CRESSI

Manuale d'istruzioni
Manuel d'instructions
Gebrauchsanweisung
Manual de instrucciones
User's Manual

UFdS
User friendly display system

GAGE Program FREE DIVE

USB
UNIVERSAL SERIAL BUS

EDY

CRESSI

EDY

User's manual

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1. - INTRODUCTION.

Congratulations on your purchase of your $\sqsubset\sqcup\sqcup$, underwater computer, a sophisticated and complete instrument, realized in order to offer you the utmost performance, reliability and safety.

1.1. - Main specifications.

- The Bühlmann ZH-L12 algorithm has been refined by Randy Böhrer, in order to make available a more complicated RGBM program. The result is an algorithm very similar to ZH-L16, though less penalizing as to the water temperature and the repeated exceeding ascent rate;
- Tissues: 12, with saturation hemi-phases between 5 and 640 minutes;
- *DIVE* PROGRAM:
  Dive data full processing - with possible decompression as well - of any air or hyper-oxygenated mixture (Nitrox) dive
- Full setting of Nitrox parameters (FO2 and PO2): PO2 may be set between 1.0 bar and 1.6 bar, while FO2 between 21% and 50%
- A Nitrox dive may be carried out after an air dive (even by desaturation in progress)
- *GAGE* (or depth gauge/timer) PROGRAM may be set
- *FREE* (apnoea) PROGRAM may be set
- $\sqcup F \sqcup \sqcup$ system display for a perfect understanding and readability of values
- Manual dive planning (scrolling)
- Unit of measure changing from the metric system (meters and °C) to the feet system (ft- °F) by the user
- Sound and visual alarm systems
- Nitrogen saturation graphic indicator

- CNS oxygen toxicity graphic indicator
- Back-luminescent display
- Incorporated calendar and clock with alarm and time zone functions
- Logbook (30 hours or last 60 dives) including dive profile
- Dive historic memory
- The instrument may be fully reset, in case of renting
- PC interface (accessory)

1.2. - SAFETY MEASURES.

1.2.1. - Definition of: danger, warning and note.

This handbook presents special notes in order to stress out very important information.

Before reading the present handbook, please read and understand well following definitions:

⚠ **DANGER:** indicates a situation (or a procedure), that might be dangerous to the divers's health and life itself.

WARNING: indicates a situation (or a procedure), that might be dangerous to the diver or damage the instrument.

NOTE: stresses important information.

1.2.2. - General recommendations and safety measures

WARNING: please read the instructions! Read carefully the present 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 the present handbook !

⚠ **DANGER:** no underwater computer avoids completely any risk of decompression sickness (embolism). It should be fully realized that no underwater computer avoids completely any risk of decompression sickness. The computer cannot in fact take in any account any single diver's physical conditions, which may vary daily. We recommend you, therefore, to have a careful medical examination before beginning any underwater activity and assess your physical condition before any dive. Please always remember that the risk of decompression sickness depends also on the diver's exposition to cold (temperature inferior to 50 °F), poor physical conditions, multiple dives made on subsequent days, weariness, use of alcohol, drugs or medicals, dehydration. 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: the present instrument should be used only by certified divers: no computer will ever be able, in fact, to replace a careful underwater training. Please remember that a dive's safety is only guaranteed by a correct preparation.

WARNING: ⊏◗∀ Cressi-sub 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.

WARNING: before using the computer, please check battery charge 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: by diving, please be equipped as well with a depth gauge, a manometer, a 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 the instrument has automatically started the program corresponding to the altitude at which you are. 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 flying, 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 used it during a dive or a series of dives.

⚠ **DANGER:** Cressi-sub discourages the use of this instrument in decompression dives. In the event that no decompression has been exceeded, ⊏◗∀ Cressi-sub computer would be able to supply any information related to decompression, surfacing and surface interval times.

WARNING: please do not dive using Nitrox mixtures without checking the content and correct O2 percentage (FO2). Set your computer with such value, so that it may correctly process the data; please be advised that the computer does not accept FO2 decimal values: approximate to the nearest whole number below! (i.e. 35.8% must be approximated to 35%).

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⚠ **DANGER:** Cressi-sub 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 ⋲◻४ computer utilizes a PO2 set at 1.4 bar even for air dives. It is possible to vary such value between 1.0 and 1.6 bar, by decrements of 0.1 bar.

WARNING: after a dive with ⋲◻४ set in Gage mode (depth gauge-timer), the instrument will not make saturation and de-saturation 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: 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-sub strongly recommends that all sport dives be conducted within the guidelines of no decompression diving and at a maximum depth of 132 ft. Exceeding these perimeters dramatically increases the likelihood of decompression sickness.

WARNING: Cressi-sub discourages apnoea dives without proper training, since the instrument does not replace a correct information on apnoea diving physiology and risks, which might be very dangerous to the diver's safety.

⚠ **DANGER:** Cressi-sub strongly recommends to avoid any apnoea diving after snorkel dives. Moreover, at least two hours should elapse since the end of a snorkel dive before starting an apnoea dive, which anyway should not exceed the allowed maximum depth of 16 ft.

NOTE: if ⋲◻४ is set on _FREE_ (apnoea) program, it is possible to set _DIVE_ program (both air and nitrox), while it is not possible to set _GAGE_ during the 48 hours elapsing since last apnoea dive.

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

1.3. – Introduction.

The $\subset \square \vdash$ Cressi-sub computer 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 utilized mixtures.

Such information is displayed on the instrument's $\sqcup \sqsubset \sqcup \sqcup$ (**User Friendly Display System**) display, 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. In addition $\subset \square \vdash$ is equipped with a versatile dive memory (logbook).

$\subset \square \vdash$ mathematical model can make saturation and de-saturation computations of dives carried out both with air and with Nitrox, whose parameters can all be checked: from the maximum allowed PO2 value (between 1.0 bar and 1.6 bar), to the mixture's oxygen percentage (FO2) between 21% and 50% of O2.

$\subset \square \vdash$ computer is also equipped with distinct *GAGE* and *FREE* programs, which are respectively utilized in table planned dives and apnoea dives. In both programs, the instrument supply any needed information in a clear and extremely easy way.

Besides being a full multifunction underwater computer, $\subset \square \vdash$ is, at the same time, a sport watch including the functions of calendar, alarm, time zone etc.

Additionally, the computer may be set by the user for either metric (m-°C) or feet system (ft-°F).

$\subset \square \vdash$ Cressi-sub underwater computer may be connected to a compatible IBM personal computer, by means of a Cressi-sub interface (accessory) and the related Cressi PC Logbook software (accessory).

Please note that it is very important to read and clearly understand this user's manual; on the contrary, serious damages to your health might occur. The present manual will lead the user to understand all the computer's functions before using it while diving.

$\subset \square \vdash$ Cressi-sub computer's watch and calendar function are always on (see picture 1), and the related battery consumption is unnoticeable.

Operational functions are easily visible either by depressing buttons **A** ($\square \square \square \subseteq$), **B** ($\sqcup \sqsubset \sqsubseteq \sqcup \sqcap \sqcap$), **C** ($\subseteq \sqsubseteq \sqcup \sqsubseteq \subseteq \sqcap$), **D** ($\subseteq \sqsubseteq \sqcap$), which will be referred to with the letters **A**, **B**, **C**, **D** or, underwater, when the contact **E** gets wet (the dive program turns on at depths greater than 4 ft.): they are clearly illustrated by the figures on the display.

> **NOTE:** keep the contact **E** always clean, remove dirt or oxide, that might cause its bad functioning, since the set program would not automatically start. It is recommended to clean the contact. **E** from time to time, by rinsing it in fresh water using a soft brush. Dry the instrument, using a soft cloth.

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

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

In such way, you will discover how it is easy using and reading ⊂⊃⅄, since it indicates just the needed data in any given situation.

2) Before diving

2.1. - ⊔⌐⌐⌐⌐ display and controls.

The ⊏⊐⊣ computer is equipped with a "**User Friendly Display System**" (⊔⌐⌐⌐⌐) display, which "escorts" the diver during any operation, allowing a direct dialogue and an easy understanding of all functions. ⊏⊐⊣'s various programs start by depressing button **A** (ᴍᴏᴅᴇ), which is the system's key: they are clearly visualized by the alpha-numeric ⊔⌐⌐⌐⌐ display. Some programs have sub-menus, which are switched on by depressing buttons **C** (sᴇʟᴇᴄᴛ) and **D** (sᴇᴛ) they also allow to change the setting on the surface, while button **B** (ʟɪɢʜᴛ) engages the display back-illumination.

2.2. - Clock functions.

2.2.1. - Clock display.

⊏⊐⊣'s clock display is always on, and the related battery consumption is unnoticeable. It shows, in its central part, the time in hours and minutes; at the bottom, the seconds; at the top, the week's day, the calendar's month and day (picture 1). This display stays on until the computer gets into water, and the previously set program starts up.

Depressing button B engages the display back-illumination, while keeping button C depressed the time related to a previously set time zone (DUAL) will be shown (see picture 2).

By depressing button C after a ᴅɪᴠᴇ, program dive, the display will show, in its central part, the time related to a previously set time zone (DUAL), at the top, the surface time and the desaturation time besides the "Don't Fly" ✱ icon.

Related topics:

- 2.2.2.- Time zone setting.
- 3.1. - ᴅɪᴠᴇ program
- 4.1.1. - Surface interval after a ᴅɪᴠᴇ program

2.2.2. - Time zone setting.

To set a time zone, please depress button A (ᴍᴏᴅᴇ) in sequence until the (DUAL) icon appears on ⊏⊐⊣'s ⊔⌐⌐⌐⌐ display.
By depressing button C (sᴇʟᴇᴄᴛ) the time zone starts flashing, waiting for its setting by respectively depressing button C (sᴇʟᴇᴄᴛ) to advance, or button D (sᴇᴛ) to move back the hour related to the time zone.
Depress button A (ᴍᴏᴅᴇ) for some seconds in order to return to the normal clock display (picture 1).

Related topics:

• 2.2. - Clock functions

2.2.3. - Alarm clock (daily) and time signal setting.

The multifunction ᴇᴅᵞ computer is equipped with alarm clock and time signal functions using the time format set for the clock display. Such functions may be switched on and set, by depressing button A (ᴍᴏᴅᴇ) in sequence until the (AL) icon appears on the display. By depressing button C (ꜱᴇʟᴇᴄᴛ) the alarm clock hours and minutes start flashing (picture 3), and they may be varied by depressing button D (ꜱᴇᴛ). Depress button C (ꜱᴇʟᴇᴄᴛ), in order to confirm and switch on the set alarm clock time. Further depress button C (ꜱᴇʟᴇᴄᴛ) in order to switch on the time signal (the icon " ☾ " will appear) and switch off the alarm clock - the latter may be switched on again by further depressing button C (ꜱᴇʟᴇᴄᴛ) (both icons " ◀ " will appear on the display). To switch off both functions depress button C (ꜱᴇʟᴇᴄᴛ): the related icons will disappear, and the functions will be switched off.

The alarm clock rings for 20 seconds, and the related icon flashes; just depress any button to switch off the alarm. The alarm will stop ringing, but it will remain set on the chosen time.

If DIVE program is on, the alarm rings for 2 seconds.

Related topics:

• 2.2. - Clock functions

2.3. - On surface, before diving.

As previously noted, the computer is always on and ready for use. Although, it must always be checked that the appropriate altitude adjustments have occurred. The function is carried out automatically, updating every 10 minutes the atmospheric pressure values and showing the related altitudes levels as follows:

no icon (▲▲) - from 0 - 2.625 ft. (picture 1)
▲ - from 2.625 - 5.250 ft. (picture 1-a)
▲▲ - from 5.250 - 7.874 ft. (picture 1-b)
▲▲▲ - from 7.874 - 19.685 ft. (picture 1-c)
Err - more than 19.685 ft - out of range

Each icon indicates that the computer has automatically modified its own mathematical model to adjust to proper altitude.

⚠ **DANGER:** Diving at altitudes greater than 9.842 ft. above sea level involves an increase risk of decompression sickness.

It should be noted that at higher altitudes the nitrogen balance between the human body and the environment is altered.

It is therefore recommended to wait some hours after arriving before diving, in order to allow a partial release of the excess nitrogen from your body. The atmospheric pressure at higher altitudes is in fact lower than at sea level: the diver has additional nitrogen in his body than at the lower altitudes. The excess is gradually released and the balance re-established within a couple of days.

At this point, it is important to check:

the low battery indicator should not be on or flashing (picture 4 a-b);

the computer is operating, displaying all liquid crystal segments.

WARNING: should the display show the symbol of a battery (picture 4 a-b), the computer must NOT be used. Should it appear during a dive, the diver must immediately surface.

2.4. - PARAMETERS SETTING.

To set your dive's parameters, just depress button A (ᴍᴏᴅᴇ) in sequence until the icon of the **program** you want to use appears (picture 5): *DIVE*, for air dive, (*DIVE* *Air*) or nitrox dives; by depressing buttons C (ꜱᴇʟᴇᴄᴛ) and D (ꜱᴇᴛ), in sequence, you will switch on respectively *GAGE* program for a depth gauge/timer dive or *FREE* program for an apnoea dive.

NOTE: ᴇᴅʸ computer is preset on *DIVE* *Air* program.

Related topics:

- 2.4.1 - *DIVE* program parameters setting.
- 2.5. - *GAGE* (or depth gauge/timer) program parameters setting.
- 2.6. - *FREE* (or apnoea) program parameters setting.

2.4.1. - DIVE program parameters setting.

NOTE: ᴇᴅʸ computer is preset on *DIVE* *Air* program.

This is the basic program with which ᴇᴅʸ is preset. It is possible to modify its parameters by repeatedly depressing button A (ᴍᴏᴅᴇ) until the *DIVE* icon appears on the bottom. Depress button C (ꜱᴇʟᴇᴄᴛ), the *DIVE* icon will flash and allow to select, in sequence, the dive parameters related to:

PO2 -> FO2 -> Safety Factor -> Max Depth -> OFF/ON -> *DIVE*

that is:

- PO2 is the maximum partial oxygen pressure, which may be set by the user on values between 1.0 bar (included) and 1.6 bar (included), by variations of 0.1 bar, obtained at each depression of button D (ꜱᴇᴛ);

WARNING: PO2 is preset on a basic value (default) of 1.4 bar, for both air dives and Nitrox dives. In such way, the diver is safeguarded since he is following the most conservative values recommended for sport diving. Although, other PO2 values may be set, as shown in chapter 3.3. The set value will be memorized in the computer until the diver chooses a different setting.

- FO2 is the oxygen percentage of the Nitrox mixture. The diver may vary it on values between FO2=Air (21%) – basic setting - and FO2=50 % (included), by variations of 1%, obtained at each depression of button D (ꜱᴇᴛ);

NOTE: during the phase of parameters setting, by depressing button D (ꜱᴇᴛ), the computer will automatically stop on standard Nitrox 1 mixture (EAN 32), with an oxygen percentage of 32%. By keeping button D (ꜱᴇᴛ), depressed, it will stop again on (Air) setting. This is to quicken the setting process. Of course, you may set any other FO2 value, by variations of 1% at each depression of button D (ꜱᴇᴛ), or by quicker increments by keeping the button depressed.

NOTE: by varying the mixture's oxygen percentage, the computer indicates as well the maximum depth (MAX) which may be reached with that mixture – it depends also on the set PO2 value (picture 5).

- A Safety Factor may be set by the divers on three values (SF0/SF1/SF2), obtained at each depression of button D

(SET). The computer is preset on SF0, with no safety factor.

WARNING: it is strongly recommended to choose and set the most conservative safety factor any time you are aware of any risk of decompression sickness.

• The maximum depth alarm (picture 6a-6b) is preset as default on 132 ft. and OFF; it is possible to switch on the alarm (ON) and vary the depth at which it will start, by selecting the related functions with button C ($SELECT$) and setting the chosen value with button D (SET).

At the end of the setting, depress button B ($MODE$) for some seconds, to return to the normal display (picture 1).

Related topics:

• 2.7.1. - Maximum depth alarm.
• 3.1. - Air dive.
• 3.2. - Hyper-oxygenated mixture ($DIVE$ nitrox program)

2.4.2. - Dive planning ($PLAN$).

While on the surface, it is possible to go to the ($PLAN$) function in order to visualize the remaining time available at different depths, without having to make decompression stops (curve time), only by the set mixture.

The values are given both for the first dive of a (possible) series and during a surface interval between two or more subsequent dives; in such case, EDY takes into account the residual nitrogen, therefore reducing the curve times.

When the computer is set on $DIVE$, program, by depressing button ($MODE$) you get to the ($PLAN$), function, as shown on the bottom of the display. The display will show (picture 7a,

air; picture 7b, Nitrox) no decompression depths times between 30 and 157 ft., in depth increments of 10 ft. obtained by depressing button C ($SELECT$), or by manual depth decreases - each of 10 ft. - by depressing button D (SET).

Depress button A ($MODE$) for some seconds in order to get back to the normal display (picture 1).

NOTE: *PLAN* function is switched off in *GAGE* and *FREE* programs and if the computer shows Error.

Related topics:

• 2.4.1. - *DIVE* program parameters setting
• 3.4. - Curve dive.
• 3.5.1. - Omitted decompression stage alarm. (Error)
• 4.1.1. - Surface interval after a *DIVE* program.
• 6.1. - Decompression tables

2.5. - GAGE (or depth gauge/timer) program parameters setting

EDY Cressi-sub computer is equipped with a *GAGE* (or depth gauge/timer) program, intended for all those divers who want to use the instrument as a depth gauge and timer. In such case, EDY supplies the dive basic parameters, that is depth and dive time, it may engage a timer function, but it does not make any computation of tissues saturation and de-saturation, that must be planned and computed by means of proper software and/or tables.

By the way, la Cressi-sub reminds you that sport dives must be carried out within the no-decompression guidelines and at the maximum depth of 132 ft.. This is the limit of sport diving: to exceed such limits increase the risk of decompression sickness.

ENGLISH

WARNING: ⊏◻⅄ Cressi-sub 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-sub strongly discourages diving with gaseous mixtures other than air without proper training. In such case, the diver may be exposed to risks including serious physical damages and, in extreme cases, even death.

WARNING: after a dive carried out in ⊏◻⅄ GAGE (depth gauge-timer) mode, the computer does not make any computation of saturation and de-saturation during the subsequent 48 hours.

⚠ **DANGER:** should you decide to reset the computer, by following the procedures shown in chapter 4.6, the nitrogen memory will be cancelled: therefore, the instrument will not be able any more to compute a subsequent dive as such. Never use such function for at least 48 hours after last dive.

To go to GAGE program, depress button A (mode) until the DIVE menu is visualized, then depress button C (select), making the DIVE icon flash. Lastly, depress button D (set), and the GAGE icon will appear (picture 8).

NOTE: ⊏◻⅄ computer is preset on DIVE ᴿr program.

GAGE program will be memorized in the computer until the diver changes the program.

In GAGE program PLAN function is off: it is possible to set only a maximum depth alarm, which may be switched on or off by the user by setting the instrument, following the same procedure as shown in chapter 2.7.1.

NOTE: in GAGE function the depth gauge supplies indications between 0 and 655,8 ft.

Related topics:
- 2.7.1. - Maximum depth alarm
- 3.6. - GAGE (or depth gauge/timer) program

2.6. - FREE (or APNOEA) program parameters setting

⊏◻⅄ Cressi-sub computer is equipped with a FREE (or apnoea) program, intended for all those divers who want to use the instrument for apnoea diving, provided they got proper training on all the necessary techniques.

WARNING: Cressi-sub discourages apnoea dives without proper training, since the instrument does not replace a correct information on apnoea diving physiology and risks, which might be very dangerous to the diver's safety.

NOTE: apnoea diving, especially when deep and protracted, may cause serious risks to occur, as for example prolonged apnoea syncope, which may cause a sudden and very dangerous loss of consciousness.

⚠ **DANGER:** Cressi-sub strongly recommends to avoid any apnoea diving after snorkel dives. Moreover, at least two hours should elapse since the end of a snorkel dive before starting an apnoea dive, which anyway should not exceed the allowed maximum depth of 16 ft.

To get to FREE program depress button A (mode) until the DIVE menu is visualized, then depress button C (select), making the DIVE icon flash. Lastly, depress button D (set), and the FREE will appear (picture 28).

During an apnoea dive, ⊏◻⅄ supplies the dive's basic parameters, that is current depth, maximum depth reached by

plunging, dive time, with a frequency of data sampling (sampling time) of 1 second.

In *FREE* program *PLAN* function is off, and it is possible to set only a maximum depth and maximum apnoea dive time alarm, which may be switched on and off by the user: first, set *FREE* program by depressing button A (ᴍᴏᴅᴇ) until the related menu is visualized (picture 8b *FREE* program) and following the procedures shown in the previous chapters. At this point, depress button C (ꜱᴇʟᴇᴄᴛ) in order to select the function and choose the setting by depressing button D (ꜱᴇᴛ) (picture 8b - *FREE* program).

The following sequence shows the available functions:

Max Depth alarm -> OFF/ON -> *FREE* **dive time alarm -> OFF/ON ->** *FREE*

that is:

- Max Depth alarm (picture 8a-9b) may be switched on (OFF/ON); it is possible to vary the depth at which it will start (picture 8b), by depressing button D (ꜱᴇᴛ).

- Free Dive time alarm (picture 29) may be varied and switched on by depressing button D (ꜱᴇᴛ). It is possible to switch it off (OFF/ON) (picture 30), by depressing first button C (ꜱᴇʟᴇᴄᴛ) then button D (ꜱᴇᴛ).

If the alarms are on (ON), when the dive reaches the maximum depth and the maximum time set, a sound alarm will start and the display will flash for three seconds.

The maximum depth value may be varied from 0 to 324,7 ft., by depressing button D (ꜱᴇᴛ). When the maximum depth has been set, depress button D (ꜱᴇᴛ) to switch on or off the depth

alarm. The computer is preset on the values of 131 ft. and OFF. At the end of the dive ᴇᴅᵞ *FREE* program processes the apnoea dives data using its functions of (*LOG*) - dive logbook (chapter 4.2.). (*HIST*) - dive historic memory (chapter 4.3.) and (*PROF*) - Dive profile (chapter 4.4.). Such functions are specific for any set program and include a processing memory of their own which does not affect the computer ᴇᴅᵞ other processing programs.

It is possible to reset the daily apnoea memory's content (HISTORY), by following the procedures shown in chapter 3.7.2 *FREE* program will be memorized in the computer until the diver changes the program.

Depress button A (ᴍᴏᴅᴇ) for some seconds to revert back to the normal display (picture 1).

Related topics:

- 2.7.1. - Maximum depth alarm
- 3.7. - *FREE* (or apnoea) program

2.7. - Instrument general setting.

2.7.1. - Maximum depth alarm.

All computer ᴇᴅᵞ's programs are equipped with a preset maximum depth alarm (picture 6b *DIVE* - program; picture 8a - *GAGE* program; picture 8b - *FREE* program) on a value of 132 ft. limit sport dives. When the function is on (ON), upon reaching the set maximum depth, a sound alarm will start and the display will flash for three seconds

It is possible to switch on the alarm or vary the maximum depth: first set the program you want to use by depressing button A (ᴍᴏᴅᴇ) until the related menu is displayed (picture

5 *DIVE* program; picture 8a *GAGE* program; picture 8b *FREE* program) and following the already described procedures. At this point, depress button C (**SELECT**) once to switch on the possibility of selection. Use again button C (**SELECT**) to select the maximum depth alarm and set the wished value (between 0 and 324,7 ft.), by depressing button D (**SET**). When the wished depth has been set, use again buttons C (**SELECT**) and D (**SET**), to switch on or off the alarm.

Depress button A (**MODE**) for some seconds to revert back to the normal display (picture 1).

Related topics:

- 2.4.1. - *DIVE* program parameters setting
- 2.5. - *GAGE* (or depth gauge/timer) program parameters setting
- 2.6. - *FREE* (or apnoea) program parameters setting

2.7.2. - Date and time adjustment (*SET*).

To adjust dare and time, depress button A (**MODE**) in sequence until the (*SET*) icon is displayed; then, depress button C (**SELECT**) to select the function you wish to vary, according to following sequence (picture 10):

1) Seconds; 2) Minutes; 3) Hours; 4) 12/24h;
5) Year; 6) Month; 7) Day.

The values are varied by pressing button D (**SET**).

Depress button A (**MODE**) for some seconds to revert back to the normal (picture 1).

NOTE: always check tome and date in order to get correct entries in you computer's logbook.

Related topics:

- 2.2. - Clock function
- 4.2. - Dive logbook (*LOG*)

2.7.3. - Units of measure setting.

EDY Cressi-sub computer can make computations both by metric units (depth in meters and temperature in °C) and by feet units (depth in feet and temperature in °F).

To change the units of measure, depress button A (**MODE**) in order to get to the first menu of (*DIVE*) program (picture 5). Then, depress button C (**SELECT**), making the (*DIVE*) flash. At this point, depress buttons C+D in sequence and keep them both depressed for about 6 seconds. While doing so, PO2 value will be flashing, a sound alarm will start and the new unit of measure will be displayed.

Depress button A (**MODE**) for some seconds to revert back to the normal display (picture 1).

3) While diving

Foto Ghisotti

3. - *DIVE program.*

ED4 Cressi-sub computer supplies two *DIVE* computing programs: for Air dives (*DIVE* **Air** program) and for Nitrox or EAN (Enriched Air Nitrox) dives.

> **NOTE:** **ED4** Cressi-sub computer is preset on *DIVE* **Air** , program, that is with a mixture value of 21% O2 (air) and PO2 of 1.4. By varying the value of FO2 **ED4**'s *DIVE* Nitrox computing program will start.

3.1. - *AIR DIVE (DIVE Air program)*

ED4 computer starts automatically "*DIVE*" program at depths superior to 5 ft. During a no decompression dive the display will show following information (picture 11):

① current depth value, in meters (m) or feet (ft)

② diving time, shown by the "DIVE T" icon

③ maximum depth reached during the dive displayed in meters (m) or feet (ft), shown by "MAX" icon

④ still available no decompression time shown by "NDL" - (No Decompression Limit) icon

⑤ indicator of segmented ascent rate

⑥ graph of nitrogen amount absorbed during the dive

⑦ graph representing CNS 02 toxicity level (see chapter 3.3.3.)

⑧ automatic indicator of altitude level

⑨ Icon of maximum depth alarm (if switched ON – see 2.7.1)

⑩ indicator of Nitrox mixture dive

Further important information are obtained by keeping button A (**MODE**) depressed by diving: they show (picture 12):

① current PO2;

② oxygen percentage of the selected mixture (Air if FO2 = 21%);

③ maximum depth reached during the dive, in meters (m) or feet (ft);

④ current temperature, in °C or °F
   The *LFdL* display shows (*DATA*).

If you keep button C (**SELECT**) depressed, current time will be displayed (picture 1) as follows:

1) Hours; 2) Minutes; 3) Seconds

> **NOTE:** if the computer is used for air dives, no modification or setting of FO2 needs to be carried out before the subsequent dive.

At any moment of your dive, should light conditions do not allow you an easy reading of the display, it is possible to switch on the back-illumination, by depressing button B (**LIGHT**). The display back-illumination will last about 5 seconds and may be repeated any time you want. The battery consumption is minimal.

Related topics:

• 2.4.1. - *DIVE* program parameters setting.
• 2.7.3. - Units of measure setting.
• 3.4.1. - Ascent rate.
• 3.3.3. - CNS toxicity display.
• 3.3.4. - PO2 alarms.

3.2. - HYPER-OXYGENATED MIXTURES DIVE
(*DIVE* Nitrox *program*)

3.2.1. - Before a Nitrox dive

⚠ **DANGER:** the use of this computer with Nitrox is *exclusively* intended for divers who have attended a full training course on the use of such mixtures.

DIVE Nitrox program of ⊏ᗡᵴ Cressi-sub computer allows making saturation and de-saturation computations for a dive carried out using a hyper-oxygenated mixture (Nitrox or EANx) and starts any time the preset *DIVE* ᖇᵣ program's parameters are varied, or any time the mixture's FO2 is varied (preset on FO%=21%). In this case, the (Nitrox) icon will be displayed (picture 13) during the dive and as long as ⊏ᗡᵴ remains set on Nitrox parameters.

Once Nitrox program is on, it is necessary to set ⊏ᗡᵴ on the exact values of oxygen percentage (FO2) contained in the cylinders to be used during the dive, after having analyzed their content, so that the computer adapt its computing algorithm to the new set values.

WARNING: ⊏ᗡᵴ computer is always set on *DIVE* ᖇᵣ program for air dives, until the diver sets it on Nitrox program (chapter 2.4.1. - dive parameters setting).

⚠ **DANGER:** do not dive with Nitrox cylinders without checking their oxygen percentage.

WARNING: before diving, always check the oxygen percentage of the mixture set on the computer. This is done on surface by depressing button A (ᵐᗝᗞᴇ) in sequence until the *DIVE* display appears, showing your dive's parameters.

WARNING: under the same dive conditions, a Nitrox mixture requires longer no decompression times than air. Although, it is strongly recommended to comply with the maximum depth allowed by the selected Nitrox mixture.

Related topics:

- 2.4.1. - *DIVE* program parameters setting
- 2.7.3. - Units of measure setting.
- 3.3.   - Nitrox parameters setting
- 3.3.3. - CNS toxicity display
- 3.3.4. - PO2 alarms

3.3. - Nitrox parameters setting.

3.3.1. - Partial pressure setting (PO2).

⊏ᗡᵴ is preset on a basic PO2 value of 1.4 bar, in order to guarantee the uppermost safety during any kind of dive.

Though, it is possible to vary the PO2 setting on values between 1.0 bar and 1.6 bar. You just need to depress button A (ᵐᗝᗞᴇ) to get to the (*DIVE*) display, as shown in picture 5, then depress button C (ᔆᴇᒪᴇᑕᴛ) to select the parameters you wish to vary according following order:

PO2 -> FO2 -> Safety Factor -> Max Depth -> OFF/ON

where PO2 is the oxygen partial pressure to be set by the diver on values between 1.0 bar and 1.6 bar, by variations of 0.1 bar. The value is varied by depressing button D (ᔆᴇᴛ).

Depress button A (ᵐᗝᗞᴇ) for some seconds to revert back to the normal display (picture. 1).

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WARNING: the computer keeps the set PO2 until the diver resets it manually on different values.

Related topics:

• 2.4.1. - DIVE program parameters setting
• 3.3.3. - CNS toxicity display
• 3.3.4. - PO2 alarms.

3.3.2. – Nitrox mixture oxygen fraction setting (FO2)

WARNING: before diving, always check the FO2 value set on your computer!

In order to set the correct oxygen percentage contained in the Nitrox mixture, depress button A (MODE) until the (DIVE) display appears, as shown in picture 5, where the parameters may be varied according to following scheme: by depressing button C (SELECT) you select the parameters relating to:

PO2 -> FO2 -> Safety Factor -> Max Depth -> OFF/ON

where FO2 is the Nitrox mixture oxygen percentage, which may be set on values between 21% and 50%, by O2 variations of 1%, by repeatedly depressing or keeping button D (SET) depressed.

NOTE: by keeping button D (SET), depressed, the computer will automatically stop on the value ot the first Nitrox standard mixtures (EAN 32), corresponding to 32% of oxygen.

NOTE: by varying the mixture oxygen percentage, the computer will also display the maximum depth that may be reached with that mixture (MAX). Of course, this value will vary according to the set PO2 value.

Depress button A (MODE) for some seconds to confirm the set percentage and revert back to the normal display (picture 1).

NOTE: it is possible to vary the Nitrox mixture's setting *even* during the surface interval *(de-saturation in progress)*

This feature is very important, especially for divers who carry out a series of subsequent dives: it allows to vary the mixture after carrying out, for example, a first air dive, without having to wait for the full de-saturation.

Though, it is important to clearly understand and comply with the following

① At the end of a dive, the previously set mixture oxygen percentage FO2 will be stored in the memory *only* during the first ten minutes of the surface interval. Another dive carried out within this period of time will be computed as a continuation of the previous dive - therefore, taking into account same cylinder and same mixture.

NOTE: it is NOT possible to set any variation of the mixture FO2 within the first 10 minutes after ending a dive

In fact, it is not possible to get to the (DIVE) parameters setting menu and therefore to vary the previously set percentage within the first ten minutes of surface interval.

② 10 minutes after the completion of the dive, the computer *resets* the FO2 percentage on a safety value of 99%, waiting for the diver to set the correct value relating to the new mixture. The dive parameters setting will change as shown in picture 14;

Of course, the diver must analyze the subsequent dive's mixture and set the computer with the new FO2 value.

Should you neglect to set the new FO2 percentage on the computer, you would be warned by the PO2 alarm (picture 15), at a depth of only 13 ft. (toxicity limit of an EAN 99% mixture, with PO2 set on 1.4). This is done to warn the diver and get him to correctly reset his dive's parameters, by surfacing at once. Should the dive be continued, a second PO2 alarm at 1.6 bar (that is at 20 ft.) would start.

③ Should the FO2 value be set and no dive carried out, the computer will store the set value in the memory until the current day's midnight, when it will reset it on the safety value of FO2 = 99%. The dive's parameters setting will change as shown in picture 14.

Related topics:

- 2.4.1. - *DIVE* program parameters setting
- 3.3.1 - Partial pressure setting (PO2)
- 3.3.3. - CNS toxicity display (OLI).
- 3.3.4. - PO2 alarms.
- 4.1.1. - Surface interval after a *DIVE* program

3.3.3. – CNS toxicity display

ᴇᴅ૫ Cressi sub computer displays a graph of the oxygen toxicity level to the Central Nervous System (CNS). The toxicity level depends on the oxygen partial pressure and on the exposure to high oxygen partial pressures (PO2). Picture 16 represents the display's 8 pixels column which shows the increasing accumulated oxygen amount. When all 8 pixels light up, 100% of the maximum tolerance allowable to the CNS has occurred and serious danger of an oxygen intoxication exists.

It is important therefore to understand, monitor and control the oxygen toxicity level.

In order to reduce the risk of oxygen intoxication, ᴇᴅ૫ displays a graph which is easy to be read in any situation. When the oxygen level reaches warning values, next to the maximum allowable toxicity (corresponding to 7 of 8 lighted pixels), the graph starts flashing along with the display and an alarm starts sounding which lasts 15 seconds, showing the proximity of a CNS toxicity level.

When the eighth pixel lights up as well, a second (100%) alarm starts: the graph and display start flashing and an alarm starts sounding, as long as the diver does not surface, and the oxygen partial pressure does not decrease. Only when the eighth pixel turns off, the graph stops flashing, while the alarm will be entered in the Logbook.

NOTE: The result of the oxygen exposure computations is approximated to the above percentage value.

Related topics:

- 3.1. - Air dive
- 3.2. - Hyper-oxygenated Nitrox mixture dive
- 3.3.1. - Partial pressure setting PO2.
- 3.3.2. - Nitrox mixture oxygen fraction (FO2%).
- 3.3.4. - PO2 alarms.
- 4.2. - Dive logbook

3.3.4. - PO2 alarms.

ᴇᴅ૫ Cressi-sub computer is able to constantly monitor another basic parameter relating to oxygen, and that is O2 partial pressure value (PO2). Oxygen toxicity may be caused both by an excessive accumulation (CNS toxicity seen in the previous chapter) and by exceeding the maximum PO2,

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which is exceeding the maximum depth allowed by the mixture used. As already seen, the PO2 limit value is set by the diver within a range between 1.0 bar and 1.6 bar. ⊏⊐⅄ 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 level. Such limit varies according to the PO2 value set. ⊏⊐⅄ is preset on a value of 1.4 bar whose corresponding maximum depth is, by air, 184 ft. Of course, it is possible to set the computer on other PO2 values, up to a maximum of 1.6 bar, ⊏⊐⅄ is therefore equipped with two kinds of PO2 alarm:

① By reaching the limit depth relating to the set PO2 (from 1.0 bar to 1.6 bar), an alarm starts sounding for 15 seconds, while the display starts flashing, showing the (PO2) icon (picture 17), and, at the left top, the reached set PO2 limit value.

② A second alarm will start when the diver reaches the depth corresponding to a PO2 of 1.6 bar, lasting again for 15 seconds. The display will also flash, the diver must not go beyond this warring depth limit.

Both alarms will be entered in the Logbook.

Related topics:

- 3.1. - Air dive.
- 3.2. - Hyper-oxygenated Nitrox mixture dive.
- 3.3.1. - Partial pressure setting PO2
- 4.2. - Dive logbook (LOG).

3.4. – Curve dive.

3.4.1. – Ascent rate.

⊏⊐⅄ Cressi-sub computer's algorithm considers different ascent rates according to the depth. The rate is shown on the display by a segmented indicator at the right bottom, which works according to the following table:

Depth	No segments	3 segments	6 segments	8 segments
0 ft - 19.3 ft.	0.0 - 12.7 ft./min	13.1 - 19.3 ft./min	19.7-25.9 ft./min	26.2 ft./min (SLOW)
19.7 ft. - 58.7 ft.	0.0 - 19.3 ft./min	19.7 - 25.9 ft./min	26.2-39 ft./min	39.4 ft./min (SLOW)
19.7 ft. - 58.7 ft.	0.0 - 25.9 ft./min	26.2 - 39 ft./min	39.4-52.1 ft./min	16.4 ft./min (SLOW)

If during surfacing, the maximum allowed ascent rates are exceeded, the display will show several segments, showing the ascent rate increasing level. Moreover, an alarm will start sounding and the ⎍⌐⌐⎍⌐ display (picture 18) will show a flashing (SLOW) icon. The segmented indicator will flash as well, showing the ascent rate and the current depth value.

In this situation, surfacing must be stopped until the (SLOW) icon disappears and the computer shows its normal display.

⚠ **DANGER:** surfacing too fast dramatically increases the risk of decompression sickness! Cressi-sub always recommends a safety stop at the end of each dive, lasting about 3-5 min at 10-20 ft., which will be assisted by the computer (see chapter 3.4.2.)

WARNING: do not engage in a follow up dive after a surface interval if the (SLOW) icon has been on! The computations for the next dive might be invalidated by exceeding the maximum ascent rate.

3.4.2. - Safety Stop (STOP).

⊂⊐╈ is programmed to automatically signal a safety stop, after any dive at a greater depth than 32 ft., as recommended by training agencies and the most recent studies on diving physiology. A stop should be carried out at a depth between 10 ft. and 20 ft. and last as long as signalled by the computer.

NOTE: Cressi-sub always recommends a safety stop after the end of any dive, lasting about 3-5 min. at 10 ft.-20 ft.

The stop is shown by the (STOP) icon at the bottom of the display (picture 13); it shows clearly how many minutes the safety stop must last and the depth in meters or feet.

The safety stop is not mandatory, though it is strongly recommended after any dive. If, for example, the maximum ascent rate has been repeatedly exceeded, a safety stop should be conducted. In this case, ⊂⊐╈ requires an especially prolonged stop, which Cressi-sub always recommends to respect, in order not to get exposed to serious risks.

△ **DANGER:** at the end of a safety stop, divers often surface at a high rate, sometimes even pumping their gav. It is a very great mistake, which might cause decompression sickness. The last feet before surface are the most dangerous, showing dramatic pressure variations. You should always take at least a minute to reach the surface after a safety stop.

3.4.3. – Decompression warning.

Any time the available no decompression time shown by the "ＮdＬ", icon decreases to 3 minutes (picture 19), ⊂⊐╈ will engage an alarm and the display will be flashing for several seconds, warning the diver he is approaching no decompression limits, therefore beginning a decompression dive.

3.5. - Decompression dive (DECO).

△ **DANGER:** do not use this instrument to dive beyond the no decompression limits! Cressi-sub discourages the use of this computer for decompression dives.

In the event you have exceeded the no decompression limits, ⊂⊐╈ Cressi-sub computer will assist you with specific information related to surfacing correctly and related decompression stages. Upon exceeding the no decompression limits, the computer will start an alarm lasting several seconds, and the display will change as in picture 20, giving the diver the following information:

① DECO replaces the "ＮdＬ" icon, showing that no decompression has been exceeded and decompression stops must be taken.

② Depth of first decompression stage (*the deepest*), given in meters (m) or feet (ft). It may vary from a minimum of 10 ft. to a maximum of 98,4 ft., by increments of 10 ft.

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③ Time in minutes of first decompression stage (the deepest).

④ (**TOTAL**) icon supplies the total surfacing time, including all decompression stops and proper ascent rates between stops and from the last stop to the surface.

⑤ "DIVE. T" icon giving the total time spent while diving.

⑥ Graph showing the nitrogen amount absorbed during the dive: in this case it is fully lit up until next "*DECO*" icon.

⚠ **DANGER:** DO NOT ascent above a decompression depth.

To avoid this situation, you should remain, during decompression, at depths slightly deeper than the stop.

NOTE: In case of decompression stops, you should always consider the amount of gas needed to complete your dive.

During rough sea conditions, it may be difficult to comply with the decompression stage requirements without exceeding them. Cressi-sub recommends that shallowest depth (nearest the surface) be at depth of about 13-16 ft., even though decompression will last slightly longer , that will be automatically calculated by ⋿⊏⅄.

Related topics:
- 2.7.3. - Units of measure setting.
- 3.1. - Air dive (*DIVE* Air)
- 3.2. - Hyper-oxygenated (Nitrox) mixture dive
- 3.4.1. - Ascent rate.
- 3.3.3. - CNS toxicity display
- 3.3.4. - PO2 alarms.
- 4.2. - Dive logbook.

3.5.1. - Omitted Decompression stage alarm

If the decompression stage is missed by exceeding the depth given by the computer, an alarm will start sounding and the display will be flashing until the diver descends back at least to the proper depth (*ceiling*) or below it (picture 21a).

The computer allows a maximum time of 3 minutes to correct this dangerous situation: during this time the alarm will be sounding to warn the diver. In the event that the diver does not descend to the proper depth given by the computer, ⋿⊏⅄ will display "Error" (picture 21b) and won't be usable for the next 48 hours. The only functions working will be the following:

Set Alarm -> Dual Time -> Log -> Hist -> Profile -> PC -> Set Time

In this situation, it is though possible, through *PC* function and the accessory interface, to transfer the data contained in ⋿⊏⅄'s memory.

⚠ **DANGER:** should this happen, you must not dive for the next 48 hours.

In the event you feel any symptoms of decompression sickness, you should contact DAN (Divers Alert Network) and your local hyperbaric chamber, supplying all data related to your dive.

Related topics:
- 3.1. - Air dive (*DIVE* Air)
- 3.2. - Hyper-oxygenated (Nitrox) mixture dive.
- 3.3.3. - CNS toxicity display
- 3.3.4. - PO2 alarms
- 3.5. - Decompression dive.
- 4.2. - Dive logbook.
- 4.5 - PC data transferring: compatibile PC interface

3.6.- *GAGE* (depth gauge/timer) program

EDY Cressi-sub computer is equipped with a *GAGE* program (or depth gauge/timer) intended for the divers who wish to use the instrument for prolonged table dives or decompression software dives.

Please be advised tha *EDY*, if in *GAGE*, program, does not make any saturation and de-saturation computation, working only as a basic instrument, supplying depth, dive time, together with other accessorial data. In this conditions, the dive must be planned using proper decompression software and carried out by means of proper tables.

By the way, Cressi-sub reminds you that sport dives must be carried out within the no decompression guidelines, at the maximum depth of 132 ft. which is the limit of *sport* dives: to exceed such limits dramatically increases the risk of decompression sickness!

WARNING: *EDY* Cressi-sub 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-sub strongly discourages dives with gaseous mixtures other than air without proper training. On the contrary, the diver may be exposed to risks including serious physical damages and, in extreme cases, even death.

EDY computer's "*GAGE*" dive program automatically starts the functions of depth gauge/timer at depths deeper than 5 ft, and the display will show the following information (picture 22):

① current depth value, in meters (m) or feet (ft). The depth gauge operative range reaches a depth of 199,9 m (656 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, given in meters (m) or feet (ft), shown by the "MAX" icon
④ segmented ascent rate indicator
⑤ Maximum depth alarm icon (if ON - see 2.5.1)
⑥ *GAGE* computing program icon
⑦ Timer icon

Related topics:

- 2.5. - *GAGE* (or depth gauge/Timer) program parameters setting
- 2.7.1. - Maximum depth alarm
- 2.7.2. - Date and time adjustment
- 2.7.3. - Units of emasure setting.
- 3.6.1. - Timer function starting
- 4.1.2. - Surface interval after a *GAGE* program
- 4.2.2. - *GAGE* program logbook
- 4.3.2. - *GAGE* program dive historic memory

3.6.1. – Timer function starting

During a *GAGE* program dive, it is possible to start Timer function, by depressing button D (*SET*); in this way a cronograph is started, whose icon will be starting on the display (picture 23), as long as it will be on. To stop the timer, you just need to depress again button D (*SET*), to look at the time shown by the timer, you need to keep button A (*MODE*) depressed and the display will show the following (picture 24):

① time given in hours, minutes and seconds;
② maximum depth reached during the dive, given in meters (m) or feet (ft);
③ current water temperature, given in °C or °F ;

Moreover, by keeping button C (SELECT) depressed, it is possible to look at the current time given in hours, minutes and seconds.
To reset the timer, you need to keep button D (SET), for longer than three seconds, as shown in picture 25: the display shows the "TRES" icon flashing for some seconds, confirming that the *GAGE* program's timer has been reset.
At any moment of your dive, should light conditions do not allow you an easy reading of the display, it is possible to switch on the back-illumination, by depressing button B (LIGHT). The display back-illumination will last about 5 seconds and may be repeated any time you want. The battery consumption is minimal.

WARNING: the instrument does not make *DIVE* program's saturation and de-saturation computations during the 48 hours elapsing since a dive carried out in *GAGE* (depth gauge-timer) program.

WARNING: it won't be possible to set *FREE* mode during the 48 hours elapsing since last *GAGE* (gauge-timer) dive.

Related topics:
• 2.7.3. - Units of measure setting.
• 3.6. - *GAGE* (or depth gauge/Timer) program

3.7. - *FREE* (or apnoea) program

EDY Cressi-sub computer is equipped with a *FREE* (or apnoea) program, destined to the divers who wish to use the instrument for apnoea dives, provided they had proper training.

WARNING: Cressi-sub discourages apnoea dives without proper training, since the instrument does not replace a correct information on apnoea diving physiology and risks, which might be very dangerous to the diver's safety.

NOTE: apnoea diving, especially when deep and protracted, may cause serious risks to occur, as for example prolonged apnoea syncope, which may cause a sudden and very dangerous loss of consciousness.

⚠ **DANGER:** Cressi-sub strongly recommends to avoid any apnoea diving after snorkel dives. Moreover, at least two hours should elapse since the end of a snorkel dive before starting an apnoea dive, which anyway should not exceed the allowed maximum depth of 16 ft.

It has already been shown in chapter 3.3. how to get to EDY computer's *FREE* mode setting: it switches on automatically when the computer gets underwater. In this situation the computer's contact "E" is on, and its display changes, according to the situation, showing following information:

a) View of the first apnoea dive of the day (picture 31-a):

① value of current depth, in meters (m) or feet (ft);

② time of last apnoea dive, given in minutes and seconds by the icon "DIVE T";

③ maximum depth reached during last apnoea dive, given in meters (m) or feet (ft) by the icon "MAX";

④ TOTAL number of apnoea dives performed during the day;

⑤ icon *FREE*.

NOTE: the total number of apnoea dives performed during the day will be reset automatically at midnight. It is though possible to reset the apnoea dives' memory of the day at any moment, by following the procedure described in chapter 3.7.2.

b) View of a subsequent apnoea dive (picture 31-b):

① value of current depth, in meters (m) or feet (ft);

② time of last apnoea dive, given in minutes and seconds by the icon "DIVE T";

③ maximum depth reached during last apnoea dive, given in meters (m) or feet (ft) by the icon "MAX";

④ TOTAL number of apnoea dives performed during the day;

⑤ icon *FREE*.

By exceeding the depth of 4 ft. the *FREE* mode will switch on the counting, and the display will change as shown in picture 32, delivering following information and updating it every second:

① value of current depth, in meters (m) or feet (ft);

② time of apnoea dive, given in minutes and seconds by the icon "DIVE T";

③ maximum depth reached during the dive, given in meters (m) or feet (ft) by the icon "MAX";

④ indicator of segmented ascent rate

⑤ icon *FREE*.

Other meaningful information may be obtained by keeping A (*mode*) depressed, as follows (picture 33):

① value of maximum depth of apnoea dive, in meters (m) or feet (ft);

② water temperature, given in C° or °F degrees;

③ Icon of apnoea time alarm (if set);

④ Icon of maximum depth alarm (if set)

By keeping button C (*select*) depressed, the display shows the current time given in hours, minutes and seconds, as shown in picture 34.

At any moment of your dive, should light conditions not allow you an easy reading of the display, it is possible to switch on the back-illumination, by depressing button B (*light*). The display back-illumination will last about 5 seconds and may be repeated any time you want: the battery consumption is minimal.

The *FREE* mode will remain set as long as the diver does not change the setting.

NOTE: when *edy* is set on *FREE* (apnoea) mode, you may set *DIVE* mode (both air or nitrox); on the contrary, it won't be possible to set *GAGE* mode during the 48 hours elapsing since last apnoea dive.

⚠ **DANGER:** Cressi-sub strongly recommends to avoid any apnoea diving after snorkel dives. Moreover, at least two hours should elapse since the end of a snorkel dive before starting an apnoea dive, which anyway should not exceed the allowed maximum depth of 16 ft.

Related topics:

- 2.7.3. - *FREE* (or Apnoea) mode parameters setting
- 2.7.1. - Maximum depth alarm
- 2.7.2. - Date and time adjustment
- 2.7.3. - Units of measurement setting.
- 3.7.1. - Surface interval after an apnoea dive (SURF) / Apnoea dives memory and history (*HIST*)
- 3.7.2. - *FREE* dive memory and history (*HIST*) reset
- 4.1.3. - Surface interval after a *FREE* dive
- 4.2.3. - *FREE* dive Logbook
- 4.3.3. - *FREE* dive memory and history

3.7.1. - Surface interval after an apnoea dive (SURF) / Apnoea dives memory and history *HIST*

At a depth lower than 4 ft. and as long as *edy* computer remains underwater (contact "E" on), its display will deliver following information (picture 35-a):

① Surface (or recovery) time, given in minutes (1 a) and seconds (1 b);

② Time of **last** apnoea dive, given in minutes and seconds by the icon "DIVE T.";

③ Maximum depth reached during **last** apnoea dive, given in meters (m) or feet (ft) by the icon "MAX".

④ TOTAL number of apnoea dives performed during the day;

⑤ Value of current depth, in meters (m) or feet (ft).

Same information is given even when the computer is taken out of water and the contact "E" switches off. In this case the display will change as shown in picture 35-b, delivering following information:

1. Surface (or recovery) time, given in minutes (1 a) and seconds (1 b);
2. Time of **last** apnoea dive, given in minutes and seconds by the icon "DIVE T.";
3. Maximum depth reached during **last** apnoea dive, given in meters (m) or feet (ft) by the icon "MAX".

By depressing button D ($\mathbf{SET}$), you get to the view of apnoea dives memory and history (*HIST*), which delivers following information (picture 36):

1. TOTAL number of apnoea dives performed during the day;
2. Maximum depth reached during the apnoea dives of the day, given in meters or feet;
3. Time of the longest apnoea dive of the day, given in minutes and seconds by the icon "MAX DIVE T".

By depressing button D ($\mathbf{SET}$) once more, you get back to the main view (picture 37), which shows the current time; by depressing button D ($\mathbf{SET}$) once more, you get back to the view of the surface values as shown in picture 35-b.

In case the computer is plunged again underwater, and the contact "E" switches on, same values will remain on the display, which will change as shown in picture 35-a.

After ten minutes of surface time elapsing since last apnoea dive, the display will change as follows: if the computer is underwater, the contact "E" is on, and the display will change as shown in picture 31-b; if the computer is taken out of water,

the display will get back to the main view shown in picture 37.

Related topics:

- 2.7.3. - Units of measurement setting
- 3.7.   - *FREE* (or Apnoea) program
- 3.7.2. - Apnoea dives memory and history (*HIST*) reset
- 4.3.3. - *FREE* dives memory and history

3.7.2. - Apnoea dives memory and history (*HIST*) reset

Apnoea dives memory and history of the day will be reset automatically at midnight. Though, it is possible to reset the apnoea dives memory and history, by getting to mode and depressing button A ($\mathbf{MODE}$) repeatedly, until the related view will appear (picture 36). Now, keep button C ($\mathbf{SELECT}$) depressed during 5-6 seconds: the display will be flashing and replacing the icon with "CLEA" (picture 38), until the data stored in the apnoea dives memory will be entirely cancelled (picture 39).

Since the high frequency of data updating in $\mathbf{EDY}$ computer's *FREE* mode (every second), the resetting function is particularly important, in order not to fill the available memory too soon.

NOTE: it is possible to carry out the above procedure only for the *HIST* function of $\mathbf{EDY}$ computer's *FREE* mode.

NOTE: the apnoea dives memory reset does not affect at all the data to be downloaded through the PC interface.

Related topics:

- 3.7.1. - Surface interval after an apnoea dive (SURF) / Apnoea dives memory and history *HIST*
- 4.3.3. - *FREE* dive memory and history
- 4.5.   - Data PC transfer: compatible PC interface

4) On surface after a dive

Foto Ghisotti

4. - On surface after diving/Data processing.

This chapter deals with all the "on surface" functions, meaning data processing after a dive carried out using ⊏◻⊢ computer.

Thanks to the functions of:

• (LOG)- Dive logbook (chapter 4.2.); (HIST) – Dive historic memory (chapter 4.3.); (PROF)- Dive profile (chapter 4.4.), and data PC transfer (accessory interface) (chapter 4.1.2.), ⊏◻⊢ computer processes, for any program set, all the parameters related to your dive. Each diving program has got an independent memory of its own, which may be managed by the diver, inside the selected program, by means of the above mentioned functions.

4.1. - Surface interval after a dive.

4.1.1. - Surface interval after a DIVE program dive

When, after a DIVE, program dive, the diver ascends to a depth lower than 4 ft., by keeping button C (SELECT) depressed the display will supply the following information (picture 26):

① De-saturation time, given in hours and minutes, shown by the (DESAT) icon;

② "Don't Fly" (✱) icon.

The latter icon ✱ means that any flight or travel to higher altitudes than the current altitude must be avoided, until the icon itself disappears.

WARNING: DAN (Divers Alert Network) and UHMS (Undersea and Hyperbaric Medical Society) advise a surface interval between 12 and 24 hours after a no decompression dive and a surface interval of 48 hours after a decompression or especially fatiguing dive, before a flight.

③ Surface time, given in hours and minutes, meaning the current surface interval, shown by the (SURF.T) icon.

④ graph of the residual nitrogen in the tissues after a dive.

NOTE: should a dive begin within less than 10 minutes of surface interval, ⊏◻⊢ will consider this new dive as the continuation of the previous one: the dives' count and dive time computation will restart from where they had stopped.

NOTE: on the contrary, dives carried out after at least 10 minutes of surface interval will be considered as new dives.

By depressing button A (MODE)four times in a row, you get to the dive planning program, shown by the (PLAN) icon (picture 7c), already seen in chapter 2.4.2.: this time, it will take into account the residual nitrogen contained in the tissues after the previous dives, and will vary the no decompression time, making it shorter than those given for the first dive.

NOTE: the PLAN function does not work in GAGE (depth gauge/timer) computing program and in the FREE program

At the end of de-saturation, the side bar showing the residual nitrogen will be empty, meaning the full releasing of residual nitrogen, that may affect following dives.

Related topics:
• 2.4.2. - Dive planning.
• 3.1. - Air dive (DIVE Air).
• 3.2. - Hyper-oxygenated Nitrox mixture dive

4.1.2. - Surface interval after a GAGE program

In a GAGE, program dive, ascending to a depth lower than 4 ft., ⊏◻⊢ computer won't give any data related to de-saturation and won't be able to make any saturation and de-saturation

computations during the next 48 hours after concluding the GAGE program dive. The value of such surface time, given in hours and minutes, is shown by the (SURF.T) icon (picture 27)

> **WARNING:** the instrument does not make saturation and de-saturation computations in DIVE program for the next 48 hours after ending the GAGE (depth gauge-timer)

Related topics:

• 3.6 - GAGE (depth gauge/Timer) program.

4.1.3. - Surface interval after a FREE program dive

At a depth lower than 4 ft. and as long as ᴇ◻ᵞ computer remains underwater (contact "E" on), its display will deliver following information (picture 35-a):

1. Surface (or recovery) time, given in minutes (1 a) and seconds (1 b);
2. Time of **last** apnoea dive, given in minutes and seconds by the icon "DIVE T.";
3. Maximum depth reached during last apnoea dive, given in meters (m) or feet (ft) by the icon "MAX".
4. TOTAL number of apnoea dives performed during the day;
5. Value of current depth, in meters (m) or feet (ft).

Same information is given even when the computer is taken out of water and the contact "E" switches off. In this case the display will change as shown in picture 35-b, delivering following information:

1. Surface (or recovery) time, given in minutes (1 a) and seconds (1 b);

2. Time of **last** apnoea dive, given in minutes and seconds by the icon "DIVE T.";
3. Maximum depth reached during last apnoea dive, given in meters (m) or feet (ft) by the icon "MAX".

By depressing button D (SET), you get directly to the view of apnoea dives memory and history (HIST), which delivers following information (picture 36):

1. TOTAL number of apnoea dives performed during the day;
2. Maximum depth reached during the apnoea dives of the day, given in meters or feet;
3. Time of the longest apnoea dive of the day, given in minutes and seconds by the icon "MAX DIVE T".

By depressing button D (SET) once more, you get back to the main view (picture 37), which shows the current time; by depressing button D (SET) once more, you get back to the view of the surface values as shown in picture 35.

In case the computer is plunged again underwater, and the contact "E" switches on, same values will remain on the display, which will change as shown in picture 35-a.

After ten minutes of surface time elapsing since last apnoea dive, the display will change as follows: if the computer is underwater, the contact "E" is on, and the display will change as shown in picture 31-b; if the computer is taken out of water, the display will get back to the main view shown in picture 37.

Related topics:

• 2.7.3. - Units of measurement setting
• 3.7. - FREE (or Apnoea) program
• 3.7.2. - Apnoea dives memory and history (HIST) reset
• 4.3.3. - FREE dives memory and history

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4.2. - Dive logbook (*LOG*).

4.2.1. - *DIVE* program logbook.

EDY Cressi-sub computer stores data related to the last 30 hours' dives (or to the last 60 dives) conducted in *DIVE* program: the data are entered every 30 seconds in the logbook (dive journal). To activate the logbook, depress button A (*MODE*) repeatedly, until the (*LOG*) icon appears on the display (picture 40)

NOTE: Any dive lasting less than 30 seconds (data entering frequency) will not be stored.

EDY's logbook is a multifunction instrument that allows to view, on three different display modes, a full series of data related to dives, starting with the most recent one in chronological order.

The main display mode (picture 40) shows on the bottom the (*LOG*) function, which is soon replaced by the number of dive and display mode (1/3 = first of the three available modes related to that dive).

The display supplies the following information:

1. Dive's year.

2. Dive's date (month and day) – in brackets the dive's number in the daily series

NOTE: the first dive of the daily series is noted in brackets with 1 (meaning dive 1), the second with 2 (dive 2), and so on.

3. Maximum depth reached during the dive, given in m or ft.

4. Dive's number: the most recent dive's information is given first. When more than 60 dives are conducted, the oldest dives are cancelled out.

5. Graph of the residual nitrogen at the end of the dive: if it remains in the "green" zone, the dive is classified a no decompression dive; if it enters the "red" zone, the dive is considered a decompression dive.

6. Indicator of altitude level at which the dive has been conducted (see chapter 2.2.).

7. The (**Nitrox**) icon appears when the dive has been conducted with EANx mixture (Nitrox).

8. Graph of CNS O2 toxicity (see chapter 3.3.3.).

All three display modes show as well all icons related to the alarms which may have started during the dive, like:

(*PO2*) (PO2 alarm); (*SLOW*) (maximum ascent rate alarm), and so on

To view the second logbook display mode, just depress button D (*SET*). The mode's number 1/3 is replaced by 2/3, meaning the second of the available logbook modes related to the dive.

This second mode supplies the following data (picture 41):

1. Dive's starting time (the time at which the computer has gone below 4 ft., starting the dive time computation.

2. Dive's end time (the time at which the computer has gone above 4 ft.;

3. Dive's average depth (AVE) in m or ft.

4. Dive's total time, given in minutes, shown by the "DIVE T." icon

To revert back to the first display mode, just depress button C (*SELECT*), To view the third logbook display mode, just depress button D (*SET*). The mode's number 2/3 is replaced by 3/3, meaning the third and last of the available logbook modes related to the dive.

It supplies the following data (picture 42):

①   Mixture used for the dive: if an air dive, the (Air) icon appears; if a Nitrox dive, the display will give its FO2%;

②   Water temperature at the maximum depth, given in °C or °F.

③   Surface interval since the previous dive, given in hours and minutes.

④   The use of a safety factor SF1/2) .

To view the previous dives' modes recorded in the logbook, depress button D (SET) again. By keeping the button depressed, you will enter a rapid sequence of the first display modes related to the previous dives.

By depressing button C (SELECT), the display mode will change, while by keeping it depressed you will enter a rapid sequence of the first display modes related to the subsequent dives.

Related topics:

• 2.4.1. - DIVE program dive parameters setting
• 2.7.2. - Date and time adjustment
• 2.7.3. - Units of measure setting
• 3.1.   - Air dive (DIVE Ar)
• 3.2.   - Hyper-oxygenated Nitrox mixture dive
• 3.3.3. - CNS toxicity display.
• 3.3.4. - PO2 alarms.
• 3.4.1. - Ascent rate
• 4.1.1. - Surface interval after a DIVE program

4.2.2. – GAGE program logbook

EDY Cressi-sub computer stores data related to the last 30 hours' dives (or to the last 60 dives) conducted in GAGE pro-gram: the data are entered every 30 seconds in the logbook (dive journal). To activate the logbook, while on surface, depress button A (MODE), in sequence, until the (LOG) icon appears on the display (picture 43).

NOTE: Any dive lasting less than 30 seconds (data entering frequency) will not be stored.

EDY's logbook is a multifunction instrument that allows to view, on three different display modes, a full series of data related to dives, starting with the most recent one in chronological order.

The main display mode (picture 43) shows the (LOG) function, which supplies the following information:

①   GAGE icon

②   Dive's year

③   Dive's date (month and day) – in brackets the dive's number in the daily series

NOTE: the first dive of the daily series is noted in brackets with 1 (meaning dive 1), the second with 2 (dive 2), and so on.

④   Maximum depth reached during the dive, given in m or ft.

⑤   Dive's number: the most recent dive's information is given first. When more than 60 dives are conducted, the oldest dives are cancelled out.

⑥   Indicator of altitude level at which the dive has been conducted (see chapter 2.2.);

⑦   SLOW icon meaning the maximum ascent rate has started

To view the second logbook display mode, just depress button D (SET). The mode's number 1/3 is replaced by 2/3, meaning the second of the available logbook modes related to the dive.

This second mode supplies the following data (picture 45):

① Dive's starting time (the time at which the computer has gone below 4 ft., starting the ("*GAGE*") program;

② Dive's end time (the time at which the computer has gone above 4 ft).;

③ Dive's average depth (AVE) in m or ft.

④ Dive's total time, given in minutes, shown by the "DIVE T." icon

To revert back to the first display mode, just depress button C (**SELECT**). To view the third logbook display mode, just depress button D (**SET**). The mode's number 2/3 is replaced by 3/3, meaning the third and last of the available logbook modes related to the dive.

It supplies the following data (picture 45):

① Water temperature at the maximum depth, given in °C or °F.

② Surface interval since the previous dive, given in hours and minutes.

To view the previous dives' modes recorded in the logbook, depress button D (**SET**) again. By keeping the button depressed, you will enter a rapid sequence of the first display modes related to the previous dives.

By depressing button C (**SELECT**), the display mode will change, while by keeping it depressed you will enter a rapid sequence of the first display modes related to the subsequent dives.

Related topics:

• 2.5. - *GAGE* (or depth gauge/Timer) program parameters setting.

• 2.7.2. - Date and time adjustment

• 2.7.3. - Units of measure setting

• 3.6. - *GAGE* (or depth gauge/Timer) program

• 4.1.2. - Surface interval after a *GAGE* program

4.2.3. - *FREE* **program logbook**

EDY Cressi-sub computer stores data related to the last apnoea dives conducted in *FREE* program: the data are entered every second. To activate this function, while on surface, depress button A (**MODE**), in sequence, until the (*LOG*) icon appears on the display (picture 46).

> **NOTE:** the storage of dives' time in function *FREE* varies as to the time of apnoea and, although the data sampling frequency is of 1 second, no apnoea dive lasting less than 30 seconds is stored, in order not to fill up the available memory too soon.

EDY's logbook is a multifunction instrument that allows to view, on three different display modes, a full series of data related to apnoea dives, starting with the most recent one in chronological order.

The main display mode (picture 46) shows the (*LOG*) function, which is soon replaced by the number of dive and display mode (1/3 = first of the three available modes related to that apnoea dive).

It shows the following information:

① FREE icon

② Apnoea dive's year

③ Apnoea dive's date (month and day) - in brackets the dive's number in the daily series

NOTE: the first apnoea dive of the daily series is noted in brackets with 1 (meaning dive 1), the second with 2 (dive 2), and so on.

④ Maximum depth reached during the apnoea dive, given in m or ft.

⑤ Dive's number: the most recent dive's information is given first.

To view the second logbook display mode, just depress button D (SET). The mode's number 1/3 is replaced by 2/3, meaning the second of the three available logbook modes related to the apnoea dive.

This mode supplies the following data (picture 47):

① Apnoea dive's starting time (the time at which the computer has gone below 4 ft., starting the (*FREE*) computing program);

② Apnoea dive's end time (the time at which the computer has gone above 4 ft.)

③ Apnoea dive's average depth (AVE) given in m or ft.

④ Apnoea dive's total time, given in minutes, shown by the "DIVE T." icon

To revert back to the first display mode, just depress button C (SELECT), to view the third logbook display mode, just depress button D (SET). The mode's number 2/3 will be replaced by 3/3, meaning the third and last available mode related to the apnoea dive, which supplies the following data (picture 48):

① Water temperature at the maximum depth, given in °C or °F.

② Surface interval since the previous apnoea dive given in minutes (picture 3a) and seconds (picture 3b).

③ Total time of the apnoea dive given in minutes and seconds, shown by the "DIVE T." icon

To view the display modes related to the previous apnoea dives, depress button D (SET) again. By keeping the button depressed, you enter a rapid sequence of the first display modes related to the previous apnoea dives.

By depressing button C (SELECT), the display mode will change, while by keeping it depressed, you will enter a rapid sequence of the first display modes related to the subseuquent apnoea dives.

Related topics:

- 2.6. - *FREE* (or Apnoea) program parameters setting.
- 2.7.2. - Date and time adjustment
- 2.7.3. - Units of measure setting
- 3.7. - *FREE* (or Apnoea) program
- 4.1.3. - Surface interval after a *FREE* program

4.3. – Dive historic memory (*HIST*).

4.3.1. – *DIVE* program dive historic memory.

EDY Cressi-sub computer is also equipped with a historic memory for *DIVE* program dives (*HIST*). To start this function, depress button A (MODE) in sequence until the (*HIST*) icon appears on the display (picture 49). This program supplies information related to:

① total time of *DIVE* program dives, given in hours;

② maximum depth reached during the dives (given in m or ft);

③ dives' total number, shown by the "DIVE" icon

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The (*HIST*) function is able to store up to 599 dives, after which the counter is reset.

> **NOTE:** it is possible to vary the data stored in the *HIST*, function, using the proper interface software (accessory).

Related topics:
- 2.7.2. - Date and time adjustment
- 2.7.3. - Units of measure setting
- 3.1. - air dive (*DIVE* **A r**)
- 3.2. - Hyper-oxygenated Nitrox mixture dive.
- 4.5. - Data PC transfer: compatible PC interface.

4.3.2. - *GAGE* program dive historic memory.

ED 4 Cressi-sub computer is also equipped with a historic memory for *GAGE*, program dives (*HIST*). To start this function, depress button A (**mode**) in sequence until the (*HIST*) icon appears on the display of the *GAGE* program (picture 50). This program supplies information related to:

① total time of *GAGE*, program dives, given in hours;

② maximum depth reached during the dives (given in m or ft);

③ dives' total number, shown by the "DIVE" icon

④ *GAGE* program icon

The (*HIST*) function is able to store up to 599 dives, after which the counter is reset.

> **NOTE:** it is possible to vary the data stored in the *HIST*, function, using the proper interface software (accessory).

Related topics:
- 2.7.2. - Date and time adjustment

- 2.7.3. - Units of measure setting.
- 3.6. - *GAGE* (or depth gauge/Timer) program
- 4.5. - Data PC transfer: compatible PC interface.

4.3.3. - *FREE* program apnoea dive historic memory

ED 4 Cressi-sub computer is also equipped with a historic memory for *FREE*, program apnoea dives (*HIST*). To start this function, depress button A (**mode**) in sequence until the (*HIST*) icon appears on the display of the *FREE* program (picture 36). This program supplies information related to:

① **TOTAL** number of apnoea dives performed during the day;

② Maximum depth reached in apnoea dives during the day, given in meters (m) or feet (ft);

③ Time of the longest apnoea dive performed during the day, given in **minutes and seconds** by the icon "MAX DIVE T"

The memory of apnoea dives performed during the day will be reset automatically at midnight. It is though possible to reset the apnoea dive historic memory by keeping button C (**select**) depressed for about 5-6 seconds: the display will be flashing and replacing the *HIST* icon with "CLEA" (picture 38), until all data stored in the apnoea dive historic memory have been fully cancelled (picture 39).

Since the frequency of **ED 4** computer's data adjustment in the *FREE* program (every second), the reset function is especially important, in order not to fill up the available memory too soon.

> **NOTE:** it is possible to carry out the above procedure only for the *HIST* function of computer **ED 4**'s *FREE* program.

> **NOTE:** the apnoea dive historic memory reset does not affect in any way the data transferring through the PC interface.

4.4. - Dive profile (*PROF*).

The automatic scrolling of the data related to dives' and apnoea dives' profile is entered, inside the specific selected program (*DIVE*, o *GAGE* o *FREE*) by depressing button A (*MODE*) in sequence, until the (*PROF*) icon appears on the display (picture 51 a,b,c). The display will automatically show every information related to:

① current depth given in m or ft

② time of profile visualisation given in minutes (picture 51 a/b) for the *DIVE/GAGE*; programs dives; given in seconds (picture 51 c) for the *FREE*; program apnoea dives.

③ date of the selected dive's profile

Therefore, it is possible to scan the selected dive or apnoea profile, in detail, even without the interface (accessory). The dive profile's data will automatically appear with an interval of 30 seconds between each other for the *DIVE/GAGE*, programs, of 1 second for the *FREE* program apnoea dives. To view the immediately previous dive's profile, just depress button D (*SET*); to view the subsequent dive's profile just depress button C (*SELECT*).

4.5. - Data PC transfer: compatibile PC interface (*PC*).

EDY Cressi-sub computer may be interfaced with a compatible IBM personal computer having following specifications:

• operating systems: Windows 98 *second edition*, Windows 2000, Windows ME, Windows XP (Windows**®** is a Microsoft Inc. registered trademark);

• CPU: Pentium II 266 Mhz or superior;
• RAM: at least 64 MB or superior (recommended);
• Video resolution: 800x600 or superior (recommended)

By connecting the hardware of Cressi-sub (accessory) interface to a USB port of your personal computer and installing the related Cressi PC Logbook (accessory) software, it will be possible to download all data stored in your *EDY* computer. In order to do so, you need first to enter *EDY*, computer's PC function, by depressing button B (*MODE*), in sequence, until the (*PC*) icon appears (picture 52).

By following the directions, you can easily download your own dives' or apnoea dives' profile in order to view, print or vary them by means of the (accessory) interface. It may also be used for training, by means of a dive simulator contained in Cressi PC Logbook software of its PC interface (accessory).

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4.6. - Instrument reset

The instrument may be completely reset, by using the file "⊏ᴏᵞ_RESET.exe" contained in the utilities of Cressi PC Logbook software in the PC interface (accessory). By doing so, the data related to the nitrogen absorption of a *DIVE* program dive will be cancelled and the data stored in the other programs will be reset.

> **WARNING:** by resetting the instrument, all computation related to current de-saturation are cancelled! Do not reset your instrument if it has to be used to compute subsequent dives!

> **NOTE:** Dive logbook, profile and historic memory will be stored in the memory even after the instrument has been reset.

This function may be especially useful in the event the instrument is rented by Diving Centres.

You need to comply with the following directions before starting ⊏ᴏᵞ_RESET.exe program:

EDY RESET UTILITY

1. Application
   This document applies to the utility to reset ⊏ᴏᵞ.
2. Function

This utility can be reset dive computer like as warm boot. These setting and calculation data were cleared as follows:
1) Dive mode setting like as Dive, GAGE and Free mode
2) Surface time count and de-saturation time count
3) PGT and OLI value
4) Lock condition
And these setting were not cleared as follows:
1) Current time and calendar
2) Dive setting such as FO2, PO2Max, Depth alarm, Dive time alarm (free) and USF
3) Unit setting
3. How to use it to dive computer
   A.) Installation
   - Please install PCLOGBOOK V6.0 before using this utility to install USB driver for this
   PC Interface unit.
   - Copy utility to your storage on PC (It is not necessary to specify folder)
   B.) Run utility
   Click icon (EDY_RESET.exe).
Below screen will be shown on screen if utility could find PC Interface unit.
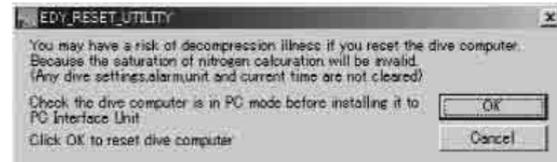
If it success to reset dive computer, below screen will be shown and dive computer will
be into time set mode after exit PC mode.

EDY_RESET_UTILITY

Success to reset

OK

4. Error message

1) There is no connection between PC and PC Interface Unit.

EDY_RESET_UTILITY

⚠ Could not find PC Interface Unit

OK

2) There is no connection between dive computer and PC interface unit.
or Dive computer is not in PC mode

EDY_RESET_UTILITY

⚠ Verify connection

OK

3) Different dive computer are installed to PC interface unit

EDY_RESET_UTILITY

⚠ Dive Computer is not EDY

OK

end....

Related topics:
- 2.4. - Parameters setting
- 2.5.2. - Date and time adjustment
- 2.7.3 - Units of measure setting
- 4. - Surface interval
- 4.2. - Dive logbook
- 4.3. - Dive historic memory
- 4.4. - Dive profile

5. - CARE AND MAINTENANCE.

 EDY Cressi-sub is designed to operate in extreme conditions with extensive underwater use.

You should always remember though 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, never store it wet, avoid any contact with heavy equipment, like diving cylinders.

WARNING: avoid any contact with solvents or chemicals of any kind. Never use compressed air to dry the computer. Do not use the computer in hyperbaric cabins if it is not completely under water.

WARNING: Do not open the instrument's cage or try to open and remove its buttons or its pressure sensor.

NOTE: always wash the instrument in fresh water after using.

The buttons don not need any particular care: never grease them with oil or spray of any kind.

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Have your computer checked only by specialized and properly equipped personnel. DO NOT carry out any procedure if you are not sure of doing it in the best way!

Should your computer show any possible anomaly in functioning, do not use the instrument to dive and have it checked by an authorized Cressi-sub retailer.

Should you notice humidity inside the display, have it checked immediately by an authorized Cressi-sub retailer.

Avoid over tighten your computer's strap, in order not to stress the handles fastening it to the instrument.

Related topics:

- 5.1. - Battery replacement.
- 7. - Warranty.

5.1. - Battery replacement.

The battery must be replaced by a specialized properly equipped centre. After any battery replacement, in fact, it is always necessary to check the computer's water-tightness, and this may be done only through specific equipment operated by highly qualified personnel.

The battery must be replaced any time the computer's display shows the run-down battery icon, either fixed or flashing (picture 4 a-b) as already seen in this manual.

WARNING: by replacing the battery, all data related 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. Do not replace the battery when de-saturation is in progress, since all data related to de-saturation computation would be cancelled. In this case, check the amount of de-saturation hours and do not dive, after battery replace

ment, during a corresponding amount of hours. After battery replacement, all settings revert back to the preset value (*DIVE* **R** **r** program: FO2=21% and PO2=1.4 bar, depth alarm on 132 ft., not working).

NOTE: you should remember that different factors affect the battery average life: time of storage before acquiring, the dive time, the use of back-illumination, the battery's quality itself, the temperature.

WARNING: always check your computer's water-tightness! Any anomaly or ater infiltration due to incorrect battery replacement will void the warranty.

Related topics:

- 5. - Care and maintenance
- 7. - Warranty.

6. - TECHNICHAL SPECIFICATIONS.

Algorithm: Bühlmann ZH-L12;

Standard tissues: 12

Hemi-saturation time: from 5 to 640 minutes

Dimensions and weight: Diameter: 51 mm (2 in.) - Height: 12 mm (0,47 in.) - Weight: 75 g (2,6 oz.)

Depth sensor:

- Sea water setting (fresh water depths are about 3% lower)

- Thermic counterbalanced

- Measuring field by *DIVE* function: 0-325 ft.

- Measuring field by *GAGE/FREE* function: 0-656 ft.

- Precision: +/- 1% (T 20° C – 68 °F)

- Reading resolution: 0.33 ft. (from 0 to 327,7 ft.), 3,3 ft. (from 328 to 655,8 ft.)

- Surface interval: from 0 to 48 hours

- Altitude function monitoring: from 0 to 19.685 ft., measures every 10 minutes

- Dive time: from 0 to 599 minutes

- Data entering interval: 30 seconds (*DIVE/GAGE* programs); 1 second (*FREE* program)

TERMOMETER:

- Resolution: 33 °F

- Measuring field: 23 °F + 104 °F

- Precision: +/- 35,6 °F ; °T adjustment every minute

WATCH:

- Precision: +/- 10 sec month average

- 12/24 hours display

BATTERY:

Li/MnO2 CR 2032 - 3V battery. 2 years average life (by 50 dives for year)

NOTE: you should remember that different factors affect the battery average life: time of storage before acquiring, the dive time, the use of back-illumination, the battery's quality itself, the temperature.

6.1. - DECOMPRESSION TABLES.

At the end of a dive, the computer will continue processing data for a subsequent dive. This is possible since the computer keeps recording the nitrogen absorption and release of "standard" tissues, which are taken as reference. Each tissue absorbs and releases nitrogen at different rates, indicated by the so-called "hemi-saturation times" (the time taken to

reach a 50% saturation). ⊑⊐⅄ Cressi-sub utilizes 12 standard tissues, on which the mathematical model computations are carried out, in any stage of the dive, on surface and in the subsequent dives.

6.1.1. - No decompression tables by the first dive in a series.

Depth (m)	Depth (ft)	AIR	EAN1 (32%) PO2=1.4bar	EAN2 (36%) PO2=1.4bar
9	30	200	200	200
12	40	104	200	200
15	50	66	117	182
18	60	47	74	92
21	70	35	55	65
24	80	25	41	50
27	90	19	32	38
30	100	16	24	--
33	110	13	19	--
36	120	11	--	--
39	130	9	--	--
42	140	8	--	--
45	150	7	--	--
48	160	7	--	--

7. - WARRANTY

⊑⊏⅄ Cressi-sub computer is warranted for manufacturing or material defects for a period of two years from the purchase date. The warranty DOES NOT include damages caused by improper use, by inattentive maintenance or modifications/repairs carried out by unauthorized personnel and is automatically suspended when the correct maintenance procedures described by the present manual have not been followed. The warranty cannot be transferred by the first purchaser to a third party. A purchase receipt (with purchase date) from an authorized Cressi-sub dealer is required for warranty service. Any unwarranted repair will be carried out at the buyer's expense.

The warranty does not include any document or warranty granted by retailers or agents beyond the present warranty's terms

No retailer or agent is authorized to carry out any variations to the present warranty or to grant an additional one.

In the event of product malfunction occurring, contact your authorized Cressi-sub retailer supplying your name and a copy of the purchase receipt from an authorized Cressi-sub retailer
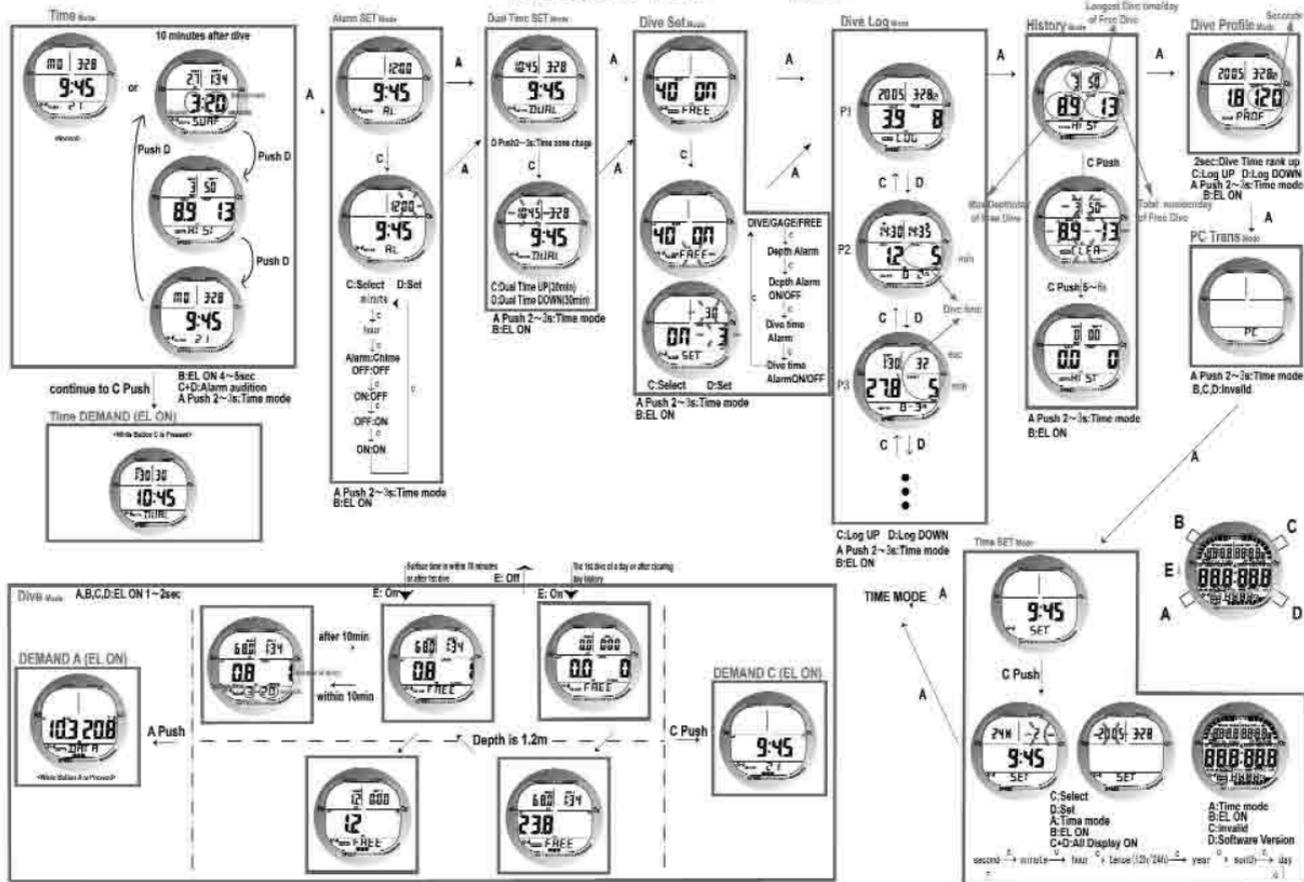
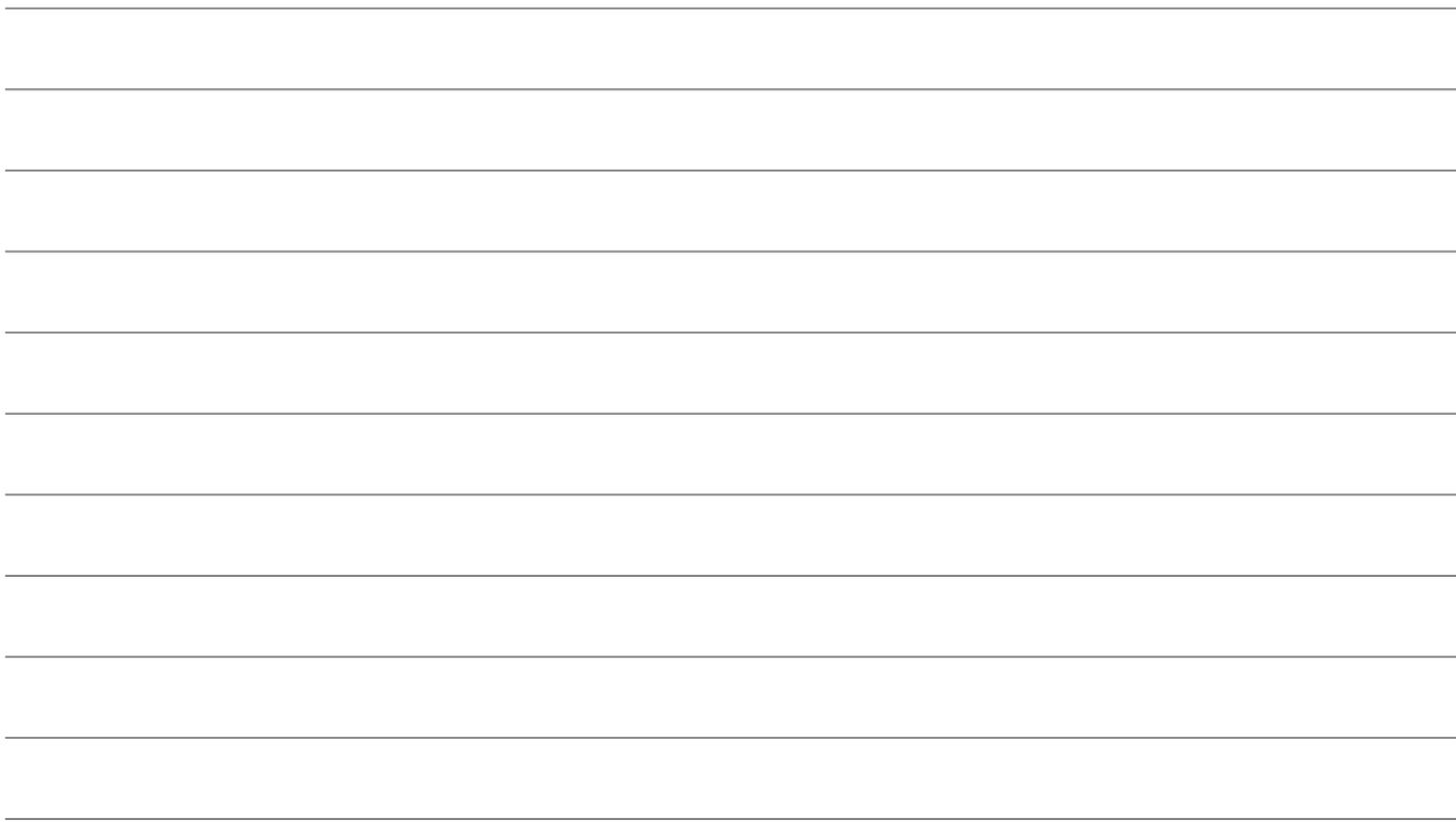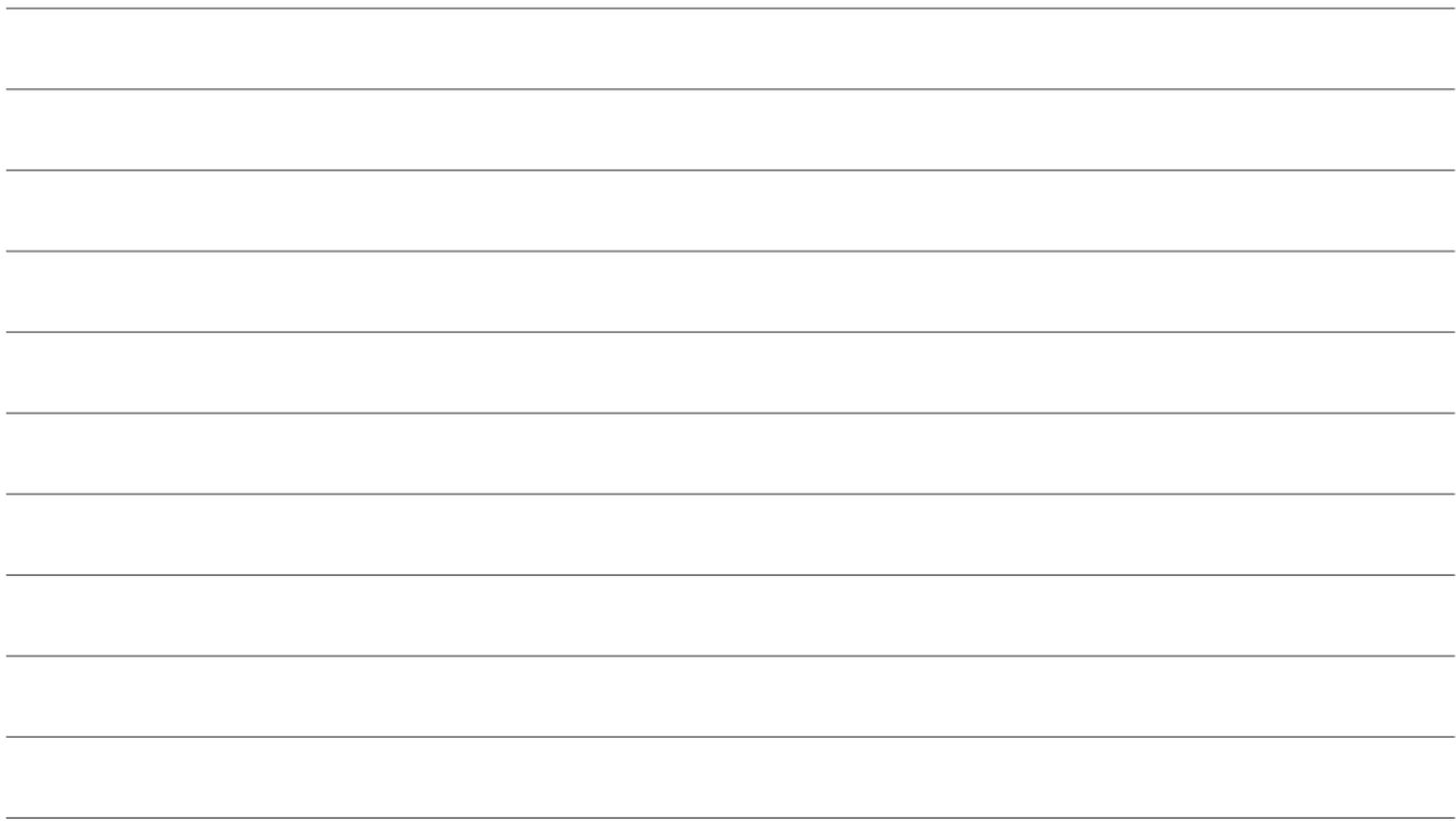Always keep the present manual with your ⊑⊏⅄ computer.

OPERATION FLOW — Normal —

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OPERATION FLOW —GAGE—

OPERATION FLOW —FREE—

Fig. 1 Fig. 1a Fig. 1b Fig. 1c Fig. 2 Fig. 3 Fig. 4a Fig. 4b Fig. 5 Fig. 6a Fig. 6b Fig. 7a

Fig. 7b Fig. 7c Fig. 8 Fig. 8a Fig. 8b Fig. 9a Fig. 9b Fig. 10 Fig. 11 Fig. 12 Fig. 13 Fig. 14

Fig. 15 Fig. 16 Fig. 17 Fig. 18 Fig. 19 Fig. 20 Fig. 21a Fig. 21b Fig. 22 Fig. 23 Fig. 24 Fig.25

Fig. 26 Fig. 27 Fig. 28 Fig. 29 Fig. 30 Fig. 31a Fig. 31b Fig. 32 Fig. 33 Fig. 34 Fig. 35a Fig.35b

Fig. 36 Fig. 37 Fig. 38 Fig. 39 Fig. 40 Fig. 41 Fig. 42 Fig. 43 Fig. 44 Fig. 45 Fig. 46 Fig. 47

Fig. 48 Fig. 49 Fig. 50 Fig. 51a Fig. 51b Fig. 51c Fig. 52

NOTA: *Per effettuare il cambio delle unità di misura vedere cap. 2.7.3.*
REMARQUE: *Pour effectuer le changement de l'unité de mesure cap. 2.7.3.*
HINWEIS: *Zur Einstellung der Masseinheiten bitte Kapitel 2.7.3. lesen.*
NOTA: *Para effectuar el cambio de las unidades de medida consultar cap. 2.7.3.*
NOTE: *In order to change the units of measure to be used cap. 2.7.3.*

Cressi-sub S.p.A.

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