CRESSI SINCE 1946

Direction for use
Computer Leonardo

ENGLISH

cressi.com

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Congratulations on your purchase of your Leonardo underwater computer, a sophisticated and complete instrument, realized in order to offer you the utmost safety, efficiency, and reliability.

Always keep this manual with your Leonardo.

Main specifications.

- The Leonardo features a new Cressi RGBM agorithm, created in conjunction with the expertise of Bruce Wienke and based on the Haldane model, integrated with RGBM factors. This algorithm allows for safe decompression calculations for multiple dives spread out over multiple days.
- Tissues: 9 with saturation hemi-phases between 2.5 and 480 minutes;
- ”Dive” program: Full processing of dive data, even with decompression (if any), for any air or hyper-oxygenated mixture (Nitrox) dive.
- Full setting of FO2 (percentage of the oxygen) and PO2 (partial oxygen pressure) parameters: PO2 may be set between 1.2 bar and 1.6 bar, FO2 between 21% and 50%.
- A Nitrox dive may be carried out after an air dive (even with desaturation in progress).
- Possibility of Deco (decompressive computations) or Gage program setting (depth gauge and timer).
- Deep Stop can be enabled or disabled.
- Large display with ”PCD System” for perfect understanding and readability of values.
- Replaceable display protective cover.
- Battery replacement can be carried out by the user.
- Planning: Scrolling of the safety curve.
- Unit of measure change from the metric system (meters and °C) to the feet system (ft-°F) by the user.

- Sound and visual alarm systems.
- CNS oxygen toxicity graphic indicator.
- Backlit display.
- Built-in calendar and clock.
- Logbook (70 hours or 60 dives) including dive profile.
- Dive history.
- The instrument may be fully reset, in case of renting.
- PC/Mac interface with simulator and dive profile (optional).

GENERAL RECOMMENDATION AND SAFETY MEASURES

⚠ **WARNING:** please read the instructions! Read carefully this handbook, including the safety measures paragraphs. Please be sure of perfectly understanding your instrument's use, functions and limits before using it! DO NOT use your instrument without reading every part of this handbook!

⚠ **WARNING:** this instrument is designed to be a dive aid and does not replace the use of the dive tables.

⚠ **DANGER: AN UNDERWATER DIVING COMPUTER CAN NEVER COMPLETELY ELIMINATE THE RISK OF DECOMPRESSION SICKNESS (EMBOLISM). IT MUST BE CLEAR THAT AN UNDERWATER DIVING COMPUTER CAN NEVER COMPLETELY ELIMINATE THE RISK OF DECOMPRESSION SICKNESS. IN FACT, THE COMPUTER CANNOT TAKE INTO ACCOUNT THE PHYSICAL CONDITIONS OF THE DIVER WHICH MAY VARY DAILY. IT IS RECOMMENDED THAT A MEDICAL EXAMINATION IS COMPLETED PRIOR TO COMMENCING ANY UNDERWATER DIVING ACTIVITY, AND TO AS-**

SESS ONE'S OWN PHYSICAL CONDITION BEFORE EACH DIVE. CIRCUMSTANCES SUCH AS COLD WATER TEMPERATURE (LESS THAN 50F), POOR PHYSICAL CONDITION, MULTIPLE DIVES IN SUBSEQUENT DAYS, WEARINESS, USE OF ALCOHOL, DRUGS, OR MEDICATION AND DEHYDRATION MAY INCREASE THE RISK OF DECOMPRESSION SICKNESS. PLEASE AVOID ALL THESE SITUATIONS AS WELL AS ANY OTHER THAT MIGHT ENDANGER YOUR LIFE: EVERYONE HAS TO BE RESPONSIBLE FOR ONE'S OWN SAFETY!

⚠ **WARNING:** this instrument should be used only by properly trained and certified divers. No computer will replace proper underwater training. Please remember that a dive's safety is only guaranteed by a correct preparation.

⚠ **WARNING:** The Leonardo computer by Cressi is designed for sport diving only. It is not intended for commercial or professional use, requiring longer dive times and greater depths. Diving beyond the parameters of sport diving dramatically increases the risk of decompression sickness.

⚠ **WARNING:** Before using the computer, please check the battery life status and the visibility of the LCD display. DO NOT dive if the instruments' indications are not perfectly clear and, first of all, if the battery is low.

⚠ **WARNING:** While diving, be equipped with a depth gauge, a manometer, a diving timer or watch and dive tables. Please always check your diving cylinders' pressure to be fit

to the planned dive and, while diving, often check the cylinders' air capacity by means of your manometer.

⚠ DANGER: DO NOT DIVE AT HIGH ALTITUDES BEFORE SETTING THE CORRECT ALTITUDE. ONCE SET, PLEASE CHECK THE ALTITUDE LEVEL ON THE DISPLAY. PLEASE REMEMBER THAT DIVING AT HIGHER ALTITUDES THAN 9.842 FT. ABOVE SEA LEVEL INVOLVES A REMARKABLE INCREASED RISK OF DECOMPRESSION SICKNESS.

⚠ DANGER: BEFORE EMBARKING ON A FLIGHT, PLEASE WAIT UNTIL THE ICON "NO FLY TIME" ON YOUR COMPUTER DISPLAY HAS DISAPPEARED.

⚠ WARNING: the present instrument's use is strictly personal; the information it supplies refer, in fact, exclusively to the individual who has used it during a dive or a series of dives.

⚠ DANGER : CRESSI DOES NOT RECOMMEND THE USE OF THIS INSTRUMENT IN DECOMPRESSION DIVES. IF, FOR ANY REASON, THE NO DECOMPRESSION LIMITS HAVE BEEN EXCEEDED, THE CRESSI COMPUTER WILL DISPLAY THE INFORMATION RELATED TO DECOMPRESSION, SURFACING AND SURFACE INTERVAL TIMES.

⚠ **WARNING:** Do not dive using Nitrox mixtures without checking the contents and correct O2 percentage (FO2). After doing so, set your computer with the mixture(s)' value so that it may process the decompression computations. Please be advised that the computer only accepts FO2 values to the nearest whole number.

⚠ **WARNING:** Before diving, check instrument parameter settings.

⚠ **DANGER: Leonardo always keeps the latest oxygen setting set. It is very important for diver's safety to always check this parameter before each dive.**

⚠ **DANGER: CRESSI DISCOURAGES NITROX DIVES WITHOUT PROPER TRAINING. NITROX DIVES WILL EXPOSE THE DIVER TO DIFFERENT RISKS THAN THOSE OF AIR DIVES, INCLUDING SERIOUS PHYSICAL DAMAGES AND, IN EXTREME CASES, EVEN DEATH.**

⚠ **DANGER: AS A SAFETY MEASURE THE COMPUTER UTILIZES A PO2 SET AT 1.4 BAR EVEN FOR AIR DIVES. IF IT IS NECESSARY TO INCREASE THE SAFETY MARGIN, IT IS POSSIBLE TO SET PO2 TO LOWER VALUES, UP TO 1.2 BAR, BY DECREMENTS OF 0.1 BAR.**

⚠ **WARNING:** after a dive with Leonardo set in Gage mode (depth gauge-timer), the instrument will not make saturation and desaturation computations during the subsequent 48 hours.

⚠ **WARNING:** avoid any dive presenting very risky profiles, such as "yo-yo" dives, dives with reversed profiles or several subsequent dives during subsequent days, since they are potentially dangerous and present a higher risk of decompression sickness!

⚠ **WARNING:** Currently, no validated scientific literature allows to dive more than twice a day for periods of one or more weeks without the risk of decompression sickness. For your own safety, it is important to avoid diving for more than two times a day.
A rest of at least 2 hours between two subsequent dives is mandatory. The next/repetitive dive shall be shallower and its minimum duration shall be 15 minutes.

⚠ **WARNING:** please utilize the most conservative safety factor any time you are aware of factors that might increase the risk of decompression sickness. By doing so, you will dive more conservatively and safety.

NOTE: while flying, the instrument must be stored in the pressurized cabin.

NOTE: Cressi reminds that all sport dives must be conducted within the no decompression limits and at a maximum depth of 132 ft, limit of sport dives. Exceeding these limits dramatically increases the likelihood of decompression sickness.

As a result of technological advancements, Cressi reserves the right to modify the instrument without notification.

Introduction.

The Leonardo computer by Cressi is a multifunctional instrument for sport diving. It will supply any wanted information on depth, dive times, decompression status, ascent rate and surface interval times between dives. Nitrogen absorption and release is continuously processed by its sophisticated software, taking into account the quantity of inert in the different mixtures which can be used. Such information is displayed on the instrument's large display, thanks to the PCD (Priority Compartment Digit Display) System, allowing an easy and direct "dialogue" between the diver and the computer, ensuring a clear understanding of all the data needed at any given time and a perfect readability in any situation. The computer is provided with clock and calendar, a versatile

dive memory (logbook), as well as a dive simulator. The mathematical model of Leonardo can make saturation and desaturation computations of dives carried out both with air and with Nitrox, whose parameters can all be set: from the maximum allowed PO2 value (between 1.2 bar and 1.6 bar), to the mixture's oxygen percentage (FO2) between 21% and 50% of O2. Additionally, the instrument may be set by the user for either metric (m-°C) or feet system (ft-°F).

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In order to understand all the computer's functions and their meaning, the manual is divided into five main chapters, dealing with every possible use:

- 1 - Introduction and safety measures
- 2 - Before diving
- 3 - While diving
- 4 - On surface after diving
- 5 - Care and maintenance

COMPUTER CONTROL

OPERATION OF THE LEONARDO COMPUTER

Leonardo is provided with a user friendly display, which "escorts" the diver during any operation. Leonardo's screen different modes change by repeatedly depressing the button which is the key to operating the system. They are clearly indicated by the alpha-numeric display. The same button enables to access the sub-menus and to switch on back-lighting (on sea surface in PRE-DIVE mode only).

Pressing the button, Leonardo switches on and the PRE DIVE screen is displayed. This screen displays the following data:

- Maximum partial oxygen pressure
- Type and percentage of respiratory mixture used (Air ***im. 1*** / Nitrox ***im. 2***)
- Maximum depth which can be reached with the previously set parameters.
- Dive Safety Factor (SF/0/1/2)
- Altitude level (if set)
- GAGE function (if set)
- Battery charge level
- Current time

Pressing again the button it is possible to browse the main menu with 9 screen modes ***im. 3***:

1) **LOG-00:** It is the logbook and the number next to "log" is the dive number.
2) **DIVE-S:** The purpose of Dive-set is to set the dive parameters. In this mode it is possible to set two of the three functions of the program of the computer, that is DIVE AIR and DIVE NITROX.
3) **TIME-S:** The purpose of Time-set is to set date and time.

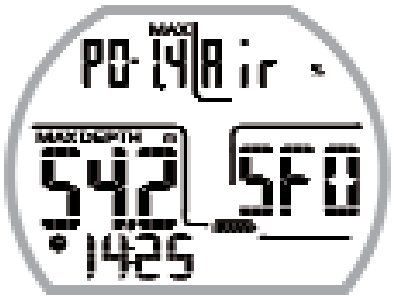
4) **PLAN:** For dive planning
5) **GAGE:** It is the third dive function of the computer. It acts just as timer and depth gauge.
6) **PCLINK:** For the connection to a personal computer.
7) **HISTORY:** This mode displays dive history.
8) **SYSTEM:** In system mode, it is possible to set the measurement unit of the computer and a RESET can be performed.
9) **PRE DIVE:** In this mode, the time of the day is displayed on the bottom of the screen (clock icon). It is the main screen of the computer.

To access the menu of these screens (except history and pclink) press and hold the button. Pressing and releasing the button, it is possible to browse the data of the menus. The computer automatically returns to the first screen of the menu.

All the operations available for each mode of the display will be explained in this manual.

PRE DIVE SCREENS

AIR



PRESS AND HOLD

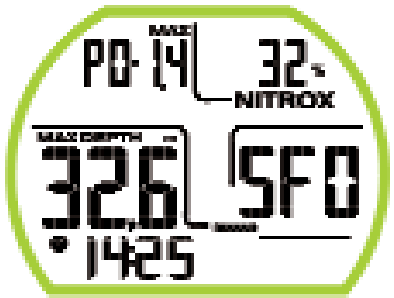
LIGHT

PRE DIVE

(im. 1)

PRE DIVE SCREENS

NITROX



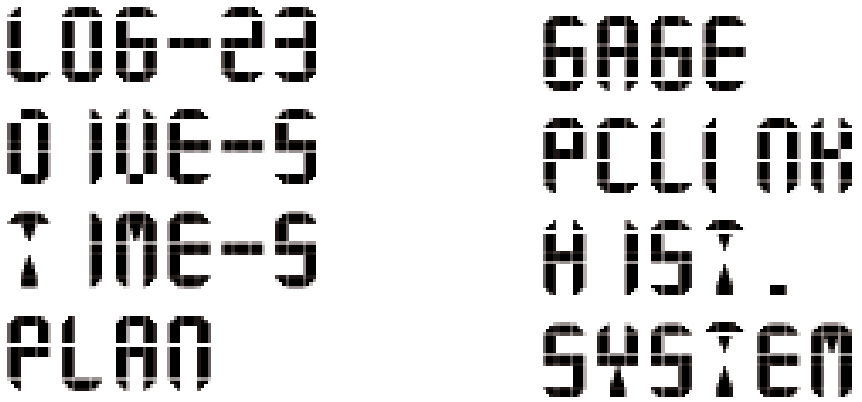
PRESS AND HOLD

LIGHT

PRE DIVE

(im. 2)

COMPUTER MENUS



(im. 3)

2 - BEFORE DIVING

DIVE-SET MODE: Setting of dive parameters.

Once switched on, the computer is in PRE DIVE screen mode. The settings for the next dive are displayed here. The parameters can be changed by repeatedly pressing the button and accessing the DIVE SET (DIVE-S) mode, which enables to select the dive parameters related to:

Partial Oxygen Pressure (PO2)
Nitrox-Percentage or Fraction of oxygen (FO2)
Dive Safety Factor (SF)
Altitude (ALT.)
Deep Stop

⚠ WARNING: If the screen displays the battery icon with a single segment on, the computer MUST NOT BE USED. If it is displayed during a dive, stop the dive and return to the surface. The battery can be replaced by the user (refer to the relevant chapter).

PARTIAL OXYGEN PRESSURE (PO2) *(im. 4)*

Leonardo is factory set with a Partial Oxygen Pressure (PO2) value of 1.4 bar for both air dives and Nitrox dives, in order to ensure the maximum safety during any type of dive. However, it is possible to change the PO2 setting on values between 1.2 bar (included) and 1.6 bar (included), with steps of 0.1 bar, obtained each time the button is pressed. If it is necessary to increase the safety margin of the dive, it is possible to set PO2 to lower values, up to a

minimum of 1.2 bar. Just press the central button up to the DIVE SET mode, displayed in the ***picture 5***, then press and hold the button to enter the mode. The indication of the partial oxygen pressure (PO2) will flash. Press and hold again. The display shows just the highlighted item, flashing. Change it by pressing again the button. Once the desired setting is reached (values between 1.2 bar and 1.6 bar, with steps of 0.1 bar) wait for a few seconds. The computer automatically changes the settings, issuing a sound signal and then returns to the main screen.

⚠ **WARNING:** the computer maintains the PO2 setting until it is manually reset by the diver on different values.

NOTE: by varying the maximum PO2 set and the percentage of oxygen in the FO2 mixture, the computer indicates the maximum depth which may be reached.

⚠ **WARNING:** The PO2 is set by the manufacturer on the default value of 1.4 bar, for both air dives and Nitrox dives. This way, the safety of the diver is ensured by following the most conservative values recommended for sport dives. However, it is possible to select another value PO2 value, as indicated in the chapter related to Nitrox dives. The value set will be stored in the computer until the diver resets it.

NITROX - PERCENTAGE OF THE OXYGEN (FO2) *(Fig. 5)*

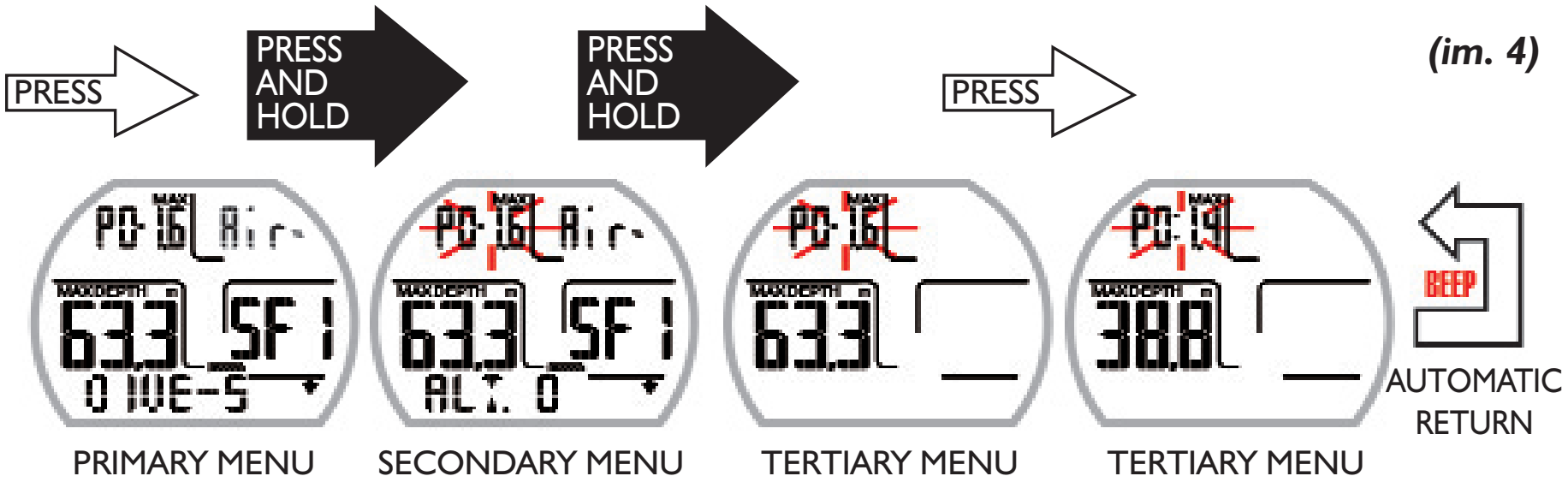
With this setting, it is possible to decide the type of dive: with air (Dive Air Program), with fraction of oxygen at 21%, or oxygen enriched (Dive Nitrox Program).

To set the correct percentage of the Oxygen contained in the Nitrox mixture, press the central button until you reach the DIVE SET mode. Press and hold the button to enter the mode. The PO2 indication starts flashing. Press again the button. The indication of the fraction of Oxygen (FO2) starts flashing. Press and hold again. The display shows just the highlighted item, flashing. Change it by pressing again the button. Once the desired setting is reached (values between 21% and 50% with steps of 1% of O2) wait for a few seconds. The computer automatically changes the settings, issuing a sound signal. Then it automatically returns to the main screen.

NOTE: The Leonardo computer is factory set on the DIVE AIR program, with the Nitrox mixture set to Fo2 at 21%.

SETTING OF PARTIAL OXYGEN PRESSURE - PO2

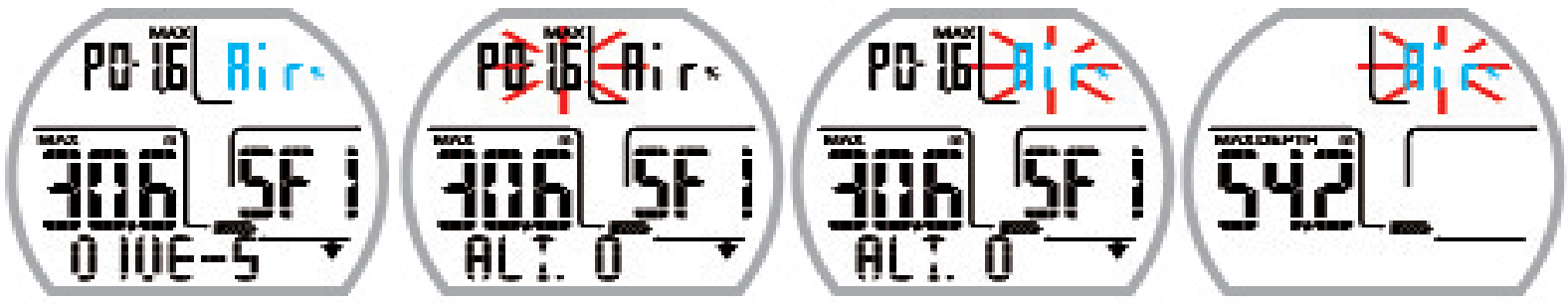
(im. 4)



When the computer issues a sound signal, it means that the setting has been stored, then it automatically goes back to the previous menus.

SETTING OF NITROX FO2 MIXTURE

PRESS → PRESS AND HOLD → PRESS → PRESS AND HOLD → PRESS



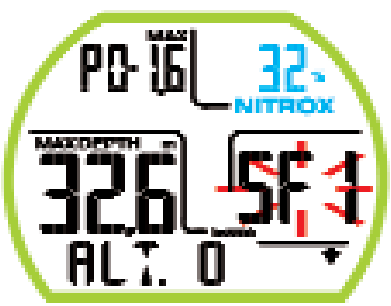
PRIMARY MENU — SECONDARY MENU — TERTIARY MENU — TERTIARY MENU

(im. 5)

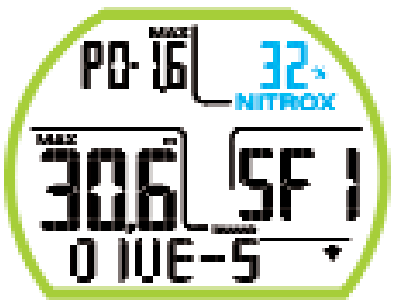
PRESS → SET THE DESIRED PERCENTAGE

BEEP → AUTOMATIC RETURN

WAIT FOR 3 SECONDS



SECONDARY MENU



PRIMARY MENU

When the computer issues a sound signal, it means that the setting has been stored, then it automatically goes back to the previous menus.

NOTE: by varying the PO2 set, the computer indicates the maximum depth which may be reached with that mixture.

It is possible to change the setting of the Nitrox mixture also during the surface interval (with desaturation in progress), but only after 2 minutes from the start of the interval.

This is a very important feature, especially for divers who perform a series of subsequent dives (for instance trainers), which enables to change one's mixture after having dived, for instance, once with air, without having to wait for complete desaturation.

⚠ **WARNING:** Once the percentage of oxygen FO2 has been set, it remains stored in the computer until it is changed again.

⚠ **DANGER: Leonardo always keeps the latest oxygen setting set. It is very important for diver's safety to always check this parameter before each dive.**

⚠ **DANGER: If you dive again after a Nitrox dive, it is fundamental for one's safety to check for the type of mixture contained in the cylinder, setting the Fo2 of the computer according to that mixture.**

⚠ **DANGER: Do not dive with cylinders containing nitrox mixtures whose percentage of oxygen has not been personally checked.**

DIVE SAFETY FACTOR (SF) *(im. 6)*

The Safety Factor is an additional parameter whose purpose is to make dives safer based on the existence of personal risk factors which increase the risk of decompression sickness. The diver can set it on three values: SF0/SF1/SF2. The factory setting is SF0, i.e. disabled.

⚠ **WARNING:** Enable and set a higher safety factor (SF2/SF3) whenever you are aware of conditions which may increase the risk of decompression sickness. This way, non decompression times will be shorter and the dive will be more conservative, ensuring a greater safety.

DEEP STOP *(im. 7)*

There are different diving teaching methodologies and decompression theories. Each of those has been developed according to important scientific concepts, lab tests and practical tests. Some of those, during specific dives, support and require DEEP STOP, while others do not contemplate this type of decompression profile. Leonardo is factory set on DEEP STOP. If you want to disable it, just press the button until you reach the DIVE SET mode, press and hold to enter the mode, press to browse until DEEP STOP flashes. Now press and hold until “Deepst” “ON” is displayed. Pressing, OFF is displayed and the arrow icon on the bottom right disappears. Deep Stop has been disabled. The computer automatically returns to the main menu.

ALTITUDE *(im. 8)*

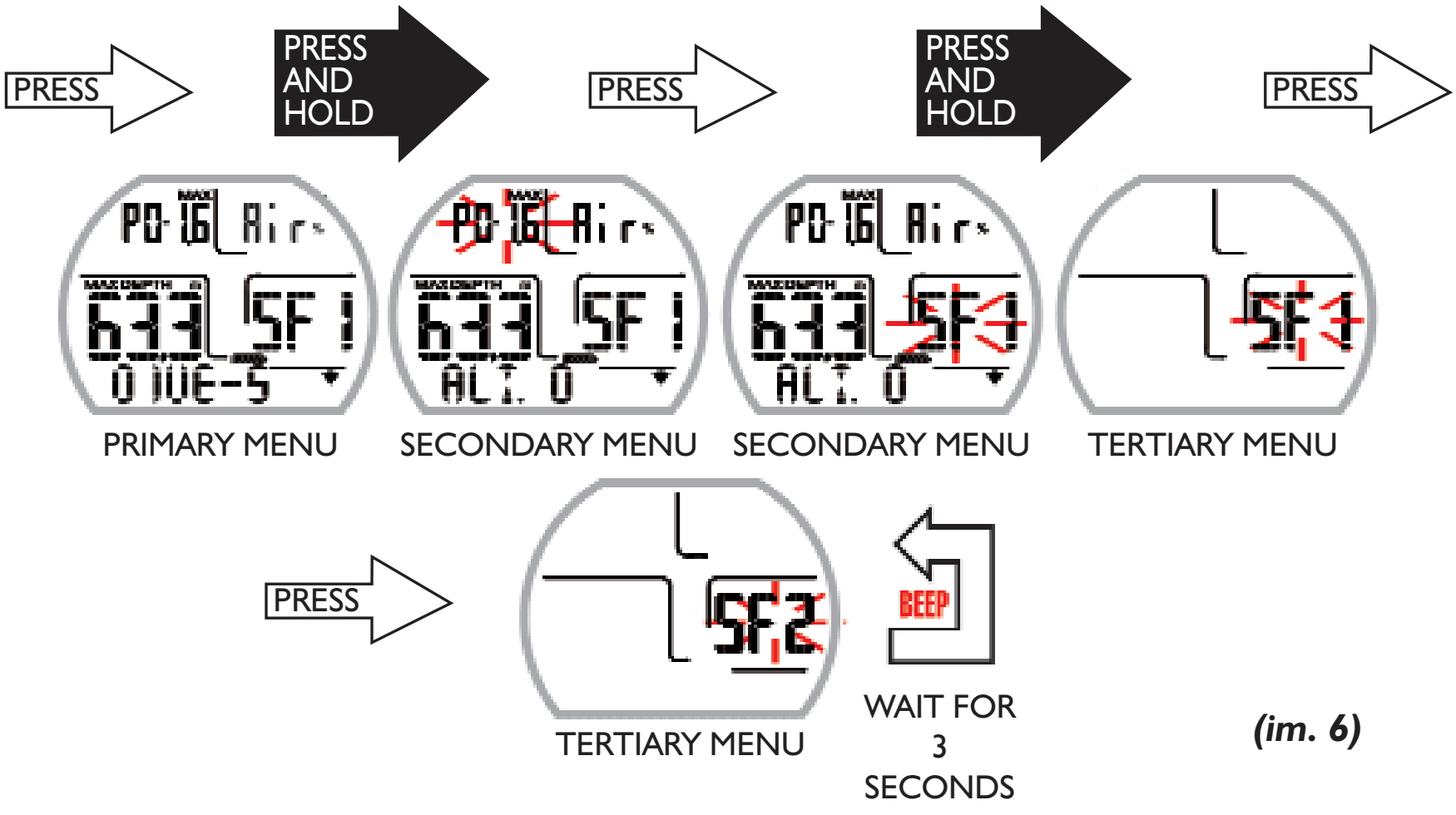
When diving at a location above sea level, it is important to check that the appropriate altitude has been set. Once entered the DIVE-S menu, reach the parameter altitude "Alt. 0". A digit flashes next to Alt. Press and hold; the screen shows the corresponding altitude levels, indicated with:

ALT. 0 (no mountain) - da 0 a 700 m
ALT. 1 (1 mountain) - da 700 a 1500 m
ALT. 2 (2 mountains) - da 1500 a 2400 m
ALT. 3 (3 mountains) - da 2400 a 3700 m
Each icon indicates that the computer has automatically changed its mathematical model depending on the altitude reached, providing reduced curve times with the increase of altitude.
In case of dive at an altitude higher than the one where the diver usually lives, the body experiences alterations due to nitrogen oversaturation which must rebalance with the external environment. It is important to remind that, due to the lower partial pressure of the oxygen in the atmosphere, our body needs an acclimatization period. It is therefore recommended to wait at least 12/24 hours after arriving at a location above sea level before diving.

⚠ DANGER: Leonardo does not automatically handle dives at a location above sea level. Thus, it is mandatory to correctly set the altitude level and respect the acclimatization period before diving.

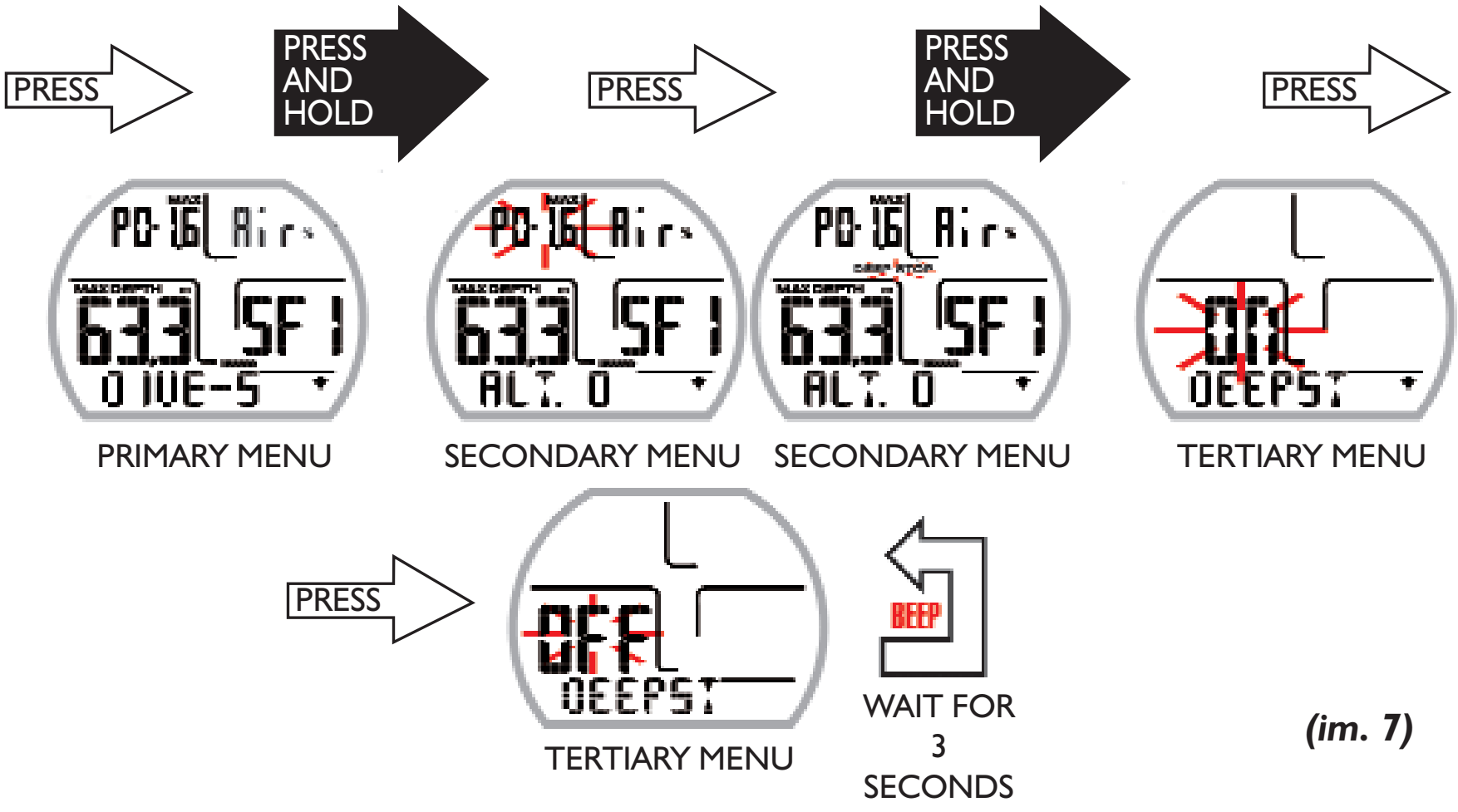
⚠ DANGER: Diving at altitudes greater than 9,842 ft. above sea level involves an increased risk of decompression sickness.

SAFETY FACTOR SETTING



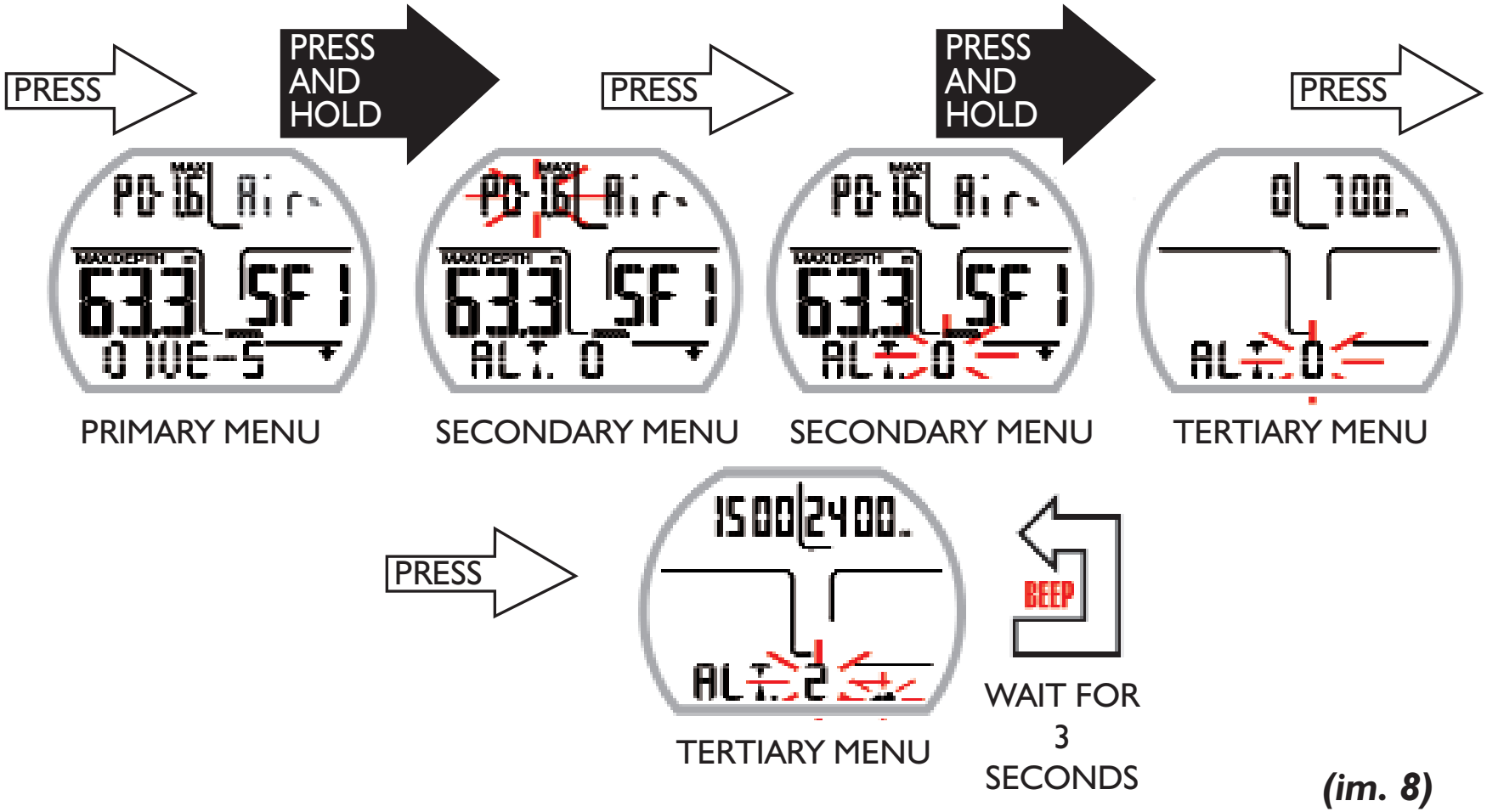
(im. 6)

DEEP STOP ON/OFF



(im. 7)

ALTITUDE SETTING



(im. 8)

PLAN MODE: Dive planning *(im. 9)*

While on the surface, it is possible to go to the **PLAN** function in order to visualize, depending on the mixture used (Nitrox or air) the remaining time available at different depths, without having to make decompression stops (safety curve). The values are given both for the first of a (possible) series of dives and during the surface interval between two or more subsequent dives; in such case, Leonardo takes into account the residual nitrogen, therefore reducing the times in the safety curve. To access the PLAN MODE, once the computer is on, press the button until PLAN is displayed. Pressing and holding the button it is possible to access the function. The screen displays a safety curve (no decompression times) related to the different depths between 30 ft. and 157 ft, with manual steps of 10 ft., achieved by pressing the button. Wait for a few seconds to return to the main screen.

NOTE: the PLAN function will be switched off if the computer shows Error.

GAGE MODE: Depth gauge and timer *(im. 10)*

The computer is provided with a third program called GAGE (depth gauge and timer) that may be used for both apnea (free divers) divers and for the use in technical dives. In this case, the instrument provides just the dive basic parameters, i.e. depth and dive time. It does not make tissue saturation and de-saturation computation, which must be programmed and computed by means of proper software and/or tables. Cressi reminds you

that sport dives must be carried out within the no decompression guidelines, and at the maximum depth of 132 ft., which is the limit of sport diving: to exceed such limits dramatically increases the risk of decompression sickness!

⚠ **WARNING:** The Leonardo computer is designed for sport diving only. It is not intended for commercial or professional use, requiring longer dive times and greater depths. Diving beyond the parameters of sport diving dramatically increases the risk of decompression sickness.

⚠ **DANGER: Cressi discourages diving with gaseous mixtures other than air without proper training. The use of "technical" multi-gas mixtures may expose the diver to different risks than those of sport diving, including serious physical damages and, in extreme cases, death.**

⚠ **WARNING:** After a dive in GAGE mode, the instrument will not make saturation and de-saturation computations for the following 48 hours.

⚠ **DANGER: Should you decide to reset the instrument by accessing the system mode, the nitrogen memory will be cancelled. Therefore, the instrument will not be able to compute the following dive. Before using this function, wait for at least 48 hours after the last diving activity.**

To access the GAGE program, press the button until the “GAGE” screen is displayed, then press and hold the button until OFF flashes. Pressing again, OFF becomes ON, after a few seconds the computer issues a sound and at the same time the function is enabled.

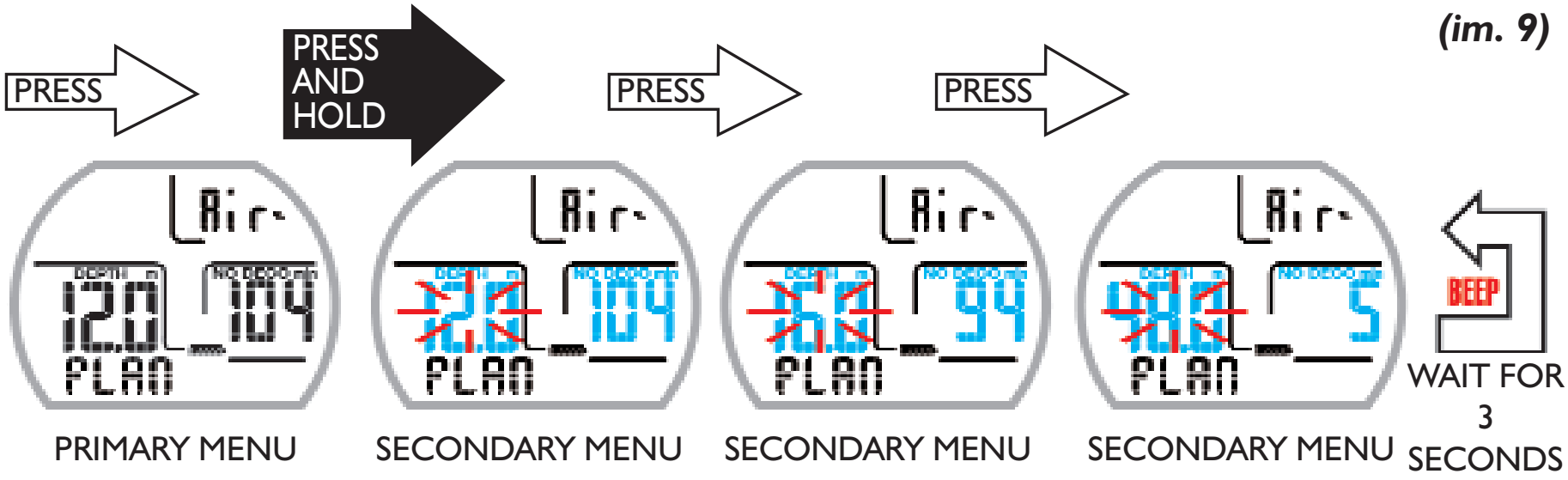
PLAN mode is disabled.

NOTE: The Leonardo computer is factory set on the “DIVE AIR” function.

NOTE: The depth indicator gives indications between 0 – 393 ft.

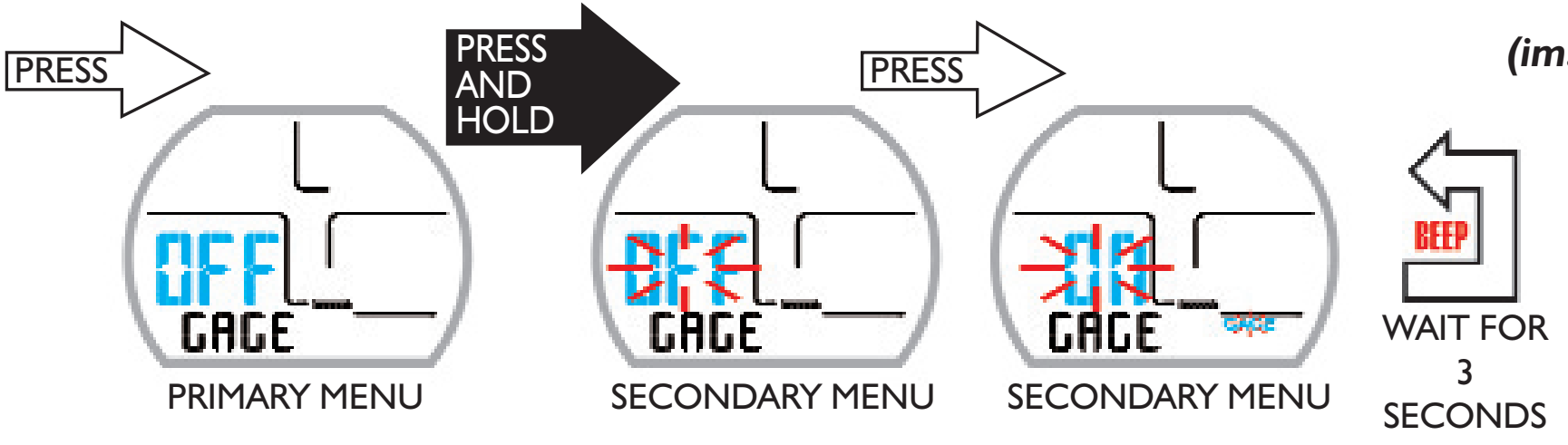
PLAN MODE

(im. 9)



GAGE MODE

(im. 10)



TIME SET MODE

Date and time adjustment. *(im. 11)*

Press the button up to the TIME SET mode. Press and hold the button to enter the mode. The digits of the year start flashing, press again to set month, day and 12/24 hours settings. Go to the desired setting. Press and hold again. The display shows just the highlighted item, flashing. Change it by pressing again the button. Once the desired setting is reached, wait for a few seconds. The computer automatically changes the settings, issuing a sound signal. Then it automatically returns to the main screen.

NOTE: To store exact information in the computer logbook, remember to check for correct time and date settings.

SYSTEM MODE

Units of measure setting *(im.12)*

The Leonardo computer can make computations by metric units (depth in meters and temperature in °C), or in feet and temperature in °F. To change the unit of measurement, press the button up to the SYSTEM mode, then press and hold to enter the mode. “s.unit” (set unit) is displayed with the indication °C/m. or °F/ft. Press and hold. The indications start flashing. To change them, press and wait. The computer stores the settings, issuing a sound signal, then automatically returns to the main screen.

Instrument reset. *(im. 13)*

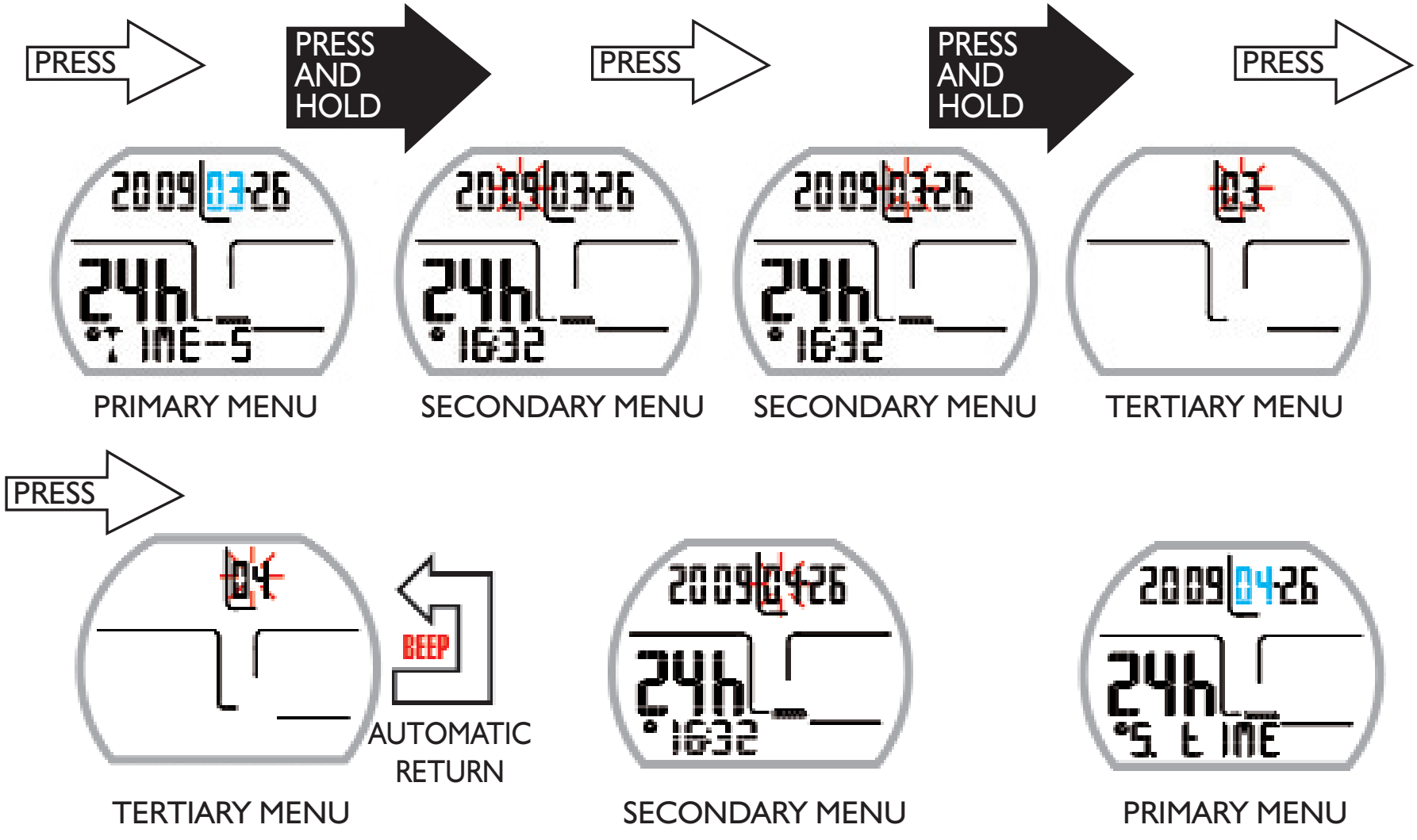
To reset the instrument, press the button up to the SYSTEM mode, then press and hold to enter the mode. “s.unit” (set units) is displayed with the indication °C/m. or °F/ft. Press again. “S.RESET_NO” (system reset) is displayed. Press and hold. The indication NO flashes. Press. YES is displayed. Press and hold. “SURE?_NO”. is displayed. Press. “YES” is displayed. Press and hold. Wait for a sound signal. Dots and the writing “DONE!” are displayed. The instrument is reset. Then it automatically returns to the main screen.

By resetting the instrument, all the computations related to the current de-saturation are reset.

⚠ DANGER: Do not reset your instrument if it has to be used to compute subsequent dives!

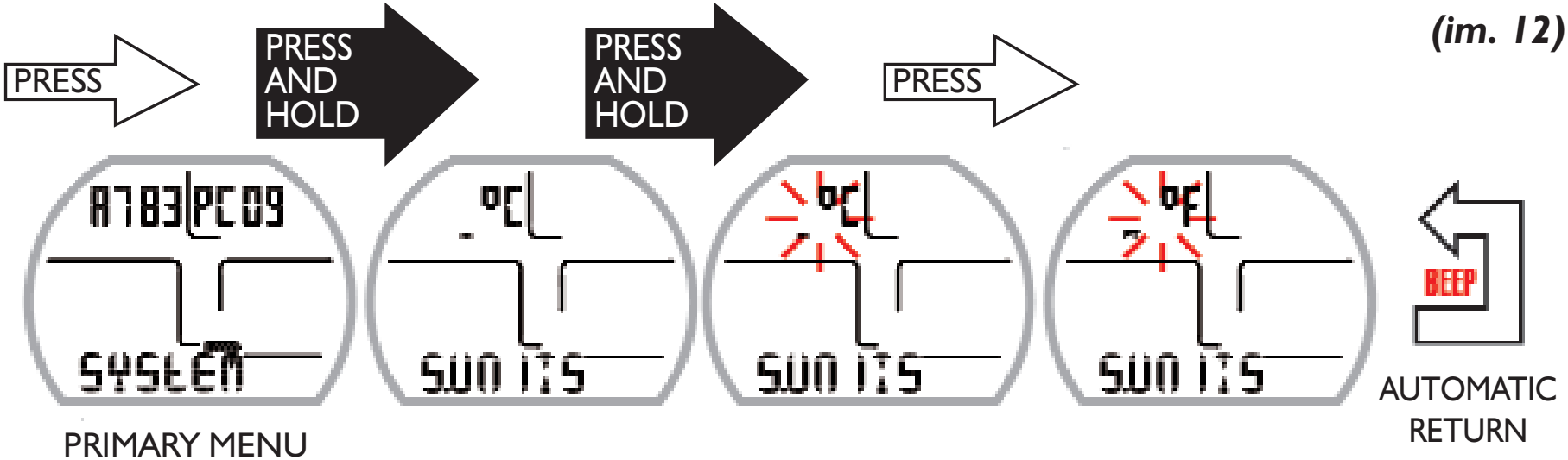
TIME SET MODE

(im. 11)



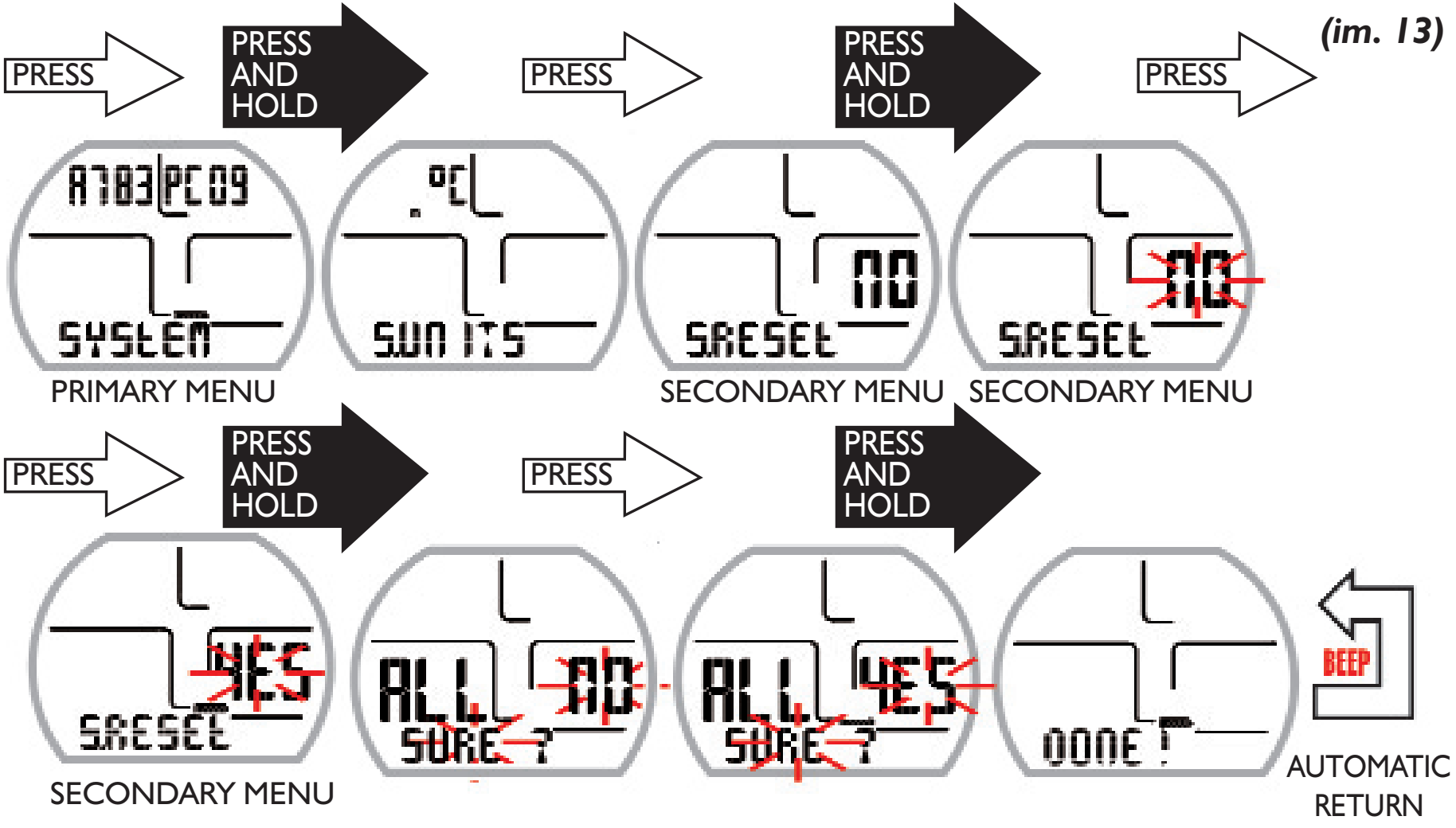
SYSTEM MODE: SETTING OF MEASUREMENT UNIT

(im. 12)



SYSTEM MODE: INSTRUMENT RESET

(im. 13)



WHILE DIVING
COMPUTER FUNCTIONS *(im. 14-15)*

The computer can be set with three different functions:

1) DIVE AIR if dives are performed with air and you want to use a decompression computation.

2) DIVE NITROX if dives are performed with Nitrox and you want to use a decompression computation..

3) GAGE if you do not want to use a decompression computation.

NOTE: The Leonardo computer is factory set on the DIVE AIR program, with the mixture's O2 value on 21% and PO2 on 1.4. FO2 values different from Air 21% activate the computation program Dive Nitrox.

DIVING WITHIN NO DECOMPRESSION LIMITS

DIVE AIR function: Dive with air. *(im. 14)*

The Leonardo computer automatically starts the DIVE AIR program at a depth exceeding 3.93 ft.. During a dive within the no decompression limits, the display will show the following information:

1) Current depth value (Depth m.).
2) Non decompression time (No Deco min.).
3) Max depth reached (Max m.).
4) Elapsed dive time (Dive.T min.).
5) Ascent rate indicator.
6) Indicator of altitude level (if set)
7) Current temperature, expressed in °C or °F.

Additional important information may be obtained by pressing the button during the dive:

1) Maximum PO2 set.
2) Oxygen percentage of the selected mixture (Air if FO2=21%);
3) Maximum depth which can be reached depending on the maximum PO2 set.
4) Safety Factor SF.

DIVE NITROX FUNCTION: Dive with Nitrox *(im. 15)*

The Leonardo computer keeps the setting of the percentage of Oxygen Fo2, until the diver manually resets it to different values. It is important to understand that:

Artificial respiratory mixtures may expose the diver to significant risks, unless they are perfectly known, analysed and studied. It is mandatory to understand that THE MIXTURE BEING BREATHED MUST BE EXACTLY EQUAL TO THE ONE SET ON THE COMPUTER. OTHERWISE, DECOMPRESSION AND TOXICITY INFORMATION provided by the computer WILL BE DANGEROUS FOR THE LIFE OF THE DIVER. Before, after, and during a Nitrox dive, it is mandatory to verify the percentage of the Oxygen so that it exactly corresponds to the one in the cylinder.

BEFORE A NITROX DIVE.

The Leonardo computer always keeps the DIVE AIR program switched on, until the diver sets it for the use with Nitrox mixtures (chapter DIVE-SET MODE: Dive parameters setting). In this case the display will show the Nitrox icon (***picture 15***) which will stay on during the dive and until Leonardo remains set on Nitrox parameters. Once the Nitrox program is on, it is neces-

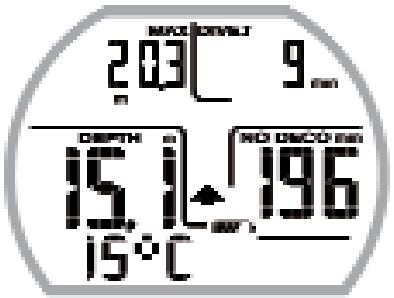
sary to set the computer with the exact values of oxygen percentage (FO2) contained in the cylinder to be used during the dive, after having meticulously analysed its content, so the computer is able to adapt its computing algorithm according to the new parameters..

⚠ **DANGER: the use of the computer with hyper-oxygenated (nitrox) mixtures is exclusively intended for divers who have attended a full training course on the use of such mixtures.**

WHILE DIVING

AIR

(im. 14)



PRESS

PRE DIVE

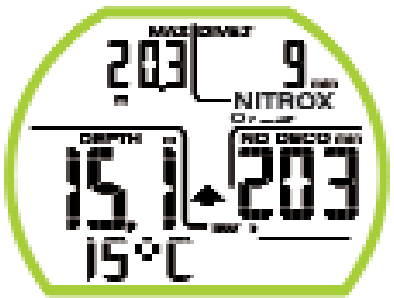
PRESS AND HOLD

LIGHT

AUTOMATIC RETURN

NITROX

(im. 15)

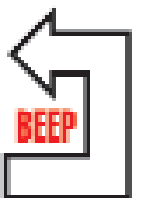


PRESS

PRE DIVE

PRESS AND HOLD

LIGHT



AUTOMATIC RETURN

⚠ **DANGER: Do not dive with cylinders containing Nitrox mixtures without checking their oxygen percentage.**

⚠ **WARNING: : Check the FO2 value set on the computer prior to diving!** This is done on surface by means of the main screen PRE-DIVE and the DIVE SET screen which allow visualization of the previously set parameters.

⚠ **WARNING:** Under the same dive conditions, a Nitrox mixture requires longer no decompression times than air. It is recommended to comply with the maximum depth allowed by the selected Nitrox mixture.

DIVING WITH NITROX

During a Nitrox dive within the no decompression limits, all the information related to the a standard dive with air will be provided, as well as ***(picture 16):***

1) NITROX dive indicator
2) Graph representing CNS O2 toxicity level

The second screen, after pressing the button, displays the same settings as the DIVE AIR but, of course, concerning the nitrox mixture used.

CNS TOXICITY DISPLAY

The Leonardo Cressi computer is able to display a graph of the oxygen toxicity level for the Central Nervous System. The toxicity level is related to the partial oxygen pressure and to the time of the diver's exposure to high partial oxygen pressure (PO2). ***The picture 16*** represents the display column, consisting of a 5-segment bar, which shows the increasing amount of accumulated oxygen. When all the segments are

lit up, 100% of the maximum tolerance allowable to the CNS has occurred and serious danger of hyperoxia exists.

It is important to understand, monitor, and control the oxygen toxicity level. In order to reduce the risk of oxygen toxicity, Leonardo displays a graphic bar, easy to read in any situation. When the oxygen level reaches warning values, next to the maximum allowable toxicity (corresponding to 5 segments out of 5 lit up), the graph starts flashing along with the Nitrox writing, and a temporary alarm starts sounding, showing the proximity of a CNS toxicity level. If the situation remains unchanged or worsens (100% of allowable toxicity), the bar and the writing continue to flash and the temporary sound alarm is repeated until, ascending, the partial oxygen pressure decreases below 0.6 atmospheres. The graph stops flashing, yet the alarm is entered in the Logbook.

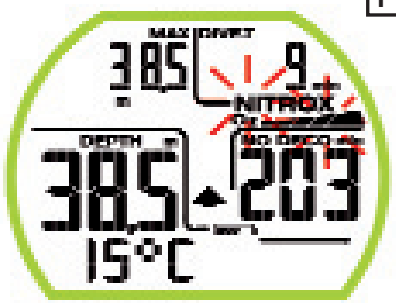
NOTE: The result of the oxygen exposure computation is approximated to the nearest whole number.

⚠ DANGER: do not use hyper-oxygenated mixtures in diving or decompression without having attended the related training courses. The Nitrox Basic license enables to use just the standard hyper-oxygenated mixtures (Ean 32 and Ean 36, respectively called Nitrox 1 and Nitrox 2), within the non decompression limits.

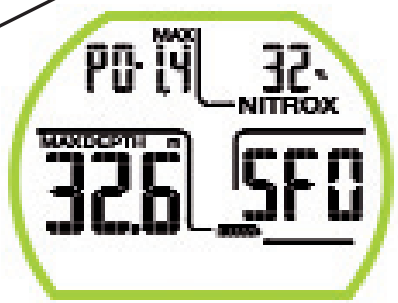
CNS TOXICITY DISPLAY

(im. 16)

BEEP-BEEP

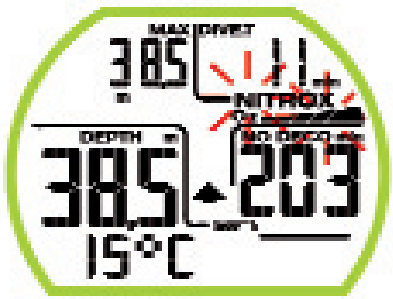


PRESS



PRE DIVE

BEEP-BEEP



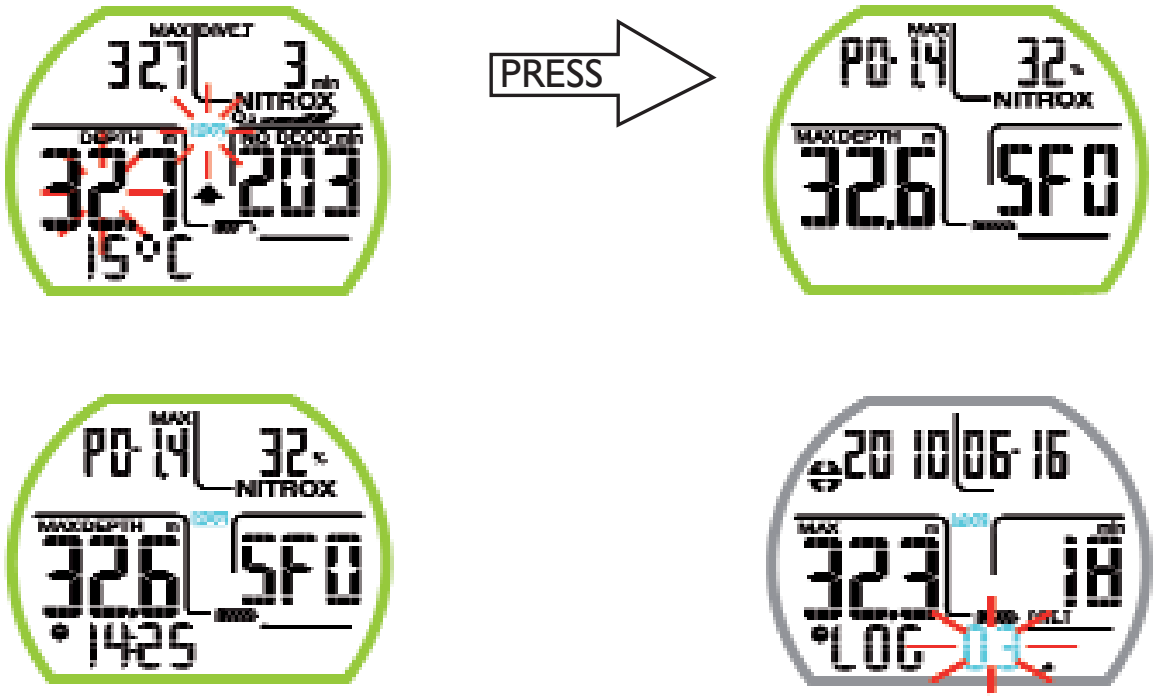
PO2 ALARM *(im. 17)*

The computer is able to constantly monitor another basic parameter relating to oxygen, that is O2 partial pressure value (PO2). Oxygen toxicity may be caused both by an excessive exposure (CNS toxicity, seen in the previous chapter) and by exceeding the maximum Po2, which is exceeding the maximum depth allowed by the mixture used. As already seen, the PO2 limit value is set by the diver in a range between 1.2 bar and 1.6 bar. Leonardo considers the 1.6 bar value as the partial pressure maximum allowable limit and, according to the used mixture, automatically signals the maximum depth which may be reached. Remember that even by using air, you may reach the oxygen toxicity limit. Such limit varies according to the set PO2. Leonardo is manufactured with a preset value of 1.4 bar, whose corresponding maximum depth is 188 ft. in air.

It is possible to set the computer on other PO2 values, up to a maximum of 1.6 bar. To warn the diver about the excess of Po2, when reaching the limit depth relating to the set PO2 (1.2 bar to 1.6 bar), a sound alarm will start while the Po2 icon will be flashing, indicating the current depth. As soon as you return to a depth shallower than the limit one, the sound alarm stops, current depth and the Po2 icon stop flashing. The latter icon remains lit up during the residual part of the dive, in the LOG BOOK and in the PRE DIVE screen.

PO2 ALARM

(im. 17)



ASCENT RATE *(im. 18)*

The ascent rate is shown on the display by an arrow indicator at the centre, operating according to the table on the ***picture 18***: If, during surfacing, the maximum allowed ascent rate is exceeded, the display will show three arrows, showing the increasing level of the ascent rate. Additionally, the alarm will sound, the SLOW icon will flash, as well as the arrow indicator. In this situation, surfacing must be stopped until the SLOW icon disappears and the display returns to standard conditions.

⚠ DANGER: Surfacing too fast dramatically increases the risk of decompression sickness. Cressi recommends, at the end of each dive, a safety stop of 3 minutes at 10 ft– 20 ft., which will be assisted by the computer (see next chapter).

SAFETY STOP. *(im 19)*

Leonardo is programmed to automatically signal a safety stop after each dive at a depth greater than 32 ft., as recommended by the training centres and the most recent studies on diving physiology. A 3 minute stop should be carried out at a depth between 20 ft. - 10 ft..

The stop is indicated by the display with the STOP icon; the display, in this condition, clearly indicates the duration in minutes of the stop and the depth in meters or feet. The safety stop is not mandatory, yet it is strongly recommended if, for instance, the maximum ascent rate is repeatedly exceeded. Cressi always recommends to respect it, in order to avoid safety issues.

NOTE: During the safety stop, the maximum depth can be displayed pressing the button.

⚠ **DANGER: At the end of the safety stop, many divers use to quickly reach the surface, sometimes even inflating the Buoyancy Control Device. It is a very severe error which may lead to decompression sickness. The last meters before surface in fact are the most critical and the percentage variations of the pressure are significant. The last section of the ascent to surface in fact should be covered in no less than a minute.**

DECOMPRESSION FOREWARNING *(im. 20)*

Every time the time available within the curve, shown on the display by the NO DECO icon, decreases to 3 minutes, Leonardo warns the diver. The digit with the remaining minutes and the NO DECO icon flash and a sound alarm is issued. It means that the diver is approaching the no decompression limits. A decompression is required.

DEEP STOP. *(im. 21)*

In order to avoid the risks related to the microbubbles forming during the ascent, Leonardo is able to suggest a DEEP STOP of 1 - 2 minutes (in case of dive with decompression) at variable depth depending on the dive profile. During the dive, if the profile requires it, DEEP STOP is displayed and an acoustic signal is issued. The stop icon with the depth and the time in minutes is displayed.

If the diver omits it, the warnings will be deleted and the computer recalculates ascent planning without that stop.

NOTE: verify that the deep stop is enabled (see the paragraph at page 22).

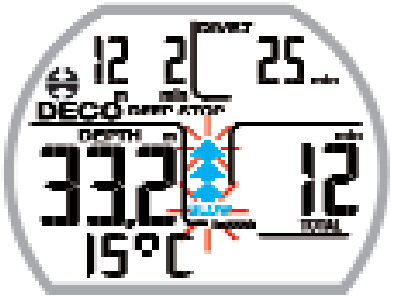
NOTE: In this case, the maximum depth can be displayed pressing the button.

ASCENT RATE

(im. 18)

DEPTH	NO SIGNAL	▲	▲▲	BEEP BEEP SLOW
	0.0-3.9 m/min	4.0-7.9 m/min	8.0-11.9 m/min	12.0 m/min

BEEP-BEEP



SAFETY STOP

(im. 19)

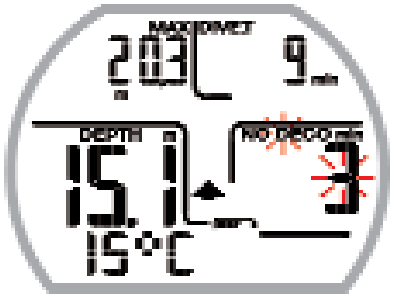
PRESS AND HOLD

LIGHT

DECOMPRESSION FOREWARNING

(im. 20)

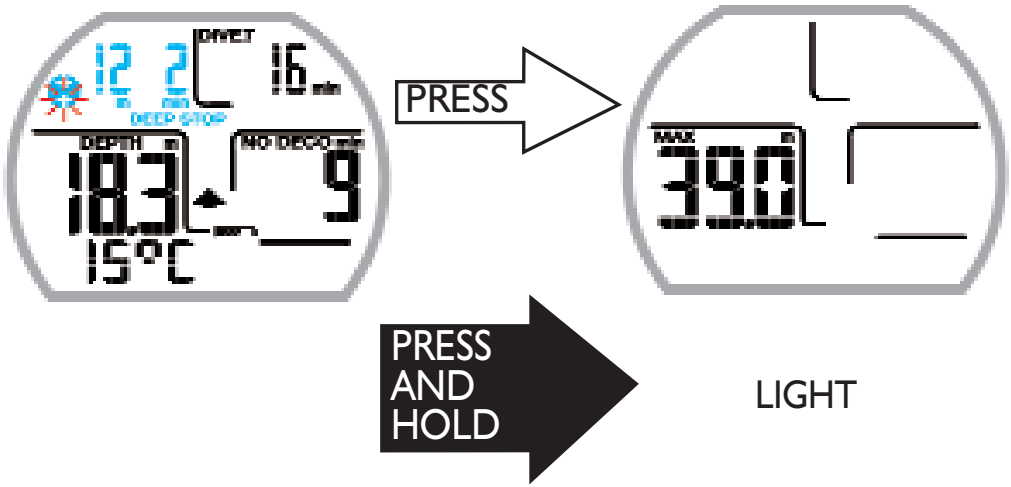
BEEP-BEEP



DEEP STOP

(im. 21)

BEEP-BEEP



DIVING OUTSIDE THE NO DECOMPRESSION LIMITS *(im. 22)*

⚠ DANGER: Do not use this instrument to dive beyond the no decompression limits! Cressi discourages the use of this instrument for decompression dives.

In the event that you have exceeded the no decompression limits, Leonardo will assist with specific information related to surfacing and related decompression information.
Upon violating the no decompression limits, the computer will issue a sound alarm, and the display changes as in the ***figure 22***, providing the diver with the following information:

1) Stop icon with the writing DECO, showing that the no decompression limits have been violated and that decompression stops must be performed. The arrow indicating UP flashes.
2) Depth of first decompression stage (the deepest), given in meters (m) or feet (ft.). It may vary from a maximum of 78 ft. to a minimum of 10 ft., by steps of 10 ft..
3) Time in minutes for the first decompression stage (the deepest).
4) TOTAL icon, indicating the total ascent time, that is the time required to ascend to the deepest stage, respecting the ascent rate, PLUS the stop time at that depth and at any other subsequent stop (including the deep stop if necessary), PLUS the safety stop time, PLUS the time required to reach the surface after completing the decompression stages.
5) “DIVE. T” icon giving the total time spent while diving.

NOTE: In this case, the maximum depth can be displayed pressing the button.

⚠ **DANGER: NEVER ascend above a decompression depth.** To avoid this situation, you should ascend to a depth slightly deeper than the stage decompression depth requirement. You should consider the amount of gas needed to successfully complete all decompression requirements. During rough sea conditions, it may be difficult to comply with the decompression stage requirements without exceeding it. Cressi recommends that the shallowest depth (nearest the surface) be at depth of about 20 ft., even though decompression will take slightly longer. Leonardo will automatically calculate this.

Omitted Decompression stage alarm *(im. 23)*

If the decompression stage is missed by surfacing above the depth given by the computer, an alarm will sound and the down arrow of the decompression icon will flash on the display until the diver descends back to the proper depth or below it. In the opposite case, that is when the diver goes below under the stage depth by a specific amount, an arrow flashes, indicating that it is necessary to go up. The computer allows a maximum time of 2 minutes to correct this dangerous situation; during this time, the alarm will keep sounding. In the event that the diver does not descend to the proper depth (after 2 minutes) Leonardo enters the ERROR PROGRAM. The “STOP” icon flashes and the instrument won’t be usable for the next 48 hours. The only functions working

will be Logbook and History. Later, in the PRE DIVE screen the "STOP" icon, the DECO writing and the stop icon with the up arrow flash. This means that the decompression stage has been omitted during the last dive. The LOG BOOK will store the same warning, indicating that in a specific date the dive with a specific number has been carried out without the decompression stage.

⚠ **DANGER: Should this happen, you must not dive for the next 48 hours.** In the event that you feel any symptoms of decompression sickness, you should contact the DAN (Divers Alert Network) and your local hyperbaric chamber centre, providing as much data as possible about the dive.

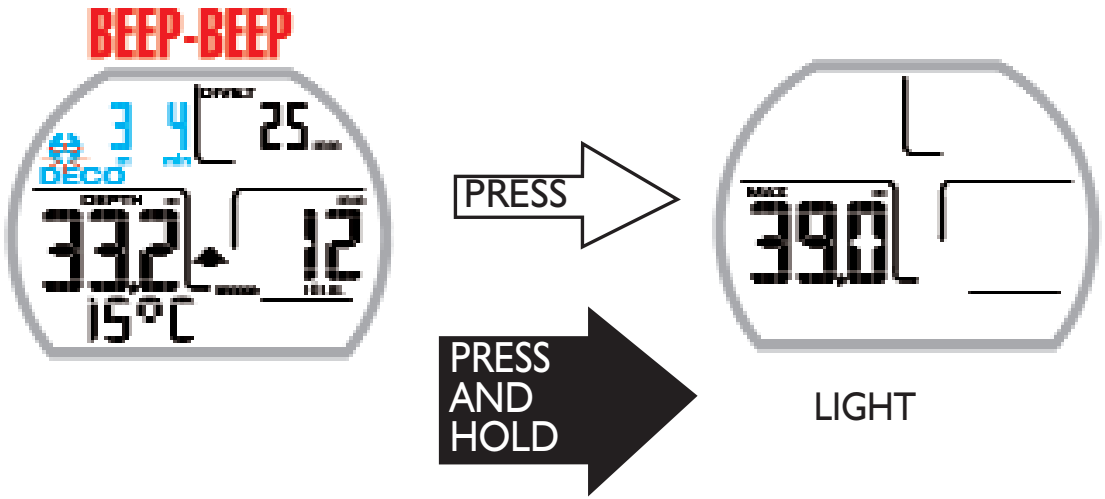
GAGE FUNCTION (depth gauge/timer). *(im. 24)*

The Leonardo computer is equipped with a third dive computing program (GAGE). This function is especially useful for technical dives, yet it is useful as well for apnea (free diving).
When the Gage function is enabled, Leonardo does not perform any saturation and de-saturation computation. It only operates as a basic instrument indicating dive depth and time, as well as some accessory data. In this condition, proper decompression software must be utilized according to proper dive tables. Cressi reminds you that sport dives must be carried out within the no decompression guidelines, and at the maximum depth of 132 ft., which is the limit of sport diving: to exceed such limits dramatically increases the risk of decompression sickness!

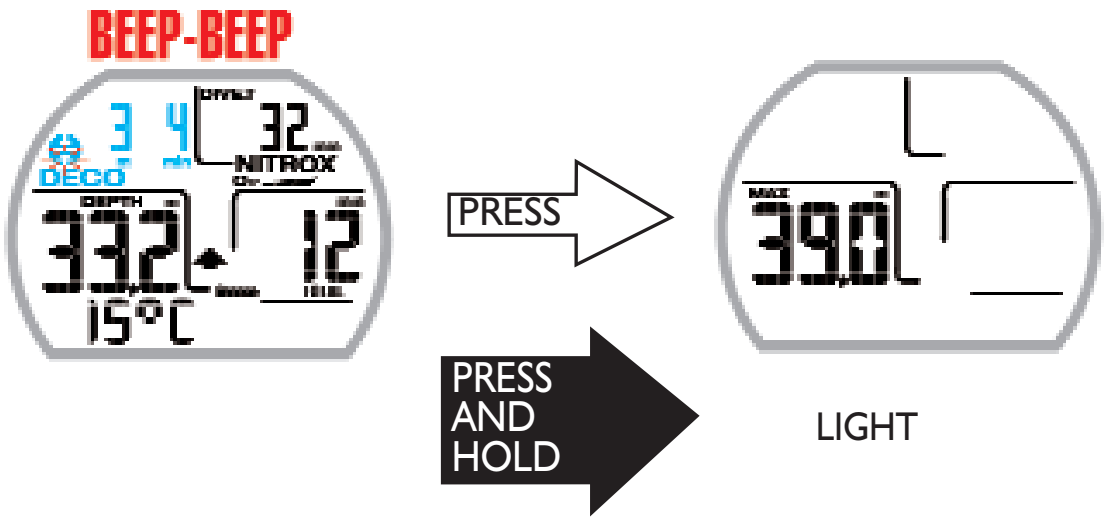
DECOMPRESSION WARNING

AIR

(im. 22)



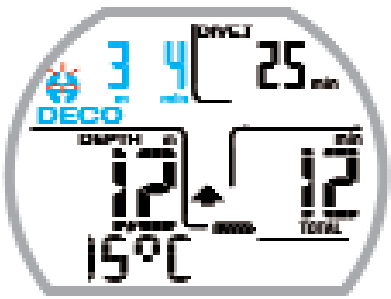
NITROX



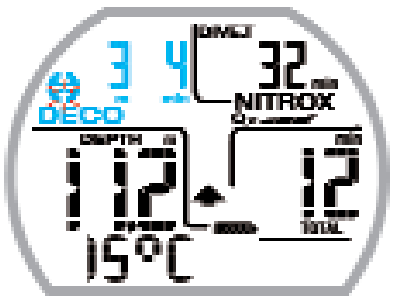
OMITTED DECOMPRESSION STAGE ALARM

(im. 23)

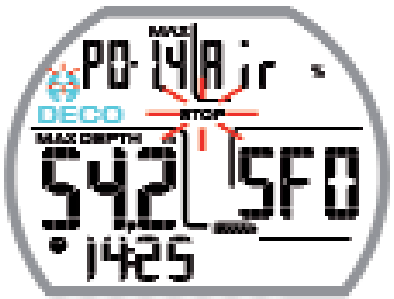
BEEP-BEEP



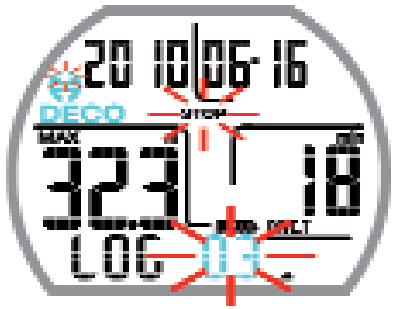
Deco depth not respected:
lower depth.



Deco depth not respected:
upper depth.



PRE DIVE



LOG BOOK

⚠ **WARNING:** Leonardo is designed for sport diving only. It is not intended for commercial or professional use, requiring longer dive times and greater depths. Diving beyond the parameters of sport diving dramatically increases the risk of decompression sickness.

⚠ **DANGER: Cressi discourages diving with gaseous mixtures other than air without proper training. The use of "technical" multi-gas mixtures may expose the diver to different risks than those of sport diving, including serious physical damages and, in extreme cases, death.**

If the GAGE function is enabled, the computer, if it has not been switched on with the button, automatically activates at depths below 4 ft. showing the following information on the display:

1) current depth value, in meters (m) or feet (ft.) The depth gauge operative range reaches a depth of 393 ft.
2) dive time, shown by the "DIVE T" icon, given by the timer in minutes and seconds.
3) maximum depth reached during the dive, displayed in meters (m) or in feet (ft.), shown by the "MAX" icon.
4) indicator of ascent rate (arrows).
5) GAGE computing program icon.
6) current temperature, expressed in °C or °F
7) battery state.

⚠ **WARNING:** The computer will not perform any saturation and de-saturation computation during the remaining 48 hours elapsing from the end of the dive performed with the GAGE function.

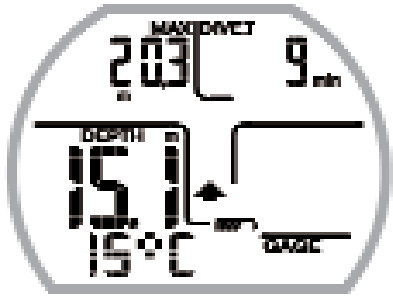
⚠ **DANGER: Should you decide to reset the instrument, the nitrogen memory will be cancelled. Therefore, the instrument will not be able to compute a subsequent dive as such. Before using this function, wait for at least 48 hours after the last diving activity.**

USE OF THE COMPUTER WITH POOR VISIBILITY (*im. 25)*

During your diving activity, light condition may not allow easy reading of the display, therefore, it is possible to switch on its backlight by pressing and holding the button. The display's backlight lasts for a few seconds, then automatically switches off.

GAGE FUNCTION

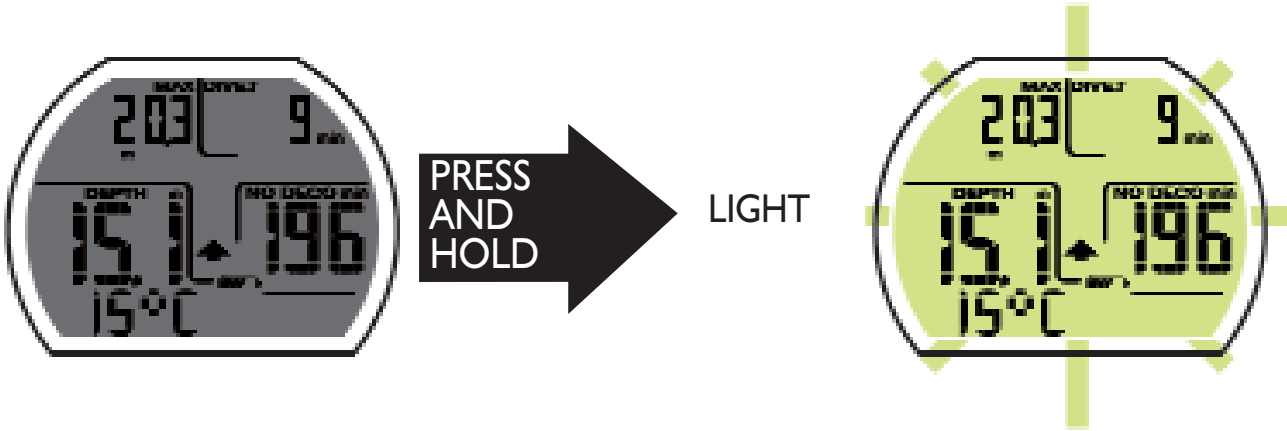
(im. 24)



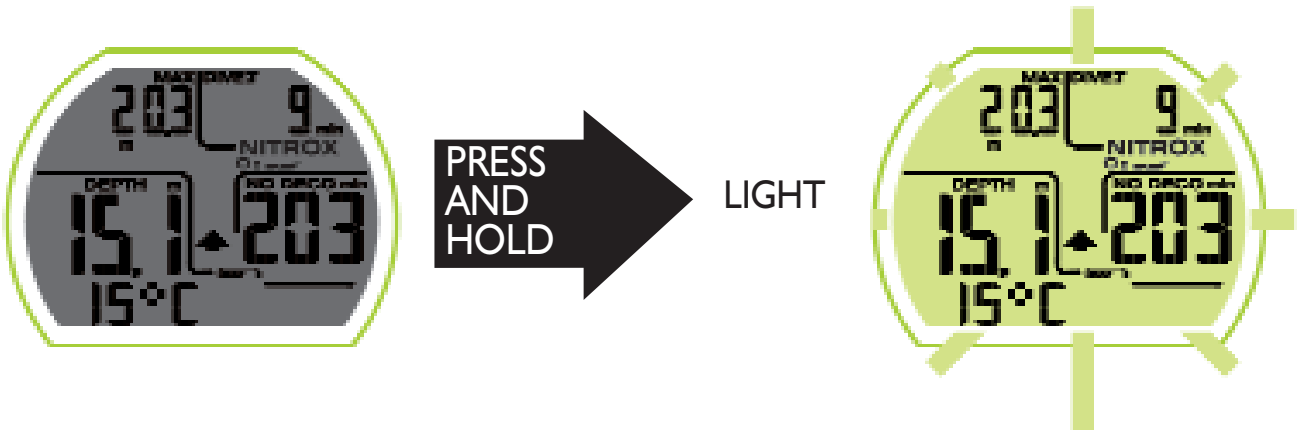
BACKLIGHT WHILE DIVING

AIR

(im. 25)



NITROX



4 - ON SURFACE AFTER DIVING

DATA DISPLAY AND MANAGEMENT

This chapter deals with all the "on surface" functions, including data processing after a dive with DIVE AIR, DIVE NITROX or GAGE function. By repeatedly pressing the button, it is possible to activate the following functions: LOGBOOK (dive log), HISTORY (dive history) and PCLINK (Data transfer to PC by means of interface).

SURFACE INTERVAL. *(im. 26)*

After a dive with DIVE AIR or DIVE NITROX, when you reach depths above 4 ft., the display provides the following information:

1) Surface interval given in hours and minutes (SURF.T)
2) Desaturation time (DESAT) to be respected before embarking on a flight (in hours and minutes).
2) NO FLY icon. It means that flights or travel to higher altitudes than the current altitude must be avoided, until the icon disappears.
3) Max depth reached in the latest dive.
4) Duration of the latest dive.
5) Alarms (if any) issued during dive (ascent rate, partial pressure of the oxygen)
6) Indication of the altitude (if applicable).
7) DECO indication (if applicable).
8) Nitrox indication and O2 toxicity bar if the latest dive has used Nitrox

⚠ **WARNING:** Following the indications of the major organizations which study diving and hyperbaric medicine, Leonardo applies the no flight times as follows: 12 hours after a single dive without decompression. 24 hours after a dive with decompression or after repetitive or multiday, if correctly performed.

48 hours after the use of the gage function or if severe mistakes in dive management occurred.

NOTE: Should a dive begin with less than 2 minutes of surface interval time, Leonardo will consider this a continuation of the previous dive; the dive's count and dive time computation will restart from where they had stopped. Dives carried out after at least 2 minutes of surface are considered as a new dive. The computer will not perform any saturation and de-saturation computation during the 48 hours (represented by the surface interval SURF.T.) elapsing from the end of the dive performed with the GAGE function.

PLAN FUNCTION - DIVE PLANNING. *(im. 27)*

The PLAN function takes into account the residual nitrogen in the tissues after the dive/s performed, changing the curve times and making them shorter than those indicated for the first dive.

NOTE: The PLAN function will be switched off in GAGE function (depth gauge/timer) and if the computer shows "error". After de-saturation, the computer switches off.

LOG BOOK FUNCTION - DIVE LOG *(im. 28 - 29)*

Leonardo by Cressi stores data about the latest 60 dives or 70 hours elapsed with the functions DIVE AIR, DIVE NITROX and GAGE. Data is recorded every 20 seconds in the LOG BOOK (dive log), which is activated on the surface by repeatedly pressing the button until the LOG icon is displayed. The latest dive will be displayed. To display the previous dives, press and hold until the dive number flashes. Then press the button to reach the desired dive. To display the second screen of the dive, press and hold the button. Data will be displayed for 20 seconds, then the computer automatically returns to the main screen. Press the button to extend the display time.

The LOGBOOK function enables to display, in two separate screens, a full range of information relating to the dives, starting with the most recent dive in chronological order. The main screen displays the following information:

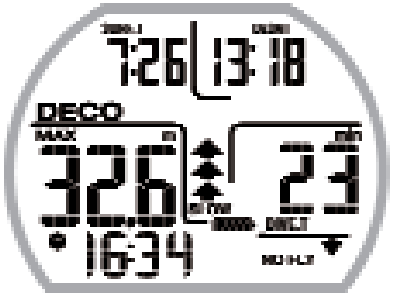
- Dive's year, month, and day.
- Dive number: the most recent dive's information are given first. When more than 60 dives are carried out, the oldest dives are deleted.
- Maximum depth reached during the dive (MAX).
- Total time of the dive in minutes (DIVE.T).
- Decompression dive (DECO).
- Indication of the altitude level of the dive.
- The NITROX icon will appear when a dive with enriched oxygen mixture has been carried out.

- Indicator of CNS O2 toxicity at the end of a dive with program DIVE AIR or DIVE NITROX.
- The display will display all icons relating to the alarms which have possibly engaged during the dive, such as: PO2 (PO2 alarm), SLOW (maximum ascent rate alarm) and so on.
- To display the second screen of the Logbook, press and hold the button. It displays the following data ***(im. 28-29)*.**
- Dive's starting time (the time when the computer has gone below 4 ft.), activating the function relating to the set computing program ("DIVE" or "GAGE");
- Mixture used for the dive with the function DIVE AIR or DIVE NITROX: if an air dive, AIR will appear, if a Nitrox mixture dive, the display shows respectively FO2 and NITROX.
- Water temperature.
- Safety Factor (SF 0-1-2).

SURFACE INTERVAL

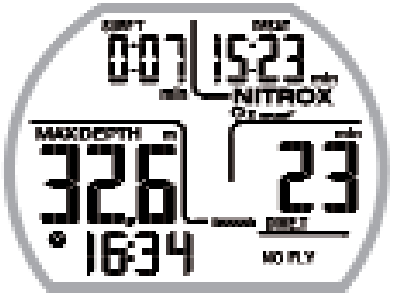
AIR

(im. 26)



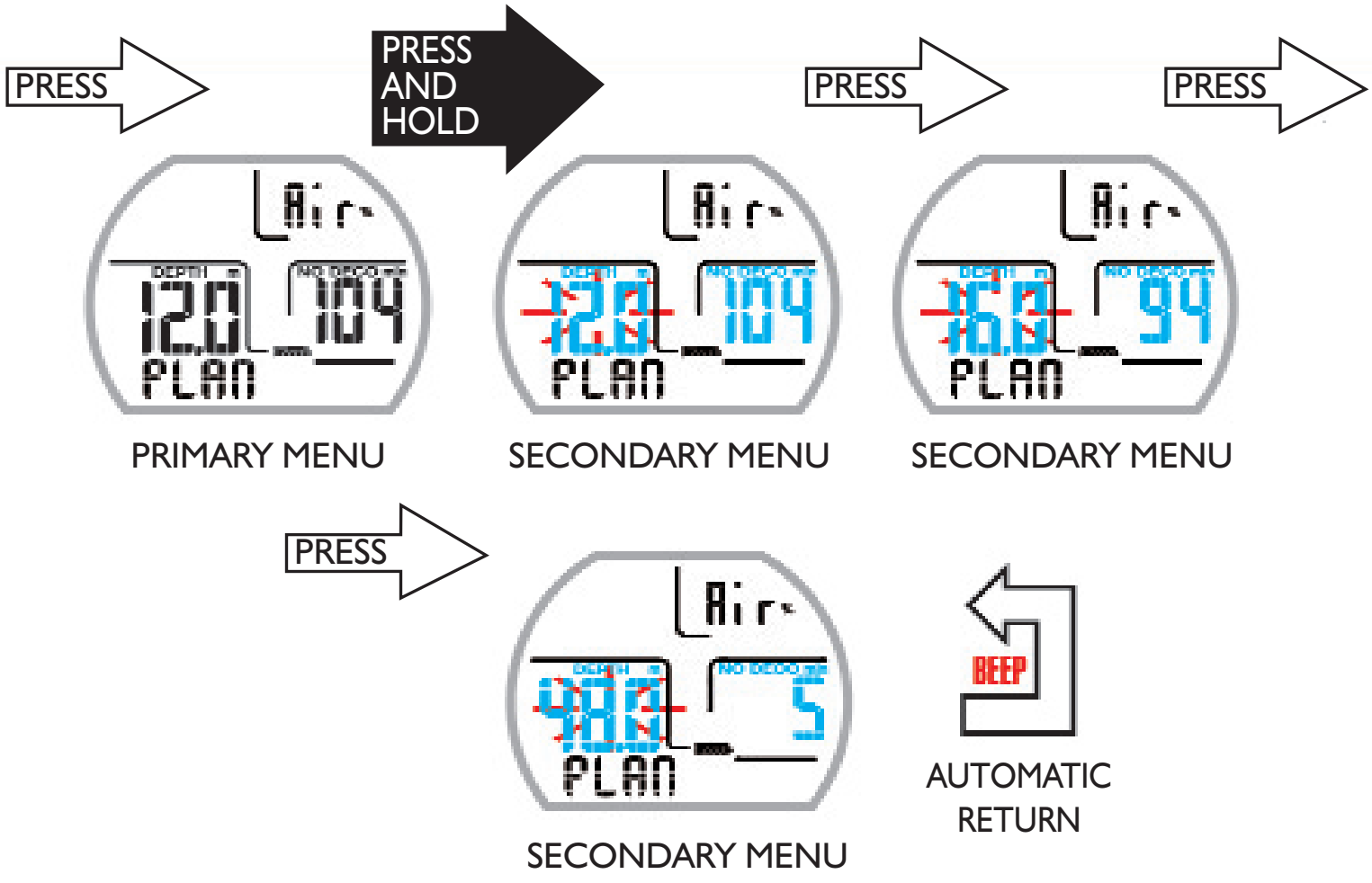
PRESS AND HOLD → LIGHT

NITROX



PLAN FUNCTION

(im. 27)



HISTORY FUNCTION - DIVE HISTORY *(im. 30)*

The computer is equipped with a dive history memory for DIVE AIR, DIVE NITROX, and GAGE dives. To access this function, repeatedly press the button until the HISTORY icon appears. The program will display the following information:

- Total time of all dives carried out, in hours (DIVE T.-h.)
- Maximum depth reached during all dives.
- Total number of dives (DIVE TOTAL).

The function is able to store up to 999 dives, after which it will reset the counter and restart from zero.

DIVE PROFILE FUNCTION - DIVE PROFILE

The detailed profile of the dives can be viewed by means of the software of the interface. A PC (Desktop or Notebook) is required. The display will automatically show any information relating to depth, time and decompression of the most recent dive stored in the logbook, therefore allowing to scan the dive's profile in detail. The data interval is 20 sec.

The display shows as well all the icons relating any alarm activated during the dive, such as: PO2 (PO2 alarm), SLOW (maximum ascent rate alarm), and so on.

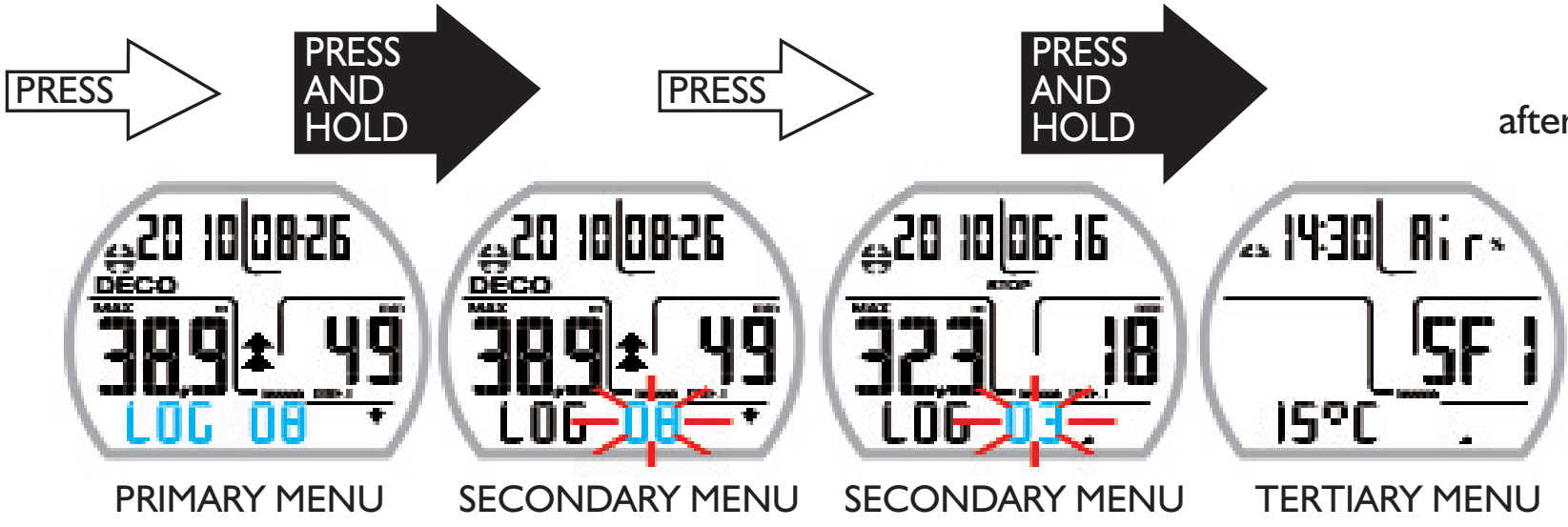
PCLINK FUNCTION - PC COMPATIBLE INTERFACE

Using the PC link function with the PC button, the Cressi Leonardo connects with your personal computer using an interface that you may purchase as a separate accessory. The interface will allow you to download and print all available data from your Leonardo, including dive profiles, and with this, you can modify the data using the dive simulator feature.

LOG BOOK

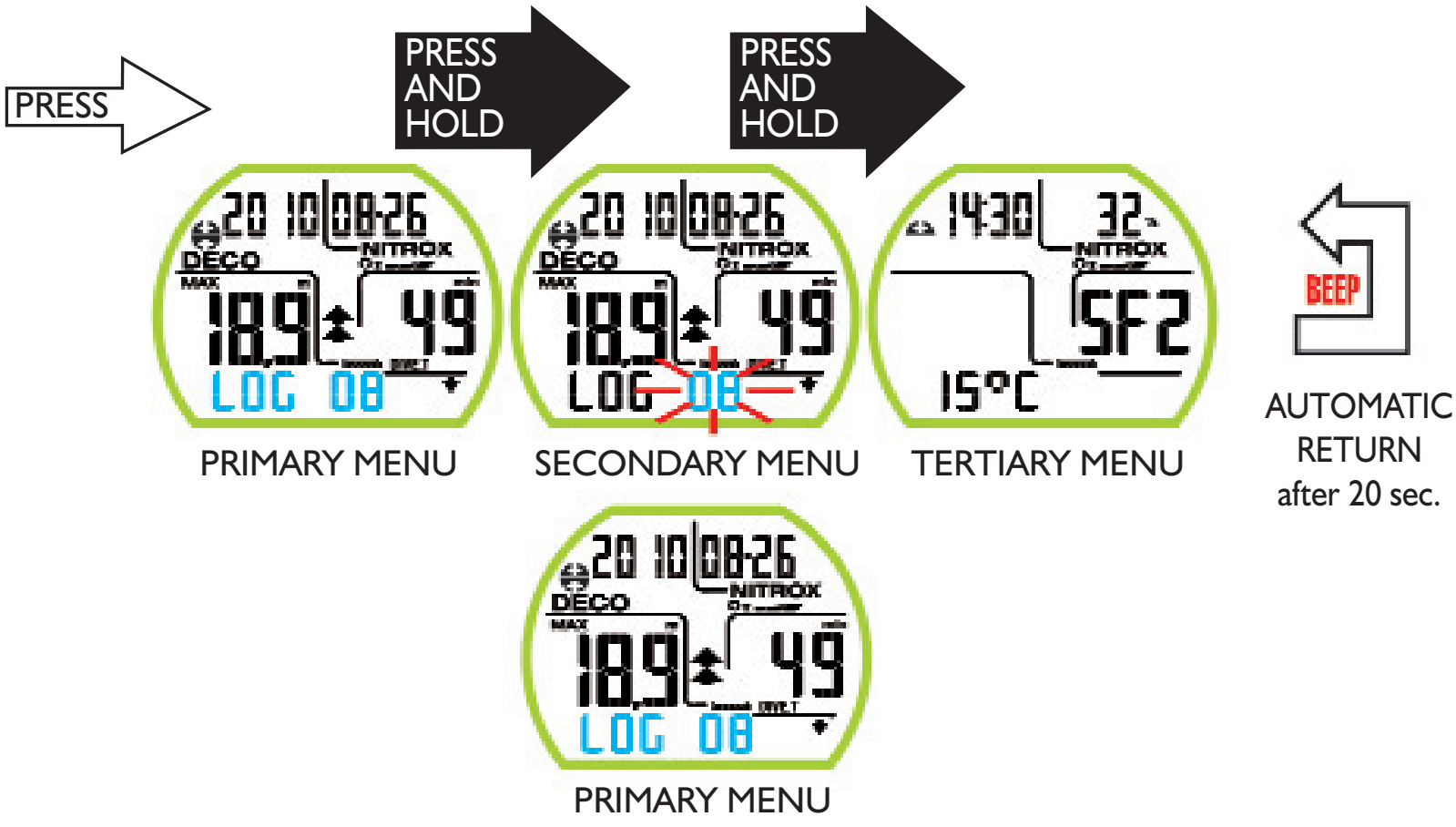
AIR

(im. 28)



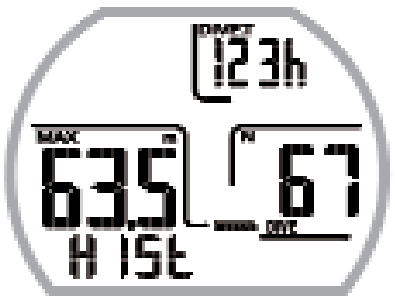
NITROX

(im. 29)


PRESS
PRESS AND HOLD
PRESS AND HOLD
20 10 08:26
NITROX
DECO
MAX
18.9
49
LOG 08
PRIMARY MENU
LOG 08
SECONDARY MENU
14:30
32
SF2
15°C
TERTIARY MENU
BEEP
AUTOMATIC RETURN after 20 sec.
PRIMARY MENU

HISTORY

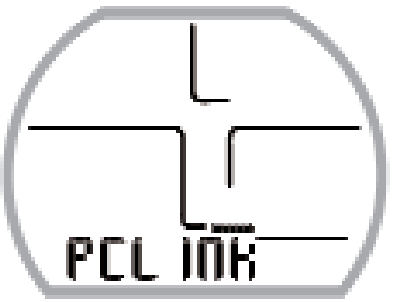
PRESS



PCLINK

(im. 30)

PRESS



SYSTEM RESET - RESET OF THE INSTRUMENT

By resetting the instrument, all the computations related to the current de-saturation are reset. Dive logbook, profile and history remain stored in the memory even after the instrument's reset. The settings return to the factory default. Such function may be especially useful in case of instrument's renting by Diving Centres.

⚠ **DANGER: Do not reset your instrument if it has to be used to compute subsequent dives!**
The procedure to perform this operation has already been explained in the chapter "Before diving".

5 - CARE AND MAINTENANCE.

Leonardo by Cressi has been designed to operate in extreme conditions with extensive underwater use. You should remember that it is a precision instrument deserving appropriate care. Please avoid any violent shock, protect it from extreme heat sources, always wash it in fresh water after using, dry it carefully, do not store it wet, and avoid contact with heavy equipment, like diving cylinders.

⚠ **WARNING:** avoid contact between the computer and solvents or chemical substances. Do not use compressed air to dry the computer. The button does not need any particular care; never grease with oil or spray of any kind.

NOTE: When replacing the battery, check its housing; should any signs of moisture be visible, please have the instrument checked by an authorized service centre.
Should you notice any anomaly in functioning, do not use the instrument to dive and have it checked by an authorized Cressi retailer.

BATTERY REPLACEMENT. (im. 33)

Replacing the battery is easily done by the consumer, not requiring special service. It must be done any time the instrument's display shows the run-down battery symbol. **(im. 33)**

⚠ **IMPORTANT:** do not use the computer when the flashing battery symbol is displayed with only one segment (Low Battery Warning - Fig. 33). If it is displayed during a dive, stop the dive and return to the surface. When the low battery symbol is displayed, we recommend against using the computer for other dives and causing the computer to switch off due to a completely flat battery.

⚠**IMPORTANT:** After replacing the battery, we recommend switching the computer on immediately: if the PRE DIVE screens do not appear on the display (fig. 31 and fig. 32), we recommend that you DO NOT use the computer for other dives and contact our assistance center.

PRE DIVE SCREENS:

AIR

(Im.31)

NITROX

(Im.32)

⚠ **WARNING:** by replacing the battery, all information relating to de-saturation, time and date will be cancelled. Reset the time and date, in order to get correct entries in your computer's logbook. Please do not replace the battery when de-saturation is in progress, since all information relating to de-saturation computing would be cancelled. In this case, please check the amount of de-saturation hours and do not dive after battery replacement during a corresponding amount of hours. After battery replacement, all settings go back to the latest value set by the user. Time and date must be reset.

To replace the battery, unscrew the battery cover on the back of the instrument, using a coin. Remove the lid and check the battery and its housing. Should you note traces of corrosion due to water entry, have the instrument checked by an authorized Cressi retailer. If everything appears in good condition, remove the battery from its housing by holding the computer face down. Replace the battery complying with its polarity (an incorrect polarity may damage the instrument). Before closing the cover, check that there is no soiling on its seat and apply a thin layer of silicone grease to battery cover seal.

NOTE: Different factors affect the battery life. For example: time of storage before acquiring the instrument, dive time, use of backlight, battery's quality (whose average life depends on temperature and other factors).

NOTE: Do not over tighten the battery cover! Over tightening of the cover does not create a better seal; to the contrary, it can result in cracking of the cover or difficulty in removing the cover in the future.

NOTE: Make sure that the instrument is watertight!

⚠ **WARNING:** Any anomaly or water infiltration due to incorrect battery replacement will void the warranty.

RUN-DOWN BATTERY WARNING

BEEP-BEEP

(im. 33)

6 - TECHNICAL SPECIFICATIONS.

Algorithm: CRESSI RGBM algorithm.
Sample tissues: 9 with saturation hemi-phases between 2.5 and 480 minutes
Dimensions and weight: Diameter: 67 mm - Height: 27 mm - Weight: 135 g
Depth sensor:
- Sea water setting (fresh water depths are about 3% lower)
- Measuring field: 0-393 ft., measured every second.
- GAGE function measuring field: 0-393 ft.
- Precision: +/- 1% (T 20°C – 68 F).
- Reading resolution: 10 cm (0 to 100 m) / 1 m (100 to 120 m) / 1 ft (0 to 316 ft)
- Dive time: 0 to 255 minutes
- Data acquisition frequency: 20 sec.

THERMOMETER:
- Resolution: 1 °F
- Measuring field: 23 °F + 104 °F
- Precision: +/- 35.6 °F/10min change °T

WATCH:
- Precision: +/- 50 seconds month average
- 24 hours display

BATTERY:
CR 2430 - 3V battery. 2 years average life (by 50 yearly dives).

NOTE: Different factors affect the battery average life. For example: time of storage before acquiring the instrument, dive time, use of back-illumination, battery's quality itself (whose average life varies according to temperature).

7 - WARRANTY.

CRESSI LIMITED WARRANTY FOR CRESSI UNDERWATER COMPUTERS AND RELATED ACCESSORIES

Important notice: this warranty does not limit the statutory rights granted to the consumer by the applicable National Laws concerning the sales of consumer products.

Cressi provides this limited warranty to the purchaser of the Cressi underwater computer and of the related accessories (product).

During the warranty period, Cressi, or a Cressi authorized service centre, according to their exclusive judgement, will remove any defect in terms of material, design and workmanship, free of charge, by means of repair or replacement of the product according to this limited warranty.

This limited warranty is valid and effective exclusively in the country where the product has been purchased, provided that Cressi has provided for the sale of the product in such country. However, in case of purchase of the product in one of the member states of the European Union, in Iceland, Norway, Switzerland and Turkey and if Cressi has originally foreseen the sale of the product in one of these countries, this limited warranty is valid and effective in all these countries.

Limitations to the service provided by this warranty could be caused by the presence in the products of specific items for a country.

For countries not belonging to the European Union, different from Iceland, Norway, Switzerland and Turkey, provided that the purchaser agrees to pay a service fee and a refund for shipping expenses borne by Cressi or by a Cressi authorized centre, it is possible to obtain

the service foreseen by the warranty in country different from that where the product has been purchased. In that case, any spare part will be provided free of charge.

Warranty period

The warranty period starts form the retail purchase date by the first purchaser.
The product can consist of several components which may be covered by a different warranty period, notably this limited warranty is valid for a period of:

A) two years for underwater computers
B) one year for consumables and accessories, including, but not limited to, watchbands, buckles, etc. (either in bundle with the underwater computer or sold separately).
Within the limits allowed by the applicable National Laws, the warranty period will not be extended or renewed or changed in any way following a later resale, product repair or product replacement authorized by Cressi. However, the parts of the product repaired or replaced during the warranty period, or the replaced product are warranted for the remaining original warranty period or for three months from the repair or replacement date, depending on which period is longer.

How to avail of the warranty services

If you want to submit a claim according to this limited warranty, contact your Cressi authorized dealer for information about claim submission; information will be provided about how to request the application of the warranty to your product.
If you want to return the product by shipping it to your authorized Cressi dealer, make sure that shipping is prepaid.

The validity of the claims submitted according to this limited warranty is subject to notification to

Cressi or to a Cressi authorized service centre of the alleged defect within a reasonable time form its observation, however not beyond the expiry of the warranty period.

For any claim, based on this limited warranty, it is necessary as well to provide one's name and address, the purchase proof which shall clearly indicate the name and address of the seller, the date and place of purchase and the type of product. The request of repair under warranty will be satisfied free of charge by Cressi or by a Cressi authorized service centre, according to their exclusive judgement, and the product will be repaired or replaced within a reasonable time.

If the product is deemed non compliant with the terms and conditions of this limited warranty, Cressi or a Cressi authorized service centre reserve the right to charge service and/or repair costs.

Other important notes

In case of product repair or replacement, the data and contents stored in it may get lost. Cressi or a Cressi authorized service centre will not be liable for any damage or loss of contents or data during Product repair or replacement.

Cressi recommends to make back-ups or to take written note of each important content or data stored in the product.

The Product or part of it, when replaced, will become property of Cressi. In case a refund is granted, the related product must be returned to a Cressi authorized service centre, since it becomes a property of Cressi and/or the Cressi authorized centre.

In case of repair or replacement of the Product, Cressi or a Cressi authorized service centre, can use new, as new or repaired products or parts.

Exclusions and limitations

This limited warranty does not cover:

1. a) product deterioration due to standard wear, b) defects caused by improper use (including, but not limited to, defects caused by sharp objects, bending, compression, fall, shocks, etc.) c) defects or damages due to improper use of the product, including use non compliant with the instructions provided by Cressi (e.g. those indicated in the instruction manual of the product) d) defects caused by other events not depending on Cressi;
2. user manuals or software by third parties (even if included in the package or sold together with Cressi hardware), settings, contents or data, either provided with the product or obtained by means of download or provided together with installation, assembly, shipping or other stage of the supply chain or otherwise purchased by the buyer;
3. defects or alleged defects caused by the use or connection of the product, with any accessory, software e/o service not produced or provided by Cressi or by using the product differently from the intended use;
4. replaceable batteries.

This limited warranty is void in the following cases:

1. if the Product has been opened, changed or repaired by personnel not belonging to Cressi or a Cressi service centre;
2. if the Product has been repaired using non authorized spare parts;
3. if the Product has been exposed to chemical substances such as (including, but not limited to) insect repellents.

Cressi does not guarantee uninterrupted or error free operation of the Product or that the Product will operate in combination with other hardware or software provided by third parties.

Limitation of Cressi liability

THIS LIMITED WARRANTY IS THE ONLY AND EXCLUSIVE APPEAL INSTRUMENT AVAILABLE FOR THE PURCHASER AND REPLACES ANY OTHER WARRANTY, EITHER EXPLICIT OR IMPLICIT.
HOWEVER, THIS LIMITED WARRANTY DOES NOT PREJUDICE THE RIGHTS GRANTED BY THE APPLICABLE NATIONAL REGULATIONS. CRESSI SHALL NOT BE LIABLE FOR SPECIAL, INCIDENTAL, PUNITIVE OR CONSEQUENTIAL DAMAGES, INCLUDING, BUT NOT LIMITED TO, LOSS OF PROFITS OR FORESEEN BENEFITS, LOSS OF SAVINGS OR INCOME, DATA LOSS, PUNITIVE DAMAGES, UNSUCCESSFUL USE OF THE PRODUCT OR ASSOCIATED EQUIPMENT (IF ANY), COST OF THE CAPITAL, COST OF THE REPLACEMENT

EQUIPMENT OR STRUCTURES, DOWNTIME, CLAIMS BY THIRD PARTIES, INCLUDING CUSTOMERS AND DAMAGES TO PROPERTIES CAUSED BY THE PURCHASE OR USE OF THE PRODUCT OR RESULTING FROM BREACH OF WARRANTY OR CONTRACT, NEGLIGENCE, ABSOLUTE RESPONSIBILITY OR OTHER LEGAL MEANS, EVEN IF CRESSI KNEW THE PROBABILITY OF SUCH DAMAGES. CRESSI SHALL NOT BE LIABLE FOR DELAYS IN THE PROVISION OF THE SERVICE TO WHICH THIS LIMITED WARRANTY REFERS OR OF THE IMPOSSIBILITY OF USE DURING THE PRODUCT REPAIR PERIOD.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Note:

CRESSI
SINCE 1946
Via Gelasio Adamoli, 501 - 16165 - Genova - Italia
Tel. (0) 10/830.79.1 - Fax (0) 10/830.79.220
E.mail: info@cressi-sub.it
www.cressi.com