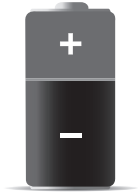
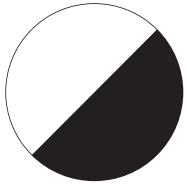
CRESSI

SINCE 1946

CARTESIO/ NEON GOA

USER MANUAL

LONG LIFE	HIGH CONTRAST	WIDE DIAMETER	EASY ACCESS	MULTI MODE
				AIR EAN GAGE FREE
BATTERY	DISPLAY	DISPLAY	MENU	

MADE IN ITALY BY
CRESSI ELETTRONICA

Cressi congratulates you on the purchase of your GOA/CARTESIO/NEON scuba dive watch-computer, specially designed so that you can rely on maximum efficiency, safety and reliability at all times.

MAIN CHARACTERISTICS

WATCH

- 12/24 time format with minutes and seconds.
- Calendar.
- Precision stopwatch.
- Second time setting.
- Alarm clock.

SCUBA DIVE COMPUTER

- CRESSI RGBM algorithm. A new algorithm born of Cressi's collaboration with Bruce Wienke, is based on the Haldane model and uses RGBM factors for safe decompression computations in repeated multi-day diving.
- Tissues: 9 with saturation half times of between 2.5 and 480 minutes.
- "Dive" program: Processor handling all dive data, and decompression data too, as applicable, for each Air and EAN (Enhanced Air Nitrox) dive made.
- Possibility to use two different Nitrox hyper-oxygenated mixes selectable during the same dive (CARTESIO/NEON only).
- Complete setting of oxygen percentage (%O2) and partial pressure of oxygen (PO2) parameters, with possibility to set PO2 between 1.2 bar and 1.6 bar and %O2 between 21% and 50% for the first mix, and between 21% and 99% for the second (CARTESIO/NEON only).
- Possibility to make a Nitrox dive after a dive with air (even with desaturation underway).
- Possibility to turn the Deep Stop function On and Off.
- **GAGE** function for dives without decompression calculation and resettable depth.
- **FREE** function for free dives, with alarm disabling function.
- Display with "PCD System" for perfect understanding and legibility of the values.
- Battery replacement by the user.
- Dive planning with manual scrolling of the safety curve.
- Possibility to change the units of measure, from metric system (metres - °C) to the imperial system (ft.-°F).
- Acoustic and visual alarms.
- Graphic indicator of CNS toxicity level of oxygen.
- High efficiency backlit display.
- Logbook with possibility to store up to 50 dives per type.
- Historic dive memory.
- Possibility to reset desaturation – useful for renting purposes.
- PC/Mac interface with general data and dive profiles (option).

GENERAL WARNINGS AND SAFETY STANDARDS.

IMPORTANT: read the instructions. Read this user manual carefully, including the paragraphs on safety regulations. Make sure you have understood the use, the functions and limitations of your instrument before using it! DO NOT use your instrument without first having read this booklet in its entirety!

IMPORTANT: This instrument should be regarded as a diving aid: it does replace the use of dive tables.

⚠ **DANGER**: NO DIVE COMPUTER CAN PROVIDE FULL PROTECTION AGAINST DECOMPRESSION SICKNESS (DCS) (EMBOLISM). IT MUST BE CLEARLY UNDERSTOOD THAT A DIVE COMPUTER CANNOT TOTALLY RULE OUT THE DCS RISKS. A COMPUTER, IN FACT, CANNOT TAKE INTO ACCOUNT THE PHYSICAL CONDITIONS OF EACH SCUBA DIVER, SINCE SUCH CONDITIONS MAY UNDERGO CHANGES ON A DAILY BASIS, ACCORDINGLY, PRIOR TO UNDERTAKING ANY ACTIVITY, IT IS ADVISABLE TO UNDERGO A CAREFUL MEDICAL EXAMINATION, AND YOU SHOULD ASSESS YOUR FITNESS BEFORE ANY DIVE. KEEP IN MIND THAT CIRCUMSTANCES LEADING TO A HIGHER RISK OF DCS MAY ALSO INCLUDE COLD WEATHER (TEMPERATURES BELOW 10° C), NON-OPTIMAL PHYSICAL CONDITIONS, REPEATED DIVES PERFORMED OVER SEVERAL DAYS, FATIGUE, CONSUMPTION OF ALCOHOLIC BEVERAGES, DRUGS OR MEDICATIONS, DEHYDRATION. IT IS GOOD PRACTICE TO AVOID SUCH SITUATIONS AND ANY CONDITION THAT COULD PUR YOUR SAFETY AT RISK: EACH PERSON SHOULD ASSUME RESPONSIBILITY FOR HIS/HER SAFETY!

IMPORTANT: this instrument should be used solely by patented scuba divers, as no computer can replace extensive underwater training. Keep in mind that safety during a dive can only be ensured by appropriate training.

IMPORTANT: Cressi's GOA/CARTESIO/NEON computer has been designed solely for amateur sports uses, not for professional uses that require prolonged diving times, with the ensuring increase in the DCS risks.

IMPORTANT: carry out preliminary checks before using the computer: check battery charge and the status of display indications. Do NOT dive if the indications appear unclear or faded and, above all, if the "battery low" icon appears on the display.

IMPORTANT: when you dive, you should also take along a depth gauge, a manometer, a timer or a watch, and your decompression tables. Make sure the pressure in the cylinders is appropriate to the dive you are planning to make, check the quantity of air in the cylinders frequently by means of the manometer.

⚠ **DANGER**: DO NOT DIVE AT HIGH ALTITUDES WITHOUT FIRST HAVING SET THE CORRECT ALTITUDE LEVEL. CHECK THE ALTITUDE ON THE DISPLAY. REMEMBER THAT DIVING AT ALTITUDES OF OVER 9842 FT ABOVE SEA LEVEL ENTAILS AN APPRECIABLE INCREASE IN DCS RISKS.

⚠ **DANGER**: BEFORE FLYING, WAIT FOR THE "NO FLY" ICON TO DISAPPEAR FROM THE DISPLAY OF YOUR COMPUTER.

IMPORTANT: the use of this instrument is strictly personal; the information it supplies, in fact, applies solely to the person who has used it during a dive or a series of dives.

⚠ **DANGER**: CRESSI DOES NOT RECOMMEND USING THIS INSTRUMENT IN DECOMPRESSION DIVES. HOWEVER, IF FOR ANY REASON YOU WERE FORCED TO EXCEED THE DECOMPRESSION LIMITS, YOUR GOA/CARTESIO/NEON COMPUTER WOULD BE ABLE TO PROVIDE ALL THE NECESSARY INFORMATION ON DECOMPRESSION, SURFACING AND THE RELATIVE SURFACE INTERVAL TIMES.

IMPORTANT: do not dive with cylinders containing Nitrox mixes without first having checked personally their contents and oxygen percentage (%O2). Then set the mix value on your computer, so that it might make the decompression computations. Keep in mind that the computer will only accept %O2 values rounded to the nearest whole number.

IMPORTANT: Before diving, always check the parameter settings on your computer.

⚠ **DANGER**: GOA/CARTESIO/NEON always retains the last oxygen percentage you set. It is essential for your safety to verify this parameter before diving.

⚠ **DANGER**: CRESSI ADVISES AGAINST DIVING WITH NITROX WITHOUT FIRST HAVING COMPLETED A SPECIFIC COURSE ON THIS TYPE OF DIVE. NITROX DIVES, IN FACT, MAY EXPOSE A DIVER TO DANGERS OTHER THAN THOSE ASSOCIATED WITH AIR DIVES, WHICH MAY ENTAIL SEVERE PHYSICAL INJURIES AND, IN EXTREME CASES, EVEN DEATH.

⚠ **DANGER**: TO BE ON THE SAFE SIDE, THE GOA/CARTESIO/NEON COMPUTER COMES WITH THE PO2 PARAMETER VALUE SET TO 1.4 BAR BY THE MANUFACTURER, EVEN FOR AIR DIVES. IT IF PROVES NECESSARY TO INCREASE THE SAFETY MARGIN EVEN FURTHER, YOU CAN SET THIS PARAMETER TO LOWER VALUES, DOWN TO 1.2 BAR, IN DECREMENTS OF 0.1 BAR.

IMPORTANT: after a dive made with GOA/CARTESIO/NEON in GAGE mode (depth gauge-timer), the instrument will not perform saturation and desaturation computations for the following 48 hours.

IMPORTANT: avoid all types of high risk profile dives, such as those with "yo-yo" or reverse profiles, or several repeated multi-day dives, which may be dangerous and entail a higher risk of DCS!

IMPORTANT: At present, no validated scientific literature permits making more than two dives per day over periods of one or two weeks without entailing a DCS risk. Hence you should not exceed the limit of two dives per day. It is also advisable to take a rest period of at least 2 hours between one dive and the next.

IMPORTANT: whenever you become aware of any factor that could increase the risk of DCS (decompression sickness), select and set the most conservative Safety Factor (SF1 and SF2), for a safer dive.

NOTE: on a plane flight, take the instrument with you in the pressurized cabin.

NOTE: Cressi underscores that sport dives should always be made within the safety curve and to a max. depth of 40 m, which is the limit depth for sport dives. Exceeding these limits greatly increases the risk of DCS.

FREE DIVING (APNEA DIVES)

IMPORTANT: when free diving, safety hinges on a person's capacity to make use of their theoretical and practical knowledge, rationally and cautiously, so as to avoid accidents. Hence, this instrument should be regarded as an aid in free diving, for use by persons fully aware of the risks entailed by this activity. It should be used only and exclusively after careful theoretical and practical training on the techniques and the hazards associated with free diving.

⚠ **DANGER**: IT SHOULD BE CLEARLY UNDERSTOOD THAT A DIVE COMPUTER CANNOT, AND IS NOT DESIGNED TO, RULE OUT THE RISK OF A SYNCOPE OR THE TARAVANA SYNDROME. ALL THE COMPUTER DOES, IN FACT, IS PROVIDE INDICATIONS ON SURFACE, DEPTH AND DIVING TIMES. THE INFORMATION SUPPLIED TO THE SCUBA DIVER SHOULD BE REGARDED AS USEFUL DATA, WHICH MAY BECOME SAFETY INFO ONLY UPON BEING EVALUATED AND PROCESSED BY THE HUMAN MIND. ACCORDINGLY, IN-DEPTH THEORETICAL TRAINING IS HIGHLY RECOMMENDED.

IMPORTANT: THIS INSTRUMENT SHOULD BE USED SOLELY BY CERTIFIED SCUBA DIVERS, AS NO COMPUTER CAN REPLACE EXTENSIVE UNDERWATER TRAINING. KEEP IN MIND THAT SAFETY IN APNEA DIVING IS ONLY ENSURED BY APPROPRIATE TRAINING.

IMPORTANT: CRESSI'S GOA/CARTESIO/NEON COMPUTER HAS BEEN DESIGNED EXCLUSIVELY FOR AMATEUR SPORT USES, NOT FOR PROFESSIONAL USE.

IMPORTANT: Make preliminary checks before using your computer, check battery charge and the status of the indications on the del display. DO NOT dive if the indications are unclear or faded and, especially, if the “battery low” icon appears on the display.

⚠**DANGER**: Before a plane fight or a stay at altitude, make sure you have not engaged in heavy apnea sessions during the last 48 hours.

IMPORTANT: Check the settings of the parameters on your computer before diving.

IMPORTANT: Deep free diving is a risky discipline and, in order to be practiced in full safety, it requires extensive practical and theoretical training. Hence, it is important to obtain a scuba diving certification from an accredited diving school. In any event, is it important to be aware of one's personal limits and to engage in this discipline well within such limits. Do not ever dive alone, and always have a companion ready to intervene if the need arises.

IMPORTANT: At present, there is no validated scientific literature providing a thorough explanation of the causes of the Taravana syndrome. Hence, for your health it is important that you do not engage in deep diving for hours on end with only brief surface intervals, and do not dive if you are not perfectly healthy. Always keep your body well hydrated, with a regular calorie intake.

NOTE: on a plane flight, take the instrument with you in the pressurized cabin.

Cressi reserves the right to make changes to the instrument without notice, based on the incessant technological upgrade of its components.

INTRODUCTION

The GOA/CARTESIO/NEON watch-computer by Cressi is a highly advanced recreational instrument, that can supply all the necessary information on depth, dive times, decompression needs, ascent rates and surface intervals between a dive and the next (AIR and NITROX).
Nitrogen absorption and release is continuously monitored by highly sophisticated software, which adjusts it to the amounts of inert gas contained in the various mixes used. This information appears on the computer display thanks to the PCD System (Priority Compartment Digit Display), which permits a simple and direct "dialogue" between the diver and the computer, ensuring a perfect understanding all the data necessary at all times and optimal legibility in any situation of use. The computer is equipped with a watch, a stopwatch and a calendar, and has a versatile dive memory (logbook). The mathematical model of GOA/CARTESIO/NEON can perform saturation and desaturation computations for dives made with air or with a hyper-oxygenated mix (Nitrox).
In the latter case, you can set all the parameters for the mix used: from the maximum admissible value of PO2 (of between 1.2 bar and 1.6 bar) to the oxygen percentage in the mix (%O2), of between 21% and 50% (GAS1) and between 21% and 99% (GAS2) (CARTESIO/NEON only).
Moreover, the instrument can be set by the user on either metric units (m -°C) or imperial units (ft.-°F).

The GOA/CARTESIO/NEON watch-computer can be connected to a personal computer through Cressi's ad hoc interface (an accessory) and the relative software (accessory). It is very important to read this user manual carefully and gain a precise understanding of the instructions contained herein, otherwise, a person's health may be endangered or even damaged severely. The aim of this manual is to help users understand all the functions of the computer, prior to using it in a dive. The GOA/CARTESIO/NEON watch-computer by Cressi is always active in watch mode and, unless it has been deliberately blocked, the dive computer mode may be activated by scrolling the menu by means of the UP ▲ / DOWN ▼ buttons till you reach the DIVE page. When diving, the dive mode is activated automatically at depths of over -1.2 m.

COMPUTER CONTROL

OPERATION OF THE GOA/CARTESIO/NEON WATCH-COMPUTER – WATH FUNCTION

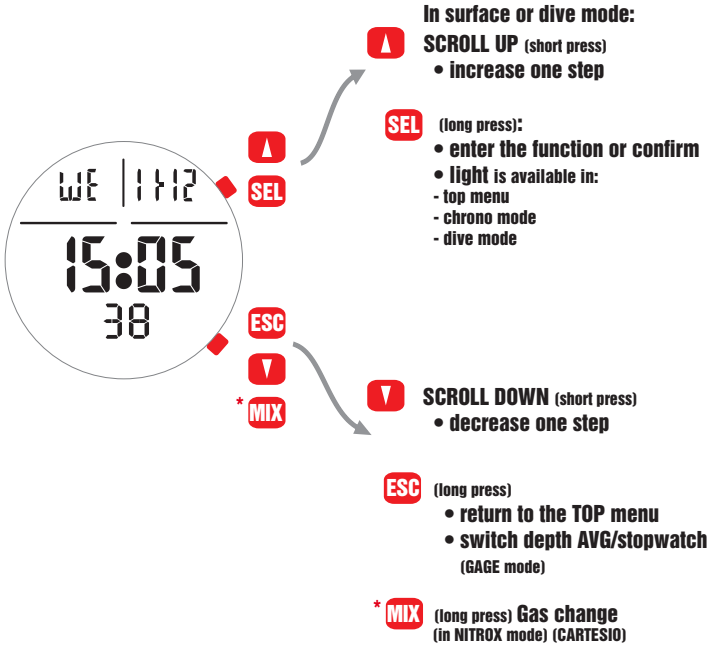
GOA/CARTESIO/NEON is equipped with a user-friendly multi-level circular menu, all in uppercase letters for improved legibility.

Functions of the buttons

UP button ▲ / SEL: when pressed briefly, this button lets you scroll through the various menus and set the parameters in incremental mode. If you keep it down, it lets you enter into the various menus and confirm the changes made.

When you press this button, and keep it down for a few seconds, in stopwatch or dive mode, the backlight is turned ON.

DOWN BUTTON ▼ / ESC **:** when pressed briefly, this button lets you scroll through the various menus and set the parameters in decremental mode.
If you keep it pressed down, it lets you exit the various menus.
When kept down for a long time in **NITROX** qdive mode, this button lets you make the GAS1/GAS2 change (CARTESIO/NEON only).
When pressed in **GAGE** mode, this button gives access to the depth stopwatch mode.

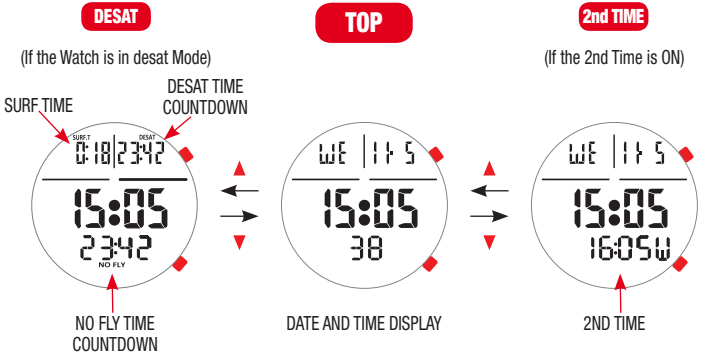


TOP MENU

In the standard screen, the watch shows the time and date as shown in the figure: In post dive mode, the date is replaced by surf, desat and no fly times.

However, it will still be possible to see the date, by pressing the UP ▲, button.

If you want to add another time zone (WORLD function), you can do so and view the desired time zone in lieu of the seconds.



MAIN MENU

From the TOP screen, using the up ▲ /down ▼ buttons you can scroll through the screens of the main menu

CHRONO → MODE-S → LOG → DIVE-S → TIME-S → PLAN → SYSTEM → DIVE

From each of these screens, by pressing the SEL button you may have access to the relative functions:

CHRONO (STOPWATCH)

From this screen, press SEL to access the CHRONO functions

To turn the stopwatch On and Off press the UP button ▲

To reset it (with the stopwatch off) press the DOWN button ▼

The first line of the display will read CHRO, the centre line shows the current time, and the last line shows the stopwatch data.

During the first 10 minutes, minutes, seconds and tenths of second are shown.

After 10 minutes, hours, minutes and seconds are displayed.

After 24 hours, the stopwatch is reset.

When you exit the CHRONO function, the data is retained until the following reset.

To exit the CHRONO mode, press the ESC button.

MODE-S (MODE-SET)

The MODE-S function lets you select the desired dive mode.

To access the MODE-S function, press the SEL button.

The first line will read SEL and will show the mode currently selected (flashing).

By means of the UP ▲ /DOWN ▼ buttons, you can select the various modes

- AIR for dives with air
- EAN for dives with enriched air (Enhanced Air Nitrox).
- FREE for apnea dives
- GAGE for the depth gauge/depth stopwatch function
- OFF (padlock 🔒) to turn off the pressure sensor (when swimming in a pool or when you do not want the computer to log your dives).

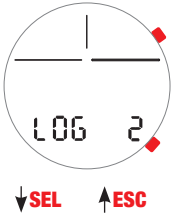
Confirm the desired mode by pressing the SEL button until you hear the confirmation beep.

Press the ESC button to go back to the main menu.

⚠ **NOTICE**: When the dive computer is OFF it is essential to enable it before each dive. For safety purposes, in fact, the computer will remain blocked during the dive and it can only be enabled by returning to the surface and raising it off the water. Once enabled, the computer will not consider the time elapsed until then. Accordingly, we recommend that you do not continue diving right away and wait 24 hours for complete desaturation.

LOG

From this screen, press the SEL button to access the dive log.

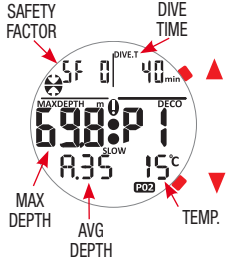


In the memory of GOA/CARTESIO/NEON you can log up to 50 dives of each type (air/ean-free-gage) with the relative pressure and temperature data.
After 50 dives, the oldest are progressively deleted. The dives are numbered in order of occurrence, from the most recent to the oldest.
NOTE: the logbook cannot be reset.

The first line shows the day, month and year of the dive.
The central line shows the start date.
In a dive in NITROX, FREE,GAGE modes, the relative icon will appear.
By pressing the SEL button, you can view the data relating to the dive.

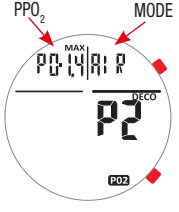
AIR LOG

The AIR dive log is comprised of 2 pages that may be scrolled with the UP ▲ / DOWN ▼ .
Page 1 shows:



- The safety factor SF (0/1/2)
- Total dive time DIVE.T (min)
- The maximum depth reached MAXDEPTH (m/FT)
- The number of the page you are consulting P(1/2)
- The average depth of the dive A. (m/FT)
- The minimum temperature of the dive (°C/°F)
- The mountain icon, when applicable
- The PPO2 set limit exceeded icon

Page 2 shows:

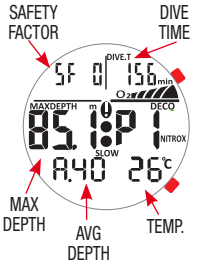


- The maximum value of partial pressure PP02 (1.2/1.6)
- Dive type (AIR)

LOG EAN (GOA)

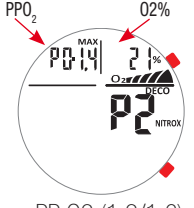
The EAN (NITROX) dive log is comprised of 2 pages that can be scrolled with the UP ▲ /DOWN ▼ button.

Page 1 shows:



- The AIR dive log is comprised of 2 pages that can be scrolled with the UP ▲ /DOWN ▼
- The safety factor SF (0/1/2)
- Total dive time DIVE.T (min)
- The maximum depth reached in the dive MAXDEPTH (m/FT)
- The number of the page you are consulting P (1/2)
- The average depth of the dive A.(m/FT)
- The minimum temperature of the dive °C/°F
- The mountain icon, as applicable
- The PPO2 set limit exceeded icon

Page 2 shows:

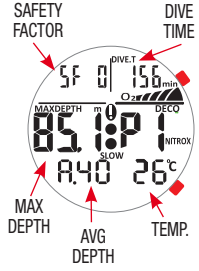


- The max. value of partial pressure PP O2 (1.2/1.6)
- The oxygen percentage in the mix (21/50%)O2

EAN LOG (CARTESIO/NEON)

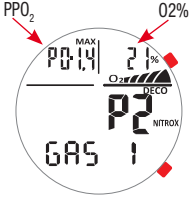
The EAN (NITROX) is comprised of 3 pages that may be scrolled with the UP ▲ / DOWN ▼ buttons.

Page 1 shows:



- The AIR dive log is comprised of 2 pages that can be scrolled with the UP ▲ /DOWN ▼.
- The safety factor SF (0/1/2)
- Total dive time DIVE.T (min)
- The number of the page you are consulting P(1/2/3)
- The max. depth reached in the dive MAXDEPTH (m/FT)
- The average depth of the dive A. (m/FT)
- The minimum temperature of the dive °C/°F
- The mountain icon, as applicable
- The PPO2 set limit exceeded icon

Page 2 shows:



- The max. value of partial pressure PP O2 (1.2/1.6) for GAS1
- The oxygen percentage in the mix (21/50%)O2 for GAS1

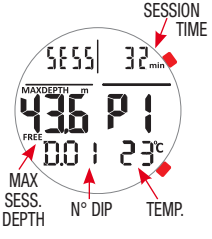
Page 3 shows:

- The max. value of partial pressure PP O2 (1.2/1.6) for GAS2
- The oxygen percentage in the mix (21/99%)O2 for GAS2

FREE dive LOG

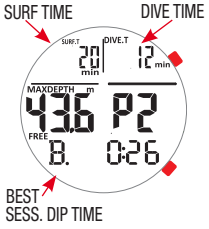
The FREE (apnea) dive log is comprised of 2 pages that you can scroll with the UP ▲ /DOWN ▼ buttons.

Page 1 shows:



- Total session time SESS (min)
- Max. depth reached in the session MAXDEPTH (m/FT)
- Number of the page you are consulting P(1/2)
- Progressive number of dives D.(01,02,03...)
- Minimum temperature of the session °C/°F

Page 2 shows:

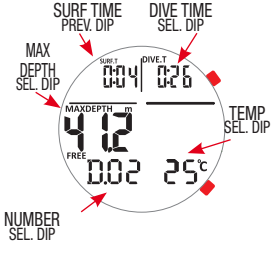


- Total surface time of the session SURF.T (min)
- Total dive time of the session DIVE.T (min)
- The time of the best dive in the session B.(min:sec)

Individual dip log:

Pressing the SEL button from one of the 2 pages of the FREE log gives access to the data relating to the individual dips.
In this log, by scrolling by means of the UP ▲ /DOWN ▼ buttons you can view the dips in this order with the relative data:

- Surface time of the previous dip, SURF.T (min)
- Time underwater for the dip shown, DIVE.T(min
- Max depth of the dip shown, MAXDEPTH (m/FT)
- Number of the dip shown, D. (01,02,03...)
- Minimum temperature of the dip shown, °C/°F

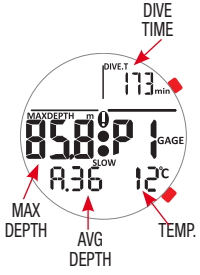


(The individual dip log can be viewed only for sessions with fewer than 100 dips). To view individual data in sessions with more than 100 dips, use the PC/MAC interface).

GAGE LOG

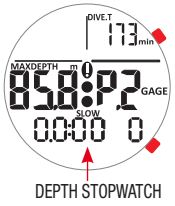
The GAGE dive log is comprised of 2 pages that you can scroll with the UP ▲ / DOWN ▼ buttons.

Page 1 shows:



- Dive time DIVE.T (min)
- Max. depth reached in the dive MAXDEPTH (m/FT)
- Number of the page you are consulting P(1/2)
- Average depth of the dive A.(m/FT)
- Minimum temperature of the dive °C/°F

Page 2 shows:



- The time recorded by the depth stopwatch

DIVE-SET: Setting your dive parameters. AIR / NITROX / NITROX (GOA) NITROX GAS1-2 (CARTESIO/NEON)

Once the MODE SET (MODE-S) menu, has been set to AIR, NITROX mode, you can change the parameters by accessing the DIVE SET (DIVE-S) menu.
Press the SEL button to access the dive-set menu.
The parameters that may be changed through the DIVE-S menu in AIR/NITROX mode are:
DEEPSTOP - SAFETY FACTOR (SF) - ALTITUDE (ALT) – OXYGEN PARTIAL PRESSURE (PPO2) – OXYGEN PERCENTAGE (%O2 NITROX MODE) – PARTIAL PRESSURE OF GAS2 (CARTESIO/NEON only) – OXYGEN PRESSURE GAS 2 (CARTESIO/NEON only).

DEEP STOP

In the world, there are different scuba diving teaching methods and different decompression theories, each of which was developed on the basis of scientific evidence, laboratory tests and practical experience. According to some of them, during the course of specific dives, a DEEP STOP is required, whilst other approaches do not contemplate a decompression profile of this type. GOA/ CARTESIO/ NEON is set in the factory with the DEEP STOP function active.
The DEEP STOP icon shows that that the deep stop function is ON. Press the SEL button to turn the deep stop function On and Off, until you hear the confirmation beep.

SF (SAFETY FACTOR)

The Safety Factor is an additional parameter that makes diving safer in the presence of personal factors making for a higher DCS risk. It can be set by the diver to three different values: SF0/SF1/SF2. The default setting by the manufacturer is SF0, i.e., Off.

To change the Safety Factor (SF) press the SEL button and adjust the factor as desired by means of the UP ▲ /DOWN ▼ SEL buttons (SF0/SF1/SF2). Confirm by pressing the SEL BUTTON until you hear the confirmation beep.

ALT (ALTITUDE)

When diving at high altitude, adjust the computer as follows: Press the SEL button and use the UP ▲ /DOWN ▼ buttons to enter the altitude value. Press SEL until you hear the confirmation BEEP.
The display icons show the following altitude levels:
No mountain: - from 0 to 700 m;
1 mountain: - from 700 to 1500 m;
2 mountains: - from 1500 to 2400 m;
3 mountains: - from 2400 to 3700 m

Each icon shows that the computer has changed its mathematical model as a function of the new altitude setting.
Needless to say, the value entered must correspond to the actual altitude reached and must be comprised in the altitude ranges provided for by the computer (none, one or two or three mountains). Keep in mind that when you move to a higher altitude than you are accustomed to, your body undergoes changes due to oversaturation with nitrogen, and has to find a new balance with the exterior environment. Similarly, you should keep in mind that on account of reduced oxygen partial pressure in the atmosphere, your body needs a certain acclimatization time. Thus, after reaching a location at high altitude, you should wait at least 12/24 hours before diving.

⚠**DANGER**: GOA/CARTESIO/NEON does not manage dives at high altitudes automatically and therefore it is essential that you set the correct altitude level and respect the required acclimatization time before diving.

⚠**DANGER**: Diving at an altitude of over 9842 ft. a.s.l. entails an appreciable increase in DCS risk.

OXYGEN PARTIAL PRESSURE P02

GOA/CARTESIO/NEON is set in the factory to a basic oxygen partial pressure value (PO2) of 1.4 bar both for Air dives and for Nitrox dives, whether using one mix (GOA) or two mixes (CARTESIO/NEON), so as to ensure maximum safety during any type of dive.
If it proves necessary to increase the safety margin for a dive, you can set PO2 to lower values, down to a minimum of 1.2 bar.
Setting oxygen partial pressure (PO2) AIR, NITROX (GOA): In the PPO2 screen press the SEL button to access the function. The value of partial pressure will begin to flash.
Press the UP ▲ / DOWN ▼ buttons until you reach the desired partial pressure setting.

Press SEL to confirm until you hear the confirmation beep.
Press ESC to quit the function.
Setting the oxygen partial pressure (PO2) NITROX GAS1/GAS2 (CARTESIO/NEON):
In the PPO2 GAS1 screen, press the SEL button to access the function.
The value of partial pressure will begin to flash.
Press the UP ▲ /DOWN ▼ buttons until you set the desired partial pressure.
Press the SEL button until you hear the confirmation beep.
Press the UP ▲ /DOWN ▼ buttons to go to the PPO2 GAS2 screen.
In the PPO2 GAS2 screen, press the SEL button to access the function.
The value of partial pressure will begin to flash.
Press the UP ▲ /DOWN ▼ buttons until you set the desired partial pressure.
Press SEL to confirm until you hear the confirmation beep.
Press ESC to exit the function.

IMPORTANT: The computer retains the last value of PO2 entered until it is changed manually by the diver to a different value.

NOTE: When the set value of max PO2 and the oxygen percentage in the %O2 mix are changes, the computer shows the max. depth that can be reached.

IMPORTANT: PO2 is set in the factory to a basic (default) value of 1.4 bar, both for Air dives and for dives with Nitrox mixes. In this manner, your dive is protected by adopting the most conservative values recommended for sport dives. However, it is possible to choose a different value of PO2, as described in the chapter on Nitrox dives. The value set will remain stored in the computer until it is set to a new value by the diver.

OXYGEN PERCENTAGE (NITROX) GOA

In the %O2 screen, press the SEL button to access the function.
The oxygen percentage value will begin to flash.
Press the UP▲ /DOWN▼ buttons to set the desired value.
Press SEL to confirm until you hear the confirmation beep.
Press ESC to leave the function.
In the %O2 screen, press the SEL button to access the function.
The oxygen percentage value will begin to flash.
Press the UP ▲ /DOWN ▼ buttons until you set the desired value.
Press SEL to confirm until you hear the confirmation beep.
Press ESC to exit the function.

OXYGEN PERCENTAGE (NITROX GAS1 GAS2) CARTESIO/NEON

In the %O2 GAS1 screen, press SEL to access the function.
The oxygen percentage value will begin to flash.
Press the UP▲ /DOWN▼ buttons until you set the desired value.
Press SEL to confirm until you hear the confirmation beep.
Press the UP ▲ /DOWN ▼ buttons to move to the %O2 GAS2 screen.
In the %O2 GAS1 screen, press SEL to access the function.
The oxygen percentage value will begin to flash.
Press the UP ▲ /DOWN ▼ values until you reach the desired value.
Press SEL to confirm until you hear the confirmation beep
Press ESC to exit the function.

DIVE-SET: Setting the dive alarms. FREE

Once the MODE SET (MODE-S) menu has been set to FREE, you can turn ON and change the alarms by accessing the DIVE SET (DIVE-S) menu.
Press the SEL button to access the dive-set menu. The alarms available in FREE mode are: (SURF-T) - (DEPTH) - (STEP) - (DIVE-T)

Surface time alarm (SURF-T)

When this alarm has been turned on, once the time previously set has elapsed, the watch will give out three beeps to indicate that surface time has been exceeded, and the surface time shown on the display will begin to flash.
The setting can be based on elapsed time, from 1'00" to 10'00" in increments of 30", or the ratio between the previous dive time and surface time, from F1 to F5. In the latter case, the computer will multiply the time of the previous dive by the factor set. For example, if the previous dive lasted 1'20" and the F2 ratio is set, the surface time will be 1'20" x 2 = 2'40".
Press SEL to access the function, and use the UP ▲ / DOWN ▼ buttons to set the desired time, press SEL to confirm.

Depth alarm (DEPTH)

When this alarm is ON, once the depth previously set has been exceeded, the watch will give out three beeps to indicate that the depth level has been exceeded and the depth shown on the display will begin to flash.
The depth can be set in a 1m. (3 ft.) to 50 m. (164 ft.) range, in 1 m (3 ft.) steps. Press SEL to access the function, and use the UP ▲ / DOWN ▼ buttons to set the depth, then press SEL to confirm.

DEPTH INTERVAL ALERT (STEP)

You can set an alert that will be given out whenever a depth interval is exceeded, for instance every 2m (6 ft.).
When this alert has been turned on, whenever a depth interval is exceeded, the watch will give out three beeps.
You can set the interval in a range from 2m (6ft.) to 25m (82ft.) in 1m. (3ft.) steps. Press SEL to access the function, use the UP ▲ / DOWN ▼ buttons to set the desired depth, then press SEL to confirm.

Allarme del tempo di immersione (DIVE-T)

When this alarm is ON, once the time previously set has elapsed, the watch will give out three beeps to tell you that your dive time has been exceeded, and the dive time indication on the display will begin to flash.
Dive time can be set in a range from 0'10" to 6'00" in steps of 0'10".
Press SEL to access the function, and press the UP ▲ / DOWN ▼ buttons to set the desired time, then press SEL to confirm.

Press ESC to exit the alarm setting mode.

TIME SET (TIME-S) changing time and date

From this screen, pressing the SEL button gives access to the time and date adjustment, alarm clock, second time zone functions.
By pressing the UP ▲ / DOWN ▼ buttons you can scroll through the following screens: AL. ON/OFF (daily alarm clock) - H24/H12 - time - minutes - d-m/m-d (day-month or month-day options) - day - month - year T2 (second time zone) ON/OFF.

Setting the alarm clock:

From the AL. OFF screen, press the SEL button.
The display will show the indication OFF, flashing.
Press up ▲/down▼ to change to ON and press the SEL button to confirm your choice.
Press up ▲/down▼ to move to the time or minutes mode, the data that flashes is the one selected.
Press SEL and then UP ▲ /DOWN ▼ DOWN to change the parameter.
Press SEL to confirm until you hear the confirmation beep.
Press ESC to exit the function.
If the alarm clock is ON, the display will show the alarm clock (Bell) icon.

Setting the date/time

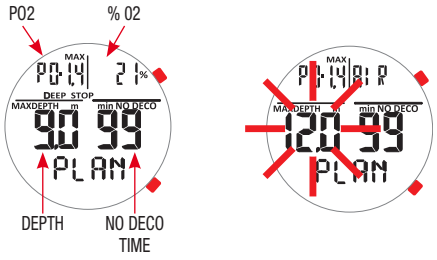
From the AL.OFF screen, by pressing the UP ▲ / DOWN ▼ buttons, scroll until the data you want to change begins to flash.
Press SEL to view the individual data, and then press the UP ▲ / DOWN ▼ buttons to change the value.
Press SEL to confirm.
Press ESC to exit the function.

Setting another time zone W (world)

From screen T2 press the SEL button.
The display will show the indication OFF, flashing.
Press UP ▲ / DOWN ▼ to change (increase/decrease) the time zone in 30 minute steps.
Press SEL to confirm, then press ESC to exit the function.

PLAN (diving plan)

From this screen, press the SEL button to access the PLAN function:



With this function, depending on the mix used (Nitrox or Air), you can view the non-decompression time still available at the various depth levels (safety curve). The values are supplied both for the first dive in a series and in the course of the surface intervals between two or more successive dives; in the latter case, GOA/CARTESIO/NEON takes into account the residual nitrogen and reduces the curve times accordingly. On the display, you will see the values of the safety curve (non-decompression times) for the various depth in the 9m (29ft.) to 48m (157ft.) range, with manual increments for the latter in 3m (10ft) increments obtained by pressing indifferently the UP ▲ or DOWN ▼ buttons. Press and keep down the ESC button to exit the function.

NOTE: The PLAN function is disabled if the computer is on STOP or is set to the GAGE, FREE, OFF functions.

SYSTEM – system menus

The system mode lets you download the data onto a PC/MAC, change your system settings, reset the instrument, etc.
From the SYSTEM screen, pressing SEL gives access to the PC, UNITS, HIST, INFO, AL.SP, T.ERASE functions.

PC LINK - PC COMPATIBLE INTERFACE

GOA/CARTESIO/NEON by Cressi can be interfaced with a Personal Computer having the following characteristics:
- Operating system: Windows/Mac

To connect the two computers, proceed as follows:
- Install the UCI underwater computer interface software on the PC.
- Connect the hardware of the Cressi interface to a USB door in the PC.
- Access the GOA/CARTESIO/NEON PC function by pressing the the SEL button from the SYSTEM menu.

HISTORY (HIST) – DIVE MEMORY

The HIST screen shows the non-resettable historic memory of the dives: the first line shows the total number of hours of use in dive Hxxx, and the second line shows the max. depth reached.

INFO – SYSTEM INFORMATION

The INFO screen supplies the system information.
The first line shows the serial number Sn xxxxxx
The second line shows the firmware version 1xx and the number of battery changes made by the user.
The watch leaves the factory with the battery change counter set to 00.

AL.SP – EXCLUDING THE ASCENT ALARM IN AIR/NITROX/GAGE MODES

This function lets you disable the fast ascent (> 12m/min) audible alarm.

NOTICE: An exceedingly fast ascent rate increases the risk for decompression sickness! This function is reserved for use by instructors assuming full responsibility for ascent rate alarm (AL.SP) deactivation. In any event, when this function is activated, the computer displays an icon showing a crossed over loudspeaker throughout the dive.

To activate the alarm exclusion function, from the AL.SP screen press SEL until you hear the confirmation beep. Press ESC ESC to go back to the SYSTEM menu.

T.ERASE (TISSUE ERASE) INSTRUMENT RESET

The T.ERASE function lets you erase all the computations relating to a desaturation currently underway. Logbook, profile and historic memory of the dives made are retained even when the instrument is reset.
This function may prove useful when the instrument is rented at a Diving Centre.

DANGER: Do not ever reset the instrument if it has to be used underwater for subsequent dives!

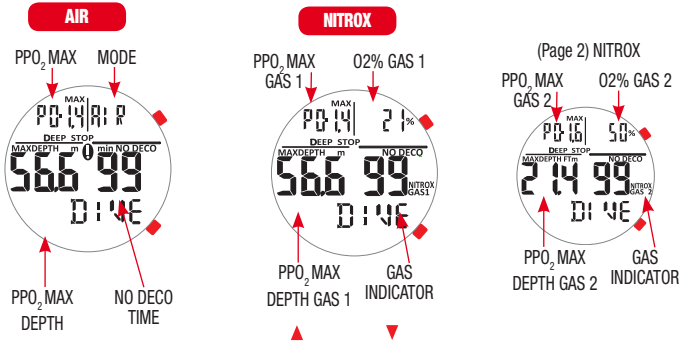
To reset the instrument, from the T.ERASE screen, press the SEL button.

At this point, the indication NO will appear flashing and the question SURE? Press an UP ▲ / DOWN ▼ button to go from NO to YES and immediately afterwards keep the SEL button pressed down for 5 seconds:
This will start a countdown from 5 seconds to zero, at the end of which you will hear three beeps confirming that the instrument reset has been successfully completed.

DIVE (PREDIVE)

The DIVE (predive) screen is the one you see before a dive. From this screen, you can control all the parameters set previously.

It is important to set the watch to dive mode prior to diving and to make sure that all the dive parameters are correct



DIVE FUNCTIONS OF THE COMPUTER

The GOA/CARTESIO/NEON computer can be set to three different modes:

- AIR, if the dives are made with air and you want to use the decompression computation feature.
- NITROX, if the dives are made with one or two hyper-oxygenated Nitrox mixes and you want to use the decompression computation feature.
- FREE for free diving with dip count and surface and depth alarms.
- GAGE if you do not want to use the decompression computation feature, but want to have the dive time, instant depth and average depth indications, and resettable stopwatch.

NOTE: The GOA/CARTESIO/NEON is set in the factory to AIR mode for air diving with PO2 pressure set to 1.4 bars and the oxygen percentage set to 21%. To set percentages other than Air 21%, activate the NITROX mode.

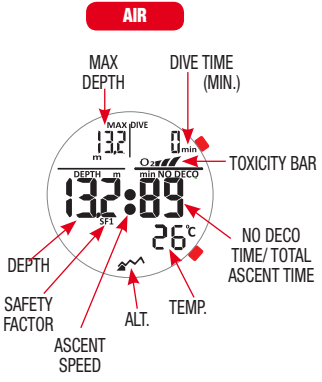
NOTICE: Before diving, make sure your computer is not blocked (presence of the padlock icon). If it is, unlock it from the MODE-S menu.

NOTICE: Before diving, make sure you set the computer to DIVE mode by pressing the DOWN ▼ button from the TOP screen. In this manner, the computer will activate the computation of dive parameters in no more than 2 seconds as soon as the depth of 1.20 m is reached. If you forget to do so, the computer will start computing automatically within no more than 20 seconds' time when the 1.20 m depth is reached.

DIVES WITHIN THE SAFETY CURVE. AIR mode: Diving with air.

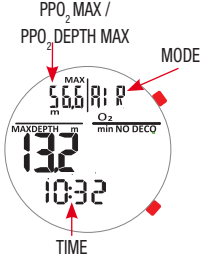
When the computer is set to AIR mode, in a dive within the safety curve, the display will show the following information:

- Time elapsed (Dive.T min.).
- Current depth (Depth m.).
- Max. depth reached (Max m.).
- Non-decompression time (No Deco min.).
- Current temperature, expressed in °C or °F.
- Ascent rate indicator.
- Altitude level, if set.
- Safety factor, SF.
- Bar chart showing the CNS oxygen toxicity level.



Additional important info may be obtained by pressing the UP ▲ button during the dive, and namely:

- Max. PO2 set.
- Mode selected (Air).
- Max depth reachable for the max. PO2 set.
- The current time.



NITROX mode : Diving with nitrox.

The memory of the GOA/CARTESIO/NEON computer retains the Oxygen percentage %O2 value entered previously until this parameter is changed manually by the diver.
Hence, it is important to realise that:
Artificial breathing mixes pose extremely severe risks to a person's health if they are not perfectly known, analysed and studied in all aspects to do with diving activities. It is essential to understand that THE MIX YOU BREATHE MUST BE PERFECTLY IDENTICAL TO THE ONE SET ON THE COMPUTER. OTHERWISE THE INFORMATION on decompression and toxicity of the gas SUPPLIED BY THE COMPUTER WILL POSE A RISK TO HUMAN LIFE. Before, during and after a NITROX dive, it is imperative to check the oxygen percentage and ensure it matches exactly the percentage of oxygen in the scuba diving cylinder.

BEFORE A NITROX DIVE.

The GOA/CARTESIO/NEON computer keeps the Air dive mode always active until the scuba diver sets it to Nitrox mix mode. In this case, the display will show the NITROX icon, which remains visible throughout the dive and as long as the GOA/CARTESIO/NEON computer remains set to NITROX MODE-S. To enable the computer to adjust its computation algorithm according to the new parameters, once the Nitrox program has been activated, it is necessary to enter the exact value of the oxygen percentage (%O2) contained in the cylinder that you are going use, after conducting a careful analysis of the content thereof.

DANGER: The use of this computer with hyper-oxygenated (NITROX) mixes is reserved for divers who have successfully completed a training course on the use of such mixes.

DANGER: Do not dive with cylinders containing Nitrox mixes without having verified personally the oxygen percentage in the mix.

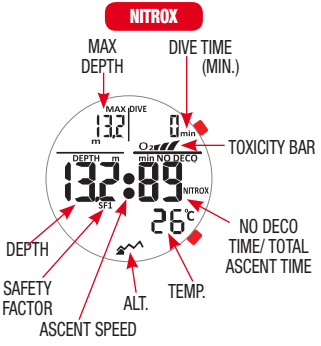
IMPORTANT: before diving, always verify the setting for the %O2 parameter (oxygen percentage) on the computer!
This can be done at surface level, from the main DIVE screen and the DIVE SET screen, which provide a quick view of the parameters previously set.

IMPORTANT: Keep in mind that time underwater being the same, a Nitrox mix requires longer decompression times than Air. It is essential to adhere strictly to the max depth values permitted by the Nitrox mix used.

DIVING WITH NITROX

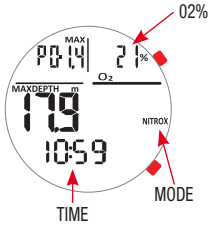
During a dive with a Nitrox mix conducted within the safety curve, besides all the info associated with a normal Air dive, the following data will also be given:

- Bar chart showing the current O2 toxicity level for the CNS.
- NITROX GAS1 icon, or GAS2 icon (CARTESIO/NEON).
- The mix currently used (GAS 1 or GAS 2 CARTESIO/NEON)



Additional important info may be obtained by pressing the UP ▲ button during the dive, and namely:

- Max. PO2 set.
- The oxygen percentage, %O2, set.
- The max. depth reachable as a function of max PO2 set.
- The current time.



The second page shows data regarding the mix selected GAS1 or GAS2 (CARTESIO/NEON).

DIVING WITH TWO MIXES: GAS SWITCHING (CARTESIO/NEON only) BEFORE A DIVE IN GAS SWITCHING MODE.

The CARTESIO/NEON computer retains the Air dive mode active by default until the diver changes it and sets it for use with two mixes in EAN (NITROX) mode. Setting the dive mode. In this case, the display will show the NITROX icon, which stays on throughout the dive and until CARTESIO/NEON settings are changed again. To enable the computer to adjust its computation algorithm according to the new parameters, it is necessary to enter the exact value of the oxygen percentage (%O2) contained in the cylinder that you are going use, after conducting a careful analysis of its content.

GAS SWITCHING DURING A DIVE (CARTESIO/NEON only)

During the ascent from a dive, if the computer is set to MODE-S NITROX, the icon of the primary mix GAS1 will begin to flash as soon as the maximum operational depth of the other mix, GAS2, has been reached; this tells you that, at that depth ans lesser depths, gas switching is possible. At this point, in order to switch mix, you have to press the MIX button and keep it down. The last line will read GAS1. Press an UP ▲ / DOWN ▼ button to see the indication GAS2 appear with the parameters of the second mix. Keep the SEL button pressed down to confirm the setting of the second mix, GAS2.

NOTE: The icon of the primary gas mix GAS1 will not flash if the max, operational depth of the second mix, GAS2, is not exceeded.

DANGER: If the current depth is greater than the maximum depth permitted by MIX2, CARTESIO/NEON will not allow the gas to be changed.

PO2 ALLARM.

The computer is able to continuously monitor another fundamental oxygen-related parameter: Partial Pressure (PO2). Oxygen toxicity, in fact, may be due to excessive exposure or to maximum PO2 being exceeded, which in actual practice means that the limit depth permissible with the mix being used has been exceeded. As discussed above, the limit value of PO2 is set by the diver in a 1.2 bar to 1.6 bar range. GOA/CARTESIO/NEON considers 1.6 bar as the maximum admissible limit for Partial Pressure and, as a function of the mix used, automatically indicates the maximum depth that can be reached. Do not forget that the oxygen toxicity limit may be reached even when air is used. This limit varies as a function of the PO2 value set.

GOA/CARTESIO/NEON provides for a default value set in the factory of 1.4 bar, which, in air, corresponds to a maximum depth of 56.6 m (186 ft.). Needless to say, you can set the computer to other values of PO2, up to a maximum of 1.6 bar: this can be done only when you are at surface level, from the DIVE-S PPO2 SET screen.

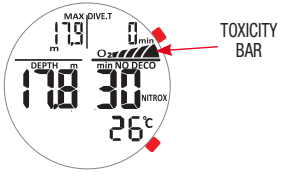
To warn the scuba diver of excessive PO2 , the computer has a **P02** alarm. When the limit depth corresponding to the PO2 setting (from 1.2 bar to 1.6 bar) is reached, an audible alarm is given out and at the same time a visual alarm shows the PO2 icon flashing together with the current depth value. As soon as you acend to a lesser depth, the audible alarm is silenced, the current depth stops flashing and the **P02** icon also stops flashing, but stays ON during the rest of the dive and it remains recorded in the LOGBOOK.

CNS TOXICITY DISPLAY

The GOA/CARTESIO/NEON computer by Cressi can illustrate through charts the degree of oxygen toxicity to the Central Nervous System (CNS). The degree of toxicity depends on Oxygen Partial Pressure and a diver's exposure time to high values of Oxygen Partial Pressure (PO2).

The oxygen toxicity level appears on the display as a column made up of 5 segments, which indicate increasing quantities of oxygen build-up. When all the segments are lit, it means that 100% of the maximum admissible CNS tolerance has been reached and the scuba diver is in danger of hyperoxia.

Therefore, it is essential to be able to monitor continuously this value, which depends on Oxygen Partial Pressure and exposure time and should always be controlled during a dive. When the oxygen level reaches risky levels, close to maximum admissible toxicity (4 segments lit in 5), the graphic bar begins to flash and a temporary audible alarm is given out, that tells you are close to CNS toxicity conditions. If the situation remains the same or gets worse (100% of admissible toxicity), the bar and the indication keep flashing, and the temporary audible alarm is repeated until the diver moves up and the oxygen partial pressure decreases to below 0.6 atmospheres. At this point, the graphic bar stops flashing, but the alarm is still recorded in the Logbook.

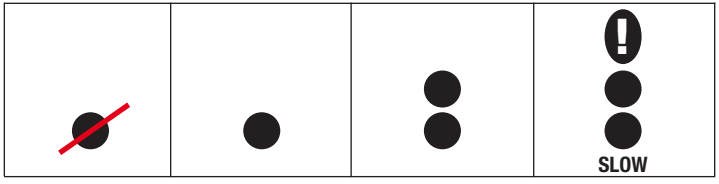


NOTE: The result of oxygen exposure computations is rounded up to the next higher percentage value.

DANGER: Do not use hyper-oxygenated mixes, when diving and especially in decompression dives, without first having taken specific training courses. The basic Nitrox certification given by the various scuba diving training centres only enables a diver to use standard hyper oxygenated mixes (Ean32 and Ean 36), within the decompression limits.

ASCENT RATE

Ascent rate is shown on the display by a dot indicator situated in the centre of the display, which works according to the table shown in the figure below. If the maximum ascent rate values are exceeded, the display will show the indication SLOW and three flashing icons, while an audible alarm is also given out. In these conditions, you have to stop the ascent until the indication SLOW disappears and the display returns to normal conditions.



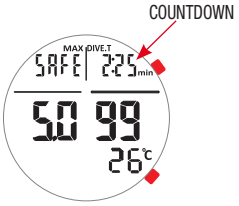
0.0 - 3.9 m/min.	4.0 - 7.9 m/min.	8.0 - 11.9 m/min.	12 - > 12 m/min.
0.0 - 12 ft./min.	13 - 26 ft./min.	26 - 39 ft./min.	40 - > 40 ft./min.

NOTE: If the maximum ascent rate of 12m/min - 40ft/min is exceeded for a prolonged period of time, the GOA/CARTESIO/NEON watch-computer makes the following dive more conservative, but only if it is done during the desat period of time, so as to protect the diver from the risk for DCS. The ! icon tells you that the penalization factor is active.

DANGER: An exceedingly fast ascent rate causes the risk for DCS to increase exponentially! Cressi recommends to make a safety stop, of 3 minutes at a depth of 5m (16 ft.), which will be computer assisted at the end of each dive (see the next chapter).

SAFETY STOP

GOA/CARTESIO/NEON is programmed to automatically recommend a safety stop after any dive to a depth of 10 m or more, as recommended by diving theory and the latest studies on diving physiology. A safety stop should last 3 minutes and should be made in a depth range of between 5m (16ft.) and 3m (9ft.).



The safety stop is shown on the display with the SAFE icon. In this condition the display clearly shows the stop time in minutes and seconds with a countdown. While it is not mandatory, the safety stop is strongly recommended, for instance, when the maximum ascent rate is exceeded repeatedly. Cressi recommends making the safety stop on a regular basis so as to avoid safety problems.

NOTE: During a safety stop, the maximum depth can be seen by pressing the UP ▲.

DECOMPRESSION PREWARNING ALARM

Whenever the time still available within the curve, as shown on the display by the NO DECO icon, drops to 3 minutes, GOA/CARTESIO/NEON gives out an audible alarm. In this situation, we are about to overstep the limits of the safety curve and begin a dive that requires decompression.

DEEP STOP

To avoid the risks arising from the microbubbles that form during the ascent, GOA/CARTESIO/NEON is able to suggest a DEEP STOP lasting one or two minutes (in a dive with decompression), to be made at a variable depth as a function of dive profile. During a dive, if its profile requires it, the words DEEP STOP appears on the display and an audible signal is heard. The STOP icon appears with the values of stop depth and time in minutes. If the diver does not make the Deep Stop, the warning is deleted and the computer plans an ascent without deep stop.

NOTE: Make sure that the deep stop function is ON (see DIVE SET).

NOTE: In this situation, the maximum depth may be seen by pressing the scroll UP ▲ /DOWN ▼ button.

DIVES OUTSIDE THE SAFETY CURVE (DECOMPRESSION)

DANGER: Do not use this instrument to make dives outside the safety curve! Cressi advises against using this computer to make decompression dives.

However, if during a dive, due to carelessness or in an emergency, you have to overstep the limits of the safety curve, GOA/CARTESIO/NEON can assist you by providing all the information necessary for a correct ascent and the relative decompression steps.
When a dive goes outside the curve, the computer gives out an audible alarm and at the same time the display screen changes as shown in the figure below, to display the following information:

- Stop icon with the word DEC flashing in the lower part of the display, telling you that you have left the safety curve and will have to make decompression stops. The arrow pointing upwards flashes to encourage you to start your ascent.
- Depth of the first decompression stop to be made (the deepest one), expressed in metres (m) or feet (ft.). This may vary from a maximum of 24 m to a minimum of 3 m, in 3 m decrements.
- Time in minutes of the first decompression stop to be made (the deepest one).
- TOTAL icon indicating total ascent time, i.e., the time required to reach the deepest stop, respecting the proper ascent rate, plus stop time at that depth

and other subsequent depths (including the deep stop, if necessary), plus the safety stop time and the time it will take to reach the surface after completing the various decompression steps.

- "DIVE. T" icon, indicating dive time.

NOTA: In this situation, maximum depth can be seen by pressing an UP ▲ / DOWN ▼ scroll button.

DANGER: Do NOT ever rise above the decompression depth. In order to prevent this situation from occurring accidentally, during decompression remain at a level slightly deeper than the required depth, but always within the decompression depth range shown on the instrument with the two icons lit simultaneously and not flashing. It should be kept in mind that when decompression stops have to be made, the quantity of gas required to complete a dive increases.

Decompression stop omitted alarm.

If, for some reason, a decompression stop is skipped by rising above the depth specified by the computer, an audible alarm is given out and at the same time the decompression icon pointing downwards begins to flash on the display and keeps flashing until you go down to the decompression step depth or deeper. The computer allows a max. time of 2 minutes to remedy this hazardous condition, which is clearly identified by a continuous audible alarm.

If after 2 minutes the diver has not returned to the specific decompression depth, GOA/CARTESIO/NEON switches to ERROR mode, shows the "STOP" icon flashing and will not be usable for the following 48 hours: it will work solely as a watch and will permit access solely to the Logbook and History functions. Then, the PRE-DIVE screen will show the "STOP" icon, flashing, together with the word DECO while the stop icon with the downward arrow blinks to signify that a decompression step was omitted during the last dive.

If you return to the water during the following 48 hours, GOA/CARTESIO/NEON will give out repeated audible alarms and will show the word STOP on the display. The same warning will be recorded in the LOGBOOK to signify that on a given date a dive with a given number was done without making a decompression stop.

DANGER: In these conditions, no dive can be done for 48 hours. Monitor your conditions and if you detect the onset of decompression sickness, contact the Divers Alert Network (DAN) and a hyperbaric centre, and provide as much info as possible on the dive. Otherwise, i.e., when you descend to more than 1 metre below the decompression stop depth, the flashing arrow will tell you to ascend.

FREE DIVING (APNEA)

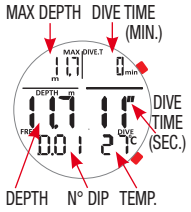
GOA/CARTESIO/NEON has a dedicated mode for free divers, with specific functions, such as dip count (time and depth) and recovery times at surface level.

IMPORTANT: This instrument should be used solely by certified scuba divers: no computer, in fact, can replace extensive underwater training. Keep in mind that safety in apnea diving can only be ensured by appropriate training.

⚠ **DANGER**: NO DIVE COMPUTER COMPUTER CAN RULE OUT THE RISK OF A SYNCOPE OR THE TARAVANA SYNDROME. ALL A COMPUTER CAN DO, IN FACT, IS PROVIDE INDICATIONS ON DIVE TIMES, SURFACE TIMES, DEPTH AND THEIR INTERACTIONS. THE INFORMATION SUPPLIED TO THE DIVER SHOULD BE REGARDED AS MERE DATA, WHICH MAY BECOME SAFETY INFO ONLY UPON BEING EVALUATED AND PROCESSED BY THE HUMAN MIND. ACCORDINGLY, IN-DEPTH THEORETICAL TRAINING IS HIGHLY RECOMMENDED.

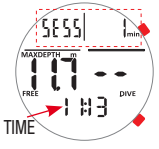
When the computer is set to FREE mode, during a dive, the display shows the following info, from the first to the last line:

- Max depth reached (Max m.).
- Current dip time in minutes and seconds.
- Current depth (Depth m.).
- Current dip number.
- The current temperature, expressed in °C or °F.



Additional information of interest may be obtained by pressing the UP ▲ (>) button during a dive, and namely:

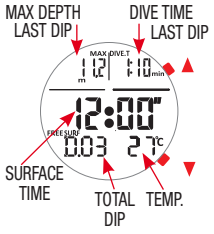
- Total time of a free dive session, in minutes
- Max depth reached during the session
- The current time



AT SURFACE LEVEL - FREE (APNEA)

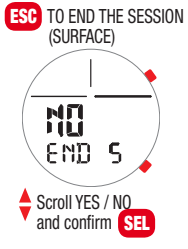
During the surface interval between two dips, the display shows the following data:

- Max depth of last dip.
- Last dip underwater time.
- Surface time in minutes and seconds.
- Number of dips made.
- Temperature.



To exit the apnea session:
Press ESC to view the exit screen.
Then press UP ▲ /DOWN ▼ until you see YES, and confirm by pressing SEL.

NOTE: After 30 minutes at surface level, the session ends automatically.

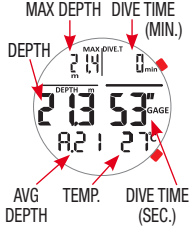


NOTE: To prevent the risk for DCS after a FREE dive, no AIR or EAN dive is permitted for 24 hours.

GAGE MODE: depth gauge and timer.

Besides the AIR, NITROX and FREE modes, the computer has a fourth mode called GAGE (depth gauge and timer) that may be used both in free diving and when using the instruments in the so-called technical dives. In the latter case, the instrument will only supply the basic parameters of the dive, i.e., depth, dive time, average depth, and temperature and it will make no tissue saturation and de-saturation computations, which must be programmed and determined by means tailor-made software and/or tables. In this connection, Cressi underscores that sport dives must be conducted within the safety curve at a maximum depth of 40 m (sport dive limit): overstepping such limits entails an appreciable increase in DCS risks!
When the computer is set to GAGE mode, during a dive within the safety curve, the display shows the following information:

- Max depth reached.
- Dive time (in minutes).
- Current depth.
- Dive time (seconds).
- Average depth (A.).
- Temperature.



To view the current time, press UP ▲ /DOWN ▼

IMPORTANT: The GOA/CARTESIO/NEON computer has been designed solely for amateur sport use, and it is not intended for professional uses requiring prolonged dive times and posing higher decompression sickness risks.

DANGER: Cressi categorically advises against diving with gas mixes other than air without first having taken a specific course. The so-called "technical" dives, in fact, may expose the scuba diver to risks other than those associated with recreational dives, and which may cause severe physical injuries or in extreme cases even death.

IMPORTANT: After a dive performed in GAGE mode, the instrument will not make saturation/desaturation computations for 48 hours.

DANGER: If you decide to reset the instrument by accessing the system mode, the nitrogen memory will be deleted and the instrument will not be able to compute a subsequent dive as such. Do not use this function until at least 48 hours have elapsed from your last dive.

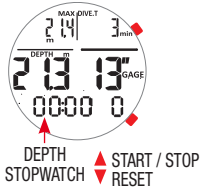
When the GAGE mode is active, the GAGE icon appears.

NOTE: The GOA/CARTESIO/NEON computer is set in the factory to the MODE SET (MODE-S) AIR mode.

NOTE: The depth sensor supplies indications between 0 and 120 m.

DEPTH STOPWATCH (GAGE DIVE MODE)

During a dive in GAGE mode you can activate a resettable depth stopwatch.
To activate the depth stopwatch press and keep down the ESC button.
The last line will supply stopwatch data as shown in the figure below.



Press the UP button ▲ to start or stop the stopwatch, press the DOWN ▼ button to reset the stopwatch.
Press ESC to go back to the average depth and temperature screen.
The last value seen from the stopwatch will be recorded in the logbook.

USING THE COMPUTER IN POOR VISIBILITY CONDITIONS

If at any time during a dive the lighting conditions make the display hard to read, you can turn on the backlighting function by pressing the LIGHT button. The display backlight stays on for a few seconds and then goes out automatically. When the backlight is ON you might notice some dark stains on the display: this is not a defect, as the stains are due to the use of a high-contrast display.

SURFACE INTERVAL

After a dive in MODE-S AIR or MODE-S NITROX mode, when you ascend to depths of less than 0.8m, the display supplies the following information:

- Surface interval in hours and minutes (SURF.T)
- Desaturation time (DESAT), i.e., waiting time before you can board a plane (in hours and minutes).

- NO FLY time and the relative icon. When this icon is ON, it tells you that you should avoid plane flights and should not go to altitudes higher that the altitude of the dive site.
- Maximum depth of the dive just ended.
- Dive time.

IMPORTANT: Pursuant to the indications provided by primary scuba diving and hyperbaric medicine organizations, GOA /CARTESIO/NEON applies the no-fly times as follows: 12 hours after a single dive within the safety curve (without decompression). 24 hours after a dive outside the safety curve (with decompression) or repeated or multi-day dives performed correctly. 48 hours after diving in GAGE mode or if severe errors have been made during the dive.

NOTE: If you start a new dive after a surface interval of less than 2 minutes, GOA/CARTESIO/NEON interprets the new dive as the continuation of the previous one: the dive number remains the same and the computation of dive time resumes from where it stopped. Dives made after a surface interval of at least 2 minutes, instead, are considered subsequent dives. If the previous dive was made in GAGE mode, the instrument cannot make saturation/desaturation computations for 48 hours after the end of the dive, denoted by the surface interval SURF.T.

PC LINK - PC COMPATIBLE INTERFACE

GOA/CARTESIO/NEON by Cressi can be interfaced with a Personal Computer having the following characteristics:

- Operating system: Windows/Mac

To connect the two computers, proceed as follows:

- Install the UCI Underwater Computer Interface software in the PC.
- Connect the Cressi interface hardware to an USB ports in the PC.
- Access the PC function of GOA/CARTESIO/NEON by pressing the SEL button from the SYSTEM menu.

Then, following the instructions you can easily download all the data contained in GOA/CARTESIO/NEON, such as the profiles of your dives, and can reproduce, print and change the data through the software.

CARE AND MAINTENANCE

GOA/CARTESIO/NEON by Cressi has been designed and constructed to withstand intensive underwater use. However, you should keep in mind that it is a precision instrument and deserves to be handles with care. It is good practice to avoid violent shocks, protect it from excessive heat sources, rinse it in fresh water after use, dry it carefully, and never store it wet, avoid contact with heavy equipment such as the dive tanks.

IMPORTANT: Do not let the computer come in contact with solvents or chemical substances of any sort. Do not use compressed air to dry it. The button has no special maintenance requirements: do not lubricate it with any oil or spray of any sort.

NOTE: When you change the battery, check the compartment: if you notice any signs of moisture inside, send the instrument to an authorized service centre. In the presence of any malfunctions, do not use the instrument to dive and contact an authorized Cressi dealer to have it overhauled.

CHANGING THE BATTERY.

The battery must be changed whenever the “battery low” icon appears on the display of the instrument.
If the display shows a fixed battery icon, GOA/CARTESIO/NEON can still perform all its functions. However, especially if the watch-computer is used in cold places, we recommend changing the battery as soon as possible.

LOW BATTERY
(YOU SHOULD CHANGE THE BATTERY SOON)

If the battery icon flashes, the dive functions are disabled for safety reasons.

YOU MUST CHANGE THE BATTERY
(DIVE FUNCTION IS DISABLED)

IMPORTANT: When the battery is changed, all desaturation, time and date data are lost. Set the time and date again to have correct entries in the logbook of your computer. Do not change the battery when desaturation is underway, because all desaturation computation data would be lost. In this event, do not dive for the following 48 hours. After a battery change, all the parameters return to the last values set by the user. Time and date have to be reset. To change the battery, with a screwdriver unscrew the two screws that secure the cover to the back of the instrument. Remove the cover and observe the conditions of the battery and the battery compartment: if you notice any sign of corrosion due to infiltrations, contact an authorized Cressi centre to have the instrument overhauled. If everything looks fine, remove the battery from its compartment while holding the computer so that is faces down. Replace the battery respecting the polarities shown (wrong polarities can damage the instrument).
Prior to closing the cover, check for impurities in the compartment and apply a thin film of silicone grease onto the sealing gasket of the cover.

NOTE: Keep in mind that various factors affect the service life of a battery, including instrument storage time before it was purchased, dive times, the use of backlighting, the quality of the battery, whose average service life varies, for example, as a function of temperature.

NOTE: Do not tighten the cover excessively, as this would not ensure better sealing of the battery compartment and it might even damage the cover or make it difficult to open the cover again. **Do not touch or try to clean the pressure sensor!** Any malfunctions will be excluded from the warranty.

NOTE: Make sure the instrument is hermetically sealed!

IMPORTANT: Any malfunctioning or flooding due to incorrect battery change is excluded from the warranty.

Algorithm: CRESSI RGBM algorithm.
Sample tissues: 9 with saturation half times of between 2.5 and 480 minutes
Depth sensor:
- Calibrated for sea water (in fresh water the depth values shown are about 3% lower)
- Measuring range: 0-120m (0 ft. - 393 ft.), measured every second.
- Precision: +/- 1% (T 20°C).
- Reading resolution: 10 cm (from 0 to 100 m) / 1 m (from 100 to 120 m) / 1 ft. (from 0 to 316 ft.)
- Data acquisition interval: 20 sec. on the surface, 1 second in DIVE.

THERMOMETER:
- Resolution: 1 °C / 1 °F
- Measuring range: -5 °C +40 °C.
- Precision: +/- 2 °C /10 min °T change.

WATCH:
- Precision: +/- 30 sec. monthly average.
- Display 24 hours.

BATTERY:
3V CR 2450 battery.

WARRANTY

LIMITED CRESSI WARRANTY FOR CRESSI DIVE COMPUTERS AND THE RELATIVE ACCESSORIES

IMPORTANT NOTICE: This warranty does not set limitations on the consumer rights provided for by the applicable National Standard on the sale of consumer goods.

Cressi supplies this limited warranty to the buyers of a Cressi dive computer and the relative accessories (product).

During the warranty period, Cressi, or an authorized Cressi service centre, at their sole discretion, will remedy any material, design or manufacturing defect by either repairing or replacing the product according to the terms of this limited warranty. This limited warranty is valid and effective solely in the country where the product has been purchased, and as long as Cressi earmarked the product for sale in that country. However, if the product is purchased in one of the EU member countries, in Iceland, Norway, Switzerland or Turkey, and as long as Cressi originally earmarked the product for sale in one of the aforementioned countries, this limited warranty shall be valid and effective in such countries.

Pursuant to the terms of this warranty, service restrictions may arise from the presence in a product of country-specific elements.

For countries outside the European Union other than Iceland, Norway, Switzerland and Turkey, provided that the buyer agrees to pay a maintenance fee and reimbursement of costs incurred for shipment by Cressi or an authorized Cressi service centre, it is possible to obtain the services provided for by the warranty in a country other than the one where the product was originally purchased. In this case, spare parts will be supplied free of charge.

Warranty period

The warranty period begins on the date the product is purchased from a retailer by the first buyer.
The product may be comprised of different components having different warranty periods; in particular, this limited warranty extends over a period of:
A) 2 years for dive computers
B) 1 year for consumables and accessories, including but not limited to, wrist bands, buckles, etc. (whether included with the computer in the original sale package 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 subsequent resale, product repair or product replacement authorized by Cressi. However, product parts repaired or replaced during the warranty period, and replaced products are covered for the remaining original warranty period or for a three-months period of the date of repair or replacement, whichever is longer.

How to use the warranty services

If you want to submit a claim pursuant to this limited warranty, contact your authorized Cressi dealer for information on how to submit your claim; 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 of the alleged defect to Cressi or an authorized Cressi service centre within a reasonable period of time from its detection and, in any event, before the end of the warranty period.

For any claim, based on this limited warranty, it is also necessary to provide one's name and address, proof of purchase clearly indicating the name and address of the retailer, the date and place of purchase and type of product. Requests for repair under this warranty will be fulfilled free of charge by Cressi, or a Cressi authorized service centre, at their sole discretion, and the product will be repaired or replaced within a reasonable period of time.

If the product is deemed not in keeping with the terms and conditions of this limited warranty, Cressi, or the authorized Cressi service centre, reserve the right to charge service and/or repair costs.

Other important provisions

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

Upon being replaced, a Product and/or any part thereof will become the property of Cressi. If a refund is granted, the product in question shall be returned to an authorized Cressi service centre, since it has become a property of Cressi and/or the authorized Cressi centre.

When repairing/replacing a Product, Cressi, or an authorized Cressi service centre, can use new or new and repaired products or parts.

Exclusions and limitations

This limited warranty does not cover:

1. a) product deterioration due to normal 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 uses non-conforming to the instructions provided by Cressi (e.g., the instructions given in the user manual) d) defects caused by events outside the control of Cressi;
2. user manuals or software by third parties (even if included in the package or sold together with Cressi hardware), settings, contents and data, whether supplied with the product or obtained by downloading, or provided together with the installation, assembly, shipping or other stages of the supply process, or otherwise purchased by the buyer;
3. defects or alleged defects caused by using the product with, or connected to, any accessory, software and/or service not produced/supplied by Cressi or by using the product in ways other than its intended use;
4. replaceable batteries.

This limited warranty shall be void in the following circumstances:

1. the Product has been opened, changed or repaired by personnel other than Cressi or Cressi service centre personnel;
2. the Product has been repaired using non authorized spare parts;
3. the Product has been exposed to chemical substances such as (for example) insect repellents.

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

Limitations of Cressi's liability

THIS LIMITED WARRANTY IS THE ONLY AND EXCLUSIVE REMEDY AVAILABLE TO THE PURCHASER AND REPLACES ANY OTHER WARRANTIES, WHETHER EXPLICIT OR IMPLICIT.
HOWEVER, THIS LIMITED WARRANTY DOES NOT PREJUDICE THE RIGHTS PROVIDED FOR BY THE APPLICABLE NATIONAL REGULATIONS.
CRESSI SHALL NOT BE LIABLE FOR SPECIAL, INCIDENTAL, PUNITIVE OR CONSEQUENTIAL DAMAGES, INCLUDING, BUT NOT LIMITED TO, LOSS OF EXPECTED PROFITS OR BENEFITS, LOSS OF SAVINGS OR INCOME, LOSS OF DATA, PUNITIVE DAMAGES, UNSUCCESSFUL USE OF THE PRODUCT OR ANY ASSOCIATED EQUIPMENT, COST OF CAPITAL, COST OF REPLACEMENT EQUIPMENT OR STRUCTURES, DOWNTIME, CLAIMS BY THIRD PARTIES, INCLUDING CUSTOMERS, DAMAGES TO PROPERTY CAUSED BY THE PURCHASE OR USE OF THE PRODUCT OR BY A BREACH OF WARRANTY OR CONTRACT, NEGLIGENCE, OBJECTIVE RESPONSIBILITY OR OTHER LEGAL ISSUES, EVEN IF CRESSI WAS AWARE OF THE PROBABILITY OF SUCH DAMAGES OCCURRING. CRESSI SHALL NOT BE LIABLE FOR DELAYS IN THE PROVISION OF THE SERVICE TO BE PROVIDED PURSUANT TO THIS LIMITED WARRANTY OR FOR THE UNAVAILABILIY OF THE PRODUCT WHILE IT IS UNDERGOING REPARIS/ REPLACEMENT PROCESS.

Note:

Note:

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