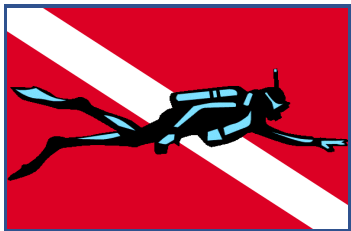


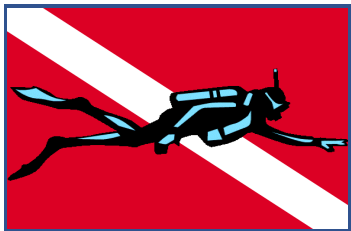
Getting to Know Your Dive Computer



Getting to Know Your Computer



- **So-- You've bought a new Dive Computer. Now, the fun Starts.....**
- **Questions:**
 - **How do I get this darn thing to work?**
 - **What do all those Screens mean?**
 - **How do I get it to show me the information I Want and Need?**
- **BOTTOM LINE: Am I going to be using IT? Or, is IT going to be using me?**

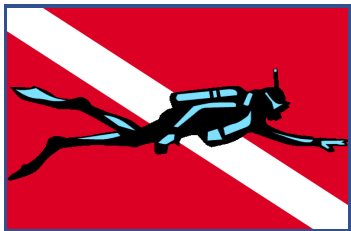


Working Thru the Verbiage

TVSC

- Now that you have opened the manual– What does it all mean?

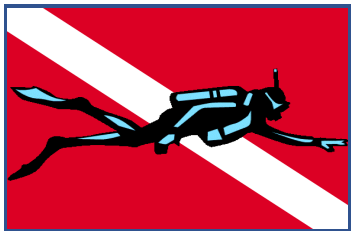
GTR
DECO
NDL
ATR
PO2
EAN
EDT
MOD
FO2
DTR
OLF
NITROX
TLBG
NDC



Goals



-
- Review 3 Basic Dive Computers with Respect to Screens, Settings and Options.
 - Discuss the Most Common (Important?) Screen Items (Gen).
 - Review User Adjustable Settings (Gen).
 - Discuss the User Adjustable Settings with most Significant Impact on the User's Dives (Gen).
 - WON'T Try to address all the 'contingency' screens: Exceeding "Limits, "Excessive Ascent", "Passed Deco", ETC



Sample Computers



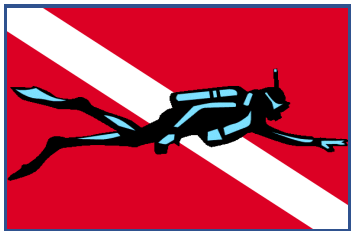
SUUNTO Zoop
\$329



Oceanic ProPlus 4
\$899



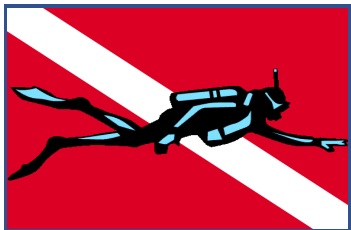
Aqualung i770R
\$899 w/o Trnsmtr
\$1,300 w/ Trnmtr



Potential Screen Information



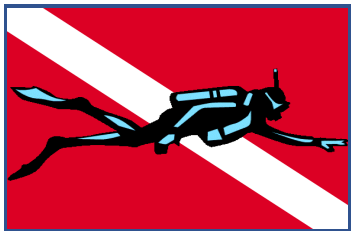
- **Current Depth**
- **Max Depth**
- **Deco Time Remaining (NDC, ND, DTR)**
- **Elapsed Dive Time (EDT, Dive-T, DT)**
- **Current Air/Gas Volume**
- **Remaining Air/Gas Volume (ATR, GTR)**
- **Safe Operating Depth (MOD)**
- **Percent Oxygen /NITROX Setting (FO2)**
- **Temperature**
- **Partial Pressure O2 (PP02, PO2) Limit**
- **Current PP02 Status (PP02, OLF)**



Potential Screen Information



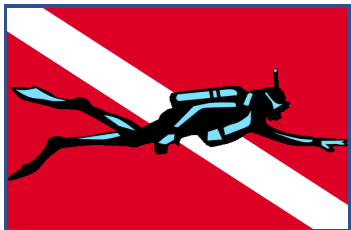
- **Date / Time**
- **Oxygen Saturation Level (O2SAT)**
- **Ascent Rate**
- **Tissue Loading Bar Graph (TLBG)**
- **Oxygen Limit Fraction Bar (OLF)**
- **Consumed Bottom Time (CBT)**



Most Common (Important?) Screen Info



- Current Depth
- Elapsed Dive Time
- DECO Time Remaining (NDC, NDL, DTR)
- Current Air/Gas Pressure
- Ascent Rate
- Tissue Loading Bar Graph (TLBG)
- Percent Oxygen /NITROX Setting (FO2)
- Maximum Operating Depth (MOD)



SUUNTO Zoop



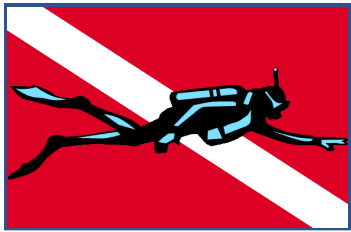
Air Dive Mode *after 5 sec*



- Personal Adjustments
- Conservative
 - Altitude



- Current Depth
- Max Depth
- Consumed Bottom Time (Left)
- Ascent Rate (Rt)
- No Deco Time
- Dive Time
- Temperature
- (Alt) - Current Time**



SUUNTO Zoop



Nitrox Dive Mode



Current Depth
Max Depth
OLF (Left)
Ascent Rate (Rt)
Dive Time
No Deco Time

Percent Oxygen Setting

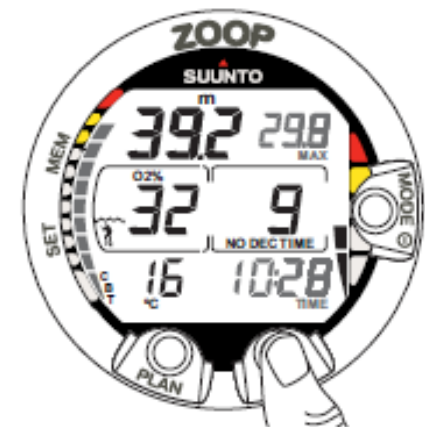
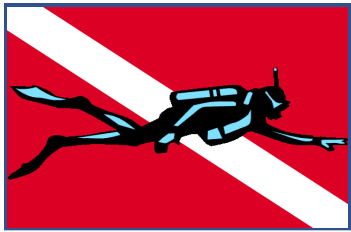


Fig. 3.24. Alternative display. Pressing TIME button displays current time, maximum depth, temperature, CBT and O₂%,



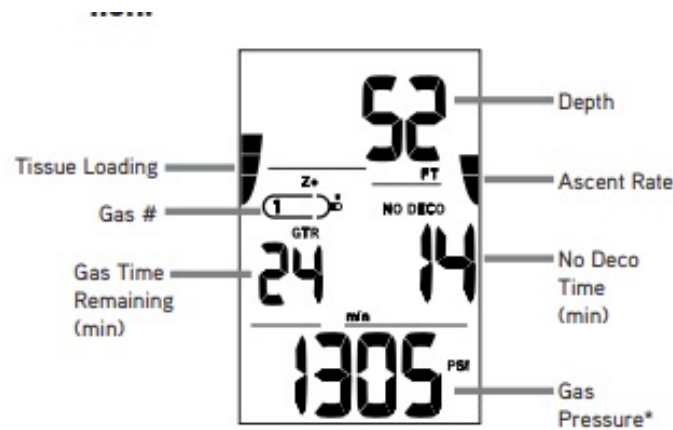
Oceanic ProPlus 4



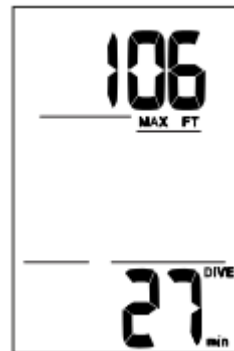
Main Screen



Alt
Screens



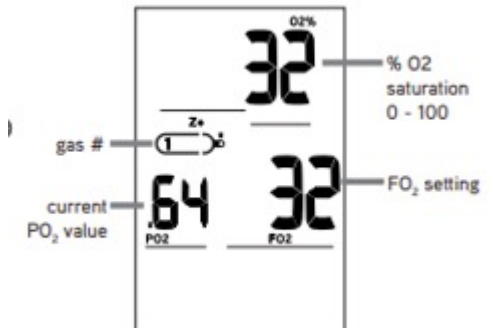
Alt 1

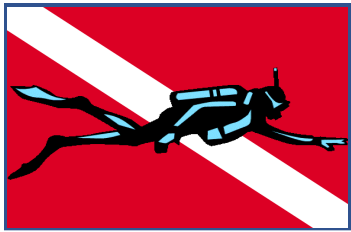


Alt 2

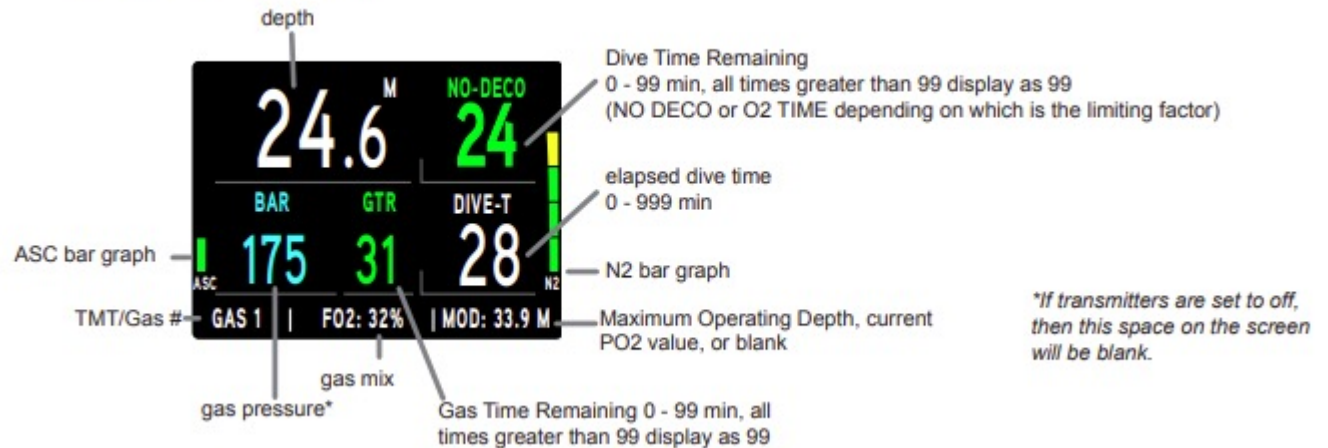


Alt 3





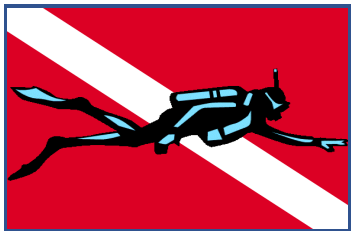
Aqualung i770R



Alt Screen

DIVE	MORE DIVE DATA
MAX DEPTH	40 M
DATE	7.23.17
TIME OF DAY	11:46 AM
TEMPERATURE	23 °C
ELEV	SEA
O2 SAT	24 %
CURRENT PO2	0.84

% O₂ saturation
0 - 100



User Settings



- One of the biggest challenges in getting your computer to work effectively FOR YOU is checking and setting the User-Adjustable Settings to meet YOUR requirements:
- Potential Settings:

Alarms (On/Off)

Max Depth
Dive Time
Turn Pressure
End Pressure
Max N2 Bar / TLBG
Dive Time Remaining
High O2
High PO2/PPO2
Adjust Screen Options

Utilities

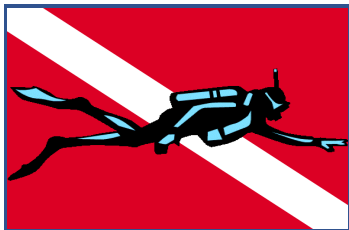
Date/Time
Water Type (Salt/Fresh)
Units (US/M)
Lighting / Backlighting
Sample Rate (2-15-30-60 ??)
Deep Stop (1/2 Max Depth)
Safety Stop (On/Off)
(Depth 10-15-20?)
Conservative Settings (1-3?)

Dive Factors

Air/Nitrox/Other
Oxygen/Other Percentages
PP02 Setting (1.2-1.4-1.6)

Tech

Decompression Dive Settings
Ind Tank Gas Settings



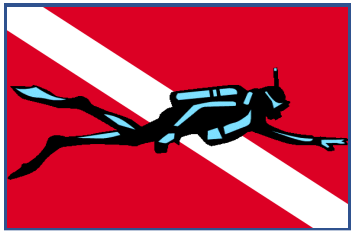
Conservative Settings



Personal Adjustment “Modes” for SUUNTO Zoop

TABLE 6.2. NO-DECOMPRESSION TIME LIMITS (MIN) FOR VARIOUS DEPTHS [FT] FOR THE FIRST DIVE OF A SERIES

Depth [ft]	Personal Mode / Altitude Mode								
	P0/A0	P0/A1	P0/A2	P1/A0	P1/A1	P1/A2	P2/A0	P2/A1	P2/A2
30	--	160	▲ 127	160	127	▲ 93	127	93	▲ 73
40	120	86	65	86	65	53	65	53	43
50	69	56	41	56	41	34	41	34	28
60 Ft	50	38	29	38	29	25	29	25	20
70	36	29	23	29	23	20	23	20	15
80	28	23	19	23	19	15	19	15	11
90	22	18	15	18	15	11	15	11	9
100 Ft	17	14	11	14	11	9	11	9	7
110	13	11	9	11	9	7	9	7	6
120	10	9	8	9	8	6	8	6	5
130	9	7	6	7	6	5	6	5	4
140	7	6	5	6	5	4	5	4	4
150	6	5	4	5	4	4	4	4	3



Impact of NITROX and PO2 Settings



Maximum Operating Depth (MOD) in feet sea water (fsw) for pO₂ 1.2 to 1.6

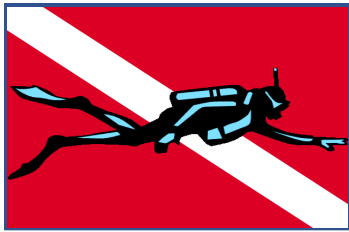
MOD (fsw)		% oxygen																
		4	8	12	16	20	21	24	28	32	36	40	50	60	70	80	90	100
Maximum pO ₂ (bar)	1.6	1287	627	407	297	231	218	187	156	132	114	99	73	55	42	33	26	20
	1.5	1205	586	380	276	215	203	173	144	122	105	91	66	50	38	29	22	17
	1.4	1122	545	352	256	198	187	160	132	111	95	83	59	44	33	25	18	13
	1.3	1040	503	325	235	182	171	146	120	101	86	74	53	39	28	21	15	10
	1.2	957	462	297	215	165	156	132	108	91	77	66	46	33	24	17	11	7

These depths are rounded to the nearest foot.

Standard for
Rec Diving

Max for
Rec Diving

NOTE: PO₂ settings relate to level at which Oxygen levels become Toxic, NOT Nitrogen Absorption.



Post-Dive Info

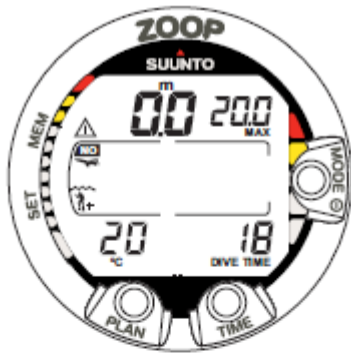


Fig. 3.26. Surface display. You have surfaced from a 18 minute dive, which maximum depth was 20.0 m [66 ft]. The present depth is 0.0 m [0 ft]. Airplane symbol indicates that you should not fly and Diver Attention Symbol indicates that you should prolong your surface interval time because of excess micro-bubbles.

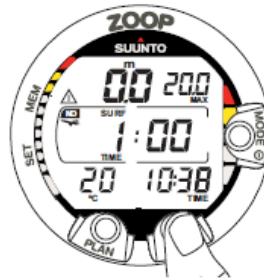
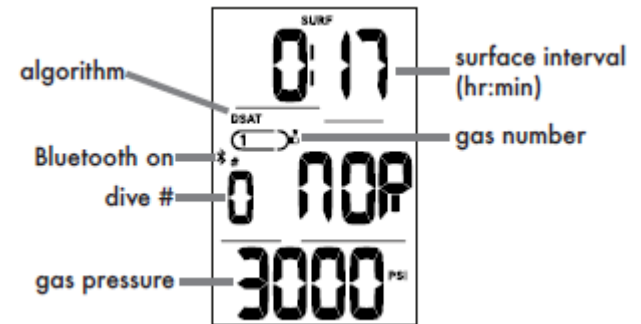


Fig. 3.27. Surface interval, Surface time display. Pressing TIME button once will show surface time display.

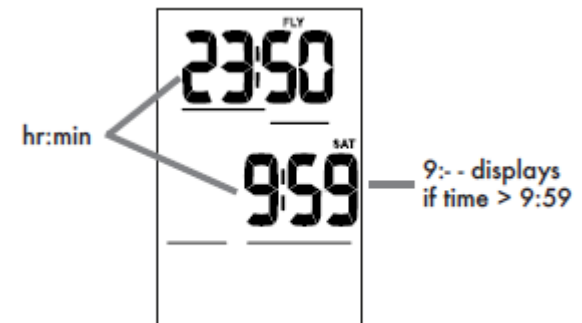


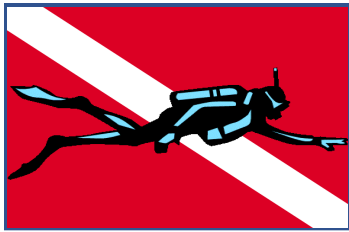
Fig. 3.28. Surface interval, no-flying time. Pressing TIME button twice will show no-flying time, indicated by an airplane symbol.

Surface Mode Screen

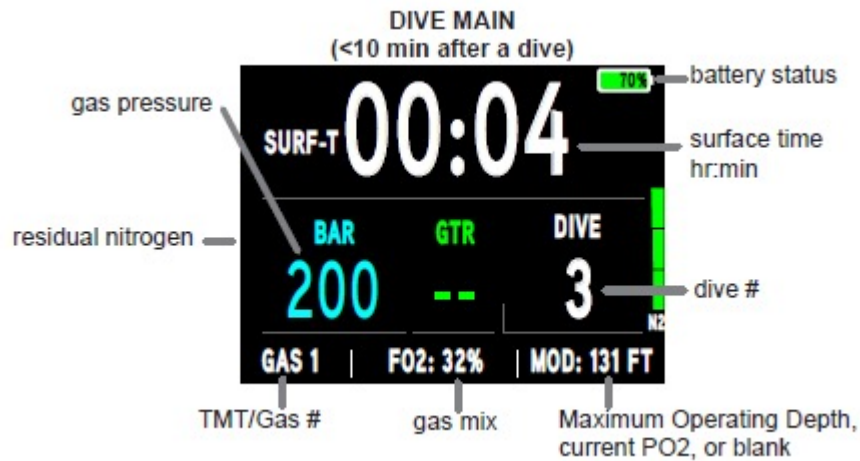


Fly / DESAT Screen

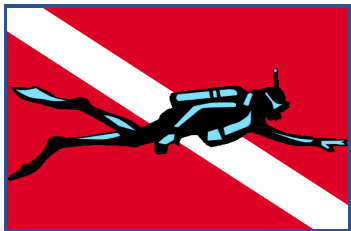




Post-Dive Data



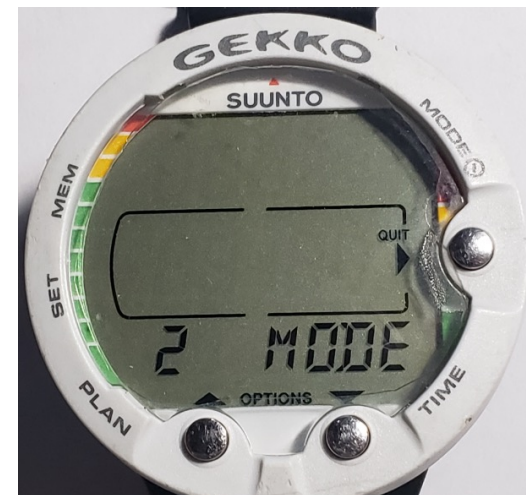
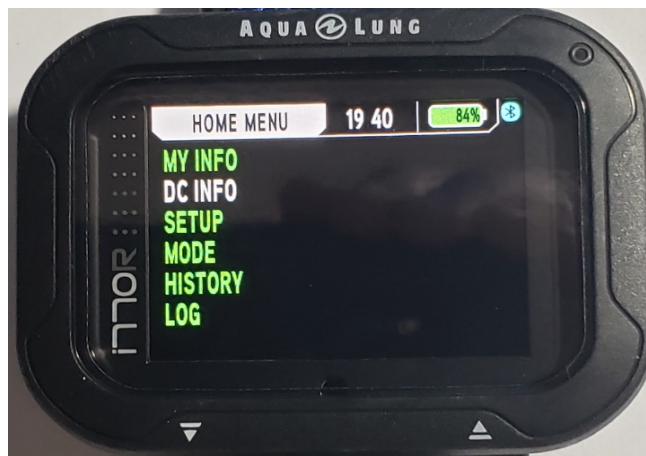
DIVE	MORE DATA
DATE	7.30.17
TIME OF DAY	11:46 AM
TEMPERATURE	74 °F
ELEV	SEA
FLY	16:36
O2 SAT	24%
DESAT	9:48

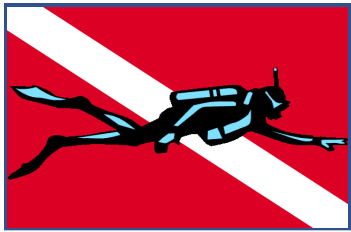


Navigating the Menu's



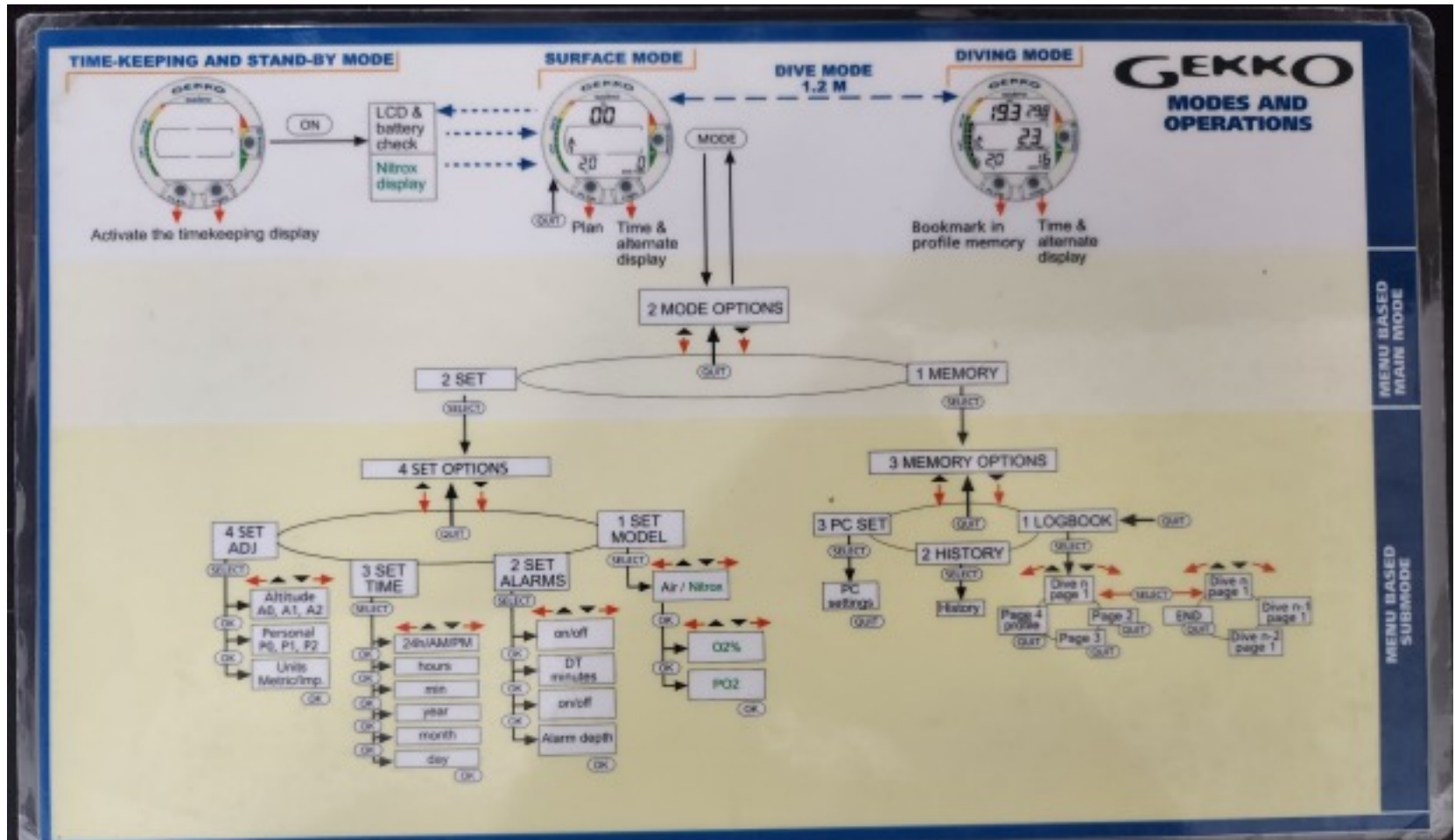
- Once you know how you want to set your computer, then you have to navigate the menus.....???

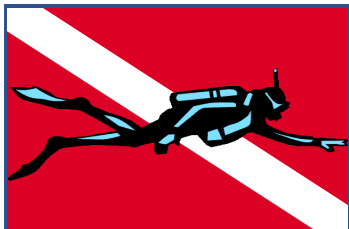




SUUNTO GEKKO

TVSC

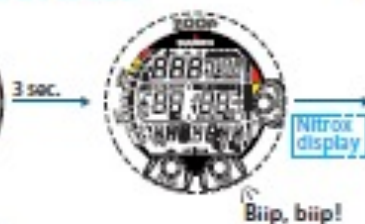




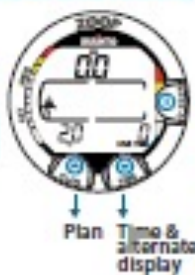
SUUNTO ZOO

TVSC

TIME & STAND-BY MODE



SURFACE MODE



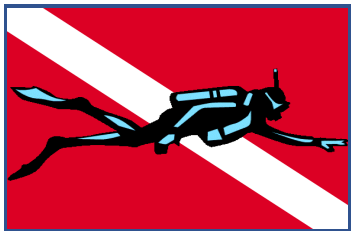
2 MODE OPTIONS



4 SET OPTIONS 3 MEMORY OPTIONS

DIVING MODE > 1.2 m / 4 ft



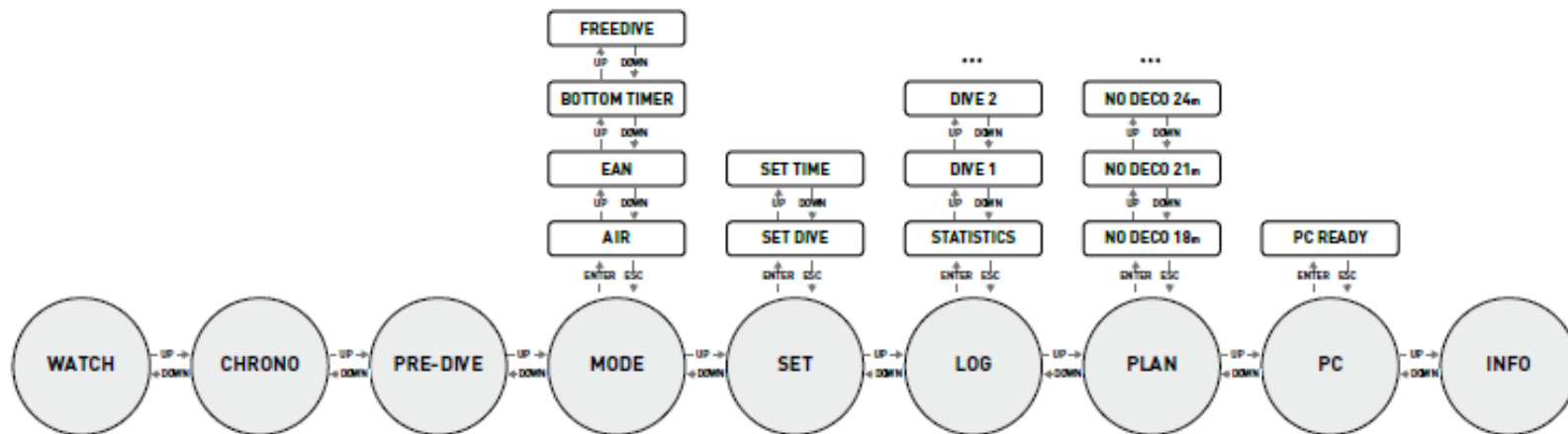


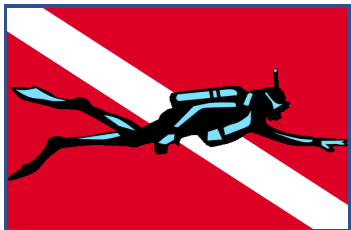
Mares Smart



SURFACE MODE

- press
- press and hold



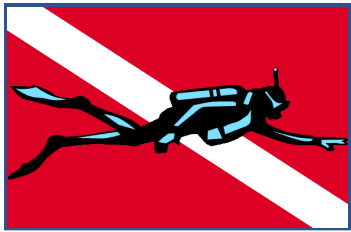


Downloading Data

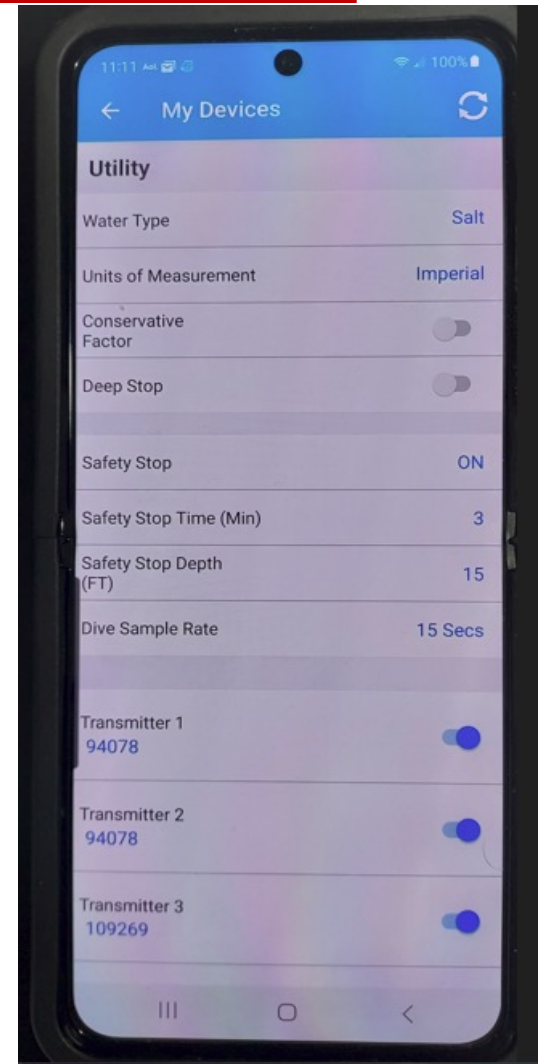
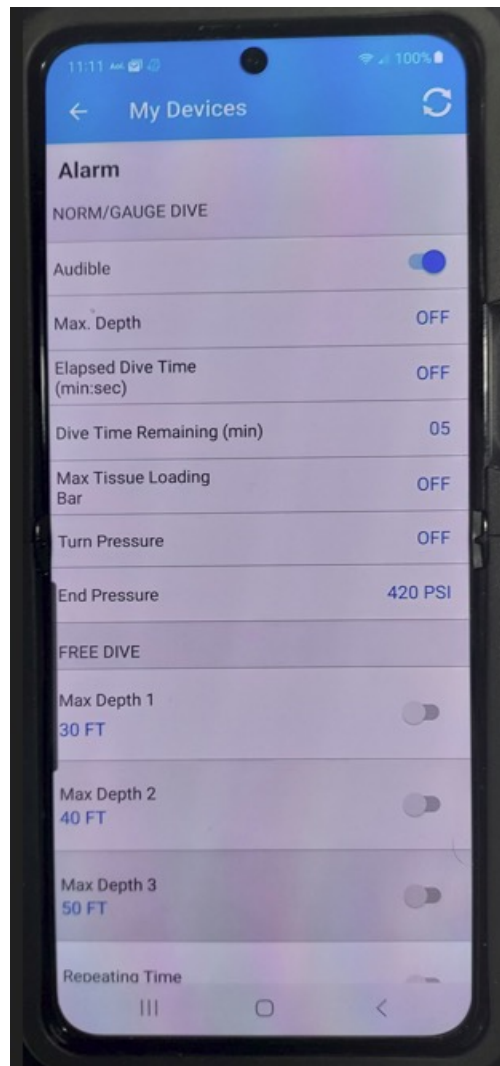
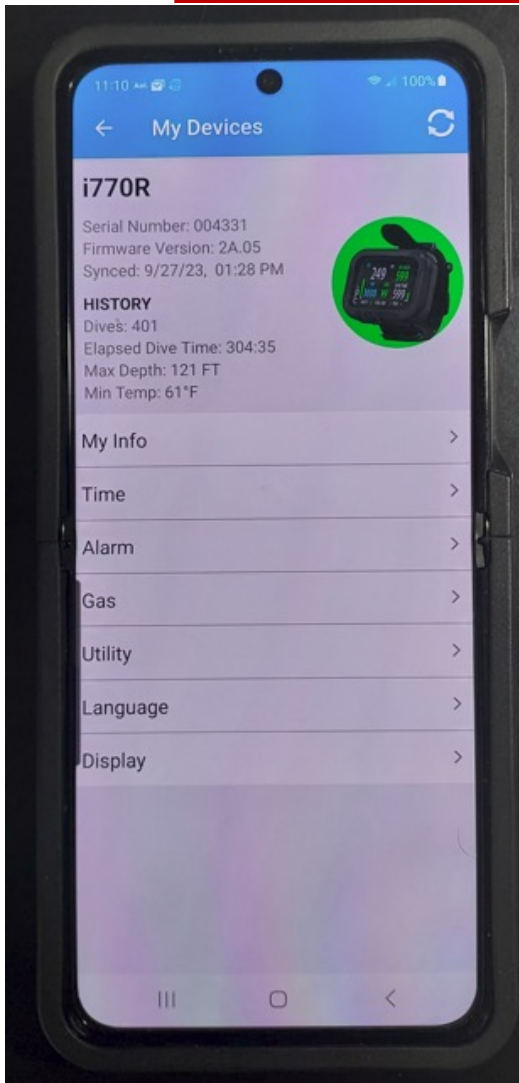


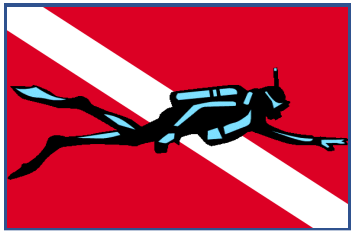
- **Many (Most?) of the newer computers have the capability to download your data from the Dive Computer to either your Cell Phone and/or your Personal Computer.**
 - **Bluetooth**
 - **USB**
 - **Wifi**

- **Samples will use Diverlog / Diverlog+. (AQUALUNG, APEKS, HUIH/OCEANIC, SHERWOOD.)**

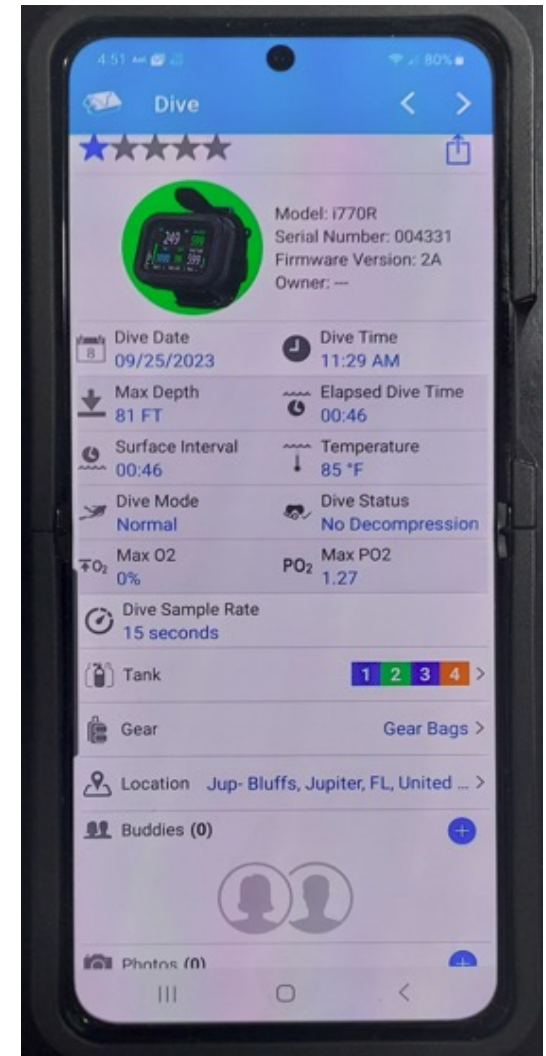
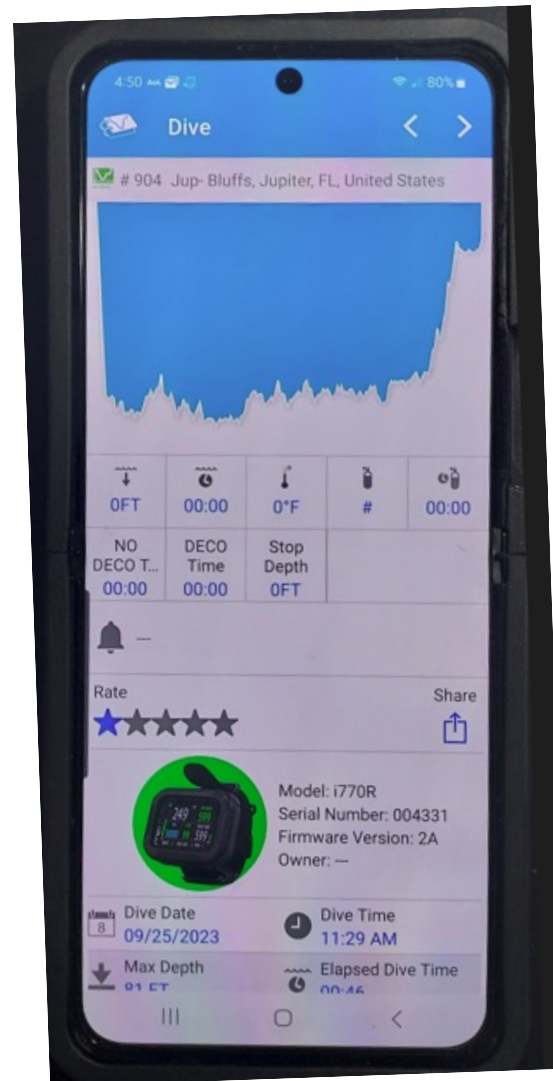
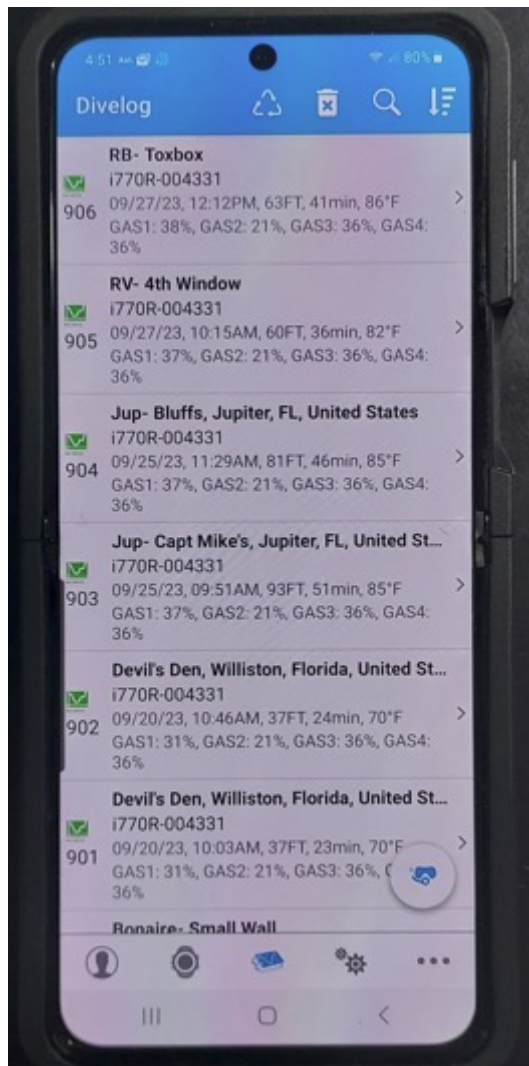


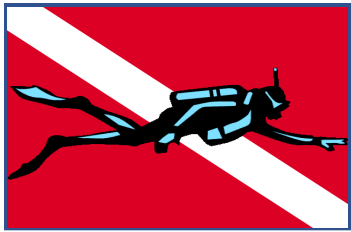
App to View / Change Data





Downloading Data (Cell)





Downloading Data (Computer)

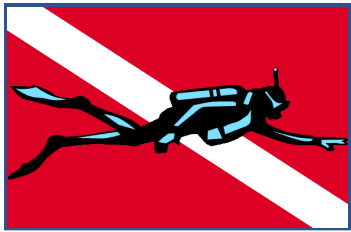


Dives

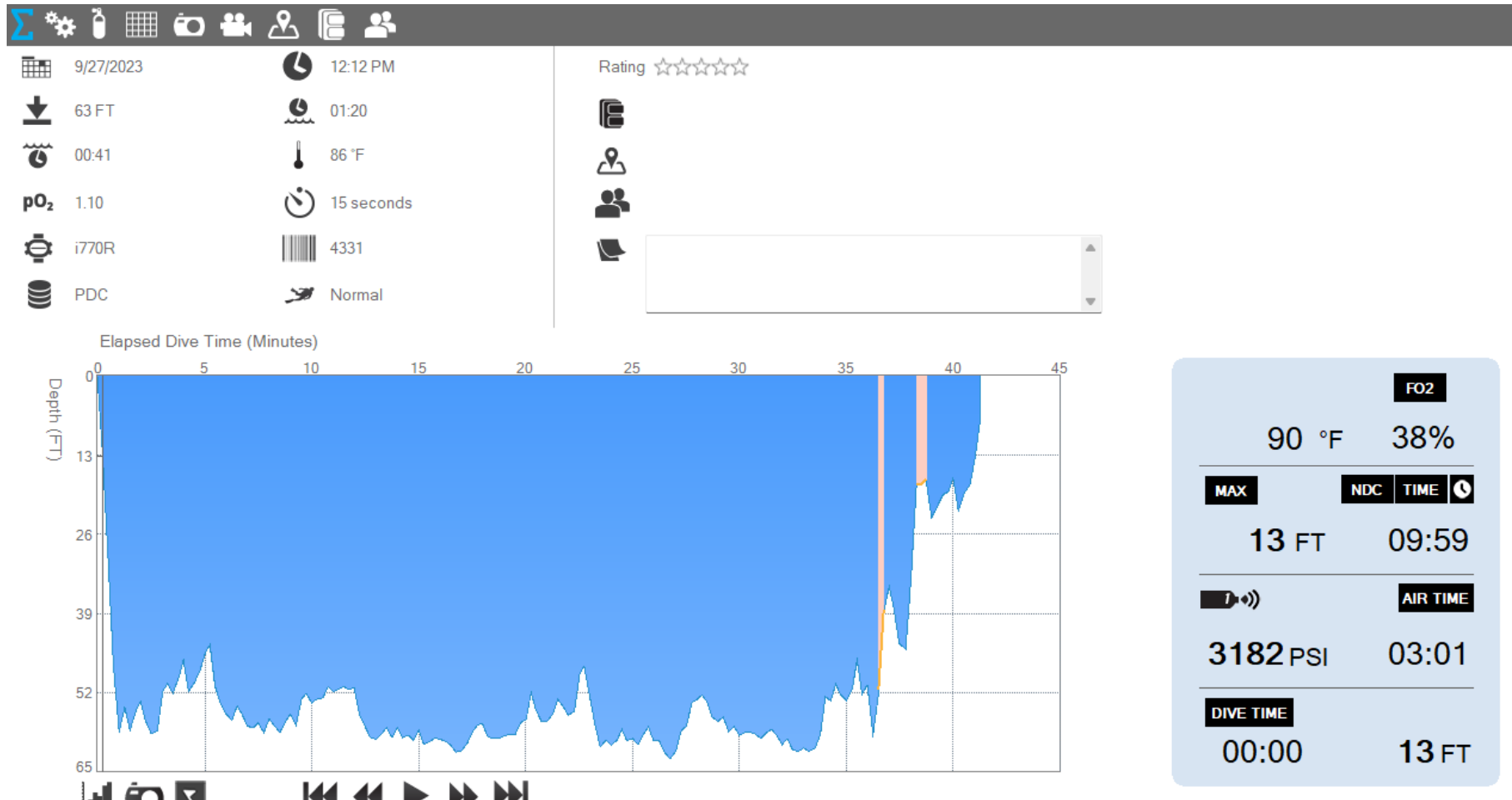


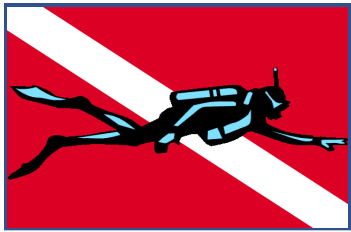
Life Time Dive No. ▲	Dive Date	Dive Time	PDC Dive #	PDC Model	Dive Mode	Dive Status	Dive Site	Rating
903	9/20/2023	10:46 AM	2	i770R - 4331	Normal Nitrox	No Decompression	Devils Den	
904	9/25/2023	9:51 AM	1	i770R - 4331	Normal Nitrox	No Decompression	Jup- Capt Mike(U002...	
905	9/25/2023	11:29 AM	2	i770R - 4331	Normal Nitrox	No Decompression	Jup- Bluffs	
906	9/27/2023	10:15 AM	1	i770R - 4331	Normal Nitrox	No Decompression	RB- 4th Window	
907	9/27/2023	12:12 PM	2	i770R - 4331	Normal Nitrox	No Decompression	RB- Toybox	





Downloading Data (Computer)





Downloaded Data (Computer)



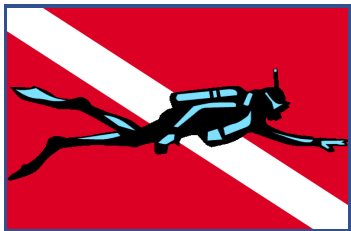
Dives



Life Time Dive No. ▲	Dive Date	Dive Time	PDC Dive #	PDC Model	Dive Mode	Dive Status	Dive Site	Rating
903	9/20/2023	10:46 AM	2	i770R - 4331	Normal Nitrox	No Decompression	Devils Den	
904	9/25/2023	9:51 AM	1	i770R - 4331	Normal Nitrox	No Decompression	Jup- Capt Mike(U002...	
905	9/25/2023	11:29 AM	2	i770R - 4331	Normal Nitrox	No Decompression	Jup- Bluffs	
906	9/27/2023	10:15 AM	1	i770R - 4331	Normal Nitrox	No Decompression	RB- 4th Window	
907	9/27/2023	12:12 PM	2	i770R - 4331	Normal Nitrox	No Decompression	RB- Toybox	



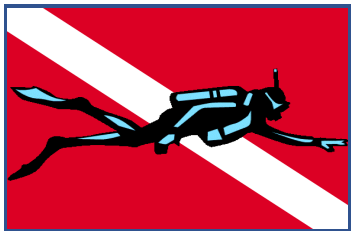
Elapsed Dive Time (hr.min)	Depth(FT)	TLBG (Tissue Loading Bar Graph) (segments)	O2BG (Oxygen Bar Graph) (Segments)	Tank	Pressure Reading(Psi)	PO2(ATA)	VARI (Variable Ascent Rate Indicator)(FPM)	Air Time Remaining (hr.min)	Dive Time Remaining (hr.min)	Deco Time (hr.min)	Stop Depth(FT)	Temp.(°F)	Link Status
00:31	57	2	0	1	1424	1.05	0-10	00:19	01:18	00:00	0	86	Linked
00:31	58	2	0	1	1402	1.06	0-10	00:17	01:11	00:00	0	86	Linked
00:32	60	2	0	1	1394	1.08	0-10	00:16	01:08	00:00	0	87	Linked
00:32	59	2	0	1	1372	1.06	0-10	00:15	01:11	00:00	0	86	Linked
00:32	61	2	0	1	1362	1.09	0-10	00:15	01:05	00:00	0	87	Linked
00:32	61	2	0	1	1344	1.09	0-10	00:15	01:05	00:00	0	86	Linked
00:33	61	2	0	1	1336	1.08	0-10	00:15	01:07	00:00	0	86	Linked
00:33	61	2	0	1	1318	1.09	0-10	00:15	01:05	00:00	0	86	Linked
00:33	61	2	0	1	1312	1.08	0-10	00:16	01:04	00:00	0	87	Linked
00:33	59	2	0	1	1258	1.06	0-10	00:16	01:09	00:00	0	86	Linked



Conclusions



- **De-mystifying all the screens and parameters for your computer is a key for safe and informed diving.**



Comments - Questions

