User Manual

heinrichs $oldsymbol{eta}$ weikamp



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Contact

For any questions relating to your OSTC sport , please contact us via...

• internet forum: forum.heinrichsweikamp.com

• E-Mail: info@heinrichsweikamp.com

 mail: heinrichs weikamp Adlerstraße 7
79098 Freiburg im Breisgau Germany Thank you for choosing a heinrichs weikamp dive computer!

The OSTC sport is specially adapted to sportdiving, it offers a simplified handling and very big letters on the display in dive mode. Thereby the OSTC sport benefits from the permanent further development of the Tech-dive-computer from heinrichs weikamp, because all models are based on the same platform. With firmware updates you can always get your dive computer up to date. We hope you enjoy diving with your new OTSTC sport dive computer!

You can use the OSTC sport intuitively. But to become familiar with its functions and to use it in the best way, we recommend you to read this manual carefully.

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Common advices

Technical status

This manual corresponds to the technical status of OSTC sport and its firmware as of August 2014.

OSTC sport, its firmware and the documentation are subject to technical changes without notice.

The OSTC sport firmware (integrated software) is an ongoing development. To make the best use of OSTC sport, we advise you to use the latest stable firmware available on the heinrichs weikamp website: www.heinrichsweikamp.com How to update the firmware, please read page 91.

Standard settings

Unless noted differently, the information in this manual refers to OSTC standard settings.

For important settings, the OSTC sport shows an asterisk * behind the current setting, if the current setting is different from the default setting.

About this manual

Special markings

▲ Warning

indicates a situation that carries a significant risk or injury.

Caution

indicates a situation that carries a risk of damage to the device.

indicates additional information for advanced OSTC sport user.

Hint

Terms of use

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Functions overview

Your dive computer OSTC sport assists you with the following functions:

Display

- Diving depth and duration according to EN 13319
- Maximum diving depth
- Ambient temperature
- Ambient pressure

• Bottom time

- Duration and depth of planned decostops
- Time to desaturation based on diving depth and duration
- Additional informations (e.g. tilt-compensated compass, average depth, stopwatch, ppO2, CNS)

Planning

- Configure and check gas mixtures
- Calculate a decoplan in the simulator

Record

Time, duration, depth profile, temperature, reference pressure and time of desaturation

Requirements

The most important factor for safe diving is a competent and well trained diver.

This dive computer is intended for experienced divers. That implies:

- A diving education including decompression diving is mandatory.
- Sufficient knowledge about the laws of physics in diving is required.

• It may harm your health if you rely on a wrong configured dive computer.

- Do not use this dive computer, if you don't know or understand the settings and displayed information of OSTC sport.
- If necessary, you must be able to finish your dive safely without a dive computer.
- Don't adjust decompression parameters if you are not aware of their meanings.

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Before every dive

Plan your dive.

Set up a dive plan independently from OSTC sport and take it with you when diving.

Make sure that your OSTC sport is ready for use and correctly configured.

Always confirm the following questions before diving:

Stable firmware?

Use only stable firmware provided by heinrichs weikamp. It has been tested and allows a proper and reliable performance of OSTC sport.

Configured correctly?

Check the settings of your OSTC sport. If necessary, adjust the settings according to your dive plan and equipment.

Battery full?

Check the battery status using the battery indicator on the display. To ensure reliable performance throughout your dive, the battery must be sufficiently high. A new lithium primary cell (SAFT LS14500) allows up to 50 hours of diving, a quality alkaline AA battery (e.g. Duracell Ultra Power) about 20 hours. a lithium 1,5V AA battery (e.g. Energizer E2) about 30 hours.

Device waterproof?

Ensure that the battery compartment is properly closed and watertight. Check the housing for cracks or damages which might allow water to intrude.

Safely attached?

Display messages?

Make sure that your OSTC sport can be fastened safely using either the bungees or a suitable alternative.

Check the signals of OSTC sport. Do not dive if your dive computer displays a warning. Check the cause of the warning.

While diving

Take a backup system with you

While diving, always carry a backup system to measure duration and depth of your dive independently from OSTC sport.

A correct calculation of tissue saturation requires that your OSTC sport is:

- configured correctly
- used on every dive
- only used during your own dives (and not shared with other divers).

Take the OTSC sport with you on every repeat dive – don't lend it to anyone.

Z

Take a sufficiently long surface break before diving again.

Caution

The OSTC sport doesn't indicate how long to wait before the next dive. Please follow the guidelines you were taught during your dive training. Saturation data is lost when updating the OSTC sport firmware or in the unlikely event of a failure. In these cases, do not dive any further until tissue saturation has returned to normal level.

Safe use of the OSTC sport

Do not modify the hardware. Modifications to the hardware of OSTC sport can damage its proper function and can have bad influence on the watertightness of its housing.

Only the cap of the battery compartment and the bungee backplate can be removed. There is no other way to open the housing without damaging the device. Only open the battery compartment when the battery has to be replaced.

Keep your OSTC sport out of children's reach. Small parts such as the battery cap may represent a choking hazard.

Environmental conditions

Store the OSTC sport in a cool, dry place.

Permissible temperature range for use and storage: between -5 $^\circ C$ and 40 $^\circ C.$

Make sure that the used battery is suitable for the ambient temperature to be expected in your dives. For cold water diving (under 10°C) we recommand the use of a Lithium battery.

Decompression calculations and depth display are always based on the actual surface pressure. So if you are diving in **mountain lakes**, no further settings are needed. OSTC sport automatically adapts to the actual surface pressure.

Maximum water depth for operation: 70 meter.

Hint

Caution

• Surpassing the maximum water depth may cause malfunction or permanent damage of the device.

Before first use



heinrichs weikamp delivers the OSTC sport ready for use with a high quality lithium battery (Saft LS14500). If the OSTC sport has not been used for a long time (more than one year), it may be necessary to replace the battery first.

Before diving, you need to adjust some settings as described in this manual. Familiarize yourself with the OSTC sport. It is recommended that you read this manual carefully.

Handling



SET/MENU

ENTER

Operate the OSTC sport with the two buttons Set/MENU and ENTER on the left and right side of the housing. The force required to push the buttons is independent to ambient pressure. You can push and hold the button in order to change a data. You always have to push only one button.

Push the left button SET/MENU to enter the menu. To select a menu entry, push SET/MENU repeatedly until the cursor marks the required menu item. From the item on the bottom, the cursor jumps back to the top with the next push. To confirm push ENTER. ------

In some menus you will find the entry **more**. Select this entry to access the next menu page with more menu items.

To change the setting of a menu item, push ENTER repeatedly until the required value is displayed. You can also hold-down the ENTER button in order to change a value.

Modes of operation

OSTC sport has three modes of operation and switches automatically between them: Surface mode, dive mode and sleep mode.

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Surface mode

To wake up the OSTC sport, push one of the buttons SET/MENU or ENTER.

11:06 14.06.14	3.4V 99%	DSTC
*Air Nx50 <mark>02</mark>	Om 21m Om	OC
<menu< td=""><td></td><td>989 mbar 26 °C View></td></menu<>		989 mbar 26 °C View>

In surface mode the display shows general information as time, date, temperature, ambient pressure and battery status. After a dive the display also shows tissue saturation and the no-fly-time.

In surface mode you can adjust the settings for the next dive, adjust the base settings of the OSTC sport and read recorded dive data.

Dive mode

The OSTC sport automatically switches into dive mode when it is at least 1,6 meter below the surface for five seconds.



Hint

For a pre-dive-check of the functions and settings, we recommend to switch on the dive computer manually before every dive. In dive mode the display shows current diving depth, elapsed time since starting the dive, maximum depth, the currently selected gas, decompression information and additional information.

It is not possible to switch underwater from dive mode to surface mode. You cannot change the base settings while diving. Note that exceptions apply to the apnea mode.

The integrated simulator allows you to get familiar with the functions of the dive mode even before your first dive (look for page 51).

Sleep mode

When the OSTC sport isn't operated at the surface, it switches into sleep mode after two minutes to save battery.

In sleep mode the display is turned off. Ambient pressure is measured at regular intervals. After a dive, decompression calculation continues.

Modes of diving

Deco Mode

→Dive	Mode	:00		
Decot	type:	ZH-	L16	+GF
Conse	ervat	ism	:+0	
Last	Deco	:	Зm	
ppO2	Max:	1.6	0ba:	r
Futus	re TT	S:	5'	
Exit				
Next	#2676	v10.0)4	Enter

In the main menu you can choose under **Deco mode**, if you want to use the OSTC sport for scuba diving or apnea diving.

OC (open circuit): Use this dive setting with regular dive equipment (open circuit). This setting is pre-set on your OSTC sport.

The decompression calculation model is Bühlmann ZH-L16 without or Bühlmann ZH-L16+GF with gradient factors (read more on page 58). You can switch from ZH-L16 to ZH-L16+GF under **Decotype**. **Apnoe:** Use this dive setting for apnea diving or snorkeling.

In apnea mode the OSTC sport serves as a depth gauge. Additionally displayed are ambient temperature and elapsed time since starting the dive. Decompression and saturation calculation are switched off. In apnea mode the OSTC sport remains in dive mode even when diving at low depths. You can switch into surface mode at any time by pushing SET/MENU. Push ENTER to confirm the **QUIT?** question. The OSTC sport switches automatically from apnea mode into surface mode after a 15 minutes delay and above a depth of 1 meter.

Compass calibration



OSTC sport has a tilt-compensated electronic compass. Like all other electronic compasses it must be calibrated before use. The calibration compensates aberration that can be caused by the battery.

Important

For an exact heading, the calibration of the compass is absolutely necessary.

It is recommended to compensate the compass after battery change (it is not necessary if you use the same battery type) or your dive computer shows big deviations in the heading reading. During the calibration routine the OSTC sport shows X-, Y- and Z-axis.

After starting the calibration in the menu, move the dive computer slowly around each axis. Do this a number of times within 60 seconds. After this while the calibration ends automatically.

Hint

- The order of the axis rotation is not important.
- Keep OSTC sport away from any metallic object during the calibration process (at least 50 centimeters).

Surface mode

Display in surface mode



Permanent items

In the surface mode the OSTC sport shows the following items:

- ambient pressure, clock, date
- Temperature
- Battery level
- Dive mode: Open circuit (OC) or Apnea
- After the dive: No fly time, desaturation, and surface interval. Warnings for missed deco and a too high CNS.

Selectable items

11:11 3.4V OSTCE	11:13 3.4V OSTCS
*Air Om OC Nx50 21m O2 6m	ZH-L16+GF OC (GF:30/80) Future TTS:5' Last Deco:3m
989 mbar 28 °C	Salinity:0% 989 mbar 28 °C
<menu view=""></menu>	<menu view=""></menu>



In the middle part of the display you can see extra information in the custom view. You can switch them with the right button.

- Personal text (up to 60 characters)
- Compass

- Gaslist
- Current settings: Deco type, time of future TTS, last deco, salinity

• Desaturation diagram (After the dive, you can see the approximate tissue saturation in the desaturation diagram. The 16 types of tissue according to the Bühlman model are arranged horizontally. The fastest tissue is on top, the slowest is below. When the line is longer, the tissue is more saturated.)
Menu functions

Main Menu

Logbook
Gas Setup
Start Bluetooth
Simulator
Deco Mode
Settings
Exit

Logbook
Exit

In surface mode you can adjust the settings to prepare the next dive, adjust the base settings of OSTC sport and review your dives in the logbook.

To open the menu in surface mode push SET/MENU. With the left button you can scroll through the menu. To select an item push ENTER.

Logbook: Recorded data from recent dives

Gas setup: Shows your actual gas mix and allows you to configure three gases

Start Bluetooth: Start Bluetooth to connect the OSTC sport to any kind of personal computer

Simulator: Calculate deco and simulate the dive mode

Deco mode: Settings for deco calculation and dive modes (open circuit or apnea) of the OSTC sport. **Settings:** Settings for time, language, display brightness, compass

Exit: Exit the main menu

These functions are described in the following chapters of this manual.

Logbook



	1	20.01	. 23.8m	50'	
	2	19.01	23.9m	42'	
•	3	18.01	. 28.7m	46'	
	4	18.01	. 29.2m	41'	
	5	17.01	. 19.9m	48'	
	6	17.01	. 30.3m	43'	
Next Page					
Exit Logbook					
			0		

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The OSTC sport records data during every dive. It can be retrieved from the logbook. The OSTC sport stores data of up to 255 dives with a total duration of 500 to 1000 hours. The exact number of records depends on the overall size of data. If the memory is full, existing records will be overwritten, starting with the oldest.

Hint

If you want to secure your recorded dive data, you can connect the OSTC sport via Bluetooth to a computer and readout the data (page 88). Logbook entries are sorted in chronological order, starting with the most recent entry. Every entry shows position index, date, maximal depth and dive time.

To see details of the selected dive, press ENTER. The dive profile and details page shows up. The details page also shows position index, date, maximum diving depth, duration, minimum ambient temperature, ambient pressure above water, desaturation time, the used gases and additional information of the dive. Switch from depth diagram to details page with the left button.

Hint

Via **Settings** > **Display Settings** > **Logbook Offset** you can put in your own number of dives. It will be shown instead of the numbers of dives which are stored in the dive computer (page 66).

Gas setup

Use **gas setup** to configure presets for up to three gases. You can switch between these presets when you change your gases while diving.

Gas List			
<pre> Gas1: Gas2: Gas3: Exit </pre>	Nx5		Om 21m Om
<next< td=""><td>#2676</td><td>v10.04</td><td>Enter></td></next<>	#2676	v10.04	Enter>

The presets are marked like this: **Air** for compressed air (21% oxygen) and **Nx** for Nitrox (e.g. a mix of Nitrox 31 is shown as Nx31). 100% oxygen are shown as **O2**. If the oxygen value is lower than 21%, there will be the warning **Err**. This gas mix is unusual.

Choose a gas in the menu **gas setup** and push ENTER to see details or to change values.

Туре

Edit Gas

Gas1:*Air	Om
MOD: 66m	
▶Type: First	
Setup Mix	

Change depth Exit

<Next #2676 v10.04 Enter>

Each mix can be set to the following type:

First: The first gas which is used when the dive starts. Only one gas can be marked as *first*. If there is only one gas active, it will be automatically first gas. In the view the first gas is marked with a *. Each gas can be marked as first gas.

Travel: Gases used for descending or as bottom gas.

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Deco: Gases used for decompression

Disabled: Gas is disabled and is not taken into account for the decompression prognosis.

Disabled gases are shown in blue letters.

Hint

- The first gas is used when starting the dive.
- All gases (even disabled ones) can be chosen underwater.
- The OSTC sport always computes the tissue load and the decompression scheme using the selected gas. It takes all *deco* gases in account for the decompression phase.

• The change of *deco* gases with configured change depth will be advised underwater (the change depth of *travel* gases is not shown, it is only a reminder for the diver and is relevant for the logbook).

Setup mix

Edit Gas

Gas1: MOD: +02 + 02 - Exit		8	Om
<next< td=""><td>#2676</td><td>v10.04</td><td>Enter></td></next<>	#2676	v10.04	Enter>

For every of the three gases you can set the percentage of oxygen.

Select **O2+** or **O2-** to make the percentage of oxygen higher or lower. Repeatedly push ENTER (or hold down the ENTER button) until the required value is displayed. For reference, the OSTC sport displays the calculated maximum operating depth (**MOD**) for your mix.

Change depth

To set the operation depth for your gas mix, select **Depth+** or **Depth-**. The chosen operation depth will be shown in the first line of the display. It will turn red if the change depth is larger than the maximum operation depth (**MOD**). Use **Reset to MOD** to reset the value to the MOD.

Examples

Dive with only **one gas**: Configure one gas, for example gas 1 as *first*. Set up the mix using the submenu "setup" mix. Disable the other two gases (Type: disabled).

Dive with **one additional decompression gas**: Setup the *first* gas. Enable one other gas as *deco* and setup your gas mix. Disable the remaining gas. Dive with **two decompression gases**: Setup another gas to *deco* and configure the second deco mix.

Gas List Gas1: Air Om →Gas2:*Nx30 Om Gas3: O2 Om Exit <Next #2676 v10.04 Enter>

Hint

- In surface mode the actual gas list is shown via the custom view (right button). Underwater you can only see the gaslist via the menu (left button SET/MENU).
- If you only dive with one gas and only switch from air to nitrox, you can store the two gases in your gaslist – now you can easily choose your actual gas with *first*.

Simulator

Simulator

Start Simulator Interval : 60'* Bot. Time: 25'* Max Depth: 30m* Calculate Deco Exit

<Next #2676 v10.04 Enter>

Use the simulator to simulate the dive mode of the OSTC sport or to calculate the decoplan for your next dive. Using the simulator you can get familiar with your dive computer even before the first dive.

Calculate decoplan

Dive	Plan:	6m	
ZH-L: 30%/8 OC	16+GF 30%	3m	3,
TTS: CNS:	8' 0%) 12%		

As a planning aid, the OSTC sport can calculate decompression stops in advance to planned dive. Hereby all settings of the OSTC sport and the tissue load of previous real dives are taken into account.

If you are planning a repetitive dive, set up the surface interval in minutes.

First set the values for **bottom time** and **maximum depth**. Select the menu entry and push ENTER (or hold down the ENTER button) until the required value is displayed. To start calculation, select **calculate deco** and push ENTER.

Wait while the calculation is going on. Depending on the bottom time, the calculation can take some moment. While calculating, the green LED is blinking.

When the calculation is finished, the display shows the decoplan with the planned decostops. Depth is displayed in meters, duration in minutes. The duration is additionally represented graphically. If there are more than eight stops, more stops can be shown with the ENTER button.

- Interval: Increase interval in 10 minutes steps up to 240 minutes.
- **Bottom time:** Can be increased in steps of 2 minutes up to maximum of 59 minutes.
- Maximum depth: Can be increased in steps of 3 meters up to a maximum of 60 meters.

Start simulator



Simulated dives can be maximum 90 minutes long and are not stored in your logbook. The maximum depth for the simulation is 60 meters. Simulated dives don't affect any settings of the OSTC sport. Of course there will be no influence on the tissue loads from real dives.

Select the **maximum depth** and select **start simulator** to start the simulation of the dive mode.



Change diving depth: In the simulator you can also change the depth while the dive computer is in dive mode. Push repeatedly SET/MENU to get into the depth menu. Select the desired value with SET/MENU and confirm with ENTER.

Sim: -1m: descend 1 meter

Sim: + 1m: ascend 1 meter

Quit?: Quit dive mode simulation. The simulation will stop after a short delay. All other functions are similar to the dive mode and are described there.

Hint

The OSTC sport stays 90 minutes in the simulation mode until it switches to sleep mode. Stop the dive mode manually not to waste battery.

Deco mode

In **deco mode** you can configure the dive mode of your OSTC sport (open circuit or apnea) and select important settings for the decompression calculation.

Deco Mode

Dive Mode:OC Decotype:ZH-L16+GF Conservatism:-1 Last Deco: 6m* ppO2 Max:1.60bar Future TTS: 5' Exit Next #2676 v10.04 Enter> **Dive mode:** Choose if you want to go scubadiving or apnea diving.

Decotype: Toggles between decompression calculation using the classical Bühlmann ZH-L16 algorithm or the more modern Bühlmann ZH-L16+Gf with gradient factors.

The classical algorithm Bühlmann **ZH-L16** calculates with maximum values (M-values) wich should not be exceeded. As safety margin to the M-values (100 percent) this decomodel uses saturation factors. The OSTC sport is pre-set to a value for saturation of 112 percent and a value for desaturation of 88 percent. Thereby there is a safety margin of 12 percent to the M-value.

The more modern algorithm Bühlmann **ZH-L16+GF** with gradient factors calculates with deeper decostops and a much bigger safety margin to the M-value. So you have less micro bubbles in your tissues. The GF low controls the allowed saturation for the deepest decostop, the GF high does it with the highest decostop. OSTC sport is set up to a GF low of 30 percent and a GF high of 80 percent (GF 30/80). With a GF low of 30 percent, you start your decompression with a safety margin of 70 percent to the M-value. The GF high comes closer with 80 percent, until you can stop your dive. We suggest to use the algorithm ZH-L16+GF with gradient factors.

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Conservatism: With levels of conservatism you can choose if your decompression shall be calculated more conservative (+2) or progressive (-2). The levels correspond to the following values:

Value	Description	Saturation factors (ZH-L16)	Gradient factors (ZH-L16+GF)	Distance to decostop
+2	very conservative	80%/120%	20/70	1,5 meter
+1	conservative	85%/115%	20/75	1,0 meter
0	normal	88%/112%	30/80	1,0 meter
-1	progressive	90%/110%	30/85	1,0 meter
-2	very progressive	95%/105%	50/90	0,5 meter

Last deco: Setting for depth of last decompression stop. Choose here if the OSTC sport shall calculate its last stop at 3, 4, 5 or 6 meter (default: 3m). If you have heavy waves, a deeper last decostop can be better.

ppO2 max: Settings for the maximum partial pressure of oxygen (ppO2 from 1,20 bar to 1,60 bar). This value is used for warnings and the calculation of EAD and MOD in gas setup. Your OSTC sport is set up to a ppO2 of 1,60 bar.

Future TTS: The future TTS makes a deco forecast. You can set this value between 0 (disabled) or 10 minutes. It shows you the total time to surface (TTS) in xx minutes if you stay on the actual depth. For example: "Future TTS @5" shows your TTS in five minutes.

Settings

Settings

Information
 Set Time & Date
 Display Settings
 Language:English
 Compass calibration
 Reset Menu
 Exit

In this menu you can set up basic configurations, calibrate your compass and reset settings.

Information

Shows some device specific information as serial number, number of total dives, kind of battery and the actual used firmware.

Set time and date

Menu to set time and date. With **set time** you can set the time, with **set date** you can set the date of the internal clock of the OSTC sport. You can set up time and date with the ENTER button.

Set Time & Date

Set Time Set Date Date:DDMMYY Exit

<Next #2676 v10.04 Enter>

Hint

You can also set up time and date with your personal computer.

Choose a date format:

YYMMDD: year, month, day

DDMMYY: day, month, year

MMDDYY: month, day, year

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Display settings

Settings for display and other settings.

Brightness

Display brightness in OSTC sport is controlled automatically with an ambient light sensor. The three settings *Eco, Medium* and *High* set different maximum and minimum values for this control loop. In most cases the default *Eco* is recommended. Only if OSTC sport is used often in low depths and bright sunlight, a higher setting is recommended.

Units

Display of depth and temperature in metric (m/°C) or imperial (ft/°F) units.

Logbook-Offset

Display Settings

- Brightness:Eco Units: m/°C
- Logbook offset
 Salinity: 0%
 Colour scheme
 Exit

<Next #2676 v10.04 Enter>

With the **logbook-offset** you can adjust the dive number shown in the logbook to match your actual number of dives. In the detail view of the logbook the last dive isn't shown as dive number 1 but as number 349, if you have made 349 dives in total yet. This value will be increased after every dive automatically (Not for simulated dives).

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Salinity

Hint

This setting allows you to adjust salinity of water, used for calculating the actual and maximum depth.

The default salinity is 0%. To increase this value, select the **salinity** menu and press ENTER repeatedly until the required value is displayed. The value range is from 0% to 4%.

Decompression information is based on absolute pressure and not on relative pressure. Therefore salinity does not effect this calculation.

Colour scheme

Choose the colour of display in dive mode. You can choose the schemes red, green, blue and standard.

Language

The OSTC sport can be se tup in four languages: English, German, French and Italian. Choose your language with the ENTER button

Compass calibration

In this menu you can calibrate your digital compass. How to do exactly, look for page 31.

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Reset menu

The **reset menu** allows resetting options in the OSTC sport to its default values, clear the logbook and change the information for the battery.

Reset all

Resets all settings (not time and date) to factory defaults. You'll be prompted to confirm the action. Dives in the logbook and the dive counter will not be reset.

Caution

Reset all really resets **all** settings in the OSTC sport to their factory defaults, it also occurs to the compass calibration and the personal text. Once confirmed this can't be undone! Saturation and no-fly-time will stay on the dive computer.

Reset logbook

Deletes all data in the logbook. The counter starts again with zero. If you want your personal number of dives to be shown in the logbook, you have to set up (again) the number via logbook offset (page 66).

Reset battery

When replacing the battery you have to choose the battery type. If you were wrong, you can correct your information in this menu (how to change the battery, page 85).

Dive mode

Displays in divemode



Permanently shown information

- Depth in meter or feet
- Maximum depth

- Divetime in minutes and seconds
- NDL (No Deco Limit) or TTS (Time To Surface including all decostops) in minutes.
- Actual used gas
- Water temperature in °C or °F

• Future TTS (@+xx): shows your deco in xx minutes at the same depth. Future TTS is only displayed, when the OSTC sport is in deco and no longer in the NDL (NO Deco Limit).

Selectable information in the center area of the screen

- Stopwatch with average depth
- Decoplan: Display of all decompression stops. If there are no decostops necessary, there will be displayed "---". If there are decostops, the next decostop is permanently shown on the main display.
- Time, MOD/EAD and graphical indication of tissue saturation
- Compass
- No information

Warnings:



Warnings appear permanently on the display. Up to two warnings are shown simultaneously. If there are more than two warnings, the warning display toggles every two seconds. If there are critical warnings, a yellow warning sign is displayed additionally. Warnings are shown for the following items:

- Low battery level
- ppO2 too high
- CNS warning (danger of oxygen poisoning)

- ----- 🎵
- Missed decocstop (the missed decostop is marked red)
- Violation of MOD
- Too fast ascent

Safety stop

If you go diving within the no deco limit (NDL) and have no decostops, there will be displayed a safety stop of three minutes in five meter. It is shown as a countdown to the split second.



Menu functions



In dive mode (**OC**) you can select your preset gases (**gaslist**) und reset the calculation of your average depth (**reset avr./stopwatch**).

To open the menu, push the left button SET/MENU. On the display appears **Menu?**. Push ENTER to confirm. The pre-menu **Menu?** avoids that you push the button by accident. Confirm within five seconds or the OSTC sport returns to normal display.

Hint

In the dive mode **apnea** there are no menu functions available.

Gaslist



In the menu **gaslist** you can make your gas change and select the actual gas. You can choose the gas mixes that you prepared in **gas setup** in the surface mode. The actual gas appears on the main display.

Hint

• Gases in red have too high ppO2 to be used in the current depth (They can be selected by the user anyway).

- Gases in blue are disabled (They can be selected by the user anyway, but they haven't been part of the decompression calculation).
- A gas turns yellow, when you get close to the selcected change depth of the gas. Doing your gas change, the yellow marked gas helps you to find the right gas very easily.



Reset Avr

Restarts the stopwatch and calculates the average depth from new.



In dive mode you can select the average depth and stopwatch with the right button. **Total avr** indicates the average depth since the start of the dive. **Stopped avr** indicates the average depth for a period of time that you choose.

The stopwatch starts with the beginning of the dive. While diving you can restart it in the **menu** function **reset avr**. The stopwatch starts from new and shows the average depth since the start of the stopwatch (stopped avr).

Maintenance

Housing

Wash your OSTC sport after every dive with fresh water, especially after diving in seawater. If the housing is very dirty, put your OSTC sport over night in fresh water. Don't use any cleaning agents or solvents.



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▲ Warning

If there is some sea water in the battery compartment, rinse it immediately with fresh water. Let it dry completely before using the OSTC sport again.

Bungee



The OSTC sport is delivered with bungees. The bungee wristband can be set to your arm diameter individually. To tighten the bungee, make a reef-knot above the circular cavity (tighten knot very strong). Cut remaining bungee after about 1cm and use a lighter to melt the small remains of nylon.

The bungees are hand washable and can be replaced if necessary. In order to replace the bungee, remove the four screws (2mm Allen key) and detach the lower housing plate. Align the new bungee in the compartment and put the ends through the two holes in the lower housing plate. Only use the screws supplied with the OSTC sport (M3x10 and M3x6). They are non-corrosive.

Replacing the battery

You can easily replace the battery of the OSTC sport by yourself.

Hint

When you replace your battery, the desaturation time and no-fly-time are still remaining. You can change the battery between two dives without losing any important information. After a replacement of battery please check time and date.

- Open the battery compartment and remove the old battery.
- Insert a new battery of the size AA with the plus pole ahead.
- Check the battery compartment o-ring. From time to time apply a very small amount of o-ring grease to it.
- Close the battery cap until it is completely inserted in the housing.

After the replacement the menu **new battery** appears on the display. Select if you have inserted the old battery again, a new 3,6V battery or a new 1,5V Battery. With this information the OSTC sport can calculate the remaining battery capacity.

Hint

If you put in wrong value, you can change it in the menu **reset** under **reset battery**.

Important: Only use good quality AA Batteries, e.g. Lithium ("Photo") or Alkali-Mangan ("Alkaline") batteries. Simple Zinc–Carbon batteries should be avoided. Leaking Zinc–Carbon batteries may permanently damage the OSTC sport battery compartment.

Spare parts

Bungees, batteries (Saft LS14500 3.6V) and caps for the battery compartment are available in the online shop of heinrichs weikamp (**shop.heinrichsweikamp.com**) or at your dealer.

Hint

AA-Lithium batteries with 1.6 or 1.7V voltage can be used as well.

You can connect your OSTC sport easily via Bluetooth to your personal computer or notebook. You can upload software and readout your logbook. All you need is a computer that is able to work with Bluetooth.

Bluetooth



Starting...Done. Service mode enabled 🎵

Activate the Bluetooth interface in the main menu with **start bluetooth**. After a short while the Bluetooth is active. After activating you have two minutes to connect the OSTC sport with your computer. When there is no connection, the Bluetooth menu stops automatically. You can also stop it with the right button ENTER.

When connecting your OSTC sport to a computer the first time, you need to do some settings. The Bluetooth pin you need is 0000 (four Zeros). This process depends on the operation software of the computer. In Windows: Click the

Bluetooth symbol in the system tray and select the option "add device".

When the connecting is done, the PC creates a virtual COM-port. Via this the PC software communicates with the OSTC sport. You don't need any special drivers.

Software for the OSTC sport

Data transfer with the OSTC sport is supported by many software applications for all common platforms. The applications provide easy-to-operate functions for transferring recorded dive data, and for configuring and remotely controlling your OSTC sport.

On our website you'll find a list of all OSTC sport supporting programs and applications:

www.heinrichsweikamp.com/ostc

Hint

For programmers, we have the OSTC sport interface description available.

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Updating the firmware

The OSTC sport firmware (integrated software) is in a constant process of improvement. To make the best of your OSTC sport, use the latest stable firmware that is available at the heinrichs weikamp website

www.heinrichsweikamp.com/ostc

▲ Warning

Only install firmware for the OSTC sport from trusted sources.

Hint

We recommend you to upgrade the firmware regularly - at least ones a year. Updates for the OSTC sport are free of charge, of course. On the homepage you can download the **OSTC companion**. With this software you can upload the newest firmware easiliy.

Display	High resolution IPS LCD monitor with ambient light sensor, field of view: 160°, Resolution: 320 x 240 pixel, status display: 2 LEDs
Connections	Bluetooth (PIN=0000)
Sensor	Combined depth/temperature sensor 3D compass (fully tilt-compensated)
Power supply	AA battery of any type Up to 50 hours of operation, 2 years standby
Operating elements	Two push buttons
Housing	Milled from a single block of alloy. Scratch resistant borosili- cate-glass panel
Dimensions	64 mm x 62 mm x 22 mm
Weight	160 gr.
Max. usage depth	70 meter

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Disposal

According to the European WEEE directive, electrical and electronic devices must not be disposed with consumer waste. It's components must be recycled or disposed apart from each other. Otherwise contaminative and hazardous substances can pollute our environment. You as the consumer are committed by law to dispose electrical and electronic devices to the producer, the dealer or public collecting points at the end of the lifetime for free. Particulars are regulated in national right.



Notes

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