AQUA ⊘ LUNG®

i750TC

Dive Computer Owner's Manual

NOTICES

LIMITED TWO-YEAR WARRANTY

For warranty details and to register your product, refer to www.aqualung.com.

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TRADEMARK, TRADE NAME, AND SERVICE MARK NOTICE

Aqua Lung, the Aqua Lung logo, i750TC, the i750TC logo, Gas Time Remaining (GTR), Diver Replaceable Batteries, Graphic Diver Interface, Pre-Dive Planning Sequence (PDPS), SmartGlo, Set Point, Control Console, Turn Gas Alarm, and Aqua Lung computer Interface (ALI) are all registered and unregistered trade-marks, trade names, and service marks of Aqua Lung. All rights are reserved.

PATENT NOTICE

U.S. Patents have been issued to protect the following design features: Dive Computer with Free Dive Mode and/or Wireless Data Transmission (U.S. Patent no. 7,797,124), GTR/Air Time Remaining (U.S. Patent no. 4,586,136 and 6,543,444) and Data Sensing and Processing Device (U.S. Patent no. 4,882,678). Set N2 Bar Graph Alarm (NIBG Alarm) and other patents pending. User Setable Display (U.S. Patent no. 5,845,235) is owned by Suunto Oy (Finland).

DECOMPRESSION MODEL

The program within the i750TC simulates the absorption of inert gases into the body by using a mathematical model. This model is merely a way to apply a limited set of data to a large range of experiences. The i750TC dive computer model is based upon the latest research and experiments in decompression theory. Still, using the i750TC, just as using any other No Decompression Tables, is no guarantee of avoiding decompression sickness, i.e. "the bends". Every diver's physiology is different, and can even vary from day to day. No machine can predict how your body will react to a particular dive profile.

DANGERS, WARNINGS, CAUTIONS, AND NOTES

Pay attention to the following symbols when they appear throughout this document. They denote important information and tips.

⚠ **DANGERS:** are indicators of important information that if ignored **would** lead to severe injury or death.

⚠ **WARNINGS:** are indicators of important information that if ignored **could** lead to severe injury or death.

⚠ **CAUTIONS:** indicate information that will help you avoid faulty assembly, leading to an unsafe condition.

▤ **NOTES:** indicate tips and advice that can inform of features, aid assembly, or prevent damage to the product.

RESPONSIBLE COMPUTER DIVING

- Always plan each dive.
- Always limit your dive to the level of your training and experience.
- Always make your deepest dive first.
- Always make the deepest part of every dive first.
- Check your computer often during the dive.
- Do a safety stop on every dive.
- Allow adequate surface interval between each dive.
- Allow adequate surface interval between each day of diving (12 Hours or until your computer clears).
- Read and understand this manual thoroughly before using the i750TC.

⚠ WARNINGS:

- **The i750TC is intended for use by recreational divers who have successfully completed a internationally recognized course in scuba diving (for air use) and diving with enriched nitrogen-oxygen (nitrox) breathing gas mixtures (for nitrox use).**
- **It must not be used by untrained persons who may not have knowledge of the potential risks and hazards of scuba diving and diving with enriched nitrogen-oxygen (nitrox) mixtures.**
- **You must obtain scuba certification in diving with enriched nitrogen-oxygen mixtures (nitrox) before using the i750TC for nitrox diving.**
- **It is NOT for use by military and commercial divers.**
- **As with all underwater life support equipment, improper use or misuse of this product can cause serious injury or death.**
- **Never participate in sharing or swapping of a dive computer.**
- **Conduct your dives in such a manner so as to insure that you continuously check the computer's proper function.**
- **Read and understand this owner's manual completely before diving with the i750TC.**
- **If you do not fully understand how to use this dive computer or if you have any questions, you should seek instruction in its use from your authorized Aqua Lung dealer before you utilize this product.**
- **If your i750TC stops working for any reason while operating, it is important that you have anticipated this possibility and are prepared for it. This is an important reason for not pushing the tables, oxygen exposure limits, or entering decompression without proper training. If you dive in situations where your trip would be ruined or your safety would be jeopardized by losing the use of your i750TC, a backup instrument system is highly recommended.**
- **Each numeric and graphic display represents a unique piece of information. It is imperative that you understand the formats, ranges, and values of the information represented to avoid any possible misunderstanding that could result in error.**
- **Remember that technology is no substitute for common sense. The dive computer only provides the person using it with data, not the knowledge to use it. Remember also that the dive computer does not actually measure and test the composition of your body tissue and blood. Using an Aqua Lung dive computer, just as using any other Decompression Tables, is no guarantee of avoiding decompression sickness. Every diver's physiology is different and can even vary from day to day. No machine can predict how your body will react to a particular dive profile.**
- **Diving at high altitude requires special knowledge of the variations imposed upon divers, their activities, and their equipment by the decrease in atmospheric pressures. Aqua Lung recommends completion of a specialized altitude training course by a recognized training agency prior to diving in high altitude lakes or rivers.**
- **Repetitive dives in a series should only be conducted at the same altitude as that of the first dive of that series. Repetitive dives made at a different altitude will result in an error equal to the difference in barometric pressure, and possibly a false dive mode with erroneous data.**
- **If the i750TC is activated at an elevation higher than 4,270 m (14,000 ft), it will immediately shutdown.**
- **Decompression diving or diving deeper than 39 m (130 ft) will greatly increase your risk of decompression sickness. This should only be attempted by those properly trained and certified in decompression diving. It is important to completely understand the features, functions, and specifically the limitations of the i750TC. Based on this the diver must decide if the i750TC is suitable for the dive activities and dive profiles being planned.**
- **Using an i750TC is no guarantee of avoiding decompression sickness.**
- **The i750TC enters Violation Mode when a situation exceeds its capacity to predict an ascent procedure. These dives represent gross excursions into decompression that are beyond the boundaries and spirit of the i750TC's design. If you are following these dive profiles, Aqua Lung advises that you should not use an i750TC.**
- **If you exceed certain limits, the i750TC will not be able to help you get safely back to the surface. These situations exceed tested limits and can result in loss of some functions for 24 hours after the dive in which a violation occurred.**

CONTENTS

GETTING STARTED

BASICS

Welcome to your new i750TC. The i750TC is an easy to use dive computer utilizing a three button interface. Divers may choose between three modes of functionality consisting of Dive, Gauge, and Free Mode. Though the i750TC is easy to use, you will get the most out of your new i750TC if you take some time to familiarize yourself with its displays and operation. Information has been organized into easy to follow sections to aid you in learning all you need to know. There is also a glossary at the end of this guide for any terms that may sound unfamiliar.

INITIAL ACTIVATION

To activate the i750TC, press and release any button. The i750TC will also turn on if its metal contacts become wet and you descend below 1.5 m (5 ft) for 5 seconds.

• Upon activation, the unit will display the Welcome screen and perform a diagnostic check. The i750TC checks the display and voltage at this time to ensure that everything is within tolerance.
• It will also check ambient barometric pressure, and calibrate present depth as 0 m (ft). When at 916 m (3001 ft), or higher, it will adjust for the higher altitude.
• After the Diagnostic check, the i750TC will display the Home Menu (or Dive Main if wet activation).

📘 **NOTE: The i750TC has no off button or command. If no buttons are pressed or dives made, the unit will enter sleep mode after 2 minutes. Within 2 hours of no buttons being pressed or dives made, the unit will shut itself off. However, the i750TC will stay on for a 24 hour period after a dive, counting down FLY (time to fly) and DESAT (desaturation time) if a dive has been made.**

WELCOME SCREEN

HOME MENU SCREEN

DISPLAY ICONS

SYMBOL	MEANING
M or **FT**	DEPTH (METERS OR FEET)
NO DECO	NO DECOMPRESSION TIME (DIVE TIME REMAINING)
O2 MIN	O2 SATURATION TIME (DIVE TIME REMAINING)
TTS	TIME TO SURFACE
DIVE-T	DIVE TIME
(cylinder icon)	GAS/TRANSMITTER # (1, 2, OR 3)
GTR	GAS TIME REMAINING
BAR or **PSI**	VALUE IS GAS PRESSURE IN BAR OR PSI
DS	DEEP STOP (TRIGGERED)
AIR or **32%**	GAS MIX (AIR OR 21 - 100%)
(green battery icon)	BATTERY CONDITION IS GOOD (SURFACE ONLY)
(orange battery icon)	LOW BATTERY WARNING
(red battery icon)	LOW BATTERY ALARM
SURF-T	SURFACE TIME
CDT	COUNTDOWN TIMER (FREE MODE)
RUN	RUN TIMER (GAUGE MODE)
M MAX or **FT MAX**	MAXIMUM DEPTH (METERS OR FEET)

HOME MENU

MY INFO

MODE

LOG

SETUP

HISTORY

DC INFO
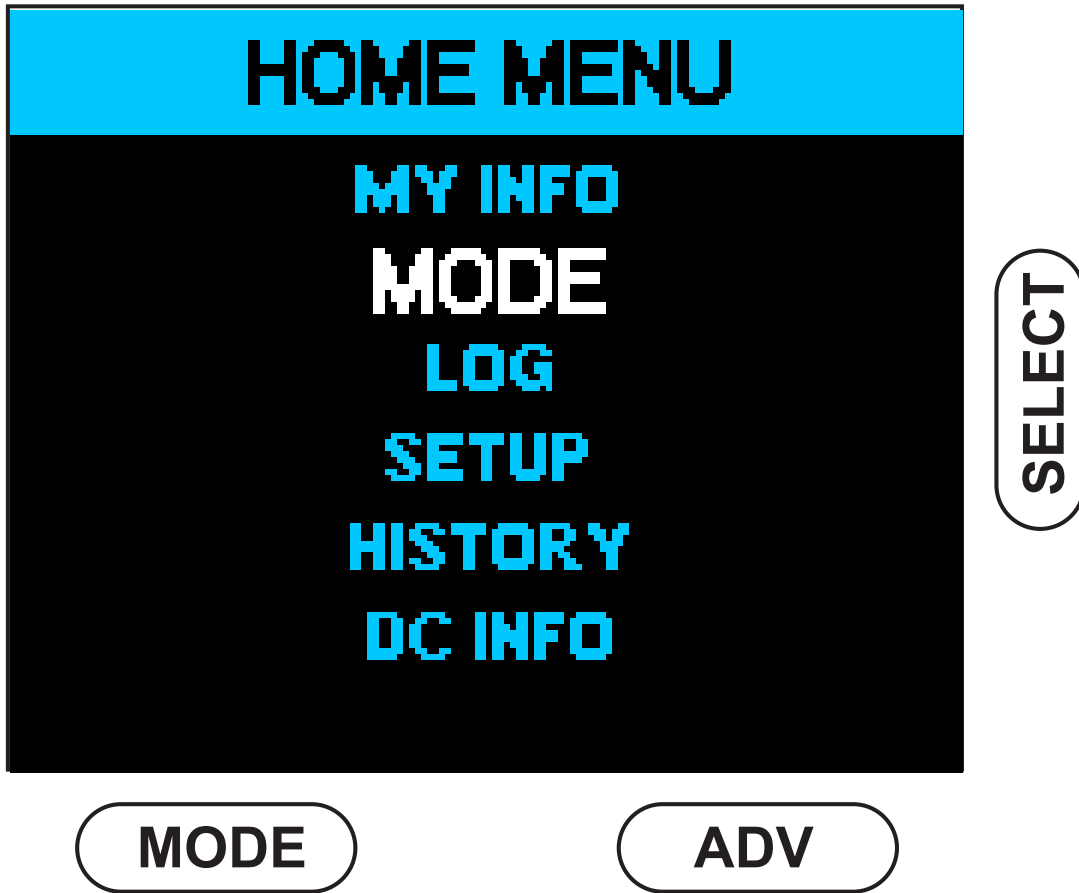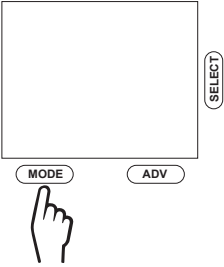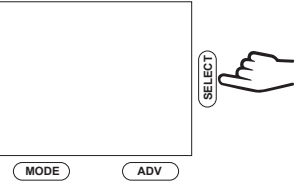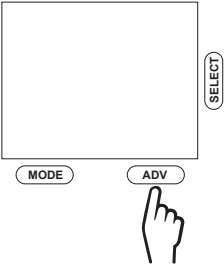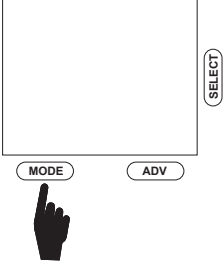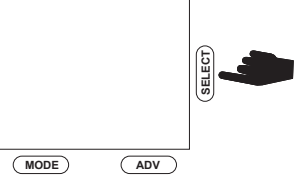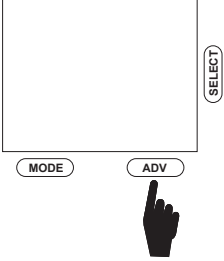
SELECT

MODE   ADV

BUTTONS

The i750TC utilizes 3 control buttons called the MODE, ADV (Advance), and SELECT buttons. They allow you to select mode options and access specific information. They are also used to enter settings and acknowledge the audible alarm.

Pressing different combinations of these buttons will navigate through different menus and options of the i750TC. The symbols in the table below will illustrate how to proceed through the menus.

SYMBOL	MEANING
	PRESS BUTTON LESS THAN 2 SECONDS
	HOLD BUTTON GREATER THAN 2 SECONDS

BUTTON FUNCTIONS

ACTION	BUTTON	FUNCTION
	MODE	• to access main menus from main screens • to step up the screen, backward through selections • to toggle or change setpoints • to apply Earmark
	SELECT	• to select, save an option or setting • to start/stop Run Timer (Gauge mode) and Countdown Timer (Free mode)
	ADV	• to access Alt screens • to step down the screen, advance through selections • to toggle or change setpoints
	MODE	• to exit a menu directly to the Main screen • to access Home Menu from Main screens
	SELECT	• to switch between Compass mode and the active diving mode, while on the Main screen • to exit or step back to the previous screen or setting
	ADV	• to increase a setting value at a faster rate • to access Adjust Brightness screen

HOME MENU

HOME MENU

This is a base menu that provides access to general items common to all the operating dive modes. When the i750TC is activated manually, this is the first screen you will see after the Welcome screen.
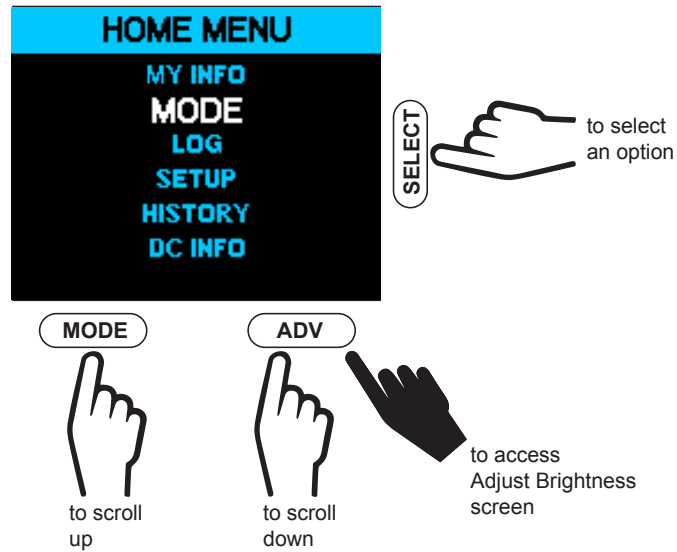
ADJUST BRIGHTNESS

The level (%) of screen brightness can be adjusted to optimize screen appearance in different lighting conditions or to conserve battery power. Press the Select button to cause the percentage value to flash and allow it to be changed.

NOTE: During a Low Battery Warning or Alarm condition, the level will be limited to 60% maximum.
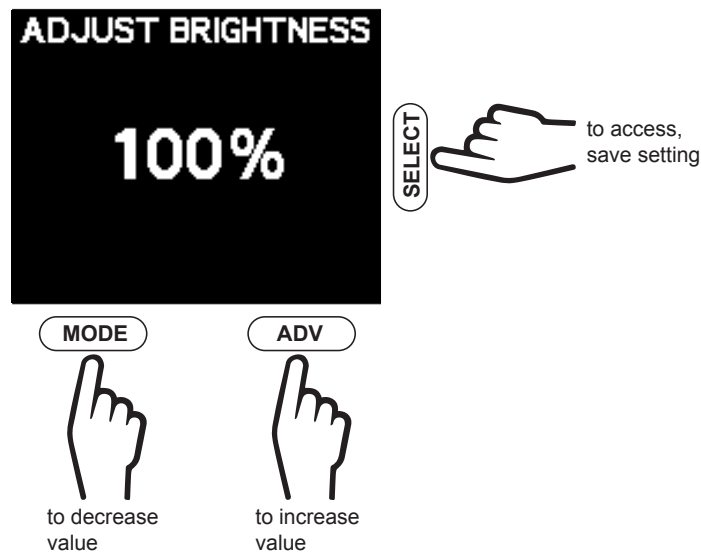
MY INFO

This screen displays up to 7 lines of personal information containing up to 16 characters each. Information must be entered using the PC/Mac/Diverlog interface. The screen shown below will be displayed until information has been uploaded.
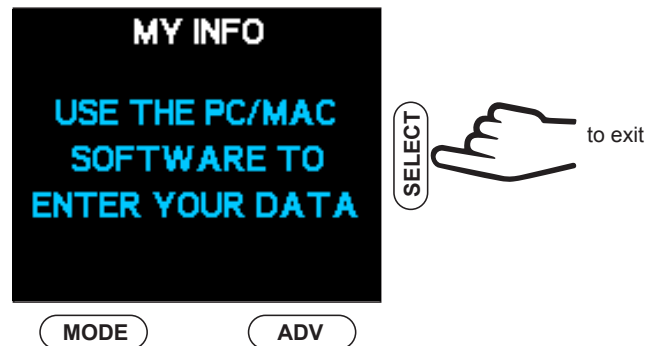
MODE MENU

This screen allows you to access the DIVE, GAUGE, or FREE modes.
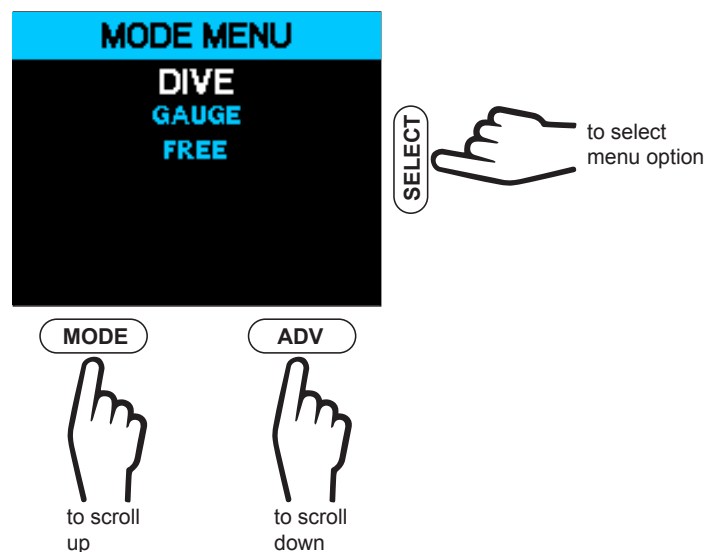
LOG

The log stores Information from DIVE and/or GAUGE mode dives for viewing.
• If no dives are recorded, the message NONE YET will be displayed.
• There is a maximum of 24 entries overall.
• After exceeding 24 entries the oldest entries will be deleted to allow space for the new entries.
• Dives are numbered starting with 1 each time DIVE (or GAUG) mode is activated. After 24 hours elapse with no dive, the first dive of the next period of operation is called Dive #1.
• In the event that dive time (DIVE-T) exceeds 999 min, the data at the 999 interval is recorded in the Log upon surfacing of the unit.

📘 **NOTE: New data will automatically overwrite the oldest data in memory when the memory becomes full. If you do not remember to log or download your dives, they will be lost when the memory overwrites. See the PC Download section of this manual for instructions on downloading dives.**

NO DIVES

LOG ENTRY FINDER

NONE YET

FULL LOG (99 Entries)

LOG ENTRY FINDER

2 -   4.9.14 #2
1 -   4.9.14 #1
99 - 10.29.13 #22
98 - 10.29.13 #21
97 - 10.28.13 #20
96 - 10.28.13 #19
95 - 10.27.13 #18

entry number

date

dive number

SELECT — to select menu option

MODE — to scroll up

ADV — to scroll down

Dive Type: no deco, deco, viola (violation), gauge

Elevation: SEA (or EL2 - EL7)

LOG DATA 1

ENTRY 21 - DATA 1

TYPE: NO DECO
ELEV: SEA
PRE-DIVE SI: 1:28
START TIME: 10:28 AM
DIVE-T: 48 MIN
MAX DEPTH: 108 FT
MIN TEMP: 59 F

surface interval

dive time

SELECT — to Log Data 2

MODE   ADV

FO_2, PO_2 setting of the gas used at the end of the dive (DIVE Mode only)

LOG DATA 2

ENTRY 21 - DATA 2

LAST GAS: 80%, 1.60
AVG DEPTH: 56 FT
AVG TEMP: 60 F
START: 3000 PSI
END: 320 PSI
MAX PO2: 1.02
O2 SAT: 23%

start & end pressure of tank #1

SELECT — to exit

maximum PO_2 (DIVE Mode only)

O_2 Saturation (DIVE Mode only)

MODE   ADV

SETUP MENU

This screen allows you to adjust the Auto Dim, Set Date Time, and Bluetooth® features.

SETUP MENU

SET AUTO DIM
SET DATE TIME
BLUETOOTH

SELECT — to select menu option

MODE — to scroll up

ADV — to scroll down

Doc. 12-7852-r05 (8/5/16)
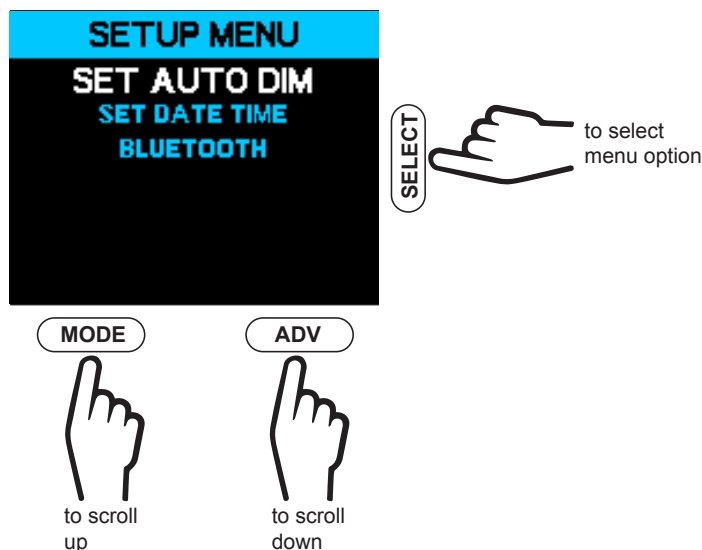
1. SET AUTO DIM

While underwater the i750TC screen dims after a set time interval from the last button press. This is done to reduce distractions during the dive and to conserve power. The i750TC allows you to customize the time interval and degree of dimming. This feature may also be turned off.

OFF or 0:20 - 2:00

SET AUTO DIM

TIME UNTIL DIM
0:30 MIN:SEC

SELECT — to save setting

DIM TO BRIGHTNESS
30% — 10 - 60%

MODE — to decrease value

ADV — to increase value
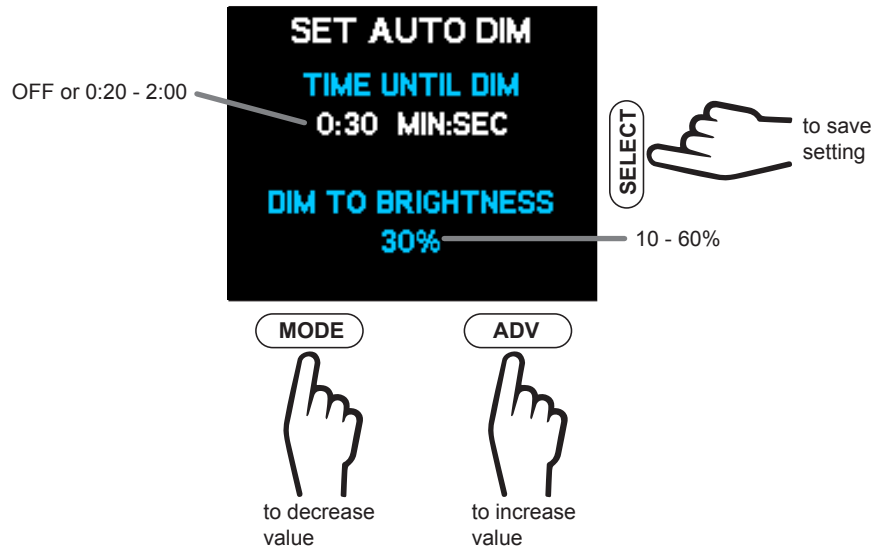
2. SET DATE, TIME

Within this menu you can set the formats, date, and time of day.

SET DATE, TIME

Month.Day or Day.Month

DATE FORMAT: M.D — set date
DATE: 7.24.14

SELECT — to save setting

HOUR FORMAT: 12 — 12 or 24 hr
TIME: 10:38 AM — set time

MODE — to decrease value

ADV — to increase value
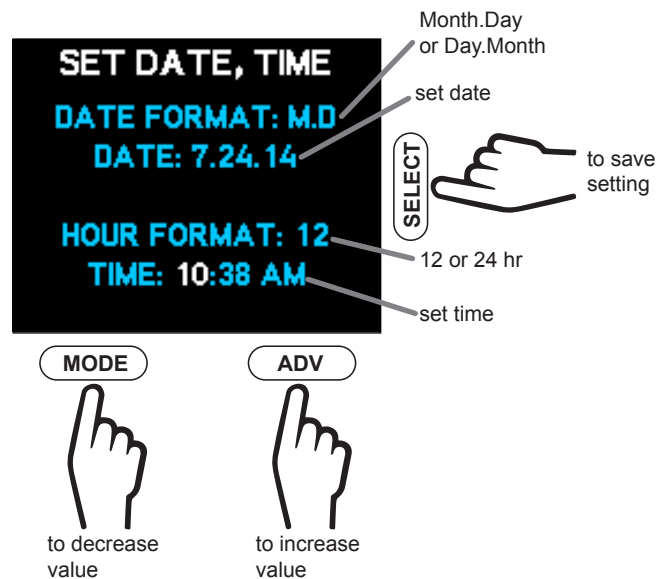
3. BLUETOOTH

Within this screen the Bluetooth® may be turned on or off. When Bluetooth® is turned on it will operate in sniffing mode (searching for compatible devices) while on the surface. Comunication with your i750TC must be initiated with your traditional computer or mobile device using Diverlog software.

NOTE: When Bluetooth® is ON the Bluetooth® icon will display on the DIVE, GAUGE, or FREE Main screens. Bluetooth® is temporarily deactivated when a dive is started and returns to sniffing mode when the i750TC enters Surface Mode.
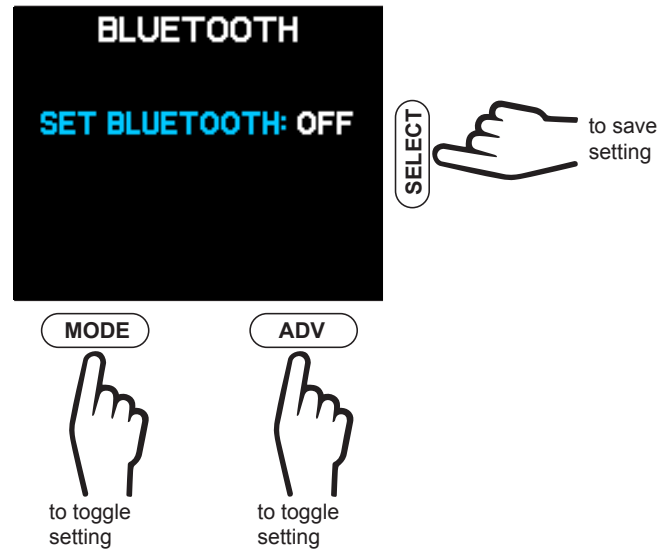
HISTORY

History is a summary of basic data recorded during all DIVE and GAUGE dives.

NOTE: Dives made in Free mode are not shown in History or the Log mode. Free dive data is only visible using the PC Download software.
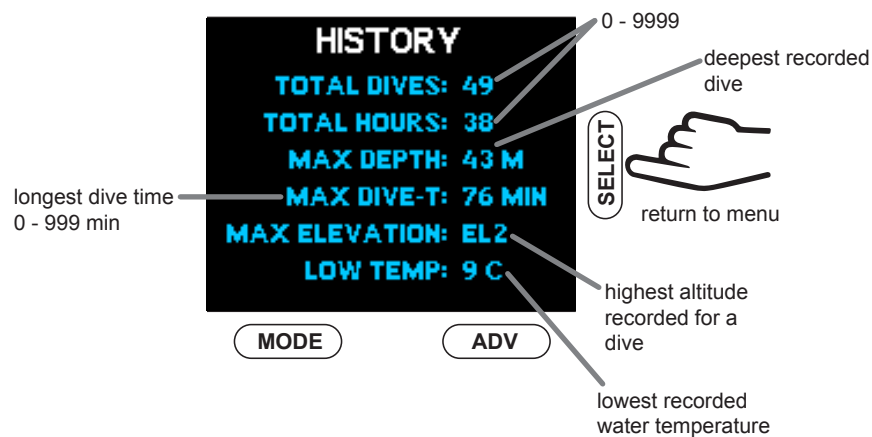
DC (DIVE COMPUTER) INFO

Information displayed on the DC Info screen should be recorded and kept with your sales receipt. It will be required in the event that your i750TC requires factory service.

firmware revision

date of last factory calibration

return to menu
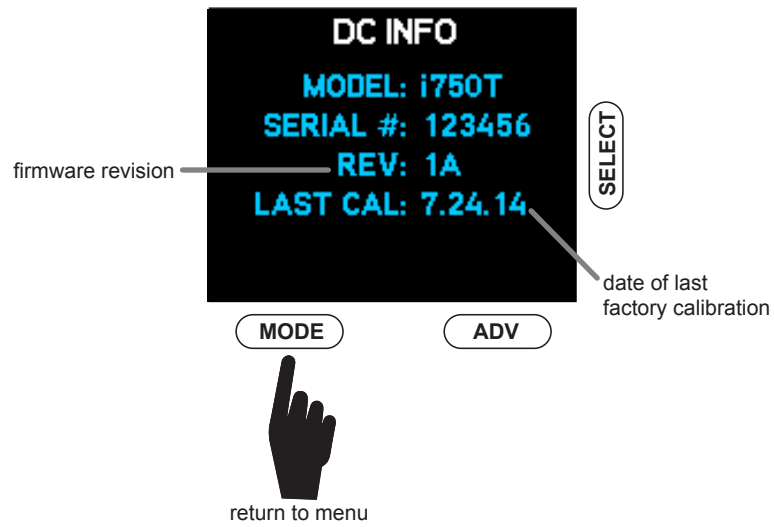
DIVE FEATURES

DTR (DIVE TIME REMAINING)

The i750TC constantly monitors No Decompression status and O2 Accumulation, and will display whichever time is the least amount available as DTR on the No Decompression Dive Main screen. The time being displayed will be identified by the NO DECO (no decompression) or O2 MIN icons.

NO DECOMPRESSION

No Decompression is the maximum amount of time that you can stay at your present depth before entering decompression. It is calculated based on the amount of nitrogen absorbed by hypothetical tissue compartments. The rates each of these compartments absorb and release nitrogen is mathematically modeled and compared against a maximum allowable nitrogen level.

Whichever compartment is closest to this maximum level is the controlling compartment for that depth. Its resulting value NO DECO (no decompression) will be displayed. It will also be displayed graphically as the N2 Bar Graph, see Bar Graphs later in this section.

As you ascend, the N2 Bar Graph will recede as control shifts to slower compartments. This is a feature of the decompression model that is the basis for multilevel diving, one of the most important advantages that Aqua Lung dive computers offer.

DTR is No Decompression
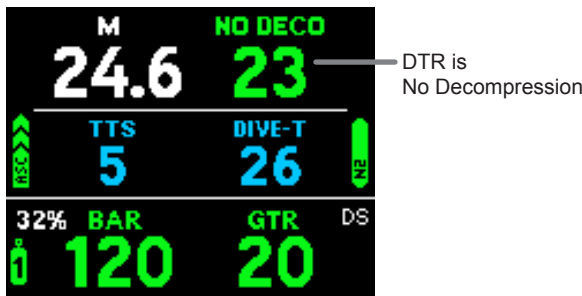
O2 MIN (OXYGEN TIME REMAINING)

When set for nitrox operation, O2 SAT (Oxygen Saturation) during a dive is displayed on an ALT screen as a percentage of allowed saturation identified by the O2 SAT graphic. The limit for O2 SAT (100%) is set at 300 OTU (Oxygen Tolerance Units) per dive or 24 hour period. See the chart at the back of this manual for specific times and allowances. O2 SAT and O2 MIN values are inversely related; as the O2 SAT value increases the O2 MIN value decreases.

When the O2 MIN value becomes less than the No Decompression calculations for the dive, DTR (Dive Time Remaining) will be controlled by O2 SAT and the O2 MIN value will be displayed as the DTR on the Dive Main screen, identified by the O2 MIN icon.

DIVE ALT 4
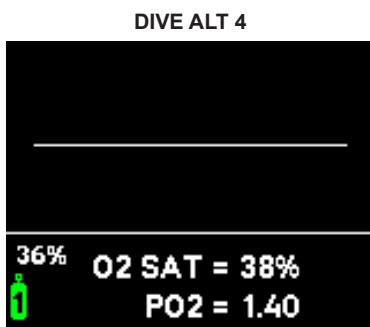
BAR GRAPHS

The i750TC features two specific bar graphs.
1. The one on the left represents ascent rate. It is referred to as ASC Bar Graph.
2. The one on the right represents nitrogen loading. It is referred to as the N2 Bar Graph.

Ascent Rate

Nitrogen Loading
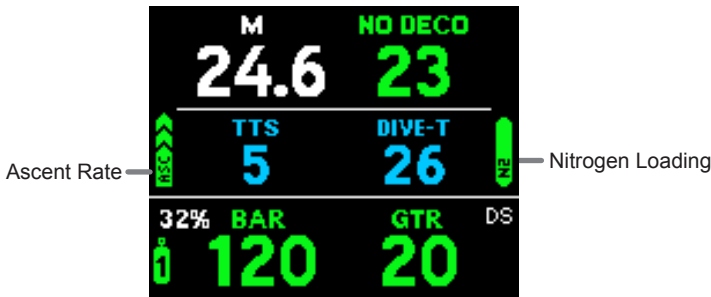
ASC BAR GRAPH

The ASC Bar Graph provides a visual representation of ascent speed (i.e., an ascent speedometer). When the ascent is faster than the recommended 30 fpm (9 mpm), all segments flash until the ascent is slowed.

# OF SEGMENTS	ASCENT RATE, FPM (MPM)
0	0 - 1 (0 - 0.3)
1	>1 - 5 (0.3 – 1.5)
2	>5 - 10 (>1.5 - 3.0)
3	>10 - 15 (>3.0 - 4.6)
4	>15 - 20 (>4.6 - 6.1)
5	>20 - 25 (>6.1 - 7.6)
6	>25 - 30 (>7.6 - 9.1)
7	>30 (>9.1)

ASC ALARM TRIGGERED

flashing
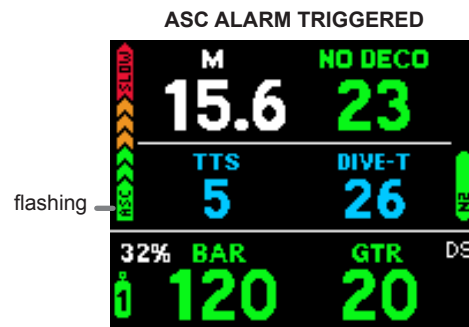
N2 BAR GRAPH

The N2 Bar Graph represents your relative No Decompression or Decompression status. As your depth and elapsed dive time increase, the bar graph will grow in length, shift from green to amber, and ultimately to red (indicating a Decompression condition). As you ascend the bar graph recedes, indicating that additional No Decompression time is available. The i750TC monitors multiple theoretical nitrogen compartments simultaneously. The N2 Bar Graph displays the one that is in control of your dive at any given time.

ALGORITHM

The i750TC utilizes the Z+ algorithm to calculate nitrogen tissue loading. Performance is based on Bühlmann ZHL-16C algorithm model. To create even greater margins of safety with respect to decompression, a Conservative Factor as well as No Decompression Deep and Safety Stops can be included for No Decompression dives.

CONSERVATIVE FACTOR

When the CF is set On, the dive time remaining, No Decompression/O2 MIN, which are based on the algorithm and used for N2/O2 calculations and displays relating to Plan Mode, will be reduced to the values available at the altitude level that is 915 m (3,000 ft) higher than the actual altitude at activation. Refer to the charts in the back of this manual for dive times.

DS (DEEP STOP)

When the DS selection is set ON, it will trigger after descending deeper than 24 m (80 ft. The i750TC then calculates (continually updating) a Stop Depth equal to ½ the Max Depth.

📖 **NOTE: The Deep Stop feature only works in DIVE mode while within No Decompression times.**

• While 3 m (10 ft) deeper than the calculated Deep Stop, you will be able to access a Deep Stop Preview screen that will display the current calculated Deep Stop Depth/Time.

• Upon initial ascent to within 3 m (10 ft) below the calculated Stop Depth, a Deep Stop screen displaying a Stop Depth at ½ the Max Depth will appear with a countdown timer beginning at 2 min and counting down to 0. If you descend 3 m (10 ft) below, or ascend 3 m (10 ft) above, the calculated Stop Depth for 10 seconds during the countdown, the No Decompression Main will replace the Deep Stop Main display and the Deep Stop feature will be disabled for the remainder of that dive. There is no penalty if the Deep Stop is ignored.

• In the event that you enter Decompression, exceed 190 ft (57 m), or a High O2 SAT (Oxygen Saturation) condition, ≥ 80%, occurs, the Deep Stop will be disabled for the remainder of that dive.

• The Deep Stop is disabled during a High PO_2 Alarm condition, ≥ set point.

SS (SAFETY STOP)

Upon ascent to within 1.5 m (5 ft) deeper than the Safety Stop depth set for 1 second on a No Decompression dive in which depth exceeded 9 m (30 ft) for 1 second, a beep will sound and a Safety Stop at the depth set will appear on the Dive Main display with a countdown beginning at the Safety Stop time set and counting down to 0:00.

• If the Safety Stop was set for OFF, the display will not appear.

• In the event that you descend 3 m (10 ft) deeper than the Stop Depth for 10 seconds during the countdown, or the countdown reaches 0:00, the No Decompression Main screen will replace the Safety Stop Main screen which will reappear upon ascent to within 1.5 m (5 ft) deeper than the Safety Stop depth set for 1 second.

• In the event that you enter Decompression during the dive, complete the Decompression obligation, then descend below 9 m (30 ft); the Safety Stop Main will appear again upon ascent to within 1.5 m (5 ft) deeper than the Safety Stop depth set for 1 second.

• If you ascend to 0.9 m (3 ft) of the surface for 1 second, the Safety Stop will be canceled for the remainder of that dive.

• There is no penalty if you surface prior to completing the Safety Stop or choose to ignore it.

LOW BATTERY WHILE ON THE SURFACE

Warning Level
• The i750TC functions continue but but screen brightness is limited to 60% max.
• The Battery icon appears amber.
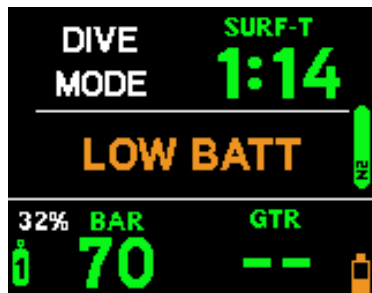
Alarm Level
• All operations cease.
• The Battery icon appears red.
• The Battery icon flashes for 5 seconds then the unit shuts off.

⚠ **WARNING: Change the battery before diving if your i750TC indicates the Battery Low Warning or Alarm.**
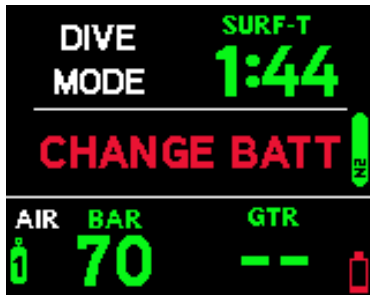
LOW BATTERY DURING A DIVE
Warning Level
• The i750TC functions continue but screen brightness is limited to 60% max.
• The battery icon appears solid upon entry into Surface mode.

Alarm Level
• The i750TC functions continue but screen brightness is limited to 60% max.
• The Battery icon appears flashing. 5 seconds after entering Surface mode the i750TC will shut down.

AUDIBLE ALARM
While operating in Dive or Gauge mode, the audible alarm will emit 1 beep per second for 10 seconds when alarms strike. During that time, the audible alarm can be acknowledged and silenced by pressing the SELECT button.

The audible alarms will not be active if the audible alarm is set to OFF (a Set Alarms setting).

Free Dive mode has its own alarms which emit multiple beeps multiple times which cannot be acknowledged or set to OFF.

Events that emit (10) beeps >> each sound for ½ sec with ½ sec silence between beeps:
• Watch Daily Alarm.
• Watch CDT Alarm.
• DIVE, GAUGE - GTR Alarm.
• DIVE, GAUGE - Turn Alarm (TMT 1 only).
• DIVE, GAUGE - Press Alarm (TMT in use).
• DIVE, GAUGE - Loss of Link (Dive mode).
• DIVE, GAUGE - Ascent Rate too fast.
• DIVE, GAUGE - Depth Alarm.
• DIVE, GAUGE - EDT Alarm.
• DIVE - DTR Alarm.
• DIVE - N2 Alarm.
• DIVE - entry into Decompression.
• DIVE - Conditional Violation.
• DIVE - Delayed Violations 1, 2.
• DIVE, GAUGE - Delayed Violation 3.
• DIVE, GAUGE - entry into Violation Gauge Mode.
• DIVE - PO2 Warning and Alarm.
• DIVE - O2 Warning and Alarm.
• DIVE - Gas Switch Alarm.

Events that emit (3) beeps >> each sound for ½ sec with ½ sec silence between beeps:
• DIVE, GAUGE - Ascent Rate warning.
• FREE - Delayed Violation 3.

Events that emit (3) sets of (3) beeps >> each sound for ½ sec with ½ sec silence between beeps and ½ sec silence between sets:
• FREE - RTI AL (Repeating Time Interval Alarm)
• FREE - CDT (Countdown Timer) Alarm.
• FREE - N2 Alarm.
• FREE - Violation, entry into Decompression.

Events that emit (3) sets of (3) beeps >> each sound for ⅛ sec with ⅛ sec silence between beeps and ¼ sec silence between sets:
• FREE - DA1 to DA3 Alarms.

PROXIMITY OF THE TMTS (TRANSMITTERS) AND i750TC

The TMTs emit low frequency signals that radiate out in semicircular patterns parallel to the length dimension of the TMT. A coiled antenna inside the i750TC wrist unit receives the signals when it is positioned within a zone parallel to or at a 45 degree angle to the TMT as illustrated.

3 ft / 0.91 m

OPTIMAL ZONE
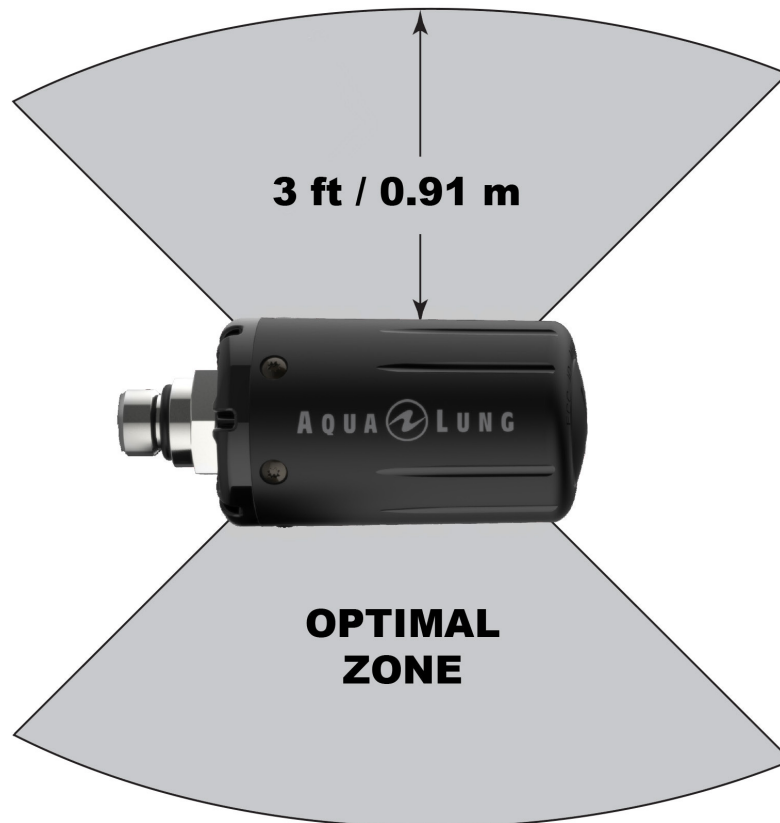
The i750TC cannot effectively receive a signal when it is held out to the sides of the TMT or held at distances greater than 0.91 m (3 ft) in front of the TMT. Best reception is achieved when the i750TC is within less than 0.91 m (3 ft) of the TMT.

When installed into the high pressure ports of the regulator first stages, the TMTs must be positioned so that they face horizontally outward from the tank valves.

Link Interruption Underwater
During a dive, you may at times move the i750TC out of the signal pattern of the TMT, resulting in a temporary loss of the link signal. The link will be restored within 4 seconds after the i750TC is moved back into its correct position.

An interruption may also occur while the i750TC is within 3 feet (1 meter) of a running DPV, or shortly after a strobe flashes. The link will be restored within 4 seconds after the i750TC is moved out of that area.

If the link is not restored within 15 seconds, the audible alarm will sound, dashes will replace GTR and gas pressure values.
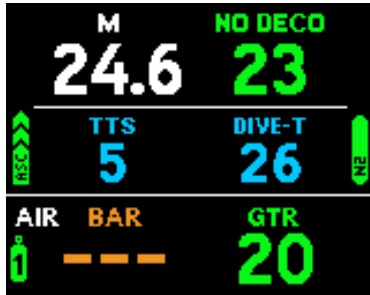
DIVE SURFACE MODE

ON THE SURFACE BEFORE A DIVE

The Dive Main screen will display the SURF-T (Surface Time) and the selected FO_2 of the breathing gas. The surface time displayed is the time since activation or the surface interval after a dive.

DIVE MAIN
(<10 min after a dive)

DIVE MODE   SURF-T   0:06 — surface time hr:min

DIVE   DIVE-T — residual nitrogen
dive # — 1   – –

gas mix — AIR BAR   GTR
TMT/Gas # — 200   – –

gas pressure   battery status

DIVE MAIN
(>10 min after a dive, no transmitter)

DIVE MODE   SURF-T   23:34

DIVE   DIVE-T
3   – –

AIR
Gas # — SPG

submersible pressure gauge

DIVE MODE   SURF-T   0:10

DIVE   DIVE-T
1   – –

32% BAR   GTR
200   – –

SELECT — to access Compass Mode

MODE

to access Home Menu   to access Dive Menu

ADV — to access Adjust Brightness* screen

ADV

ALT 1
ALT 2
ALT 3
ALT 4
(nitrox only)
back to Main

Adjust Brightness functions the same as in the Home Menu, see p.12

ALT 1 (LAST DIVE)

The ALT 1 screen displays essential data from the last dive. If there has been no dive within the current activation cycle, the the max depth and elapsed dive time will be displayed as dashes.

LAST DIVE

DIVE-T
49

M MAX
42
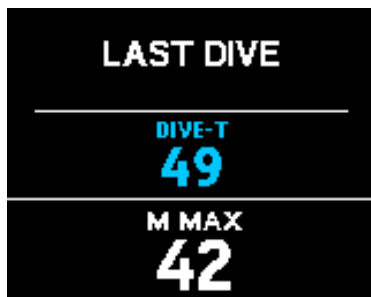
ALT 2

The ALT 2 screen displays time of day, temperature, date, and current elevation readings.

ALT 3

The ALT 3 screen displays the FLY (Time to Fly) and the DESAT (Desaturation) countdown. The Time to Fly countdown shall begin counting from 23:50 to 0:00 (hr:min), 10 minutes after surfacing from a dive. The DESAT counter shall provide calculated time for Tissue Desaturation at sea level taking into consideration the CF (Conservative Factor) if the i750TC CF setting was set on. It shall begin counting down 10 minutes after surfacing from DIVE or FREE dives counting down from a maximum of 23:50 to 0:00 (hr:min). When the DESAT countdown reaches 0:00 (hr:min), which will generally occur prior to the FLY countdown reaching 0:00 (hr:min), it will remain on the display as 0:00 until the Fly countdown also reaches 0:00.

▤ **NOTE: Desaturation requiring times greater than 24 hours will display the graphic > 24:00. In the event that Time to Desaturate still remains at the end of 24 hours, the unit will turn Off and any Nitrogen and Oxygen calculations will clear.**
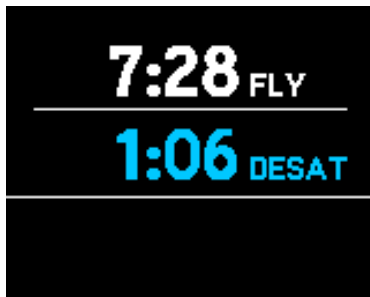
ALT 4

The ALT 4 screen displays only after a nitrox dive. It displays the current oxygen saturation level and the current gas mix.
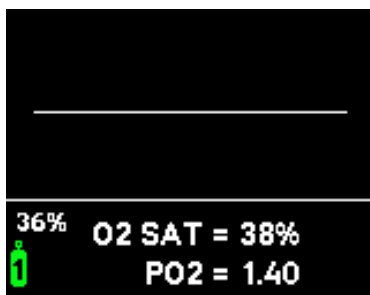
DIVE MENU

To plan dives, set gases, transmiters, alarms, and change other settings you must navigate through the Dive Menu. Enter the menu by pressing the MODE button. Press the SELECT button to choose options from the Dive Menu. All Dive Menu options will be discussed in the order they appear in the menu below.

DIVE MODE SURF-T 0:10
DIVE 1   DIVE-T --
32% BAR 200   GTR --

MODE   ADV   SELECT

DIVE MENU
PLAN
SET GAS
TRANSMITTERS
SET ALARMS
SET UTILITIES

SELECT — to select an option
— step back

MODE — exit menu
ADV — to scroll up / to scroll down
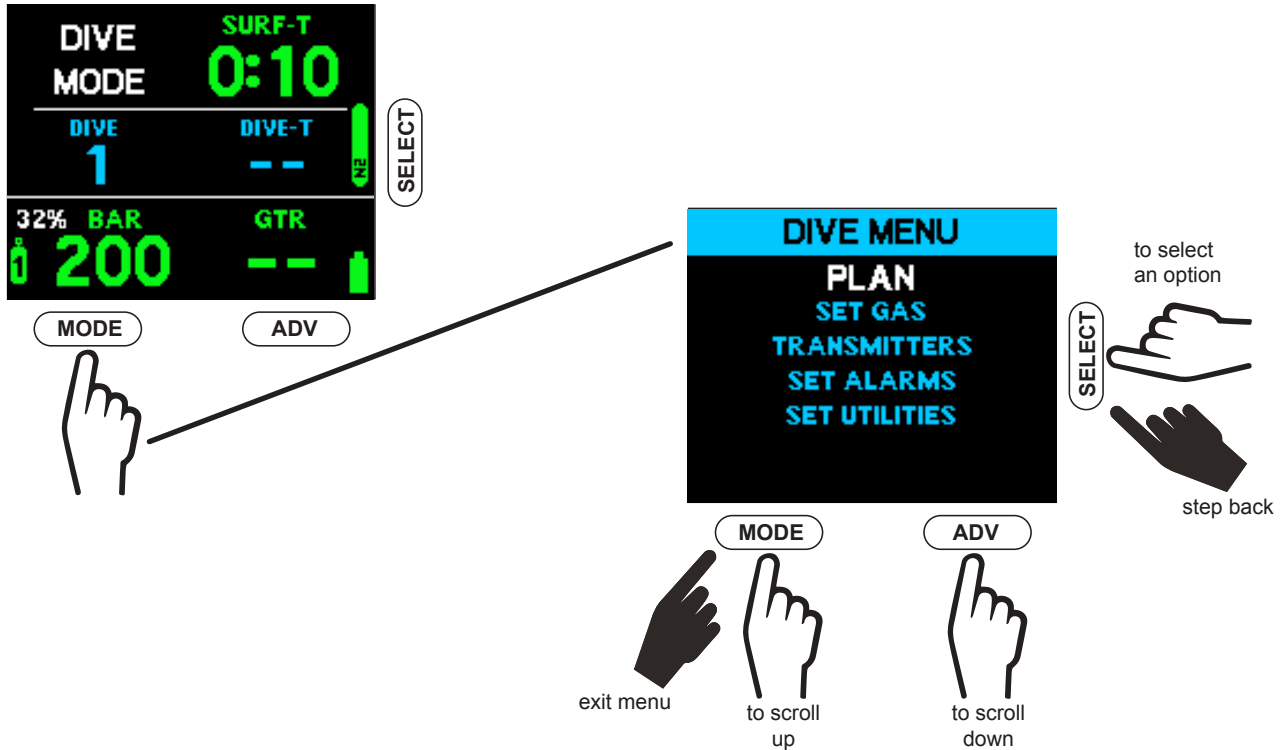
PLAN

This mode calculates dive depth and time limits. To do so, it accounts for any residual nitrogen, oxygen, surface intervals, the programmed gas mix, and PO_2 alarm setting. Either NO DECO (No Decompression) or O_2 MIN limits are displayed, depending on whether nitrogen or oxygen levels will be the limiting factor. The time limit will display as 1-99 minutes, all times greater than 99 display as ">99".

📖 **NOTE: Depths exceeding the MOD (Maximum Operating Depth), if nitrox, or that have less than 1 minute allowed dive time will not be displayed.**

PLAN GAS 1
DEPTH   NO DECO
21 M   65 MIN
MIX: 32%, 1.40
MOD: 33 M

% O_2, current FO_2 setpoint

No Decompression or O2 MIN

SELECT — to exit

current PO_2 Alarm setpoint, blank if FO2 is Air

Maximum Operating Depth

MODE — to decrease depth
ADV — to increase depth
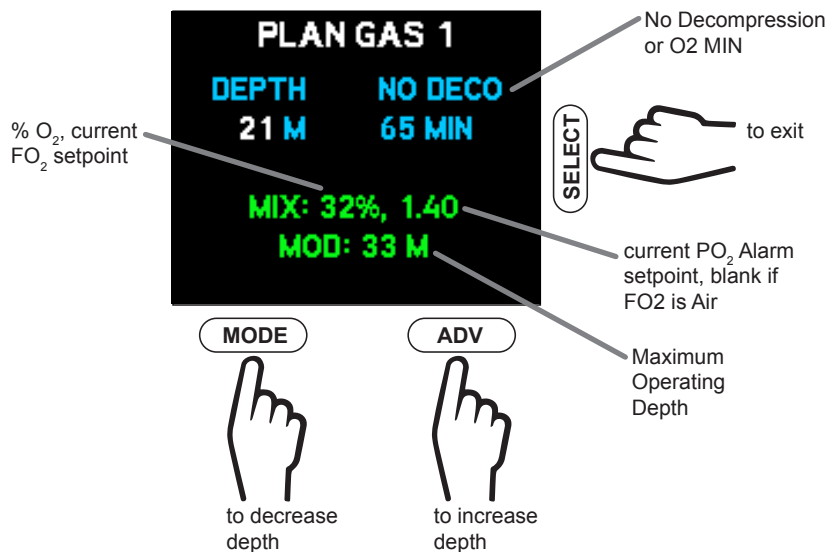
SET GAS

Within this submenu you can change the available gas mixes from OFF, AIR, or to any nitrox mix between 21 - 100 FO_2 (% O_2). Nitrox mixes are displayed with their corresponding MOD (Maximum Operating Depth) and the current PO_2 Alarm setting for the selected gas. Default settings are FO_2 AIR with no PO_2 alarm value for Gas 1, and OFF for Gas 2 and 3. Settings revert to the defaults when 24 hours elapse without conducting a dive. If you save a nitrox mix value for any gas, the i750TC will highlight the PO_2 alarm value allowing it to be set. Additionally, the i750TC allows for each gas (1 - 3) to have individual PO_2 alarm settings.

▤ **NOTE: Once any Gas is set for Nitrox, any other Gas set for AIR will automatically be set to 21%. The AIR option will not be displayed as an FO_2 setting until 24 hours elapse after the last dive.**

▤ **NOTE: When FO_2 is set for AIR, oxygen related data (such as PO_2, % O_2) will not be displayed at any time during the dive, on the surface, or in Plan Mode. Though these oxygen values will be tracked internally for use in any subsequent nitrox dives.**

▤ **NOTE: Gas 1 cannot be set to OFF.**

FO_2 (% O_2)

PO$_2$ alarm value, blank if AIR

SET GAS

GAS 1: AIR
GAS 2: 22%, 1.40
GAS 3: OFF

MOD: 37 M

SELECT — to select or save option

Maximum Operating Depth, blank if AIR

MODE — exit menu / to scroll up or decrease value

ADV — to scroll down or increase value
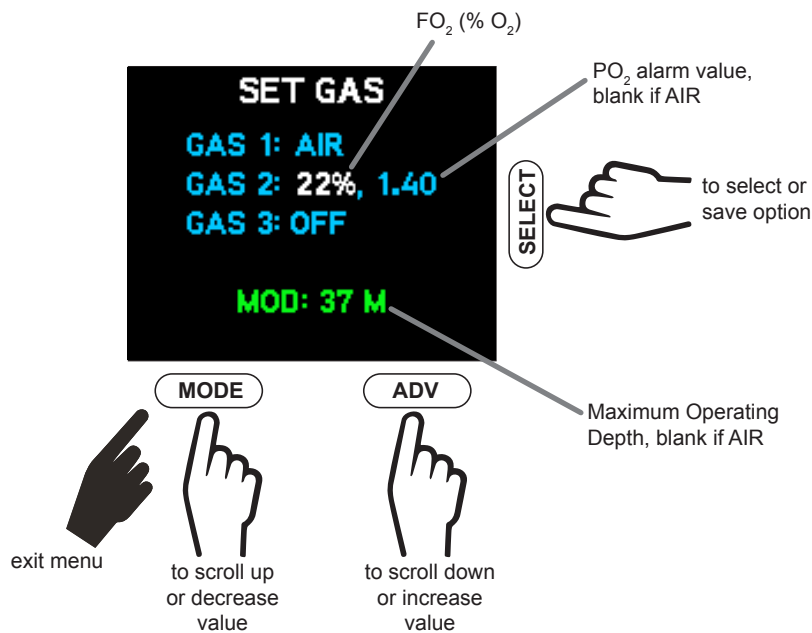
TRANSMITTERS

The i750TC can use up to 3 transmitters to monitor gas supplies. The TMT Menu allows for the programming of the wrist unit to receive the signals from selected Aqua Lung transmitters. See the Dive Mode Features section (p. 23) for further information on transmitters.

You can scroll up or down to select the TMT (transmitter) you want to modify. The transmitters have the option of ON, OFF, or SET. When a transmitter is highlighted a transmitter status message will be displayed. Initially, the message will be "SEARCHING." Once connected to the Transmitter the gas pressure and transmitter battery status will be displayed.

Selecting the SET option will take you to another screen where you can enter the serial number/ID code for the transmitter.

📘 **NOTE: If the TMT is set OFF for the active gas, the letters SPG will be displayed in place of a pressure reading on the Main Screen.**

📘 **NOTE: Transmitter 2 cannot be set to ON unless transmitter 1 is set to ON. Likewise, transmitter 3 cannot be set to ON unless transmitter 2 is also set ON. If you attempt to do so, the i750TC will display the message TMT 1(2) MUST BE SET ON FIRST.**

TRANSMITTERS

TMT 1: ON
TMT 2: SET
TMT 1: OFF

TMT 2: 200 BAR,
BATT GOOD

SELECT — to select or save option

transmitter status message

MODE — exit menu

ADV

to scroll up or toggle selection

to scroll down or toggle selection
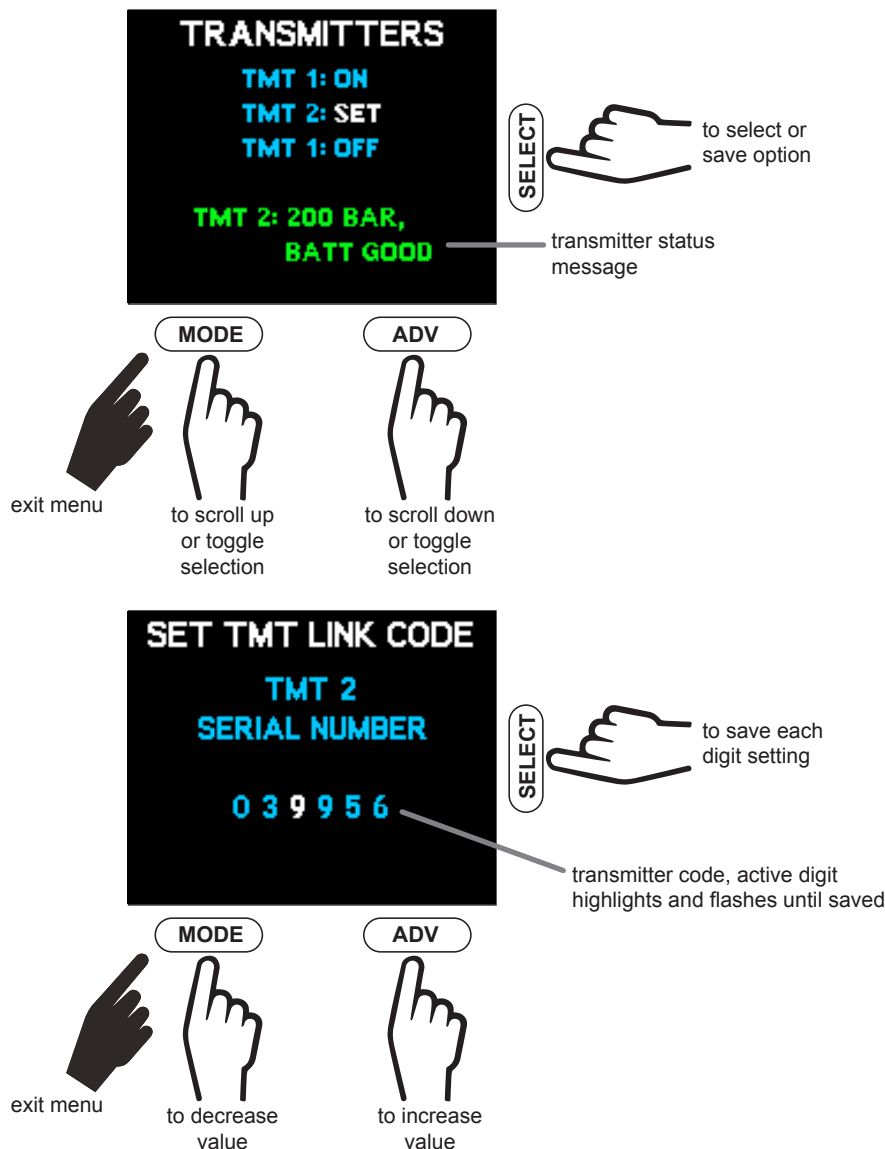
📘 **NOTE: The serial number can be located in two places directly on the transmitter (see below).**

SET TMT LINK CODE

TMT 2
SERIAL NUMBER

0 3 9 9 5 6

SELECT — to save each digit setting

transmitter code, active digit highlights and flashes until saved

MODE — exit menu

ADV

to decrease value

to increase value

SERIAL #

SET ALARMS

Within this submenu you can customize the following seven alarm settings. When one of these alarms is triggered the critical data will flash on the Dive Main screen.

SET ALARMS

AUDIBLE: ON
DEPTH: 40 M
DIVE-T: 40 MIN
N2 BAR: 70%
DTR: 10 MIN
TURN PRESS: 100 BAR
END PRESS: 50 BAR

SELECT — to select or save option

MODE — exit menu

ADV

to scroll up, decrease value, or toggle setting

to scroll down, increase value, or toggle setting
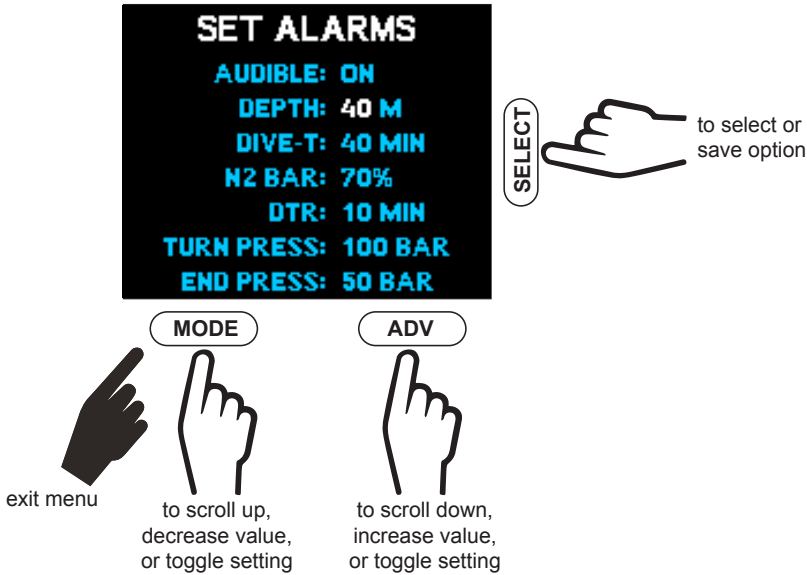
1. Audible

The Audible Alarm allows you to set audible alarms ON or OFF.

2. Depth

The Depth Alarm allows you to set a maximum depth alarm. Selections inlcude OFF or 10- 100 m (30 - 330 ft).

DEPTH ALARM TRIGGERED

flashing —

M   NO DECO
30.0   23
TTS   DIVE-T
5   7
32% BAR   GTR   DS
170   20
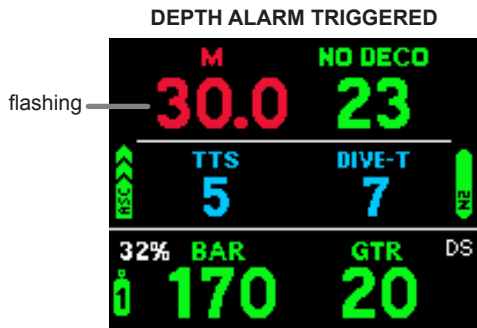
3. Dive-T

The Dive Time Alarm allows you to set an alarm to go off at a predetermined amount of dive time. Settings include OFF or 10 - 180 min.

DIVE-T ALARM TRIGGERED

M   NO DECO
14.6   23
TTS   DIVE-T   — flashing
5   60
32% BAR   GTR   DS
120   20
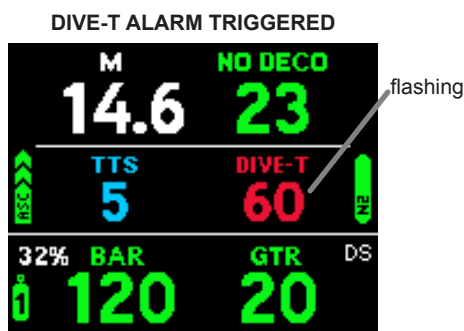
4. N2 Bar

This feature allows you to set an alarm to go off at a predetermined percentage of N2 bar graph being filled.

N2 BAR ALARM TRIGGERED

flashing
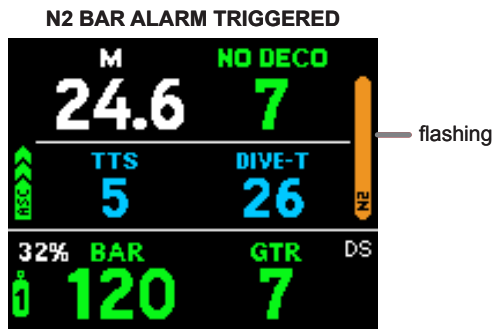
5. DTR

The Dive Time Remaining Alarm allows you to set an alarm to go off with a designated reserve. Settings include OFF or 5 - 20 min of dive time remaining.

DTR ALARM TRIGGERED

flashing
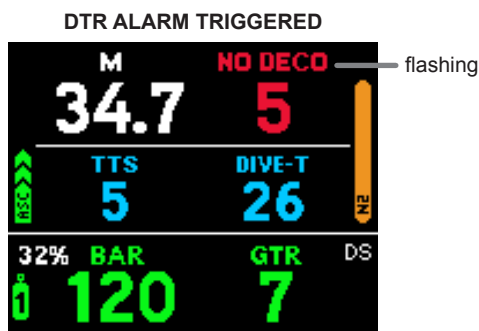
6. Turn Press

The Turn Pressure Alarm allows you to set an alarm to go off at a designated turn pressure. You may choose from OFF or 70 to 205 BAR (1000 to 3000 PSI) in increments of 5 BAR (250 PSI).

TURN PRESS ALARM TRIGGERED

flashing
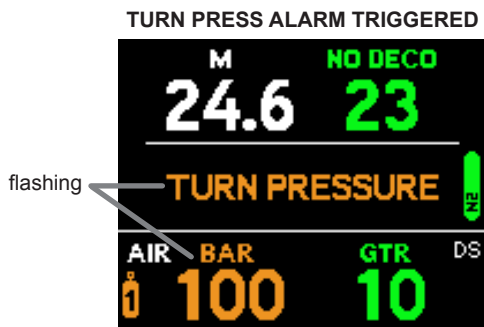
7. End Press

The End Pressure Alarm allows you to set an alarm for when you reach a designated end pressure. You may choose from from 20 to 105 BAR (300 to 1500 PSI) in increments of 5 BAR (100 PSI).

📘 **NOTE: The Pressure Alarm only considers the active gas when diving with multiple gas transmitters.**

END PRESS ALARM TRIGGERED

flashing
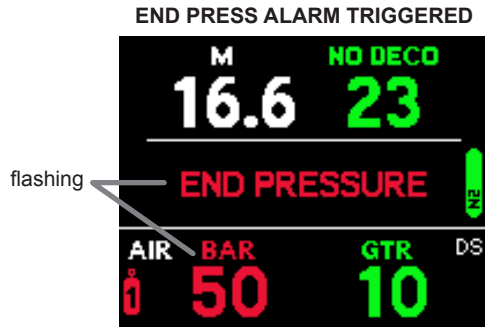
SET UTILITIES

Within the Set Utilities menu you can customize the following six operational functions.
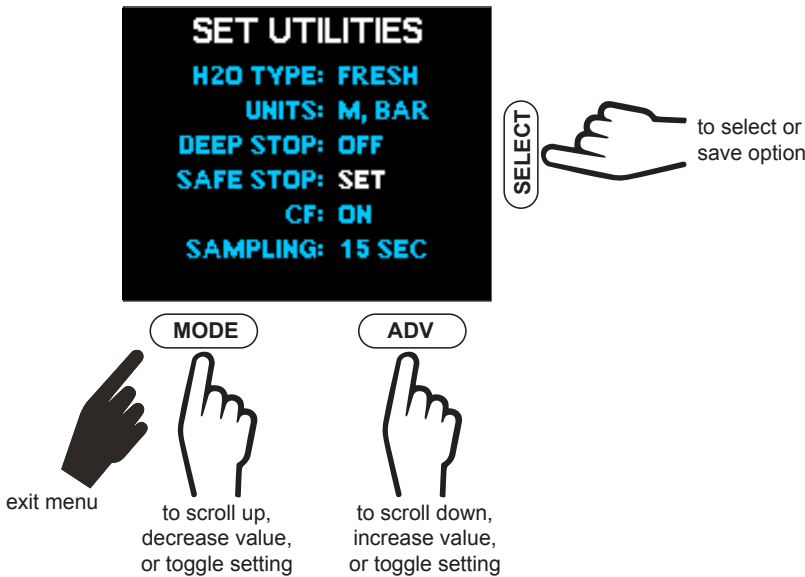
SELECT to select or save option

MODE — exit menu — to scroll up, decrease value, or toggle setting

ADV — to scroll down, increase value, or toggle setting

1. H2O TYPE (Water Type)

The H2O Type feature allows you to set SALT or FRESH water environment for accurate depth calculations.

2. UNITS

The Units feature allows you to select whether Metric (M, BAR) or Imperial (FT, PSI) units of measure will be displayed.

3. DEEP STOP

The Deep Stop feature can be set ON or OFF.

4. SAFE STOP (SAFETY STOP)

The Safety Stop feature can be set ON or OFF. If SET is selected, you may choose from an available 3 or 5 min Safety Stop at depths of 3, 4, 5, or 6 m (10, 15, or 20 ft).

SET SAFE STOP
TIME: 3 MIN
DEPTH: 5 M

SELECT — to select or save option

step back

MODE — exit menu / decrease value

ADV — increase value
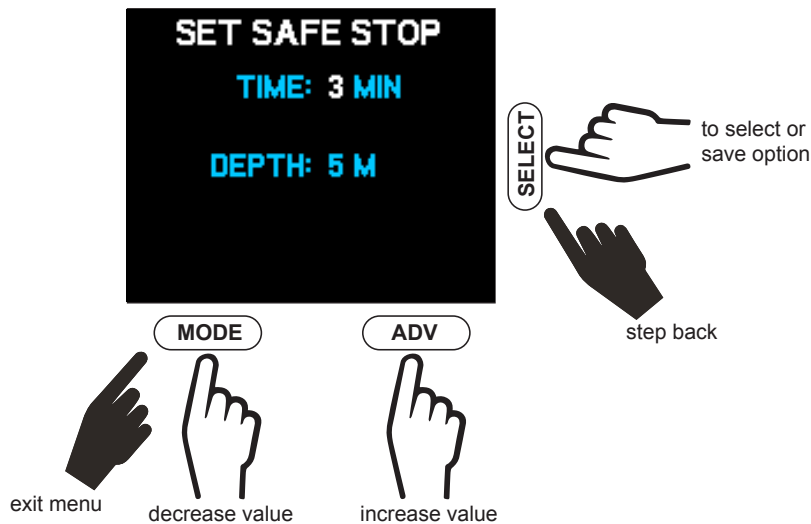
5. CF (Conservative Factor)

The Conservative feature (see pg. 20) can be set ON or OFF.

6. SAMPLING (SAMPLE RATE)

The Sample Rate controls how frequently the i750TC stores a data snapshot for PC Download during a dive. Setting options are 2, 15, 30, or 60 second intervals. Shorter intervals will provide a more precise record of your dives.

NOTE: New data will automatically overwrite the oldest data in memory when the memory becomes full. The i750TC Log and PC Download data is stored separately in different partitions of the memory. The Log only stores a short summary of each dive. Alternately, the PC Download function stores much larger files for each dive. Depending on the chosen settings and dive durations, it is possible to see dives stored in the i750TC's onboard Log that have already been overwritten in the PC Download Partition. Choosing a longer Sample Rate interval will consume less memory per dive. Remember to download your dives more frequently if you are using a shorter Sample Rate interval.

DIVE OPERATION

INITIATING A DIVE

With the i750TC in Dive Mode, a dive will commence upon descending to 1.5 m (5 ft) for at least 5 seconds. Below is a diagram to help you navigate Dive Mode functions.

NO DECO DIVE MAIN

M NO DECO
24.6 23
TTS DIVE-T
5 26
32% BAR GTR DS
120 20

SELECT → to Compass Mode

Adjust Brightness functions the same as in the Home Menu, see p.12

MODE

ADV

to Gas Switch Menu

to record data earmark for download

to access Adjust Brightness* screen

ADV

ALT 1
ALT 2
(nitrox only)
Deep Stop Preview
back to Main
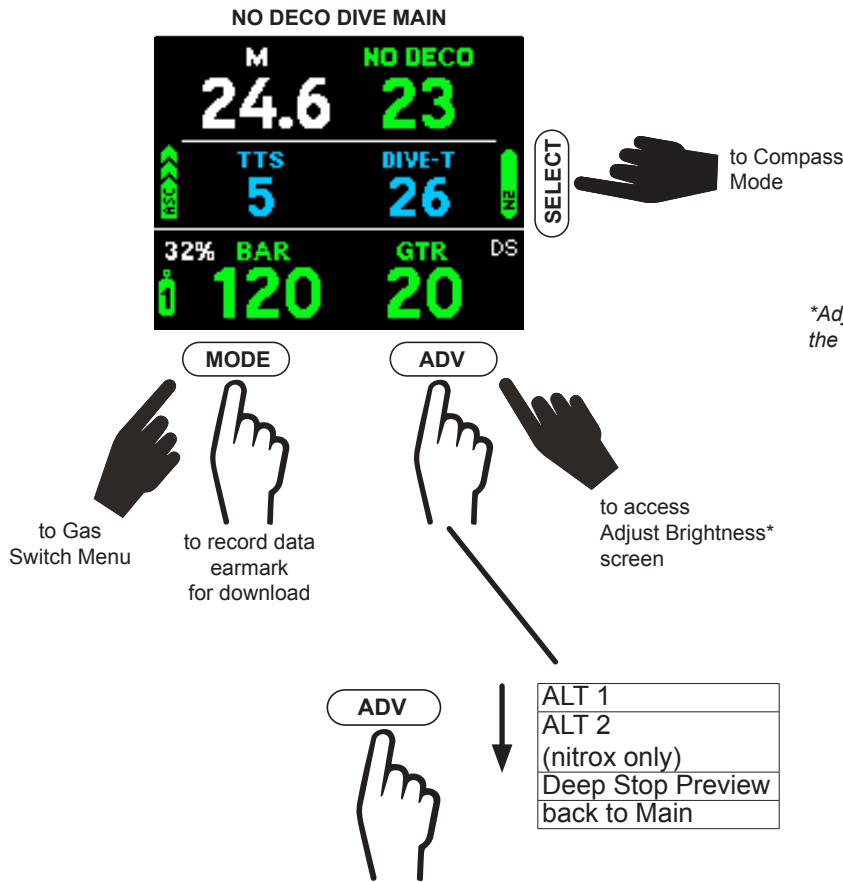
NO DECOMPRESSION DIVE MAIN

From the Main screen you can see all critical dive parameters. During a dive an audible alarm may sound and the priority of information displayed may change. This is to indicate a safety recommendation, warning, or alarm. The following information in this chapter demonstrates and describes an uneventful dive, in terms of safety. Alarms are described in the Complications section of this chapter.

⚠ **WARNING: Before diving with the i750TC take time to familiarize yourself with both normal and alarm conditions of operation.**

Dive Time Remaining
0 - 99 min, all times greater than 99 display as 99
(NO DECO or O2 MIN depending on which is the limiting factor)

depth

Time To Surface
0 - 99, then - - if greater than 99 min

elapsed dive time
0 - 999 min

M NO DECO
24.6 23
TTS DIVE-T
5 26
32% BAR GTR DS
120 20

ASC bar graph

N2 bar graph

gas mix

deep stop if triggered

TMT/Gas #

gas pressure*

Gas Time Remaining 0 - 99 min, all times greater than 99 display as 99

If transmitters are set to off, then SPG (submersible pressure gauge) will be displayed in place of pressure.

DIVE ALT 1

This screen simply tells you the current time of day, ambient temperature, and max depth.
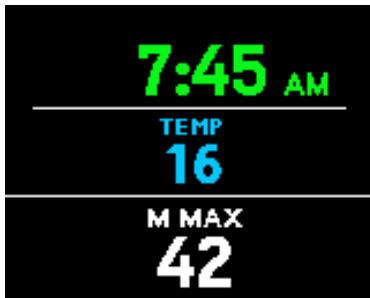
DIVE ALT 2

The ALT 2 screen displays information pertaining to nitrox; it is bypassed if the i750TC is set for air.

FO_2 setting

% O_2 saturation
0 - 100

current
PO_2 value
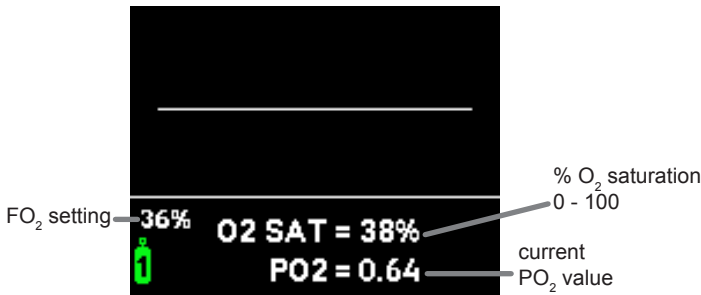
DEEP STOP PREVIEW

If Deep Stop was set to ON in the Utilities Menu, the Deep Stop Preview screen is available after exceeding 24 m (80 ft) of depth. The Deep Stop is always at a depth half that of your maximum depth during the dive. This preview screen keeps track of that depth for you.

current depth

stop depth

stop time

EARMARK

By pressing the Mode button during a dive you can manually record a data snapshot which can later be accessed using the i750TC's download feature. The message "EARMARK APPLIED" will be displayed for 3 seconds as confirmation after an earmark is made.
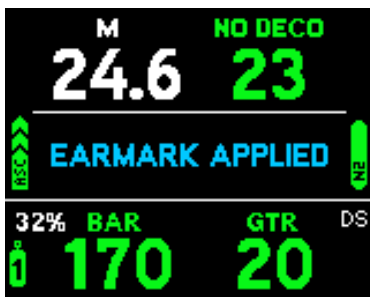
DEEP STOP MAIN

If triggered, the Deep Stop will activate upon ascending to within 3 m (10 ft) below the calculated Deep Stop depth. The stop time will be displayed and count down to 0 min as long as you stay within 3 m (10 ft) above or below the stop. While Deep Stop Main is displayed, you may access up to 3 ALT displays by pressing the ADV button to cycle through them. They are similar to the No Decompression Main, Dive ALT 1, and Dive ALT 2 displays, respectively. See Deep Stop in the Dive Features chapter for further details.

📖 **NOTE: The i750TC does not penalize for a missed Deep Stop.**

stop depth

remaining
stop time (min:sec)

SAFETY STOP MAIN

If triggered, the Safety Stop will activate upon ascent to within 1.5 m (5ft) deeper than the Safety Stop depth on a No Deco dive. The stop time will then countdown to 0 min. While Safety Stop Main is displayed, you may access up to 3 ALT displays by pressing the ADV button repeatedly. They are similar to the No Deco Main, Dive ALT 1, and Dive ALT 2 displays, respectively. See Safety Stop in the Dive Features chapter for further details.

📖 **NOTE: The i750TC does not penalize for a missed Safety Stop.**

stop depth

remaining
stop time (min:sec)

SURFACING

Upon ascending to 0.9 m (3 ft) the i750TC transitions to Dive Surface mode. For the first 10 minutes after a dive the i750TC will continue to display the maximum depth and elapsed dive time. Once the surface time reaches 10 minutes the i750TC will display the standard Dive Surface screen.

📖 **NOTE: The i750TC requires a 10 minute surface interval to record a subsequent dive as a separate dive in the Log. Otherwise, the dives will be combined and recorded as a single dive in the i750TC memory.**

surface time

residual nitrogen

dive #

gas mix

TMT/Gas #

gas pressure   battery status
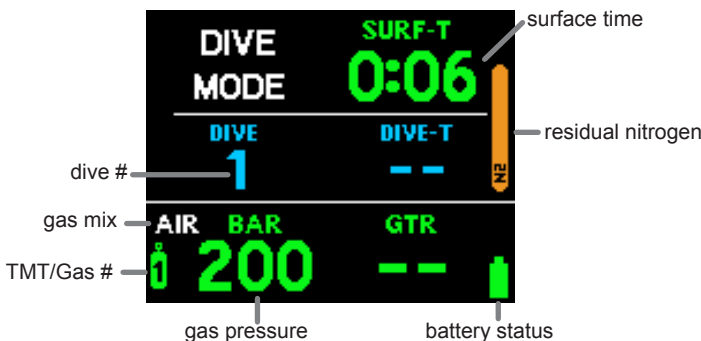
GAS/TRANSMITTER SWITCHES

⚠ WARNINGS:

- Historically, many accidents and near misses have occurred by switching to the wrong gas at the wrong depth. DO NOT attempt gas switch decompression dives without proper education and training to do so from an internationally recognized training agency.
- Diving deeper than 39 m (130 ft), will greatly increase your risk of decompression sickness.
- Decompression diving is inherently hazardous and greatly increases your risk of decompression sickness, even when performed according to the dive computer's calculations.
- Using an i750TC is no guarantee of avoiding decompression sickness.
- The i750TC enters Violation Mode when a situation exceeds its capacity to predict an ascent procedure. These dives represent gross excursions into decompression that are beyond the boundaries and spirit of the i750TC's design. If you are following these dive profiles, Aqua Lung advises that you should not use an i750TC.
- If you exceed certain limits, the i750TC will not be able to help you get safely back to the surface. These situations exceed tested limits and can result in loss of some functions for 24 hours after the dive in which a violation occurred.

OVERVIEW
- All dives begin with GAS 1 and TMT 1.
- The GAS and TMT default to # 1 after 10 minutes on the surface.
- Gas switches can only be made when a Dive Main screen is displayed.
- Gases cannot be switched while on the surface.
- The Gas Switch Menu cannot be accessed during the sounding of alarms.
- If an alarm strikes while in the Gas Switch Menu, the switch operation is terminated (reverting to the Dive Main screen.

DIVE MAIN

SELECT

MODE

to Gas Switch Menu

CHOOSE GAS

current gas settings

SELECT

press 2 times (first to select gas, then to confirm switch)

current PO$_2$ value of selected gas

MODE — to scroll up

ADV — to scroll down
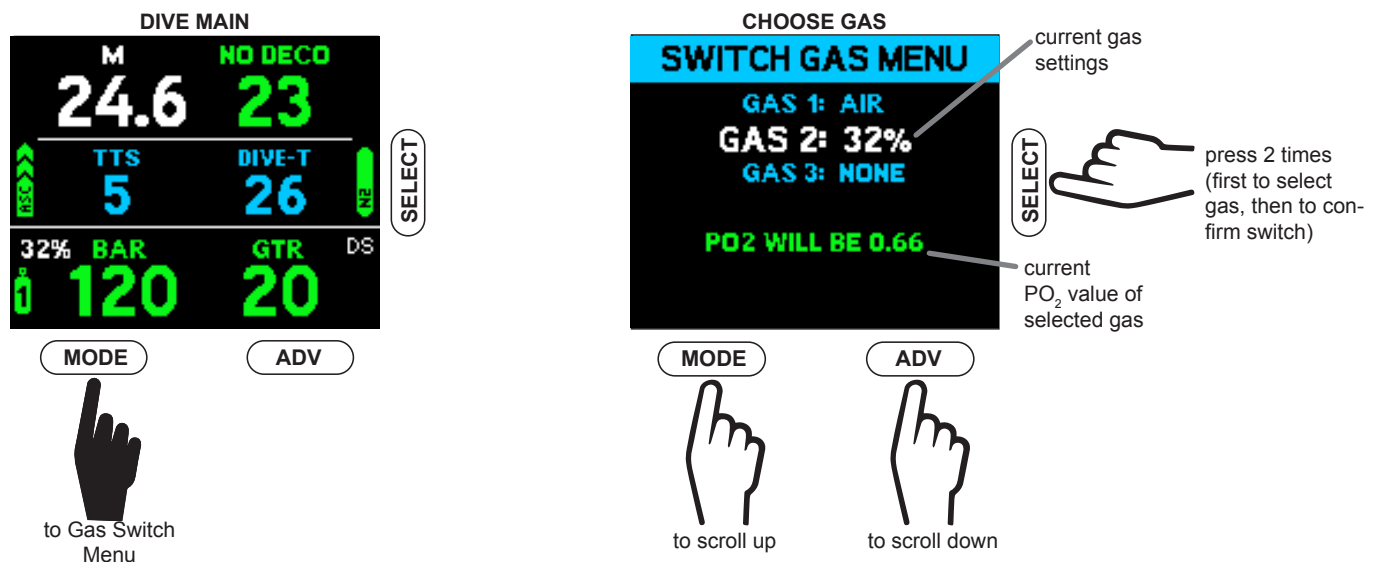
SEARCHING

📖 NOTE: If no TMT is active the Searching screen will be bypassed.

If the TMT is not reporting, a message will be displayed for 10 seconds before switching gas. Afterwards, the i750TC will calculate for the gas change but the Dive Main screen will show a lost transmitter signal.

If the current PO$_2$ value is greater than 1.6, then a warning not to switch will display. The i750TC will maintain the current gas without switching. The diver may overide the i750TC and force the gas switch by pressing the SE-LECT button during the DO NOT SWITCH TO message.

⚠ **WARNING: Switching to gases with a PO$_2$ above 1.6 has a high risk of oxygen poisoning, convulsions, and drowning. Doing so should always be avoided. It is intended as a last resort option because of the likelihood of injury or drowning. Always dive within your training, experience, and skill level.**

COMPLICATIONS

The preceding information has described standard dive operations. Your new i750TC is also designed to help you to the surface in less than ideal situations. The following is a description of these situations. Take some time to familiarize yourself with these operations before diving your i750TC.

DECOMPRESSION
Decompression (deco) mode activates when theoretical No Decompression time and depth limits are exceeded. Upon entry into deco, the audible alarm will sound. The full N2 bar Graph and Up Arrow icon will flash until the audible is silenced.

• Once within 3 m (10 ft) below the required Stop Depth (stop zone), the Full Stop icon (both Arrows with Stop Bar) will be displayed solid.

To fulfill your decompression obligation, you should make a safe controlled ascent to a depth slightly deeper than, or equal to, the required stop depth indicated and decompress for the stop time indicated. The amount of decompression credit time that you receive is dependent on Depth, with slightly less credit given the deeper you are below the Stop Depth indicated. You should stay slightly deeper than the required Stop Depth indicated until the next shallower Stop Depth appears. Then you can slowly ascend to that indicated Stop Depth but not shallower.

DECOMPRESSION ENTRY
Upon entry into decompression (deco) the audible alarm will sound until the audible is silenced. The message DECO ENTRY, up arrow, and full N2 Bar Graph icons will flash. Additionally, the stop depth and stop time values will be displayed. TTS (Time To Surface) and DIVE-T (Dive-Time) moveto the Alt 1 screen.

stop depth — up arrow — remaining stop time (min)
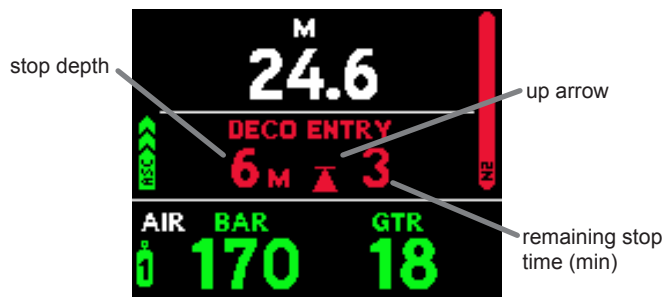
DECOMPRESSION STOP MAIN
Decompression (deco) Stop Main will display upon ascending to within 3 m (10 ft) below the Deco Stop depth. The message DECO STOP, the full stop graphic (opposed arrows with stop bar) will be displayed solid. While Deco Stop Main is displayed, you may access up to 2 ALT displays by pressing the ADV button to cycle through them. They are similar to the No Deco Main, Dive ALT 1, and Dive ALT 2 displays, respectively.

full stop graphic — stop depth — remaining stop time (min)
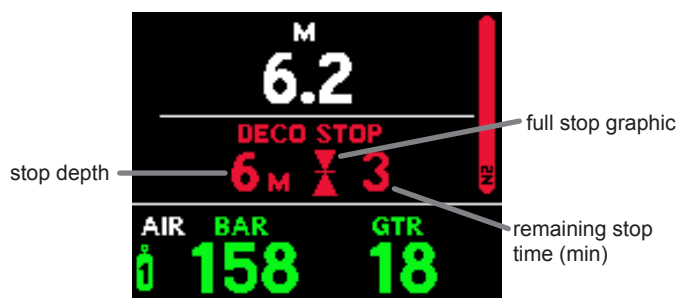
CONDITIONAL VIOLATION (CV)

Upon ascent above the required Decompression (deco) Stop depth, operation will enter Conditional Violation during which time no off gassing credit will be given. The Audible alarm will sound. Additionally, the full N2 Bar Graph, down arrows, and DOWN TO STOP message will flash until the audible alarm is silenced, then the N2 Bar Graph will be solid.

- The down arrows continues to flash until descending below the required Stop Depth (within stop zone), then the full stop graphic (opposed arrows with stop bar) will be on solid.
- If you descend deeper than the required Decompression Stop before 5 minutes elapse, Decompression operation will continue with no off gassing credit given for time above the Stop. Instead, for each minute above the Stop 1½ minutes of penalty time will be added to the required Stop Time.
- The added penalty (decompression) time will have to be worked off before obtaining off gassing credit.
- Once the penalty time is worked off, and off gassing credit begins, required Decompression Stop Depths and Time will decrease toward zero. The N2 Bar Graph will recede into the No Decompression zone, and operation will revert to No Decompression mode.

missed stop depth

N2 Bar Graph flashing

stop time (min)

message and arrows flashing
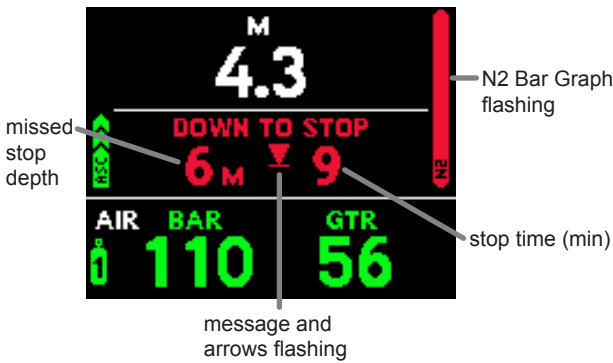
DELAYED VIOLATION 1 (DV 1)

If you remain shallower than a Deco Stop Depth for more than 5 minutes, operation will enter DV1* which is a continuation of CV with penalty time still being added. Again, the audible alarm will sound and the full N2 Bar Graph will flash until it is silenced. ALT screens are accessed and appear similar to Deco ALT screens.

The difference is that 5 minutes after surfacing from the dive, operation will now enter Violation Gauge Mode.

- Down arrow and DOWN TO STOP message continues to flash until descending below the required Stop Depth, then the full stop graphic will be on solid.
- If the DV1 status is ignored, the i750TC will enter DV1 Surface mode for 5 minutes upon surfacing from the dive. Down arrows and Deco Stop depth/time will alternate with VIOLATION. After 5 minutes on the surface in DV1 mode, the unit will enter VGM (Violation Gauge Mode).

DV1 DIVE MAIN

missed stop depth

time required at missed stop (min)

DV1 < 5 MIN ON SURFACE

alternating with violation
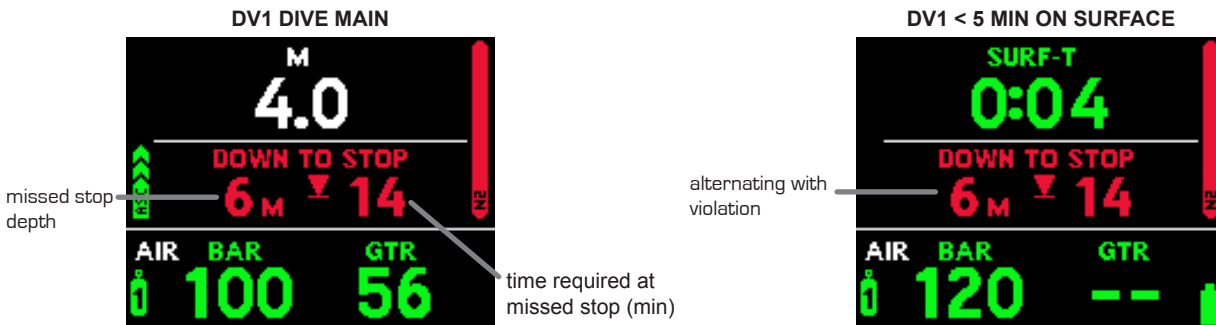
DELAYED VIOLATION 2 (DV 2)

If the calculated Decompression obligation requires a Stop Depth between 18 m (60 ft) and 21 m (70 ft), operation will enter DV2. The audible alarm will sound. Additionally, the full N2 Bar Graph will flash until the audible is silenced.

• Up arrows flash if 3 m (10 ft) deeper than the required Stop Depth.
• Once within 3m (10 ft) of and below the required Stop Depth, the DECO STOP message and full stop graphic (opposing arrows with stop bar) will be displayed solid.
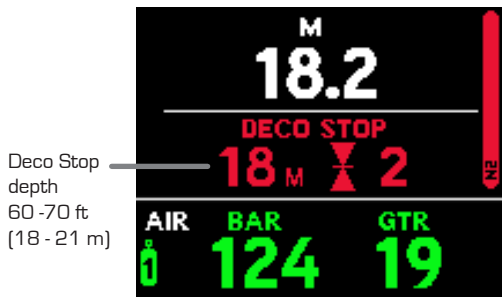
Deco Stop depth 60 - 70 ft (18 - 21 m)

DELAYED VIOLATION 3 (DV 3)

If you descend deeper than the maximum functional depth*, the audible alarm will sound. Also, the up arrows, and GO UP TOO DEEP message will flash. Only dashes will display for Current Depth signifying that you are too deep.

*The maximum functional depth (Dive/Gauge/Free = 100 m / 330 ft) is the depth at which the i750TC can properly perform calculations or provide accurate display information.

Upon ascending above the maximum functional depth, current depth will be restored. However, the log for that dive will display dashes for max depth.

flashing
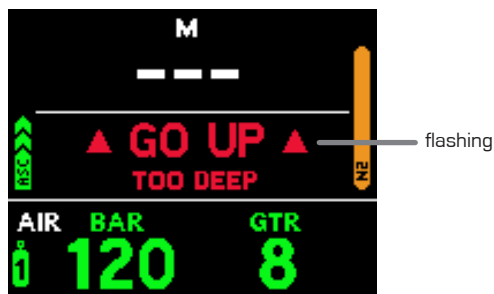
VIOLATION GAUGE MODE (VGM) DURING A DIVE

During Dive mode dives, operation will enter VGM when Decompression requires a Stop Depth greater than 21 m (70 ft). It will also enter VGM if Deco is activated during a dive in Free mode, described later. Operation would then continue in VGM during the remainder of that dive and for 24 hours after surfacing. VGM turns the i750TC into a digital instrument without any decompression or oxygen related calculations or displays. Upon activation of VGM, the audible alarm will sound. The message GO UP VIOLATION with up arrows will flash. After the audible alarm becomes silent (10 seconds), the NO DECO (No Decompression) and N2 Bar Graph will not display for the rest of the dive. GTR (Gas Time Remaining) will be moved to an ALT screen.

flashing

VIOLATION GAUGE MODE (VGM) ON THE SURFACE

The message VIOLATION is displayed until 24 hours elapse with no dives. During that 24 hours, VGM lockout does not allow access to the Set Gas, Plan, Desat, and Free mode features/screens. The Compass function will be allowed.

• The Fly countdown timer provides the time remaining before normal operation can resume with full features and functions.

• In the event that a dive is made during the 24 hour lockout period, a full 24 hour surface interval must then be served before all functions are restored.
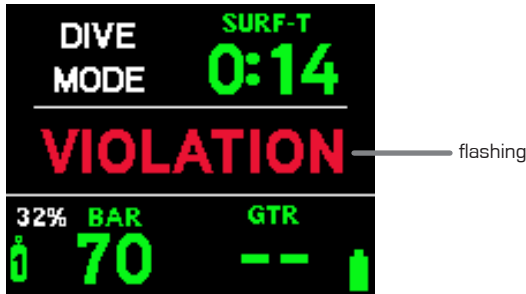
flashing

HIGH PO$_2$

Warning >> at Alarm Set Point value minus .20
Alarm >> at Set Point value, except in Deco then at >1.60 only

Warning

When PO$_2$ (partial pressure of oxygen) increases to the Warning level; the audible alarm sounds and the PO$_2$ value will flash (in place of TTS and DIVE-T) until the audible alarm is silenced.
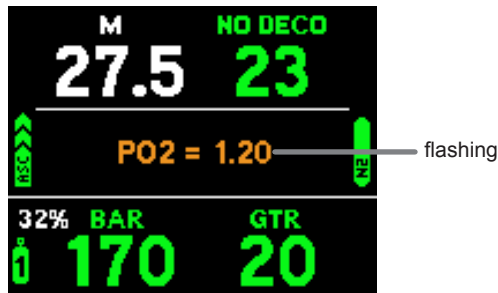
flashing

Alarm

If PO$_2$ continues to increase and reaches the alarm set point, the audible alarm sounds again. The PO$_2$ value, GO UP message, and up arrows will flash (in place of TTS and DIVE-T) continually until PO$_2$ decreases below the alarm set point. During this time the TTS and DIVE-T will be available on the Alt screen.

flashing
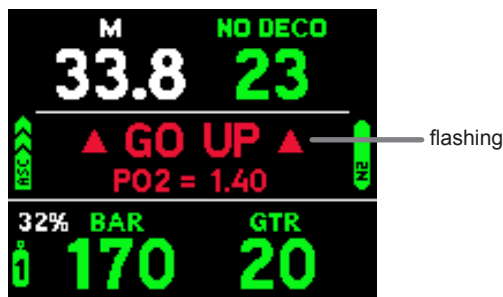
PO$_2$ During Decompression

The PO$_2$ alarm setting does not apply when in Decompression. If PO$_2$ exceeds 1.60 while at a Decompression Stop, the PO$_2$ value (> 1.60) with icon will flash during the audible alarm. After the audible alarm is silenced, the gas pressure and PO$_2$ value will alternate until the PO$_2$ value decreases below 1.60.

alternating with deco stop/time
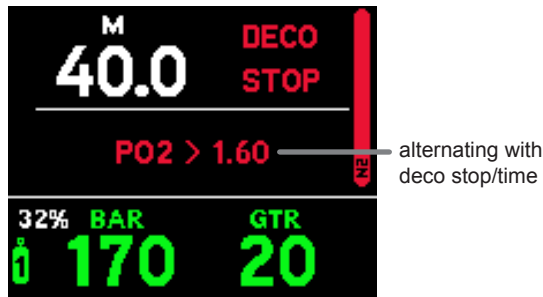
HIGH O2 SAT (OXYGEN SATURATION)

Warning >> at 80 to 99% (240 OTU)
Alarm >> at 100% (300 OTU)

Warning

When O$_2$ reaches the Warning Level, the audible alarm sounds and the O2 SAT (saturation) value will flash in place of TTS and DIVE-T. They will be restored when the audible alarm is silenced.
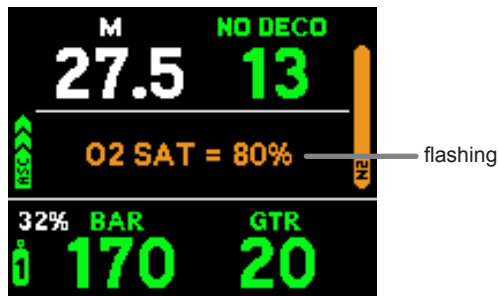
flashing

Alarm

If O2 SAT reaches the Alarm level, the audible alarm sounds. The UP message, up arrows, and the O2 SAT value will flash in place of TTS and DIVE-T. During this time the TTS and DIVE-T will be available on the Alt screen.
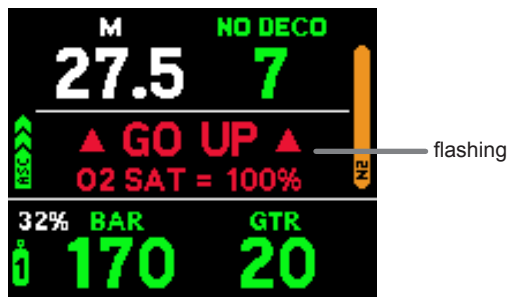
flashing

Warning During Decompression

When O2 SAT reaches the Warning Level, the audible alarm sounds and the O2 SAT value will flash in the middle of the screen. When the audible alarm is silenced, the standard Deco Dive screen is restored.
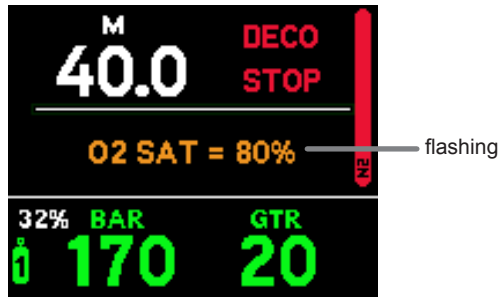
flashing

Alarm During Deco

If O2 SAT reaches the Alarm level, the audible alarm sounds and the O2 SAT value will flash in the middle of the screen. When the audible alarm is silenced, the message O2 SAT 100% will display solid until on the surface.

flashing
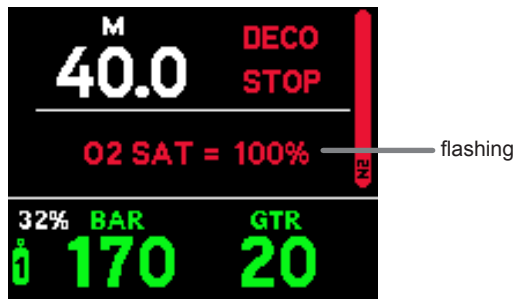
Alarm On Surface

• If O2 SAT is 100% upon surfacing while in No Decompression, O2 SAT = 100% will flash until the O2 SAT value decreases below 100%.

• If O2 SAT becomes less than100% during the first 5 min on the surface, the Delayed Violation 1 Main screen will be displayed.

• If O2 SAT is still 100% after 5 min, operation is to revert to Violation Gauge Mode for 24 hours.

flashing
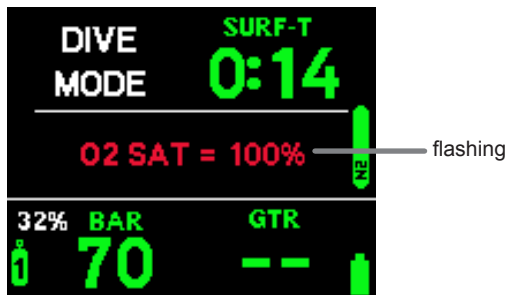
GAUGE MODE

ON THE SURFACE BEFORE A DIVE

Gauge Surface Main is nearly identical to Dive Mode. Unlike Dive Mode, there will be no N2 tissue saturation or gas mix values displayed.

GAUGE SURF MAIN
(post dive)

GAUGE MODE   SURF-T **23:34**
DIVE **3**   DIVE-T **– –**
dive #
BAR **170**   GTR **– –**
TMT #

Surface Time hr:min

gas pressure or SPG (no TMT)

battery status

GAUGE MODE   SURF-T **23:34**
DIVE **3**   DIVE-T **– –**
SPG

SELECT — to access Compass Mode

MODE — to access Home Menu

ADV — to access Gauge Menu

ADV — to access Adjust Brightness* screen

ADV

ALT 1
ALT 2
ALT 3
back to Main

Adjust Brightness functions the same as in the Home Menu, see p.12

GAUGE SURF MAIN MENU

To change transmitter, alarm or other settings you must navigate through the Gauge Menu. Enter the menu by pressing the MODE button. Press the SELECT button to choose options from the Gauge Menu.
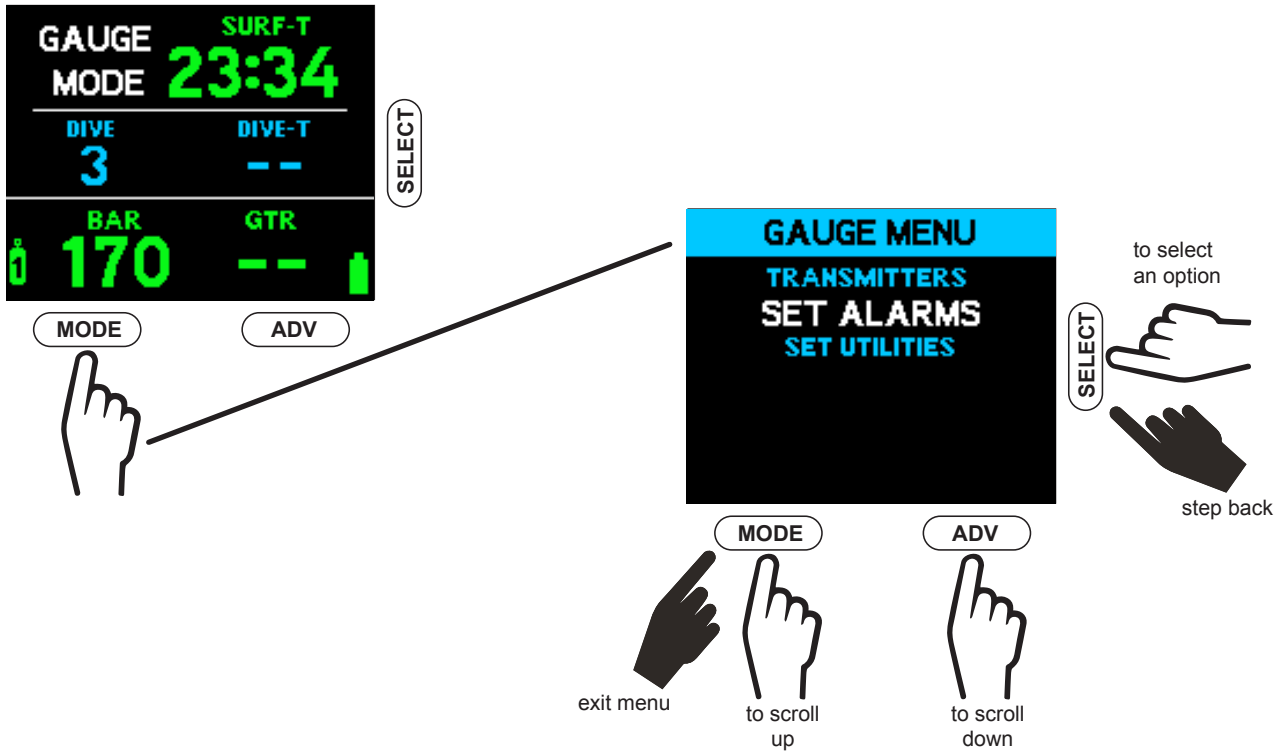
📘 **NOTE: Gauge Surface ALT screens and Menu options are similar to those described previously for Dive Mode. See the Dive Surface Mode chapter for further details.**

INITIATING A DIVE

With the i750TC in Gauge Mode, a dive will commence upon descending to 1.5 m (5 ft) for longer than 5 seconds. Below is a diagram to help you navigate Gauge Dive Mode functions. The dive will end and revert to Surface Mode upon ascent to 0.9 m (3 ft) of depth for at least 1 second.

SELECT — to Compass Mode

start/stop run timer

MODE + ADV — reset run timer

MODE — to Transmitter Switch Menu

to record data earmark for download

ADV — to access Adjust Brightness* screen

ALT 1
back to Main

ADV

*Adjust Brightness functions the same as in the Home Menu, see p.12
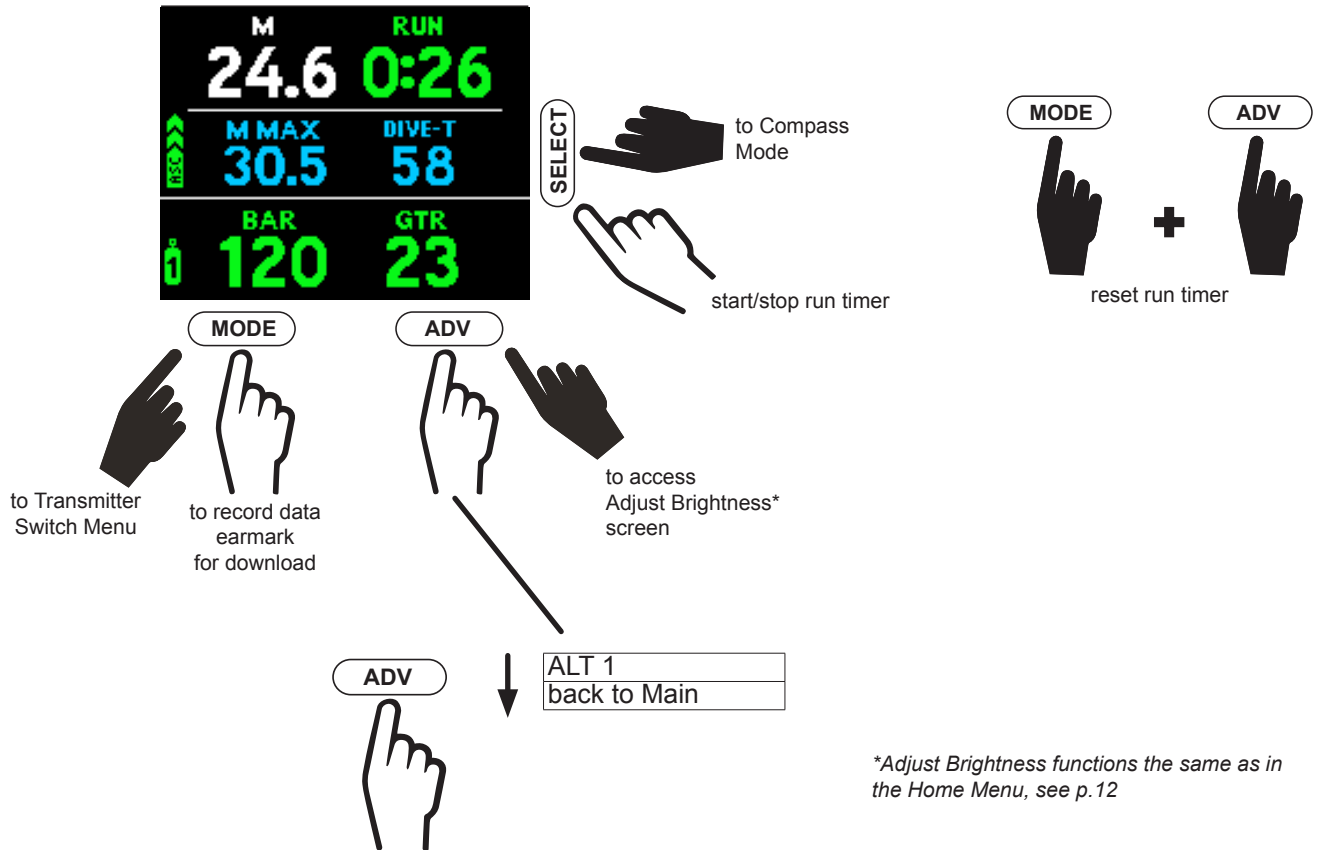
GAUGE DIVE MAIN

The Gauge Dive Main provides basic information including ascent rate, depth, run time, max depth, dive time, gas pressure, and gas time remaining.

depth

Run Timer

max depth

ASC bar graph

elapsed dive time 0 - 999 min

TMT #

gas pressure or SPG (no TMT)

Gas Time Remaining 0 - 99 min, all times greater than 99 display as 99
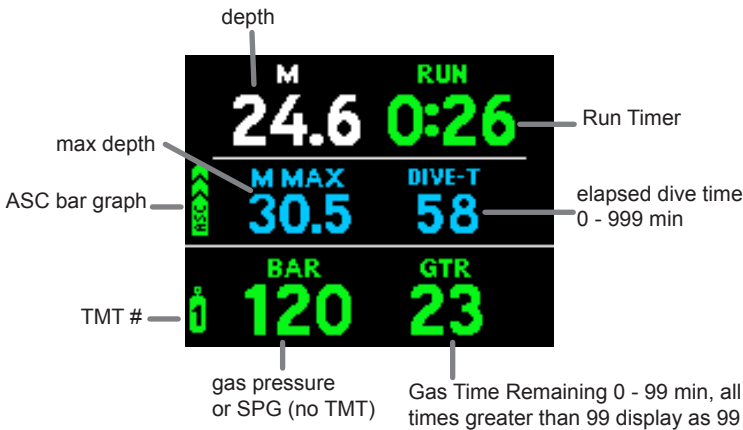
GAUGE DIVE ALT

This screen simply tells you the max current time of day and ambient temperature.
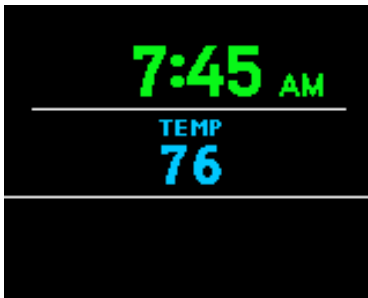
RUN TIMER

The Run Timer is started and stopped by pressing the Select button. It can be reset by holding Mode and Advance buttons together.
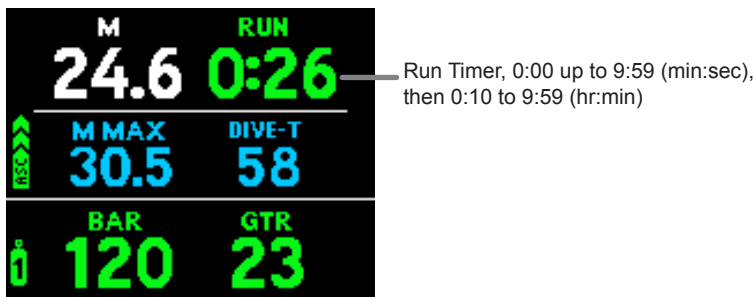
Run Timer, 0:00 up to 9:59 (min:sec),
then 0:10 to 9:59 (hr:min)

DELAYED VIOLATION 3 (DV3)

If you descend deeper than the maximum functional depth*, the audible alarm will sound. At the same time, the GO UP TOO DEEP message with up arrows will flash and depth will only indicate dashes signifying that you are too deep. The max depth on the Alt screen will also be represented by dashes.

*The maximum functional depth (Dive/Gauge/Free = 100 m/330 ft330) is the depth at which the i750TC can properly perform calculations or provide accurate display information.

Upon ascending above the maximum functional depth, current depth will be restored, however, max depth will continue to be displayed as dashes for the remainder of that dive. The Log for that dive will also display dashes for max depth.

flashing

FREE MODE

52

FREE DIVE MODE DETAILS

- Although breathing apparatus is not utilized for free dive activities, nitrogen tissue loading remains a factor. Nitrogen loading is calculated based upon a fixed FO_2 of Air.
- Since a user has the option of alternating between SCUBA and free dive activities within a 24 hour period, nitrogen calculations and the displayed value of No Decompression Dive Time Remaining are carried over from one operating mode to the other, which permits the user to maintain awareness of nitrogen absorption and off-gassing status.
- The mathematical models currently used in the i750TC are based on no decompression/decompression multi-level repetitive dive schedules.
- These algorithms do not take into account the physiological changes associated with the high pressures that competitive type free diving can expose a diver to.

⚠ WARNINGS:

- **Ensure that you know which operating mode is selected (DIVE, GAUGE, or FREE) prior to commencing any dive.**
- **Conducting Free dives within a 24 hour period after conducting SCUBA dives, combined with the effects of multiple rapid free dive ascents, increases your risk of decompression sickness. Such activities may result in accelerated entry into decompression which could cause serious injury or death.**
- **Combining competitive type free dive activities that involve multiple descents/ascents with activities utilizing SCUBA during the same 24 hour period is not recommended. Presently, there is no data relating to such activities.**
- **It is highly recommended that anyone planning to become involved in competitive type free dive activities obtain proper instruction and training from a recognized free diving trainer. It is imperative that the physiological affects be understood and the diver is physically prepared.**

ON THE SURFACE BEFORE A DIVE

The Free Mode Surface screen is similar to the Dive Mode screen. If the CDT (Countdown Timer) is on, it is displayed in the lower left of the screen. Dive-T (Dive Time) and M Max (FT Max) for the previous dive is displayed during the first minute after surfacing. Otherwise, dashes are displayed for their values.

FREE SURF MAIN
(post dive)

dive #

Surface Time min:sec up to 59:59, then hr:min

Dive Time min:sec

battery status

CDT (Countdown Timer) min:sec, blank if off

Max Depth

FREE SURF MAIN
(basic function)

SELECT — to Compass Mode

MODE — to access Home Menu / to access Free Menu

ADV — to access Adjust Brightness* screen

ADV

ALT 1
ALT 2
back to Main

*Adjust Brightness functions the same as in the Home Menu, see p.12

FREE SURF MAIN
(using Countdown Timer)

SELECT — to start/stop CDT

MODE + ADV — reset CDT
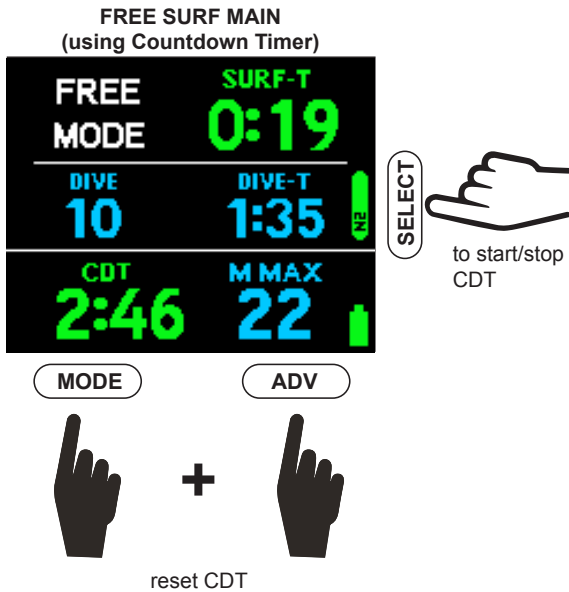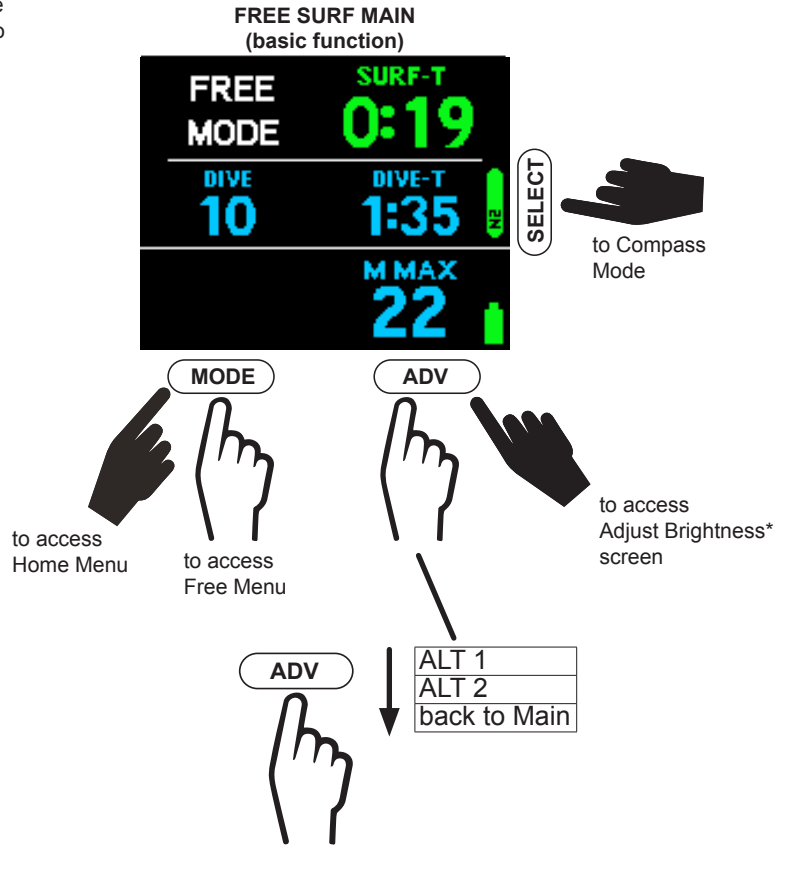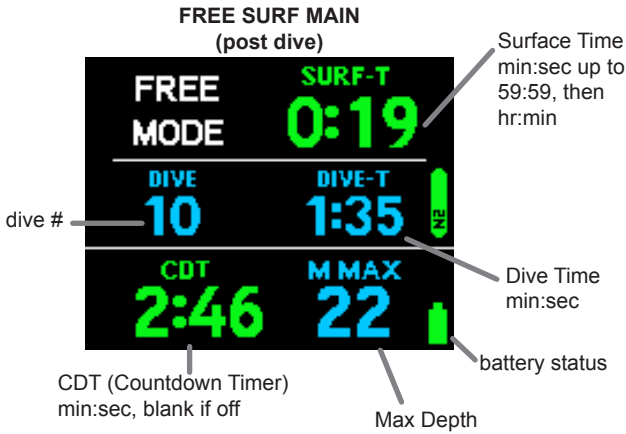
📧 **NOTE: The Free ALT screens are similar to the Dive Surface ALT screens described previously. See the Dive Surface Mode chapter for further details.**

FREE SURF MAIN MENU

To view to adjust i750TC Free Dive settings you must navigate through the Surf Main Menu. Enter the menu by pressing the MODE button. Main Menu screens and options will be discussed in the order they appear in the menu.
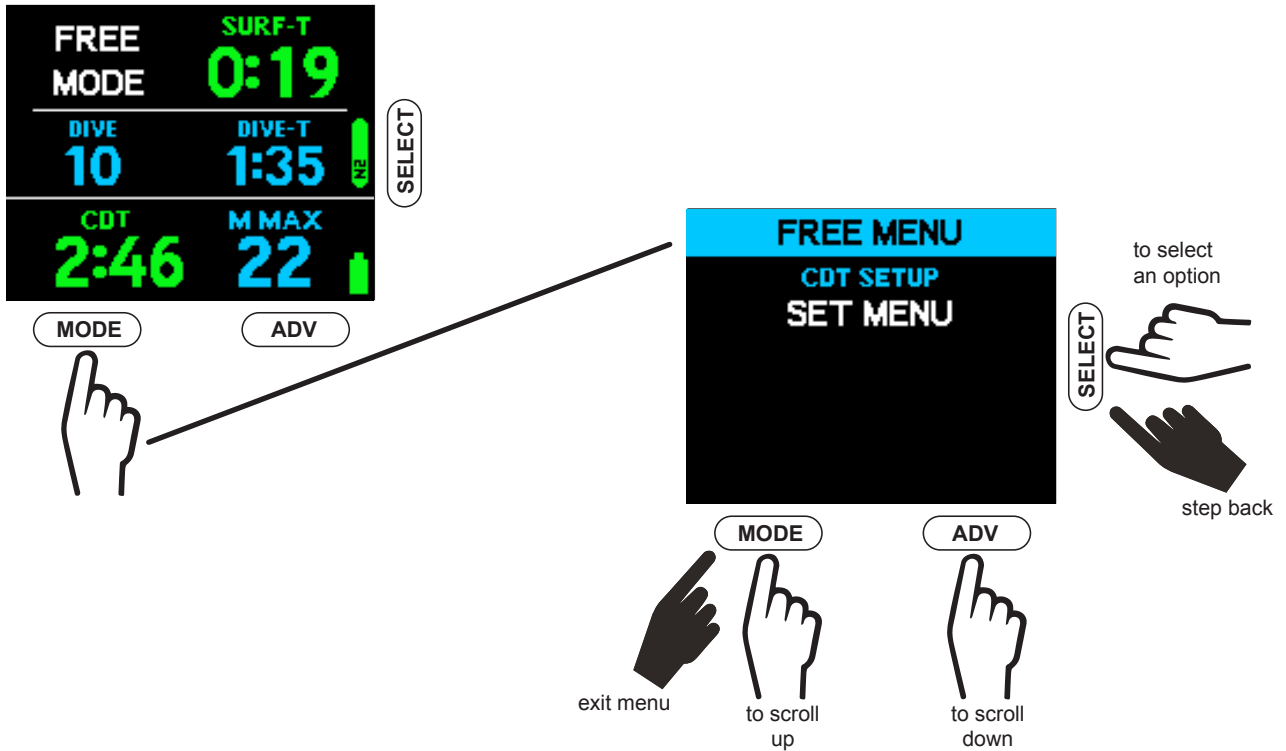
CDT (COUNTDOWN TIMER) SETUP

This screen allows you to set the CDT time from 0:01 - 9:59 (min:sec).

📘 **NOTE: Setting the CDT does not start the countdown. While on the Main screen, the SELECT button is used to start and stop the selected timer.**

FREE DIVE MAIN
(CDT Triggered)
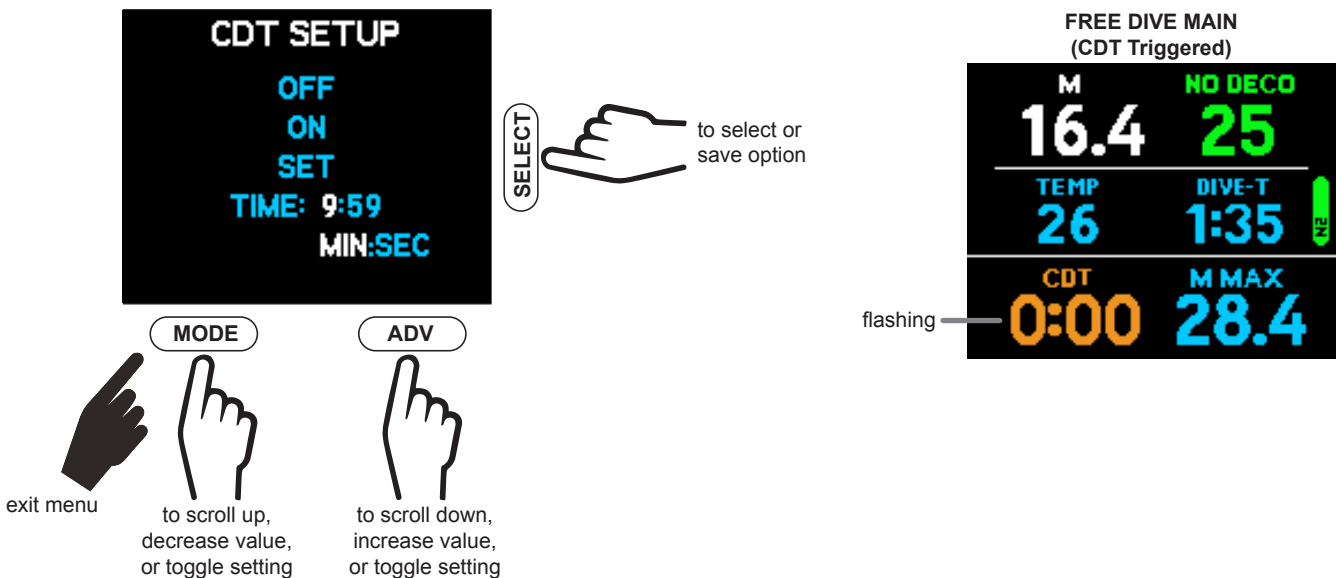
SET MENU

Within the Set Menu you can customize the following operational functions.
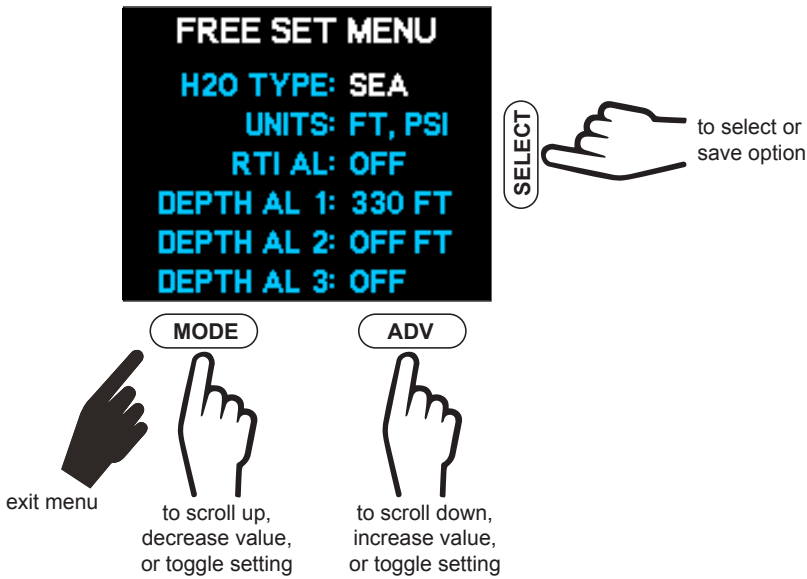
1. H2O TYPE (Water Type)

The H2O Type feature allows you to set SALT or FRESH water environment for accurate depth calculations.

2. UNITS

The Units feature allows you to select whether Metric (M, BAR) or Imperial (FT, PSI) units of measure will be displayed.

3. RTI AL (Repeating Time Interval Alarm)

The RTI Alarm allows you to set an audible alarm to go off repeatedly every 30 seconds during a dive.

**FREE DIVE MAIN
(RTI Triggered)**

flashing
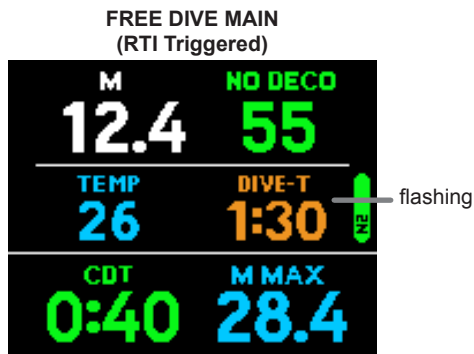
4. DEPTH AL (Alarm)

There are 3 Free Depth Alarms that can be set at progressively deeper depths, in intervals of 1 m (10 ft).

NOTE: Each successive Depth Alarm can only be set deeper than the Depth Alarm that precedes it. For example: If Depth Alarm 1 is set for 100 ft then Depth Alarm 2 settings start at 110 ft.

FREE DIVE MAIN
(Depth Alarm Triggered)

D1 (2 or 3), flashing

flashing
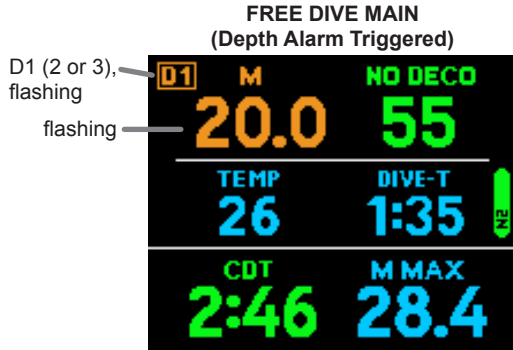
INITIATING A DIVE

With the i750TC in Free Mode, a dive will commence upon descending to 1.5 m (5 ft) for longer than 5 seconds. Below is a diagram to help you navigate Free Dive Mode functions. The dive will end and revert to Surface Mode upon ascent to 0.9 m (3 ft) of depth for at least 1 second.

to Compass Mode

start/stop Countdown Timer

reset run timer

to access Adjust Brightness* screen

ALT 1
back to Main

Adjust Brightness functions the same as in the Home Menu, see p.12
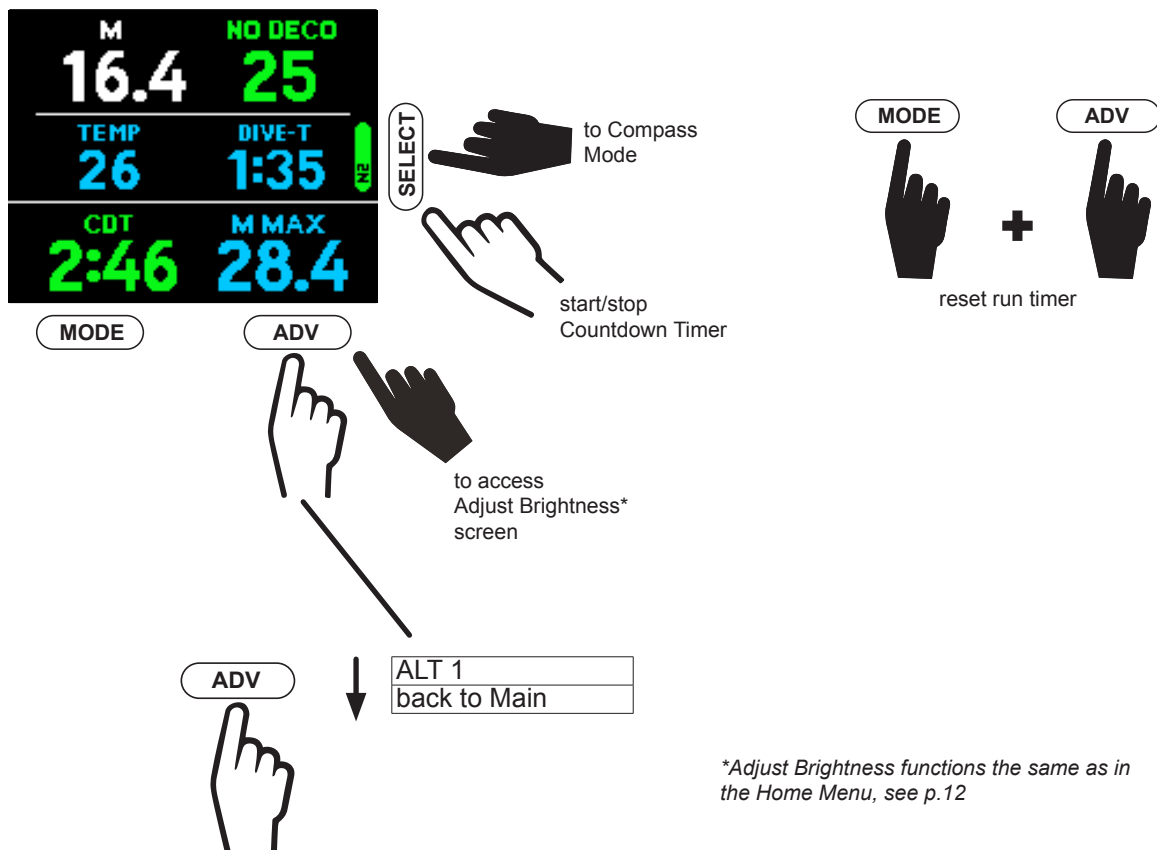
FREE DIVE MAIN

The Free Dive Main provides basic information including depth, no decompression time, dive time, temperature and nitrogen loading during the dive.

depth

temperature

CDT (Countdown Timer)
min:sec, blank if off

No Decompression Time Remaining
0 - 99 min, all times greater than 99 display as 99

elapsed dive time
min:sec

N2 bar graph

max depth
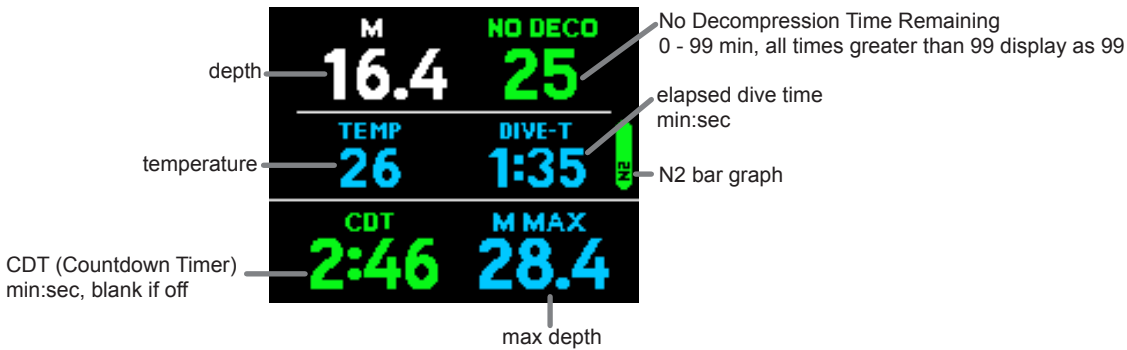
FREE DIVE ALT

This screen displays the current time of day.
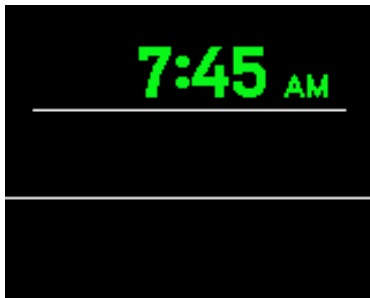
HIGH NITROGEN ALARM

If nitrogen increase to the Deco (decompression) level, the audible alarm will sound. Temperature. NO DECO (no decompression) , and Dive-T (dive time)values are removed. They are replaced by the message GO UP VIOLATION with Up Arrows flashing until on the surface. At this time the N2 Bar Graph will also flash. When the audible alarm is silenced, the N2 Bar Graph is removed.

On the surface, the graphic GO UP and Up Arrows are removed, the graphic VIOLATION is to flash (red) for 24 hours with Violation Gauge Mode activated to prevent further dives.

COMPASS MODE

COMPASS DISPLAY ICONS
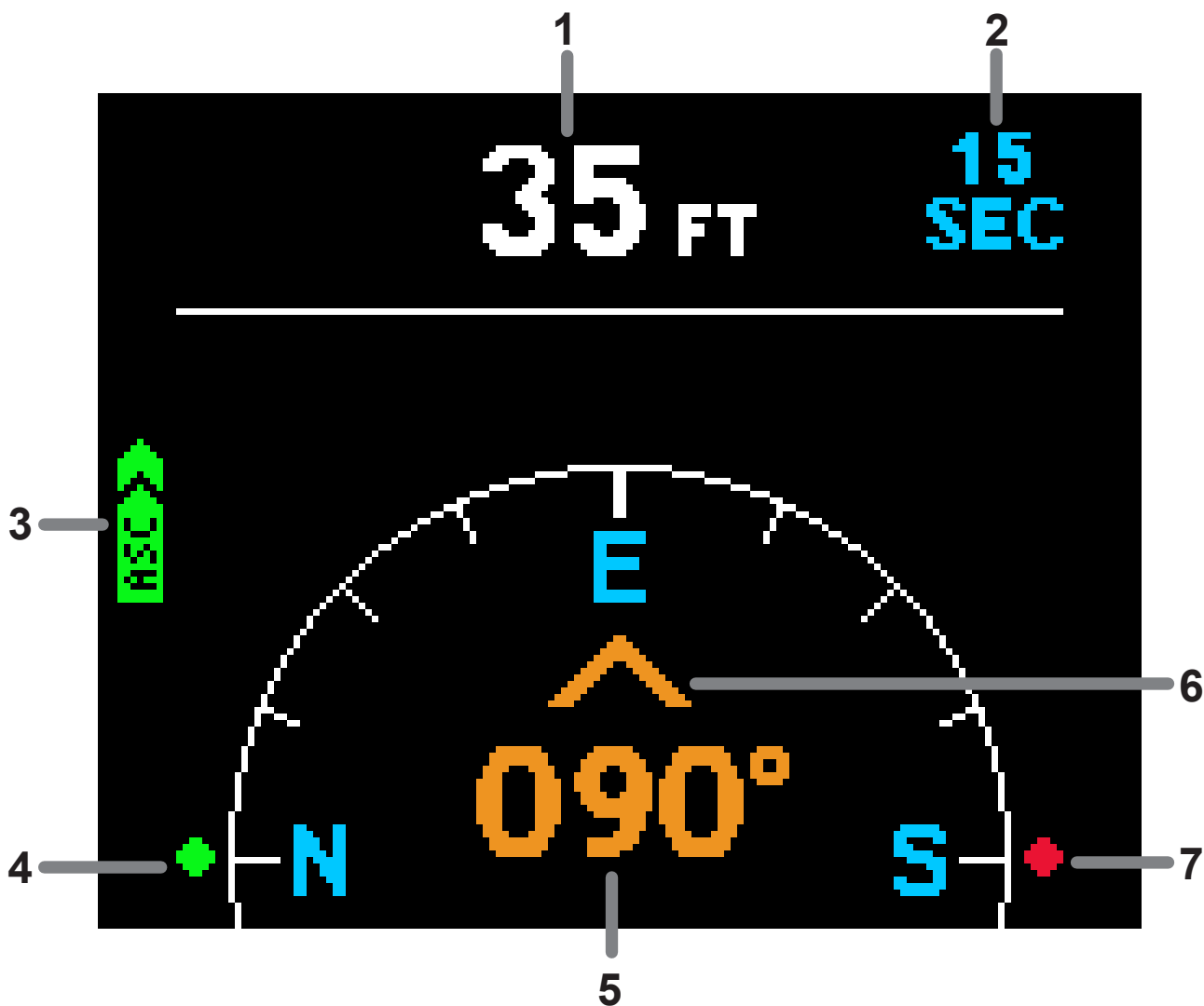
1	DEPTH OR SURFACE TIME
2	TIME OUT COUNTDOWN
3	ASCENT RATE
4	HEADING MARKER
5	HEADING DEGREES
6	DIVER'S DIRECTION (LUBBER LINE)
7	RECIPRICAL HEADING MARKER

OVERVIEW

The i750TC is equipped with an advanced 3D digital compass. Compass Mode can be activated while in Dive, Gauge, or Free operation modes by holding the SELECT button for at least 2 seconds.

• The i750TC reverts back to the previous operation mode after 1 minute unless the Compass Mode is reset by pressing any of the buttons. See the Timeout section at the end of this chapter for further details.

• When the i750TC is held almost vertical or completely upside down, the heading and cardinal points are temporarily removed from the display until the i750TC is again level.

• When no heading is set, the heading degrees and diver's direction (lubber line) remain green.

• Once a heading is set, the heading degrees and diver's direction (lubber line) are green when on heading, red when on reciprical heading, and amber when off heading.

NOTE: Similar to an analog compass, magnetic and ferrous metals can cause erratic and erroneous readings.

⚠ **WARNING: You must become thoroughly familiar with setup and operation of the i750TC Digital Compass before using it as your primary device for navigation. Failure to do so could result in serious errors relating to activities involving navigation.**

COMPASS MAIN
(while on surface)

SELECT — to Surface Main

MODE — to Compass Main Menu

ADV — to access Adjust Brightness* screen

Set Heading

COMPASS MAIN
(during a dive)

SELECT — to Dive Main

MODE — to apply Earmark (Dive Mode only)

ADV — to access Adjust Brightness* screen

Set Heading
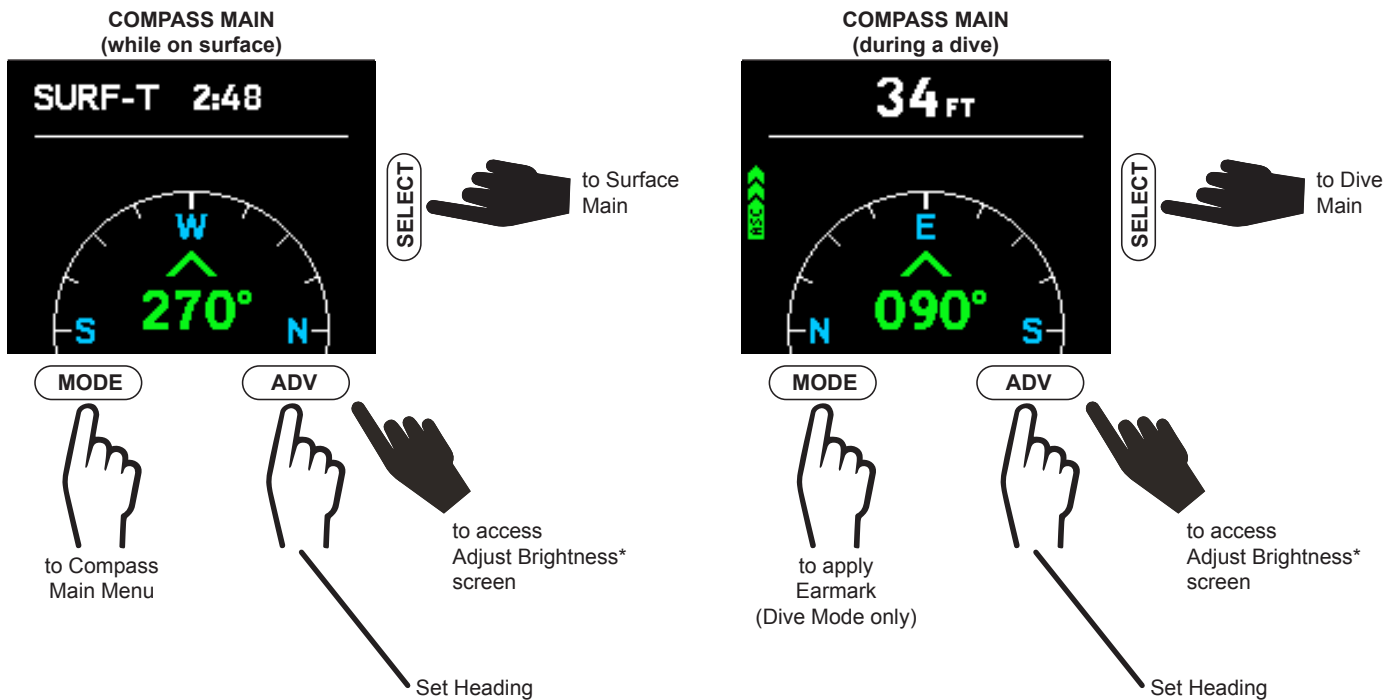
Adjust Brightness functions the same as in the Home Menu, see p.12

COMPASS MAIN MENU

The Main menu allows you to adjust compass accuracy. The different selections will be described in the order they appear in the menu.

📶 **NOTE: The Main Menu can only be accessed while on the surface. During a dive the i750TC will use the last saved settings when accessing the Compass Mode.**
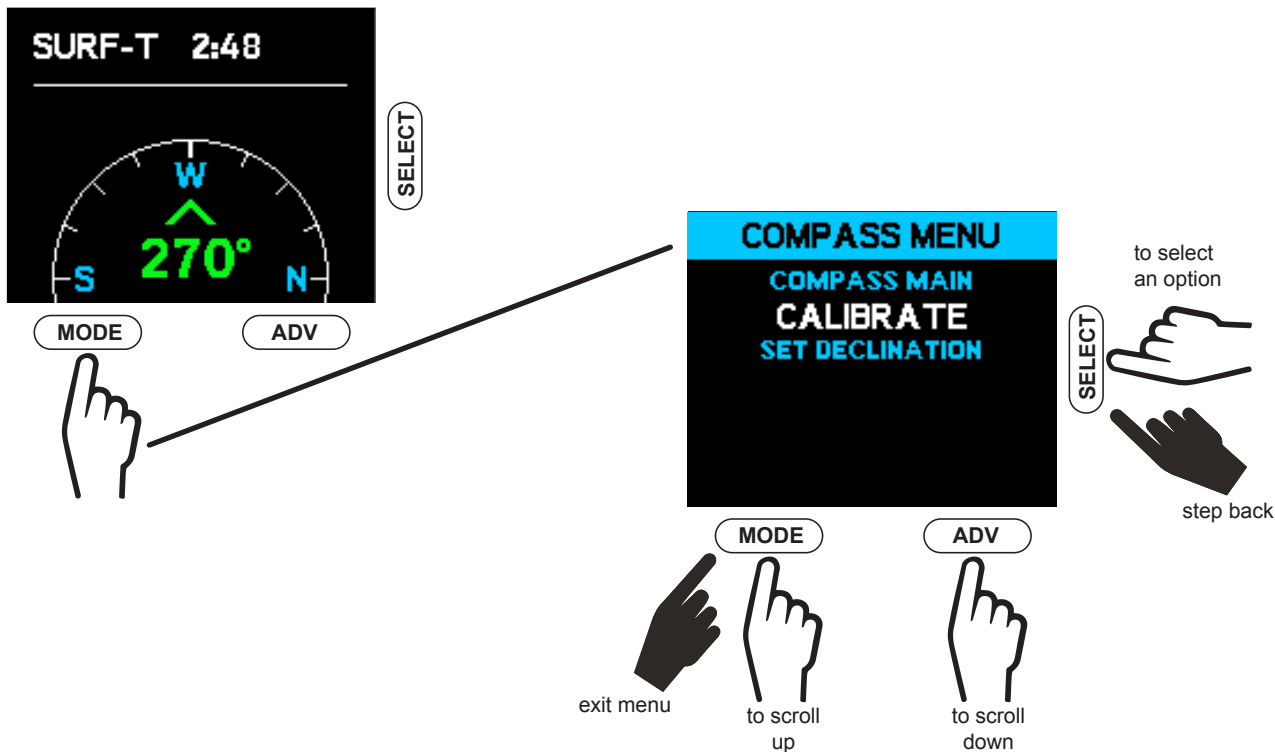
COMPASS MAIN

This selection returns you to the Compass Main screen.

CALIBRATE

You may need to calibrate the compass from time to time to compensate for any magnetic interference (new batteries, new dive location, or other surrounding changes). Sometimes the i750TC will prompt for a calibration, after a battery change for example. The Calibration selection in the Compass Main Menu allows you to manually initiate a calibration.

The i750TC will guide you through the following sequential steps of calibration.
1. Turn the unit face down until it beeps.

2. Turn the unit face up until it beeps.

CALIBRATE

**FACE UP
UNTIL BEEP**

3. Rotate the unit continually until it beeps.

CALIBRATE

**ROTATE
360°
KEEP LEVEL**
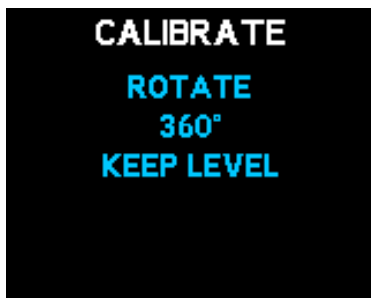
CALIBRATE

4. The message READY PASSED CALIBRATION or FAILED TO CALIBRATE TRY AGAIN will then appear.

CALIBRATE

**READY
PASSED
CALIBRATION**

CALIBRATE

**FAILED
TO CALIBRATE
TRY AGAIN**
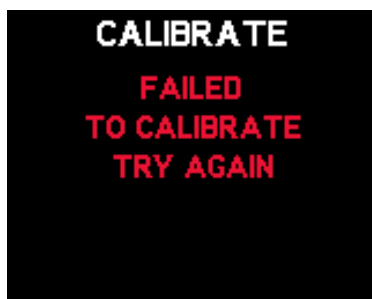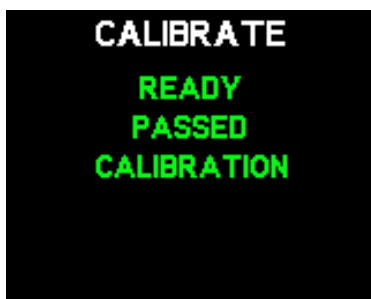
SET DECLINATION

Magnetic declination or variation measures the angle between the Earth's magnetic north and true north. The declination value for any region can be found on current geographical charts. By correcting for declination, you can achieve a more accurate compass reading.

📘 **NOTE: Magnetic north changes over time; so use only current geographical charts to obtain the declination value for any geographical region.**

SET DECLINATION MENU

SET DECLINATION
(showing Declination East)

SET DECLINATION
OFF
EAST   00°
WEST   00°

to select an option

SELECT

step back

MODE   ADV

to scroll up   to scroll down

SET DECLINATION
OFF
EAST + 14°
WEST   00°

to select an option

SELECT

step back

MODE   ADV

to scroll up   to scroll down
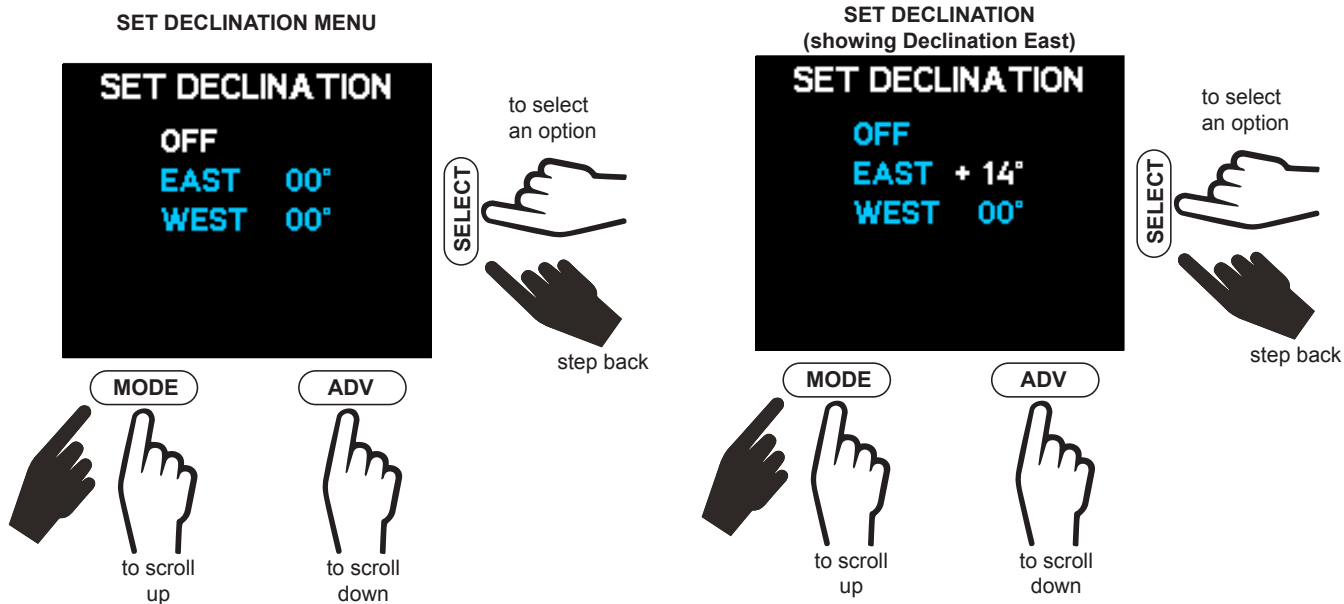
SET HEADING

Pressing the Advance button while on the Compass Main screen will simultaneously set a heading and reciprical heading. The message HEADING SET is confirmation of your heading being set. The heading is then represented by a green marker and the reciprical heading is represented by a red marker. The heading can be reset at anytime by pressing the Advance button again.

SET HEADING

HEADING IS SET

29.5 M

N ∧ E
045°

SELECT

MODE   ADV

set heading

HEADING SET

heading marker

N ∧ E
045°

ON HEADING
(heading set to 045°)

OFF HEADING
(heading set to 045°)

ON RECIPRICAL HEADING
(heading set to 270°)

heading marker

reciprical heading marker
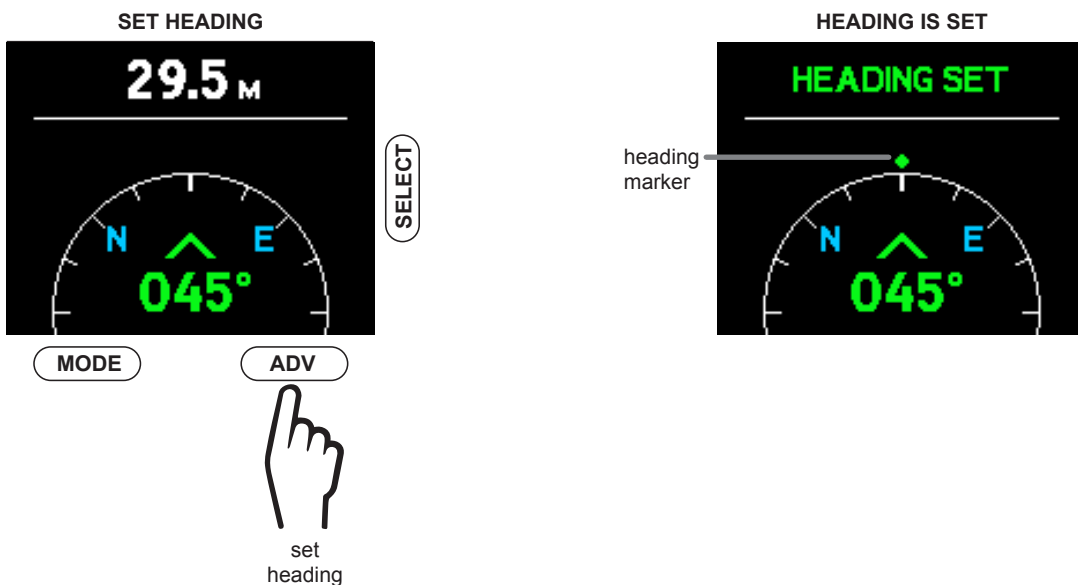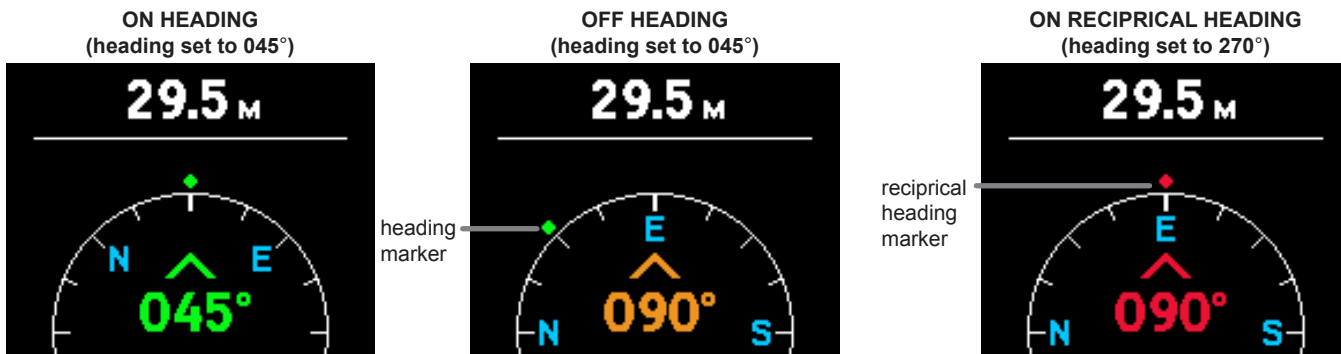
TIMEOUT

The Compass Mode will timeout after 1 minute. There is a 15 second countdown timer displayed before switching back to the previous operation mode. You may reset the timout at any time by pressing the Select button on the i750TC.
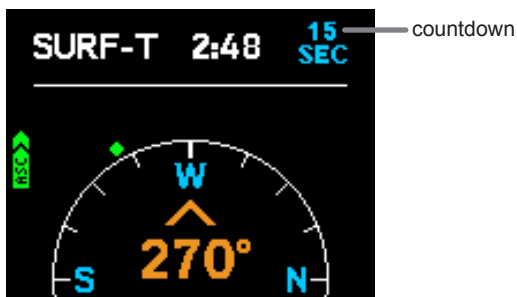
countdown

EARMARK

By pressing the Mode button during a dive you can manually record a data snapshot which can later be accessed using the i750TC's download feature. The message "EARMARK APPLIED" will be displayed for 3 seconds as confirmation after an earmark is made.

ALARMS

When most alarms are triggered, operation in Compass Mode will be terminated and the Dive Main screen will be displayed describing the alarm condition. Compass Mode can then be reentered by holding SELECT for 2 sec.

The following alarms are those indicated without terminatining Compass Mode.

ASC (Ascent) Alarm

When the ascent is faster than the recommended 9 m (30 fpm), all segments flash until the ascent is slowed. See pg. 20 for further details.

flashing
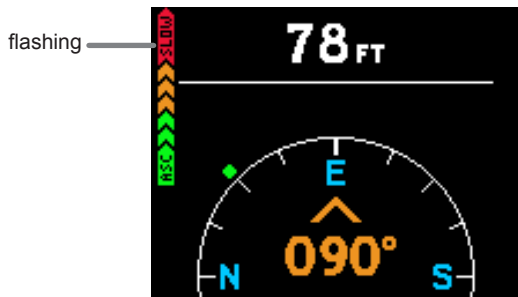
Depth Alarm

Depth digits flash red until shallower than the alarm depth set.

flashing
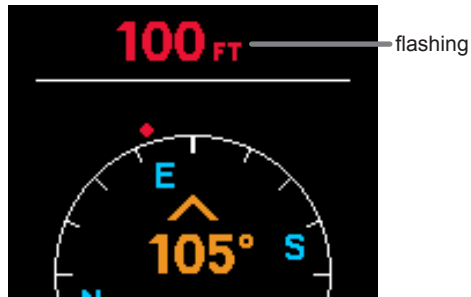
REFERENCE

UPLOADING/DOWNLOADING

As previously described (page 16), the i750TC can be paired using the Bluetooth® feature. This requires a PC, Mac, or mobile device running Diverlog software and equipped with Bluetooth® functionality. If your personal computer is not equipped with internal Bluetooth® hardware, a Bluetooth® dongle can be purchased separately from a computer store.

Alternately, The i750TC is configured with a 4 pad data connection port located on the back of the case. It can be used with the included adapter clip to connect the i750TC with a PC or Mac using a USB cable. Connect the adapter clip to the i750TC. When connecting the adapter clip to the i750TC, ensure that the 4 pins on the clip are properly fitted over the 4 pads on the i750TC. Then connect the USB interface cable to the adapter clip. The i750TC and USB cable assembly can now be connected to a PC or Mac running Diverlog software.

🔲 **NOTE: If a USB cable is connected to the i750TC, Bluetooth® connection will be blocked or disabled. Though any active downloads, uploads, or firmware updates using Bluetooth® will be allowed to finish first.**

DATA PORT	USB CABLE AND ADAPTER	ADAPTER INSTALLED

4 pads

CARE AND CLEANING

Protect your i750TC from shock, excessive temperatures, exposure to chemicals, and tampering. Protect the lens against scratches with the stick on i750TC lens protector. Small scratches will naturally disappear underwater.
• Soak and rinse the i750TC in fresh water at the end of each day of diving, and check to ensure that the areas around the low pressure (depth) sensor, PC interface data port, and buttons are free of debris or obstructions.
• To dissolve salt crystals, use lukewarm water or a slightly acidic bath (50% white vinegar/50% fresh water). After removal from the bath, place the i750TC under gently running fresh water. Towel dry before storing.
• Keep your i750TC cool, dry, and protected during transport.

low pressure sensor
data port
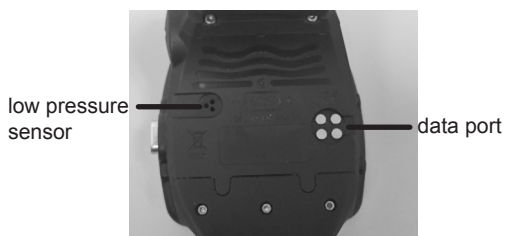
SERVICE

⚠ **WARNING: At a minimum, annually check the altitude reading on the ALT 2 screen (p. 27) and Pre-Dive Planner (p. 28, 73) for accuracy. If your i750TC is ever out of calibration (incorrect elevation reading, incorrect No Decompression Dive Times in the planner, or showing a depth reading at the surface) or displays an error code message, it must be serviced at the factory before use.**

If required to return your i750TC to Aqua Lung:
• Obtain an RA (Return Authorization) number by contacting http://www.aqualung.com/us/support/contact-us or (760) 597-5000
• Record all dive data in the Log and/or download the data stored in memory. All data will be erased during factory service.

BATTERY REPLACEMENT

📃 **NOTE: The procedures that follow must be closely adhered to avoid entrance of water into the unit. Damage due to improper battery replacement (or subsequent leakage of moisture into the unit) is not covered by the i750TC's warranty.**

📃 **NOTE: The i750TC can be sent to Aqua Lung, Regional Distributor, or Authorized Dealer Service for proper battery change service which includes pressure (depth) and leak testing to the max operating depth. Standard charges for service will apply.**

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

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

Inspect the buttons, lens, and housing to ensure they are not cracked or damaged. If there is any sign of moisture in the i750TC, **DO NOT** attempt to use it for diving until it receives proper service by the Aqua Lung factory or an authorized regional distributor.

Data Retention
When the battery is removed, settings and nitrogen/oxygen calculations for repetitive dives will be retained in volatile memory until a new battery is installed. You will have the choice of saving or deleting the data. The Compass will need to be calibrated after the new battery is installed.

All parts needed for the battery change that follows are provided in the i750TC Battery Kit available from your Aqua Lung Dealer.

Battery Removal
• Locate the battery cover on the end of the housing.
• Apply a coin to the recessed slot of the cover and turn it counterclockwise out of the housing.
• Remove the Battery and discard it according to local regulations governing disposal of Lithium batteries.

REMOVE COVER

REMOVE BATTERY

Inspection
• Closely check all of the sealing surfaces for any signs of damage that might impair proper sealing.
• Closely examine the battery cover and housing for any signs of damage that might prevent proper threading.
• Closely examine the inside of the battery compartment for any signs of corrosion indicating entrance of moisture into the unit.
• Inspect the buttons, lens, and housing to ensure they are not cracked or damaged.

⚠ **WARNING: If damage or corrosion is found, return your i750TC to an authorized Aqua Lung dealer, and DO NOT attempt to use it until it has received factory prescribed service.**

• Remove the cover O-ring by squeezing the sides. Discard, and **DO NOT** attempt to reuse it.

⚠ **CAUTION: DO NOT use tools to remove the O-ring. To ensure proper sealing, O-ring replacement is required each time the battery is replaced.**

REMOVE O-RING
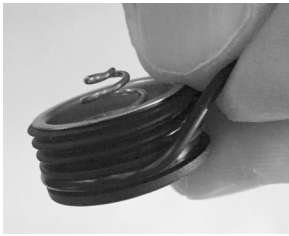
Battery Installation

⚠ **CAUTION: The O-ring must be a genuine Aqua Lung part that can be purchased from an authorized Aqua Lung dealer. Use of any other O-ring will void the warranty.**

• Very lightly lubricate the new O-ring with silicone grease. Install it onto the battery cover. **DO NOT** roll the O-ring over the threads, instead stretch it slightly to work it down over the slotted end of the cover into the groove at the base of the threads.
• Insert a new CR2 lithium 3 volt battery, positive (+) side first, into the battery compartment with the negative end facing out.
• Ensure that the battery is properly installed and the cover O-ring is evenly seated around the cover.
• Carefully place the cover (with spring) into the housing and turn clockwise slowly by hand to ensure proper threading.
• Apply a coin and tighten the cover by turning it clockwise until secure. The outer surface of the cover should be flush with the outer surface of the housing.
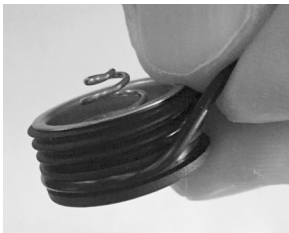
INSTALL O-RING	**REPLACE BATTERY**	**INSTALL COVER**

ALTITUDE SENSING AND ADJUSTMENT
Prior to the first dive of a series of repetitive dives, Altitude (i.e., ambient pressure) is measured upon activation of Dive Surface Mode and every 15 minutes until a dive is made or operation reverts to Watch Mode.

• While it is operating in Watch Mode after a dive, measurements are taken every 15 minutes during the 24 hour period after surfacing.
• Measurements are only taken when the unit is dry.
• Two readings are taken, the second reading 5 seconds after the first. The readings must be within 1 foot (30 cm) of each other to record that ambient pressure as the current altitude.
• No adjustments are made during any time that the wet contacts are bridged.

When diving in high altitude waters from 916 to 4,270 meters (3,001 to 14,000 feet), the i750TC automatically adjusts to these conditions providing corrected depth, and reduced No Decompression and O2 Times at intervals of 305 meters (1,000 feet).

At an elevation of 916 meters (3,001 feet), Depth calibration automatically changes from feet of seawater to feet of fresh water. This is the first adjustment to the algorithm. When the Conservative Factor feature is set to ON, No Decompression Times are calculated based upon the next higher 915 meter (3,000 foot) Altitude. All adjustments for altitudes greater than 3,355 meters (11,000 feet) are then made to allowable dive times for 4,270 meters

(14,000 feet). At Sea Level, calculations are based upon an altitude of 1828.8 meters (6,000 feet).

The i750TC will not function as a dive computer above 4,270 meters (14,000 feet).

TECHNICAL DATA

NO DECOMPRESSION TIME LIMITS

Z+ ALGORITHM >> NDLS (HR:MIN) AT ALTITUDE (METRIC)

Altitude (meters)	0 to 915	916 to 1220	1221 to 1525	1526 to 1830	1831 to 2135	2136 to 2440	2441 to 2745	2746 to 3050	3051 to 3355	3356 to 3660	3661 to 3965	3966 to 4270
Depth (M)												
9	3:37	2:41	2:31	2:23	2:16	2:10	2:04	1:59	1:54	1:50	1:43	1:37
12	1:55	1:27	1:21	1:15	1:12	1:08	1:05	1:03	1:00	0:58	0:55	0:54
15	1:08	0:55	0:53	0:51	0:49	0:47	0:44	0:42	0:39	0:37	0:36	0:34
18	0:50	0:39	0:37	0:35	0:33	0:32	0:30	0:28	0:26	0:24	0:23	0:22
21	0:36	0:28	0:26	0:24	0:23	0:21	0:20	0:19	0:18	0:17	0:16	0:16
24	0:27	0:20	0:19	0:18	0:17	0:16	0:15	0:14	0:13	0:12	0:11	0:11
27	0:20	0:16	0:15	0:13	0:12	0:11	0:11	0:10	0:09	0:09	0:09	0:08
30	0:16	0:12	0:11	0:10	0:09	0:09	0:09	0:08	0:08	0:07	0:07	0:07
33	0:13	0:09	0:09	0:08	0:08	0:07	0:07	0:07	0:07	0:06	0:06	0:06
36	0:10	0:08	0:07	0:07	0:07	0:06	0:06	0:06	0:05	0:05	0:05	0:05
39	0:09	0:07	0:06	0:06	0:06	0:06	0:05	0:05	0:05	0:05	0:05	0:04
42	0:08	0:06	0:06	0:05	0:05	0:05	0:05	0:05	0:04	0:04	0:04	0:04
45	0:06	0:05	0:05	0:05	0:05	0:04	0:04	0:04	0:04	0:04	0:04	0:04
48	0:06	0:05	0:05	0:04	0:04	0:04	0:04	0:04	0:04	0:04	0:03	0:03
51	0:05	0:04	0:04	0:04	0:04	0:04	0:04	0:03	0:03	0:03	0:03	0:03
54	0:05	0:04	0:04	0:04	0:04	0:03	0:03	0:03	0:03	0:03	0:03	0:03
57	0:05	0:04	0:04	0:03	0:03	0:03	0:03	0:03	0:03	0:03	0:03	0:03

Z+ ALGORITHM >> NDLS (HR:MIN) AT ALTITUDE (IMPERIAL)

Altitude (feet)	0 to 3000	3001 to 4000	4001 to 5000	5001 to 6000	6001 to 7000	7001 to 8000	8001 to 9000	9001 to 10000	10001 to 11000	11001 to 12000	12001 to 13000	13001 to 14000
Depth (FT)												
30	3:17	2:30	2:21	2:14	2:08	2:02	1:57	1:52	1:47	1:39	1:34	1:29
40	1:49	1:21	1:15	1:11	1:08	1:05	1:02	1:00	0:57	0:55	0:53	0:51
50	1:05	0:53	0:51	0:49	0:47	0:44	0:42	0:39	0:37	0:35	0:34	0:33
60	0:48	0:37	0:35	0:33	0:32	0:30	0:28	0:26	0:24	0:23	0:22	0:21
70	0:35	0:26	0:24	0:23	0:21	0:20	0:19	0:18	0:17	0:16	0:16	0:14
80	0:26	0:19	0:18	0:17	0:16	0:15	0:14	0:13	0:12	0:11	0:11	0:10
90	0:19	0:15	0:14	0:13	0:12	0:11	0:10	0:10	0:09	0:09	0:08	0:08
100	0:16	0:11	0:10	0:10	0:09	0:09	0:08	0:08	0:07	0:07	0:07	0:07
110	0:12	0:09	0:08	0:08	0:08	0:07	0:07	0:07	0:06	0:06	0:06	0:05
120	0:10	0:08	0:07	0:07	0:07	0:06	0:06	0:06	0:05	0:05	0:05	0:05
130	0:08	0:07	0:06	0:06	0:06	0:05	0:05	0:05	0:05	0:05	0:04	0:04
140	0:07	0:06	0:05	0:05	0:05	0:05	0:05	0:04	0:04	0:04	0:04	0:04
150	0:06	0:05	0:05	0:05	0:05	0:04	0:04	0:04	0:04	0:04	0:04	0:03
160	0:06	0:05	0:05	0:04	0:04	0:04	0:04	0:04	0:04	0:03	0:03	0:03
170	0:05	0:04	0:04	0:04	0:04	0:04	0:03	0:03	0:03	0:03	0:03	0:03
180	0:05	0:04	0:04	0:04	0:03	0:03	0:03	0:03	0:03	0:03	0:03	0:03
190	0:04	0:04	0:04	0:03	0:03	0:03	0:03	0:03	0:03	0:03	0:03	0:00

NOTE: The i750TC graphical format displays a maximum of 99 minutes of No Decompression time. Times greater than 99 minutes display as 99 on the i750TC screen. The above figures in the above chart are actual no decompression time values the i750TC uses for calculations.

ALTITUDE LEVELS

DISPLAY	RANGE: FEET (METERS)
SEA	0 to 3,000 (915)
EL2	3,001 to 5,000 (916 to 1,525)
EL3	5,001 to 7,000 (1,526 to 2,135)
EL4	7,001 to 9,000 (2,136 to 2,745)
EL5	9,001 to 11,000 (2,746 to 3,355)
EL6	11,001 to 13,000 (3,356 to 3,965)
EL7	> 13,000 (3,965)

OXYGEN EXPOSURE LIMITS
(from NOAA Diving Manual)

PO2 (ATA)	MAX DURATION SINGLE EXPOSURE (MIN)	MAX TOTAL DURATION 24 HOUR DAY (MIN)
0.60	720	720
0.70	570	570
0.80	450	450
0.90	360	360
1.00	300	300
1.10	240	270
1.20	210	240
1.30	180	210
1.40	150	180
1.50	120	180
1.60	45	150

SPECIFICATIONS

CAN BE USED AS
- Dive Computer (Air or Nitrox)
- Digital Depth Gauge/Timer
- Free Dive Computer

DIVE COMPUTER PERFORMANCE
- Bühlmann ZHL-16C based Z+ algorithm
- Decompression in agreement with Bühlmann ZHL-16C
- No Decompression Deep Stops - Morroni, Bennett
- Decompression Deep Stops (not recommended) - Blatteau, Gerth, Gutvik
- Altitude - Bühlmann, IANTD, RDP (Cross)
- Altitude corrections and O2 limits based on NOAA tables

OPERATIONAL PERFORMANCE
Function: Accuracy:
- Depth   ±1% of full scale
- Timers   1 second per day

Dive Counter:
- DIVE/GAUGE displays Dives #1 to 24, FREE displays #1 to 99 (0 if no dive made)
- Resets to Dive #1, upon diving (after 24 hours with no dives)

Dive Log Mode:
- Stores 99 most recent DIVE/GAUGE dives in memory for viewing
- After 99 dives, adds 100th dive in memory and deletes the oldest dive

Altitude:
- Operational from sea level to 14,000 feet (4,270 meters) elevation
- Measures ambient pressure every 30 minutes when inactive, upon activation, every 15 minutes while activated.
- Does not measure ambient pressure when wet.
- Compensates for Altitudes above sea level beginning at 3,001 feet (916 meters) elevation and every 1,000 feet (305 meters) higher.

Power:
- User replacement battery.
- (1) 3 vdc, CR2, 800 mAh, Lithium battery (Duracell, Energizer, Panasonic, or Rayovac recommended) 15 operating hours at 100% brightness with Auto Dim set off.
- Shelf life Up to 5 years (dependent on battery manufacturer)

Power Saver Mode (surface):
- Activates and turns screen off when 2 minutes elapse on surface with no button operations.
- Resume operation from Power Saver Mode by pressing any button.

Battery Indication:
- Green (Good) - Green Icon displays on the Suface Main. No battery icon during the dive.
- Amber (Warning) - Amber Icon solid on the Surface and Dive Main screens. Battery change is recommended. Brightness level will automatically be limited to 60% maximum.
- Red (Alarm) - Red Icon flashing on the Surface and Dive Main screens. If during a dive, the message GO UP LOW BATTERY flashes. If on the surface, the message CHANGE BATT flashes until the unit shuts off. The battery must be changed before using your i750TC

Operating Temperature:
- Out of the water - between -6.6 and 60 °C (20 °F and 140 °F).
- In the water - between -2.2 and 35 °C (28 °F and 95 °F).

NUMERIC DISPLAYS:

	Range:	Resolution:
• Dive Number	0 to 24	1
• Depth	0 - 100 M (0 - 330 FT)	0.1 M (1 FT)
• FO$_2$ Set Point	Air, 21 to 100 %	1 %
• PO$_2$ Value	0.00 to 5.00 ATA	0.01 ATA
• Dive Time Remaining	0 to 99 min, display 99 if >99 min	1 minute
• Time To Surface	0 to 99 min, display - - if >99 min	1 minute
• No Decompression Deep Stop Time	2:00 to 0:00 min:sec	1 second
• No Decompression Safety Stop Time	5:00 to 0:00 min:sec	1 second
• Decompression Stop Time	0 to 999 min	1 minute
• DIVE/GAUGE Elapsed Dive Time	0 to 999 min	1 minute
• Free Elapsed Dive Time	0:00 to 9:59 min:sec	1 second
• Surface Interval Time	0:00 to 23:59 hr:min	1 minute
• Free Surface Interval Time	0:00 to 59:59 min:sec,	1 second
	then 1:00 to 23:59 hr:min	1 minute
• Time to Fly & Desaturate	23:50 to 0:00 hr:min*	1 minute
	starting 10 min after the dive	
• Temperature	-18 to 60° C (0 to 99° F)	1°
	if outside of temp range, then displays - -	
• Time of Day	0:00 to 23:59 hr:min	1 minute
• Free Countdown Timer	9:59 to 0:00 min:sec	1 second
• Violation Countdown Timer	23:50 to 0:00 hr:min	1 minute

Max Functional Depth:

	Limit:
• DIVE/GAUGE/FREE	100 M (330 FT)

FCC ID: MH8A

FCC COMPLIANCE:
This equipment complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: 1.) this equipment may not cause harmful interference, and 2.) this equipment must accept any interference received, including interference that may cause undesired operation.

FCC INTERFERENCE STATEMENT:
This equipment has been tested and found to comply with the limits for an Intentional Radiator, a Class B Digital Device, pursuant to Part 15 of FCC Rules, Title 47 of the Code of Federal Regulations. These rules are designed to provide reasonable protection against harmful interference in a commercial or residential installation. This equip-ment 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.

There is no guarantee that interference will not occur in a particular installation. If this equipment does cause 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:
• Reorient or relocate the receiving antenna.
• Increase the separation between the equipment and receiver.
• Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
• Consult the dealer or an experienced radio/TV technician.

⚠ **CAUTION: Changes or modification to this unit not expressly approved by Aqua Lung International could void the user's authority to operate the equipment.**

ABBREVIATIONS/TERMS

ACT = Activation
AL = Alarm
ALT = Alternate
ASC Bar Graph = Ascent Rate
ATA = Standard Atmosphere (unit)
AUD = Audible Alarm
BATT = Battery
CDT = Countdown Timer
CF = Conservative
DA = Depth Alarm (Free Dive)
DCS = Decompression Sickness
DECO = Decompression
DFLT = Default
DS = Deep Stop
DTR = Dive Time Remaining
EDT = Elapsed Dive Time
EL = Elevation (altitude)
FLY = Time To Fly
FO2 = Fraction of Oxygen (%)
FORM = Format (date, time)
FREE = Free Dive Mode
FT = Feet (depth)
GAU/GAUG/GAUGE = Digital Gauge Dive Mode
GTR = Gas Time Remaining
H2O = Water
HIST = History
IMP = Imperial (measure)

LAST = Previous (dive)
M = Meters (depth)
MET = Metric
MFD = Maximum Functional Depth (equipment limits)
MIN = Minutes (time)
MOD = Maximum Operating Depth
N2 = Nitrogen
N2 Bar Graph = Tissue Loading Bar Graph
NDL = No Decompression Limit
NO DECO = No Decompression DTR
O2 = Oxygen
O2 MIN = Oxygen Time Remaining (DTR)
O2 SAT = Oxygen Saturation
PC = Personal Computer (download)
PLAN = Dive Planner
PO2 = Partial Pressure of O2 (ATA)
RTI = Repeating Time Interval
SAFE = Safety (stop)
SAT = Desaturation Time
SEA = Sea Level
SEC = Seconds (time)
SN = Serial Number
SR = Sample Rate
SS = Safety Stop
SURF = Surface
TTS = Time To Surface
VIO/VIOL = Violation

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