TUSA

DC Solar LINK

DC-Solar IQ 1204 Dive Computer
Owner's Manual

CE

EN60950-1/EN300 328/EN301 489-1/EN301 489-17/EN62479/ EN13319*

* when you switch to Manual Dive Mode

The CE mark is used to mark conformity with the European Union EMC directive 2004/108/EC.

1st.

Thank you for your selection of the TUSA IQ-1204 Dive Computer.

◆ This dive computer does not conform to the diver watches(100m) stated in the ISO6425 and JISB7023.

Applications

This is a dive computer to support no decompression dive safely.
Solar panel generates electric power to run the dive computer.
It has multi-functions as watch, alarm, timer, stopwatch, direction compass and angle, world time watch in the Time mode, and surface interval time and desaturation time (DESAT time) in surface interval. In the Dive Mode, information of water depth, water temperature,dive time, ascent speed and decompression are provided. When divers exceeds no decompression limit, the dive computer gives divers alarm with display.
IQ1204 is compatible with a mixture of four different Nitrox gases. Comprehensive accelerated decompression is possible because each fraction of oxygen (FO_2)% can be set from 21% to 100% in 1% increments.
The calculation model we use for the decompression program of the dive computer is based on the decompression theory of Dr. A. A. Buhlmann.

Before use, you need understand how to use, all warnings and cautions of the dive computer written on this Instruction Manual. To avoid any serious accidents, please make sure to read and fully understand the dive computer. If you have any questions, please ask the shop you purchased the dive computer.

Whenever there is something you do not know in how to use the dive computer, we strongly recommend that you access the TUSA website and read this instruction manual carefully.
Understanding and using the functions of the dive computer ensures safe dive you can enjoy.

Safety Precautions

Please read the followings before use.
TUSA shall assume no responsibility on damages, lost profit and/or any claims caused in use or by malfunctions of this dive computer from customers and any third parties.

⚠ Danger

- Make sure to understand how to use, warnings, and cautions of this dive computer with this Instruction Manual completely before use. Confirm that you understand how to use the dive computer in closed water as in a pool before using in open water.

- When using the dive computer in scuba diving, you need to take dive training course both in learning rules and practical skills, and obtain C card (certification card) issued by internationally acknowledged dive training organizations beforehand. (You can use the dive computer in the training under the guidance of instructors of such organizations)

- When using the dive computer in Nitrox (EANx) dive, you need to take Nitrox (EANx) dive training course and complete it beforehand. Otherwise, do not use the dive computer in Nitrox (EANx) dive.
  Ref: EANx: Enriched Air Nitrox (commonly called Nitrox).
  It is mixed gas with higher FO_2 % than normal compressed air (FO_2 is 21%)

- If “Decompression stop violation” warning and/or “Out of measurement range” warning are released, cancel dive for a day and pay attentions on changes of your physical condition.

- When you notice abnormal conditions on the dive computer, stop using it immediately and contact the shop you purchased the dive computer.

- Check the battery power level is “H” before dive. If power level gets low and warning (WARNING!! BATT) is released while dive, exit as soon as possible and recharge the dive computer.
  ● Even this warning is released in dive, enough power for dive remains. Deal with the situation calmly without panic.
  Ref. Power Levels … P.13

- Follow the displayed warnings and messages for cautions on the dive computer at once.

- When using the dive computer, also use other devices as another dive computer, divers watch, and depth indicator together as backup tool.

- The dive computer is to be used for recreational dive only. Do not use the dive computer for any other dive.

- Never lend or share the dive computer with anyone else if residual nitrogen still exists in the body after use of the dive computer.

- Make sure to set FO_2 % in every dive. It is extremely dangerous if FO_2 % in tank and in the dive computer don’t match.

- Dot not disassemble, repair, modify, exchange the secondary battery or conduct pressure chamber test on the dive computer by yourself. This will be extremely dangerous since doing this without sufficient knowledge causes malfunction.

- Check out the dive computer by yourself once a year regardless of frequency of use. Especially, check it out definitely when you have not used the dive computer for more than 3 months since last dive season.

- The dive computer is applicable to the air with FO_2 21 % and Nitrox (EANx) gas with FO_2 22-100%. (4 mixture gases are available). The dive computer can not be used with any other mixed gas.

- Each diver should be responsible in planning and conducting of safety dive according to each diver' s condition.

- Please try cautious dive not exceeding the displayed data in the dive computer. The dive computer can not prevent from developing decompression illness completely.

- The dive computer does not measure, display and control the air pressure in tank. Use the residual air pressure indicator and check it by yourself.

- When removing the secondary battery from the dive computer, be careful for small children not to swallow it. Put the battery out of reach of children. If swallowed, contact a doctor at once.

CAUTION!

- Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type.
- Do not exposed to excessive heat such as direct sunshine in the car, near the heater, fire or the like.

Contents

1. About This Instruction Manual 10

2. Things To Check Before Using The Dive Computer..... 10

3. Charging the Dive Computer 11

Charging Guide..... 11
Power Levels 13
Power Recovery Mode 14
Charging Times..... 15
Power Saving..... 16
To Recover From The Sleep State..... 16
Low Power Alarm..... 17

4. Mode Reference Guide 18

Selecting A Mode 19
General Functions (All Modes)..... 20
Auto Return Features..... 20
Initial Screens 20
Scrolling..... 20

5. Timekeeping..... 21

6. Configuring Home City Settings..... 22

To configure Home City and Daylight Saving Time Settings..... 22

7. Configuring Current Time and Date Settings..... 23

To Change The Current Time And Date Settings 23
Specifying Temperature and Depth Display Units..... 24

8. Displays In The Surface Mode..... 26

9. Dive Mode (DIVE) 27

How To Switch The Mode To Dive Mode..... 27
No Decompression Mode..... 28
Safety Stop 29
What Makes “Safety Stop Function” End..... 29
No Decompression Limit (NDL) Warning..... 30
Decompression Dive..... 30
The Below Information Is Shown In Decompression Dive..... 31
Warnings In Dive..... 32
Ascent Rate 32

Warning Of Three Minutes To Decompression 32
Decompression Dive 32
Decompression Stop Violation 33
Out Of Measurement Range 34
O_2 Indicator (OLI) 35
PO_2 35
M Value 36
Nitrox (EANx) Dive 36
End Of Dive 37
Dive At High Altitude 38

10. Log Mode (LOG) 39

How to use L) Log Button
(Dive Log, Dive Profile, Dive History Mode, Bluetooth log data transfer) 39
(Scuba) Dive Log Mode 40
Dive log confirmation 41
How to view the log data 41
Button operation 42
Oxygen concentration 43
Warnings recorded in the log 43
Dive Profile Mode 44
Confirm dive profile 44
Dive History Mode / Free Diving History Mode 46
Dive History 46
Free Diving History 47
Dive history clear / Dive number edit function 48
Dive profile sampling time settings 48
Setting method 48
O_2 profile save settings 49
Setting method 49
Bluetooth (BLE) data transfer mode 50

11. Plan Mode (PLAN) 52

Plan Dive 52
Enriched Air, Nitrox Diving 53
FO_2% Setting 54
Default 55
Oxygen-Pressure Warning And Bodily Oxygen Quantity Warning 55
Bodily Oxygen Quantity Warning 56
Oxygen Partial Pressure Warning 56

Multiple Gas Settings Diving (Accelerated Decompression) 57
How to switch the gas 57
Regarding The Accelerated Decompression Log 58
Set Safety Factor 58
Safety Factor setting 59
Set M Value Warning 60
Depth Interval Alarm 61
Setting Of Depth Interval Alarm 61
Setting Range 62
Maximum Water Depth Warning Settings 62
Setting Method 62
Setting Range 63
UPTD Pulmonary Oxygen Poisoning Units (Total Minutes Per Day/Week) Display 63

12. Using The Compass 65

To Take A Direction Reading 65
Digital Compass Readings 66
Calibrating The Bearing Sensor 67
Bidirectional Calibration 67
Precautions About Bidirectional Calibration 67
To Perform Bidirectional Calibration 68
Digital Compass Precautions 69
Magnetic North And True North 69
Location 69
Storage 70

13. Using The Stopwatch 71

To Enter The Stopwatch mode 71
To Perform An Elapsed Time Operation 71

14. Using The Countdown Timer 73

To Enter The Countdown Timer Mode 73
To Specify The Countdown Start Time 73
To Perform A Countdown Timer Operation 74
To Stop The Alarm 74

15. Using The Alarm 75

To Enter The Alarm Mode 75
To Set An Alarm Time 76
To Turn An Alarm And The Hourly Time Signal On And Off 77

To Stop The Alarm 77
16. Checking The Current Time In A Different Time Zone 78
To Enter The World Time Mode 78
To View The Time In Another Time Zone 78
To Specify Standard Time Or Daylight Saving Time (DST) For A City 79
17. Illumination 80
To Turn On Illumination Manually 80
To Change The Illumination Duration 81
About The Auto Light Switch 82
To Turn The Auto Light Switch On And Off 83
Illumination Precautions 84
Auto Light Switch Precautions 84
18. Other Settings 85
To Turn The Button Operation Tone On And Off 85
To Turn Power Saving On Or Off 86
Dive Mode Screen Setting (To select the basic screen in dive) 87
Mode Switching ON/OFF Setting 87
19. Free Diving (FREE) Mode 88
Switch To Free Diving Mode 88
End of Free Diving Mode 89
Free diving functions 89
Button operation (underwater / water surface) 90
Session history 91
Log of maximum water depth for session 91
Log of longest dive time for session 92
Compass / StopTime 92
Free Diving Log 92
How to read log data 93
Free Diving History 93
20. Gauge Mode 94
Setting Of Gauge Mode 94
Canceling Gauge Mode 95
21. Troubleshooting 96
Time Setting 96
Dive Mode and Surface Mode 96

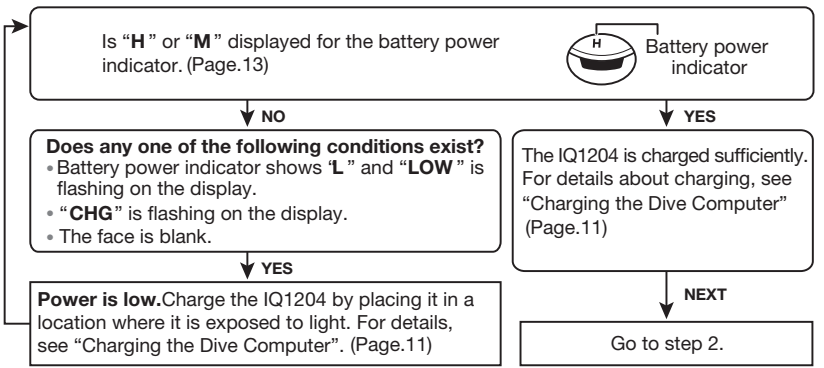
World Time Mode 99
Charging 99
23. Specification..... 101
Accuracy at normal temperature 101
Timekeeping 101
Calendar system 101
Other 101
Sensor precision: 101
FO_2 % 101
Water proof 102
Max. dive log 102
Digital Compass 102
Bearing Sensor Precision 102
Stopwatch 102
Countdown Timer 102
Alarms 102
World Time 102
Other 103
Illumination 103
Power Supply 103
City Code Table 104

1. About This Instruction Manual

- Button operations are indicated using the letters shown in the illustration.
- Note that the dive computer illustrations in this Instruction Manual are intended for reference only, and so the actual dive computer may appear some what different than depicted by an illustration.

2. Things To Check Before Using The Dive Computer

1. Check the battery power level.



2. Check the Home City and the daylight saving time (DST) setting. Use the procedure under "To configure Home City and summer time settings" to configure your Home City and daylight saving time settings.

Important!

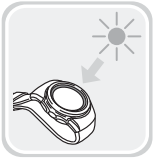
World Time Mode data depends on correct Home City, time, and date settings in the Time mode or Surface Mode. Make sure you configure these settings correctly.

3. Set the current time.
   See "Configuring Current Time and Date Settings

3. Charging the Dive Computer

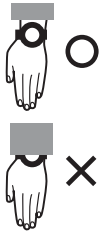
The face of the dive computer is a solar panel that generates power from light. The generated power charges a built-in rechargeable battery, which powers dive computer operations. The dive computer charges whenever it is exposed to light.

Charging Guide



Whenever you are not wearing the dive computer, leave it in a location where it is exposed to light.

- Best charging performance is achieved by exposing the dive computer to the strongest light available.



When wearing the dive computer, make sure that its face is not blocked from light by the sleeve of your clothing.

- The dive computer may enter a sleep state if its face is blocked by your sleeve even only partially.

Warning!

Leaving the dive computer in bright light for charging may make it become quite hot.
Take care when handling the dive computer to avoid burn injury. The dive computer can become particularly hot when exposed to the following conditions for long periods.

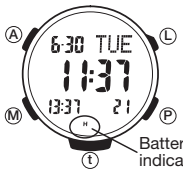
- On the dashboard of a car parked in direct sunlight
- Too close to an incandescent lamp
- Under direct sunlight

Important!

- Allowing the dive computer to become very hot can cause its liquid crystal display to black out. The appearance of the LCD should become normal again when the dive computer returns to a lower temperature.
- Turn on the dive computer's Power Saving function and keep it in an area normally exposed to bright light when storing it for long periods. This helps to ensure that power does not run down.
- Storing the dive computer for long periods in an area where there is no light or wearing it in such a way that it is blocked from exposure to light can cause power to run down. Expose the dive computer to bright light whenever possible.

Power Levels

You can get an idea of the dive computer's power level by observing the battery power indicator on the display.



Level	Battery Power Indicater	Function Status
1 (H)		All functions enabled.
2 (M)		All functions enabled.
3 (M) • (CHG)		Mode cannot be changed to Dive Mode.
4 (L)		Illumination, beeper, and sensor operation disabled.
5 (CHG)		Except for the current time and the **CHG** (charge) indicator, all functions and display indicators disabled.
6	– – –	All functions disabled.

- When (**M**) is on and (**CHG**) blinks at the Level 3 (**M** and **CHG**), and all other display is shown OK, mode cannot be changed to Dive Mode from 5 hours after then. (You can not dive.)
- The blinking LOW indicator at Level 4 (**L**) tells you that battery power is very low, and that exposure to bright light for charging is required as soon as possible.
- At Level 6, all functions are disabled and settings return to their initial factory defaults.

Once the battery reaches Level 2 (**M**) after falling to Level 6, reconfigure the current time, date, and other settings.

- Display indicators reappear as soon as the battery is charged from Level 6 to Level 2 (**M**).
- Leaving the dive computer exposed to direct sunlight or some other very strong light source can cause the battery power indicator to show a reading temporarily that is higher than the actual battery level.
  The correct battery level should be indicated after a few minutes.
- All data stored in memory is deleted, and the current time and all other settings return to their initial factory defaults whenever battery power drops to Level 6 and when you have the battery replaced.

Power Recovery Mode

- Performing multiple sensor, illumination, or alarm operations during a short period may cause all of the battery power indicators (**H**, **M**, and **L**) to start blinking on the display. This indicates that the dive computer is in the power recovery mode. Illumination, alarm, countdown timer alarm, hourly time signal, and sensor operations will be disabled until battery power recovers.
- Battery power will recover in about 15 minutes. At this time, the battery power indicators (**H**, **M**, and **L**) will stop blinking. This indicates that the functions listed above are enabled again.
- If all of the battery power indicators (**H**, **M**, **L**) are blinking and the **CHG** (charge) indicator also is blinking, it means the battery level is very low. Expose the dive computer to bright light as soon as possible.

- Even if battery power is at Level 1 (**H**) or Level 2 (**M**), the Digital Compass Mode, Dive Mode sensor may be disabled if there is not enough voltage available to power it sufficiently. This is indicated when all of the battery power indicators (**H**, **M**, **L**) are blinking.
- Frequent blinking of all of the battery power indicators (**H**, **M**, **L**) probably means that remaining battery power is low. Leave the dive computer in bright light to allow it to charge.

Charging Times

〔 Recharging time 〕

Condition (luminance)	Recharging hours needed for a dive from the time low power alarm is released.	Recharging hours needed to full charge from the time low power alarm is released.
Outdoor sunlight (50,000 lux)	1 hrs.	8 hrs.
Sunlight through a window (10,000 lux)	2 hrs.	30 hrs.
Daylight through a window on a cloudy day (5,000 lux)	4 hrs.	60hrs.
Indoor fluorescent lighting (500 lux)	36 hrs.	·····

- Actual exposure times depend on lighting conditions.
- For details about the operating time and daily operating conditions, see the "Power Supply" section of the Specifications.

Power Saving

When turned on, Power Saving enters a sleep state automatically whenever the dive computer is left for a certain period in an area where it is dark.

The table below shows how dive computer functions are affected by Power Saving.

- For information about enabling and disabling power saving, see "To Turn Power Saving On And Off". (P. 86)
- There are actually two sleep state levels: "display sleep" and "function sleep".

Elapsed Time in Dark	Display	Operation
60 to 70 minutes (display sleep)	Blank	Display is off, but all functions are enabled.
6 or 7 days (function sleep)	Blank	All functions are disabled, but timekeeping 6 or 7 days (function sleep) Blank is maintained.

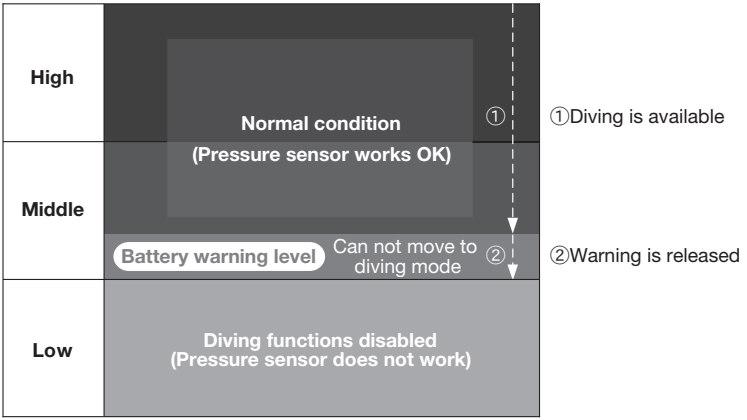
- The dive computer will not enter a sleep state between 6:00 AM and 9:59 PM. If the dive computer is already in a sleep state when 6:00 AM arrives, however, it will remain in the sleep state.
- The dive computer will not enter a sleep state while it is in the Dive Mode, Stopwatch Mode or Countdown Timer Mode. In Surface Mode, display becomes blank but functions are enabled.

To Recover From The Sleep State

Move the dive computer to a well-lit area, press any button, or angle the dive computer towards your face for reading.

Low Power Alarm

For safe dive, when power becomes too low to dive, Low power alarm is on with message to urge divers to recharge the power. Since sensors of the dive computer would not function when power level becomes (**L**), dive is not allowed. Suppose you started dive with the power level (**M**), and it becomes (**L**) while dive, no information related the dive is shown anymore.To avoid this dangerous situation, when power becomes too low to dive, you can not dive until the power becomes high enough for dive.



Current mode	Displayed alarms
Time mode or Surface Mode	[CHG] will blink
Dive Mode	[WARNING!! BATT] will scroll from right to left 5 times, and [M] on the lower side of the display will blink. [WARNING!! BATT] will be re-shown every minute. Alarm will be on for 6 seconds

◆ The alarm will continue until power becomes high enough for dive. No dive is allowed when the alarm is on.

4. Mode Reference Guide

Your dive computer has 13 "modes". The mode you should select depends on what you want to do.

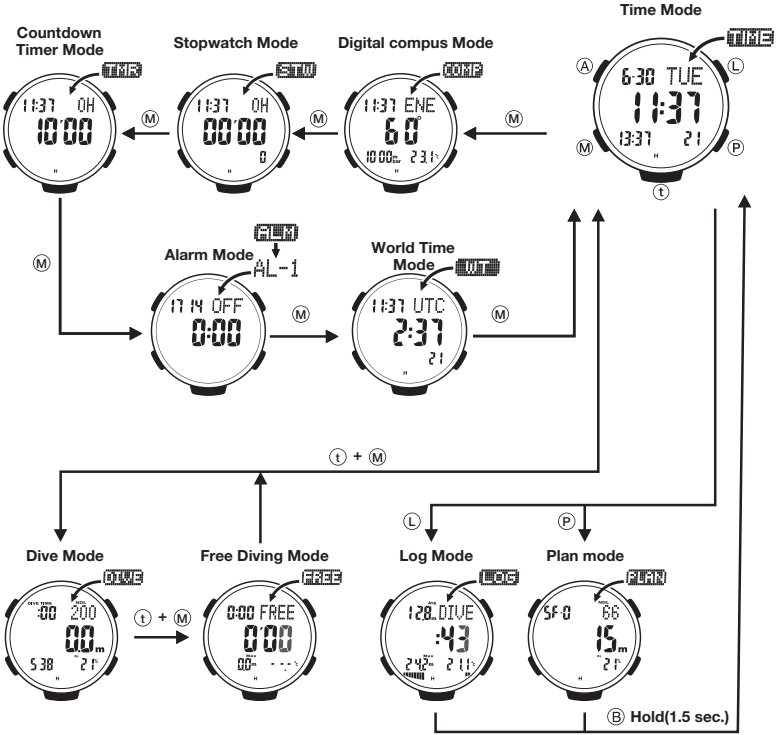
Mode types and how to switch them:

The below shows mode types and how to switch them.

Modes	Functions	Ref. page
Time mode and Surface Mode (TIME)	To display current time, date, day	21P
	To view the current date in the Home City	21P
	To configure Home City and daylight saving time (DST) settings	22P
	To configure time and date settings	23P
Surface Mode (TIME)	To display desaturation time (DESAT time)	24P
	To display surface time	24P
Dive Mode (DIVE)	To display no decompression limit (NDL)	28P
	To display safety stop	29P
	To display NDL warning	30P
	To display decompression dive	31P
	To give warnings in dive	32P
	Nitrox (EANx) dive	36P
	Dive at high altitude	38P
Log Mode (LOG)	To display dive history	39P
	To display dive log	41P
	To display dive profile	44P
Plan Mode (PLAN)	To display dive plan	52P
	To set safety factor (SF)	59P
	To set FO_2 %	54P
Digital Compass Mode	To determine your current bearing or the direction from your current location	65P
Stopwatch Mode	To use the stopwatch to measure elapsed time	71P
Countdown Timer Mode	To use the countdown timer	73P
Alarm Mode	To set an alarm time	76P
World Time Mode	To view the current time in one of 48 cities (31 time zones) around the globe	78P
Free Diving (FREE) Mode	To use the Free Diving Mode	88P
Gauge Mode	To use the Gauge Mode	94P

Selecting A Mode

- The illustration below shows which buttons you need to press to navigate between modes.



General Functions (All Modes)

The functions and operations described in this section can be used in all of the modes.

Auto Return Features

- The dive computer will automatically return to the Time mode if you do not perform any button operation for a particular amount of time in below mode.

Mode Name	Approximate Elapsed Time
Log, Plan	3 minutes
Alarm, Digital Compass	3 minutes
Setting screen (digital setting blinking)	3 minutes

- If you leave a screen with blinking digits on the display for two or three minutes without performing any operation, the dive computer exits the setting screen automatically.

Initial Screens

When you enter the Alarm, World Time, or Digital Compass Mode, the data you were viewing when you last exited the mode appears first.

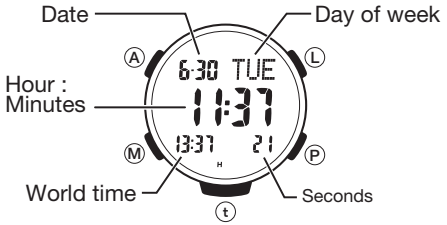
Scrolling

The **L** and **P** buttons are used on the setting screen to scroll through data on the display. In most cases, holding down these buttons during a scroll operation scrolls through the data at high speed.

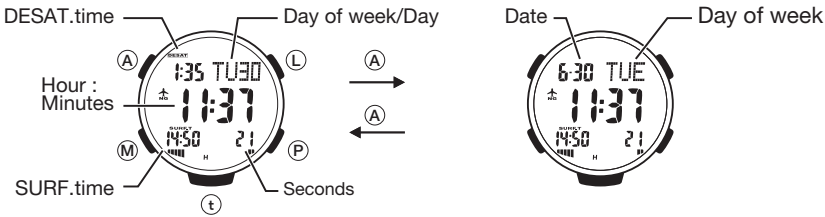
5. Timekeeping

Use the Time mode (TIME) to set and view the current time and date.

- Each press of **A** in the Time mode will change screen contents as shown below.

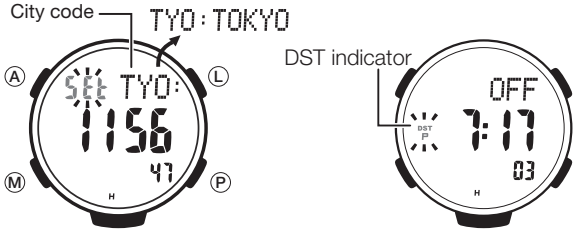


〔**Surface Mode**〕



6. Configuring Home City Settings

There are two Home City settings: actually selecting the Home City and selecting either standard time or daylight saving time (DST).



To configure Home City and Daylight Saving Time Settings

1. In the Time mode, hold down **A** for at least 2 seconds. First, SET Hold will blink on the display, and CITY will be displayed in the upper right display. After that, the currently selected city code and city name will scroll across the upper right display.

- The dive computer will exit the setting mode automatically if you do not perform any operation for about two or three minutes.
- For details about city codes, see the "City Code Table" at the back of this manual.

2. Use **P** (East) and **L** (West) to scroll through the available city codes.

- Keep scrolling until the city code you want to select as your Home City is displayed.

3. Press **M** to display the DST setting screen.

4. Press **P** to toggle the DST setting between Daylight Saving Time (ON) and standard time (OFF).

- Note that you cannot switch between standard time and daylight saving time (DST) while UTC is selected as your Home City.

5. After all of the settings are the way you want, press **A** to exit the setting screen.

- Daylight Saving Time is turned on when the DST indicator is on the display.

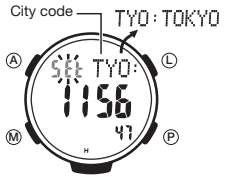
Note

- After you specify a city code, the dive computer will use UTC * offsets in the World Time Mode to calculate the current time for other time zones based on the current time in your Home City.

* Coordinated Universal Time, the world-wide scientific standard of timekeeping. The reference point for UTC is Greenwich, England.

7. Configuring Current Time and Date Settings

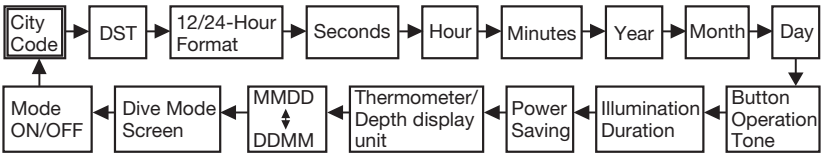
You can use the procedure below to adjust the Time mode time and date settings if they are off.



To Change The Current Time And Date Settings

1. In the Time mode, hold down **A** for at least 2 seconds.First, SET Hold will blink on the display, and CITY will be displayed in the upper right display. After that, the currently selected city code and city name will scroll across the upper right display. Keep **A** depressed until the scrolling starts.

2. Press **M** to move the linking in the sequence shown below to select the other settings



• The following steps explain how to configure timekeeping settings and surface settings only.

3. When the timekeeping setting you want to change is blinking, use **L** and/or **P** to change it as described below.

Screen	To do this :	Do this :
TYO	Change the city code	Use **P** (East) and **L** (West).
OFF	Toggle between Daylight Saving Time (ON) and Standard Time (OFF).	Press **P**.
12H	Toggle between 12-hour (12H) and 24-hour (24H) timekeeping.	Press **P**.
50	Reset the seconds to 00 (If the current seconds count is between 30 and 59, one is added to the minute count).	Press **P**.
10:58	Change the hour or minutes	Use **P** (+) and **L** (-)
2016 6.30	Change the year, month, or day	

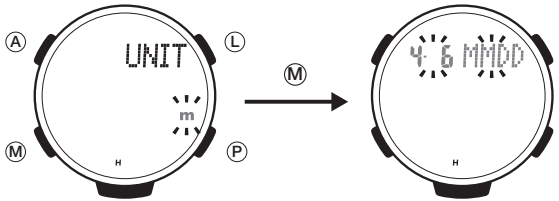
4. After all of the settings are the way you want, press **A** to exit the setting screen.

Note

- For information about selecting a Home City and configuring the DST setting, see "Configuring Home City Settings".While the 12-hour format is selected for timekeeping, a P (PM) indicator will appear for times from noon to 11:59 p.m. No indicator appears for times from midnight to 11:59 a.m. With 24-hour format, time is displayed from 0:00 to 23:59, without any P (PM) indicator.
- The dive computer's built-in full automatic calendar makes allowances for different month lengths and leap years. Once you set the date, there should be no reason to change it except after you have the dive computer's rechargeable battery replaced or after power drops to Level 6.
- The day of the week changes automatically when the date changes.
- Refer to the pages shown below for more information on Time mode settings.
  - Button operation tone on/off: "To turn the button operation tone on and off"
  - Illumination duration setting: "To change the illumination duration"
  - Enabling and disabling power saving: "To turn Power Saving on and off"
  - Changing the temperature and depth display units: "To specify temperature and depth display units"

Specifying Temperature and Depth Display Units

Use the procedure below to specify the temperature and depth display units to be used in the Dive Mode.



Important!

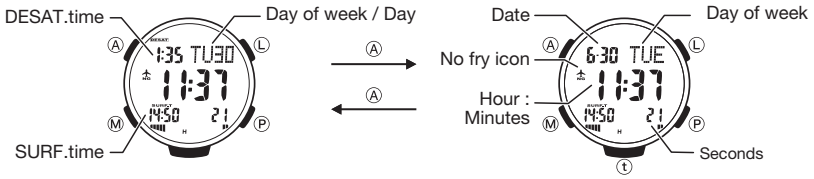
- When TYO (Tokyo) is selected as the Home City, the depth unit is set automatically to meters (m) and the temperature unit to Celsius (°C). and date is displayed, month, in the order of day. These settings cannot be changed.

1. In the Time mode or Surface Mode, hold down **A** for at least 2 seconds. First, SET Hold will blink on the display, and CITY will be displayed in the upper right display. After that, the currently selected city code and city name will scroll across the upper right display. Keep **A** depressed until the scrolling starts.
2. Press **P** to select m(°C) or ft(°F) if necessary.
3. And press **M**, date and MMDD or DDMM appears on the display.
   Press **P** to select MMDD(month-day)or DDMM (day-month) if necessary.
   * MMDD:Date is displayed, month, in the order of day.
4. After all of the settings are the way you want, press **A** to exit the setting screen.

8. Displays In The Surface Mode

Surface Mode is to display the necessary information when nitrogen remains in the body after dive. It displays current time, date, day shown in the Time mode and desaturation time (DESAT time) and surface time.

〔**Surface Mode**〕



The below information is shown in the Surface Mode.

Desaturation time (DESAT)	The time remained until the body' s internal nitrogen is desaturated. You can not fly while this is shown.
Surface time (SURF. T)	The time currently elapsed at or shallower than 1.6m from the surface after ascending.
No fly icon	You can not fly while this icon is on. The icon will be off in 18 hours from the mode becomes Surface Mode.
N_2 indicator (PGT= Pressure Gas in Tissue)	Risk degree of nitrogen accumulated in the body is shown with 1 to 10 levels.
O_2 indicator (Oxygen limited indicator) (=OLI) or PO_2 (pressure of oxygen)	Risk degree of oxygen accumulated in the body is shown with 1 to 10 levels.Or current hazardous level of oxygen is shown with 1 to10 levels.

• Either higher level above will be shown.

Note

- Surface Mode will be changed to Time mode automatically when residual nitrogen and/or oxygen are released outside.
- Surface Mode will be changed to Time mode automatically in 48 hours even residual nitrogen and/or oxygen is still in the body.
- No fly icon will be canceled in 18 hours. Even though there is no residual nitrogen and/or oxygen in the body and mode changed to Time mode, the icon will be on for 18 hours.

⚠ Warning: No flying !

DO NOT fly in the following conditions.
The risk of developing decompression illness will be increased.
- NO Fly icon is on.
- Within desaturating time (DESAT. time)

9. Dive Mode (DIVE)

In the Dive Mode, important information for scuba dive is shown.

How To Switch The Mode To Dive Mode

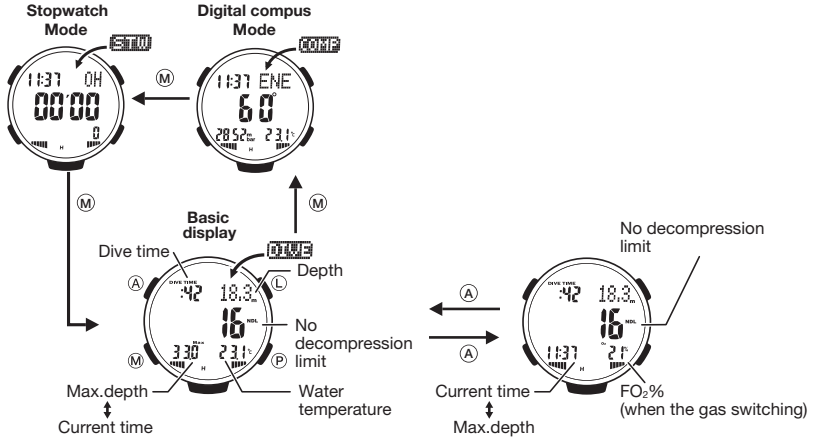
After entering water, and in max. 20 seconds after the dive computer senses pressure of 1.6m depth, the mode will be changed to Dive Mode automatically. If you want to use Dive Mode sooner after entering the water, press **t** + **M** together to switch the mode manually. Repeat the operation manually to switch to Surface Mode via Free Diving mode (P.88). Also, if you do not start diving within 1 minute of switching to Dive Mode, the dive computer goes into Surface Mode.

Ref. Mode types and how to switch them … P.19

Note

- When you descend to 1.6m or deeper, the dive computer judges you started descending and starts count of dive time.

No Decompression Mode



No decompression limit (NDL)	Time you can stay at the current depth without decompression. * Max. 200 minutes
Current depth (DEPTH)	Current depth is shown per 0.1m after depth of 1.5m. * Max. 99.9m
Dive time	Time elapsed from start of dive *Max 599 minutes
N_2 indicator (PGT)	Risk degree of nitrogen accumulated in the body is shown with 1 to 10 levels
O_2 indicator (OLI) or PO_2	Risk degree of oxygen accumulated in the body is shown with 1 to 10 levels
• Either higher level above will be shown.	
Max. depth (MAX)	The max. depth in the current dive * Max 99.9m
Current water temperature	Displays current water temperature.
Current time	Displays current time with hour and minutes
Direction compass and angle	**Refer to direction measurement ... P.65**

Note

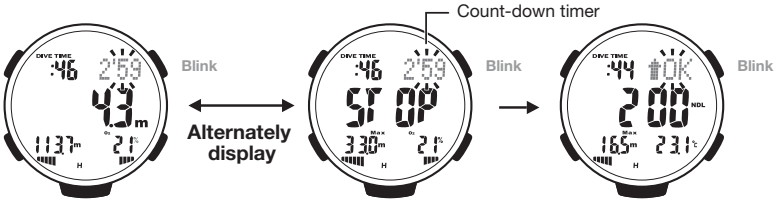
- O_2 and PO_2 FO_2 21%. This is always monitored even in the compressed air. Press **A** to display the oxygen concentration settings at the bottom right of the screen. * Oxygen concentration is automatically displayed at the bottom right for 10 minutes after starting diving, and switches to current water temperature. Press **M** to display Compass Mode and display the orientation, angle and pressure. Press **M** again to display Stopwatch Mode, and once moreto display no decompression diving. Even without pressing **L** , the display goes back to Dive Mode automatically in approx. 1 min. You can set the basic display of Dive Mode as the default display.

Ref. Dive Mode screen setting …P.87

Safety Stop

The dive computer has functions to urge divers to do [Safety stop]. After dive in 10m or deeper, and ascending with no decompression stop, the 3 minutes count-down timer will be on automatically at the depth of 6m. This will be on during you are in the depth of 1.6m to 6m. We recommend you not to ascend to the surface but stop for safety until 3-minutes count-down is finished.

1) At the depth of 6m, safety stop alarm “pi” will be on. STOP will be displayed.
2) Count-down timer displays (03:00), and 3-minutes timer will start.
3) After 3 minutes is passed, [↑ OK] will be displayed for 5 seconds Then start ascending to the surface.



Water depth	Count-down function	display
1.5m or shallower	end (reset)	Surface Mode
1.6m to 6.0m	normal function	Safety stop
6.1m to 9.9m	stop (data is saved)	Dive Mode
10m or deeper	end (reset)	Dive Mode

What Makes “Safety Stop Function” End

- when 3 minutes is passed.
- when you ascend 1.5m or shallower from the surface.
- when you re-descend 10m or deeper.

Note

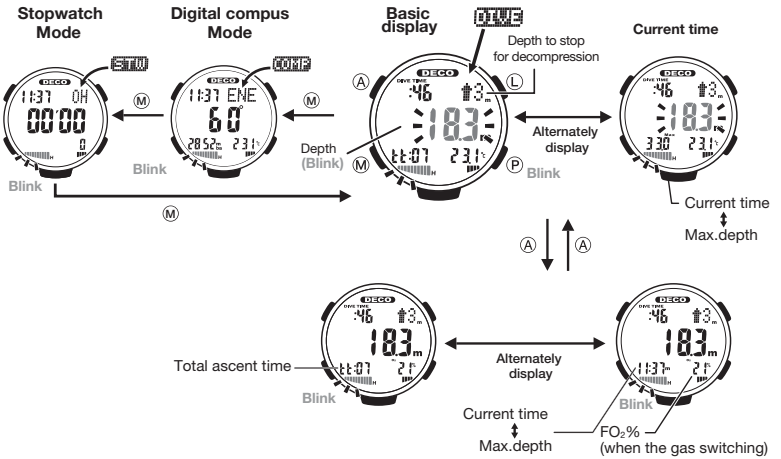
Safety stop is always displayed when you descend 10m or deeper even if you have to do decompression dive.

No Decompression Limit (NDL) Warning

The dive computer has the functions to urge divers to ascend when no decompression limit (NDL) is getting less. When it becomes less than 3 minutes, the dive computer will urge divers to ascend as shown below.

1) When NDL is displayed on the dot area at the upper right, NDL value in the dot area will keep on blinking. Or when NDL is displayed on the main display area at the center, NDL value in the main display area will keep on blinking.
2) At the same time, alarm is on for 3 seconds.
3) When No decompression limit (NDL) becomes 3 minutes or more after started ascending, blinking is stopped.

Decompression Dive



The Below Information Is Shown In Decompression Dive.

Depth to stop for decompression	It is shown in every 3m depending on the dive condition.
DECO	Decompression dive mark. It is shown when NDL is exceeded.
Current depth (DEPTH)	Current depth is shown per 0.1m after depth of 1.6m. * Max. 99.9m
Dive time	Time elapsed from start of dive *Max 599 minutes.
N_2 indicator (PGT)	Risk degree of nitrogen accumulated in the body is shown with 1 to 10 levels.
O_2 indicator (OLI) or PO_2	Risk degree of oxygen accumulated in the body is shown with 1 to 10 levels. Or current hazardous level of oxygen is shown with 1 to 10 levels.
• Either higher level above will be shown.	
Max. depth (MAX)	The max. depth in the current dive * Max 99.9m
Current water temperature	Displays current water temperature.
Current time	Displays current time with hour and minutes
Total ascent time (TOTAL)	Total ascending time from current depth to the surface with the proper ascending speed including decompression stop
Direction compass and angle	**Refer to direction measurement ... P.64**

Press **A** to display the oxygen concentration settings at the bottom right of the screen. * Oxygen concentration is automatically displayed at the bottom right for 10 minutes after starting diving, and switches to current water temperature.

Press **M** to display Compass Mode and display the orientation, angle and p ressure. Press **M** again to display Stopwatch Mode, and once more to display no decompression diving.

Warnings In Dive

Ascent Rate

Ascending speed is monitored and warning is given when ascending speed exceeds than set speed. The ascending speed set in this dive computer is 10m/minutes

- When ascending speed exceeds than 10m/minutes, warning of [SLO] is shown in the center of the main display and it will blink for 6 seconds. Alarm will be on for 6 seconds.
- When ascending speed becomes OK, warning of [SLO] is off, and warning is canceled.
- If the warnings are released 2 times in a row, it will be recorded in the dive log.

Warning Of Three Minutes To Decompression

When NDL becomes three minutes, alarm will be ON for three seconds and main display will start blinking .

Decompression Dive

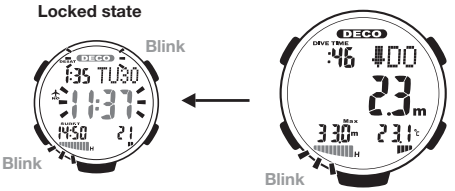
When No decompression limit (NDL) is exceeded in a dive, the warning is given for you to stop for decompression. NDL display will change to current water depth.

- DECO will be on, and N_2 indicator and Current depth will blink.
- Alarm will be on for 6 seconds
- After that, decompression dive will be displayed automatically.

- When you stopped for decompression at the indicated depth, DECO will be off, N_2 indicator will change from blinking to ON, Current depth blinking will be canceled, and dive will become No decompression dive.
- If the warning is given even 1 time, it will be recorded in the dive log.

Decompression Stop Violation

Warning is given when the decompression stop depth is shallower than the indicated depth. Depth range for stop: -0.5m < indicated decompression stop depth < + 1m



- When current depth is shallower than the indicated depth for decompression stop, [↓ DOWN] warning is shown.
- DECO and STOP will blink and alarm will be on for 6 seconds
- When you are back to the right depth for decompression stop, the warning will be off, otherwise it will keep on.
- If the warning is given even 1 time, it will be recorded in the dive log.

Stop for decompression at the indicated depth. Do not stop at the shallower depth than it should be. If sea condition would not allow stopping at the indicated depth, try at 1 – 2 m deeper than the indicated one and stop for 1-2 minutes longer than indicated time.

If you ascended and stayed in the water shallower than 1.6m for 10 minutes ignoring decompression stop warning, the risk of developing decompression illness will be increased. In this case, the dive computer cannot be used for dive next 48 hours.

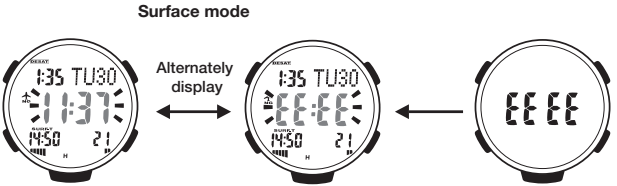
- DECO and Current time will all blink indicating the functions are locked.

Out Of Measurement Range

Warning is given in the following conditions.

1) When depth exceeds 99.9m
2) When decompression stop is needed at 33m or deeper in decompression dive
3) When decompression stop time exceeds 99 minutes or when total ascending time exceeds 99 minutes in decompression dive.

- EEEE will be shown in 7-segment display area, and alarm will be on for 3 seconds
- The dive computer cannot be used for dive next 48 hours after the warning.
- If the warning is given even 1 time, it will be recorded in the dive log.
- The dive computer cannot be used for dive next 48 hours after mode becomes Surface Mode. During all that time, EEEE and Current time are shown in 7-segment display area in turn indicating the functions are locked.



O_2 Indicator (OLI)

Warning is given when oxygen accumulated in the body exceeds the tolerance.

- O_2 indicator and its PO_2 indicator will blink.
- Alarm will be on for 6 seconds.
- Warning continues until OLI inside the body goes back within the tolerance. Move to the shallower area with proper speed at once.
- If the warning is given even 1 time, it will be recorded in the dive log.

PO_2

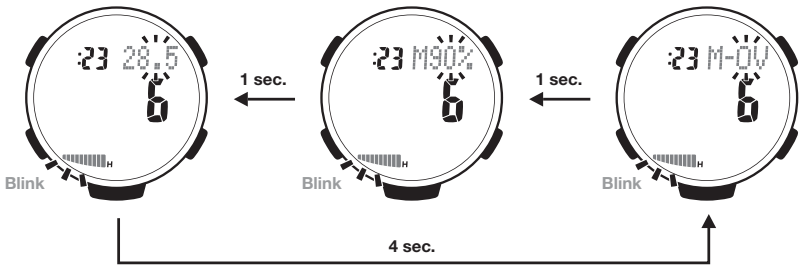
Warning is given when PO_2 becomes 1.4 or more.

- O_2 indicator and its PO_2 indicator will blink, and [PO_2] will be shown at the upper right dot area.
- Alarm will be on for 6 seconds.
- Warning continues until PO_2 goes back within the tolerance. Move to the shallower area with proper speed at once.
- If the warning is given even 1 time, it will be recorded in the dive log.

M Value

Warning is given if the bodily nitrogen pressure value for the compartment that determines the no decompression diving time reaches the set value (80%, 90%, 95% of M value). M Value = Maximum allowable pressure value=No decompression limit.

- Accumulated nitrogen indicator will blink, and M-OV(1s)M??% (1s) Current water temperature(4s) will be shown at the upper right dot area.
- Alarm will be on for 3 seconds
- Warning continues until M value becomes below the set %.
- If the warning is given even 1 time, it will be recorded in the dive log.



Nitrox (EANx) Dive

Ref.EANx: Enriched Air Nitrox (commonly called: Nitrox) Mixed gas with higher % of FO_2 than normally used compressed air (FO_2 is 21%)

Dive with normal compressed air (FO_2 is 21%) and 4 mixture EANx gases (FO_2 is 22-100%) are available with this dive computer. Beside the normal information on dive, considering the oxygen toxicity due to excess intake, oxygen affecting to diver's body per oxygen level and water depth is to be monitored in the Nitrox dive.

* O_2 and PO_2 level: FO_2 is 21 %: Normal compressed air is also to be monitored all the time.

The below information is shown in the Nitrox (EANx) dive.

- When FO_2% is set to 22-100% as Nitrox (EANx), "FO_2 % set" will be on with blinking in all modes except Log mode.

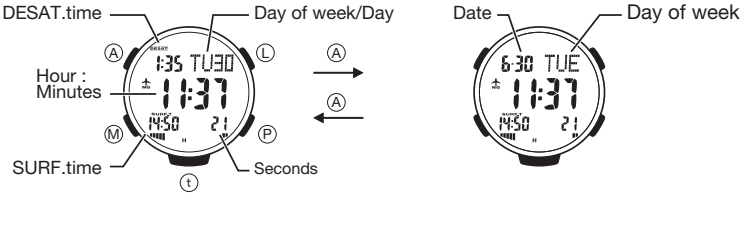
Ref: Set FO_2 % P.54
Default FO_2 % ... P.55

End Of Dive

The computer ends the dive when the depth is less than 1.6 m from the water surface, and switches to Surface Mode display. Therefore, if you dive again to a depth of more than 1.6 m after Surface Mode is displayed, rather than continuing the same dive, it is calculated as a new dive.

The longer the surface rest time you take, the longer the no decompression dive time for the next dive will be. TUSA recommends that you take at least 90 minutes' surface rest time due to nitrogen elimination time.

〔**Surface Mode**〕



Dive At High Altitude

Air pressure (Ambient pressure) at high altitude is lower than one on sea surface. Higher the altitude in dive is, more difficult the decompression condition becomes compared to the sea surface. The dive computer auto-measures air pressure in every 20 seconds and sets the current air pressure properly to calculate for decompression. You are free from worrying the altitude you are at and can enjoy safe dive according to the altitude. However, you must remember that non decompression limit (NDL) is much shorter in the dive at high altitude than in the sea. Dive at high altitude increases the risk of developing decompression illness. Please keep in mind that you should not have decompression dive in high altitude.

⚠ Attention

The computer measures the pressure of atmosphere every 20 seconds, and constantly calculates the Desaturation time from the difference with the bodily nitrogen pressure, unlike other conventional products which measure the exit point pressure and displays the Desaturation time by reverse calculation timer from the difference with the bodily nitrogen pressure at that time. For this reason, the Desaturation time may vary due to ambient pressure changes such as changes in the weather, going to high altitude road by a car or getting on an airplane.

10. Log Mode (LOG)

It is available on Time mode and Surface Mode. Dive logs of last 30 logs are shown in the latest to earliest order. After 30 logs, next dive log will be added, and oldest (earliest) log will be deleted. You can see the depth variation over dive time on the simple dive profile. The dive history is shown at the
end of dive log in which you can see the accumulated data.

- Dive recorded in Log Mode is dive for min. 3 minutes at the depth of 1.6m or deeper.

How to use L) Log Button

(Dive Log, Dive Profile, Dive History Mode, Bluetooth log data transfer)

The computer records all dives deeper than 1.6 m and 3 minutes or longer in Dive Log Mode and Dive Profile Mode, and records information such as total dive time in Dive History Mode.

L can be used in Time Mode and Surface Mode. 30 dive logs are displayed from the most recent. If there are more than 30 dive logs, the new data is saved each dive and the oldest data is deleted. (* Free Diving Log is one log per session. P.93)

You can confirm a simple dive profile so you can know the depth change over the length of the dive. Additionally, at the end of the dive log, the Dive History and Free Diving History (P.93) are displayed, and you can confirm the accumulated data.

(Scuba) Dive Log Mode

Dive Log Mode is comprised of three screens, and the following information is displayed.

* Please read (P.93) for how to read the Free Diving Log

LOG	Log No.	The latest 30 dives from total dives are shown. Max.No. is 9999 (4 digits) When total dive counts exceeds 9999, it goes back to 1.
	Dive year/month/date	Date you dived (year/month/day)
	DIVE/GAUGE	Diving Mode, Gauge Mode
	Entry time	The time you started the dive
	Dive end time	The time you finished the dive
L-1	Average water depth	The average depth in the diving
	DIVE/WARNING/GAUGE	Warnings released in the dive, Dive Mode, Gauge Mode
	Dive Time	The time from the start to the end of the dive
	Max. water depth	The max. depth in the dive
	Lowest water temperature	The lowest water temperature for that dive
L-2	Safety factor	Safety factor settings for that dive
	FO_2% / GAUGE	FO_2% used in the tank for the dive / Gauge mode
	CNS	Ratio of limit value to prevent oxygen poisoning in the central nervous system
	OTU	Ratio of limit value to prevent oxygen poisoning in the lungs
LOG L-1	N_2 or O_2 LOG:At exit time L-1:max	Risk degree of nitrogen accumulated in the body is shown with 1 to 10 levels Risk degree of oxygen accumulated in the body is shown with 1 to 10 levels Or current hazardous level of oxygen is shown with 1 to 10 levels

* The maximum number of logs that can be recorded is 30 (default), but the log number is displayed until a maximum of 9999.
* Please note that if the dive history is cleared, the latest diving log number at the time of clearing is00 and later dives are added newly. Additionally, if the number of dives is edited, the latest diving log number is the same as the edited number.(see page 48)

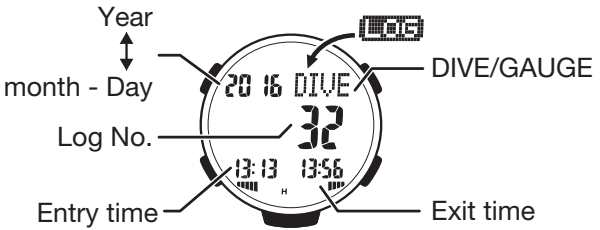
- TUSA recommends clearing the history data prior to use and matching the log number to your own number of dives. (see P. 48)

Dive log confirmation

Press **L** once in Time Mode or Surface Mode to display a scuba diving log data and free diving log data (P.92) mixed in chronological order. Free diving logs are recorded every session (* series of free dives in Free Diving Mode from start to finish). In diving logs, a maximum of 30 log data's can be recorded for only the number of dives (one session of free diving counts as one log).

* The dive profile sampling time is set to 20 s by default, you can record 30 logs if the total diving time is less than 80 hours.

How to view the log data



Press **L** in Time Mode or Surface Mode to display the most recent log data of either (scuba) diving or free diving (1 session).

Press **P** to scroll back through previous log data, and stop at the dive log you wish to see.

Button operation

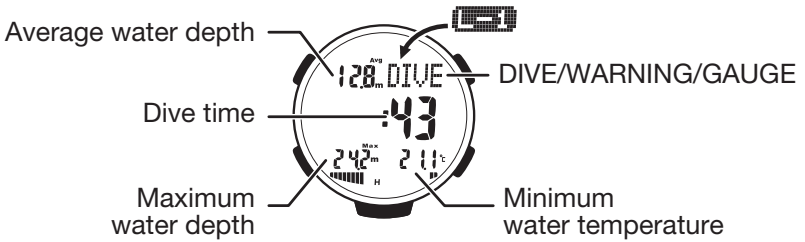
Each time you press **L**, a new dive log is called up in the order of new logs.

Each time you press **P**, conversely, an older dive log is called up in the order of old logs.

Press and hold the **L** or **P** to fast forward.

* The last dive log (the next oldest log before the latest log) is the dive history data (P.46) and free diving history data (P.47).

The larger the log number displayed in the center of the initial screen, the newer the dive log. On this screen, the Dive date, Entry time and Exit time are displayed.

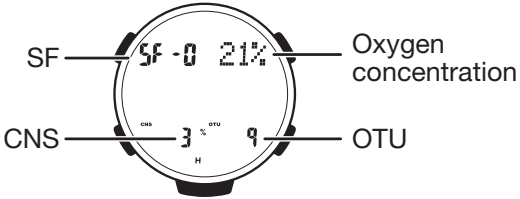


Press **A** if you want to see the details.

[L-1] is displayed on the screen, and after about 1 s the figure information is displayed.

On this screen, the Average water depth, released Warnings, Dive time, Maximum depth, Lowest water temperature, Maximum bodily nitrogen quantity and Maximum bodily oxygen quantity is displayed.

Oxygen concentration



Press **A** again and [L-2] is displayed on the screen, and after about 1 s the information is displayed.
On this screen you can confirm the set value of the Safety factor, FO_2 settings, CNS and OTU.Press **P** or **L** to call up one newer or one older log.
Press and hold the **M** for about 2 seconds to return to Time Mode or Surface Mode.

Warnings recorded in the log

Warnings that occurred during the diving are also recorded in the log data. For more information on warning contents details, see the Dive Mode chapter (P.27 to P.37).
There are the following seven types of warning.

Ascent rate	↑ SLOW	When ascending speed exceeds than 10m/minutes and the warnings are released 2 times in a row.
Decompression dive	DECO is ON	When No decompression limit (NDL) is exceeded in dive and you need to stop for decompression.
Decompression stop violation	↓ DOWN	When the decompression stop depth is shallower than the indicated depth.
PO_2	!!PO_2	When PO_2 becomes 1.4 or more.
O_2	!!O_2	When O_2 in the body exceeds the tolerance.
Maximum water depth warning	DEEP	When the warning water depth set in advance is exceeded
M value	M-VAL	When M value (no decompression limit) reaches at the set %. (80%, 90%, 95%)

Dive Profile Mode

The dive profile taken in the water is very important from the viewpoint of prevention of decompression sickness. TUSA recommends that you check the last dive before diving.

By following a dive profile such the recommended profile (model diving pattern) on P.45, you can reduce the risk of decompression sickness.

The Dive Profile Mode records the transition of diving depth for each dive every 20 s (default), and can display in every 7minutes (20sec.×21) dive profile.

Confirm dive profile

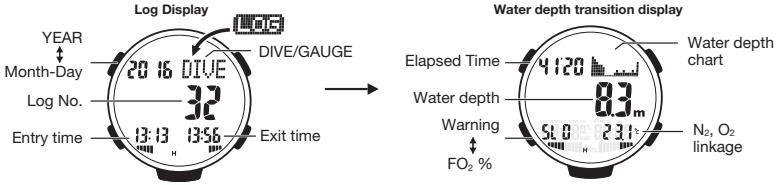
1) Press **L** in the Time Mode or Surface Mode once to display [LOG] on the screen, and the dive computer switches to Log mode after about 1 s.

   When you switch to Log mode, the latest dive log is displayed.

   Dive logs are displayed together with free diving log data (see P.88) in chronological order. Additionally, free diving logs are recorded every session (* series of free dives in Free Diving Mode from start to finish). The dive log displays the characters DIVE.

2) Each time you press **L**, a new dive log is called up in the order of new logs.
   Each time you press **P**, conversely, an older dive log is called up in the order of old logs.
   Press and hold the **P** or **L** to fast forward.
   * The last dive log (the next to oldest and next to newest logs) are dive history data, and before that is the free diving history data.

3) Display the dive log that you want to check the profile of on the screen, press **M**.
[PROF] displays on the screen and after about 1 s the profile screen displays.



* Automatic display of the transition of the depth of water per minute
* The dive profile that is displayed on the graph is every 7 minutes (20sec.×21).
Elapsed time is the change of the current time while diving.

4) The change in water depth as time elapses during the dive (20 second intervals) is automatically displayed every second, and stops display at the end of the dive.

For example, above right figure, indicates that 41 min. and 20 s after the dive start, the depth was 8.3 m. In addition, from the fact that the characters SLO are displayed, you will see that there was an ascent rate violation.

When you are automatically display the profile, press either the **A**, **L**, or **P** to stop part way through.

After stopping, each time you press **P**, the display time continues at 20 s intervals from the time that you stopped. Each time you press L, the display time returns in 1-minute intervals from the time that you stopped.
* The maximum recording capacity is 30 profiles. If there are more than 30 profiles, the old profile data is erased, and the new data will be added.

5) When you press M, [LOG] displays and the dive profile display exits.
   Or, if you leave the dive computer for 2 to 3 minutes, it returns to Time Mode or Surface Mode.

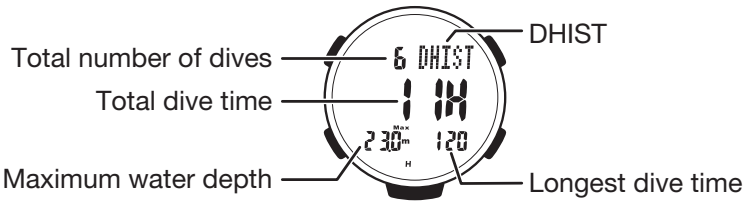
Dive History Mode / Free Diving History Mode

Dive History Mode is a function where you can confirm the diving history data saved in the memory = the total number of dives to date, the total dive time, the maximum water depth and the longest dive time. And Free Diving History Mode is a function where you can confirm the free diving history data saved in the memory = the total number of free dives to date, the total dive time, the maximum water depth and the longest dive time.

Dive History

Total dive time: The display of total time of diving up to now. (0 h to 999 h)

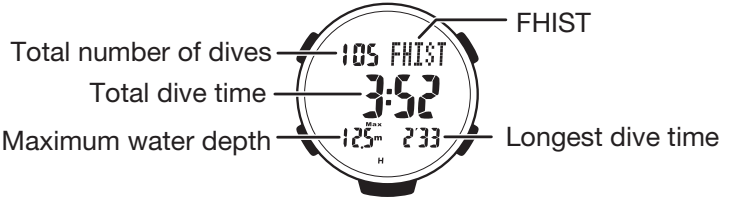
* Minutes are truncated in the display time.



Total dive hours	The display of total time of diving up to now. (0 h to 999 h)
Total number of dives	The display of total number of dives up to now. (0 to 9999)
Maximum water depth	The maximum water depth dived to up to now. (0. to 99.9 m)
Longest dive time	The longest dive time up to now. (0 to 599min)

In avobe figure, it is shown that the total dive time is 11 hours, the total number of dives is six, the maximum water depth is 23.0m and the longest dive time is 120 min.

Free Diving History



Total dive hours	The display of total time of free diving up to now. (0 h to 99h59min)
Total number of dives	The display of total number of free dives up to now. (0 to 9999)
Maximum water depth	The maximum water depth free dived to up to now. (0. to 99.9 m)
Longest dive time	The longest free dive time up to now. (0 to 99.59)

In avobe figure, it is shown that the total dive time is 3 hours 52 minutes, the total number of dives is 105, the maximum water depth is 12.5m and the longest dive time is 2 min. 33 s.

Confirmation of dive history / free diving history

1) Press **L** in the Time Mode or Surface Mode once to display [LOG] on the screen, and the dive computer switches to log mode after about 1 s.

When you switch to log mode, the latest dive log is displayed.

2) Press **L** again and [DHIST] displays on the screen, and dive history displays after about 1 s.

3) Press **L** again and [FHIST] displays on the screen, and free diving history displays.

Dive history clear / Dive number edit function

1) Press and hold **A** from the Time Mode or Surface Mode to display the basic operation screen of various settings (page 18). While holding down **t**, press **A** and **M** at the same time, a beep sounds and all history data is cleared.

2) When you are viewing the dive history screen, press **A** and **L** at the same time as pressing **t** and the total dive number flashes. Press **L** or **P** to increase or decrease the number of dives. Finally, press **A** and the update is complete.

Dive profile sampling time settings

The sampling interval of the dive profile mode is 20 s (default), but you can select every 60 s, 30 s or 10 s.

You can record a total of 80 h of dive profiles in the case of a 20 s interval.
Since the maximum recording number of log data is 30 profiles, there is a sufficient space for normal diving.

You can record a total of 40 h of dive profiles in the case of a 10 s interval.

* Example: If you set 10 s intervals, if an average dive length of 90 min. is repeated, because the 27th profile exceeds the recording limit, the oldest log data will be erased. Thus, the maximum recording number of dive logs is 26. If you set the interval to 30 s or 60 s, the recordable time per profile will be longer, but the maximum number of recordings is the same at 30 profiles.

Setting method

When you press **L** in Time Mode or Surface Mode, the dive log data or free diving log data is displayed.

Since the dive computer switches to the sampling time setting screen when you press and hold (2 seconds) **A**, press **L** or **P**, to switch to the setting of your choice.

Press **A** to return to the log mode screen.

O_2 profile save settings

The computer can transfer the log data using Bluetooth to your smartphone (requires free dedicated app). With this function, when you set the O_2 profile save settings to ON, you can view the O_2 value (dive profile O_2 bar graph information) profile on the smartphone app.
The O_2 value is the greater of (PO_2 / 1.4(bar)) % or CNS %.
* The app may not be supported - in this case please set to OFF.

Setting method

When you press **L** in Time Mode or Surface Mode, the dive log data or free diving log data is displayed.
A press and hold and then switches to the sampling time setting screen (2 seconds).

Press the **M** to switch to the O_2 profile saved settings screen and the characters O_2 and OFF (default) are displayed. If you wish to add a Bluetooth data transfer item for O_2 information, select ON, otherwise select OFF.
Press **A** to return to the log mode screen.

* If you set the O2 profile save settings to ON, the N2 sampling time interval becomes longer and the amount of information becomes smaller.

Bluetooth (BLE) data transfer mode

The computer uses the **Bluetooth SMART function** and a free downloadable app for smartphones to transfer information measured by the dive computer to a smartphone. In addition to being able to record basic log data information recorded on the dive computer such as the dive start time, dive time and maximum water depth in the smartphone app as a diving log, you can also record the dive location (map) information, an instructor signature and photos.

The transfer method is as follows.

1) In the dive computer's Time Mode or Surface Mode, press and hold **L** for more than 2 seconds.

2) After the LOG and BLE marks display momentarily, the characters BLE display in the upper-right corner and the characters OFF display in the center, and the dive computer switches to Bluetooth transfer mode.

3) Press the **P** to switch Bluetooth ON.

4) With your smartphone's Bluetooth functionality turned ON, and tap “Link with DC Solar” in the app, then press “find now” to connect to the dive computer. * For more information, follow the procedures in the app’s “User’s manual (WEB)”.

5) When data transfer is complete, press the dive computer **M** to return to Time Mode or Surface Mode.

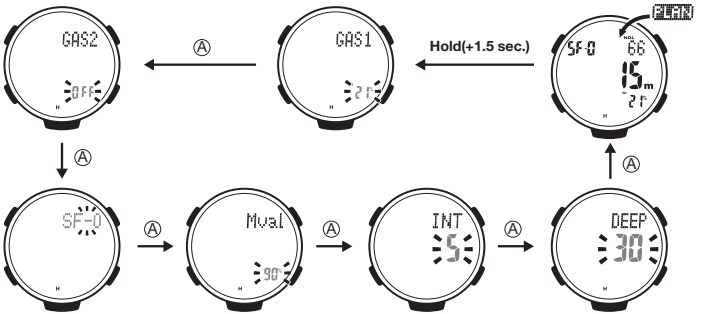
⚠ Attention

- You may not be unable to connect with certain smartphone models and operating systems. Please check the TUSA website for more information.
- The dive computer and smartphone may not be unable to communicate properly when there are multiple THE COMPUTER units set to Bluetooth transfer mode at the same time close to each other. To communicate with more than one THE COMPUTER, stagger the connection timing.
- Because Bluetooth data transfer places a great burden on the dive computer, it will turn OFF after around 30 seconds.
- Also, if there is insufficient power (the CHG mark flashes) you cannot switch on Bluetooth transfer mode.

* The Bluetooth® trademark and logo are registered trademarks owned by Bluetooth SIG, Inc., and Tabata Co., Ltd. uses these marks under license.

11. Plan Mode (PLAN)

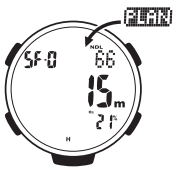
You can plan dive applied to safety factor of 3 types of dives; initial dive, repetitive dive, and Nitrox dive (EANx). By monitoring M value (no decompression limit), risk to develop the decompression illness can be reduced. No decompression limit at every 3 m from the depth of 9 m is shown.



Plan Dive

1) Make the mode Plan Mode
   Press **P** once in Time mode or Surface Mode.
   [PLAN] is displayed and mode will be changed to Plan Mode in appox. 1 second.
   Ref. Mode types and how to switch them …P.19

Non decompression limit (NDL)	Time you can stay at the planned depth without decompression. * Max. 200 minutes
Planned dive depth	You can set the depth between 9 to 48m in multiples of 3m such as 9m, 12m, 15m, etc.



2) Press **P** or **L** to set the planned dive depth (9 to 48m). The depth is shown in multiples of 3m such as 9m, 12m, 15m, etc and NDL calculated for each depth will be shown.
3) Press **M** for about 2 seconds to go back to Time mode or Surface Mode.

Enriched Air, Nitrox Diving

The computer is suitable for (enriched air) Nitrox diving. You can set up to 4 mixtures of FO_2% in 1% increments from 21% (Air) to 100% to match the gas in the tank.

Warning!

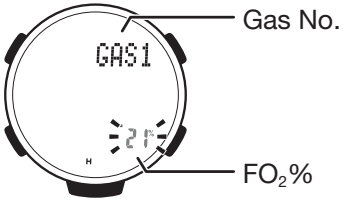
- When using the dive computer in Nitrox (EANx) dive, you have to take Nitrox dive training course and complete it by internationally acknowledged dive training organization beforehand.
- Be sure to set the oxygen percentage for each dive. It is extremely dangerous if the FO_2% setting in the gas you use is different from the percentage setting in the dive computer. * If the FO_2% setting is known, the no decompression dive time and maximum allowable dive depth can be calculated.

Note) If the dive computer is used only with normal air, set the FO_2% setting to 21% (Air) and there is no need to set it each dive. The default setting is 21%

* Bodily oxygen quantity and oxygen partial pressure is constantly measured even with an oxygen percentage of 21%: compressed air.

FO_2% Setting

1)In Time mode or Surface Mode, press **P** once and the [PLAN] screen is displayed on the screen, and after about 1 second the dive computer switches to Plan Mode. (* The dive computer does not switch when Gauge Mode is ON.)



2) Press and hold **A** for about 2 seconds.
After [SET] [Hold] flashes, remove your finger when [GAS1] [21-100%] is displayed.

3) Press **P** or **L** and set the FO_2% from 21% to 100%.
* 22% to 100% are Nitrox settings.

⚠ Attention

- With a higher FO_2% setting, the allowed diving depth is shallower.

Press and hold **P** or **L** to fast forward. The dive computer pauses at 21%, 32% and 50%. The set FO_2% flashes at the bottom left in Time mode and Surface Mode when it is set to 22% to 100%.

4) For accelerated decompression in technical diving etc. press **A** to open the GAS2 screen and set the FO_2% with the same procedure. Set GAS2 and you can set GAS3, set GAS3 and you can set GAS4, but the later GAS cannot be set unless it has a larger FO_2% such that GAS1 < GAS2 < GAS3 < GAS4.

5) Press and hold **M** for about 2 seconds to return to Time mode or Surface Mode.
After [SET] [Hold] [TIME] flashes, remove your finger when [TIME] is displayed.

⚠ Attention

- Be sure to check the oxygen percentage for each dive.

Default

If the date changes (goes past 0:00) with GAS1-GAS4 FO_2% set in the range 22 to 100%, the FO_2% returns to the default state (21% oxygen percentage: compressed air).

- Once the FO_2% goes back to the default state the flashing display in Time mode or Surface Mode no longer displays.

Warning!

- When diving with Nitrox, be sure to confirm the tank oxygen percentage and dive computer oxygen percentage setting and match them.

Oxygen-Pressure Warning And Bodily Oxygen Quantity Warning

When diving with Nitrox, the maximum diving depth limit is fixed for the FO_2%. Even if, for example, the no decompression dive time is displayed during diving, do not exceed this maximum water depth under any circumstances. The risk of oxygen poisoning will increase.

In Dive Plan Mode, the no decompression dive time at a depth lower than the fixed maximum water depth is displayed as 0. Please dive after memorizing the water depth limit in advance.

* If FO_2% are set for GAS2 to GAS4 as well as GAS1, the GAS1 no decompression dive time is displayed in Dive Plan Mode. If the oxygen partial pressure warning value is 1.4 or greater, or if the bodily oxygen quantity exceeds the allowable range, the following warnings are given.

Bodily Oxygen Quantity Warning

When the bodily oxygen quantity exceeds the allowable range, the bodily oxygen quantity and oxygen partial pressure bar graph flash, and at the same time the alarm sounds for 6 seconds. The warning continues until the bodily oxygen quantity returns to the normal range.

Oxygen Partial Pressure Warning

When the oxygen partial pressure is 1.4 or above, the bodily oxygen quantity and oxygen partial pressure bar graph flash, PO_2 is displayed at the upper right of the screen, and at the same time the alarm sounds for 6 seconds. The warning continues until the oxygen partial pressure returns to the normal range.

<u>If even one warning occurs for bodily oxygen quantity or oxygen partial pressure, it is recorded in the dive log.</u>

If the warning sounds, be sure to return to a water depth at which the warning clears, paying attention to your speed.
Under no circumstances dive at a depth that exceeds the maximum depth determined for the FO_2%. The risk of oxygen poisoning will increase dramatically.

Warning!

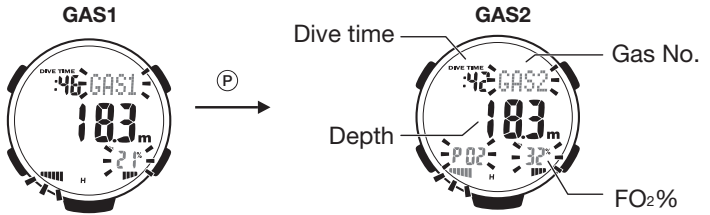
- In Nitrox diving, coming close to or exceeding the maximum water depth or dive time for the set FO_2% increases the oxygen partial pressure value and bodily oxygen quantity. The effects on the human body due to oxygen become larger and become very dangerous so be sure to avoid this.

Multiple Gas Settings Diving (Accelerated Decompression)

The computer can record up to up to four tanks with different FO_2% and switch during diving (accelerated decompression). *
It is necessary to set the FO_2% for GAS2-GAS4 for accelerated decompression. If Nitrox is set, the FO_2% flashes at the bottom left of the screen in Time mode and Surface Mode. And, regardless of whether or not multiple gases are set, FO_2% is displayed for about 10 seconds when you start diving.

How to switch the gas

GAS1 is always selected at the start of the dive. Press and hold **A** for about 2 seconds and the currently used gas No. (first is GAS1) and FO_2% flash, and the current water depth is displayed.



When multiple gases are set, you can switch the gas on this screen under water.
You can change the gas No. with **P** (gas No. UP) or the **L** (gas No. DOWN), but if you are at a depth deeper than the allowable dive water depth (oxygen partial pressures greater than 1.6 bar) you cannot change the gas No. even if you press the buttons.

Also, if you dive deeper than the allowable dive water depth for the currently selected gas displayed on the gas switch screen, an alarm sounds and the gas is automatically changed to an allowable one (lower FO_2%).

* However, you can ascend to a water depth where switching is possible and change the gas No. again.

After changing, you can press **A** to confirm the gas change.
Note that after 2 to 3 minutes on the gas switch screen, the dive computer returns to the normal Dive Mode screen, keeping the currently selected gas.

* The allowable dive depth is set to an oxygen partial pressure of within 1.6 bar, but if it becomes 1.4 bar or more on the gas switch screen, "PO_2"is displayed in the lower left corner.

Regardless of multiple gases settings or single gas settings, after diving with Nitrox settings, the settings are kept until the date changes (0:00). When the date changes, GAS1 is set to 21% and GAS2-GAS4 to OFF as default, so be sure to confirm the gas settings before diving in Dive Plan Mode.

Regarding The Accelerated Decompression Log

The FO_2% display screen log (L-2) displays the last switched FO_2%.
On the Dive Profile display, the initial FO_2% and the FO_2% at the time of switching are displayed in the lower left are in chronological order.

Set Safety Factor

You can select decompression schedule from the 3 dive types.

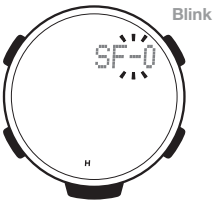
SF-0 (default)	safety factor	small
SF-1	safety factor	middle
SF-2	safety factor	high

⚠ Attention

Safety factor you select will be effective until changed.
It will effect calculation on dive and after dive.

Safety Factor setting

1) Make the mode Plan Mode
   Press **P** once in Time mode or Surface Mode.
   [PLAN] is shown in the display, and the mode will be changed to Plan Mode in approx. 1 second.
   Ref. Mode types and how to switch them…P.19
2) Press **A** for about 2 seconds
   When [GAS1] [21 - 100%] are shown after [SET] [Hold] were blinked, stop pressing the button.
3) Press **A** 2times to make the display for Safety Factor setting.



4) Every time pressing **P** or **L**, SF is set as below.
   SF-0 (default) → SF-1 → SF- 2
5) Press **A** 4 times to go back to Plan Mode.
6) Press **M** for about 2 seconds to go back to Time Mode or Surface Mode.

⚠ Attention

- Safety factor setting cannot be checked, re-set, changed in Dive Mode.
- Setting SF-1, SF-2 makes releasing level of M Value Warning more strict synergistically.

Set M Value Warning

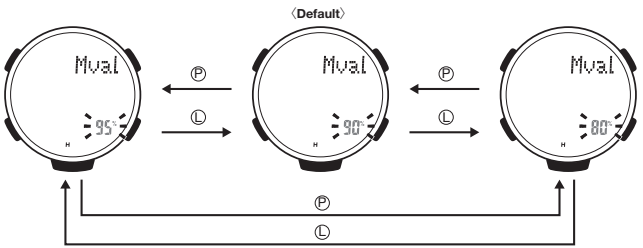
You can set the warning to release when nitrogen is accumulated at the specific % of the M value (no decompression limit) to reduce the risk to develop decompression illness.

Set the M value (no decompression limit) warning. You can select % for M value warning as below.

95%	Warning is given with 95% of M value.
90% (default)	Warning is given with 90% of M value.
80%	Warning is given with 80% of M value.

1) Make the mode Plan Mode
   Press **P** once in Time mode or Surface Mode.
   [PLAN] is displayed and mode will be changed to Plan Mode in appox. 1 second.
   Ref. Mode types and how to switch them…P.19

2) Press **A** for about 2 seconds
   When [GAS1] [21 - 100%] are shown after [SET] [Hold] were blinked. Press **A** 3 times to make the display for M value warning setting.



   [Mval] [90%] will be shown as default. If you have changed the M value %, [Mval] and either [80% or 90% or 95%] are shown.

3) Press **P** or **L**. to set [Mval] and either [80% or 90% or 95%].
   To fast forward, keep pressing **P** or **L**.

4) Press **A** 3 times to go back to Plan Mode.

5) Press **M** for about 2 seconds to go back to Time Mode or Surface Mode

Depth Interval Alarm

The dive computer features a Depth interval alarm function in normal Dive mode, Free diving mode and Gauge mode that gives a warning sound of three beeps for each set water depth during diving.

For normal diving, of course, it can also be used as a maximum depth alarm. Since the default setting is OFF, please use if needed.

Setting Of Depth Interval Alarm

1) In Time mode or Surface mode, press **P** once, [PLAN] appears on the screen, and after about 1 second the unit switches to plan mode.

2) Press and hold **A** for about 2 seconds.
After [SET][Hold] blinks, release your finger when you see [GAS1] [21 ~ 100%].

3) By pressing **A** 4 times, after passing through the M value warning settings screen, [INT] and the setting number (default is OFF) are displayed, and the unit switches to the depth interval alarm settings screen.

4) Press **P** to increase the water depth in increments of 1m or press **L** to decrease the water depth. Press **M** to switch the setting ON or OFF.

Setting Range

When using m (meters) as measurement units OFF, 3, 4, 5, …… 98, 99 The alarm can be set from 3m in 1m units up to 99m.

When using ft (feet) as measurement units
OFF, 10, 15, 20, 25, ……320, 325 The alarm can be set from 10ft in 5ft units up to 325ft

* The setting remains once it is set.

Maximum Water Depth Warning Settings

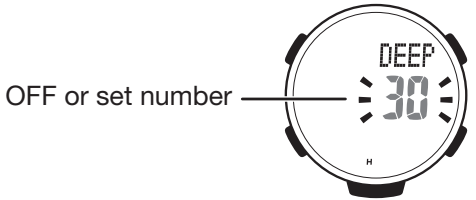
THE DIVE COMPUTER is equipped with a maximum water depth warning function that sounds when the set water depth is reached in normal Dive Mode, Free Diving Mode and Gauge Mode. The default setting is OFF so please use if necessary. TUSA recommends a maximum water depth for recreational diving of 30 m.

Setting Method

1) In Time mode or Surface Mode, press **P** once and the [PLAN] screen is displayed, and after about 1 second the dive computer switches to Plan Mode.

2) Press and hold **A** for about 2 seconds.
After [SET][Hold] flashes, remove your finger when [GAS1] [21 - 100%] is displayed.

3) Press **A** 5 times and the dive computer switches to the maximum water depth warning settings screen via the GAS2 settings to depth interval alarm settings screens, and [DEP] and the setting number (default OFF) are displayed on the screen.



4) Press **P** and the set depth increases from 3 m in 1 m increments, press **L** to decrease the depth. You can fast forward by pressing and holding either. If you set the water depth you want a warning for during diving, the alarm sounds when the set water depth is reached other than OFF.

Setting Range

When you set measurement units as m (meters)
OFF, 3, 4, 5,... 98, 99 m from 3 m in 1 m units can be set

UPTD Pulmonary Oxygen Poisoning Units (Total Minutes Per Day/Week) Display

As a guide to pulmonary oxygen poisoning prevention, The dive computer can display OTU (UPTD) total minutes per day (percentage with 600 as 100%) or per week (percentage with 2,500 as 100%).

1) In Time mode or Surface Mode, press **P** once and the [PLAN] screen is displayed on the screen, and after about 1 second the dive computer switches to Plan Mode.

2) Press **A** and total minutes per day are displayed.

3) Press **A** again and total minutes per week are displayed.

Total per day

Total per week

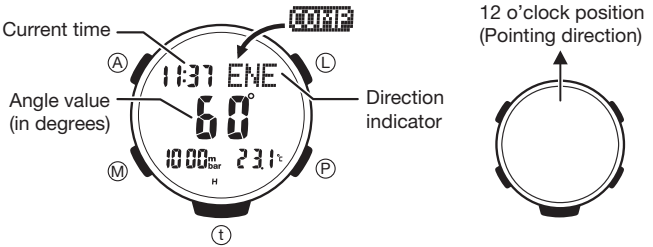
4) Press **A** again to return to Dive Plan Mode.
   Or, press and hold **M** for about 2 seconds to switch to Time mode.

12. Using The Compass

The Digital Compass Mode uses a built-in direction sensor to take direction readings and display the results. The dive computer also displays literal indications of direction that its 12 o'clock position is currently pointed.

- For information about what you can do to improve digital compass reading accuracy, see "Calibrating the Bearing Sensor" and "Digital Compass Precautions".

To Take A Direction Reading



1. Make sure the dive computer is in the Time mode, Surface Mode and Dive Mode.
2. Place the dive computer on a flat surface. If you are wearing the dive computer, make sure that your wrist is horizontal (in relation to the horizon).
3. Point the 12 o' clock position of the dive computer in the direction whose reading you want to take.
4. To enter the Digital Compass Mode. Use **M** to select the Digital Compass Mode (COMP) as shown on page 19.

- COMP will appear in the upper right display to indicate that a digital compass operation is in progress.
- About 1 seconds after you press **P**, direction will also be indicated by literal direction indicators and by a direction angle.

Digital Compass Readings

- When you press **M** to start digital compass reading operation, COMP will initially appear on the display to indicate that a digital compass operation is in progress.
- After the first reading is obtained, the dive computer will continue to take digital compass readings automatically each second for up to 60 seconds. After that, the reading operation will stop automatically.
- The direction indicator and angle value, ambient pressure (atmospheric pressure or water pressure) will show - - - to indicate that digital compass readings are complete.
- The auto light switch is disabled during the 60 seconds that digital compass readings are being taken.
- The following table shows the meanings of each of the direction abbreviations that appear on the display.

Direction	Meaning	Direction	Meaning	Direction	Meaning	Direction	Meaning
N	North	NNE	North-northeast	NE	Northeast	ENE	East-northeast
E	East	ESE	East-southeast	SE	Southeast	SSE	South-southeast
S	South	SSW	South-southwest	SW	Southwest	WSW	West-southwest
W	West	WNW	West-northwest	NW	Northwest	NNW	North-northwest

The margin of error for the angle value and the direction indicator is ±11 degrees while the dive computer is horizontal (in relation to the horizon). If the indicated direction is northwest (NW) and 315 degrees, for example, the actual direction can be anywhere from 304 to 326 degrees.

- Note that taking a direction reading while the dive computer is not horizontal (in relation to the horizon) can result in large direction reading error.
- You can calibrate the bearing sensor if you suspect the direction reading is incorrect.
- Any ongoing direction reading operation is paused temporarily while the dive computer is performing an alert operation (daily alarm, hourly time signal, countdown timer alarm) or while

illumination is turned on (by pressing **t**). The direction reading operation resumes for its remaining duration after the operation that caused it to pause is finished.
- See "Digital Compass Precautions" (page 69) for important information about taking direction readings.

Calibrating The Bearing Sensor

You should calibrate the bearing sensor whenever you feel that the direction readings being produced by the dive computer are off.

Bidirectional Calibration

Bidirectional calibration calibrates the bearing sensor in relation to magnetic north. Use bidirectional calibration when you want to take readings within an area exposed to magnetic force.
This type of calibration should be used if the dive computer becomes magnetized for any reason.

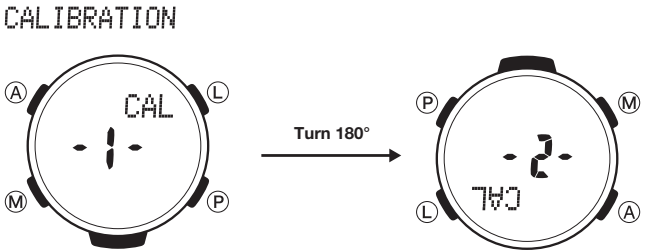
Important!

- To ensure correct direction readings by this dive computer, be sure to perform bidirectional calibration before using it. The dive computer may produce incorrect direction readings if you do not perform bidirectional calibration.

Precautions About Bidirectional Calibration

- You can use any two opposing directions for bidirectional calibration. You must, however, make sure that they are 180 degrees opposite each other. Remember that if you perform the procedure incorrectly, you will get wrong bearing sensor readings.
- Do not move the dive computer while calibration of either direction is in progress.
- You should perform bidirectional calibration in an environment that is the same as that where you plan to be taking direction readings. If you plan to take direction readings in an open field, for example, calibrate in an open field.

To Perform Bidirectional Calibration



1. In the Digital Compass Mode, hold down **A** for at least 2 seconds First, SET Hold will blink on the display. After that, CALIBRATION will scroll across the upper right display. Keep **A** depressed until CALIBRATION starts scrolling.

- At this time, the display will show -1- to indicate that the dive computer is ready to calibrate the first direction.

2. Place the dive computer on a level surface facing any direction you want, and press **L** to calibrate the first direction.

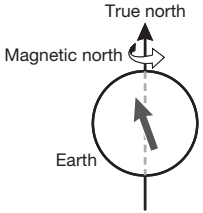
- - - - is shown on the display while calibration is being performed. When calibration is successful, Turn 180° will appear on the display. After about 1 second, CALIBRATION -2- will scroll across the upper right display.
- If ERR-1 appears on the display, press **L** again to restart the direction reading operation.

3. Rotate the dive computer 180 degrees.
4. Press **L** again to calibrate the second direction.

- - - - is shown on the display while calibration is being performed. When calibration is successful, the display will show OK and then change to the Digital Compass Mode screen.

Digital Compass Precautions

Magnetic North And True North



- The northerly direction can be expressed either as magnetic north or true north, which are different from each other. Also, it is important to keep in mind that magnetic north moves over time.
- Magnetic north is the north that is indicated by the needle of a compass.
- True north, which is the location of the North Pole of the Earth' s axis, is the north that is normally indicated on maps.
- The difference between magnetic north and true north is called the "declination". The closer you get to the North Pole, the greater the declination angle.

Location

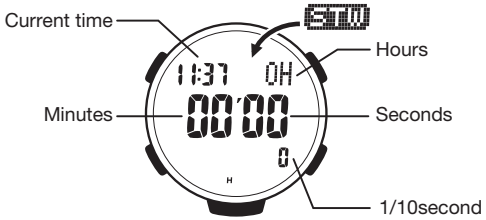
- Taking a direction reading when you are near a source of strong magnetism can cause large errors in readings. Because of this, you should avoid taking direction readings while in the vicinity of the following types of objects: permanent magnets (magnetic necklaces, etc.), concentrations of metal (metal doors, lockers, etc.), high tension wires, aerial wires, household appliances (TVs, personal computers, washing machines, freezers, etc.).
- Accurate direction readings are impossible while in a train, boat, air plane, etc.
- Accurate readings are also impossible indoors, especially inside ferro-concrete structures. This is because the metal framework of such structures picks up magnetism from appliances, etc.

Storage

- The precision of the bearing sensor may deteriorate if the dive computer becomes magnetized. Because of this, you should store the dive computer away from magnets or any other sources of strong magnetism, including: permanent magnets (magnetic necklaces, etc.) and household appliances (TVs, personal computers, washing machines, freezers, etc.).
- Whenever you suspect that the dive computer may have become magnetized, perform the procedure under "To perform bidirectional calibration" (page 68).

13. Using The Stopwatch

The stopwatch measures elapsed time, split times, and two finishes.



To Enter The Stopwatch mode

Press **M** 2 times to select the Stopwatch Mode (STW) as shown on page 19.

To Perform An Elapsed Time Operation

P → P → P → P → L

Start **Stop** **(Restart)** **(Stop)** **Reset**

To pause at a split time

P → L → L → P → L

Start **Split** **Split release** **Stop** **Reset**

(**SPLIT** appears in the upper part of the display.)

To measure two finishes

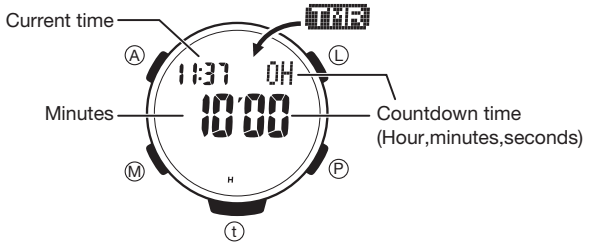
Start	Split	Stop	Split release	Reset
	First runner finishes. (**SPLIT** appears in the upper part of the display.) Display time of first runner	Second runner finishes.	Display time of second runner.	

Note

- The Stopwatch Mode can indicate elapsed time up to 999 hours, 59 minutes, 59.9 seconds
- Once started, stopwatch timing continues until you press **A** to stop it, even if you exit the Stopwatch Mode to another mode and even if timing reaches the stopwatch limit defined above. **A** paused timing operation will remain paused until you press **A** to restart it or **L** to reset.
- Exiting the Stopwatch Mode while a split time is frozen on the display clears the split time and returns to elapsed time measurement.
- While SPLIT is shown in the upper right display, it alternates with the hour digits of the split time at one-second intervals.

14. Using The Countdown Timer

The countdown timer can be configured to start at a preset time, and sound an alarm when the end of the countdown is reached.



To Enter The Countdown Timer Mode

Press **M** 3 times to select the Countdown Timer Mode (TMR) as shown on page 19.

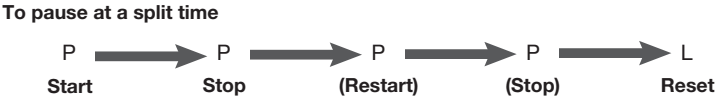
- About 1 second after TMR appears on the display, the display will change to show the countdown time hours.

To Specify The Countdown Start Time

1. Enter the Countdown Timer Mode.
   - If a countdown is in progress (indicated by the seconds counting down), press **P** to stop it and then press **L** to reset to the current countdown start time.
   - If a countdown is paused, press **L** to reset to the current countdown start time.
2. Hold down **A** for at least two seconds.
   - SET Hold will blink on the display and then the current start time setting will start to blink.
     Keep **A** depressed until the start time setting starts to blink.
3. Press **M** to move the blinking between the hour and minute settings.

4. Use **P** (+) and **L** (–) to change the blinking item.
   - To set the starting value of the countdown time to 24 hours, set 0H 00’00.
5. Press **A** to exit the setting screen.

To Perform A Countdown Timer Operation

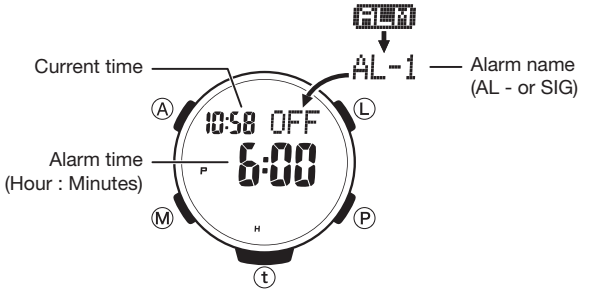


- Before starting a countdown timer operation, check to make sure that a countdown operation is not in progress (indicated by the seconds counting down). If it is, press **P** to stop it and then **L** to reset to the countdown start time.
- An alarm sounds for ten seconds when the end of the countdown is reached. This alarm will sound in all modes. The countdown time is reset to its starting value automatically when the alarm sounds.

To Stop The Alarm

Press any button.

15. Using The Alarm



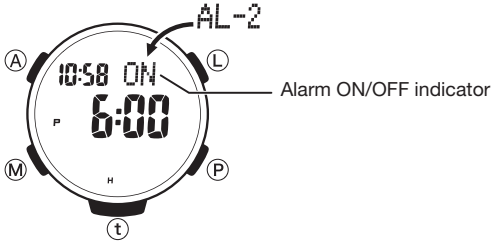
You can set five independent daily alarms. When an alarm is turned on, an alarm will sound for about 10 seconds each day when the time in the Time mode reaches the preset alarm time. This is true even if the dive computer is not in the Time mode. One of the daily alarms is a snooze alarm. The other four are one-time alarms. The snooze alarm will sound every five minutes up to seven times or until it is turned off. You can also turn on an Hourly Time Signal, which will cause the dive computer to beep twice every hour on the hour.

To Enter The Alarm Mode

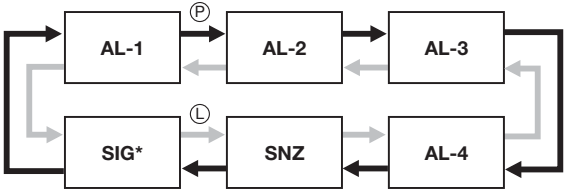
Press **M** 4 times to select the Alarm Mode (ALM) as shown on page 19.

- About 1 second after ALM appears on the display, the display will change to show an alarm name (AL-1 to AL-4, or SNZ) or the SIG indicator. The alarm name indicates an alarm screen. SIG is shown when the Hourly Time Signal screen is on the display.
- When you enter the Alarm Mode, the data you were viewing when you last exited the mode appears first.

To Set An Alarm Time



1. In the Alarm Mode, use **A** and **L** to scroll through the alarm screens until the one whose time you want to set is displayed.

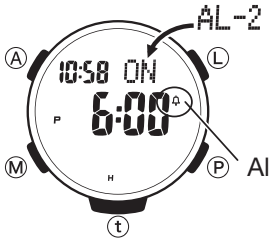


* There is no time setting for the hourly time signal.

2. Hold down **A** until SET Hold appears on the display and then the current settings start to blink.
   - This is the setting screen.
3. Press **M** to move the blinking between the hour and minute settings.
4. While a setting is blinking, use **P** (+) and **L** (–) to change it.
   - When setting the alarm time using the 12-hour format, take care to set the time correctly as a.m. (no indicator) or p.m. (P indicator).
5. Press **A** to exit the setting screen.
   - Setting an alarm time causes that alarm to turn on automatically.

To Turn An Alarm And The Hourly Time Signal On And Off

1. In the Alarm Mode, use **P** and **L** to select an alarm or the Hourly Time Signal.
2. When the alarm or the Hourly Time Signal you want is selected, press **A** to turn it on and off.



- The alarm on indicator (when any alarm is on) is shown on the display in all modes.

To Stop The Alarm

Press any button.

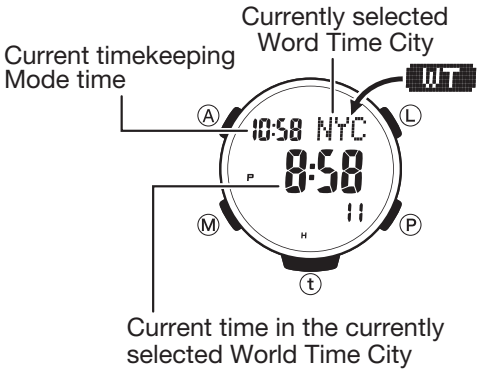
Note

- The snooze alarm sounds up to seven times at intervals of about five minutes.
- After the snooze alarm first sounds, SNZ will blink on the display until the snooze alarm sounds all seven times or until it is canceled.
- The snooze alarm will be canceled when any of the following occurs while the SNZ indicator is blinking on the display.

- If you turn off the snooze alarm
- If you display the snooze alarm setting screen
- If you display the Time mode setting screen
- If your Home City and World Time City are the same city, and you use the World Time Mode to change the summer time setting of your Home City.

16. Checking The Current Time In A Different Time Zone

You can use the World Time Mode to view the current time in one of 31 time zones (48 cities) around the globe. The city that is currently selected in the World Time Mode is called the "World Time City".



To Enter The World Time Mode

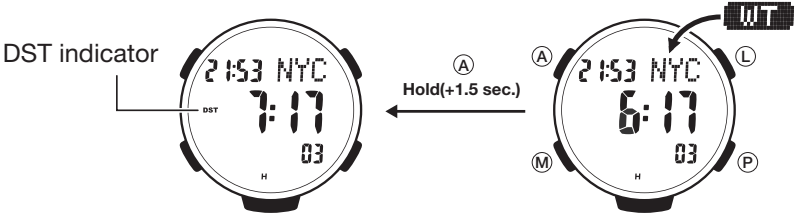
Press **M** 5 times to select the World Time Mode (WT) as shown on page 19.

- 1 second after WT appears on the display, the city code of the currently selected World Time City will scroll once in the upper right display. After that, the World Time City's city code will be displayed in the upper right display.

To View The Time In Another Time Zone

In the World Time Mode, use **P** (East) and **L** (West) to scroll through city codes.

To Specify Standard Time Or Daylight Saving Time (DST) For A City



1. In the World Time Mode, use **P**(East) and **L**(West) to scroll through the available city codes.

- Keep scrolling until the city code whose Standard Time/Daylight Saving Time setting you want to change is displayed.

2. Hold down **A** for at least 2 seconds

- Keep **A** depressed until the current setting (DST Hold ON or DST Hold OFF) appears on the display.
- DST Hold ON means that summer time is enabled, and that the current time is advanced accordingly.
  DST Hold OFF means that summer time is disabled, and that the current time shows standard time.
- This toggles the city code you selected in step 1 between Daylight Saving Time (DST indicator displayed) and standard time (DST indicator not displayed).
- Using the World Time Mode to change the DST setting of the city code that is selected as your Home City also will change the Time mode time DST setting.
- Note that you cannot switch between standard time/daylight saving time (DST) while UTC is selected as the World Time City.
- Note that the standard time/daylight saving time (DST) setting affects only the currently selected time zone. Other time zones are DST indicator not affected.

17. Illumination

The display of the dive computer is illuminated for easy reading in the dark. The dive computer' s auto light switch turns on illumination automatically when you angle the dive computer towards your face.

- The auto light switch must be turned on (page 83) for it to operate.

To Turn On Illumination Manually

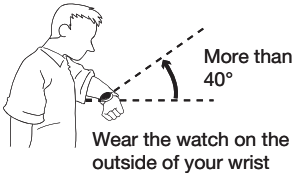
Press **t** in any mode to illuminate the display.

- You can use the procedure below to select either 1.5 seconds or 3 seconds as the illumination duration. When you press **t**, the display will remain illuminated for about 1.5 seconds or 3 seconds depending on the current illumination duration setting.
- The above operation turns on illumination regardless of the current auto light switch setting.
- Illumination is disabled while configuring sensor measurement mode settings, and during bearing sensor calibration.

To Change The Illumination Duration

1. In the Time mode or Surface Mode, hold down **A** for at least 2 seconds. First, SET Hold will blink on the display, and CITY will be displayed in the upper right display. After that, the currently selected city code and city name will scroll across the upper right display. Keep **A** depressed until the scrolling starts.
2. Press **M** as many times as necessary until [LIGHT appears on the display.
   See the sequence in step2 of the procedure under “To change the current time and date settings”for information about how to scroll through setting screens.
3. Press **P** to select 1 (1.5sec.) or 3 (3sec.) if necessary.
4. After all of the settings are the way you want, press **A** to exit the setting screen.

About The Auto Light Switch



Turning on the auto light switch causes illumination to turn on, whenever you position your wrist as described below in any mode.

Moving the dive computer to a position that is parallel to the ground and then tilting it towards you more than 40 degrees causes illumination to turn on.

Warning!

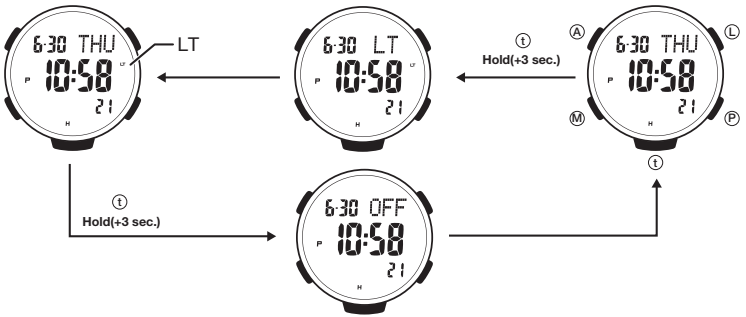
- **Always make sure you are in a safe place whenever you are reading the display of the dive computer using the auto light switch. Be especially careful when running or engaged in any other activity that can result in accident or injury. Also take care that sudden illumination by the auto light switch does not startle or distract others around you.**
- **When you are wearing the dive computer, make sure that its auto light switch is turned off before riding on a bicycle or operating a motorcycle or any other motor vehicle. Sudden and unintended operation of the auto light switch can create a distraction, which can result in a traffic accident and serious personal injury.**

Note

- This dive computer features a "Full Auto Light", so the auto light switch operates only when available light is below a certain level. It does not illuminate the display under bright light.
- The auto light switch is always disabled, regardless of its on/off setting, when any one of the following conditions exists.
  - While an alarm is sounding
  - While a bearing sensor calibration operation is being performed in the Digital Compass Mode
  - An auto light switch operation is performed after a sensor reading

To Turn The Auto Light Switch On And Off

Turning on the auto light switch causes illumination to turn on, whenever you position your wrist as described below in any mode.



In the Time mode or Surface Mode, hold down **t** for at least 3 seconds to toggle the auto light switch on (LT displayed) and off (OFF displayed).

- The auto light switch turns off automatically whenever battery power drops to Level 4 (page 13).
- [LT] is displayed at upper right dot area for 2 seconds when auto light switch becomes ON, and [OFF] is displayed for 2 seconds when it becomes OFF.
- Since no icon of auto light switch ON/OFF is on the screen, check ON/OFF by holding down **t** for 3 seconds.

Illumination Precautions

- The LED that provides illumination loses power after very long use.
- Illumination may be hard to see when viewed under direct sunlight.
- Illumination turns off automatically whenever an alarm sounds.
- Frequent use of illumination runs down the battery.

Auto Light Switch Precautions

- Wearing the dive computer on the inside of your wrist, movement of your arm, or vibration of your arm can cause frequent activation of the auto light switch and illumination of the display. To avoid running down the battery, turn off the auto light switch whenever engaging in activities that might cause frequent illumination of the display.
- Note that wearing the dive computer under your sleeve while the auto light switch is turned on can cause frequent illumination of the display and can run down the battery.

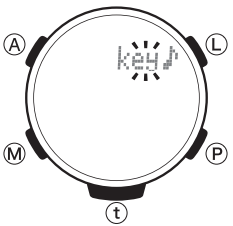
- Illumination may not turn on if the face of the dive computer is more than 15 degrees above or below parallel. Make sure that the back of your hand is parallel to the ground.
- Illumination turns off after the preset illumination duration (page 81), even if you keep the dive computer pointed towards your face.
- Static electricity or magnetic force can interfere with proper operation of the auto light switch. If illumination does not turn on, try moving the dive computer back to the starting position (parallel with the ground) and then tilt it back towards your face again. If this does not work, drop your arm all the way down so it hangs at your side, and then bring it back up again.

- You may notice a very faint clicking sound coming from the dive computer when it is shaken back and forth. This sound is caused by mechanical operation of the auto light switch, and does not indicate a problem with the dive computer.

18. Other Settings

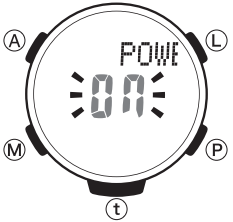
- The button operation tone sounds any time you press one of the dive computer' s buttons. You can turn the button operation tone on or off as desired.
- Even if you turn off the button operation tone, the alarm, Hourly Time Signal, barometric pressure change alert, and Countdown Timer Mode alarm, and all alarms in Dive Mode operate normally.

To Turn The Button Operation Tone On And Off



1. In the Time mode or Surface Mode, hold down **A** for at least 2 seconds First, SET Hold will blink on the display, and CITY will be displayed in the upper right display. After that, the currently selected city code and city name will scroll across the upper right display. Keep **A** depressed until the scrolling starts.
2. Use **M** to cycle through settings on the display until the current button operation tone (MUTE or key) is displayed.
   - See the sequence in step 2 of the procedure under "To change the current time and date settings (page 23)" for information about how to scroll through setting screens.
3. Press **P** to select key♪(ON) or MUTE(OFF) if necessary.
4. After all of the settings are the way you want, press **A** to exit the setting screen.

To Turn Power Saving On Or Off



1. In the Time mode or Surface Mode, hold down **A** for at least 2 seconds. First, SET Hold will blink on the display, and CITY will be displayed in the upper right display. After that, the currently selected city code and city name will scroll across the upper right display. Keep **A** depressed until the scrolling starts.
2. Use **M** to cycle through the setting screens until the current power saving setting (On or OFF) is displayed.

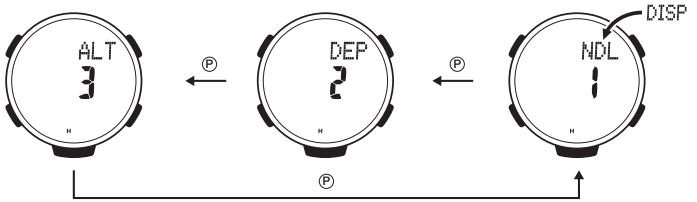
- POWER SAVING will scroll across the upper right display at this time.
- See the sequence in step 2 of the procedure under "To change the current time and date settings" (page 23) for information about how to scroll through setting screens.

3. Press **P** to toggle Power Saving on (On) and off (OFF).
4. After all of the settings are the way you want, press **A** to exit the setting screen.

Dive Mode Screen Setting (To select the basic screen in dive)

You can select basic Dive Mode screen used for dive.
There are 3 types of screens to select.

	Main 7-segment display area	Dot area at the upper right
1. NDL	NDL	current depth
2. DEP	current depth	NDL
3. ALT	NDL ⇔ current depth	NDL ⇔ current depth



1. In the Time mode or Surface Mode, hold down **A** for at least 2 seconds First, SET Hold will blink on the display, and CITY will be displayed for about 1 second
2. Press **M** to cycle through the settings on display until selecting the basic screen is shown. After [DISP] is displayed for about 1 second, [NDL] , [DEP] or [ALT] will be shown.
3. Press **P** to select either [NDL] , [DEP] or [ALT].
4. Press **A** to complete setting.

Mode Switching ON/OFF Setting

Mode of Digital Compass, Stopwatch, Timer, Alarm and World Time can be switched by pressing **M** in Watch and Surface mode. You can make the mode switching function available or not by setting ON or OFF.

1. Press **A** for approx. 2 sec. in Watch and Surface mode.
2. Press **M** to cycle through the settings on display until the Mode switching ON/OFF setting screen is shown.
3. Press **P** to switch ON and OFF.
4. Press **A** to fix the setting. The mode goes back to Watch and Surface mode.

19. Free Diving (FREE) Mode

The computer features a Free Diving Mode for use during skin diving and free diving. Because nitrogen gas fluctuation is not calculated as during normal diving mode, the bar graph of the amount of nitrogen gas in the tissues (N_2 indicator) is not displayed. Also, displays such as no-decompression dive time and various warnings, such as ascent rate warning, are not shown. During free diving, elapsed time, current water depth and maximum water depth are only displayed

In addition, up to 7,000 free diving logs can be recorded (* if only free diving is used).

Switch To Free Diving Mode

By pressing **t** while pressing **M** twice in Time Mode or Surface Mode, you can switch to Free Diving Mode manually via Dive Mode. However, if a desaturation time remains after scuba diving, or the unit is in 48 hours locked state, or if the charged amount of the battery is insufficient, it is not possible to switch to Free Diving Mode.

Important!

If you use the computer for free diving or skin diving, switch to Free Diving Mode manually.

Note that when diving at a depth of 1 m or more, even if you press M, the dive computer will remain in Free Diving Mode and will not enter Surface Mode. However, after 99 minutes the dive computer will enter Surface Mode.

End of Free Diving Mode

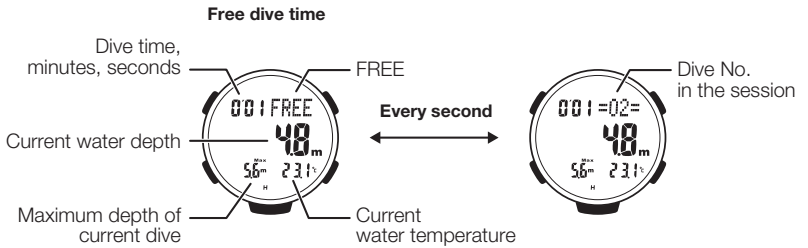
While Free Diving Mode is displayed on the water surface, press **t** while pressing the **M** to switch to Surface Mode. Note that if you do not dive to a depth of 1m or more for 60 minutes, the dive computer automatically switches to Surface Mode.

⚠ Attention

- If you switch to Free Diving Mode once via Manual Dive Mode, even if you do not free dive, Surface Mode is displayed without returning to Time Mode.

Free diving functions

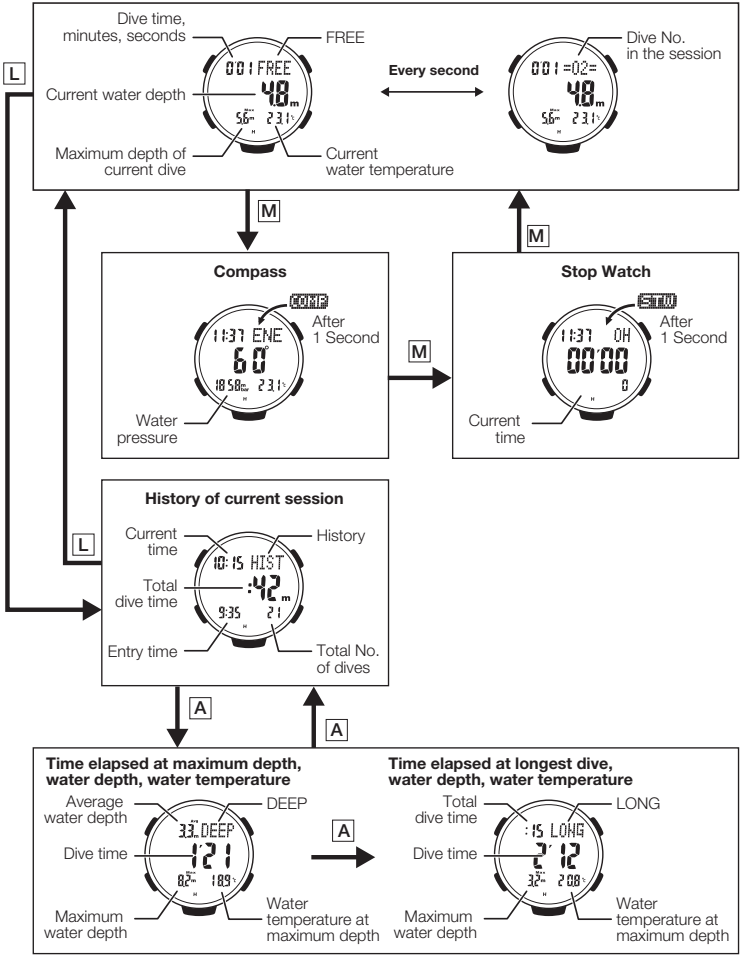
If you switch to Free Diving Mode and dive to 1 m or more, the dive computer switches to the free diving (underwater) screen. When underwater, the display alternates every second between the basic screen and the number of dives in the session. The current water depth, dive time, current water temperature and maximum depth are displayed on both screens.



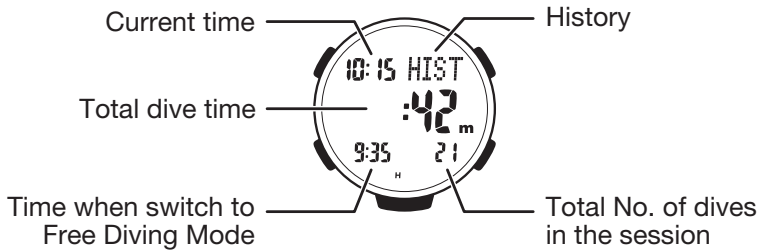
During free diving, since decompression calculations and nitrogen gas calculations are not performed, N_2 bar graph and O_2 bar graph are not displayed. In addition, displays such as no-decompression dive time and various warnings, such as ascent rate warning, are not shown. If you surface to less than 1 m water depth, the dive computer returns to the display as shown and the rest time at the surface is displayed.

Button operation (underwater / water surface)

The operation of the computer's buttons in Free Diving Mode is as follows.

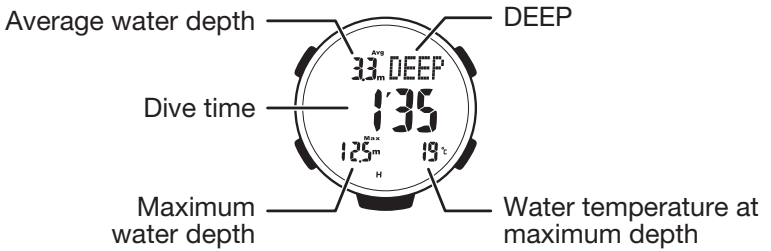


Session history



Sessions history is being displayed in Free Diving Mode by pressing L. With the function to display a simple history of free dives in that session, the dive computer displays the total dive time, start time of first dive, number of dives and the current time. Session history is cleared when you switch to Surface Mode, and zero is displayed.

Log of maximum water depth for session



Press **A** once while the session history screen is displayed to display the log data for that session's maximum depth dive. The maximum water depth log displays the maximum water depth, average water depth, water temperature at the maximum depth and dive time. The log of maximum water depth time for the session is cleared when you switch to Surface Mode and zero is displayed.

Log of longest dive time for session

Press **A** twice while the session history screen is displayed to display the log data of the dive that recorded the session's longest dive time via displaying the maximum water depth time. The longest dive time log displays the dive time (minutes and seconds), total dive time in the session (minutes), maximum water depth and maximum depth water temperature. The log of longest dive time for the session is cleared when you switch to Surface Mode and zero is displayed.

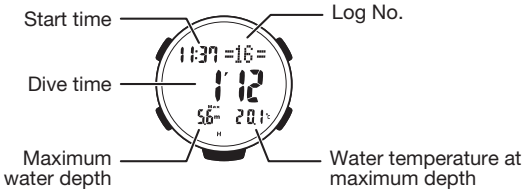
Compass / StopTime

Press **M** once to switch to Compass Mode, and twice for StopTime Mode. Press again to return to Free Diving Mode or press and hold **M** for 2 seconds in either mode to return to Free Diving Mode.

Free Diving Log

Press **L** in Time Mode or Surface Mode and the Free Diving Log displays the dive log data (See page 51) mixed with chronological order. The free diving log is recorded for each session (= the series of free dives from start of Free Dive Mode to the end). For example, a session may have 3 or 10 dives, but the all of the free diving log data from that session can be called up individually.

How to read log data



Press **L** in Time Mode or Surface Mode to display the most recent log data of either (scuba) diving or free diving (1 session). Press **P** to scroll back through previous log data, and stop at the free diving session you wish to see.

For example, if you made 16 free dives in a session, press **M** to display each of the 1-16 logs one after another, stopping at 16. Then, if you press **L** you can view the previous data 15, 14... Also, you can press **P** to view the later data 14, 15 first.

Free Diving History

When in Time Mode or Surface Mode, press **L** three times to display Free Diving History via the most recent log data (diving or free diving sessions) and Dive History.

* Display [FHIST] and after approximately 1 second the dive computer switches to Free Diving History display.As a function to display the history of all free diving made to date, longest dive time, maximum water depth, total dive times and total dive time are displayed.
* Free Diving History is not displayed in Free Diving Mode

20. Gauge Mode

In Gauge mode, the unit does not calculate non-decompression dive time or decompression dive time, but only displays water depth and diving time information etc. as a simple gauge.

When you select Gauge mode and dive to a depth of 1.6m or more for 3 minutes or more, the unit is fixed to Gauge mode for 48 hours after the dive ends and you cannot switch to Dive mode (computer function) or Free diving mode.

⚠ Attention

Since N_2 Indicator (Pressure Gas in Tissue), O_2 indicator (Oxygen Limited Indicator), surface interval time and Desaturation time are not calculated in Gauge mode, general users must not use this mode

Setting Of Gauge Mode

1) In Time mode or Surface mode, press **P** once, [PLAN] appears on the screen, and after about 1 second the unit switches to Plan mode.

2) Press and hold **A** for about 2 seconds.
   After [SET] [Hold] blinks, release your finger when you see [GAS1] [21 ~ 100%].

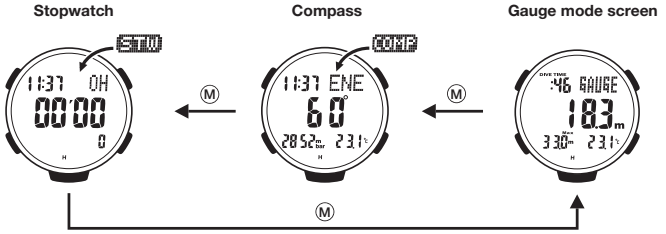
3) Press and hold **A** for about 2 seconds again.
   After [SET] [Hold] blinks, release your finger when you see [GAUGE] and [ON / OFF] setting (default is OFF). Press **P** to choose ON.

4) By pressing and holding **M** for about 2 seconds, the unit is going to be fixed to Gauge mode and displays Time mode. In addition, the unit switches to Plan mode if left for about three minutes.

Important!

If Gauge mode is turned ON, the user safety factor, FO_2% and M value warning settings screens are not displayed.

Button operation during the dive in gauge mode



Canceling Gauge Mode

1. In Time mode or Surface mode press **P** once, [PLAN] appears on the screen and the unit switches to displaying [GAUGE] ON.
2. Press and hold the **A** for about 2 seconds. After [SET] [Hold] blinks, [INT] and the setting number (default is OFF) are displayed, and the unit switches to the Depth interval alarm settings screen.
3. Press and hold **A** for about 2 seconds. After [SET] [Hold] blinks, release your finger when you see [GAUGE] [ON]. Press **P** to choose OFF.
4. Press and hold **M** for about 2 seconds and the unit switches to Time mode. In addition, the unit switches to Time mode if left for about three minutes

21. Troubleshooting

Time Setting

■ **The current time setting is off by hours.**

→ Your Home City setting may be wrong (page 23).
Check your Home City setting and correct it, if necessary.

Dive Mode and Surface Mode

■ **Display is too light**

→ Display may become light in the low temperature. Please wait for a while. If situation is not changed, please contact the shop you purchased the dive computer.

■ **Dive log is already installed in a newly bought dive computer**

→ Test data is installed for quality check in the factory before shipping. It is not malfunction.

■ **DECO, STOP and current time are blinking on the surface.**

→ [Decompression stop violation] warning is released. If you descend to the requested depth again for decompression stop within 10 minutes after the warning is released, the warning will be canceled. If 10 minutes is passed, the dive computer cannot be used next 48 hours in dive.

■ **EEEE and current time are shown in turn**

→ [Out of measurement range] warning is released. The dive computer cannot be used for dive. Warning is canceled in 48 hours after the warning is released. You should not make such a dangerous dive that releases [Out of measurement range] warning.

■ **The number of FO_2 (%)**

→ When FO_2 % was set between 22 to 100% in Nitrox gas (EANx gas), the number of FO_2 (%) have been blinking on the display and date is changed (0:00), the set FO_2 % is back to the default

setting (FO_2 : 21% that is the % in the compressed air).
When you dive with Nitrox gas, reset the FO_2 % for sure.
100% in every 1% (4mix gases are available)
Ref. Set FO_2 %...P.54

■ **Cannot make Dive Mode**

- Either [Decompression stop violation] or [Out of measurement range] warning is released. The dive computer can not be used for dive. In 48 hours after the warning is released, the mode will go back to the normal mode automatically.
- The altitude is detected as approx. 6,000m. Please wait for a while or move to place of lower altitude.
- Power level becomes low. Check the power level. Ref. Power level is low or no power...P.13
  If none of above applies, sensor might be a problem. Please contact the shop you purchased the dive computer. Digital Compass Mode.

■ **Cannot change the temperature and depth display units.**

→ When TYO (Tokyo) is selected as the Home City, the depth unit is set automatically to meters (m) and the temperature unit to Celsius (°C). These settings cannot be changed.(P.24)

■ **"ERR" appears on the display while using a sensor.**

→ Subjecting the dive computer to strong impact can cause sensor malfunction or improper contact of internal circuitry. When this happens, ERR (error) will appear on the display and sensor operations will be disabled.

- If ERR appears while a reading operation is being performed in Digital Compass Mode, restart the operation. If ERR appears on the display again, it can mean there is something wrong with the sensor.
- Even if battery power is at Level 1 (H) or Level 2 (M), the Digital Compass Mode sensor may be disabled if there is not enough voltage available to power it sufficiently. In this case, ERR will appear on the display. This does not indicate malfunction, and sensor operation should resume once battery voltage returns to its normal level.
- If ERR keeps appearing during a reading operation, it could mean there is a problem with the applicable sensor.

■ ERR appears on the display after performed bidirectional calibration.

→ If --- appears and then changes to ERR (error) on the calibration screen, it means that there is something wrong with the sensor.

- If ERR disappears after about 1 second, try performing the calibration again.
- If ERR keeps appearing, contact the shop you purchased the dive computer. Whenever you have a sensor malfunction, take the dive computer to nearest authorized TUSA distributor as soon as possible.

■ What causes incorrect direction readings?

- Incorrect bidirectional calibration. Perform bidirectional calibration (page 68).
- Nearby source of strong magnetism, such as a household appliance, a large steel bridge, a steel beam, overhead wires, etc., or an attempt to take direction readings on a train, boat, etc. Move away from large metal objects and try again. Note that digital compass operation cannot be performed inside a train, boat, etc.

■ **What causes different direction readings to produce different results at the same location?**

→ Magnetism generated by nearby high-tension wires is interfering with detection of terrestrial magnetism. Move away from the high-tension wires and try again.

■ **Why am I having problems taking direction readings indoors?**

→ A TV, personal computer, speakers, or some other object is interfering with terrestrial magnetism readings. Move away from the object causing the interference or take the direction reading outdoors. Indoor direction readings are particularly difficult inside ferro-concrete structures. Remember that you will not be able to take direction readings inside of trains, airplanes, etc.

World Time Mode

■ **The time for my World Time City is off in the World Time Mode.**

→ This could be due to incorrect switching between standard time and daylight saving time. See "To specify standard time or daylight saving time (DST) for a city" (page 22) for more information.

Charging

■ **The dive computer does not resume operation even after exposed to light.**

→ This can happen after the power level drops to Level 5 (page 13).Continue exposing the dive computer to light until the battery power indicator shows "H" or "M".

■ **All (H, M, and L) are blinking on the display.**

→ It is in the Power Recovery Mode. Battery power will recover in about 15 minutes. Exposing the dive computer to bright light makes recovery sooner.

Ref: Performing multiple sensors during a short period runs down battery power rapidly, and mode will change to Power

Recovery Mode. In this mode, all of the battery power indicators (H, M, and L) will be blinking. It is the same situation of [Low power] and available functions will be limited. After recovery, the functions are enabled again.

Ref: Power recovery mode ...P.14

- If all of the battery power indicators (H, M, L) are blinking with CHG (charge) indicator, it means the battery level is very low. Expose the dive computer to bright light as soon as possible.

■ Need to recharge battery sooner after last recharging by being exposed to light

→ Battery (secondary battery) is recharged by light solar panel received, and you don't need to replace battery regularly. However, battery quality is getting deteriorated in a long period repeating recharging and discharging. If having trouble in use, we recommend you to replace battery (paid). Please contact the shop you purchased the dive computer.

23. Specification

Accuracy at normal temperature
±15 seconds a month

Timekeeping
Hour, minutes, seconds, p.m. (P), year, month, day, day of the week Time format: 12-hour and 24-hour

Calendar system
Full Auto-calendar pre-programmed from the year 2000 to 2099

Other
Home City code (can be assigned one of 48 city codes); Standard Time / Daylight Saving Time (summer time) Year display on setting screen only.

Sensor precision:

Temperature sensor	accuracy	±2°C	guaranteed in the temperature range of -10°C to 60°C
Pressure sensor	accuracy	±1%+0.5m	guaranteed in the temperature range of 0°C to 40°C

Measuring interval
water depth : every 1 second
water temperature : every 1 second
air pressure : every 20 seconds

Measuring range
water depth → 0.0 m to 99.9m
dive time → 0 to 599 minutes
altitude → 0 to 6,000m
temperature → -10°C to 60°C

FO_2 %
21% (compressed air) to 100% in every 1 %(4mix gases are available)

Water proof
100m

Max. dive log
30 dives

Digital Compass
60 seconds continuous reading; 16 directions; Angle value 0° to 359°; Calibration (bidirectional)

Bearing Sensor Precision
Direction: Within ±10°
Values are guaranteed for a temperature range of –10°C to 60°C (14°F to 140°F).

Stopwatch
Measuring unit: 1/10 second
Measuring capacity: 999:59' 59.9"
Measuring accuracy: ±0.0006%
Measuring modes: Elapsed time, split time, two finishes

Countdown Timer
Measuring unit: 1 second
Countdown range: 24 hours
Setting unit: 1 minute

Alarms
5 Daily alarms (four one-time alarms; one snooze alarm); Hourly time signal

World Time
48 cities (31 time zones)

Other
Daylight Saving Time/Standard Time

Illumination
LED light; Selectable illumination duration (approximately 1.5 seconds or 3 seconds); Auto Light Switch (Full Auto Light operates only in the dark)
Other: Battery power indicator; Power Saving; Low-temperature resistance (–10°C/14°F); Button operation tone on/off

Power Supply
Solar panel and one rechargeable battery
Approximate battery operating time: 1 month (from full charge to Level 4) under the following conditions:
- Light: 1.5 seconds/day
- Alarm: 10 seconds/day
- Direction readings: 20 times/month
- Display: 18 hours/day
- Dive: 1 time/day

Frequent use of illumination runs down the battery.
Particular care is required when using the auto light switch.

City Code Table

City Code	City	UTC Offset/ GMT Differential
PPG	Pago Pago	-11
HNL	Honolulu	-10
ANC	Anchorage	-9
YVR	Vancouver	-8
LAX	Los Angeles	
YEA	Edmonton	-7
DEN	Denver	
MEX	Mexico City	-6
CHI	Chicago	
NYC	New York	-5
SCL	Santiago	-4
YHZ	Halifax	
YYT	St. Johns	-3.5
RIO	Rio De Janeiro	-3
FEN	Fernando de Noronha	-2
RAI	Praia	-1
UTC		0
LIS	Lisbon	
LON	London	
MAD	Madrid	+1
PAR	Paris	
ROM	Rome	
BER	Berlin	
STO	Stockholm	
ATH	Athens	+2
CAI	Cairo	
JRS	Jerusalem	
MOW	Moscow	+3
JED	Jeddah	
THR	Tehran	+3.5
DXB	Dubai	+4
KBL	Kabul	+4.5

City Code	City	UTC Offset/ GMT Differential
KHI	Karachi	+5
DEL	Delhi	+5.5
KTM	Kathmandu	+5.75
DAC	Dhaka	+6
RGN	Yangon	+6.5
BKK	Bangkok	+7
SIN	Singapore	+8
HKG	Hong Kong	
BJS	Beijing	
TPE	Taipei	
SEL	Seoul	+9
TYO	Tokyo	
ADL	Adelaide	+9.5
GUM	Guam	+10
SYD	Sydney	
NOU	Noumea	+11
WLG	Wellington	+12

* As of April 2016, the offi cial UTC offset for Moscow, Russia (MOW) was changed from +3 to +4, but this watch still uses an offset of +3 (the old offset) for MOW. Because of this,you should leave the summer time setting turned on (which advances the time by one hour) for the MOW time.

- The rules governing global times (GMT differential and UTC offset) and summer time are determined by each individual country.

TABATA U.S.A. INC.
2380 Mira Mar Ave., Long Beach, CA 90815, U.S.A.
TEL 562-498-3708/FAX 562-498-1390 (Country Code=1)

TABATA AUSTRALIA PTY. LTD.
4D James Ruse Business Park 6 Boundary Road, Northmead, Sydney, NSW 2152, Australia
TEL 02-9890-4555/FAX 02-9890-5222 (Country Code=61)

T.E.C. [TABATA EUROPE CORPORATION] B.V.
Den Brielstraat 2b, 1055RV, Amsterdam, The Netherlands
TEL 020-58-11-280/FAX 020-58-11-285 (Country Code=31)

TABATA CO., LTD. JAPAN
1-3-17, Higashikomagata, Sumida-ku, Tokyo, Japan 130-0005
TEL 03-3624-2816/FAX 03-3623-9902 (Country Code=81)

TABATA MFG. [TAIWAN] CO., LTD.
No.256, Huanqu W. Rd., Dayuan Township, Taoyuan County 337, Taiwan.(R.O.C.)
TEL.03-386-5100/FAX.03-386-5103 (Country Code=886)

© Copyright TABATA CO., LTD