SCUBAPRO®

Galileo 2
(G2)
User Manual

deep down you want the best

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GALILEO 2 (G2) USER MANUAL

The G2 Diving Computer – Designed for all kinds of diving.

Welcome to SCUBAPRO dive computers and thank you for purchasing the G2. You are now the owner of an extraordinary partner for your dives. This manual provides you easy access to SCUBAPRO state-of-the-art technology and the G2's key features and functions. Should you wish to know more about SCUBAPRO diving equipment, please visit our website www.scubapro.com

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⚠ IMPORTANT

Before using your SCUBAPRO G2, please carefully read and understand the Read First booklet that is included in the package.

⚠ WARNING

- The G2 has a depth rating of 120m/394ft.
- At depths between 115m/377ft and 120m/394ft in dive computer mode the message SWITCHING TO GAUGE appears on the display, and at depths over 120m/394ft the G2 automatically switches to Gauge mode and cannot be used as a decompression computer for the remaining time of the dive.
- Diving at oxygen partial pressures higher than 1.6bar (corresponding to a depth of 67m/220ft when breathing compressed air) is extremely dangerous and could lead to serious injury or death.
- Never risk your life on only one source of information. Eventually, every computer has the potential to fail, so do not depend exclusively upon it and always have a plan for how to handle failures. Use a redundant dive computer, carry backup tables and depth/time instrumentation.

CE

Hereby, Uwatec AG declares that the radio equipment type PAN1740 is in compliance with Directive 2014/53/EU.

The combination of SCUBAPRO Galileo 2 and SCUBAPRO high pressure transmitter is a personal protective equipment in compliance with the essential safety requirements of the European Union Regulation 2016/425. The notified body no.0474, RINA SpA, Via Corsica 12, I-16128 Genoa, Italy, has completed the EC type-examination to the combination mentioned above and assured the conformity with the European Standard EN250:2014.
The G2 dive instrument is also compliant with the European Union directive 2014/30/EU.
The full text of the EU declaration of conformity is available at www.scubapro.com/declarations-conformity.

Standard EN 13319: 2000

EN13319 is a European diving depth gauge standard. SCUBAPRO dive computers are designed to comply with this standard.

TABLE OF CONTENTS

The G2 is a technologically-advanced instrument that can accompany you during your underwater adventures while providing you with accurate depth, time and decompression information.

Your G2 User Manual is divided into 6 main sections.

Introduction to the G2. This section provides an overview of the G2 computer and describes its operating modes and main functions when on the surface.

G2 settings and menus. This section goes through the settings of your G2.

Diving with the G2. This section takes you underwater with the G2, showing you how to use the G2 as a dive computer. It outlines everything the G2 can—and will—do to enhance your safety and fun underwater.

G2 accessories. This section briefly describes the G2's extras that you can purchase to get the most out of your dive computer in all conditions.

Interfaces for the G2 and an introduction to LogTRAK. This section is all about personalization and customization. It describes how to change settings, how to download and how to manage your logbook.

Taking care of your G2. This section illustrates how to take care of your new dive computer.

1. INTRODUCTION TO THE G2

1.1 Power concept and charging

The G2 is powered by a rechargeable Li-Ion battery. SCUBAPRO recommends fully charging the battery before using the computer for the first time.

To charge the battery, plug the power/USB cable into your G2 as shown in the picture below.

Then, connect the other end of the cable to a USB charger, or a USB device capable of providing power for charging. At this point, the following battery charging status symbols will appear on the display of the G2.

☞ *NOTE: If the G2's battery is deeply discharged, nothing will appear on the display screen until the battery has reached a safe charge level for a startup. If this occurs, do not disconnect the USB, and do not try to activate the G2 by pressing a button. Simply leave the G2 charging for at least half an hour.*
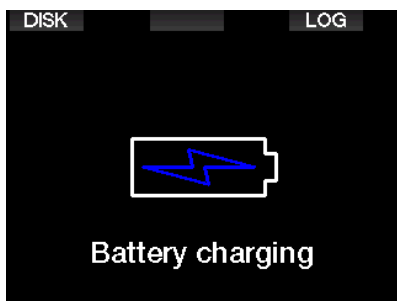
Charging will continue, but the above display will switch off after 3 minutes.
When the battery is completely charged, the following display will appear.
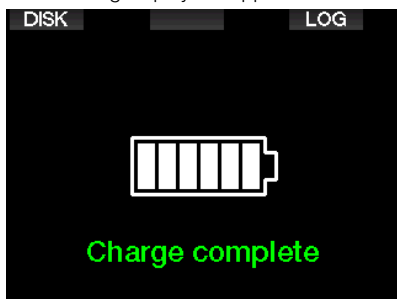
The G2 will alert you when the battery is approaching a critical discharge level by displaying the following message.

In addition, the battery icon with current charging status is shown above the main time-of-day display.

⚠ WARNING

Starting the dive with a weak battery may lead to a situation where the G2 shuts off during the dive. In case of such an event you should always carry a backup instrument that will enable you to complete the dive safely. If the G2 switches off during a dive it will remain locked in Gauge mode for 48 hours. (For more information on Gauge mode operation, see chapter: **Gauge mode.**)

☞ NOTE: Storing the G2 with a low battery may lead to a deep discharge state, which shortens the life of the battery.

⚠ WARNING

During the dive, when the battery charge level indicator falls to only 1 segment, the display will switch off automatically to save energy. However, you can still check the display manually by pressing the right button.

⚠ WARNING

The G2 will not start a dive when the battery has reached the critical discharge level indicated by the warning: "Charge battery!" In this state you cannot use the G2 for diving.

1.2 Li-ion Battery Safety Instructions

⚠ WARNING

Failure to read, and follow Li-ion battery safety instructions, and warnings may result in fire, personal injury, and property damages if the battery is charged and/or used improperly.

- DO NOT SHORT CIRCUIT. Short circuits may cause a fire and injury!
- Charge battery fully before first use.
- To charge the battery use only the specifically designed USB charger, provided in the packaging.
- Do not keep a bare battery in your pocket, purse, or anywhere together with other metal (conductive) objects.
- If the battery is damaged in any way stop using the dive computer immediately.
- Do not immerse in any liquid or allow the battery to get wet.
- Do not place the battery in high-pressure containers, microwave ovens, or on induction cookware.
- Immediately discontinue use if, while using, charging or storing, the battery emits an unusual smell, feels hot, changes color or shape, or appears abnormal in any other way.
- Do not carry, or store the batteries together with any conductive metal objects.
- Do not expose the battery to excessive sunlight or heat.
- Do not disassemble, or modify the battery.
- Keep the battery away from children, and pets.
- Never charge, or store the batteries inside your car in extreme temperature. Extreme temperatures (low or high) might ignite the battery, and cause a fire.
- Do not connect positive, and negative battery contacts intentionally, or unintentionally.
- Do not reverse the positive (+) and negative (-) terminals when charging, or using the battery.
- Never charge the battery at a current exceeding manufacturer-specified charging current.
- Never completely discharge the Li-ion battery.
- After the battery is discharged, don't leave it discharged. Charge battery as soon as possible
- It is your responsibility to determine that your charger and host device work properly.
- On battery electrolytes exposure to skin, flush with water immediately.
- If eye exposure occurs, flush with water for 15 minutes, and seek emergency care immediately.
- When your Li-ion battery reaches the end of its lifetime, it can only be replaced by an authorized SCUBAPRO service center. Do not open your dive computer or try to replace the battery yourself!

1.3 Operating modes

The G2 has 4 operating modes:

- **Charging and USB communication mode.** When connected to a USB device the G2's battery automatically starts charging. At the same time, you can access either the flash memory or the logbook using the LogTRAK program.
- **Sleep mode.** In this mode the display is off, but the G2 still updates desaturation and monitors ambient pressure for altitude changes, etc. This mode is activated automatically at the surface after 3 minutes without operation.
- **Surface mode.** After a dive or when manually activated, the display is on and you can change settings or operate the G2 with its buttons. The Bluetooth interface can be activated in this mode.
- **Dive mode.** This mode is activated when the computer reaches a depth of 0.8m/3ft or more. In this mode the G2 monitors depth, time, temperature and wireless sensors. Decompression

calculations are performed in this mode.

1.4 Switching on the G2

To switch on the G2, press the right button.

☞ *NOTE: You cannot turn the G2 on when it is connected to USB.*

The initial activation of your G2 will require some basic set up (selecting language, setting the time, etc.). The G2 will guide you through them. Simply follow the screen prompts while using the buttons.

☞ *NOTE: The following basic setup will also be required if you reset the G2 with the menu 8.6. Factory settings.*
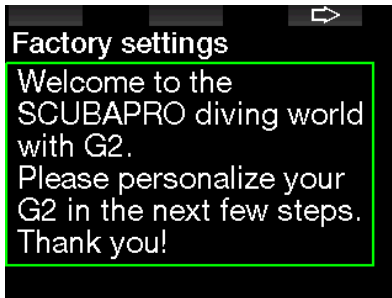
Press the right button.

Select your language with the left or middle button. Then confirm your selection with a press of the right button.
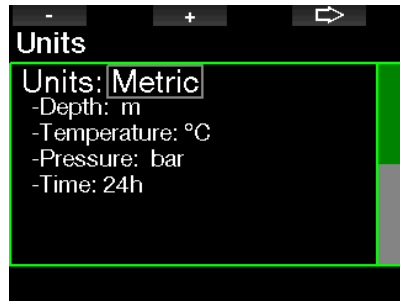
Select each unit with the left or middle button, and confirm it with the right button.

Set the time zone with the left or middle button and confirm it with the right button.

After this initial setup, your G2 will boot to the so-called main **time-of-day** display. This is the display in which the current time is shown in the main field.
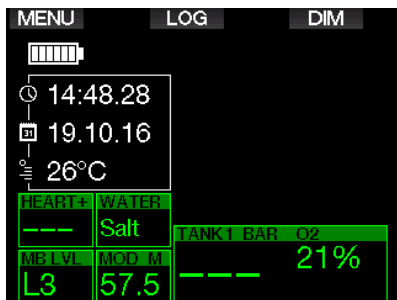
You G2's button functions can be found on-screen. To illustrate, the screen above shows that pressing the left button will take you to the main menu, pressing the middle button will take you to the logbook and pressing the right button will dim the display light.

However, be aware that these function labels may change depending on the operational mode you're currently in.

☞ NOTE: There are two methods for pressing the G2's buttons:

1. "Short" press. This is the normal method used in most cases with the labelled functions.
2. "Press-and-hold." This method is used only in special cases. They are described in this manual but are not labelled on the screen.

Button functions at the surface are summarized in the following table.

	LEFT BUTTON		MIDDLE BUTTON		RIGHT BUTTON	
	Press	Press and hold	Press	Press and hold	Press	Press and hold
SCUBA, GAUGE	Main menu	Oxygen setting	Logbook	Gas summary table Pictures	Backlight	Compass
APNEA	Main menu	Manual start of a dive	Logbook	Pictures	Backlight	Compass

1.5 No-Dive warning

If the G2 detects a situation of increased risk (due to potential microbubble accumulation from previous dives or a CNS O_2 level above 40%), the **NO DIVE** symbol will appear to advise you against performing another dive right away. The suggested time interval that you should wait prior to diving again is shown on the dive mode display, adjacent to the ⊘ symbol.
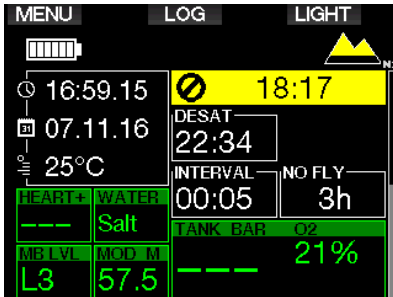
You should not undertake a dive as long as the no-dive warning is displayed on the dive computer's screen. If the warning is prompted by microbubble accumulation (as opposed to CNS O_2 over 40%) and you dive anyway, you will have shorter no-stop times or longer decompression times. Moreover, the duration of the microbubble warning at the end of the dive can increase considerably.

1.6 No-Fly time

The **no-fly time (NO FLY)** is the time during which an exposure to the reduced pressure (equal to ascending at higher altitudes) inside the cabin of an airplane could cause decompression sickness, as calculated by the decompression model in the computer. The no-fly text with countdown timer is shown until the restriction is completed.

To learn more about altitude warnings and altitude diving, see chapter: **Altitude diving.**

⚠ WARNING

Flying while the G2 displays the **NO FLY** symbol and countdown timer can result in serious injury or death.

1.7 SOS

If you stay above a depth of 0.8m/3ft for more than 3 minutes without observing a mandatory decompression stop, the G2 will switch into **SOS** mode. Once in **SOS** mode the G2 will lock up and will be inoperable as a decompression dive computer for 24 hours if it was dived in Scuba mode. If it is used for diving within the 24hours of an **SOS** lock, it will automatically switch to Gauge mode and provide no decompression information.

☞ NOTE: In Gauge mode the SOS lock interval is 48 hours.

⚠ WARNING

- Violating a mandatory decompression obligation may result in serious injury or death.
- Serious injury or death may result if a diver does not seek immediate treatment should any signs or symptoms of decompression sickness occur after a dive.
- Do not dive to treat symptoms of decompression sickness.
- Do not dive when the computer is in **SOS** mode.
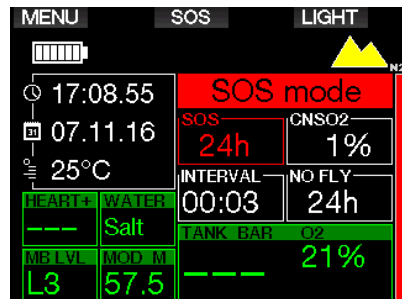
The display shows the same information as when displaying desaturation but, in addition, the SOS mode message is displayed.

Instead of the no-fly time, the 24-hour countdown is shown. The middle button description changes from **LOG** to **SOS**, and by pressing it an emergency message is displayed. The emergency information for this display can be entered using LogTRAK. Once the emergency message is displayed, pressing the **LOG** button shows the details of the last dive.

☞ *NOTE: If the battery becomes fully discharged while at depth in spite of using the power save mode, the G2 will remain in SOS mode and locked into Gauge mode for 48 hours, independent of the remaining desaturation time.*

1.8 Emergency information

To add your emergency information you will need to use LogTRAK for Windows or Mac. See section: **Interfaces for the G2 and an introduction to LogTRAK.**
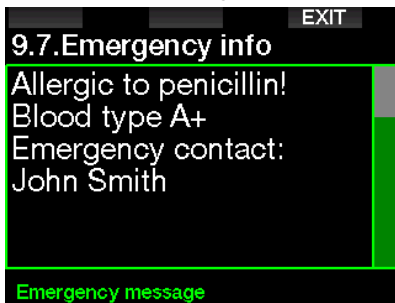
1.9 Owner information

To customize your time-of-day display with your name or other text you need to use LogTRAK for Windows or Mac. See section: **Interfaces for the G2 and an introduction to LogTRAK.**

☞ *NOTE: In the event you misplace your G2, it is advisable to include some contact information along with your owner information.*

1.10 Mounting and pairing the high pressure transmitter

The G2 can receive tank pressure information from multiple Smart series high pressure transmitters. Each transmitter needs to be mounted on a high pressure port of a first stage regulator.

To mount the transmitter, first remove the high pressure port plug from the first stage regulator, then screw the transmitter in place.
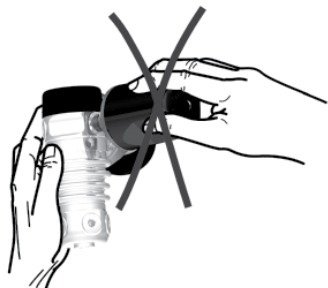
☞ *NOTE: Use an appropriate wrench to tighten the transmitter. Take care to not overtighten.*

Transmitter position for the left hand.

The Smart transmitter communicates via radio frequency with the G2. For optimal transmission performance, we recommend positioning the transmitter as described in the pictures below.
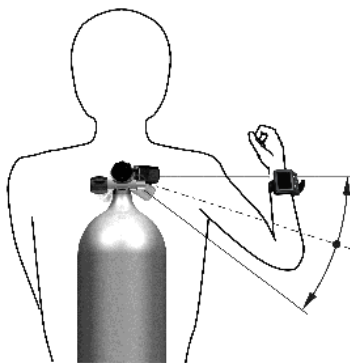
Transmitter position for the right hand.

In order for the G2 to display the pressure signal from a Smart transmitter, a coded, interference-free line of communication must first be established. This step needs to be performed only once for each transmitter.

There are two methods for pairing the G2 to a transmitter.

1. For automatic pairing, proceed as follows:
   • Mount the first stage regulator with the Smart transmitter on a full tank.
   • Turn on the G2, ensure it is in the time-of-day display, and place it near (x) the transmitter as indicated in the picture below.
   • Open the tank valve.
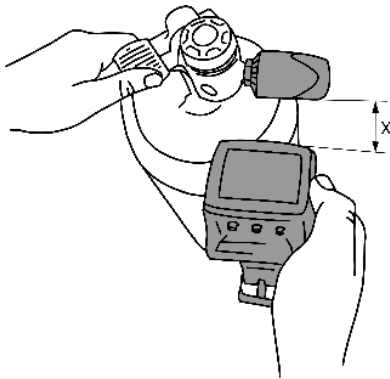
2. For manual pairing, proceed as follows:
- Mount the first stage regulator with the Smart transmitter on a full tank.
- Turn on the G2, select menu **8.2.6. Pairing.**
- Open the tank valve.

Upon pressurization, the Smart transmitter will send a pairing sequence to the G2. When the G2 receives this information, the display changes to show a listing of tank designations. (**T1**, **T2**, etc.).

Tank **T1** is always the main tank you start your dive with. Other tanks are used when diving with more than one gas mixture (described in chapter: **Diving with multiple gas mixtures**).
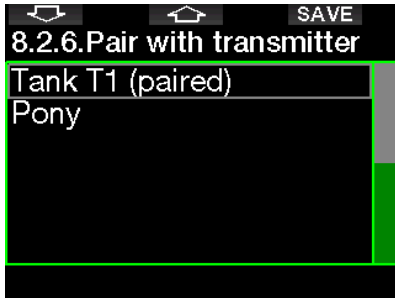
Use the ARROW buttons to select the tank that you want to assign to the transmitter, then press SAVE to lock in your selection. The G2 will confirm the pairing with the message **PAIRING TO T1 SUCCESSFUL**.

If you do not wish to complete the operation, with a press-and-hold of the right button the G2 will show the message **PAIRING CANCELLED**. The pairing will also be cancelled if you do not press SAVE within 3 minutes of tank selection.
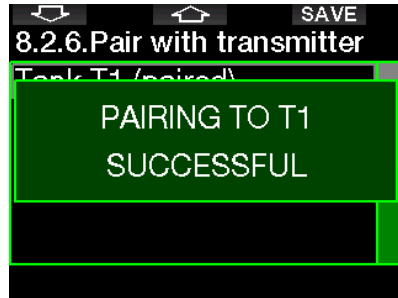
☞ NOTE: The transmitter must have been unpressurized for at least 40 seconds prior to performing the pairing operation; otherwise it will not transmit the pairing sequence.

Also, a transmitter can only be paired to one tank designation. If you pair the same transmitter to a second tank designation, the first one will be erased. However, you can pair more than one G2 to the same transmitter.

After a successful pairing of T1 to the G2, the display will show the tank pressure in either BAR or PSI. If tank T1 has not been paired, the G2 will show NO P instead of a pressure value.

If T1 has been paired but the G2 is not receiving any signal, it will show - - - instead of a pressure value.

On the surface, the status of tanks T2, T3, etc. are shown in the gas summary table, described in chapter: **Gas summary.**
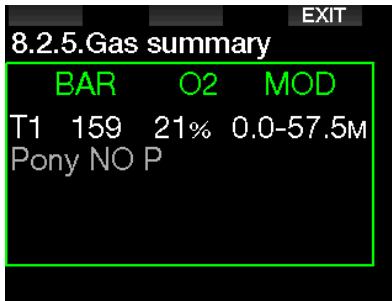
☞ *NOTES:*

- *The Smart transmitter has a range of approximately 1.5m/5ft.*
- *To maximize the life of the battery, the transmitter operates at a low update rate when there is no pressure change for more than 40 seconds. The transmitter also turns itself off when the pressure is 14bar/200psi or less.*
- *If a transmitter battery is weak, the G2 will alert you with a screen message displaying the tank assigned to that transmitter as shown on the screen below.*
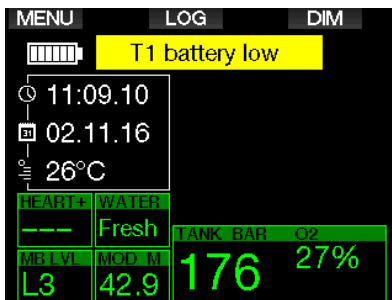
See chapter: **Replacing the battery in transmitter** for information on how to replace the transmitter battery.

1.11 Pairing a pony bottle to the G2

A pony bottle is a small diving cylinder which is fitted with an independent regulator, and carried by a diver as an extension to the scuba set. In an emergency, such as depletion of the diver's main air supply, it can be used as an alternative air source or bailout bottle to allow a normal ascent in place of a controlled emergency swimming ascent.
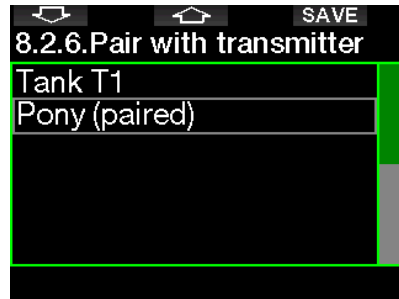
The pony bottle can be paired the same way as a normal cylinder from the G2's **8.2.6 Pairing** menu.

1.12 SCUBAPRO Human Factor Diving™

The G2 has patented underwater Heart Rate, Skin Temperature and Breathing monitors. These features will customize every dive based on your body reactions and provide you more data that enhances your diving experience and helps you to become a more advanced diver.

To learn more about the physiology of the SCUBAPRO Human Factor Diving™, see the booklet: "HEARTRATE MEASUREMENT FOR BETTER WORKLOAD ASSESSMENT," Dr. T. Dräger, Dr. U. Hoffmann, 2012, www.scubapro.com.

☞ NOTE: Refer to chapter **Workload** to learn how to enable the G2's heart rate monitor function.

1.13 Turning off the G2

The G2 turns off automatically after 3 minutes without active use, or without an active Bluetooth link. When in the time-of-day display, you can turn the G2 off manually with a press-and-hold of both right and left buttons simultaneously.

2. G2 SETTINGS AND MENUS

By pressing MENU from the time-of-day display you will enter the Settings folder. Note that when you first reach a menu, you are "outside" of it. Therefore, you must press the ENTR button to get inside the actual menu. Some menus have multiple levels. You can return to previous levels with a press-and-hold of the ENTR button. Also, you can return to time-of-day display by press-and-hold both right and left buttons simultaneously.

Simply, by pressing ARROW buttons you can surf the menu, and by pressing ENTR you get into the menu selection. For menus with multiple items there is an indicator bar on the right side of the screen which shows your current location.

Regardless of the language setting, all menus are numbered for easy identification. All of the sub menus function in a similar way, meaning that if there is a value that can be changed, the range will be shown at the bottom of the screen (see screen below). Sub menus are also numbered using the decimal format x.y (x=main menu. y=sub menu).
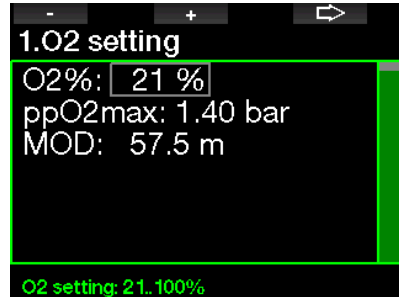
In this case, left and middle button functions are labeled – and + (enabling you to edit the current selection). The right ARROW button moves your selection to the next field and SAVE stores the entered values. On the right side of the screen a navigation bar indicates the value as an analog meter.

The Main menu offers the following settings:

Nr.	Menu		Nr.	Menu
1	O_2 setting		6.9.	Entering level stops
2	Dive settings		6.10.	MB stop ignored
2.1.	MB level		6.11.	MB level reduced
2.2.	Dive mode		6.12.	L0 no-stop = 2min
2.3.	Safety stop timer		6.13.	Entering deco at L0
2.4.	ppO_2max		7	Clock settings
2.5.	Water type		7.1.	Wake-up alarm
2.6.	Nitrox reset time		7.2.	Time
2.7.	Max surface time		7.3.	Time zone
2.8.	OTU settings		8	Other settings
2.9.	Desaturation reset		8.1.	Device information
2.10.	All-silent mode		8.2.	Gas integration
2.11.	Sidemount		8.2.1.	Tank reserve
2.12.	CCR		8.2.2.	RBT = 0 min
2.13.	Trimix		8.2.3.	Breathing sensitivity
2.14.	PDIS		8.2.4.	Bar graph
2.15.	PMG		8.2.5.	Gas summary
3	Apnea dive		8.2.6.	Pairing
3.1.	Maximum depth		8.3.	Backlight duration
3.2.	Depth increment		8.4.	Backlight intensity
3.3.	Dive time interval		8.5.	Water contacts
3.4.	Surface interval		8.6.	Factory settings
3.5.	Low heart rate		8.7.	Feature upgrade
3.6.	Ascent speed		8.8.	Software update
3.7.	Water density		8.9.	Format flash disk
4	Digital compass		9	Personalization
4.1.	Use compass		9.1.	Screen configuration
4.2.	Auto-off time		9.2.	Language
4.3.	Declination		9.3.	Start-up picture
5	Altimeter		9.4.	Units
6	Warning settings		9.5.	Workload
6.1.	Maximum depth		9.6.	Show owner info
6.2.	$CNSO_2$ = 75%		9.7.	Emergency info
6.3.	No-stop = 2min		9.8.	Display color
6.4.	Entering deco		10	Pictures
6.5.	Dive time		11	Dive planner
6.6.	Tank pressure		12	Help
6.7.	RBT = 3min		13	Bluetooth
6.8.	Pressure signal		14	Logbook

By surfing these menus you can quickly become familiar with them. Following are short descriptions for each selection.

☞ NOTE: *To make it easier to understand the menu system in accordance with your current level of diving, the G2 has a feature upgrade function. More advanced level functions and selections do not appear in the menu unless you want them to. (This is why you might find some menu numbers missing from the MAIN menu screen.)*

For example, if you are not diving with rebreathers or using more than one gas, it's not necessary to enable the CCR or PMG menu modes. This keeps the menu system simple and streamlined to suit your particular diving style.

2.1   O₂ settings

Here you can change the gas content of the tanks that you are using as well as the partial pressure limit of the gas. The Maximum Operating Depth (MOD) limit will be shown for the values that you have selected. To learn more about diving with Nitrox and MOD, see chapter: **Diving with nitrox.**

2.1.1   Recreational (factory setting)

For normal one-tank diving you can select a gas mix from 21% oxygen (Air) up to 100% oxygen. The ppO₂ max value is required for the MOD limit you intend to use for this gas. The factory setting is 1.40bar.

⚠ WARNING

The MOD limit defines the warning depth based on oxygen toxicity. However, depth narcosis can affect a diver's skills much earlier, jeopardizing his or her ability to dive safely at that depth.
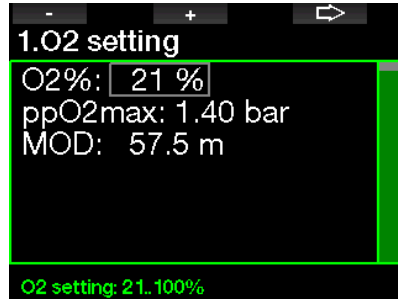
2.1.2   Multi-gas (PMG) settings

If PMG is enabled, the O₂ setting will appear as follows. See chapter: **Activating PMG** to learn how to activate this feature.

T1 is always the default gas at the start of the dive. Tank 2 through 8 values can be adjusted the same way as Tank 1.
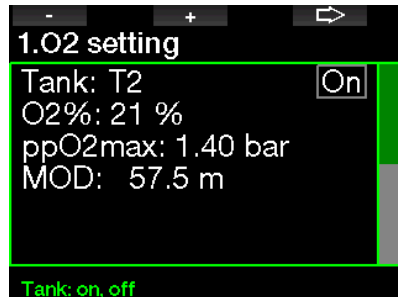
You can set a different ppO_2 setting for decompression gases.
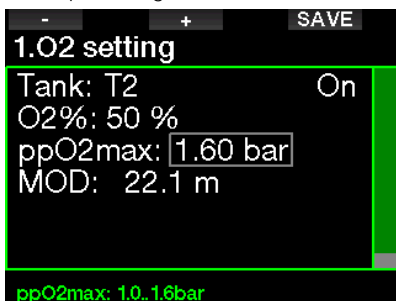
The maximum ppO_2 limit can be modified at menu **2.4. ppO₂max**.

☞ *NOTE: See chapter:* **Diving with multiple gas mixtures** *to learn more about this feature.*

2.1.3 Trimix settings

If trimix is enabled the O_2 setting will appear as follows. See chapter: **Activating Trimix** to learn how to activate this feature.
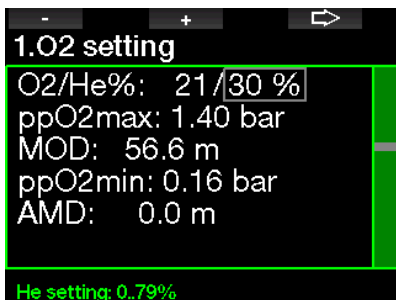
In trimix mode the oxygen fraction can be selected from 8% to 100%.

☞ *NOTE: See chapter:* **Diving with Trimix mode** *to learn more about this feature.*

☞ *NOTE: To ensure an adequate supply of oxygen to the body, the gas used at the beginning of the dive must contain enough oxygen (you can use a travel mix or one of the decompression gases). Since the dive always starts with tank T1, the minimum O_2 setting for tank T1 is 18%.*

⚠ WARNING

The Absolute Minimum Depth (AMD) depends on ppO₂min value. If the alarm depth is shallower than 0.8m/3ft which is the dive start depth for the G2, the alarm will not activate before a 0.8m/3ft depth is reached! This situation is dangerous and may lead to death by drowning.

⚠ WARNING

Engaging in heavy work while at the surface or at shallow depths while breathing less than a 21% oxygen (hypoxic mix) fraction may cause a loss of consciousness and lead to drowning.

2.1.4 Sidemount settings

In Sidemount mode the O_2 settings can be adjusted the same way as in PMG mode. See chapter: **Multi-gas (PMG) settings** to learn how to set the oxygen content in this mode.

2.1.5 CCR settings

If the CCR mode is enabled the diluent tank will appear as follows. Other tanks (T1 to T8) can be configured as with PMG mode. See chapter: **Activating CCR** to learn how to activate this feature.

Setpoint 1 can be selected from 0.2 to 0.95bar which defines the MOD.

Setpoint 2 can be selected from 1.0 to 1.6bar. Since higher values cannot be reached at the surface, an AMD will be calculated for the setting.

English

Tank: Diluent
O2%: 21 %
Set point 2: 1.30 bar
AMD: 3.2 m
MOD: 52.7 m

Set point 2: 1.00..1.60bar
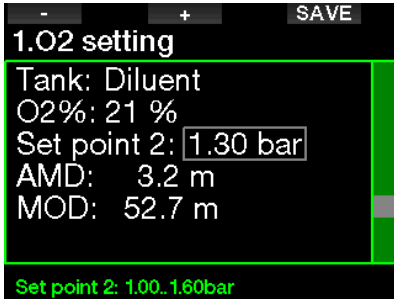
☞ NOTE: See chapter: **Diving with CCR mode** to learn more about this feature.

2.1.6   MOD setting

It is possible to disable the MOD setting (- - - shown in the field) like on the screen below.

Tank: T1
O2%: 27 %
ppO2max: Off
MOD: –––

Tank: T1..T8
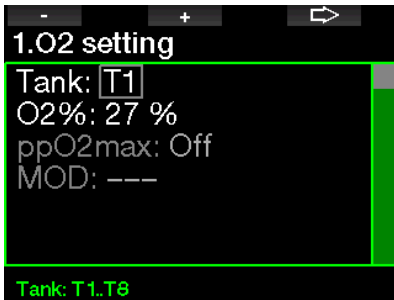
This requires entering the safety code 313 in the menu **2.4. ppO$_2$ max**.

ppO2max: Off

Code: _ _ _

ppO2max: 1.2..1.6bar, off
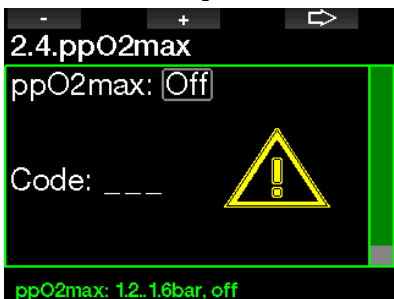
⚠ WARNING

Diving with a ppO$_2$ higher than 1.4bar is dangerous and may lead to unconsciousness, drowning and death.

☞ NOTE: the ppO$_2$ is fixed to 1.6bar when the selected oxygen content is 80% or higher.

2.2   Dive settings

2.2.1   MB-level

Here you may select the preferred Microbubble (MB) level that you want to follow during your dives. Level 9 is the most conservative, Level 0 is the least conservative.

MB level: L3

MB level: L0..L9

☞ NOTE: For more about diving with the MB levels, see chapter: **Diving with MB-levels.**

2.2.2 Dive mode (Algorithm selection)

Your G2 allows you to choose between Scuba, Gauge and Apnea modes.
When the G2 has not been submerged for a while the display appears as shown below:
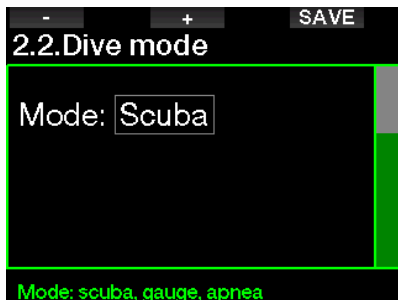
☞ NOTE: Since Gauge and Apnea modes do not track tissue saturation, a 48-hour locking interval occurs between the time the last dive is made in Gauge or Apnea mode and a change to Scuba mode is possible. Conversely, the G2 shown below has been dived in Scuba mode and cannot be changed to Gauge or Apnea mode until the desaturation time has elapsed.
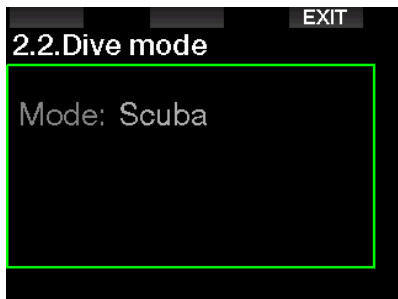
If you decide to change modes before the 48-hour interval ends, or before full desaturation occurs, you will have to go to the desaturation reset menu and make a manual desaturation reset. Refer to chapter **Desaturation reset** to learn how to manually reset the desaturation.

☞ NOTE: Apnea mode is only available as a selectable dive mode if you have enabled it in the G2's **8.7 Feature upgrade** menu. By default Apnea mode is disabled and the menu **2.2 Dive mode** will appear as **2.2 Gauge mode**.

2.2.3 Safety stop timer

Safety stop timer duration and start mode can be edited in this menu.
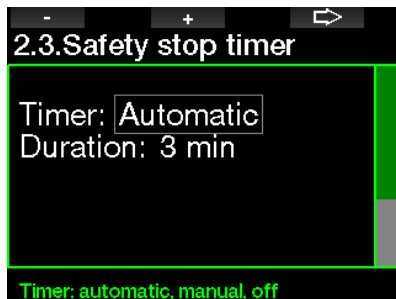
See chapter: **Safety stop timer** to learn how this feature is used while diving.

2.2.4 ppO$_2$ max

The ppO$_2$max setting defines the maximum limit for oxygen partial pressure. Gas O$_2$ settings higher than this limit cannot be selected for any tank.

2.2.5 Water type

The G2 measures pressure and converts it to a depth value by using water density as a constant. A depth of 10m/33ft in salt water corresponds approximately to 10.3m/34ft of depth in fresh water.

2.5. Water type
Water type: Salt
Water type: salt, fresh

☞ *NOTE: This setting will adjust the depth on all modes: Scuba, Gauge and Apnea.*

2.2.6   Nitrox reset time

If you are generally diving with air and want to return to this setting after the occasional nitrox dive, you can preset a default time that will enable your G2 to reset back to air.

2.6. Nitrox reset time
Reset time: 24 h
Nitrox reset time: 1..48h, no reset

Reset time can be selected from 1 hour up to 48 hours, or the nitrox reset time can be disabled. Gas reset time is disabled when "no reset" is shown.

2.2.7   Max surface time

Maximum surface time allows you to enjoy short orientations at the surface while maintaining a single logged dive.

2.7. Max surface time
Time on surface: 5 min
Time on surface: 3..30min
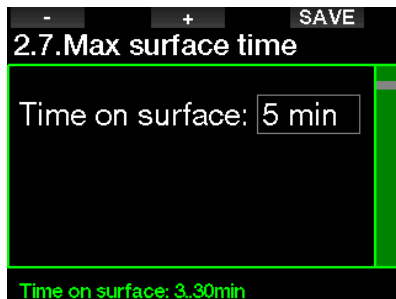
2.2.8   OTU settings

Oxygen Toxicity Unit (OTU) information and settings can be edited in this menu.

2.8. OTU settings
2.8.1. OTU information
2.8.2. OTU reset time
2.8.3. Clear OTUs
OTU information
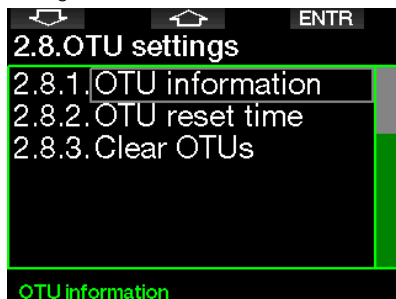
The OTU information screen below displays the current OTU related information:
1. OTUs from the last dive.
2. OTUs from the dives today along with the maximum allowed value.
3. OTUs allowed for tomorrow along with the maximum allowed value.
4. Total OTU dose during the mission (series of diving days).
5. Exposure (how many days of diving have occurred during this mission).
6. Interval (how many days have passed since the last dive day).

2.8.1.OTU information

Last dive:	0
Today:	0/850
Tomorrow:	0/700
Total dose:	0/850
Exposure:	0 days
Interval:	0 days

EXIT
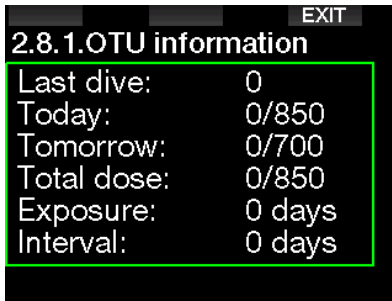
OTUs are calculated per day, changing at midnight (00:00) with limits changing accordingly.

You can define the reset interval, which is the length of time without logged dives required to clear the OTU counter.

2.8.2.OTU reset time

Reset interval: 14 days

Reset interval: 2..30days

- + SAVE
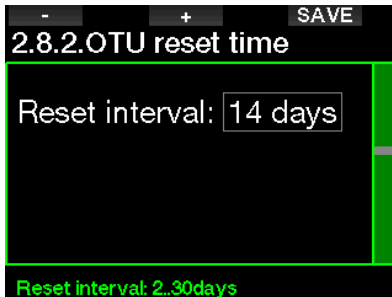
Also, if you wish to clear the OTUs manually you can do this with the following menu.

2.8.3.Clear OTUs

OTUs are cleared!

Code: ___

EXIT
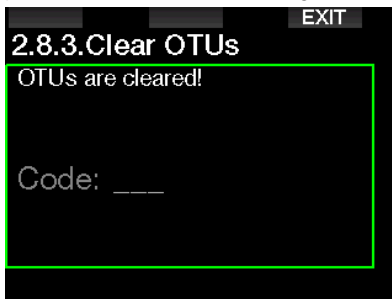
Clearing the OTUs requires the safety code 313.

2.2.9 Desaturation reset

The G2 allows you to reset the desaturation in the computer. Any tissue saturation information from a recent dives can be reset to zero, allowing the G2 to treat the next dive as a non-repetitive dive. This function is useful when the G2 is loaned to another diver who has not dived in the last 48 hours.

> ⚠ **WARNING**
>
> Resetting desaturation will affect the calculations of the algorithm, which may lead to serious injury or death. Do not reset desaturation without a valid purpose.

☞ *NOTE: Some menu changes are not possible while the G2 is counting down desaturation. If you decide to reset desaturation, the safety code **313** must be used. This procedure prevents unwanted resetting, plus the desaturation reset will be stored to memory; in the next dive log the desaturation reset warning will be shown.*

2.9.Desaturation reset

Desaturation reset

Code: 0 _ _

Enter security code

- + ▭▷

When the safety code is correctly entered and confirmed by a press of the SAVE button, the desaturation reset is complete and the following screen will be shown.

☞ NOTE: After a desaturation reset the change between Scuba, Gauge and Apnea modes are possible immediately. However, since the Gauge and Apnea modes are not tracking your tissue nitrogen loading, it is recommended that you maintain the initial intervals between mode changes.

⚠ WARNING

Diving after a desaturation reset is extremely dangerous and is very likely to cause serious injury or death. Do not reset the desaturation unless you have a valid reason to do so.

☞ NOTE: An automatic low battery switch-off will not reset the desaturation. The G2 stores tissue saturation information in a non-volatile memory. During the time the computer is without power the desaturation calculation is frozen. During recharging, the display will light up and desaturation calculation will resume as soon as a sufficient level of charge has been reached.

2.2.10 All-silent mode

With the selection ON, the stealth mode becomes active and no alarms or warnings will be emitting an audible signal. (The factory setting is OFF.)
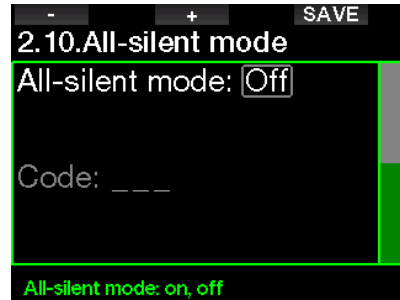
⚠ WARNING

The all-silent mode ON selection will disable all audible dive mode alarms and warnings. This could potentially be dangerous.

☞ NOTE: The only exception to the stealth mode is the alarm clock, which will beep when activated, even if the all-silent mode is activated.

☞ NOTE: In order to activate all-silent mode the safety code 313 must be entered. This is to prevent accidental deactivation of dive alarms and warnings.

2.2.11   Activating Sidemount

In sidemount diving there are normally two tanks and two regulators, each set mounted independently on each side of the diver.

Independent redundant gas delivery systems should be drawn down equally, in small steps, so in case one system fails the other system has maximum reserves to complete the dive.

When the G2's Sidemount mode is activated (ON), two tank pressures are displayed at the same time. See chapter: **Display configuration in Sidemount mode** to learn more about how the display is configured in this mode.

☞ *NOTE: For proper operation of the Sidemount mode, both tanks must be equipped with a transmitter.*

The pressure step defines the pressure difference between tanks when the G2 alerts you to switch from the lower to the higher supply side. You can choose a step between 10 and 50 bars or follow the rule of thirds.

☞ *NOTE: The Sidemount mode can be used for backmount twin tank diving as well.*

2.2.12   Activating CCR

The Rebreather mode can be set to ON here if the feature is enabled.
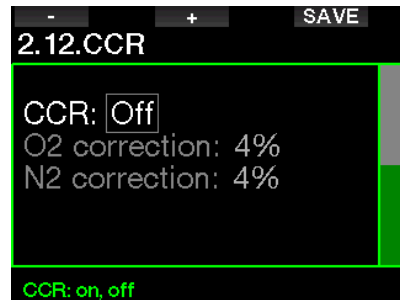
Enabling CCR changes the default open circuit gas content settings to setpoint settings. Also, the dive display will change so that both O_2 and Diluent tank pressures are shown at the same time. See chapter: **Display configuration in CCR mode** to learn more how the display is configured in this mode.

Since the CCR dive unit is responsible for the setpoint accuracy and the G2 is using that accurate number, you can select some conservatism with an O_2 and inert gas correction (it is shown as N2 but also influences He when the TMx option is enabled).

For example, the % value of the O_2 correction increases the nominally set ppO_2 value for the CNS% clock value, and decreases the nominally set ppO_2 value for the inert gas absorption (algorithm).

2.2.13   Activating Trimix

Trimix can be set to ON here if the feature is enabled.

When Trimix is on, the gas content presentation follows the standard O_2/He. Also, the AMD (Absolute Minimum Depth) for each gas is shown. See chapter: **Diving with Trimix** to learn more about this feature.

2.2.14   Enabling PDIS

SCUBAPRO dive computers feature Profile-Dependent Intermediate Stops (PDIS) which can be enabled in this menu.
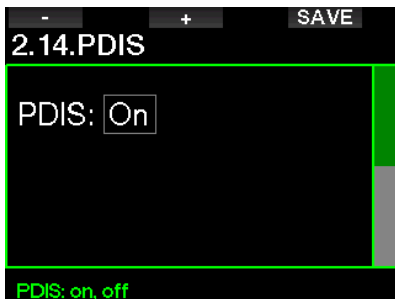
See chapter: **PDIS (Profile Dependent Intermediate Stop)** to learn more about this feature.

2.2.15   Activating PMG

Predictive Multi-gas (PMG) mode enables the use of multiple tanks from 2 to 8.
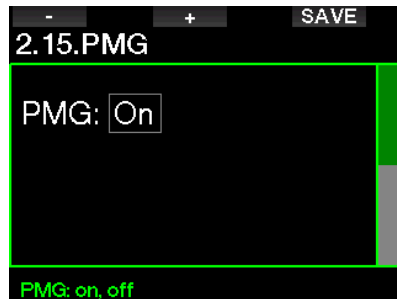
See chapter: **Diving with multiple gas mixtures** to learn more about how to use this feature.

☞ NOTE: PMG must be enabled for Sidemount and CCR diving modes.

2.3   Apnea dive

If the Apnea feature is enabled in the G2's **8.7. Feature upgrade** menu, the following settings for the Apnea mode can be edited.
1. Maximum depth
2. Depth increment
3. Dive time interval
4. Surface interval
5. Low heart rate
6. Ascent speed
7. Water density

2.3.1 Setting the maximum dual depth alarm

In Apnea mode all alarms can be either audible or disabled.


```
-          +          ⇨
3.1.Maximum depth

Alarm: Audible
1.Depth: 10.0 m
2.Depth: 20.0 m
```
Alarm: audible, off
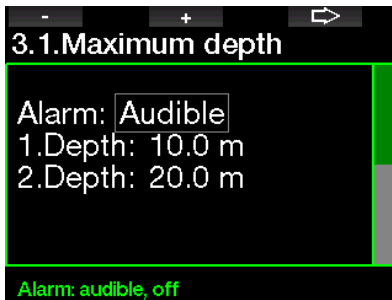
After enabling the maximum depth alarm the limits can be selected. The first depth alarm can be selected from 5-100m/20-330ft.


```
-          +          ⇨
3.1.Maximum depth

Alarm: Audible
1.Depth: 10.0 m
2.Depth: 20.0 m
```
Max depth: 5..100m
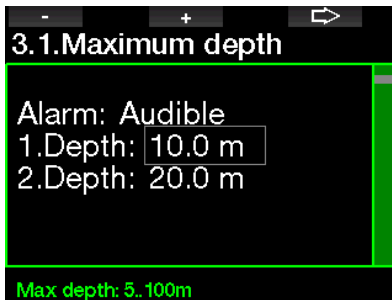
Equally, the second depth alarm may be set from 5-100m/20-330ft.


```
-          +          SAVE
3.1.Maximum depth

Alarm: Audible
1.Depth: 10.0 m
2.Depth: 20.0 m
```
Max depth: 5..100m

☞ *NOTE: The first alarm is short sequence to get your attention, and the second alarm is continuous. By setting the first alarm deeper than the second, it will be masked by the continuous alarm and you cannot hear the first one.*

2.3.2 Setting the depth incremental warning

Independent of the maximum depth alarm, you can set incremental depth warnings. These depth warnings can be set for descending (shown as Way down), for ascending (shown as Way up), or for both directions.


```
-          +          ⇨
3.2.Depth increment

Warning: Way down
Increment: 5.0 m
```
Warning: both, way up, way down, off
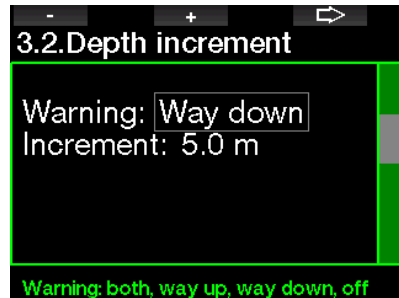
The depth increment can be selected from 5-100m/20-330ft.


```
-          +          SAVE
3.2.Depth increment

Warning: Way down
Increment: 5.0 m
```
Increment: 5..100m

2.3.3 Setting the dive time interval warning

You can set a dive time interval warning from 15 seconds up to 10 minutes.

2.3.4 Setting the surface interval warning

The surface interval warning can be set from 15 seconds up to 14 minutes and 45 seconds.
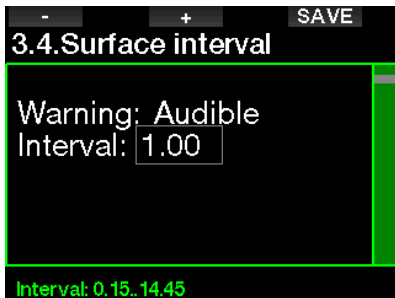
☞ *NOTE: After 15 minutes on the surface, the G2 automatically ends the dive session and saves the dive in the logbook.*

2.3.5 Low HR alarm

The G2 can trigger an alarm if your heart rate drops below a set level. The alarm can be set between 35 and 100 beats per minute.
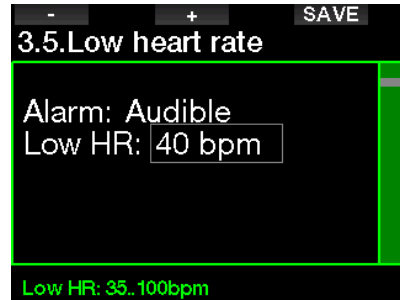
2.3.6 Setting the ascent speed alarm

The G2 can trigger an alarm if you exceed the preset ascent speed. You can select the value from 0.1-5.0m/1-15ft per second.

2.3.7 Water density

There is a direct relationship between the weight of a water column and the pressure it exerts, and the weight is given by the depth multiplied by the density of the water. Hence, the depth displayed by a dive computer is obtained by a measurement of absolute pressure.
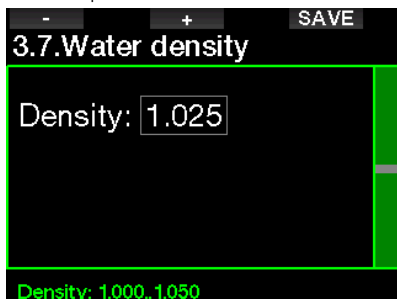
Water density, however, is a function of salinity, so the same depth in a lake (fresh water) and in an ocean (salt water) will yield a different pressure measurement.

The difference is very small, with a corresponding error in displayed depth (approximately 3%). For this reason, in Scuba and Gauge modes the G2 allows you to define whether you're diving in fresh or salt water.

A decompression calculation is based on absolute pressure, so setting the G2 to fresh water when diving in salt water, or vice versa, is acceptable. However, the depth measurement will be slightly off (approximately 1m/3ft every 40m/130ft), although the decompression calculation will be carried out correctly.

For Apnea diving, in which no decompression calculation takes place, the maximum depth reached by the diver may be the main goal of the dive, so accuracy in the depth measurement itself is the most important factor. The G2 allows you to define a water density between 1.000kg/l and 1.050kg/l in 0.001kg/l increments. (For reference, the density of the salt water setting in Scuba or Gauge mode is 1.025kg/l.)

2.4 Digital compass

In the menu **4.Digital compass** settings related to the digital compass can be selected.

2.4.1 Accessing and using the digital compass

Entering the menu **4.1 Use compass** launches the digital compass on your G2's screen, which looks like the following:

☞ *NOTE: You can also launch the compass from the G2's main time-of-day display by pressing and holding the right button.*

During diving the compass screen shows information about depth, dive time, tank pressure, no-stop time and RBT. The left button (BOOK) allows you to set bookmarks.

In case of level stops or decompression, the lower right corner alternates every 4 seconds between decompression information and tank pressure together with RBT.

A press-and-hold of the right button from the compass display returns to the computer display. This also happens after the set auto-off time defined in chapter **Auto-off time**.

☞ *NOTE: If you are in compass mode when the G2 is about to end the no-stop phase, the screen will revert to the regular computer display regardless of the set auto-off time. Press and hold the right button again if you wish to return to the compass display.*

You can set the compass bearing by pressing the middle (SET) button. Compass bearing represents the direction the front of the computer is pointed at. It is expressed in degrees, from 0 to 359. 0 degrees is North, 90 degrees is East, 180 degrees is South, 270 degrees is West and any other reading is interpolated in between.
The message **SET BEARING SUCCESSFUL** will be shown on the display and a white dot will appear in the position of the set bearing. Setting a bearing allows you to navigate towards a reference direction. A press-and-hold of the middle button will erase the set bearing. Note that the set bearing stays in memory until you either set a new one or erase it.

If you have set a reference bearing, arrows will appear to the left or to the right of the numeric bearing indication, to show you in which direction you should turn in order to match the set bearing. As an additional aid in navigation, the G2 automatically marks the positions at 90 and 120 degrees to the left and to the right of the set bearing, in addition to the position at 180 degrees (as an aid for square course, triangular course and reciprocal course navigation respectively). These are denoted with "T", Δ and ‖.

☞ NOTE: Do not use the G2's compass close to a magnet, as the magnetic force may cause the compass calibration to reset.

☞ NOTE: When triggered, alarms and warnings will supersede the G2's compass while it is active on the display. You will need to push-on for displaying the compass again.

2.4.2 Auto-off time

In the menu **4.2. Auto-off time** you can select a compass timeout, which is the amount of time the compass is displayed when activated at the surface or during a dive. Timeout can be set from 5 to 60 seconds, or the selection "Push on/Push off" maintains the compass display until it is switched off by a button press.
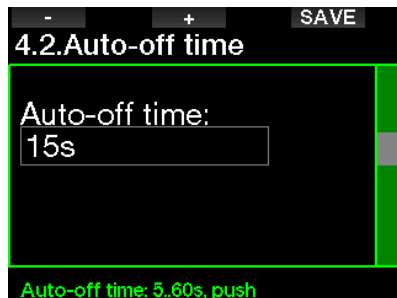
2.4.3 Declination

A compass points to the magnetic north pole of the earth. Geographic and magnetic North Pole difference is corrected with a declination setting. Declination depends on your current location on the earth. You can select a correction value from 0º to 90° in 1° increments and select the direction East or West.

☞ NOTE: The G2's compass does not normally need recalibration. If you note a significant permanent offset in compass direction, contact your authorized SCUBAPRO dealer.

2.5 Altimeter

Here you can check your current elevation. In the altitude menu, the current altitude is calculated from the barometric pressure. The altitude can be adjusted when current elevation is known. Adjusting the altitude elevation has no effect on the altitude class.

☞ NOTE: Barometric pressure is variable, changing with weather and atmospheric pressure at any particular elevation. Dive algorithms use altitude classes which are directly derived from barometric pressure. Displayed altitude is determined based on the current barometric pressure and is therefore a relative value.

2.6 Warning settings

Warnings represent situations that require diver's attention, but ignoring them does not represent an immediate risk. It is up to you to decide which ones you would like to have active and which ones not.

2.6.1 Maximum dive depth warning

The maximum depth warning value can be selected from 5-100m/20-330ft in 1m/5ft increments.
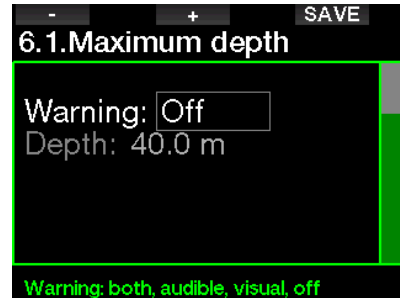
Warnings can be deactivated when OFF is selected. The visual warning selection displays the warning when the warning situation happens. The audible warning selection sounds the warning when the warning situation happens. By selecting BOTH you get a combination of audible and visual warnings.
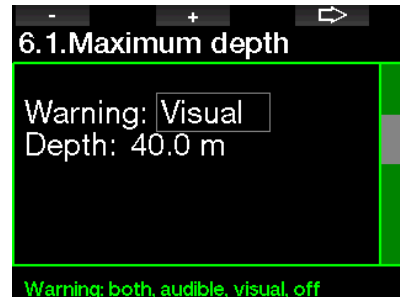
2.6.2   CNS O$_2$=75%

The G2 tracks your oxygen uptake via the CNS O$_2$ clock. If the calculated value of CNS O$_2$ reaches 75%, this warning becomes active.

```
-              +              SAVE
6.2.CNSO2 = 75%

Warning: Audible

Warning: both, audible, visual, off
```
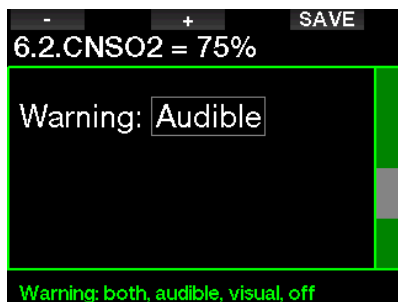
2.6.3   No-stop time = 2 min

If you wish to avoid unintentionally performing a decompression dive, the G2 can activate a warning when the no-stop time reaches 2 minutes. This applies to current selected MB level no-stop time (see chapter: **Diving with MB levels,** for more information on MB level diving). It gives you the opportunity to start ascending before incurring a decompression stop or a level stop obligation.

```
-              +              SAVE
6.3.No-stop = 2min

Warning: Visual

Warning: both, audible, visual, off
```
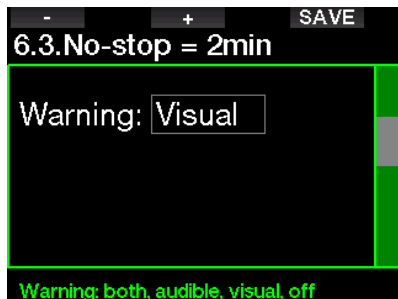
2.6.4   Entering deco

The G2 can activate a warning when the first mandatory decompression stop appears. This alerts you to the fact that a direct ascent to the surface is no longer possible.

```
-              +              SAVE
6.4.Entering deco

Warning: Visual

Warning: both, audible, visual, off
```
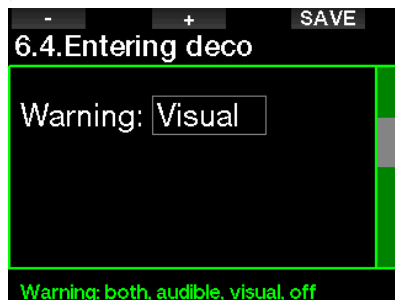
2.6.5   Maximum dive time warning

The value can be selected from 5 to 995 minutes in 1-minute increments.

```
-              +              SAVE
6.5.Dive time

Warning: Visual
Dive time: 60 min

Dive time: 5..995min
```
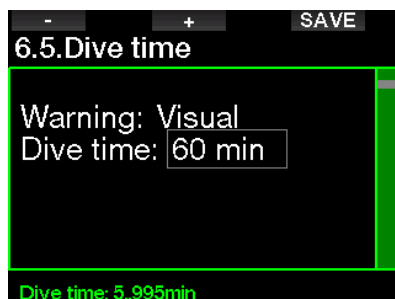
2.6.6   Tank pressure

The G2 can activate a warning when the tank pressure reaches the value defined here.

```
-              +              SAVE
6.6.Tank pressure

Warning: Visual
Pressure: 100 bar

Tank pressure: 50..200bar
```

2.6.7   RBT = 3 min

The RBT (Remaining Bottom Time) is the time you can spend at the current depth and still have enough gas supply to make a safe ascent and reach the surface with the tank reserve. The RBT calculation is based on your current breathing rate, and it accounts for any existing and upcoming decompression obligation as well as for any temperature gradient in the water. It assumes an ascent at the ideal ascent rate (defined in chapter: **Ascent rate**). When the RBT reaches 3 minutes a warning is shown.
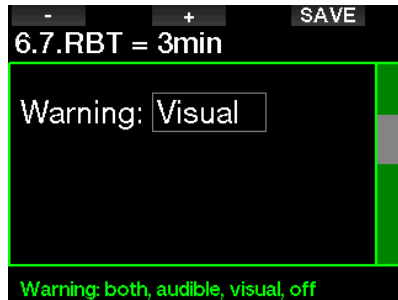
When 0 minutes RBT is reached, an alarm is triggered: the G2 has computed that if you start your ascent now and ascend at the ideal ascent rate, you will arrive at the surface with just the tank reserve, and any further delay increases the risk that you will run out of your gas supply before reaching the surface.

2.6.8   Pressure signal

The G2 can activate a warning when the wireless tank pressure signal has not been received in the last 30 seconds. The warning message is: **NO PRESSURE SIGNAL.**
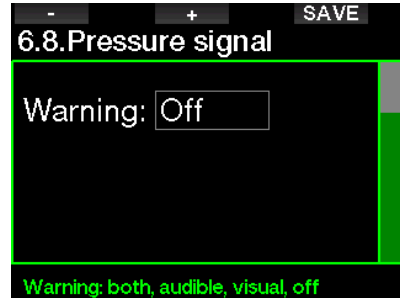
If after another 40 seconds the G2 still has not received any signal from the transmitter, another audible sequence are emitted with the message: **PRESSURE SIGNAL LOST**, after which the RBT is not displayed any longer and the tank pressure is replaced with - - -.

2.6.9   Entering level stops

When diving with a microbubble (MB) level different than L0, the G2 can warn you when you are no longer in the MB no-stop phase.
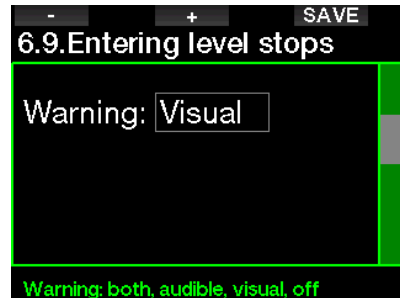
2.6.10   MB stop ignored

When diving with an MB level higher than L0 and in the presence of MB level stops, the G2 can warn you if you reach a depth shallower than the deepest required MB level stop, therefore allowing you to avoid missing the required stop.
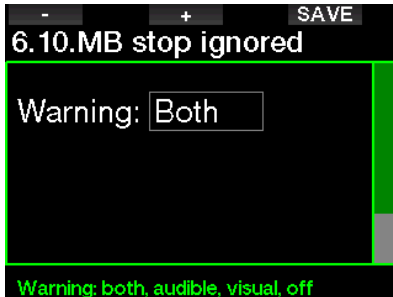
2.6.11   MB level reduced

When diving with an MB level higher than L0 and in the presence of MB level stops, if you ascend more than 1.5m/5ft above the deepest required MB level stop, the G2 reduces your MB level to the next possible level. The display will show the new active MB level. You can set your G2 to warn you when this happens.
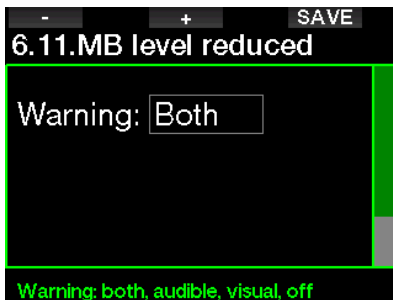
2.6.12   L0 no stop time = 2 min

When diving with an MB level higher than L0, the underlying L0 information is not directly visible on the display (though it is accessible as alternate information). You can choose to have your G2 warn you when the underlying L0 no-stop time reaches 2 minutes while diving with an active MB level higher than L0.
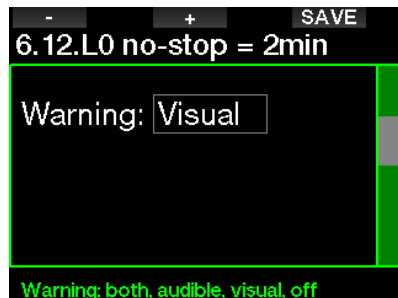
2.6.13   Entering deco at L0

When diving with an MB level higher than L0, the underlying L0 information is not directly visible on the display (though it is accessible as alternate information). You can choose to have your G2 warn you when you are about to enter a decompression obligation while diving with an active MB level higher than L0.
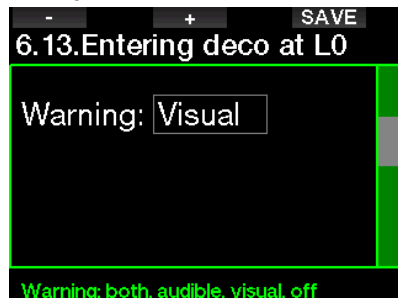
2.7　Clock settings

On this screen the current time, time format, date and time zone can be changed. The alarm clock may also be set and activated here.

2.7.1　Wake-up alarm

This menu allows you to set a wake-up alarm. The time of the alarm is shown in the format specified in the Time menu (either in AM/PM or 24hr). When the alarm is set to ON, a bell symbol appears in the time-of-day display.
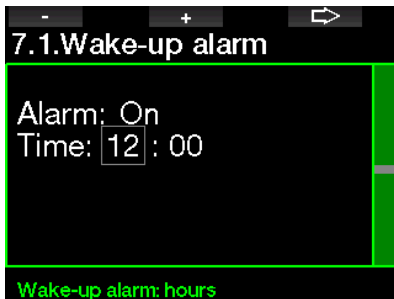
2.7.2　Time

This menu allows you to set the time format, time and date.
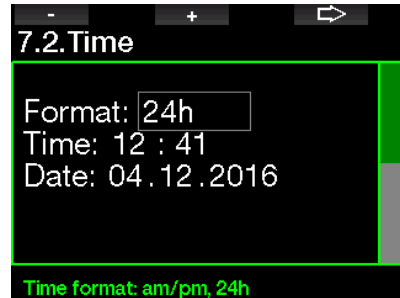
2.7.3　Time zone

This menu allows you to easily change the time when traveling to other time zones. Instead of changing the actual time itself, in this menu you can define a number of hours to add to or to subtract from the currently displayed time so as to get the correct time at your travel destination.

The range of the UTC setting is between -13 hours and +14 hours in 15-minute increments.

2.8   Other settings

Here you can see your G2's ID and software version. You can also manually check the battery status, set the backlight, enable upgrades and return the unit to its basic factory settings.
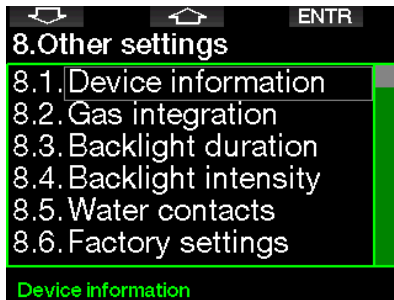
2.8.1   Device information

This menu displays the device ID number (ID), the hardware version (HW), the software version (SW) and the battery level.

2.8.2   Gas integration

In this menu you can edit various gas integration related settings.
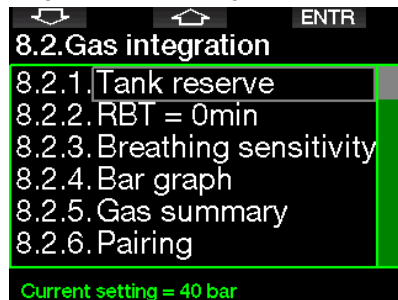
2.8.2.1   Tank reserve

The RBT (remaining bottom time) is the time you can spend at the current depth and still have enough gas supply to make a safe ascent and reach the surface with the tank reserve. The RBT calculation is based on your current breathing rate, accounts for any existing and upcoming decompression obligation and for any temperature gradient in the water. It assumes an ascent at the ideal ascent rate (defined in chapter: **Ascent rate**).

A higher value of the tank reserve is more conservative, but limits your diving time. A lower value gives you more diving time but the risk of running out of gas supply before reaching the surface increases.

2.8.2.2 RBT warning or alarm

In this menu you can select if the situation RBT = 0 minutes will be handled as a warning or alarm (visible only if PMG is installed).

```
     -          +            SAVE
8.2.2.RBT = 0min


RBT = 0min: Warning




RBT = 0min: alarm, warning
```
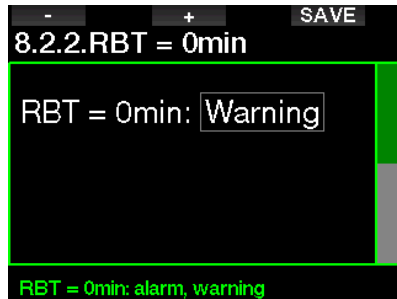
2.8.2.3 Breathing sensitivity

The sensitivity of the workload calculation to changes in breathing pattern can be adjusted in 25 steps: this has an effect on how the algorithm accounts for changes in breathing pattern in the decompression calculation.

```
     -          +            SAVE
8.2.3.Breathing sensitivity


Sensitivity: 0




Breathing sensitivity: -12..12
```
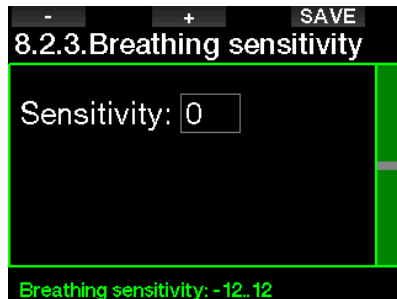
Value 0 corresponds to neutral breathing sensitivity. With value -12 the breathing has the least effect on workload in the dive algorithm.

2.8.2.4 Bar graph

The oxygen bar graph can be replaced with a graphic representation of the tank pressure (on **Classic** and **Full** screens only). If you turn ON this feature, the label of the bar graph changes from O_2 to TK. To get proper scale, you must define a value of the pressure when the tank is full. As you consume the gas in the tank, the segments will gradually turn off.

```
     -          +            SAVE
8.2.4.Bar graph


Bar graph: On
Full tank: 200 bar




Full tank: 100..300bar
```
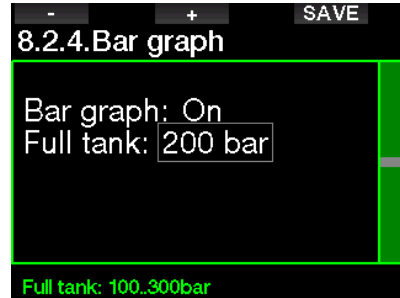
2.8.2.5 Gas summary

The gas summary table provides a fast overview of the paired tank pressures and their content.

```
                            EXIT
8.2.5.Gas summary

    BAR     O2    MOD
T1  ---  100%  0.0- 6.3M
T2 NO P  --%      -
T3 NO P  --%      -
T4 NO P  --%      -

```
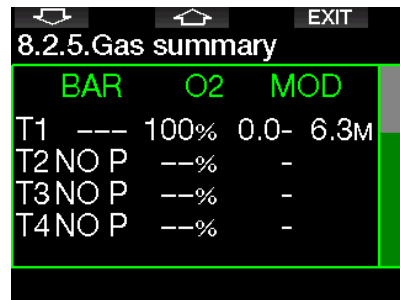
☞ NOTE: A shortcut to this screen from the time-of-date display is a press-and-hold of the LOG button.

2.8.2.6 Pairing

When this menu is selected, the G2 listens to nearby tank transmitters which are activated (tank valve is opened). This mode is practical when you cannot place the G2 in close contact with the transmitter.

EXIT

8.2.6.Pairing

Ready to pair!

Pair with transmitter
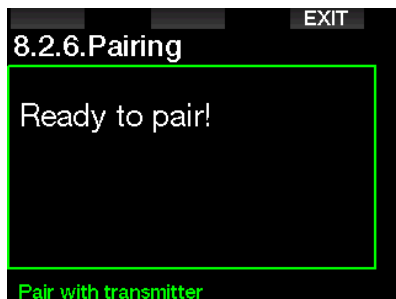
☞ *NOTE: Make sure that only one transmitter is active nearby when using this mode so that you will pair the right tank.*

2.8.3 Backlight duration

Backlight power consumption is the main factor of the battery lifetime between charging. The time selected in this menu will define the active backlight duration before dimming function will take over. Selectable range is from 10 seconds up to 3 minutes or deactivate the automatic dimming function (push).

- + SAVE

8.3.Backlight duration

Backlight duration:
60s

Duration: 10..180s, push
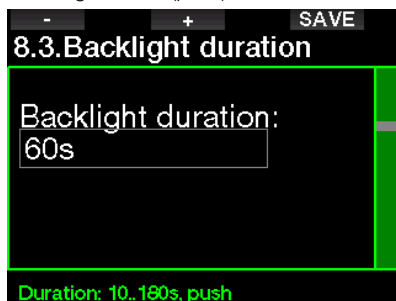
2.8.4 Backlight intensity

The ambient light sensor detects the level of darkness and the intelligent light algorithm can be set to provide different contrast levels if you select the adaptive backlight. When adaptive backlight is enabled the intensity range is from 1 to 9 and without adaptive function the range is from 1 to 15. Larger numbers correspond to more light, but also more power consumption and less battery lifetime.

- + ➨

8.4.Backlight intensity

Adaptive backlight: On
Backlight intensity: 4

Adaptive backlight: on, off

2.8.5 Water contacts

The water contacts allow the G2 to automatically turn on the moment it senses the presence of water. This means that you can jump in the water at any time without having to worry whether the computer is turned on. However, if the computer is stored in a wet environment, it may stay turned on and consume unnecessary battery power. To prevent this, you can turn the water contacts off, but you will have to remember to turn on the computer manually before starting the dive.

- + SAVE

8.5.Water contacts

Water contacts: On

Water contacts: on, off
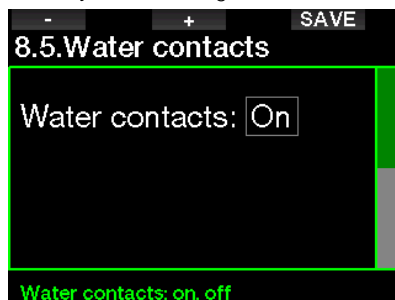
☞ NOTE: If the water contacts are turned off and you fail to turn on the computer manually, the computer will still activate by itself within one minute of having started the dive. The time and decompression calculation will be consequently inaccurate, but the accuracy of the depth measurement will be unaffected.

The G2 will display the water drop symbol in the upper right section of the screen whenever its water contacts detect a wet environment.

2.8.6   Factory settings

This menu allows you to revert all settings in all menus of the computer back to the original factory settings (except emergency information, transmitter pairing, user information and Bluetooth pairing). In order to do this, you need to enter the safety code 313.

This prevents unintentionally reverting all settings.

2.8.7   Feature upgrade

Features that enhance your G2's capabilities, but that are not initially enabled, are listed in this menu. If you need one of the features you can select and install it by pressing the SAVE button.

Features that you can install or deinstall are stored in the G2's memory folder: **\system\feature upgrade**
See chapter: **USB flash disk operations** to learn how you can store these files in your G2.

2.8.8   Software update

Software updates can be installed from the list in this menu.
To update the G2's software proceed as follows:
1. Download the latest G2 software from scubapro.com to your PC/Mac.
2. Connect your G2 with the USB cable to your PC or Mac.
3. Once you see the message "Battery charging", press the left button (DISK)
4. Open your File Explorer/Finder and select G2_DISK (PC) or click on the G2 Disk icon on your desktop (Mac). Go to the sub folder "System", select all folders from the downloaded update bundle (ZIP file) and drag and drop them into the "System" sub folder of the G2_Disk.
5. Safely eject your G2 by clicking the Safe Removal icon.
6. Select the new software version in the G2's **8.8. Software update** menu and install it by pressing the SAVE button.
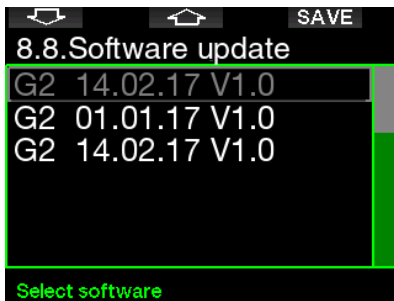
Software versions that you can install are stored in the G2 memory folder: **\system\ SWUpdate**
See chapter: **USB flash disk operations** to learn how you can store these files in your G2.

2.8.9 Format flash disk

If G2 communication is interrupted during the flash memory write process, or if the G2's battery power is exhausted when the flash is used, the memory content may become corrupted. In this case the G2 displays the following warning:
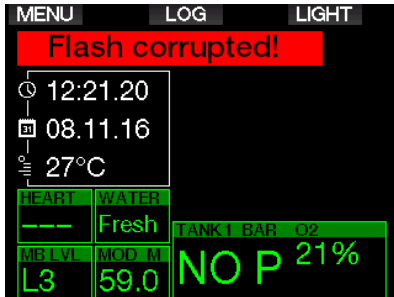
⚠ WARNING

Do not use the G2 if the flash disk becomes corrupted. The G2 may not operate correctly when flash memory access is not available. False operations may display faulty information. During a dive this may lead to serious injury or death.

☞ *NOTE: To prevent flash disk corruption, 1) use the Safe Removal and Eject Media function, and 2) keep the G2 battery charged to prevent unintended resets.*

In case of corrupted flash disk, the following menu appears in menu **8. Other settings: 8.9 Format flash disk**

Security code 313 will be required to proceed with this operation.

⚠ WARNING

All data stored to flash will be erased. This includes all dive logs. To prevent the loss of your G2 data:
1. Keep a backup on your PC/Mac.
2. Download and store your dive logs with LogTRAK.

2.9 Personalization

Here are the settings related to customization. You can select different screen configurations, color, language, owner and emergency info, along with workload and units.
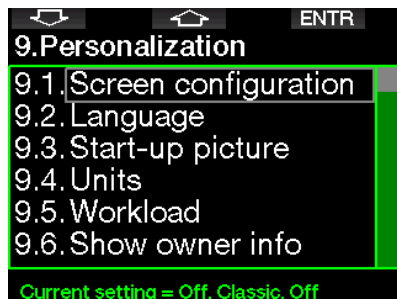
2.9.1   Screen configuration

You can choose between **Light**, **Classic**, **Full** and **Graphical** configurations. You can also rotate the display 180 degrees so that the buttons are at the bottom of the computer.
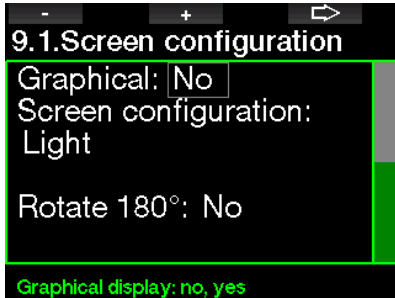
☞ *NOTE: The Light configuration does not support dives with level stops or decompression stops. If you have chosen the Light configuration and you enter level stops or decompression, the screen configuration will switch to Classic until you have fulfilled all level stop and/or deco stop obligations.*

2.9.2   Language

In this menu you can set the language used for all texts displayed on the computer. Select the language from the list and press the SAVE button to activate.

2.9.3   Start-up picture

The G2 allows you to choose a personalized picture that will be displayed for 5 seconds upon turning on the computer. In this menu you can select the picture from those available in the computer's memory.

See chapter: **USB flash disk operations** to learn how you can store the pictures into your G2.

☞ *NOTE: A press-and hold of the right button upon turning on the G2 will display the start-up picture.*

2.9.4   Setting the user preferred units

Here you can select between depth, temperature and pressure unit combinations. The effect takes place in dive mode, in the logbook, alarm settings, altitude settings, etc.
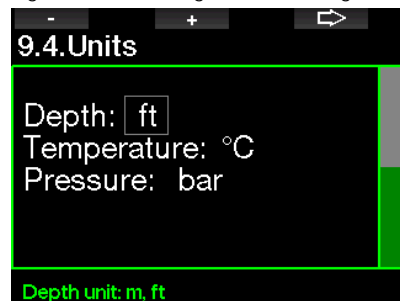
2.9.5   Workload

At the base of any decompression calculation there is the transport of nitrogen from the lungs to the blood and from there to the tissues during on-gassing, and the same but in reverse during off-gassing. As such, it is obvious that the single most important parameter in a decompression calculation is the rate at which blood travels through the body. During heavy exercise, the total blood flow from the heart can be up to 4 times higher than while at rest. This increase in blood flow is rather unevenly distributed, with some tissues such as the Central Nervous System and the brain being unaffected, while others like the muscles receiving up to 10 times more blood than when at rest.

The G2 estimates workload based on heart rate or changes in breathing pattern from the high-pressure transmitter, and the decompression calculation in the ZH-L16 ADT model is changed accordingly. This menu allows you to select the workload base or switch off the workload estimation, in which case your G2 will behave like SCUBAPRO dive computer models without heart rate or air integration.

SCUBAPRO recommends using the workload and Heart Rate features on all dives, but especially when making technical dives. When the dive goes as planned there is no effect to the decompression schedule. However, when workload is high more decompression time will be required.

Adaptive algorithm additionally incorporates into the calculation the water temperature or skin temperature (only with the patented SCUBAPRO Heart Rate Belt or Digital Heart Rate Monitor) and micro bubble formation.
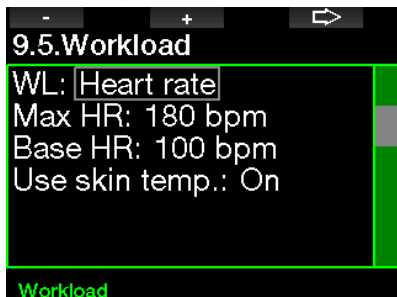
To activate the G2's heart rate function go to menu **9.5 Workload**, select Heart Rate and press the right button to save the changes. In this menu you may also adjust your heart rate limits (max 140 to 220 bpm and base 60 to 120 bpm) as well as enable or disable skin temperature measurements.

2.9.6   Show owner info

The owner information in this menu can only be entered via LogTRAK software.
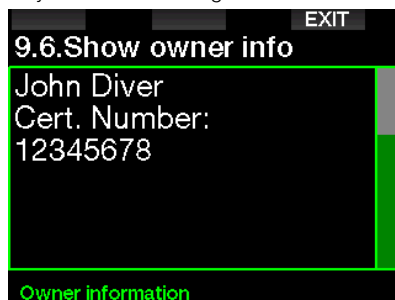
See section: **Interfaces for the G2 and an introduction to LogTRAK** to learn how to store your owner information in your G2.

2.9.7   Emergency info

The emergency information in this menu can only be entered via LogTRAK software.
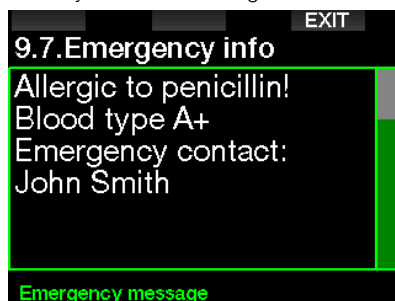
See section: **Interfaces for the G2 and an introduction to LogTRAK** to learn how to store your emergency information in your G2.

2.9.8 Display color

The G2's display power consumption is independent of the color that's used. Using menu **9.8. Display color** you can select different color combinations, shown on the screen below.
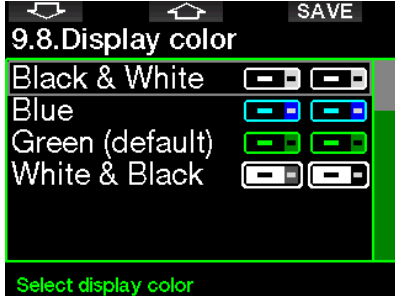
☞ NOTE: Depending on the water you're diving in, the best screen readability may be found using colors other than the default color combination or with black and white.

2.10 Pictures

Here you may look at the pictures that you have saved in your G2's memory.

2.11 Dive planner

With the dive planner you can plan your next dive based on your body's nitrogen saturation. The planner also makes use of the following information:

1. Selected oxygen concentration.
2. Selected water type.
3. Selected microbubble level.
4. Water temperature of the most recent dive.
5. Altitude range.
6. Status of saturation at the time the planner is activated.
7. Observance of the prescribed ascent rates.

☞ NOTE: When the G2 is in Gauge or Apnea mode the dive planner is disabled.

2.11.1 No-stop plan

If you have completed a dive but plan to make another during the desaturation phase, you must start the planner by adding the time you would otherwise be on the surface. The time can be added in 15-minute increments.

The prohibited altitude is shown with the mountain symbol and the peak is not allowed to be entered by the diver. For more information on altitude diving with the G2, see chapter: **Altitude diving.**

In case the G2 is displaying the no-dive warning, the duration of the warning itself is displayed as a recommended surface interval for planning purposes (rounded up to the nearest 15-minute increment).
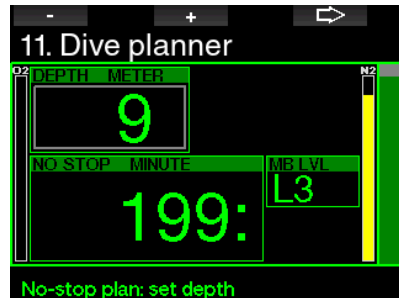
When the surface interval is given, or if you have no remaining desaturation left, the planner can show depth in 3m/10ft increments. The no-decompression dive time is shown for that depth.

11. Dive planner

DEPTH METER
18
NO STOP MINUTE
24:
OTU **6**
CNSO2 **1%**

No-stop plan: set depth

CNS% and OTU values appear on the screen when 1% would be reached for that depth with maximum no-stop time.

The minimum depth for dive planning is 9m/30ft. The planner allows only depths in line with maximum ppO_2. The oxygen content and maximum ppO_2 settings are given in the menu **1. O$_2$ setting.**

⚠ WARNING

If you have set the ppO$_2$max to OFF, the planner will allow depths up to a maximum of 120m/394ft. Air/nitrox dives with a high ppO$_2$ are extremely dangerous and can lead to death. Be aware that exposures to high ppO$_2$ will lead the CNS clock value to exceed the maximum recommended 100%.

If the MOD is shallower than 9m/30ft, planning is not allowed and the G2 will show "ppO$_2$max too low!"

2.11.2 Decompression plan

11. Dive planner

DEPTH METER **33** TIME MINUTE **27:**
LEVEL STOP
9 4: 40:
METER MINUTE TAT
OTU **23**
CNSO2 **7%**

Deco plan: set time

By pressing the ARROW button for planned depth the dive time can be edited. The start point (minimum now) is the no-decompression time. Time can be added

in 1-minute increments. The deepest decompression or MB level stop is also shown as well as the Total Ascent Time.

2.12 Help

Frequently asked questions (FAQ) and a summary of this user manual is stored here. Updates to this will be available at www.scubapro.com

2.13 Bluetooth

Bluetooth communication can be activated from this menu. How to establish a connection between your G2 and other Bluetooth devices is described in chapter: **Bluetooth connection**.

2.14 Logbook

Here the logbook can be read, including the overview that we call a dive statistic. Dive statistics is always the starting point when the logbook mode is selected.

ENTR
Logbook
00 | Dive statistics :
     01.01.16 - 01.11.16
01 | 27.10.16 - 09:59
     12.4 m - 5 min
02 | 23.10.16 - 13:33
     42.5 m - 80 min
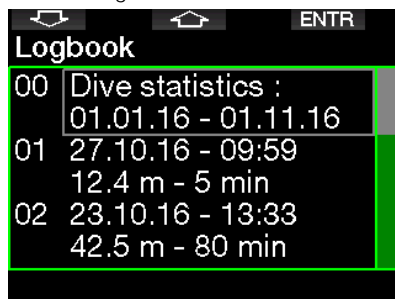
Dive statistic contains the following data.

EXIT
Dive statistics
Longest dive: 138 min
Deepest dive: 86.2 m
Total time: 16 h
No. of dives: 17
Power on: 149 h

Logbook
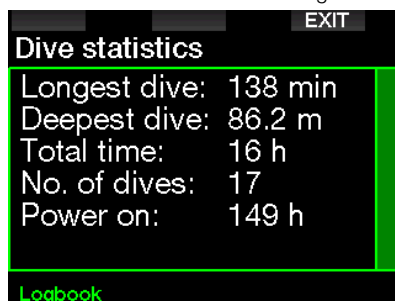
Each dive is stored with a running dive number along with immersion date, time, max depth and total dive time.
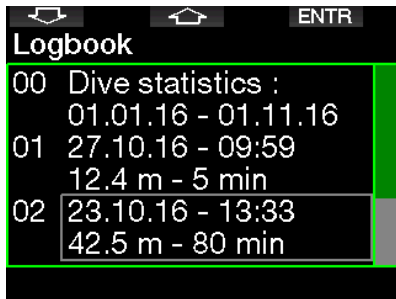
When a dive is selected the following data is shown on the 1st sub sequential page.
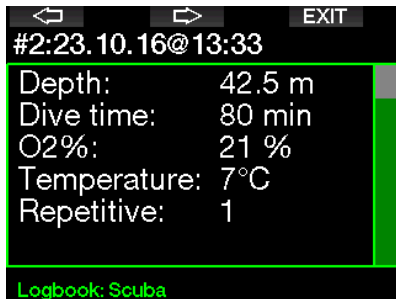
☞ NOTE: If a dive is done in Gauge mode, it is indicated on this page. The Gauge mode contains less information than what's offered in Scuba mode; therefore, some lines will remain blank in the logbook. Below is an example of a Scuba mode dive.

The 2nd sub sequential page shows the dive log in graphics.
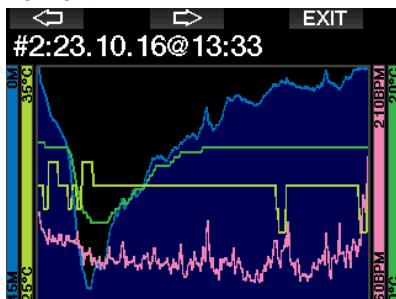
The 3rd sub sequential page shows more details.
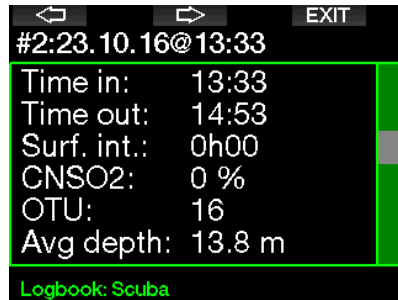
The 4th sub sequential page.
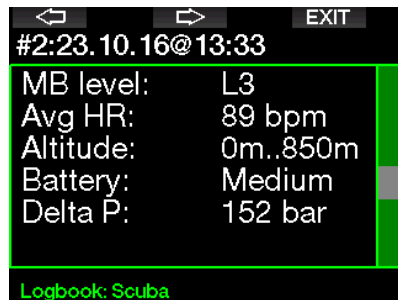
The 5th sub sequential page.
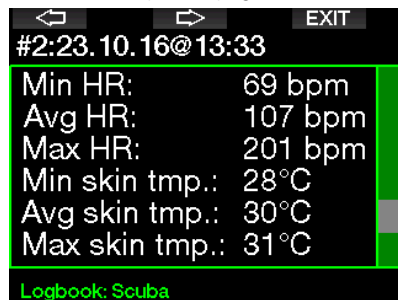
☞ NOTE: Dives with multiple gases will add log pages after the 5th sub sequential page.

The 6th sub sequential page summarizes the warnings and/or alarms of the dive, if any.

#2:23.10.16@13:33

Alarms/warnings:
- Ascent
- Desaturation reset

Logbook: Scuba

Apnea logs

The G2 organizes the Apnea dive log by grouping the individual immersions to a dive session. On the three first pages the session data is shown.

EXIT

#1:01.11.16@10:29

Time in: 10:29
Time out: 10:51
Battery: High

Logbook: Apnea

EXIT

#1:01.11.16@10:29

Deepest dive: 22.1 m
Longest dive: 2.08
Total time: 22 min
No. of dives: 4
Temperature: 22°C

Logbook: Apnea

EXIT

#1:01.11.16@10:29
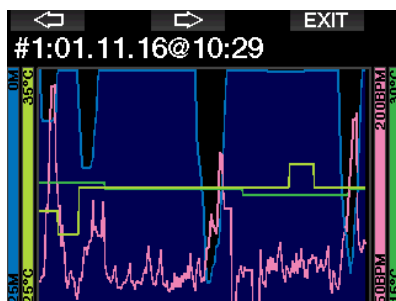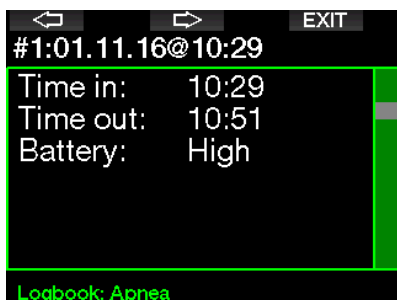
The following pages provide detailed information of a specific immersion of the session (the number is shown at the bottom of the display; for example, iteration #1, #2, etc.).

EXIT

#1:01.11.16@10:29

Time in: 10:29
Depth: 5.3 m
Dive time: 1.11
Min skin tmp.: 29°C
Temperature: 23°C

Iteration #1

EXIT

#1:01.11.16@10:29

Min HR: 64 bpm
Avg HR: 127 bpm
Max HR: 191 bpm
Desc. speed: 0.5 m/s
Asc. speed: 1.0 m/s

Iteration #1
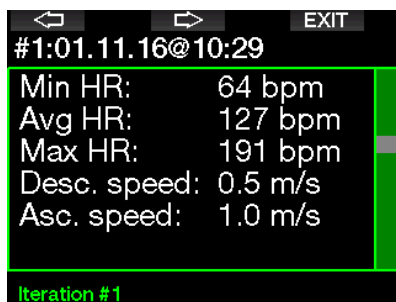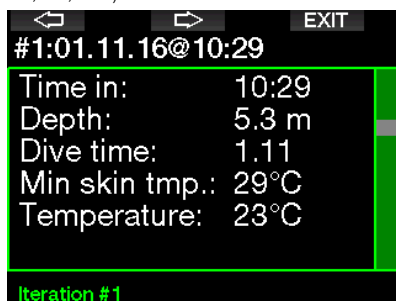
3. DIVING WITH THE G2

The G2 is a feature-rich yet highly versatile diving computer, providing decompression calculations for easy recreational dives up to complicated mixed gas dives. It also provides ascent rate calculations and warnings. Its huge memory stores photos and provides a logbook capable of holding more than 1000 hours of dive profiles with a 4s sampling rate. During the dive the G2 displays information like depth, dive time, decompression status, water temperature and so much more, while on the surface after a dive, remaining desaturation time, no-fly time, surface interval and prohibited altitude classes are shown.

3.1 Dive mode at surface

3.1.1 Recreational (factory setting)

If you have not been diving with your G2 for a while (no desaturation remaining) the dive mode screen may appear as shown below:
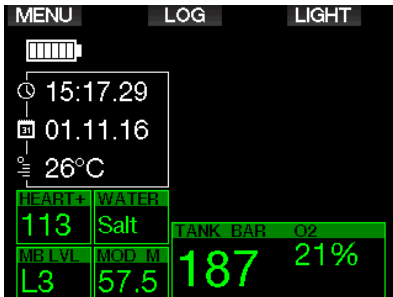
However, in Scuba mode following a dive, the display may appear as shown below.

The current altitude class and the prohibited altitude are indicated with the mountain symbol in the upper right hand corner. The interval since the last dive, as well as the remaining desaturation time, are counting up and down, respectively, in the middle of the screen.

Alternatively, when more advanced dive modes are activated the display may appear as follows (shown in PMG mode without a recent dive).

3.1.2 Display configuration in PMG mode

In Predictive Multi-gas (PMG) mode the amount of enabled gas mixes for the following dive is indicated in the gas pressure & content window below the mix. In the screen below two gas mixes are enabled (2G).

3.1.3 Display configuration in Trimix mode

In Trimix mode the gas content is shown in the tank pressure & content window in the Oxygen/Helium format.

3.1.4 Display configuration in Sidemount mode

In Sidemount mode the tank pressure & content window is split into two tanks (left and right side).

3.1.5 Display configuration in CCR mode

In CCR mode the display appears similar to Sidemount mode, but the tank pressure & content windows show the diluent and oxygen contents.

3.1.6 Surface interval, no dive and CNS% counters

After a dive the G2 shows the surface interval from the latest dive. The surface interval counter counts until desaturation is complete. After desaturation is complete this window disappears.

The no-dive symbol and countdown timer are shown to indicate the period during which you should not do another dive due to microbubbles or excessive oxygen loading (CNS O_2% > 40%).
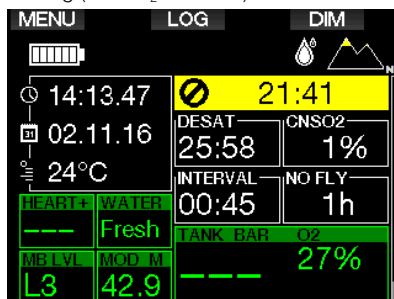
The cumulated oxygen CNS% from the last dive is counting down to zero next to the DESAT time, eventually disappearing.

3.2 Button functions while diving

The G2's button functions while diving are summarized in the table below.

☞ NOTE: The G2 can be set to three dive modes: Scuba, Apnea and Gauge. Due to the operational differences between modes, the buttons will have different functions.

	LEFT BUTTON		MIDDLE BUTTON		RIGHT BUTTON	
	Press	Press and hold	Press	Press and hold	Press	Press and hold
LIGHT	Set bookmark	-	Access alternate window in sequence:	Access alternate display in sequence:	Backlight	Compass
			Max depth	Dive profile		
			PDIS	Compartment saturation		
			Temperature	Pictures		
			Heart rate			
			Skin temperature			
			Battery level			
			Active MB level if not L0			
			MB L0 info			
			Time of day			
			CNS%			

	LEFT BUTTON		MIDDLE BUTTON		RIGHT BUTTON	
CLASSIC	Set bookmark and reset stopwatch	-	Access alternate window in sequence:	Access alternate display in sequence:	Backlight	Compass
	(Confirm gas switch)	(Manual gas switch)	Max depth	Gas summary		
			O$_2$%	Deco summary		
			PDIS	Dive profile		
			Heart rate	Compartment saturation		
			Skin temperature	Pictures		
			Battery level			
			Stopwatch			
			Active MB level if not L0			
			MB L0 info			
			Time of day			
			CNS%			
			Average depth			
			ppO$_2$			
			OTU			

FULL	Set bookmark and reset stopwatch	-	Access alternate window in sequence:	Access alternate display in sequence:	Backlight	Compass
	(Confirm gas switch)	(Manual gas switch)	O_2%	Dive profile		
			PDIS	Compartment saturation		
			Average depth	Pictures		
			Skin temperature			
			Battery level			
			CNS%			
			PPO_2			
			OTU			

GRAPHICAL	Set bookmark and reset stopwatch	-	Access alternate window in sequence:	Access alternate display in sequence:	Backlight	Compass
	(Confirm gas switch)	(Manual gas switch)	Max depth	Gas summary		
			O_2%	Deco summary		
			PDIS	Dive profile		
			Heart rate	Compartment saturation		
			Skin temperature	Pictures		
			Battery level			
			Stopwatch			
			Active MB level if not L0			
			MB L0 info			
			Time of day			
			CNS%			
			Average depth			
			ppO_2			
			OTU			

COMPASS	Set bookmark and reset stopwatch	-	Set bearing	Erase set bearing	Backlight	Manually return to initial display

GAUGE	Set bookmark and reset stopwatch	-	Set bookmark and reset average depth	Access alternate display in sequence:	Backlight	Compass
				Gas summary		
				Dive profile		
				Pictures		

|						
APNEA	Manually end the dive session (at the surface)	-	-	Access alternate window in sequence:	Backlight	-
				Heart rate		
				Skin temperature		

3.3 Altitude diving

3.3.1 Altitude classes and altitude warnings after a dive

Climbing to altitude is similar to starting an ascent from a dive: you expose your body to a lower partial pressure of nitrogen and you start off-gassing. After a dive, given the higher nitrogen loading in your body, even reaching an otherwise negligible altitude can potentially cause decompression sickness. Consequently, the G2 constantly monitors the ambient pressure and uses it to evaluate your nitrogen loading and off-gassing. If the G2 notices a drop in ambient pressure not compatible with your current nitrogen loading, it will activate a warning to alert you of a potentially dangerous situation.

The G2 counts down remaining desaturation and indicates this in the surface mode display until desaturation is complete.
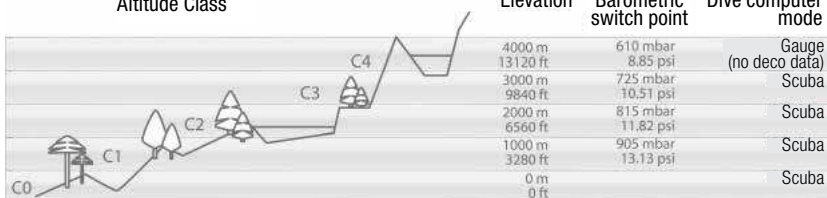
The allowable altitudes are indicated with the mountain symbol in the right upper corner of the time-of-day display. The prohibited altitudes (which the G2 has computed to be incompatible with your current nitrogen saturation levels) are solid color segments inside the mountain symbol. For more details, see chapter: **Altitude and the decompression algorithm.**

The current altitude can be checked in the menu **5. Altimeter**.

The remaining nitrogen loading is shown with an indicator bar along the right edge of the display labeled with a description text N_2.

☞ NOTE: The no-fly, no-dive and altitude restriction symbols are also shown on the time-of-day display, when applicable.

3.3.2 Altitude and the decompression algorithm

Atmospheric pressure is a function of altitude and of weather conditions. This is an important aspect to consider for diving, because the atmospheric pressure surrounding you has an influence on the on-gassing and off-gassing of nitrogen. Above a certain altitude, the decompression algorithm has to change to account for the effect of the change in atmospheric pressure.

The G2 divides the possible altitude range into 5 classes that are illustrated below:

Altitude Class	Elevation	Barometric switch point	Dive computer mode
C4	4000 m 13120 ft	610 mbar 8.85 psi	Gauge (no deco data)
C3	3000 m 9840 ft	725 mbar 10.51 psi	Scuba
C2	2000 m 6560 ft	815 mbar 11.82 psi	Scuba
C1	1000 m 3280 ft	905 mbar 13.13 psi	Scuba
C0	0 m 0 ft		Scuba

The altitude classes are defined in terms of approximate elevations because the effect of weather conditions can make the switch point pressure occur at different levels.

⚠ WARNING

At altitude class 4 the G2 functions in Gauge mode only (automatic switch from computer mode).

☞ *NOTE: You can check your elevation by activating the altitude meter. Refer to chapter: **Altimeter** to learn how to do so.*

☞ *NOTE: The G2 deals with altitude automatically. It monitors the atmospheric pressure every 60 seconds and if it detects a sufficient drop in pressure, it indicates the new altitude range and, if applicable, the prohibited altitude range. It also indicates the desaturation time which, in this case, is an adaptation time to the new ambient pressure. If a dive is started during this adaptation time, the G2 considers it a repetitive dive since the body has residual nitrogen.*

3.3.3 Prohibited altitude

Going to altitude, as well as flying after diving, exposes your body to a reduced ambient pressure. In a manner similar to no-fly time, the G2 advises you the safe altitude classes to reach after a dive, and those which are not safe. If you have to drive over a mountain pass to return home after a dive, this information can be quite important.

The prohibited altitude classes are displayed by yellow (factory initial setting color) segments inside the stylized mountain icon. These can be combined with gray (initial factory setting color) segments indicating the current altitude. In the example above, the diver is presently at altitude class 1 and should not reach altitudes of class 4 or higher.

The G2 has an altitude warning. If you reach an altitude that the G2 considers incompatible with your current residual nitrogen levels, it will warn you with an altitude warning.
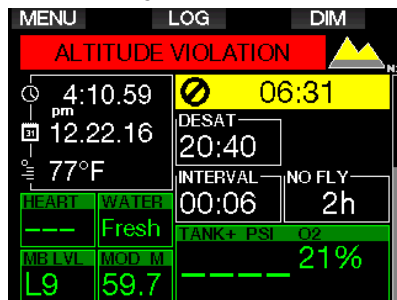
3.3.4 Decompression dives in mountain lakes

In order to ensure optimal decompression, even at higher altitudes, the decompression stop starts from 2m/7ft in altitude classes 1, 2 and 3.

If atmospheric pressure is below 610mbar (altitude higher than 4000m/13300ft), no decompression calculation is carried out by the G2 (automatic Gauge mode). In addition, the dive planner is not available in this altitude class.

3.4   Diving with nitrox

Nitrox is the term used to describe breathing gases made of oxygen-nitrogen mixes with the oxygen percentage higher than 21% (air). Because nitrox contains less nitrogen than air, there is less nitrogen loading on the diver's body at the same depth as compared to breathing air.

However, the increase in oxygen concentration in nitrox implies an increase in oxygen partial pressure in the breathing mix at the same depth. At higher than atmospheric partial pressures, oxygen can have toxic effects on the human body. These can be grouped into 2 categories:

1. Sudden effects due to oxygen partial pressure over 1.4bar. These are not related to the length of the exposure to high oxygen partial pressure. Sudden effects can vary and depend on the exact level of partial pressure they happen at. It is commonly accepted that partial pressures up to 1.4bar are tolerable during the active part of the dive, and maximum oxygen partial pressures up to 1.6bar during the decompression.

2. Long exposure effects to oxygen partial pressures over 0.5bar due to repeated and/or long dives. These can affect the central nervous system and cause damage to lungs or to other vital organs. Long exposures can be divided between more severe Central Nervous System effects and less dangerous long-term Pulmonary Toxicity effects.

The G2 treats high ppO_2 and long exposure effects in the following ways:

• **Against sudden effects.** The G2 has an MOD alarm set for a user-defined ppO_2max. As you enter the oxygen concentration for the dive, the G2 shows you the corresponding MOD for the defined ppO_2max. The default value of ppO_2max from the factory is 1.4bar. This can be adjusted to your preference between 1.0 and 1.6bar. It can also be turned off. Please refer to chapter: **ppO_2 max** for more information on how to change this setting.

• **Against long exposure effects.** The G2 "tracks" the exposure by means of the CNS O_2 clock. At levels of 100% and higher there is risk of long exposure effects, and consequently the G2 will activate an alarm when this level of CNS O_2 is reached. The G2 can also warn you when the CNS O_2 level reaches 75% (see chapter: **CNS=75%**). Note that the CNS O_2 clock is independent of the value of ppO_2max set by the user.

CNS O_2 75% warning and 100% alarm can activate during a dive (see chapters: **CNS O_2 = 75%** and **CNS O_2 = 100%)**, whereas the remaining CNS O_2 value after a dive is shown in the time-of-day display.
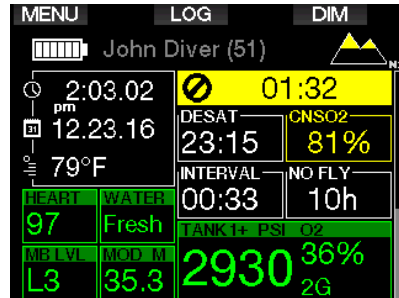
The CNS O_2 clock increases when the oxygen partial pressure is higher than 0.5bar, and decreases when the oxygen partial pressure is lower than 0.5bar. Hence, while on the surface breathing air you will always be decreasing the CNS O_2 clock. During the dive, the depth at which 0.5bar is reached for various mixes is as follows:

Air:	13m/43ft
32%:	6m/20ft
36%:	4m/13ft

☞ NOTE: For oxygen concentrations of 80% and higher, the ppO_2max is fixed at 1.6bar and cannot be changed.

• **Against long exposure and repetitive dives.** Repetitive diving and very long exposures (technical and rebreather diving) with high ppO$_2$ may cause long-term pulmonary Toxicity effects that can be tracked with OTUs. See chapter: **OTU settings** how you can check your current OTU information or reset the counter. If you exceed your OTU's for the dive, this will be noted in the logbook alarms/warnings as shown on the screen below.
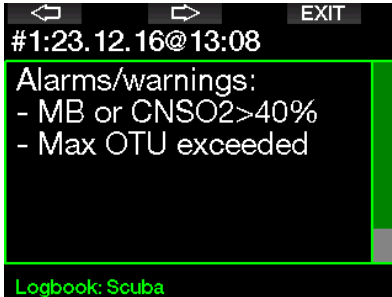
3.4.1 Technical diving

You should be trained and properly certified by a recognized agency in technical diving before using G2 for that. Decompression diving, diving with high oxygen percentage blends, multi gas diving and mixed gas diving all require skills and demand know-how that only specific training and education can provide. A dive computer is an electronic instrument that cannot make decisions for you and can not take all parameters into account while diving.

In technical diving a dive computer is not the primary instrument to follow during the dive. Before the dive you must make a plan and during the dive follow it. If your plan and the computer show different schedules, follow the more conservative one.

⚠ WARNING

Both G2 Trimix model and trimix diving are developed for healthy, physically fit, advanced divers. You should have regular medical check-ups with a specialized physician, confirming your physical aptitude for diving. This is even more important for technical diving.

Patience is a very important characteristic to maintain when conducting complex dives. It is necessary to build your personal depth limit and decompression amount based on your real diving experience and then increase little by little as you gain experience.

G2 is not designed for commercial diving. Special procedures such as surface supplied gas, heated suit, decompressing in a chamber or bell and long, high workload dives may cause algorithm to calculate incorrectly or even disturb the operation of the G2 dive computer.

Never dive without a backup instrument. It is imperative to always have backup instruments for depth, time and tank pressure, as well as a dive table with you while diving.

Plan your dives in advance and cross check your plan with another commercial planner program or table. Your dive plan should always include reserve gas amounts sufficient to handle emergencies and/or delays. Always make bailout tables for the dive.

Technical diving is not for everyone. Decompression diving, especially with Helium mixes, will always have a higher inherent potential for an accident, which could lead to permanent injury and death. The risk may be higher due to differences in an individual's physical condition, environmental conditions, human errors, etc. If you are not willing to take the risk, don't dive!

3.4.2 Diving with multiple gas mixtures

The G2 is equipped with the ZH-L16 ADT MB PMG algorithm. PMG stands for Predictive Multi-gas, meaning that when you program more than one gas mixture, the G2 will predict the switch to the higher oxygen concentration gas at the depth that you specified and alert you at all times with a comprehensive decompression schedule of all the gas mixtures that you programmed.

In other words, you get full credit at any point during the dive for all the extra gas mixtures that you are carrying with you. At the same time, the G2 can also show you what the decompression schedule would be if you were to finish the dive using only the gas mixture that you are currently breathing from, so that you can be prepared in the event that something doesn't work as planned. See chapter: **Activating PMG** to learn how to activate this mode on your G2.

⚠ WARNING

VERY IMPORTANT!

! Diving with multiple gas mixtures represents a much higher risk than diving with a single gas mixture, and mistakes by the diver may lead to serious injury or death.

! During dives with multiple gas mixtures, always make sure you are breathing from the tank that you intend to use. Breathing from a high oxygen concentration mix at the wrong depth can kill you.

! Mark all your regulators and tanks so that you cannot confuse them under any circumstances.

! Before each dive and after changing a tank, ensure that each gas mixture is set to the correct value for the corresponding tank.

! Get the proper training and certifications to make multi-gas dives prior to making them by yourself.

The G2 enables you to use up to 8 gas mixtures during the dive.

- For oxygen concentrations of 80% and higher, the ppO_2max is fixed at 1.6bar and cannot be changed.
- The MOD for tanks 2 through 8 are the switch depths for those gases. This is what the G2 uses for its calculations, warnings and suggested switch points.
- When diving with more than 1 gas mixture, the nitrox reset time function (described in the chapter: **Nitrox reset time**) has the following effect: gas1 is set to 21% gases 2 through 8 are set to OFF.

☞ *NOTE: Start breathing from the tank with the new gas mixture before confirming a switch.*
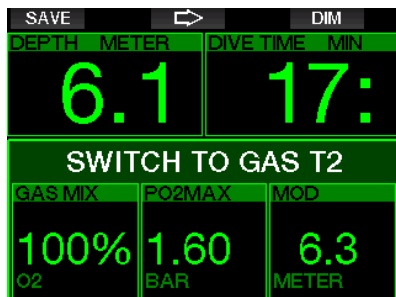

⚠ WARNING

Always make sure you are switching to the intended gas. Failure to do so may result in serious injury or death.


The following chapters about gas switching are shown with 2 gas mixtures enabled. However, more than two mixes enabled are working similarly.

Diving with 2 gas mixtures
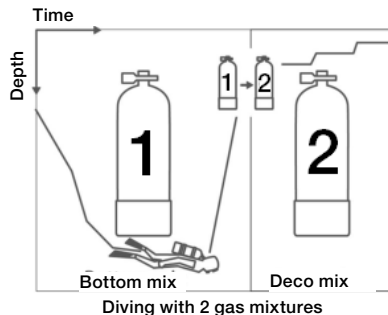
Switching gas mixture during the dive

During the ascent phase, when you reach a depth corresponding to the MOD of a gas other than the one you are currently using, the G2 will suggest that you perform the switch. An audible sequence is played, and the message **SWITCH TO GAS T2** appears on the display. You have 30 seconds to respond to this message; otherwise, the G2 will conclude that gas 2 will not be used (text: **EXCLUDING GAS T2** will be displayed) and adapt the decompression schedule accordingly.
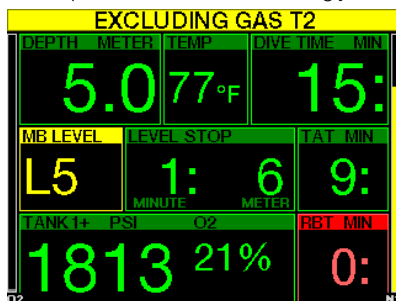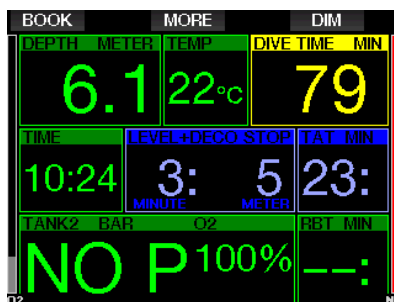
To confirm the gas switch, press the SAVE button. After you confirm the switch, the message **SWITCH TO GAS T2 SUCCESSFUL** remains on the screen for 4 seconds.

Switching back to a gas mixture with lower oxygen concentration

There may be situations in which you have to switch back to a tank with lower oxygen concentration. This can happen, for instance, if you want to descend again below the MOD of the higher oxygen concentration gas (T2), or if you have run out of T2 gas during the decompression. At this point you can manually initiate the gas switch by pressing and holding the BOOK button.

The G2 will display the message **SWITCH TO GAS T1**. At this point press the SAVE button to confirm the switch and the ARROW button to select another gas.
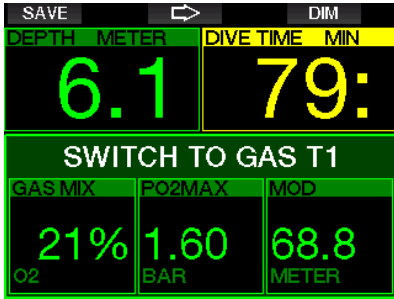
The G2 will display the text **SWITCH TO GAS T1 SUCCESSFUL** 4 seconds and adapt the decompression schedule accordingly.

Gas switch not carried out at the planned depth

If you fail to confirm the gas change within the 30 seconds of when the G2 suggests it, the gas is excluded from the decompression calculation and the decompression schedule is adapted accordingly, basically reflecting the fact that you will finish the dive without using the excluded gas.

Delayed gas switch

You can catch up on a planned gas mixture switch at any time by selecting the gas manually. Press-and-hold the BOOK button to start the gas switch procedure. The G2 will show the message **SWITCH TO GAS T2** on the display. This helps you verify that you are performing a switch to a safe gas. At this point you would press the SAVE button to confirm the switch. The G2 will display the message **SWITCH TO GAS T2 SUCCESSFUL** and adapt the decompression schedule accordingly.

Submerging below the MOD after a gas switch

If after having switched to gas 2 you inadvertently drop again below the MOD for that mixture, the MOD alarm will immediately be activated. In this case, you would either switch back to gas 1 or ascend above the MOD for gas 2.

Predicted decompression stops and gas changes during ascent

The main dive display will show only the deepest decompression stop depth and time with TAT.
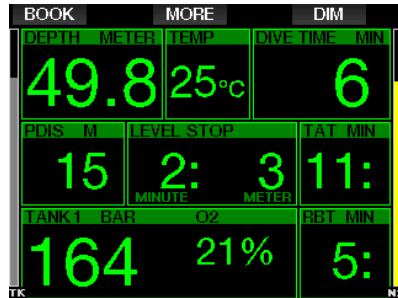

By a press-and-hold of the MORE button the gas summary table is shown. By pressing the MORE button, the predicted decompression stops are shown with all enabled gases used (PMG) and assuming only the current gas would be used (1G). Also, current selected MB level as well as MB level 0 schedules are shown.

By pressing the ARROW UP button the profile display is shown (blue is the dived part, the gray line identifies current time and green is the predicted ascent profile) with required gas switching depths according to MOD's (white lines).
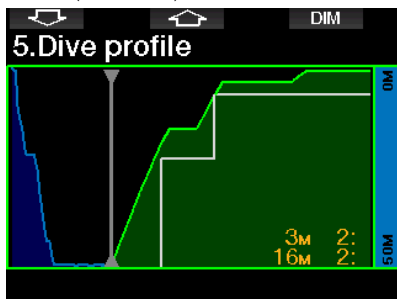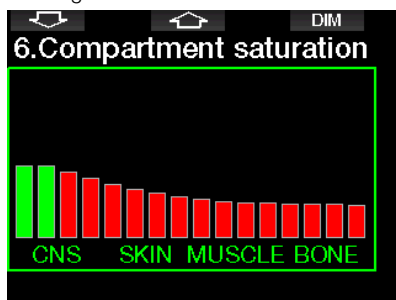

By pressing ARROW UP the current compartment saturation is shown.
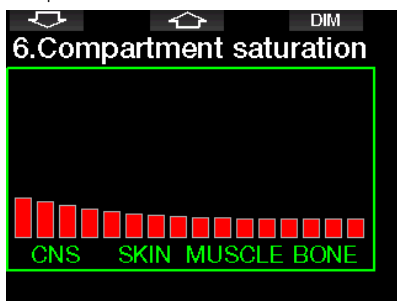
When the previously shown dive proceeds to the ascent phase the decompression is still increasing, as seen from the table information on the right side.
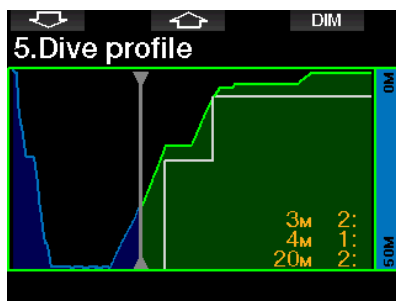
The fast compartments begin off gassing and the effect is shown in the saturation bar diagram below.

When off gassing the compartment color changes from red to green.

3.4.3 Diving with Trimix mode

> ⚠ **WARNING**
>
> **VERY IMPORTANT!**
>
> **!** When breathing compressed air or EAN Nitrox during a dive, the diver accepts a certain level of risk. When breathing a Trimix gas or other mix gases during a dive, the risk level increases.
>
> **!** We have used all relevant data and the most recent hyperbaric research on Trimix diving to bring the risk level of our Trimix algorithm to the lowest possible acceptable level. Nevertheless, we can in no way guarantee that breathing Nitrox, Trimix, mixed gases or compressed air during a dive using our Trimix algorithm will eliminate or prevent the risk of serious injury or death from decompression sickness, oxygen toxicity or some other inherent risk.
>
> **!** The Trimix diver using our Trimix algorithm on our dive computers should be aware of the risk level and be willing to accept that personal risk and bear the full legal responsibility of such risks. If the diver is not willing to accept those risks, including serious injury or death, then he or she should not dive with our Trimix mode.
>
> **!** Never risk your life on only one source of information. Eventually, every computer has the potential to fail, so do not depend exclusively upon it and always have a plan for how to handle failures. Use a redundant divecomputer, carry backup tables and depth/time instrumentation. If you make riskier dives, obtain the proper training from a recognized agency to gain the required technical skills and experience needed for this type of diving. Computer technology is never a substitute for knowledge and training

> ⚠ **WARNING**
>
> Before performing trimix dives with the G2 you should practice no-stop recreational diving to become accustomed to the interface and functions of the dive computer.

Minimum and Maximum Operating Depth

Absolute Minimum Depth (AMD) and Maximum Operating Depth (MOD) are calculated from the oxygen content in the mix. The ppO_2 that is given by the user is divided by the oxygen fraction. The result will be pressure, which is converted to depth. The maximum MOD is valid for all gases, while the minimum AMD is only applicable to a gas mix where the oxygen fraction is less than air.

> ☞ NOTE: Air (21/0) gives a different MOD than, for example, trimix 21/10. The reason is, the G2 uses a more precise value for the oxygen in the air, which is 20.7%.

> ⚠ **WARNING**
>
> Altitude diving with hypoxic mixes requires proper acclimatization. Adaptation to lower ppO_2 levels is a slow process requiring your body to produce more red blood cells. The adaptation time is personal and cannot be directly calculated. Desaturation due to pressure drop when arriving at altitude is another factor (see chapters: **Altimeter** and **Altitude diving**).

Gas selection

In technical diving, especially with Trimix blends, the decompression efficiency becomes extremely important. Gas mixes with high helium content and low oxygen content are not well suited for decompression.

For example, where two decompression mixes are in most cases enough when air or nitrox is used as a bottom gas, in the case of trimix the optimal off gassing requires more decompression mixes.

So, the PMG option shall be enabled together with trimix as described in chapter: **Diving with multiple gas mixtures** also applies to trimix diving.

Tank 1 is always the starting gas from the surface. When you have set more than one tank, you may change gas during the dive manually, or when the G2 suggests it.

The minimum O_2 setting for tank T1 is 18%. This is due to the limitation that a dive must begin with gas 1. To ensure an adequate supply of oxygen to the body, the gas used at the beginning of the dive must contain enough oxygen (you can use a travel mix or one of the decompression gases) as is required for Tank 1. Therefore, the first alarm related to Absolute Minimum Depth would be given at shallower than 1.2m/3.9ft.

⚠ WARNING

Heavy work while at the surface or at shallow depths while breathing with less than 21% oxygen fraction may cause a loss of consciousness and lead to drowning.

The minimum O_2 setting for other tanks than tank 1 is 8%.

⚠ WARNING

Low Oxygen fraction settings may allow greater MOD values. The dive computer cannot evaluate your skills, experience or condition to dive the MOD which is showing. Dive only at depths that your certification allows.

The G2 calculates the maximum possible helium fraction by subtracting the oxygen fraction from 100%.

⚠ WARNING

Helium reduces the narcotic effect of the mix, but does not remove it. At great depths, helium may also cause an effect called "Helium tremors" or HPNS (High Pressure Nervous Syndrome).

The gas summary table is practical when handling multiple gas mixtures. It can be called up on a pre-dive check as well as any time during the dive.

☞ *NOTE: The Smart transmitter communicates the pressure signal frequently only from the actively used tank. When the tank is not used within 5 minutes, the transmitter goes to a power save mode and the pressure update to a gas summary table may take longer.*

Compartment saturation with Trimix

In Trimix mode the compartment saturation shows combined both helium and nitrogen saturations separated by a thin line. On-gassing and off-gassing of the compartments are indicated the same way as with a color change.
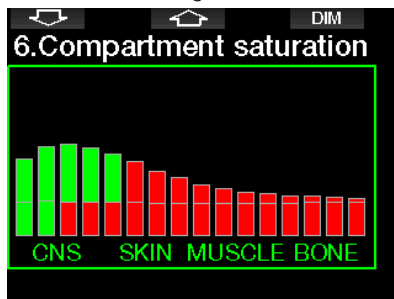
PDIS for both N2 and He

Profile Dependent Intermediate Stop (PDIS), as described in the chapter: **PDIS (Profile Dependent Intermediate Stop),** has been extended to both nitrogen and helium gases. The optimal off-gassing depth will be indicated when PDIS is enabled. PDI stops are not obligatory, but will potentially assist in reducing possible bubble formation.

3.4.4 Diving with Sidemount mode

Prior to diving with Sidemount mode, you have to make sure that the features "Sidemount" and "PMG" in the G2's **8.7 Feature upgrade** menu are enabled. Afterwards the Sidemount mode has to be activated, as described in chapter **Activating Sidemount**. Activating the Sidemount mode will automatically activate the PMG mode as well. Pair two sidemount tanks with equal oxygen mixture to your G2 and you are ready to go.

☞ *NOTE: For technical diving you can pair 6 additional tanks and the G2 will guide you through your dive.*

The G2 starts the sidemount dive with tank T1. The RBT value is shown considering you are using both tanks. When the preset threshold step is reached, the G2 will suggest that you perform the switch to the other tank. An audible sequence is played and the message SWITCH TO GAS T2 appears on the display. You have 30 seconds to respond to this message.
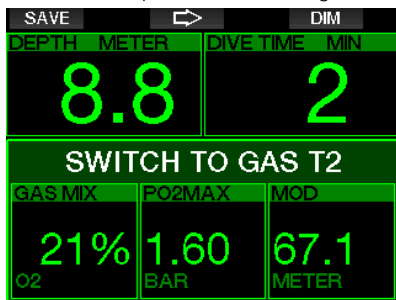
If you for any reason do not switch to the requested tank, the G2 will mark the currently used tank with an underlying red triangle. The triangle points to the other tank. This indicates you should switch to that tank, because the threshold step is reached.

Delayed gas switch: You can catch up on a recommended tank switch at any time by selecting the tank manually. Press-and-hold the BOOK button to start the tank switch procedure. The G2 will show the message SWITCH TO GAS T2 on the display. This helps you verify that you are performing a switch to the recommended tank. At this point you would press the SAVE button to confirm the switch. The G2 will display the message SWITCH TO GAS T2 SUCCESSFUL.

3.4.5 Diving with CCR mode

The CCR (Closed Circuit Rebreather) system is probably older than the Open Circuit Scuba system because the basic operating principle with manual control didn't require a highly reliable regulator system.

The CCR system also uses the gas more efficiently than an open loop system, because the oxygen is added to the breathing loop only as needed. Respectively, the carbon dioxide generated by the body is bound to calc at the scrubber. As a side effect the CCR system is nearly bubble-free, which can be beneficial when engaged in photography or observing fish under water.

In the CCR system the breathing gas ppO_2 (partial pressure of the oxygen) is kept constant. The CCR system itself takes care of this. Compared to an open loop system the constant ppO_2 converts to a variable nitrox mix at different depths.

For example, a ppO$_2$ setting of 1.0bar is comparable to an open loop 50% nitrox mix at a depth of 10m/33ft in salt water.

⚠ WARNING

All rebreathers require unit specific education before using them. Get the proper certifications and follow manufacturer recommendations and procedures when diving with a rebreather unit. Deviations may lead to severe injury or death.

Rebreathers use multiple gases, bailout procedures which are equal to gas switching and many technical diving techniques. Therefore, all considerations and warnings of the previous chapters apply to rebreather diving.

When the CCR mode is activated, the diluent tank appears in O$_2$ setting.

See chapter: **Activating CCR** to learn how to activate this mode.

The dive start setpoint (SP1) has a selectable range from 0.2 up to 0.95bar ppO$_2$. The bottom setpoint (SP2) has a range from 1.0 up to 1.6bar ppO$_2$ and this is switched normally active on the way to the bottom or when the bottom depth is reached.

The SP switch depth is suggested by the dive computer the same way the gas switches are suggested in open circuit mode (predictive gas switching).

The switch points are determined by the equivalent oxygen contents in open circuit mode. So, when the switch point is reached on the way down when the equivalent content of the gas at that depth reaches the diluent O$_2$ level.

For example, with a SP1 of 0.5bar of the air diluent the depth would be approximately 13.8m/45.3ft in salt water.
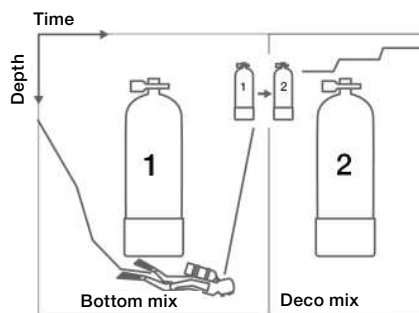
Diving with 2 gas mixtures
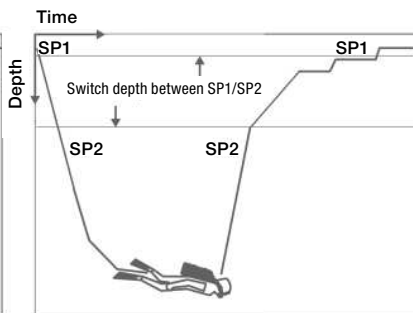
Diving in CCR mode

3.5 Warnings and alarms

The G2 can alert you to potentially dangerous situations via warnings and alarms. You can modify the warning and alarm settings in the menus or via a PC interface.

3.5.1 Warning settings

Warnings represent situations that require diver's attention; however, ignoring them does not necessarily represent an immediate risk. It is up to you to decide which ones you would like to be active.

Warnings are shown in the pop-up window at the top of the display where button descriptions are normally viewed. The warning color is YELLOW and the related data window is highlighted at the same time.

Generally, warnings can be set to AUDIBLE, VISUAL, BOTH (audible and visual) or OFF.
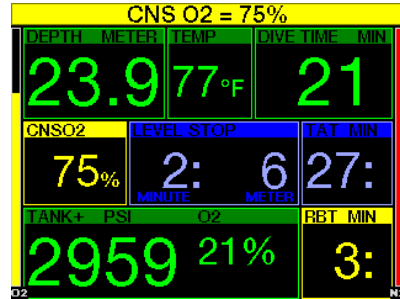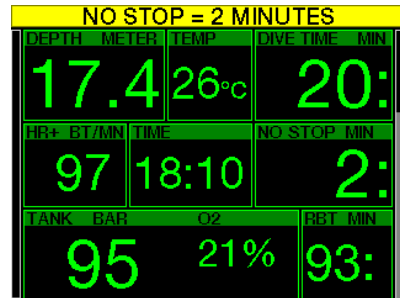
The available warnings are:

3.5.2 Maximum depth
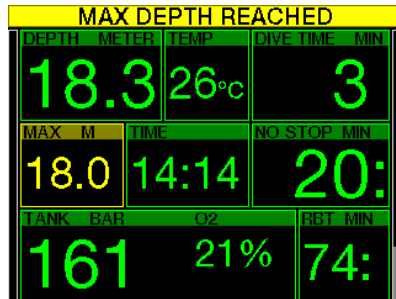
Maximum depth will trigger a warning. See chapter: **Maximum dive depth warning** to learn how to set the warning depth.

3.5.3 CNS O_2 = 75%

The G2 tracks your oxygen uptake via the CNS O_2 clock. If the calculated value of CNS O_2 reaches 75%, the G2 will warn you until the value drops below 75%.


3.5.4 No-Stop time = 2 min

If you wish to avoid unintentionally performing a decompression dive, the G2 can activate a warning when the no-stop time reaches 2 minutes. This applies to both L0 no-stop and MB no-stop time (see chapter: **Diving with MB levels**) for more information on MB level diving). It gives you the opportunity to start ascending before incurring a decompression stop or a level stop obligation.

3.5.5 Entering decompression

The G2 can activate a warning when the first mandatory decompression stop appears. This alerts the diver to the fact that a direct ascent to the surface is no longer possible. This warning applies to dives with the computer set to L0-L9.

3.5.6 Dive time

See chapter: **Maximum dive time warning** to learn how to set this warning time.
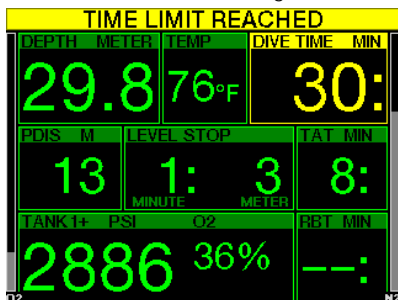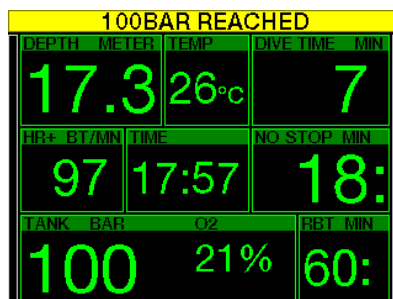

When the set dive time is reached (see example above: 30 minutes) the warning message is: **TIME LIMIT REACHED**.
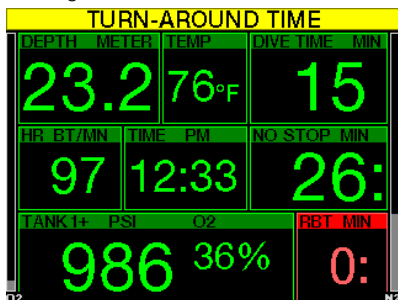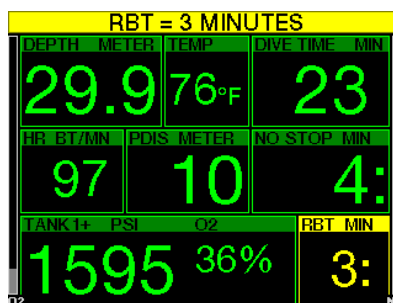

Half of the dive time warning (above set 30 minutes = 15 minutes) gives the warning message: **TURN-AROUND TIME**.

3.5.7 Tank pressure

The G2 can warn you when the tank pressure reaches a certain level. For instance, you can set it to half the full tank pressure as a reminder that it is time to start a slow ascent.

3.5.8 RBT = 3 min

In order to give you sufficient warning that your gas supply may be running low, the G2 can warn you when the RBT (remaining bottom time) drops to 3 minutes. See chapter: **RBT = 3 min** for more information on RBT.

> ### ⚠ WARNING
>
> **If the RBT drops to 3 minutes or less, you may not have enough gas supply to complete a safe ascent. Start ascending when you see this warning.**

3.5.9   Pressure signal
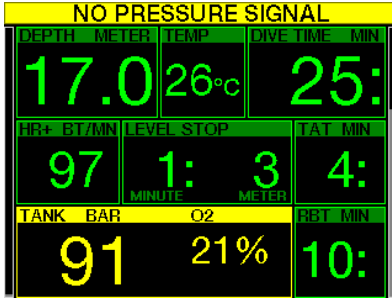
Wireless tank pressure information, under certain circumstances—such as inappropriate positioning of the transmitter or interference from strong RF sources, can be momentarily interrupted. Strobes used in underwater photography, for example, are known to momentarily affect the communication between the G2 and the wireless transmitter.

☞ *NOTE: If the G2 receives no signal from the transmitter for 30 seconds, an audible sequence goes off and the message NO PRESSURE SIGNAL appears on the display for 12 seconds. If, after another 40 seconds, the G2 still has not received any signal from the transmitter, another audible sequence sounds and the message PRESSURE SIGNAL LOST appears for 12 seconds, after which the RBT is not displayed any longer and the tank pressure is replaced with - - -.*

⚠ WARNING

In the event of a NO PRESSURE SIGNAL situation, all tank pressure-related information on the G2 ceases to be valid. In such a case, you must use a backup instrument for pressure monitoring and seek a safe ascent to the surface. Running out of gas under water is dangerous and may lead to severe injury or death by drowning.

3.5.10   Entering level stops
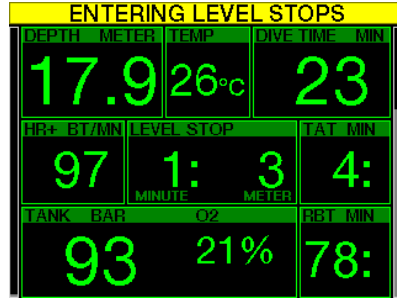
When diving with a microbubble (MB) level other than L0, the G2 can warn you when you are no longer in the MB no-stop phase. For more information, see chapter: **Diving with MB levels.**

3.5.11   MB stop ignored

When diving with an MB level higher than L0 and in the presence of MB level stops, the G2 can warn you if you reach a depth shallower than the deepest required MB level stop, therefore allowing you to avoid missing the required stop.
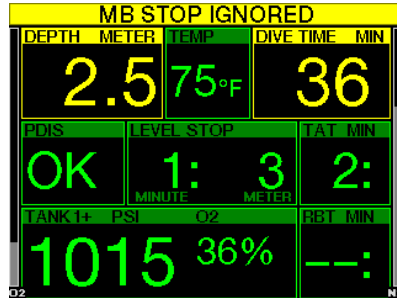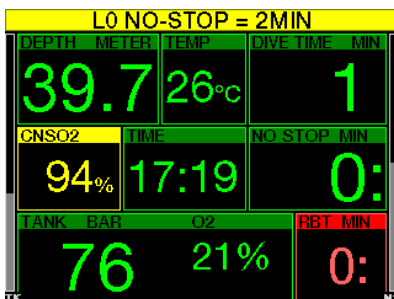
3.5.12   MB level reduced

When diving with an MB level higher than L0 and in the presence of MB level stops, if you ascend more than 1.5m/5ft above the deepest required MB level stop, the G2 reduces your MB level to the next possible level. The display will show the new active MB level.
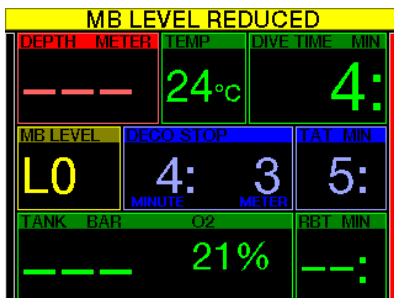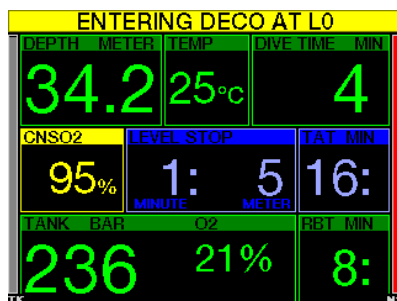

3.5.13   L0 no-stop = 2 min

When diving with an MB level higher than L0, the underlying L0 information is not directly visible on the display (though it is accessible as alternate information). You can choose to have your G2 warn you when the underlying L0 no-stop time reaches 2 minutes while diving with an active MB level higher than L0.

3.5.14   Entering decompression at L0

When diving with an MB level higher than L0, the underlying L0 information is not directly visible on the display (though it is accessible as alternate information). You can choose to have your G2 warn you when you are about to enter a decompression obligation while diving with an active MB level higher than L0.

3.6   Alarms

The diver cannot turn off alarms because they represent situations that require immediate action.

Alarms are shown in the pop-up window at the top of the display where button descriptions are normally viewed. The alarm color is RED and the related data window is highlighted at the same time.

There are 7 different alarms:
• ASCENT TOO FAST
• MOD EXCEEDED
• CNS O_2 = 100%
• TANK RESERVE REACHED
• MISSED DECO STOP
• RBT = 0 min
• LOW BATTERY

⚠ WARNING

- **When in Gauge mode, all warnings and all alarms are OFF except for the low battery, tank reserve, half tank, max depth, max dive time and pressure signal alarm**
- **When the G2 is set to SOUND OFF mode, all audible alarms and warnings are switched off.**
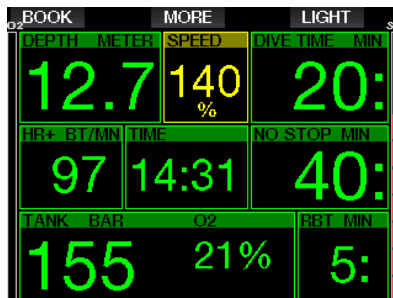
3.6.1   Ascent rate

As you ascend during a dive, the pressure surrounding you decreases. If you ascend too quickly, the ensuing pressure reduction could lead to microbubble formation. If you ascend too slowly, the continued exposure to high ambient pressure means that you will continue loading some or all of your tissues with nitrogen. Consequently, there is an ideal ascent rate that is slow enough to minimize microbubble formation yet fast enough to minimize the effect of continued loading on your tissues.

The pressure reduction that the body can tolerate without significant microbubble formation is higher at depth than it is in the shallows: The key factor is not the pressure drop by itself, but rather the ratio of the pressure drop relative to the ambient pressure. This means that the ideal ascent rate at depth is higher than it is in the shallows.

Along these lines, the G2 employs a variable ideal ascent rate. Its value ranges from 3 to 10m/min (10 to 33ft/min) and the actual breakdown by depth range is listed in the table below.

DEPTH		ASC SPEED	
m	ft	m/min	ft/min
0	0	3	10
2.5	8	5.5	18
6	20	7	23
12	40	7.7	25
18	60	8.2	27
23	75	8.6	28
31	101	8.9	29
35	115	9.1	30
39	128	9.4	31
44	144	9.6	32
50	164	9.8	32
120	394	10	33

If the ascent rate is greater than 110% of the ideal value, the speed window turns yellow.

For ascent rates higher than 140%, the **ASCENT TOO FAST** warning is displayed and the ascent window changes to red.

ASCENT TOO FAST!

The G2 also provides an audible alarm for ascent rates exceeding 110%: the intensity of the alarm increases in direct proportion to the degree that the ideal ascent rate is exceeded.

In the event of a too-fast ascent, the G2 may require a decompression stop even within the no-stop phase because of the danger of microbubble formation.

From great depths a slow ascent may cause increased saturation of tissues and an extension of both decompression duration and total ascent time. At shallow depths, a slow ascent may shorten the decompression duration.

Excessive ascent rates for longer periods are entered in the logbook.

⚠ WARNING

The ideal ascent rate must not be exceeded at any time, since this could lead to microbubbles in the arterial circulation which could cause serious injury or death.
The alarm persists for as long as the ascent rate is 110% or more of the ideal ascent rate.

3.6.2   MOD/ppO$_2$

⚠ WARNING

- The MOD should not be exceeded. Disregarding the alarm can lead to oxygen poisoning.
- Exceeding a ppO$_2$ of 1.6bar can lead to sudden convulsions resulting in serious injury or death.

MOD EXCEEDED

If you exceed the MOD, the depth change to red with alarm text: **MOD EXCEEDED.**

The MOD is displayed in an alternate display window so you can see by how much you have exceeded it. In addition, the G2 will beep incessantly. Both the blinking of the depth value and the beeping will continue for as long as you stay deeper than the MOD.

3.6.3   CNS O$_2$ = 100%

⚠ WARNING

When the CNS O$_2$ reaches 100% there is danger of oxygen toxicity. Start the procedure to terminate the dive.

The G2 tracks your oxygen uptake via the CNS O$_2$ clock. If the calculated value of CNS O$_2$ reaches 100%, the G2 will emit a sequence of audible beeps for 12 seconds and the value of the CNS O$_2$ will turn red in the O$_2$ window. The red color will continue until the value of CNS O$_2$ drops below 100%.

The audible signal is repeated for 5 seconds in 1-minute intervals after the first occurrence, and for as long as the value of CNS O_2 stays at or above 100% or until the ppO$_2$ drops under 0.5bar (see chapter: **Diving with nitrox** for a list of depths at which the ppO$_2$ equals 0.5bar for typical nitrox mixes).

3.6.4 Tank reserve pressure reached

See chapter: **Tank reserve** to learn how to set the tank reserve pressure limit. When this set pressure is reached during the dive an alarm is triggered.

3.6.5 Missed decompression stop

⚠ WARNING

Violating a mandatory decompression obligation may result in serious injury or death.

If, when conducting a required decompression stop, you ascend more than 0.5m/2ft above the required stop, the G2 will trigger an alarm. The value of the current depth and the text: **MISSED DECO STOP!** is shown and a sequence of beeps can be heard. This will continue for as long as you stay 0.5m/2ft or more above the required stop
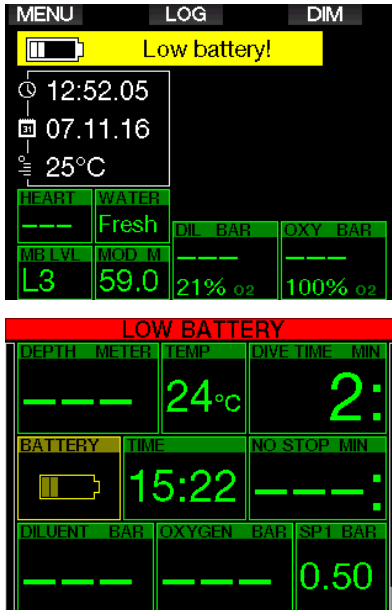
3.6.6 RBT = 0 min

The situation when RBT reaches 0 minutes can be selected as a warning or alarm. See chapter: **RBT warning or alarm** to read more about this setting.

3.6.7 Low battery

During the dive, the G2 alerts you of precarious battery situations in two ways:

1. By displaying a battery symbol with a background warning color on the screen.
2. By displaying a warning message at the top of the display (where button descriptions are normally shown).

3.7 Display information

Upon immersion, the G2 will automatically start to monitor the dive regardless of what state it was in prior to the immersion. Details on the information displayed can be found in the next sections.

Dive time. The dive time is displayed in minutes. If during the dive you ascend to the surface, the time spent on the surface will only be counted if you descend again below 0.8m/3ft within 5 minutes (default setting, or you can set from 3 to 30 minutes). This allows for brief periods of orientation. While on the surface, the time will not show as progressing but it is running in the background. As soon as you submerge, the time will resume, including the time spent on the surface. If you spend more than 5 minutes (or which time you have set) at depth shallower than 0.8m/3ft, the dive will be considered ended, the logbook closed and a subsequent immersion would cause the dive time to start again from zero.

Maximum displayed time is 999 minutes. For dives longer than that, the dive time starts again from 0 minutes.

Only dives longer than 2 minutes are stored to logbook.

Depth. The depth is given in 10cm resolution in metric mode. When displayed in feet, the resolution is always 1 foot. At a depth shallower than 0.8m/3ft, the display shows ---. The G2's maximum possible operating depth is 120m/394ft.

No-stop time. Calculated in real time and updated every 4 seconds. Maximum displayed no-stop times is 99 minutes.

Temperature. The G2 displays the water temperature during the dive and the air temperature while on the surface. However, skin temperature influences the measurement when the unit is worn on the wrist in contact with the diver's skin.
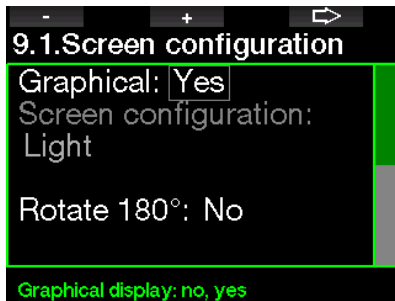
Decompression information. When the G2 calculates the need for a mandatory decompression stop, it shows you how long and how deep your deepest stop is. It also gives you the total ascent time.

⚠ WARNING

During all dives, perform a safety stop between 3 and 5 meters (10 and 15 feet) for 3 to 5 minutes, even if no decompression stop is required.

3.7.1   Display configuration during the dive

The G2 lets you select from four screen layout options: **Light, Classic, Full** or **Graphical**. You can also rotate the screen, if you prefer, to have the buttons positioned at the bottom of the screen.

The **Light** screen configuration is the factory default. It shows only the basic information with large numbers. When the dive requires decompression and more information must be shown on the display, the display changes automatically to the **Classic** configuration.
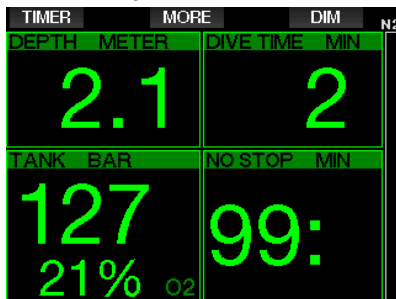
☞ NOTE: only the shorter between nostop time and RBT is shown in LIGHT configuration. If your remaining gas supply is such that you will enter level or deco stops prior to reaching an RBT of 0 minutes, the no-stop time will be displayed on the screen, emphasized by the NO STOP label. If on the other hand your remaining gas supply is such that you will reach RBT of 0 mintes while still in the no-stop phase, then the RBT will be displayed on the screen, emphasized by the RBT label

More specifically, the following information is displayed:

- current depth
- dive time
- tank pressure
- the shorter between no-stop time and RBT
- O_2 mix
- nitrogen loading (via bar graph)

⚠ WARNING

After a PRESSURE SIGNAL LOST warning the G2 is no longer able to compute the RBT. In such case, the LIGHT configuration shows the no-stop time but this does not imply that you have enough gas supply to remain at that depth for that amount of time.

The **Classic** screen presents more information with smaller numbers in smaller windows.
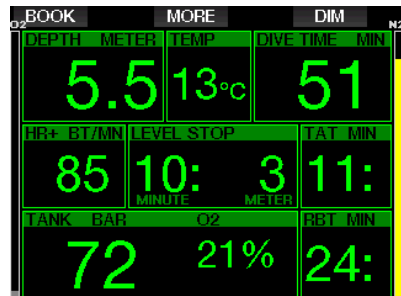
The **Full** screen configuration displays the maximum amount of information. This screen is for divers who prefer to monitor all of the parameters that the G2 can provide.
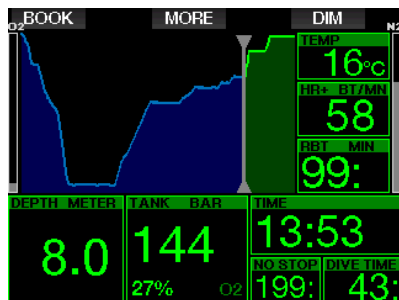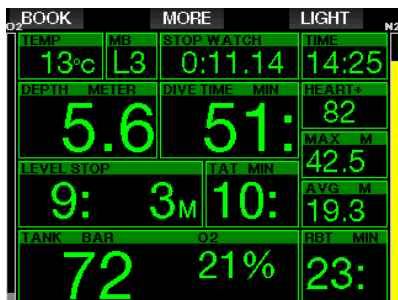
The **Graphical** screen configuration combines numeric information with an actual dive profile. The diver is represented by the gray cursor line in the graphical profile. Projected ascents and stops before surfacing are shown on the right side of the cursor line.

Regardless of screen configuration, the G2 utilizes one window for displaying additional information regarding the dive. By pressing the MORE button the G2 will show in sequence the following data on the different screens:

Screen configuration	Light	Classic	Full	Graphical
1	Tank pressure	Max depth	O_2%	Max depth
2	Max depth	O_2%	PDIS	O_2%
3	PDIS	PDIS	Average depth	PDIS
4	Temperature	HR	Skin temperature	HR
5	HR	Skin temperature	Battery level	Skin temperature
6	Skin temperature	Battery level	CNS%	Battery level
7	Battery level	Stopwatch	ppO_2	Stopwatch
8	Active MB level if not L0	Active MB level if not L0	OTU	Active MB level if not L0
9	MB L0 info	MB L0 info		MB L0 info
10	Time of day	Time of day		Time of day
11	CNS%	CNS%		CNS%
12		Average depth		Average depth
13		ppO_2		ppO_2
14		OTU		OTU

A press-and-hold of the MORE button launches a dive profile (or gas/deco summary displays depending on MB/PMG settings) display. This screen will remain for 12 seconds and return to the normal dive display unless buttons are pressed.
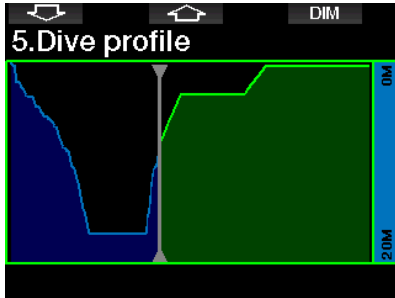

With the ARROW buttons you can scroll to the next display, which is the relative compartment saturation display. The height of each bar indicates the ratio of current tissue loading with respect to the maximum tolerable loading, expressed in a percentage. The green color indicates that the compartment is off-gassing, and the red color shows on-gassing.
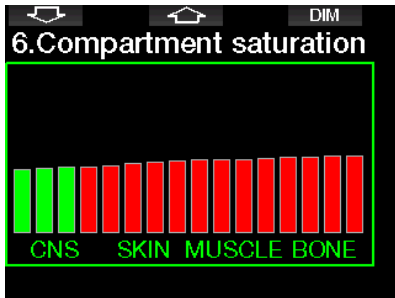
The following display shows a list of pictures stored in the G2's flash memory. See chapter: **USB flash disk operations** for more information on how and where to save pictures that can be viewed during the dive.

With a press-and-hold of the middle button you will enter the pictures list. With the ARROW buttons you can select the picture you want to view. A press-and-hold of the middle button lets you view the selected picture.
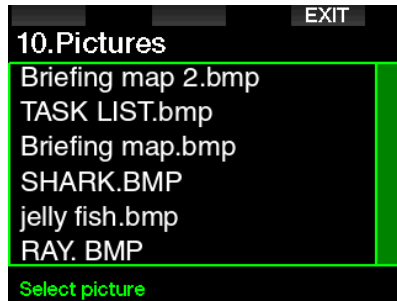
You can use the pictures for:
- fish identification
- dive site maps
- task/check lists
- notes

and many other underwater purposes. Following are some examples:
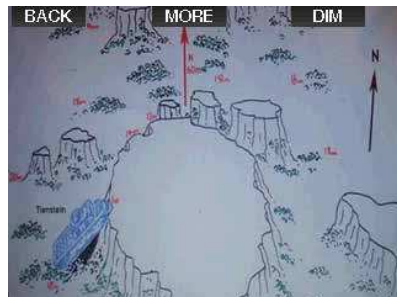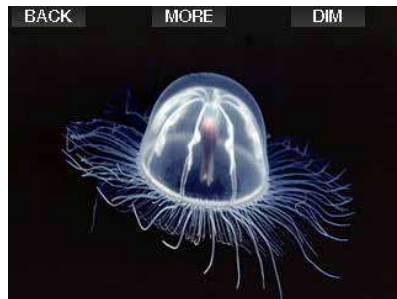
☞ NOTE: Profile, compartment saturation, and pictures can be viewed for a maximum of 1 minute, after which the normal dive screen will appear again. If any warning or alarm is triggered while viewing alternate screens, the G2 will immediately revert to the normal dive screen.

3.7.2 Setting bookmarks

By pressing the BOOK button you can set any number of bookmarks as reminders of particular moments during the dive. The bookmarks will appear on the dive profile in LogTRAK.

3.7.3 Stop watch timer

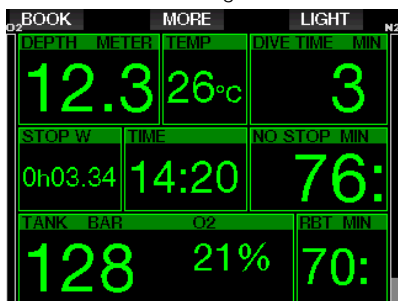There are many situations during a dive where a simple stop timer is practical (timed tasks at dive courses, etc.).

The G2 has a stop timer integrated into the Scuba mode. The stop timer can be accessed by pressing the MORE button. When displayed, the stop watch counting can be reset by pressing the BOOK button. The timer starts counting at immersion.

The stop timer generates a bookmark, which will appear on the dive profile in the LogTRAK.

3.7.4 Safety stop timer

If a minimum depth of 10m/30ft has been reached during the dive, at a depth of 5m/15ft the safety stop timer will automatically start a countdown. If you go below 6.5m/20ft, the timer will disappear and the no-stop time is shown again. Upon returning to 5m/15ft, the timer will start again automatically.
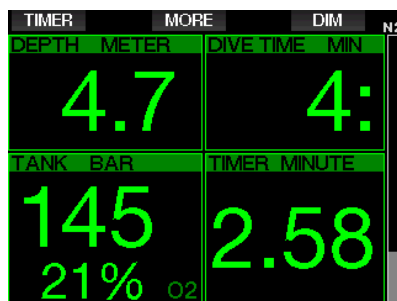
The safety stop timer can be restarted by pressing the TIMER button.

3.7.5 Backlight

In the menu **8.3 Backlight duration** you can select the time and function of the backlight. Normally the backlight is dimmed to low intensity and can be brightened by pressing the LIGHT button.

☞ NOTE: The display is totally off when the low power mode becomes active (only one battery segment is left) and by pressing the right button the display is illuminated for 10 seconds.

3.7.6 Compass

The compass can be activated during the dive by a press-and-hold of the LIGHT/DIM button. The display will change to the compass screen where a large compass rose is shown and the core numeric information of the dive.

3.8 Diving with MB levels

Microbubbles (MB) are tiny bubbles that can build up inside a diver's body during any dive and normally dissipate naturally during an ascent and on the surface after a dive. Dives conducted within no-stop times and the observance of decompression stops do not prevent the formation of microbubbles in the venous blood circulation.

Dangerous microbubbles are those migrating into the arterial circulation. The reasons for the migration from the venous blood circulation to the arterial circulation can be a many microbubbles collecting in the lungs. SCUBAPRO has equipped the G2 with technology to help protect divers from these microbubbles.

With the G2, you can choose – according to your specific needs – a MB level that will provide a level of protection from microbubbles. Diving with MB levels includes additional ascent stops (level stops); this slows the ascent process, giving the body more time to desaturate. This works contrary to the formation of the microbubbles and may increase safety.

The G2 features 10 microbubble levels (L0-L9). Level L0 corresponds to SCUBAPRO's well-known decompression model ZH-L16 ADT and does not require level stops due to microbubble formation. Levels L1 to L9 offer additional protection from microbubble formation, with level L9 offering the highest protection.

Similar to the display of information during decompression dives or dives within no-stop time, the G2 displays depth and duration of the first level stop as well as the total time of ascent as soon as the MB no-stop time has run out. As the MB no-stop time is shorter than the ordinary no-stop time you will be required to perform a stop (level stop) sooner than a diver using level L0.

If you ignore a required level stop, the G2 will simply step down to a lower MB level. In other words, if you choose level L8 prior to the dive, and during the dive you ignore the L8's recommended stops, the G2 will automatically adjust the setting to level L7 or lower.

3.8.1 Comparison of dives with MB level L0 and MB level L9

When two G2 dive computers are used simultaneously, with one unit set to a MB level of L9 and the other to a MB level of L0, the no-stop time for the L9 unit will be shortened and more level stops will be required before the diver has the obligation of a decompression stop. These additional level stops help dissipate microbubbles.
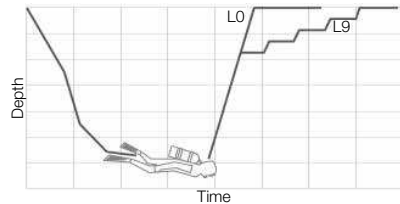
3.9 PDIS (Profile Dependent Intermediate Stop)

3.9.1 Introduction to PDIS

The main purpose of a dive computer is to track your nitrogen uptake and recommend a safe ascent procedure. Diving within the so called no-stop limits means that at the end of the dive you can ascend directly to the surface, albeit at a safe ascent rate, while for dives outside of the no-stop limit (so-called decompression dives), you must perform stops at certain depths below the surface and allow time for excess nitrogen to be expelled from your body before finishing the dive.

In both cases, it can be beneficial to stop for a few minutes at an intermediate depth between the maximum attained depth during the dive and the surface or, in case of a decompression dive, the first (deepest) decompression stop.

An intermediate stop of this kind is beneficial as soon as the ambient pressure at that depth is low enough to ensure that your body is predominantly off-gassing nitrogen, even if under a very small pressure gradient. In such a situation, you can still cruise along the reef and enjoy the dive while your body gets a chance to slowly release nitrogen.

In recent times, so called "deep" stops have been introduced in some dive computers and tables, defined as half the distance from the dive's maximum depth and the surface (or the lowest decompression stop). Spending 2 or 15 minutes at 30m/100ft would result in the same deep stop at 15m/50ft.

With PDIS, as the name suggests, the G2 interprets your dive profile and suggests an intermediate stop that is a function of your nitrogen uptake so far. The PDI stop will therefore change through the course of the dive to reflect the continuously changing situation in your body. Along the same lines, PDIS will account for the accumulated nitrogen from previous dives; hence, PDIS is also repetitive-dive dependent. Conventional deep stops completely ignore these facts.

The following figure quantifies the extent of PDIS and illustrates its dependence on cumulative nitrogen uptake for 2 sample dive profiles. This figure also demonstrates the conceptual difference between PDIS and the rather rudimentary "deep" stops.

Specifically, the figure compares 2 dive profiles to a maximum depth of 40m/132ft that are otherwise very different. Profile 1 stays at 40m/132ft for 7 minutes, then ascends to 30m/100ft for 3 minutes, followed by 12 minutes at 20m/65ft. Profile 2 stays less than 2 minutes at 40m/132ft, then ascends to 21m/69ft and stays there for 33 minutes. Both dive profiles are no-stop dives to the limit of entering decompression.

The solid line represents the PDIS depth as displayed on the computer screen during the course of the dive for profile 1, the broken line represents the PDIS depth as displayed on the computer screen during the course of profile 2. One can see that the displayed PDIS depth increases as more nitrogen is accumulated in the body, but does so very differently in the 2 dives due to the different exposure in the 2 profiles. The PDI stop is carried out at 25 minutes for profile 1 and at 37 minutes for profile 2, followed by the safety stop at 5m/15ft.

The line made up of small solid dots, on the other hand, represents the depth that would be displayed by a computer following the conventional deep stop method, and it would be the same for the 2 dive profiles. Deep stops completely ignore any facts about the dives themselves aside from max depth.
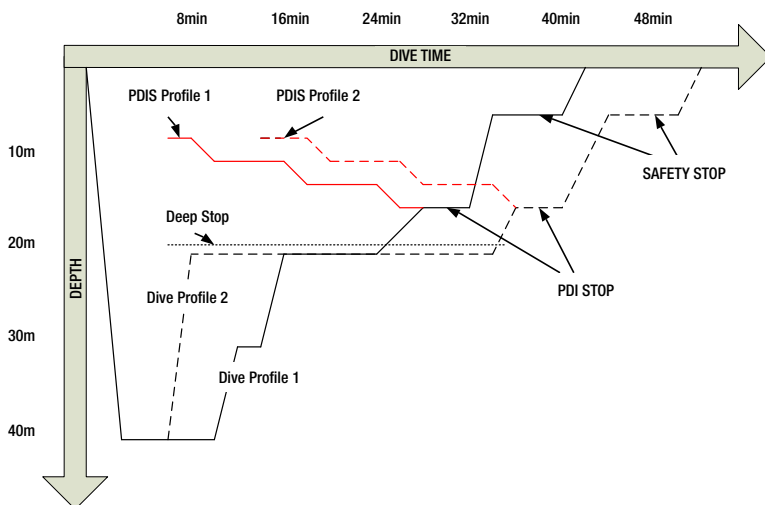
3.9.2 How does PDIS work?

The mathematical decompression model in the G2, called ZH-L16 ADT MB PMG, tracks your decompression status by dividing your body into 16 so-called compartments and mathematically following the uptake and release of nitrogen in each with the appropriate laws of physics. The various compartments simulate parts of your body such as central nervous system, muscles, bones, skin and so on.

The depth of the PDI stop is calculated as that at which the leading compartment for the decompression calculation switches from on-gassing to off-gassing, and the diver is advised to perform a 2-minute stop above the displayed depth (this is the opposite of a decompression stop, where you are asked to remain just beneath the displayed depth). During this intermediate stop, the body is not taking up any more nitrogen in the leading compartment, but rather releasing nitrogen (though under a very small pressure gradient). This, combined with the relatively high ambient pressure, inhibits bubble growth.

It should be noted that the 4 fastest compartments, up to 10-minute half-times, respectively, are not considered for the determination of the PDI stop depth. This is due to the fact that these compartments are only "leading" for very short dives, for which an intermediate stop is not required at all.

☞ NOTE: The PDI stop is not a mandatory stop, and it is NOT a substitute for the 3- to 5-minute safety stop at 5m/15ft.

⚠ WARNING

Even when performing a PDI stop, you still MUST perform a safety stop at 5m/15ft for 3 to 5 minutes. Performing a 3- to 5-minute stop at 5m/15ft at the end of any dive remains the best thing you can do for yourself!

3.9.3 Special considerations when diving with more than one gas mixture (G2)

Switching to a higher oxygen concentration mix during the dive influences the PDI stop. This needs to be accounted for, in line with the predictive nature of multi-gas handling in ZH-L16 ADT MB PMG.

When diving with more than one gas mixture, the G2 displays the PDIS depth according to the following rules:
- If the PDI stop calculated for the bottom mix (gas 1) is deeper than the switch depth, then this calculated value is displayed.
- If the PDI stop calculated for gas 1 is shallower than the switch depth to gas 2, then the displayed PDI stop is a function of gas 2.

In case of a missed gas switch, the G2 reverts to the PDI stop for the actively breathed mix.

3.9.4 Diving with PDIS

☞ NOTE: To use the PDIS feature, you must enable PDIS (see chapter: **Enabling PDIS**).
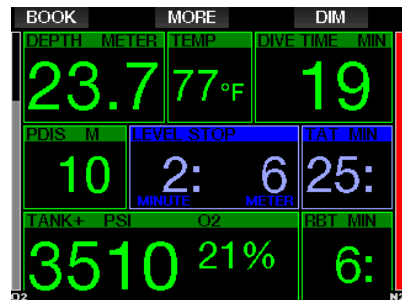
When the calculated PDI stop is deeper than 8m/25ft, the G2 shows it on the display (middle-left window) and continues to do so until you reach the displayed depth during an ascent. The displayed value changes during the dive as the G2 tracks the uptake of nitrogen in the 16 compartments and updates the PDIS depth accordingly to reflect the optimum at all times.
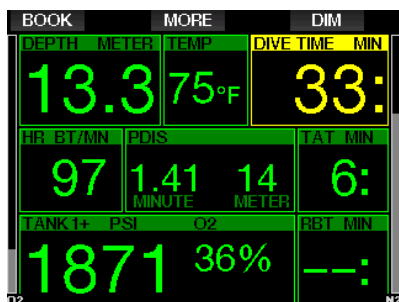
The PDIS depth is shown in the middle window. During a no-stop dive, as soon as you reach that depth during an ascent, a 2-minute countdown will appear. You can have one of 3 situations:
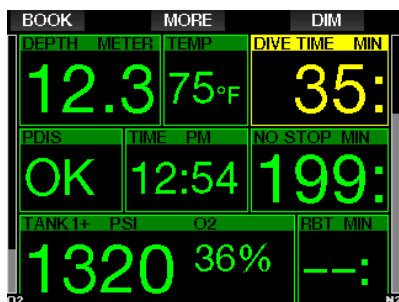
1. You have spent 2 minutes within 3m/10ft above the indicated depth. The countdown timer disappears and the alternate information window shows OK as an indication that PDIS is performed.
2. You have descended more than 0.5m/2ft below the PDIS. The countdown timer disappears and will reappear again, starting at 2 minutes, the next time you ascend to the PDIS depth.
3. You have ascended more than 3m/10ft above the PDIS. The PDIS value and countdown timer disappear and the alternate information window shows NO as an indication that PDIS is not performed.

☞ NOTE: The G2 issues no warnings relating to a missed PDI stop.

When diving with MB levels, PDIS follows the same rules as described above. MB levels, however, introduce stops earlier and deeper than the L0 base algorithm. As such, the PDIS display may be delayed and for certain dives it may not be displayed at all. This, for example, would be the case for a shallow dive with air (21% oxygen) and a MB level L5.

3.10 Gauge mode

Possible screen configurations in Gauge mode are Graphical and Classic. See menu **9.1. Screen configuration** to change between the modes.
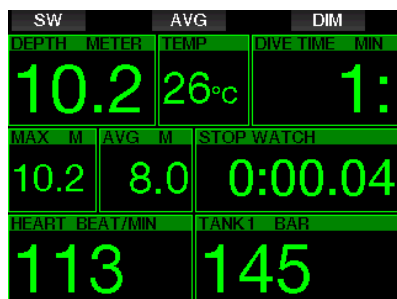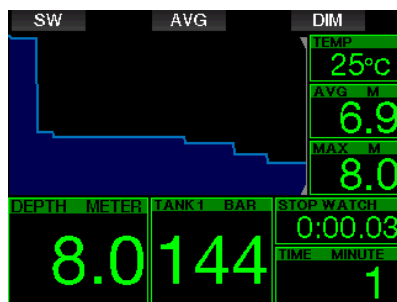
When the G2 is set to Gauge mode, it will only monitor depth, time, and temperature, and will not carry out any decompression calculations. You can only switch to Gauge mode if the computer is completely desaturated. All audible and visual warnings and alarms, other than the low battery, tank reserve, half tank, max depth max dive time and pressure signal alarm, are turned off.

⚠ WARNING

Dives in Gauge mode are performed at your own risk. After a dive in Gauge mode you must wait at least 48 hours before diving using a decompression computer.

When on the surface in Gauge mode, the G2 will show neither the remaining desaturation time nor the CNS O_2% value. It will, however, display a surface interval up to 24 hours and a 48-hour no-fly time. This no-fly time is also the time during which you cannot switch back to computer mode.

The Gauge mode surface display after a dive shows the dive time in the top row. In the middle row the stopwatch is running from the dive start or last manual restart. In the bottom row the maximum depth of the dive is shown. After a 5-minute timeout the display changes to Gauge menu mode.

During a dive in Gauge mode, the G2 displays a stopwatch. This can be reset and restarted by pressing the SW button which also sets a bookmark.

With a press-and-hold of the SW button the gas switch procedure can be started. While in Gauge mode, the average depth can be reset. To reset the average depth, press the AVG button which also sets a bookmark.

With a press-and-hold of the AVG button the profile is displayed followed by the pictures.

Dimming the display screen is accomplished by pressing the DIM button. A press-and-hold of the DIM button will activate the compass display.
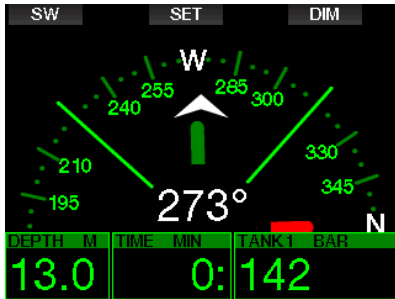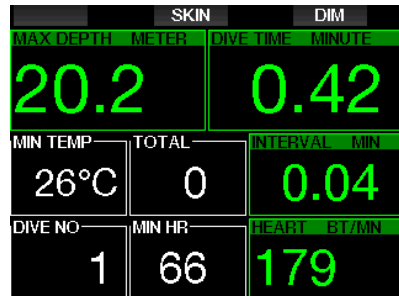

3.11 Apnea mode

The G2 has an advanced Apnea diving mode which can be enabled from the feature upgrade (see menu **8. Other settings**). The main features include a faster sampling rate than in Scuba mode along with alarm functions tailored specifically to Apnea diving.

The G2 measures the depth in Apnea mode every 0.25 seconds to ensure the precise maximum depth. In the logbook the data is saved in 1-second intervals. In Apnea mode it is also possible to start and stop the dive manually with a press-and-hold of the MENU button. This way you can use the G2 for static Apnea dives, where a normal dive start depth of 0.8 meters will not start a new dive.

As with Gauge mode, the G2 in Apnea mode doesn't carry out any decompression calculations. You can only switch to Apnea mode if the computer is completely desaturated.

Apnea mode at the surface after a dive shows the maximum depth and the dive duration. The surface interval counter starts after surfacing and the heart rate shows the current measured value.

Dive session values like water temperature, total dive time, number of dives and minimum heart rate are shown with white color as shown on the screen below.

Apnea mode during the dive shows the current depth, dive time, ascent or descent speed, water temperature, maximum depth and heart rate.


By pressing the SKIN button the temperature measured from the heart rate belt will be shown in the window of the heart rate.

4. G2 ACCESSORIES

4.1 Bungee arm strap

Divers wearing thick neoprene wetsuits or drysuits may prefer bungee mounting instead of a standard arm strap. The G2 is designed so that bungees can be affixed at the corners of the device for maximum stability.
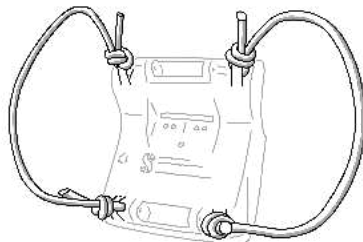
The arm strap can be removed by pressing the axle pins sideways through the bungee rings.
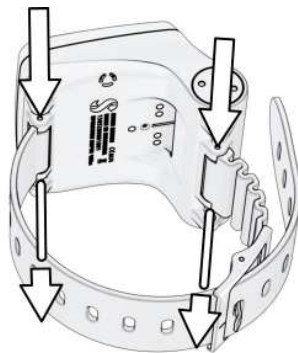
☞ NOTE: Arm strap axle holes in the housing are not symmetric! When removing the arm strap axis, place the pressing tool from the smaller diameter side. Do not use the opposite side bungee ring as support when pressing the pin out.

4.2 Wireless high pressure transmitter

The G2 supports wireless tank pressure using Smart series transmitters. With the PMG function enabled you can use up to 8 transmitters with your G2.

Additional transmitters can be purchased separately from your authorized SCUBAPRO dealer.

☞ NOTE: There are 3 generations of Smart transmitters: Smart, Smart+ (longer distance) and Smart+ LED. The G2 is compatible with all of these versions.

4.3 SCUBAPRO heart rate belt

The new SCUBAPRO heart rate belt features a patented skin temperature measurement and transmission that is supported by the G2.

The proper positioning for wearing a HR belt is shown below. Adjust the strap so that it is comfortable to wear but snug enough so that it stays in place. When wearing a dive suit the HR belt must be directly against the skin. Moisten the electrode areas if your skin is dry or when using a drysuit.
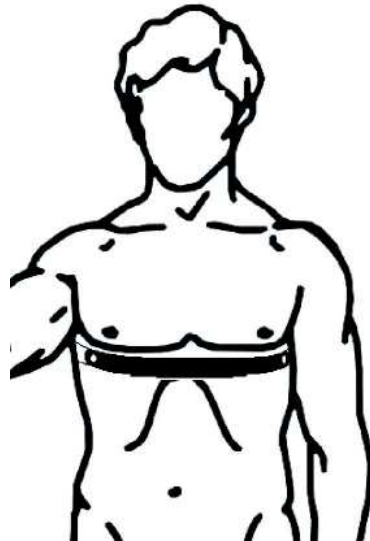
You must enable the heart rate setting on your G2. Refer to chapter: **Workload** for instructions on how to do this.

After a dive rinse the heart rate belt in fresh water, dry it and store it in a dry place.

For HR belts fitted with a battery cap, it is recommended that the battery be changed by an authorized SCUBAPRO dealer.
Check the operating conditions and depth rating of the HR belt from the unit or its user manual.

4.4 Digital Heart Rate Monitor

The new SCUBAPRO Digital Heart Rate Monitor is a wireless heart rate and skin temperature transmitter that forms an integral part of the functionality of a variety of compatible SCUBAPRO dive computers. The heart rate monitor allows you to measure and display heart rate and skin temperature in real time during diving, swimming or exercising.

The heart rate monitor must be paired with your G2 before the first use. After this initial pairing the heart rate monitor will be on standby and ready to send data.

To establish the connection follow the steps below:

1. Enable the heart rate setting in your G2, by going to the menu 9.5 Workload and selecting Heart Rate. In this menu you can also set your base and max HR values.
2. Remove the heart rate module from the elastic strap by unclipping it from the metal snap fastener.
3. Go to menu 8.10. Pair D-HR belt in your G2. Make sure your G2 is in close proximity to the digital heart rate monitor when activating the pairing mode.
4. Place your thumbs on the two metal snap fasteners on the back of the transmitter module and check the indication displayed on your G2's screen.
5. Save the pairing on your G2 with the right (SAVE) button.
6. Once a successful pairing with the digital heart rate monitor has been established, your G2 will display the following message: PAIRING TO HR-BELT SUCCESSFUL.

For more information on the operation and maintenance of the new Digital Heart Rate Monitor please refer to its user manual, available at www.scubapro.com/manuals.

4.5 Bluetooth USB stick

PC's with Bluetooth driver version lower than 4.0 require a generic Bluetooth dongle 4.0 or higher in combination with Windows operating system 8 or higher.

With older operating systems a BlueGiga type dongle is required.

☞ NOTE: Laptops with an old internal Bluetooth module (a driver lower than 4.0) will require an external generic USB Bluetooth stick.

5. INTERFACES FOR THE G2 AND AN INTRODUCTION TO LOGTRAK

LogTRAK is the software that allows the G2 to communicate with various operating systems. LogTRAK is available for Windows, Mac, Android and iOS. In the following section, Windows and Mac versions of LogTRAK are introduced. Android and iPhone/iPad versions of LogTRAK operate similarly but do not have all the features offered in the PC/Mac versions.

The following functions can be accomplished using LogTRAK:
• Download dive profiles.
• Personalize your G2 (owner and emergency information) – currently Windows and Mac only.
• Enable G2 warnings – Windows and Mac only.

Other functions can be accomplished by accessing a flash drive with a Windows or Mac directly:

• Update G2 firmware.
• Download pictures.
• G2 feature upgrades.

• Special language upgrades.
• Additional color themes.
• Startup picture personalization.

In order to take advantage of these features, you need to establish a communication between your PC/Mac and your G2.

5.1 Charging and using the G2 with a USB interface

Charging and communication between the G2 and a PC/Mac is possible with the USB cable which is included with the G2.

Clean and dry the USB contact pins with a soft towel before connecting the G2 to a charger.

⚠ WARNING

Dirt on any contact surfaces may increase the electrical resistance and burn/harden the dirt so that it is difficult to remove afterwards. To enjoy trouble-free operation and a long service life, clean the contacts of your G2 before charging.

⚠ WARNING

Always charge the G2 in a dry and clean environment.

The connector will be pressed in through the gap which is behind the buttons.

The correct method for inserting the connector is shown in the pictures below.
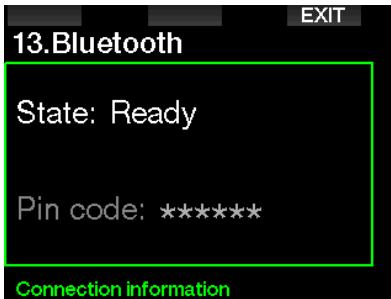
5.2 Bluetooth connection

When you select menu **13. Bluetooth**, the Bluetooth function will be enabled and "State: Initializing" will be shown for a few seconds. After this, the G2 is ready for communication. Bluetooth is active only when this menu is displayed.

Set the device to which you want to contact your G2 to scanning mode. Once you've selected contact with your G2, the pin code appears on the G2's display screen as shown below.
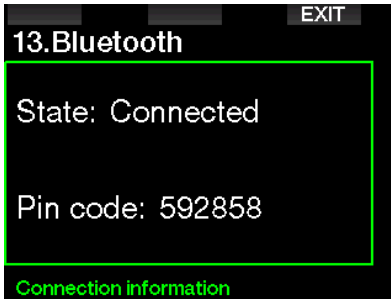
When the code is accepted by the other device, the link is ready for communication and the following display is shown on the G2's screen.


☞ NOTE: the G2 has a timeout of 3 minutes for a non-active Bluetooth connection. After this interval the G2 will disable Bluetooth and return to the normal time-of-day screen to save energy.

5.2.1 Connecting the G2 with LogTRAK

You can use either Bluetooth or USB with LogTRAK.

To start the communication with USB:

1. Connect to your G2 with the USB cable, at which time the following display will appear on the G2 display:
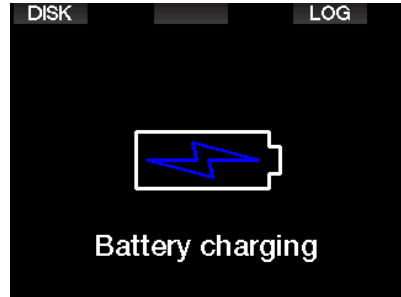
2. Push the right button labeled LOG. The following screen will appear on the G2 display.
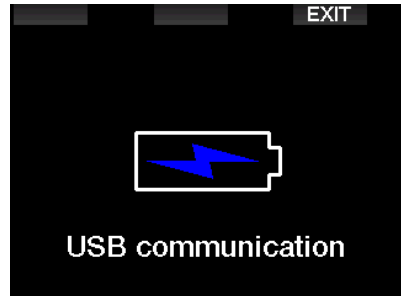
3. Launch LogTRAK.
4. Check that the G2 is detected by LogTRAK.
   Extras -> Options -> download
5. If it is not automatically detected, run the "Rescan plugged device."
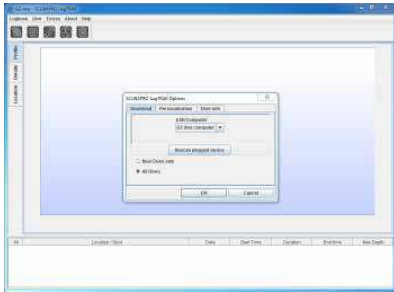
5.2.2   Download dive profiles

From LogTRAK, by selecting Dive -> Download Dives you can transfer the G2 Logbook to your PC/Mac.

There are three main views, each showing a specific part of your dive logs:
1. Profile, showing the graphical data of the dive.
2. Details about the dive, where you can edit, for example, the equipment and tank information.
3. Location, which shows your dive site on the world map.

The selection tabs for views are at the top of the main window.
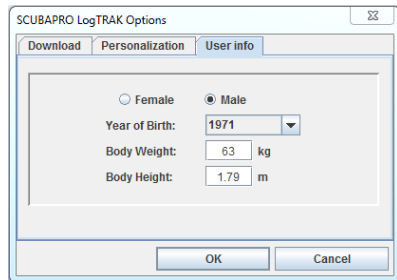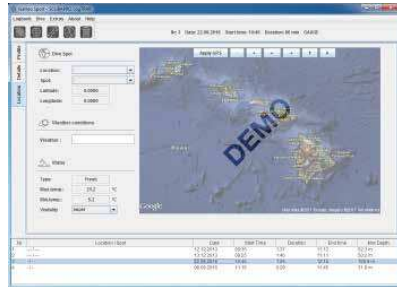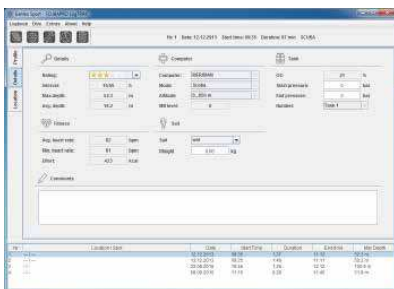
5.2.3   Changing warnings/settings on the G2, and reading computer info

By selecting Extras -> Read dive computer settings, you can enable/disable warnings that cannot be changed on the actual G2 unit via the menu system.
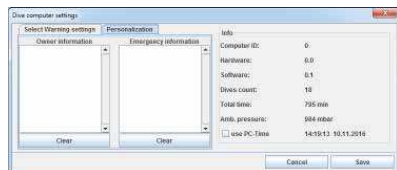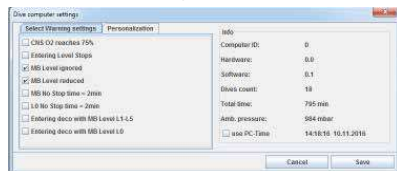
Read chapter: **Warnings and alarms** about the possible selections that you can modify on your G2.

You may also change the shown units between metric/imperial. Select Extras -> Options -> measurement units:
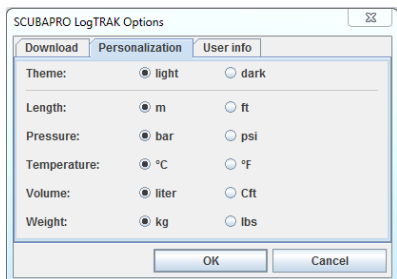
5.2.4 USB flash disk operations

1. Connect the USB cable to your G2. The following display will appear on the G2 display:
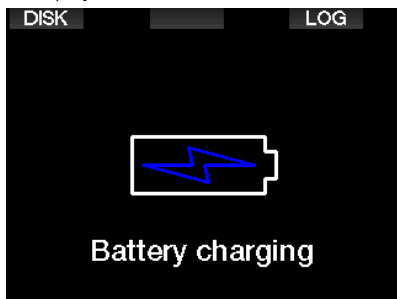
2. Select disk. The following display will appear the G2 screen.
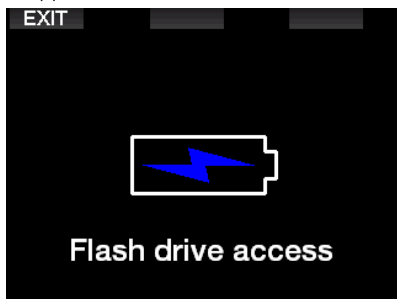
3. Your PC or Mac will detect the G2 flash memory as a normal USB memory sticks.

4. You can now select the G2 flash disk on your browser.

There are 3 folders on the G2 flash disk: Logbooks, Pictures and System.

⚠ WARNING

Do not erase any of the system folders from your G2! Removing system folders will lead to a malfunctioning G2. Diving with a G2 is not safe if data has been removed.

The logbook folder is a hidden file. You can make a backup copy of it, but you should not remove it.
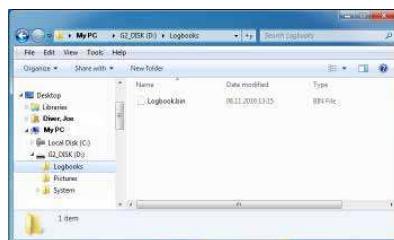
You can store pictures (fish, underwater plants or maps) that the G2 can display during diving in the Pictures folder.
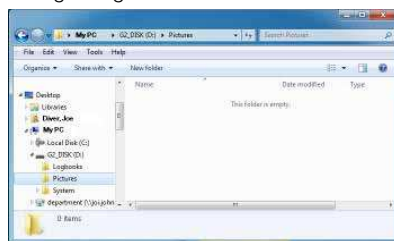
The G2 supports the following formats: jpg, bmp and gif. Pictures can be stored in a maximum of 320 x 240 pixels size format.

In the System folder there are several sub folders.
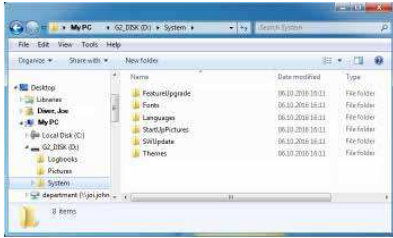
You can copy data that is provided at www.scubapro.com to the following folders for added functionality, or to receive updates:

• FeatureUpgrade
• Fonts
• Languages
• SWUpdate
• Themes

You can personalize your G2 start-up by storing a custom picture in the StartUpPictures folder.

6. TAKING CARE OF YOUR G2

6.1 Technical information

Operating altitude:
with decompression – sea level to approximately 4000m/13300ft.
without decompression (Gauge mode) – at any altitude.

Max operating depth:
120m/394ft; resolution is 0.1m until 99.9m, and 1m at depth deeper than 100m. Resolution in feet is always 1ft. Accuracy is within 2% ±0.2m/1ft.

Decompression calculation range:
0.8m to 120m / 3ft to 394ft.

Clock:
quartz clock, time, date, dive time display up to 999 minutes.

Oxygen concentration:
adjustable between 8% and 100%.

Helium concentration:
adjustable between 0% and 92%.

Operating temperature:
-10C to +50C / 14F to 122F.

Power supply:
Li-Ion battery, user chargeable via USB.

Operation time with fully charged battery:
Up to 50h. Actual battery operation time depends mainly on the operation temperature and backlight settings, but also many other factors.

Bluetooth® transceiver:
Operating frequency 2402-2478 MHz, max power < 3 dBm, connection range approx. 2m.

6.2 Maintenance

The G2's depth accuracy should be verified every two years by an authorized SCUBAPRO dealer.

The tank pressure gauge and the parts of this product used to measure tank pressure should be serviced by an authorized SCUBAPRO dealer every other year, or after 200 dives (whichever comes first).

Aside from that, the G2 is virtually maintenance-free. All you need to do is rinse it carefully with fresh water after each dive and charge the battery when needed. To avoid possible problems with your G2, the following recommendations will help assure years of trouble-free service:

• Avoid dropping or jarring your G2.
• Do not expose your G2 to intense, direct sunlight.
• Do not store your G2 in a sealed container; always ensure free ventilation.
• If there are problems with the water or USB contacts, use soapy water to clean your G2 and dry it thoroughly. Do not use silicone grease on the water contacts!
• Do not clean your G2 with liquids containing solvents.
• Check the battery capacity before each dive.
• If the battery warning appears, charge the battery.
• If any error message appears on the display, take your G2 back to an authorized SCUBAPRO dealer.

6.3 Replacing the battery in transmitter

The following parts of the transmitter are shown in the drawing above:
  1 Transmitter cap screws.
  2 HP port O-ring.
  3 Main O-ring.
  4 CR 2/3 AA battery.
  5 Transmitter cap.

To change the battery in the high-pressure transmitter:
  1. Dry the transmitter with a soft towel.
  2. Open the screws.
  3. Replace the main O-ring (replacement O-rings are available from your authorized SCUBAPRO dealer).
  4. Remove the empty battery and recycle it in an environmentally friendly way.
  5. Insert the new battery. Note the polarity, "+" is marked on the body. Do not touch to poles or contacts with bare fingers.
  6. Close the screws.
  7. Check the transmitter function and housing sealing.

⚠ WARNING

We recommend having the transmitter battery replaced by an authorized SCUBAPRO dealer. The change must be made with particular care in order to prevent water from seeping in. The warranty does not cover damages due to improper placement of the battery or the incorrect closing of the battery cap.

6.4 Replacing the battery in the SCUBAPRO Heart Rate Belt
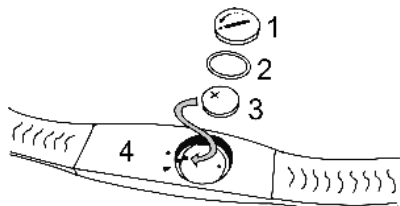
The following parts of the Heart Rate Belt are shown in the drawing above:

1. Battery cap
2. O-ring
3. CR2032
4. Heart Rate Belt body

To change the battery in the Heart Rate Belt:

1. Dry the Heart Rate Belt with a soft towel.
2. Open the battery cap.
3. Replace the main O-ring (replacement O-rings are available from your authorized SCUBAPRO dealer).
4. Remove the empty battery and recycle it in an environmentally friendly way.
5. Insert the new battery. Note the polarity, "+" is marked on the body. Do not touch to poles or contacts with bare fingers.
6. Close the battery cap. (Note the correct closing position mark).
7. Check the Heart Rate Belt function and housing sealing.

⚠ WARNING

We recommend having the Heart Rate Belt battery replaced by an authorized SCUBAPRO dealer. The change must be made with particular care in order to prevent water from seeping in. The warranty does not cover damages due to improper placement of the battery or the incorrect closing of the battery cap.

6.5 Replacing the battery in the Digital Heart Rate Monitor

The digital heart rate monitor is powered by a user-replaceable CR2032 type lithium battery. However, in order to avoid leakage by incorrect closure of the battery cap, we recommend having the battery replaced by an authorized SCUBAPRO dealer.

The following parts of the heart rate monitor are shown in the drawing below:
1. battery cap screws
2. battery cap
3. O-ring
4. CR2032 battery
5. heart rate monitor module
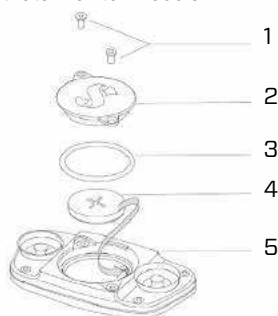
To change the battery in the heart rate monitor:
• Dry the module of the heart rate monitor with a soft towel if wet
• Open the battery cap by removing the screws
• Replace the O-ring (replacement O-rings are available from your authorized SCUBAPRO dealer)
• Remove the empty battery and recycle it in an environmentally friendly way
• Insert the new battery. Note the polarity, "+" is marked on the body. Do not touch poles or contacts with bare fingers
• Close the battery cap

6.6 Warranty

The G2 has a 2-year warranty covering defects in workmanship and functioning. The warranty only covers dive computers which have been bought from an authorized SCUBAPRO dealer. Repairs or replacements during the warranty period do not extend beyond the warranty period itself.

Excluded from warranty coverage are faults or defects due to:
• Excessive wear and tear.
• Exterior influences, e.g. transport damage, damage due to bumping and hitting, influences of weather or other natural phenomena.
• Servicing, repairs or the opening of the dive computer by anybody not authorized to do so by the manufacturer.
• Pressure tests which do not take place in water.
• Diving accidents.
• Opening the G2 housing or metal cap on the side of the G2.

WARRANTY VOID
IF OPENED

For European Union markets, the warranty of this product is governed by European legislation in force in each EU member state.

All warranty claims must be returned with dated proof-of-purchase to an authorized SCUBAPRO dealer. Visit www.scubapro.com to find your nearest dealer.

7.   COMPLIANCE

7.1   EU Radio directive

Hereby, Uwatec AG, declares that the radio equipment type PAN1740 is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available from the official SCUBAPRO importers in EU.

7.2   Diving

The G2 dive instrument is also compliant with the European standard EN 13319: 2000 (EN 13319: 2000 – Depth gauges and combined depth and time measuring devices – Functional and safety requirements, test methods).

7.3   FCC & ISED regulatory notices

7.3.1   Modification Statement

Uwatec has not approved any changes or modifications to this device by the user. Any changes or modifications could void the user's authority to operate the equipment.

7.3.2   Interference Statement

This device complies with Part 15 of the FCC Rules and Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

7.3.3 Wireless Notice

This device complies with FCC/ISED radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines and RSS-102 of the ISED radio frequency (RF) Exposure rules. This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter.

7.3.4 FCC Class B Digital Device Notice

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
1. Reorient or relocate the receiving antenna.
2. Increase the separation between the equipment and receiver.
3. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
4. Consult the dealer or an experienced radio/TV technician for help.

7.3.5 CAN ICES-3 (B) / NMB-3 (B)

This Class B digital apparatus complies with Canadian ICES-003.

7.4 Manufacturer

UWATEC AG

Bodenackerstrasse 3

CH-8957 Spreitenbach

SWITZERLAND

Your dive instrument is manufactured with high-quality components that can be recycled and reused. Nevertheless, these components, if not properly managed in accordance with the regulations on electrical and electronic equipment waste, are likely to cause harm to the environment and/or to human health. Customers living in the European Union can contribute to protecting the environment and health by returning old products to an appropriate collection point in their neighbourhood in accordance with EU Directive 2012/19/UE. Collection points are provided by some distributors of the products and local authorities. Products marked with the recycling symbol on the left must not be disposed of in normal household waste.

8. GLOSSARY

AMD	Absolute Minimum Depth, the depth where a mix can be started to be used based on its oxygen content
AVG	Average depth, calculated from the beginning of the dive or from the time of reset
CNS O_2	Central Nervous System oxygen toxicity
DESAT	Desaturation time. The time needed for the body to completely eliminate any nitrogen taken up during diving
Dive time	The time spent below a depth of 0.8m/3ft
Gas	Refers to the main gas that is set for the ZH-L16 ADT MB algorithm
Local time	the time in the local time zone
Max depth	Maximum depth attained during the dive
MB:	Microbubble. Microbubbles are tiny bubbles that can build up in a diver's body during and after a dive
MB level:	One of the 9 steps, or levels, in SCUBAPRO's customizable algorithm
MOD:	Maximum Operating Depth. This is the depth at which the partial pressure of oxygen (ppO_2) reaches the maximum allowed level (ppO_2max). Diving deeper than the MOD will expose the diver to unsafe ppO_2 levels
Nitrox:	A breathing mix made of oxygen and nitrogen, with the oxygen concentration being 22% or higher. In this manual, air is considered as a particular type of nitrox
NO FLY	Minimum amount of time the diver should wait before taking a plane
No-stop time:	This is the time that a diver can stay at the current depth and still make a direct ascent to the surface without having to perform decompression stops
O_2:	Oxygen.
O_2%:	Oxygen concentration used by the computer in all calculations
PDIS:	Profile Dependent Intermediate Stop is an additional deep stop which is suggested by the G2 at a depth where the 5th, 6th or 7th compartment starts off-gassing
ppO_2:	Partial pressure of oxygen. This is the pressure of the oxygen in the breathing mix. It is a function of depth and oxygen concentration. A ppO_2 higher than 1.6bar is considered dangerous
ppO_2 max:	The maximum allowed value for ppO_2. Together with the oxygen concentration, it defines the MOD
Press:	The act of pressing and releasing one of the buttons
Press-and-hold:	The act of pressing and holding one of the buttons for 1 second before releasing it
INT.:	Surface interval, the time from the moment the dive is closed

SOS mode:	The result of having completed a dive without respecting all mandatory decompression obligations
Stopwatch:	A stopwatch, for example, to time certain legs of the dive
Switch depth	The depth at which the diver plans to switch to a higher oxygen concentration mix while using the multi-gas option in the ZH-L16 ADT MB PMG algorithm
UTC:	Universal Time Coordinated, refers to time zone changes when traveling
TAT:	Total Ascent Time
RBT:	Remaining Bottom Time
CCR:	Closed Circuit Rebreather
Trimix:	A gas mixture containing Oxygen, Helium and Nitrogen
PMG:	Predictive Multi-Gas
OTU:	Oxygen Toxicity Unit