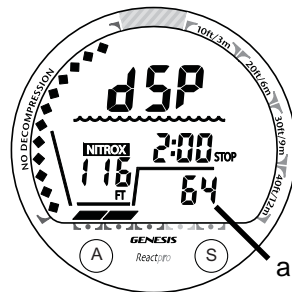


Fig. 37 - DS Preview

- Graphic dSP (meaning Deep Stop Preview)
- AIR (or NITROX) operating mode icon with Wave/Profile icons
- Current Depth with FT (or M) icon
- Stop Time 2:00 (min:sec) with STOP icon and Stop Depth (Fig. 37a, with no icon)

N NOTE: The Deep Stop is not required and although recommended, it does not have to be taken. There will be no penalty if the Stop is ignored and ascent (or other activity) is continued.

The Deep Stop feature will be disabled and its screens not displayed if you enter Deco or High O₂ (\Rightarrow 80%), during High PO₂ (\Rightarrow Alarm Set Point), or descend to > 190 FT (63 M).

Upon ascending to within 10 FT (3 M) below the calculated Deep Stop, a Deep Stop (DS) Main screen will automatically appear. Information displayed includes (Fig. 38) -

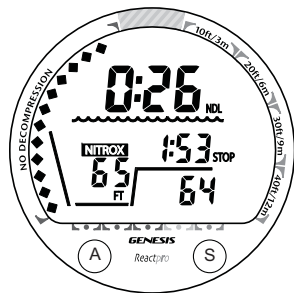


Fig. 38 - DS Main

- Dive Time Remaining (hr:min) with NDL (or OTL) icon
- AIR (or NITROX) operating mode icon with Wave/Profile icons
- Current Depth with FT (or M) icon
- Stop Time 2:00 (min:sec) with STOP icon and Stop Depth (below with no icon)
- Bar Graphs indicating nitrogen loading and ascent rate
 - > press/release the A (left) button to access the ALT 1 screen (similar to Fig. 35)
 - > press/release the A (left) button again to access the ALT 2 screen (similar to Fig. 36)
 - > press/release the S (right) button to activate the backlight for 10 seconds

In the event that you descend 10 FT (3 M) deeper than, or ascend 10 FT (3 M) shallower than, the Stop Depth during the countdown, the No Deco Main display will replace the Deep Stop Main screen which will be disabled for the remainder of that dive.

NO DECO SAFETY STOP

Upon ascending to 20 FT (6 M) on any No Decompression dive in which Depth exceeded 30 FT (9 M), a single beep Alert is sounded and a Safety Stop screen appears with a countdown timer beginning at 3:00 (min:sec) and counting down to 0:00.

Upon ascending to within 10 FT (3 M) below the Stop, a Safety Stop Main screen will automatically appear. Information displayed includes (Fig. 39) -

- Dive Time Remaining (hr:min) with NDL (or OTL) icon
- AIR (or NITROX) operating mode icon with Wave/Profile icons
- Current Depth with FT (or M) icon
- Stop Time 3:00 (min:sec) with STOP icon and Stop Depth as 20 (or 6) (below, no icon)
- Bar Graphs indicating nitrogen loading and ascent rate
 - > press/release the A (left) button to access the ALT 1 screen (similar to Fig. 35)
 - > press/release the A (left) button again to access the ALT 2 screen (similar to Fig. 36)
 - > press/release the S (right) button to activate the backlight for 10 seconds

In the event that you descend 10 FT (3 M) deeper than, or ascend 10 FT (3 M) shallower than, the Stop Depth during the countdown, the No Deco Main display will replace the Safety Stop Main screen.

The Safety Stop is not mandatory and there is no penalty if you surface during the countdown period.

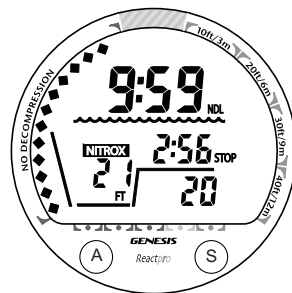


Fig. 39 - Safety Stop Main

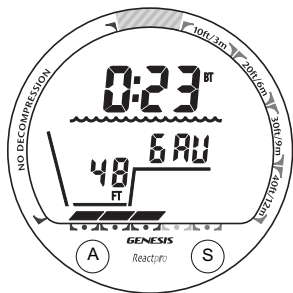


Fig. 40 - Gauge Dive Main

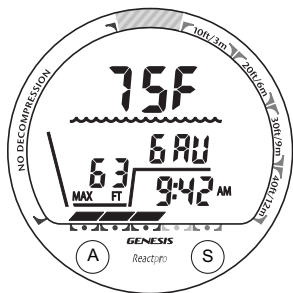


Fig. 40A - Gauge Dive ALT

DIGITAL GAUGE MODE

When Digital Gauge Mode is set On, the unit operates without any decompression or O2 monitoring functions, basically as a Depth Gauge/Timer. A contiguous 24 hour post dive surface interval is then required for the unit to operate as a full function diving computer.

GAUGE DIVE MAIN (Default)

Information displayed includes (Fig. 40)-

- Bottom Time (hr:min) with BT icon
- Wave/Profile (dive mode) icons
- Graphic GAU
- Current Depth with FT (or M) icon
- ARI while ascending

> Pressing/releasing the S button activates the Backlight.

> Pressing/releasing the A button accesses the ALT Display.

GAUGE DIVE ALT

Information displayed includes (Fig. 40A)-

- Temperature with graphic F (or C)
- Wave/Profile (dive mode) icons
- Graphic GAU
- Max Depth with MAX and FT (or M) icons
- Time of Day (hr:min) with AM (or PM) icon, no icon if set for 24 Hour Format
- > Pressing/releasing the A button reverts to the Main.
- Operation reverts to the Main after 5 seconds if A is not pressed.

POST DIVE MODES

SURFACE MODE

When you ascend to 2 FT (0.6 M), the ReACT Pro will enter Surface Mode and begin counting your Surface Interval.

TRANSITION PERIOD

The first 10 minutes is, in affect, a Transition Period during which time the following information is displayed top to bottom (Fig. 41):

- Surface Interval (hr:min with colon flashing)
 - Wave icon flashing to indicate Surface Mode
 - AIR (or NITROX) operating mode icon
 - Date as Month_Day (or Day_Month)
 - Time of Day (hr:min) with AM (or PM) icon, no icon if set for 24 Hour Format
 - NiBG
- > Press/release the A (left) button to view the Surface ALT (Temp, O2SAT, Elev).
- > Press/release the A (left) button again to view that dive's Log Preview screen, then-
- > press/release the S (right) button to view the Log 2 screen
 - > press/release the S (right) button again to view the Log 3 screen
- Operation will revert to the Surface Main after 2 minutes or if both buttons are depressed simultaneously for 2 seconds.

If you descend during the 10 minute Transition Period, time underwater will be considered a continuation of that dive. Time at the surface (< 10 min) will not be added as Bottom Time.

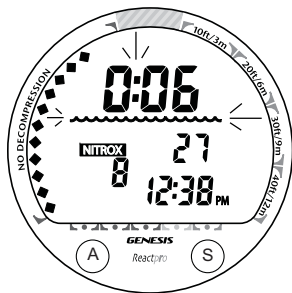


Fig. 40 - Transition Period



NOTE: Data will not be stored in the unit's memory until the Transition Period is completed. Also, no other modes are accessible.

AFTER THE TRANSITION PERIOD (THE FIRST 2 HOURS)

Once 10 minutes on the surface have elapsed, the Wave icon stops flashing indicating that the dive and Transition Period are completed, and a subsequent descent will be considered a new dive. That dive will then be entered into the Dive Log and download memory.

For the remainder of the first 2 hours after surfacing, the Surface Main will be displayed (Fig. 41) and you will have full access to the other modes.

Plan Mode will now show either adjusted No Deco Limits based upon your previous dive profiles, if calculated to be nitrogen controlled, or adjusted O2 limits based upon accumulation of oxygen, if calculated to be oxygen controlled. Calculated dive times and the maximum allowed depth displayed will increase as the real time Surface Interval increases after completion of a dive.

To access Fly/Desat -

- press/release the A (left) button 3 times, while viewing the Surface Main
Surf Main >> ALT >> Plan >> Fly/Dsat
- operation reverts to the Surface Main after 2 minutes, unless the button is pressed again to access the Log

The Time to Fly counter (Fig. 42a) begins counting down 10 minutes after the last dive (after the Transition Period) displaying FLY with a countdown that starts at 23:50 (hr:min) and counts down to 0:00.

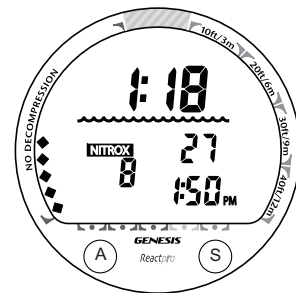


Fig. 41 - Surface Main (post dive)

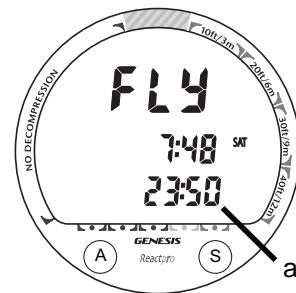


Fig. 42 - Fly/Dsat

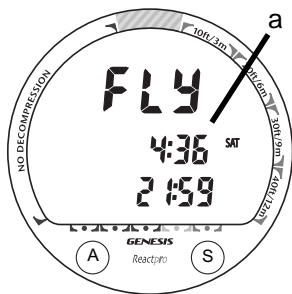


Fig. 43 - Fly/Dsat

The Desat counter (Fig. 43a) provides calculated time for tissue desaturation at sea level. Like Fly Time, it begins 10 minutes after the last dive displaying a countdown that starts at 9:59 (hr:min) maximum with the SAT icon and counts down to 0:00.

If Time to Desaturate is calculated to be greater than 9:59 (hr:min), the display will indicate 9:++ (Fig. 44a) until the time decreases to 9:59.

If a Violation occurred during the dive, Time to Desaturate will not be displayed and a single dash (-) will appear instead of the letters FLY.

LOG MODE

Information from your latest 50 dives is stored in the Log for viewing. After exceeding 50 dives, the most recent dive will overwrite the oldest dive in the Log. Log information will not be lost when the battery is removed/replaced, but factory service will delete data.

Log Mode recalls dives in reverse order from the one most recently recorded back to the oldest of the 50 dives stored. Your most recent dive will always be the first shown when Log Mode is accessed. Each dive Log has 3 screens, a Preview screen and 2 Data screens.

Dives are identified by the Dive Number (for that activation period) and Date/Time started. The first dive of a new Activation Period will be #1.

The A (left) button is used to access (or bypass) Preview screens and the S (right) button is used to view the Data screens for that dive.

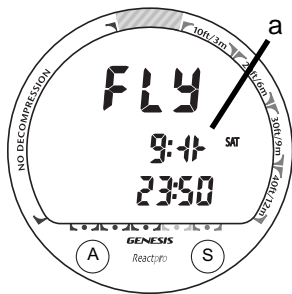


Fig. 44 - Fly/Desat

To access the Log Mode (after 10 minutes on the surface) -

- > press/release the A (left) button 4 times, while viewing the Surface Main screen
- > the Preview screen of the most recent dive will appear displaying (Fig. 45) -
 - LOG icon and Dive Number (1 to 50)
 - AIR (or NITROX) icon
 - Date (Month_Day, or Day_Month), the dive started
 - Time (hr:min) the dive started with AM (or PM) icon, no icon if set for 24 Hour Format

Hint: To bypass that dive's Log to view an older dive's Log, press/release the A (left) button repeatedly until the desired dive's Log appears.



Fig. 45 - Log Preview

To view the first Data screen for that dive, press/release the S (right) button while viewing the Preview screen. Information displayed includes (Fig. 46) -

- LOG icon
- Bottom Time (hr:min) with BT icon
- AIR (or NITROX) and Dive Profile icons
- Max Depth with MAX and FT (or M) icons
- ARI - showing max ascent rate maintained for 4 consecutive seconds during the dive
- NiBG - showing nitrogen loading at the time you surfaced from the dive. It will also display the segment that reflects the max nitrogen loading achieved during the dive (Fig. 46a).

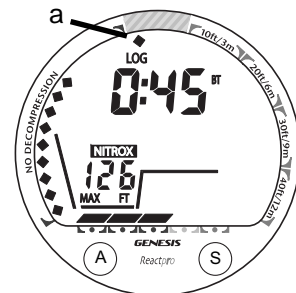


Fig. 46 - Log Data 1

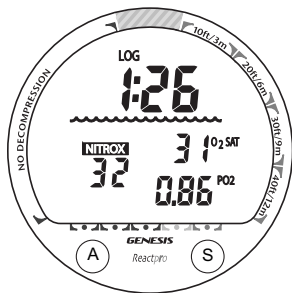


Fig. 47 - Log Data 2

To view the second Data screen for that dive, press/release the S (right) button while viewing the Data 1 screen. Information displayed includes (Fig. 47) -

- LOG icon
- Surface Interval (hr:min) prior to that dive with Wave icon
- AIR (or NITROX) icon
- FO2 (xx %), set for that dive, blank if AIR
- O2 (xx %), accumulated at the time you surfaced with O2 SAT icons, blank if AIR
- PO2 (x.xx ATA), max level reached during that dive with PO2 icon, blank if AIR

> press the A (left) button 1 time to view the Preview screen of the previous dive's Log

To exit Log Mode at any time and return to the Surface Main:

- press both buttons simultaneously for 2 seconds
- Operation will revert to the Surface Main after 2 minutes, if no button is pressed.

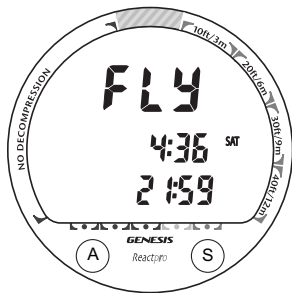


Fig. 48 - Log Screen #2

AFTER THE FIRST 2 HOURS

Two hours after the last dive, the Surface Main will no longer be displayed. The Fly/Desat screen will be displayed continuously, giving the final countdowns from 22:00 and 9:59 (hr:min) to 0:00 (Fig. 48).

To activate Surface Mode and access other modes, press/release either button 1 time.

- The Surface Main screen will be displayed.
- Operation will revert to Fly/Desat after 2 hours, if neither button is pressed.

SPECIAL SITUATIONS

DECOMPRESSION

The ReACT Pro is designed with capabilities that go beyond the range of recreational diving with compressed air. It can help you avoid and, if necessary, manage decompression.



WARNING: Adhere to all warnings and safety information.

NITROGEN BAR GRAPH (NIBG)

The NiBG offers you a convenient way to consistently monitor how close you are coming to the No Deco Limits. As you use the ReACT Pro and become familiar with the NiBG, you will notice that it displays fewer segments for shorter dive times and shallower depths. Use this feature to adjust conservatism to your diving needs.



NOTE: Use the Caution Zone of the NiBG (Fig. 49a) as a visual reference to place a wider margin of protection between you and the No Deco Limits.

Genesis Scuba suggests keeping the NiBG in the No Deco zone during all of your dives, and that it always be in the No Deco zone when leaving the water.

DECOMPRESSION DIVE MODE

The ReACT Pro is designed to help you by providing a representation of how close you are to entering Deco which activates when theoretical No Deco Limits are exceeded. Upon entering Deco, one Beep per second will sound. You should then begin a safe controlled Ascent to a depth slightly deeper than, or equal to, the Deco Stop Depth indicated and decompress for the Stop Time indicated.

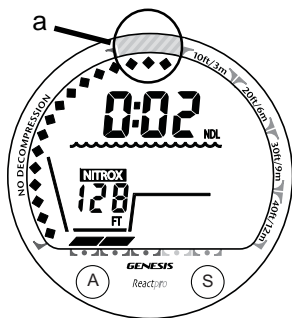


Fig. 49 - NiBG Caution

Entry into Deco

Upon entering Deco, the Ceiling Bar and Up Arrow icons appear below the Wave icon as a warning, and the NiBG will display a segment next to the deepest Stop Depth required. Other information displayed on the Main includes (Fig. 50):

- Total Ascent Time (hr:min) with TAT icon = times required at all Deco Stops plus vertical ascent time calculated at 30 FPM (9 MPM)
- AIR (or NITROX) operating mode icon with Wave/Profile icons
- Current Depth with FT (or M) icon
- Stop Time Required at that Depth (:min) with STOP icon
- ARI, while ascending

- > The Up Arrow and STOP icons flash until ascent to within 10 FT (3 M) below a Stop Depth then they are solid.
- > If a Stop Depth of 50 FT (15 M) or 60 FT (18 M) is required, all segments of the NiBG will be displayed and the required Stop Depth will appear numerically in the lower/right portion of the screen (Fig. 51a).
- > To access ALT displays, press/release the A (left) button.
- > To activate the Backlight, press/release the S (right) button.

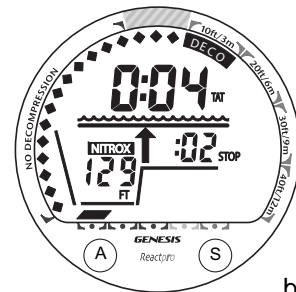


Fig. 50 - Deco Entry/Main

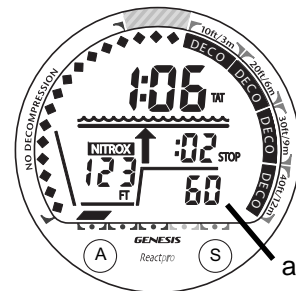


Fig. 51 - Stop > 40 FT (12 M)

CONDITIONAL VIOLATION (CV)

The unit will enter Conditional Violation if you ascend shallower than (Fig. 54a) the required Deco Stop Depth displayed (Fig. 54b). One beep per second will sound.

The Up Arrow icon will disappear, and Total Ascent Time (TAT) and the Deco Stop Bar icon will flash until you descend below the required Stop Depth.

If you descend below the required Stop Depth before 5 minutes have elapsed, operation will continue to function in Deco Dive Mode. In this case, no off gassing credit will be given, and for each minute above the required Stop Depth $1\frac{1}{2}$ minutes of Penalty Time is added to required Stop Time and Total Ascent Time.

The added Penalty Time will have to be served before off gassing credit begins again. Once the Penalty Time is served and off gassing credit begins, required Stop Depths and Times will decrease toward zero, then the NiBG will recede into the No Deco Caution Zone and operation will revert to No Deco.

DELAYED VIOLATION 1 (DV1)

If you remain above a required Deco Stop Depth for more than 5 minutes, operation will enter DV1, which is a continuation of CV.

Total Ascent Time (TAT), the Deco Stop Bar, and NiBG DECO segment, will flash (Fig. 55) until you descend below the required Stop Depth. Also, a single Long Beep will sound.

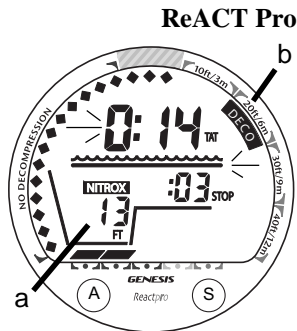


Fig. 54 - CV Main

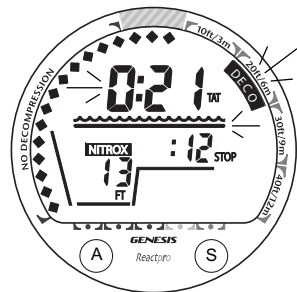


Fig. 55 - DV1 Main

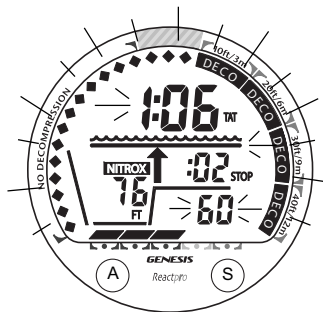


Fig. 56 - DV2 Main

When DV1 activates, you would then need to follow the Stop Depths and Times toward the surface until the NiBG recedes into the No Deco Caution Zone.

DELAYED VIOLATION 2 (DV2)

If your Decompression requires a Stop Depth between 60 FT (18 M) and 70 FT (21 M), Total Ascent Time (TAT), Stop Bar, Up Arrow, and STOP icons, full NiBG, and graphic 60 (or 18) will flash (Fig. 56) until you descend below the required Stop Depth. One beep per second will sound.

You must ascend to just deeper than 60 FT (18 M), staying as close to 60 FT (18 M) as possible without causing TAT to flash. When the required Stop Depth indicates 50 FT (15 M), etc., you can ascend to those depths and continue decompressing.

The ReACT Pro cannot accurately calculate Deco times for Stop Depths much greater than 60 FT (18 M) and offers no indication of how much time spent underwater would result in the need for a greater Stop depth.

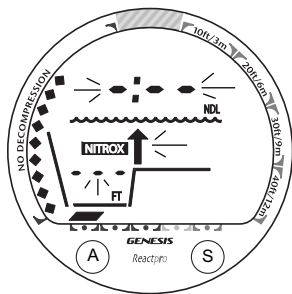


Fig. 57 - DV3 Main

DELAYED VIOLATION 3 (DV3)

If you exceed the MOD (Max Operating Depth) of 330 FT (99.5 M), or 399 FT (120 M) when operating in Digital Gauge Mode, Dive Time Remaining and Current Depth will both display 3 dashes flashing as a warning (Fig. 57). One Beep per second will sound and the Up Arrow icon will be displayed flashing.

Max Depth, O2SAT, and PO2 displays on ALT screens will also only indicate dashes until ascent is made to a depth shallower than the MOD.

Once you ascend above the MOD, the Current Depth display will be restored, however, Max Depth will only display 3 dashes (- - -) for the remainder of that dive. The Log for that dive will also only indicate dashes (- - -) as the Max Depth achieved.



WARNING: The expanded capabilities of the ReACT Pro are provided as safety features to assist you with emergency situations. Special training, equipment, and support are necessary for diving deeper than the maximum recommended sport diving depth limit of 130 FT (40 M).

VIOLATION GAUGE MODE (VGM)



WARNING: The ReACT Pro activates Violation Gauge Mode when a situation totally exceeds its capacity to predict an ascent procedure. These dives represent gross excursions into decompression that are beyond the boundaries and spirit of the ReACT Pro design, and a ReACT Pro should not be used for the dives.

If a Deco Stop Depth of 70 FT (21 M) or greater is required, Violation Gauge Mode will be activated. A single Long Beep will sound. This situation would be preceded by entering DV2.

The ReACT Pro would then operate with limited functions without any decompression or oxygen monitoring functions. Depth, Bottom Time, and the ARI will be displayed, also the Up Arrow icon and full NiBG flashing as a warning (Fig. 58).

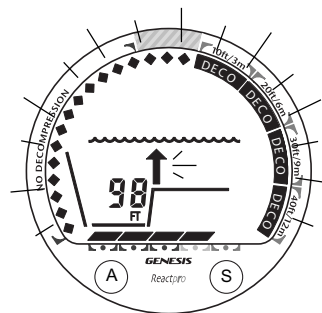


Fig. 58 - VGM

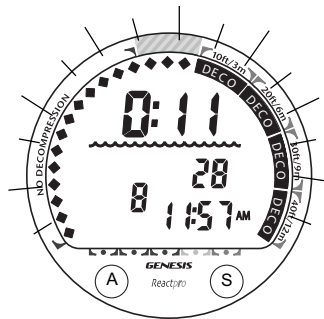


Fig. 59 - VGM (surface)

The ReACT Pro will also activate VGM 5 minutes after surfacing from a dive in which a Delayed Violation occurred. The Surface Interval, Date, and Time will be displayed together with the full NiBG flashing (Fig. 59).

The countdown timer that appears when you access the Fly screen is only provided to inform you of the time remaining before normal operation can resume with full features and functions.

Entering VGM will result in loss of Deco and O2 functions for 24 hours after that dive. FO2 and Plan Mode will not be accessible. In the event that a dive is made during the 24 hour period, a full 24 hour surface interval must then be served before all functions are restored.

HIGH PO2

As depth increases during a dive, the partial pressure of oxygen (PO2) increases. When PO2 increases to within 0.20 (ATA) less than the alarm value set, the Up Arrow and PO2 icons appear on the Main display as a warning (Fig. 60) until PO2 decreases below a value of 0.20 (ATA) less than the alarm value set. The Audible Alarm emits one Beep per second.

If partial pressure of oxygen continues to increase, the value of PO2 will increase toward a maximum value of 5.00 (ATA) in increments of .01 (ATA).

When PO2 reaches the alarm Set Point, the Up Arrow and PO2 icons will flash as a warning. The audible alarm will emit one beep per second. When PO2 decreases below the alarm Set Point, the flashing will stop.

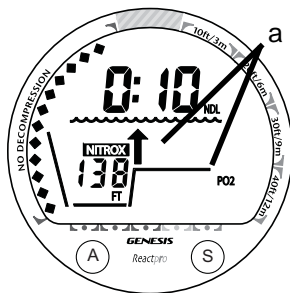


Fig. 60 - PO2 Warning



WARNING: In the event that you enter High PO₂ Dive Mode, you must immediately focus on reducing the partial pressure of oxygen by slowly ascending to a shallower depth at a safe rate in accordance with your nitrox training. If you continue the dive at your current depth, or descend deeper, your exposure to CNS oxygen toxicity will increase.

OXYGEN ACCUMULATION

It is important that you understand that conducting repetitive dives using enriched nitrogen-oxygen (Nitrox) mixtures can lead to increases oxygen saturation (O₂SAT) and the risk of pulmonary oxygen toxicity.

Genesis Scuba strongly recommends that you avoid exceeding oxygen exposure limits, and reminds you that Nitrox diving requires special training and understanding of the effects of oxygen toxicity.

During Nitrox dives, the current level of O₂ saturation (%) with O₂SAT icon is displayed on an ALT screen (Fig. 61a).

Displayed will be either the percentage (%) of oxygen accumulated during that dive, or during the repetitive dives you conducted during that 24 hour period, whichever of the two is calculated to be greater at that time.

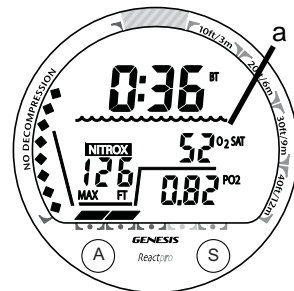


Fig. 61 - O₂ SAT

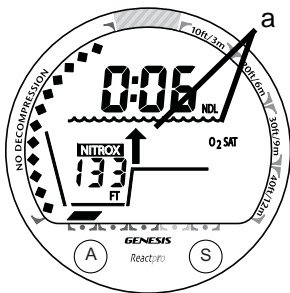


Fig. 62 - O2 Alarm

If the calculated amount of O₂ saturation equals, or exceeds, 80% of the theoretical exposure limit of 300 OTU, the Up Arrow and O₂SAT icons appear on the display (Fig. 62a).

If O₂ saturation continues to increase, the value (%) will increase toward the maximum allowed (300 OTU or 100%) in increments of 2 (%).

When O₂SAT reaches 100 (%), O₂ Dive Time Remaining (OTL) becomes zero (0:00) and the O₂SAT and Up Arrow icons will flash (Fig. 63) until O₂SAT decreases below 100% at which time O₂ Dive Time Remaining (OTL) will increase above zero (0:00).

You must immediately focus on making a safe controlled ascent to the surface to prevent further exposure. The Up Arrow icon will disappear upon surfacing. As your level of saturation decreases during your surface interval, the amount of calculated dive time available will increase.

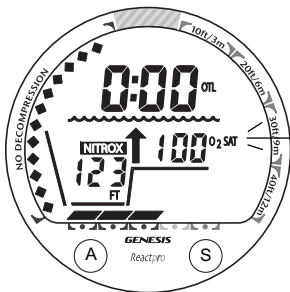


Fig. 63 - O2 Alarm



WARNING: If you exceed the per dive allowable O₂ exposure limit, it is recommended that you allow a surface interval of at least 2 hours before reentering the water. If you exceed the allowable limit for a 24 hour period, you must allow a surface interval of at least 24 hours before reentering the water.

UNEXPECTED LOSS OF DISPLAYED INFORMATION

While diving, if you find that any major piece of equipment is not functioning correctly, you must abort the dive immediately and surface slowly in a controlled manner.

If your ReACT Pro stops working for any reason, it is important that you have anticipated this possibility and are prepared for it. **This is an important reason to avoid pushing the no decompression and oxygen tolerance limits, and a critical reason to avoid entering decompression.**

Regardless of your diving habits, Genesis Scuba advises you to dive with additional backup instrumentation that can provide the data necessary to properly surface if and when your primary instruments fail.

As with any other piece of equipment, unforeseen things can happen. By preparing ahead of time, you can spare yourself a great deal of frustration and disappointment. **If you dive in situations where your trip would be ruined or your safety would be jeopardized by losing the use of your ReACT Pro, an analog or digital backup system or use of standard air (or nitrox) tables is highly recommended.**



SPECIAL WARNINGS and ADDITIONAL SAFETY INFORMATION

- **Maximum limits for exposure to oxygen should not be exceeded, and the consequences of CNS (Central Nervous System) oxygen toxicity can be severe, resulting in Gran Mal convulsions and drowning.**
- **Conducting repetitive dives using enriched nitrogen-oxygen mixtures can lead to oxygen buildup, reducing oxygen tolerance while increasing the risk of pulmonary oxygen toxicity.**
- **The oxygen features of the ReACT Pro are intended for use only by recreational divers trained for nitrox diving by an instructor certified by a recognized training agency to teach diving with nitrox.**
- **Allowing oxygen saturation (O2SAT) to increase to 100 (%) greatly increases the risk of CNS oxygen toxicity, and may result in serious injury or death.**
- **It should not be considered that the capabilities built into the ReACT Pro provide any implied approval or consent from Genesis Scuba for individuals to exceed the defined limits of recreational dive profiles, as agreed on by all internationally recognized training agencies.**
- **The ReACT Pro is not intended for use by military or commercial divers.**

CARE, INSPECTION, and SERVICE

CARE AND CLEANING

The ReACT Pro is a sensitive electronic instrument. Although it has been built to endure the rigors of diving, it still must be handled carefully to protect it from shock, excessive heat, chemical attack, and tampering. The housing is made of an impact resistant resin that is shock resistant but susceptible to scratches and attack by strong chemicals.



CAUTION: Never spray aerosols of any kind on, or near, the ReACT Pro. The propellants may chemically attack the plastic.

Be careful not to leave it in an unsupervised, unprotected location where it might be damaged. Many dive computers (and dive trips) are ruined due to carelessly tossed weight belts or cylinders.

If the lens becomes scratched, Genesis Scuba can replace it, although small scratches will naturally disappear underwater. For even more convenience and additional protection against scratches, place a transparent Instrument Lens Protector on the gauge face. This can be purchased from your Authorized Genesis Scuba Dealer.

CLEANING

Soak and rinse the ReACT Pro in fresh water following each day of diving, preferably after each dive, and ensure that it is free of any debris or obstructions that would block the sensors. If possible, use lukewarm water to dissolve any salt crystals. Salt deposits can also be dissolved using a 50% white vinegar/50% fresh water bath. Towel dry before storing, and transport your ReACT Pro cool, dry, and protected.



CAUTION: Never, under any circumstances, poke any object through any slots or holes on the rear side of the ReACT Pro. Doing so may damage the Depth Sensor, possibly resulting in erroneous depth and/or dive time remaining displays.

ANNUAL INSPECTIONS AND SERVICE

Your ReACT Pro should be inspected annually by an Authorized Genesis Scuba Dealer who will perform a factory prescribed function check and inspection for damage or wear. To keep the 2 year limited warranty in effect, this inspection must be completed one year after purchase (± 30 days). The original sales receipt and owner's portion of the Warranty Registration Card must be presented at the time of service. It is recommended that you have this inspection performed even after the warranty period has expired to ensure your ReACT Pro is working properly.

A service record is provided in the back of this manual for your convenience. It should be signed by the Authorized Genesis Dealer service technician after each annual inspection or factory service. The costs of annual inspections are not covered under the terms of the 2 year limited warranty.



WARNING: If you are in doubt about the accuracy of your ReACT Pro's depth readings, DO NOT attempt to dive with it until it has been inspected by an Authorized Genesis Scuba Dealer.

The facility conducting the depth check must have a pressure test chamber that is capable of pressurizing the ReACT Pro to its maximum operating depth of 399 FT (120 M). Also, the test gauge on the pressure test chamber must be as accurate as the Depth Sensor in the ReACT Pro ($\pm 1\%$ of full scale).



CAUTION: Never pressure test the ReACT Pro in an air environment. Doing so may damage the Depth Sensor; possibly resulting in erroneous depth or time readings.

It is possible to damage the ReACT Pro Depth Sensor if it is not pressure tested properly. The ReACT Pro must be placed completely underwater when being pressure tested to protect the Depth Sensor.

BATTERY LIFE

Battery consumption rate varies throughout periods of operation, which begin upon activation and continue for 24 hours after surfacing from a dive. The exact number of dives, or hours of operation, that you will obtain is subject to variables, such as, temperature, the number of dives conducted during each operational period, and the frequency and duration that the backlight is used (excessive use will reduce battery life).

Tests and calculations indicate that a new CR2450 Lithium battery will maintain unit operation for approximately 300 hours or -

- 150 dives, if (1) 1 hour dive per activation period to over -
- 300 dive hours, if (2 or more) 1 hour dives per activation period

LOW BATTERY CONDITION

During operation, voltage level is checked every second while on the surface. You will be alerted to a Low Battery condition by a flashing Battery icon (Fig. 64).

Upon decreasing to a voltage level that will not maintain proper unit operation, the icon will flash for 5 seconds followed by shutdown of the ReACT Pro.

If the ReACT Pro did not display the Low Battery icon prior to entering the Dive mode, and a Low Battery condition occurs during a dive, there will be sufficient battery power to maintain unit operation for the remainder of that dive, however the Backlight will be disabled. You will be alerted by the Battery icon.

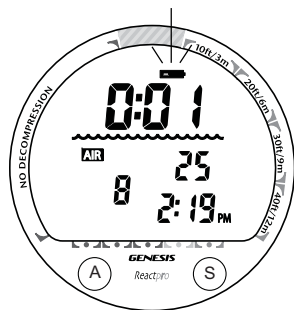


Fig. 64 - Low Battery



NOTE: Genesis Scuba strongly advises that you replace the Battery and **DO NOT** attempt to dive when the Battery icon remains on the display, and that you replace the Battery with a new one prior to any multi day dive trip.

BATTERY REPLACEMENT PROCEDURES

MODULE REMOVAL FROM BOOT

If the ReACT Pro 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.

If it 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.



CAUTION: The procedure that follows must be closely adhered to. Damage due to improper battery replacement is not covered by the ReACT Pro's limited 2 year warranty.

BATTERY REPLACEMENT

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

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

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



WARNING: If damage, moisture, or corrosion is found, it is recommended that you return your ReACT Pro to an Authorized Genesis Scuba Dealer, and DO NOT attempt to use it until it has received factory prescribed service.



NOTE: If the old battery can be removed and the new one inserted within 8 seconds, nitrogen and oxygen calculations, and settings, will be retained for repetitive dives.



Fig. 65 - Hatch Ring Removal

Battery Hatch Removal

- Locate the Battery Compartment on the back of the unit.
- While applying steady inward pressure on the center of the Battery Hatch, rotate the Hatch Retaining Ring 10 degrees clockwise by pressing against the upper tab of the Retaining Ring with a small blade screwdriver (Fig. 65).
- Lift the Hatch 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 Hatch.

Battery Removal

- Remove the Retaining Bar located across the lower portion of the Battery (Fig. 66a).
- Remove the Hatch O-ring. DO NOT use tools
- Using care not to damage the Battery Contacts (Fig. 66b/c), 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 Buttons, Lens, and Housing to ensure they are not cracked or damaged.
- If it is necessary to clean the Battery Compartment, flush it and all components with a solution of 50% white vinegar and 50% fresh water. Rinse with fresh water, and allow to dry overnight, or blow dry with a hair dryer (set at 'no heat').



WARNING: If damage or corrosion is found in the Battery Compartment, return your ReACT Pro to an Authorized Genesis Scuba 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 Cavity. Slide it in from the right side and ensure that it slides under the contact clip on the left rim of the cavity (Fig. 67).
- Orient the Retaining Bar across the lower portion of the Battery and carefully push it down into position (Fig. 68).

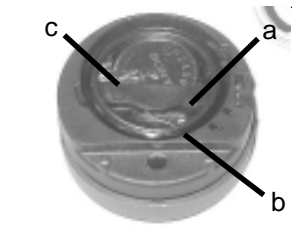


Fig. 66 - Battery Compartment



Fig. 67 - Battery Insertion



Fig. 68 - Retaining Bar



Fig. 69 - Retaining Ring



Fig. 70 - Retaining Ring Tabs

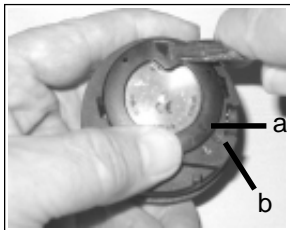


Fig. 71 - Securing the Ring

Battery Hatch and Hatch Retaining Ring Installation

- Replace the Hatch O-ring with a new one. This O-ring must be a genuine Genesis Scuba part that can be purchased from an Authorized Genesis Scuba Dealer. Use of any other O-ring will void the warranty.
- Lightly lubricate the **new** Hatch O-ring with silicone grease and place it on the inner rim of the Battery Hatch. Ensure that it is evenly seated.
- Slide the Hatch Retaining Ring, top portion first (small opening), onto your thumb (Fig. 69).
- Carefully place the Battery Hatch (with O-ring) into position on the rim of the Battery Compartment, then press it evenly and completely down into place with your same thumb.
- Maintain the Battery Hatch securely in place and, using your other hand, slide the Retaining Ring down off your thumb and into position around the Battery Compartment.
- The tabs on the Retaining Ring fit down into the two slots located at the 2 and 8 o'clock positions.
- Using your fingers, turn the Ring counter clockwise 5 degrees until the tabs engage (Fig. 70), then tighten it 5 more degrees by turning it counter clockwise with the aide of a small blade screwdriver (Fig. 71).



NOTE: While tightening (turning) the Retaining Ring, exert continuous inward pressure on it until it is secured in the proper position. A small icon located on the Ring should be aligned with the Locked icon located on the Housing (Fig. 71 a/b)

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 your ReACT Pro to an Authorized Genesis Scuba Dealer for a complete evaluation before attempting to use it.

RETURNING THE MODULE TO 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, and 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.
- Press the Module completely into place with your thumbs, watching the alignment, until it snaps into place.





NOTE: The Wet Activation Contacts are located on the stems of the Buttons and on metal Pins located on the lower left side of the module. The ReACT Pro module is designed for use in a Boot that has an opening on the left side which exposes the Pins (and side Wet Activation Contact) to water upon immersion.



WARNING: If the ReACT Pro is installed in a Boot that does not have the side opening where the side Wet Activation Contact is located, the unit may not activate automatically upon descending on a dive.

REFERENCE

DIVE TIME REMAINING (DTR)

One of the most important pieces of information on the ReACT Pro is the patented DTR numeric display. The ReACT Pro constantly monitors decompression status and oxygen accumulation. The DTR display will indicate the time that is more critical for you at that particular moment (i.e.; whichever time is the least amount available of the two).

This unique feature has been granted U.S. Patent No. 4,586,136.

No Deco DTR is the maximum amount of time that you can stay at your present depth before entering decompression. It is calculated based on the amount of nitrogen absorbed by 12 hypothetical tissue compartments. The rates each of these compartments absorb and release nitrogen is mathematically modeled and compared against a maximum allowable nitrogen level. Whichever one of the 12 is closest to this maximum level is the controlling compartment for that depth. Its resulting value will be displayed with the NDL icon (Fig. 72a) and graphically as the NiBG.

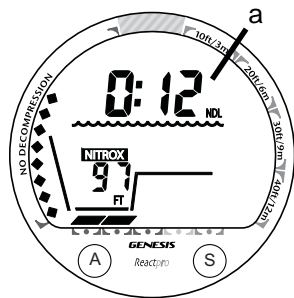


Fig. 72 - No Deco DTR

As you ascend from depth following a dive that has approached the No Deco limit, the NiBG 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 the ReACT Pro offers.

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

As oxygen accumulation increases during a nitrox dive, DTR decreases before reaching the O₂ saturation limit for that dive, or 24 hour period.

When O₂ time becomes less than the NDL, calculations for the current depth will be controlled by oxygen. Oxygen Time Remaining will then appear as DTR with the OTL icon (Fig. 78a).

ALTITUDE

Atmospheric pressure decreases as Altitude increases above sea level. Weather systems and ambient temperature also affect barometric pressures. Consequently, depth reading instruments that do not compensate for the decrease in ambient pressure indicate depth readings shallower than the depth they are actually at. The ReACT Pro automatically compensates for decreased ambient pressures for Altitudes between 3,001 feet (916 meters) and 14,000 feet (4,270 meters). Its program reduces No Deco and O₂ limits to add a larger zone of caution.

The ReACT Pro senses ambient pressure when it is manually activated, every 15 minutes while it is activated, or every 30 minutes when it is not activated. Beginning at 3,001 feet (916 meters), then at additional intervals of 1,000 feet (305 meters), it will automatically recalibrate depth measurements and the No Deco and O₂ limits. When returning to lower Altitudes, diving should not be conducted until the unit automatically clears of any residual nitrogen and oxygen loading and resets to operate at the new lower Altitude.

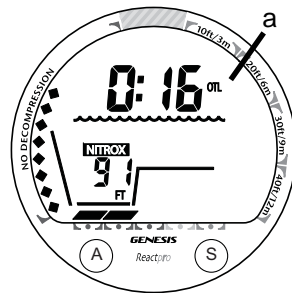


Fig. 78 - OTL as DTR



WARNING: Diving at high altitude requires special knowledge of the variations imposed upon divers, their activities, and their equipment by the decrease in atmospheric pressures. Genesis Scuba recommends completion of a specialized Altitude training course by a recognized training agency prior to diving in high altitude lakes or rivers.

FLYING AFTER DIVING

In 1990 the Undersea and Hyperbaric Medical Society (UHMS) published a set of guidelines aimed at minimizing the possibility of decompression sickness due to flying too soon after diving. The UHMS suggests* that divers using standard air cylinders and exhibiting no symptoms of decompression sickness wait 24 hours after their last dive to fly in aircraft with cabin pressures up to 8,000 feet. (2,440 meters).

* excerpted from "The UHMS Flying After Diving Workshop"

The two exceptions to UHMS's recommendation are:

- If a diver had less than 2 hours total accumulated dive time in the last 48 hours, then a 12 hour surface interval before flying is recommended.
- Following any dive that required a decompression stop, flying should be delayed for at least 24 hours, and if possible, for 48 hours.

Since the 1990 UHMS guidelines were introduced, data from the Diver's Alert Network (DAN) was introduced that resulted in DAN's position** that "A minimum surface interval of only 12 hours would be required in order to be reasonably assured a diver will remain symptom free upon ascent to altitude in a commercial jet airliner (altitude up to 8,000 feet/2,440 meters). Divers who plan to make daily, multiple dives for several days, or make dives that require decompression stops, should take special precautions and wait for an extended surface interval beyond 12 hours before flight".

** excerpted from "DAN's Position on Recreational Flying After Diving"

Both the UHMS and DAN agree that "There can never be a flying after diving rule that is guaranteed to prevent decompression sickness completely. Rather, there can be a guideline that represents the best estimate for a conservative . . . surface interval for the vast majority of divers. There will always be an occasional diver whose physiological makeup or special diving circumstances will result in the bends".

NITROX DIVING

Both central nervous system (CNS) oxygen toxicity and pulmonary oxygen toxicity were taken into consideration when the Maximum Durations (Fig. 79) for a Single Exposure and for Any 24 Hour Day were published by in the October 1991 NOAA Diving Manual. Although CNS oxygen toxicity is considered the primary constraint for higher levels of partial pressure of oxygen (PO₂), there are circumstances in which pulmonary oxygen toxicity can limit exposures.

CNS oxygen toxicity is not considered likely at PO₂ levels below 1.30 ATA. It is, however, related to diver's work level. **Performing strenuous tasks could cause the symptoms of O₂ poisoning at PO₂ levels lower than they normally would appear during casual diving.**



WARNING: In the event that you exceed the maximum limit of per dive allowable O₂, it is recommended that you allow at least 2 hours at a normoxic PO₂ before diving again. If you have reached the Maximum Total 24 hour Day Limits, you must spend at least 12 hours at a normoxic PO₂ before diving again (you should allow a surface interval of at least 24 hours before reentering the water).



WARNING: Diving with Nitrox mixtures requires special knowledge of the variations imposed upon divers, their activities, and their equipment by the increased percentage of O₂. Genesis Scuba recommends completion of a specialized Nitrox training course by a recognized training agency prior to diving with any Nitrox mixtures.

PO ₂ (ATA)	Maximum Exposure Time 	
	Per Dive (Min)	Per 24 hr (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

Fig. 79 - NOAA O₂ Limits

MULTIPLE TISSUE TRACKING

The ReACT Pro tracks 12 tissue compartments with halftimes ranging from 5 to 480 minutes. The NiBG always displays the controlling compartment that is the only one important at that time.

Think of the NiBG as transparent displays laid on top of one another. The tissue compartment that has filled up fastest is the only one that can be seen from the top.

At any particular point, one tissue compartment may be absorbing nitrogen, while another that was previously higher may be off gassing. One compartment hands over control to another compartment at a different depth. **This feature of the Decompression Model is the basis of multi-level diving, one of the most important contributions the ReACT Pro offers you.** Take advantage of this feature and make all of your dives multilevel dives.

REPETITIVE DECOMPRESSION DIVING

The decompression model used by the ReACT Pro is based on the no decompression multilevel repetitive dive schedules successfully tested by Dr. Ray Rogers and Dr. Michael Powell.

These tests did not include repetitive dives deeper than 90 FT (27 M) or decompression dives.

Due to the present unavailability of statistical data, the ReACT's decompression predictions are based on U.S. Navy theory. Therefore, pay special attention to the following warnings.



**WARNINGS:**

The decompression capabilities of the ReACT Pro are intended for emergency use. Decompression diving is inherently hazardous and greatly increases your risk of decompression sickness, even when performed according to the computer's calculations. In the event that you must make an emergency decompression, you must not make another dive for at least 24 hours.

Using the ReACT Pro, just as using the U.S. Navy (or other) No Decompression Tables, is no guarantee of avoiding decompression sickness, i.e. "the bends."

Genesis Scuba advocates responsible diving practices and does not recommend decompression diving, or diving below 130 FT (39 M).

NO DECOMPRESSION LIMITS (NDLS)

Note how the NDLS for the ReACT Pro compare with the U.S. Navy limits (Fig. 80). For most depths, the ReACT Pro provides somewhat less times than the U.S. Navy Tables. However, while the No Decompression Limits may be less, you will receive increased allowable Bottom Times as you take advantage of the multilevel dive capabilities offered by the ReACT Pro.

CONCLUSION

The ReACT Pro is an informational tool whose entire worth depends on using it correctly. **Learn how to use it and use it wisely.** Have fun with the ReACT Pro, and **thank you for being a responsible diver!**

ReACT Pro Depth	NDL-mins. FT (M)	U.S.N. NDL Eng (Metric) mins.
30 (9)	260 (283)	---
35	---	310
40 (12)	137 (144)	200
50 (15)	81 (85)	100
60 (18)	57 (59)	60
70 (21)	40 (41)	50
80 (24)	30 (32)	40
90 (27)	24 (25)	30
100 (30)	19 (20)	25
110 (33)	16 (17)	20
120 (36)	13 (14)	15
130 (39)	11 (11)	10
140 (42)	9 (9)	10
150 (45)	8 (8)	5
160 (48)	7 (7)	5
170 (51)	7 (6)	5
180 (54)	6 (6)	5
190 (57)	5 (5)	---

Fig. 80 - NDL Comparison

PC INTERFACE MODE

While the Surface Main screen is displayed, data can be downloaded from the React Pro or settings can be uploaded to it, by connecting it to a compatible PC using a special PC Interface Cable (USB) and setting up the PC program. When the cable is connected, a PC screen will be displayed for 2 minutes, or until the data transfer is complete if less.

While the PC screen is displayed, the buttons on the React Pro will be disabled. Interruption of the connection will only occur if the cable is disconnected during the countdown.

PC screen (Fig. 81)

- Graphic PC
- Countdown Timer from 119 to 00 (sec)

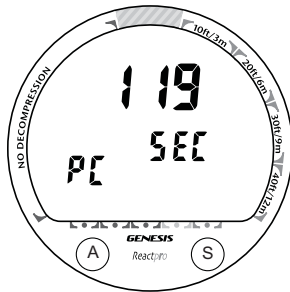


Fig. 81 - PC Interface

Data Download and/or Settings Upload action is initiated by the PC program (no buttons need to be pressed).

If PC action is not initiated by the time the countdown timer reaches 00 (seconds), operation automatically reverts to the Surface Main screen.

CLEAR (RESET)

The ReACT Pro is configured with a feature that allows calculations pertaining to a dive series in progress to be interrupted. Activation of this feature will delete all data accumulated during the dive series necessary for planning a next dive and should only be performed if the user plans to suspend diving for at least 24 hours.

This feature is provided for institutional users of the computer as a means to provide a clean computer to subsequent users without having to wait for the computer to complete all calculations in real time. This practice requires strict control to ensure that the clean computer is not used by a diver that has been diving within the preceding 24 hours. Failure to follow this practice could adversely affect the accuracy of subsequent calculations by failing to account for previous exposure to elevated nitrogen and oxygen partial pressures.



WARNINGS:

Do not attempt to activate the CLEAR (Reset) function on your computer. Proper activation of this feature requires controlled procedures and is restricted to authorized personnel.

Improper activation of this feature could expose the user to elevated risk of decompression sickness or oxygen toxicity. This is a serious risk and could result in injury or death.

If the CLEAR (Reset) screen appears (Fig. 82), cease all operation of the unit's buttons and wait until the Surface Main screen appears on the display (2 minutes). If the unit shuts Off completely, all calculations for repetitive dives will have been cleared in which case you 'must wait at least 24 hours' before resuming diving activity.

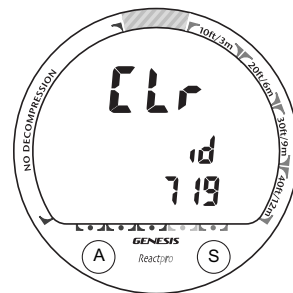


Fig. 82 - Clear (reset)

SPECIFICATIONS

NO DECOMPRESSION MODEL

Basis:

- Modified Haldanean Algorithm
- 12 tissue compartments

Data Base:

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

Performance:

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

Decompression Capabilities:

- Decompression stop ceilings at 10, 20, 30, 40, 50, & 60 FT (3, 6, 9, 12, 15, & 18 M)

Altitude Algorithm:

- Based on NOAA tables

Oxygen Exposure Limits:

- Based on NOAA tables

OPERATIONAL MODES

- Activation >> Diagnostic >> SN
- Surface Main
 - Surface ALT >> Clear
 - Plan
 - Fly/Desat
 - Log (Preview >> Data)
- Set 1 Group
 - Digital Gauge Mode
 - FO2
 - FO2 50% Default
 - Audible Alarm
 - PO2 Alarm
 - Depth Alarm
 - Bottom Time Alarm
 - Reserve Time Alarm
- Set 2 Group
 - Units of Measure
 - Date Format
 - Date
 - Hour Format
 - Time
 - Sampling Rate
 - Wet Activation
 - Deep Stop

DIVE MODES

- No Deco
 - Main >> Alt 1 >> Alt 2
 - DS Preview
 - Deep Stop
 - Safety Stop
- Deco
- Conditional Violation
- Delayed Violations
- Violation Gauge Mode
- High PO2
- High O2

SPECIFICATIONS (continued)

DISPLAY RANGE/RESOLUTION

Numeric Displays:	Range:	Resolution:
• Dive Number	0 - 50	1
• Depth	0 - 399 FT (0 - 120 M)	1 FT (.1/1 M)
• Max Depth	399 FT (0 - 120 M)	1 FT (.1/1 M)
• FO2	Air, 21 - 50 %	1 %
• PO2	1.20 - 5.00 ATA	.01 ATA
• O2SAT	0 - 100 %	2 %
• Dive Time Remaining	0 - 9:59 (hr:min)	1 min
• Total Ascent Time	0 - 9:59 (hr:min)	1 min
• Deco Stop Time	0 - 9:59 (hr:min)	1 min
• Deep Stop Time	0 - 2:00 (min:sec)	1 sec
• Safety Stop Time	0 - 3:00 (min:sec)	1 sec
• Bottom Time	0 - 9:59 (hr:min)	1 min
• Surface Time	0 - 23:59 (hr:min)	1 min
• Dive Log Surface Interval	0 - 23:59 (hr:min)	1 min
• Time to Fly	0 - 23:59 (hr:min)*	1 min
	(* starting 10 min. after the dive)	
• Time to Desaturate	0 - 9:59 (hr:min)*	1 min
	(* starting 10 min. after the dive)	

Special Displays:	Occurrence
• Diagnostic Display	Activation
• Out of Range (- - -)	> 330/399 FT (99.9/120 M)
• Gauge Countdown Timer	24:00 - 0:00 hr:min (after violation)
• PC	PC Interface (upload/download)
• Clear	Reset (erase data)

BAR GRAPHS

Nitrogen Bar Graph	segments
No Deco normal zone	13
No Deco caution zone	1
Deco zone	4

Ascent Rate Indicator:

<= 60 FT (18 M)

segments	FPM	MPM
0	0 - 10	0 - 3
1	11 - 15	3.5 - 4.5
2	16 - 20	5 - 6
3	21 - 25	6.5 - 7.5
4	26 - 30	8 - 9
5	> 30	> 9

> 60 FT (18 M)

segments	FPM	MPM
0	0 - 20	0 - 6
1	21 - 30	6.5 - 9
2	31 - 40	9.5 - 12
3	41 - 50	12.5 - 15
4	51 - 60	15.5 - 18
5	> 60	> 18

SPECIFICATIONS (continued)

OPERATIONAL PERFORMANCE

Function:

- Depth
- Timers

Accuracy:

- ± 1% of full scale
- 1 second per day

Dive Counter:

- Displays Dives #1 to 50
- Displays #1 for 51st dive of an activation period
- Resets to Dive #1 upon reactivation after shutdown

Dive Log Mode:

- Stores 50 most recent dives in memory for viewing
- After 50 dives, the 51st dive is added, overwriting the oldest

Altitude:

- Operational to 14,000 feet (4,270 meters) elevation
- Sampling of ambient pressure every 30 minutes
- Recalibration of depth readings at 1,000 feet (305 m) intervals beginning at 3,001 feet (916 meters) elevation

Power:

- Battery 1 - 3 volt CR2450, Lithium
- Shelf life Up to 5 years
- Replacement User replaceable (yearly is recommended)
- Life expectancy 150 dive hours (if 1 - 1 hr dive per activation period)
300 dive hours (if 2 or more 1 hr dives per period)

Activation:

- Manual - push button (recommended)
- Automatic - by wet contacts (if set On)
- Cannot be activated deeper than 5 FT (1.5 M)
- Cannot be activated at elevations higher than 14,000 feet (4,270 m)

Shutoff:

- Automatically shuts off if no dive is made within 2 hours after initial activation.
- Automatically shuts off 24 hours after the last dive (will reactivate if the Wet Activation feature is set On and the contacts are wet).
- Cannot be shut off manually.

SETTING FO2

- Automatically set for AIR upon activation
- Remains set for AIR unless an FO2 numerical value is set
- Nitrox Set Points from 21 to 50 (%)
- If set for 21%, remains set for 21% until changed
- If set for >21%, reverts to 50% 10 minutes after the dive (if the FO2 50% Default is set On). The previous FO2 value set will be retained, if the FO2 50% Default is set Off.

DSAT NDLS (HR:MIN) AT ALTITUDE (IMPERIAL)

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

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

GLOSSARY

Air Dive - A dive conducted using AIR (approximately 21% oxygen & 79% nitrogen) as the breathing gas.

Algorithm - A step-by-step mathematical formula designed to accomplish a particular result (i.e. Dive Time Remaining in the ReACT Pro).

Altitude Dive - A dive made at an elevation above sea level (> 3,001 feet) where no decompression limits are adjusted.

Ascent Rate - The speed that a diver ascends toward the surface.

Ascent Rate Indicator - A graphic representation of vertical ascent rate (speed) displayed alongside a color coded indicator.

Boot - A protective rubber covering that surrounds an instrument module.

Bottom Time - The total time spent underwater during a dive between 5 FT (1.5 M) on initial descent to 2 FT (0.6 M) on final ascent.

BT - Abbreviation for Bottom Time (Elapsed Dive Time).

Caution Zone - The section of a bar graph that gives visual warning of a diver's proximity to projected limits.

Ceiling - See decompression ceiling.

Clean Dive - A dive preceded by 24 hours of no diving activity.

Competitive Dive - A dive conducted for profit or prize.

Compartment - A term applied to the hypothetical modeling of nitrogen absorption in the tissues (more accurate than the term "tissue" because dive computer models have no direct relation to human tissues).

CNS - Abbreviation for the Central Nervous System of the body.

DCS - Abbreviation for decompression sickness (i.e., the bends).

DECO - Abbreviation for Decompression.

Decompression Ceiling - The shallowest depth a diver may reach upon ascent without risking DCS.

Decompression Stop - The depth(s) at which a diver must pause during ascent to allow absorbed nitrogen to escape naturally from the tissues.

Depth Sensor - An electromechanical device that converts water pressure into an electrical signal, that is converted to a visual depth display.

Diagnostic Mode - The first display seen on Genesis Scuba dive computers after initial activation during which time a self check for internal faults and battery voltage is performed.

Display - A visual readout of information.

Dive Time Remaining - A display of time allowed before a diver must surface based on decompression status or oxygen saturation.

FO2 - The fraction (percent / 100) of oxygen (O2) in the breathing gas mixture.

Hydroglow - A Genesis Scuba term for an instrument backlight feature.

LCD - Abbreviation for liquid crystal display, an easily viewed low voltage display usually found on dive computers

Log Mode - A computer display of previous dive information.

GLOSSARY (continued)

Maximum Depth - The deepest depth attained during a dive.

Mode - A specific set of functions in a dive computer.

Multi-level Dive - A type of dive profile where the diver spends various times at different shallower depths (opposite of a "Square Wave" dive profile).

NDL - Abbreviation for No Decompression Limit.

Nitrogen Bar Graph - A graphic display of simulated nitrogen absorption.

Nitrox - A nitrogen-oxygen breathing gas mixture that contains a higher fraction of oxygen than air.

Nitrox Dive - A dive conducted using nitrox (22 to 50 % O₂) as the breathing gas.

No Decompression - Any part of a dive where the diver can surface without requiring a decompression stop.

No Decompression Limit - The amount of dive time remaining based on no decompression status.

O₂SAT - Abbreviation for oxygen saturation.

OTL - Abbreviation for oxygen tolerance limit.

Out of Range - The point at which a dive computer can no longer supply correct dive information.

Oxygen Tolerance Limit - The amount of dive time remaining based on exposure to elevated levels of oxygen.

Oxygen Toxicity - The adverse physiological affects of exposure to elevated levels of oxygen.

Partial Pressure - The proportion of the total pressure contributed by a single gas in a mixture of gases.

Plan Mode - An accessible sequential display of available dive times at 10 FT (3 M) intervals from 30 to 190 FT (9 to 57 M) used when dive planning.

PO₂ - Partial pressure of oxygen. The proportion of total pressure of a gas mixture contributed by oxygen.

Repetitive Dive - Any dive that takes place within 12 hours of a previous dive.

Safety Stop - A depth at which a diver may choose, but is not required, to pause during ascent to allow absorbed nitrogen to escape naturally from the tissues.

Square Wave Dive - A type of dive profile where the entire dive is spent at one depth between descent and ascent.

Symbol - a small pictorial representation of an operational mode or informational display.

Tissue - See Compartment.

Tissue Compartment - See Compartment.

Transducer - An electro-mechanical device in a dive computer that acts as a depth or pressure sensor.

Transition Period - The first 10 minutes of surface time after ascending to 2 FT (0.6 M).

INSPECTION / SERVICE RECORD

SERIAL NUMBER _____

DATE OF PURCHASE _____

PURCHASED FROM (DEALER) _____



BELOW TO BE FILLED IN BY AN AUTHORIZED GENESIS SCUBA DEALER:

DATE	INSPECTION / SERVICE PERFORMED	DEALER / TECHNICIAN



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