SUUNTO
FAVOR AIR INSTRUCTION MANUAL

The FAVOR AIR dive computer features:

- electroluminescent LUX backlite display
- built-in calendar clock, available also during diving
- air integration, connected to the scuba cylinder
- temperature compensated cylinder pressure up to 300 bar [4000 psi] and remaining air time
- decompression capabilities
- personal adjustment
- adjustment for altitude
- four-step ascent rate indicator
- battery power indicator and low battery warning
- complete logbook memory capabilities including 9 most recent dives with dive entry time, average depth and minimum no-decompression time or maximum ascent time
- history memory up to 999 dives and 999 hours of diving + maximum depth ever recorded
- visual and audible alarms
- easily replaceable protective shield
- high quality console which can be upgraded to include an ultra tilt SK-7 compass module

DEFINITION OF WARNINGS, CAUTIONS AND NOTES

Throughout this manual, special references are made when deemed important. Three classifications are used to separate these references by their order of importance.

WARNING - is used in connection with a procedure or situation that may result in serious injury or death.

CAUTION - is used in connection with a procedure or situation that will result in damage to the product.

NOTE - is used to emphasize important information.

WARNING!
READ AND UNDERSTAND THE ENTIRE OWNER'S MANUAL BEFORE DIVING!
Carefully read this instruction manual in its entirety, including Section 2, "For Your Safety". Make sure that you fully understand the use, displays and limitations of the FAVOR AIR dive computer. Failure to complete this step may result in serious personal injury.

WARNING!
NO DIVE COMPUTER WILL PREVENT THE POSSIBILITY OF DECOMPRESSION SICKNESS (DCS)!
All divers must understand and accept that there is no procedure or dive computer that will totally prevent the possibility of a decompression accident. For example, the individual physiological make-up can vary within an individual from day to day. The dive computer cannot account for these variations. As an added measure of safety, you should consult a physician regarding your fitness before diving.

WARNING!
ONLY DIVERS TRAINED IN THE PROPER USE OF SCUBA EQUIPMENT SHOULD USE THE FAVOR AIR!
No dive computer can replace the need for proper dive training.

WARNING!
NOT FOR PROFESSIONAL USE!
SUUNTO dive computers are intended for recreational use only. The demands of commercial or professional diving often expose the diver to depths and prolonged exposures including multiday exposures that tend to increase the risk of decompression sickness. Therefore, Suunto specifically recommends that the FAVOR AIR be not used for commercial or other severe diving activity.

WARNING!
PERFORM PRECHECKS!
Always check the FAVOR AIR before diving in order to ensure that all LCD segments are completely displayed, that the FAVOR AIR has not run out of battery power, and that the personal/altitude adjustment mode is correct.

WARNING!
USE BACK-UP INSTRUMENTS!
Make certain that you use back-up instrumentation including a depth gauge, submersible pressure gauge, timer or watch, and have access to decompression tables whenever diving with the FAVOR AIR.

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1. INTRODUCTION

Congratulations on your choice of the FAVOR AIR dive computer. The FAVOR AIR is a compact and sophisticated dive instrument that will give you years of troublefree and joyful diving. The FAVOR AIR dive computer will provide you with important information that you will need during, between, and after your dives.

Key Features

The FAVOR AIR is equipped with a sophisticated electroluminescent LUX backlite display, which does not significantly reduce battery life because of the highly energy-efficient system design and because the lamp goes off automatically after approximately 10 seconds from activation. The electroluminescent lamp will give excellent backlite quality in darkness and low ambient light conditions. The backlite is not visible during daylight.

The FAVOR AIR monitors and reports vital information such as your dive time, current depth, maximum depth, no-decompression time, cylinder pressure, remaining air time and ascent rate. It will also give you information, if through carelessness or emergency you are forced to exceed the no-decompression limits for any dive.

The FAVOR AIR features versatile logbook memory capabilities and a history memory for long-term historical data.

The instrument can be adjusted for diving at different altitudes or to add an extra level of conservativeness to the diving if desired.

The FAVOR AIR has a built-in calendar and clock. The calendar time display can also be activated when diving.

The screen is protected against scratches and damage by an easily replaceable shield.

The FAVOR AIR is available as a console. The modular construction allows for a separate compass module to be attached to the console at a later stage.

Metric and Imperial Units

All examples in this manual are shown in metric units, including meters, bars and ◦C. The corresponding imperial units are shown in brackets. The FAVOR AIR is also available with imperial units, i.e. feet, psi and ◦F.

WARNING!
VERIFY THAT THE UNITS OF MEASURE, WHETHER METRIC OR IMPERIAL, ARE CORRECT BEFORE DIVING!
Any confusion resulting from improper selection of units may cause the diver to commit errors that may lead to serious injury.

2. FOR YOUR SAFETY

Always remember that THE DIVER IS RESPONSIBLE FOR HIS OR HER OWN SAFETY!

When used properly the FAVOR AIR is an outstanding tool for assisting properly trained, certified divers in planning and executing standard and multi-level sport dives within the described no-decompression limits. It is NOT A SUBSTITUTE FOR CERTIFIED SCUBA INSTRUCTION including training in the principles of decompression.

DO NOT attempt to use the FAVOR AIR without reading this entire Instruction Manual. If you have any questions about the manual or the FAVOR AIR, contact your Suunto dealer before diving with the FAVOR AIR.

Back-Up Instruments

WARNING!
USE BACK-UP INSTRUMENTS!
Make certain that you use back-up instrumentation including a depth gauge, a submersible pressure gauge, a timer or watch, and have access to decompression tables whenever diving with the FAVOR AIR.

Cylinder pressure

Before each dive, make sure that your air pressure is sufficient for the planned dive. While diving, check the cylinder supply pressure frequently.

Sharing the FAVOR AIR

WARNING!
THE FAVOR AIR SHOULD NEVER BE TRADED OR SHARED BETWEEN USERS WHILE IT IS IN OPERATION!
Its information will not apply to someone who has not been wearing it throughout a dive or sequence of repetitive dives. Its dive profiles must match that of the user. If it is left on the surface during any dive, it will give inaccurate information for subsequent dives.

No dive computer can take into account dives made without the computer. Thus any diving activity 48 hours prior to initial use of the computer may give misleading information and must be avoided.

Personal/High Altitude Adjustment

More information about this is given in Section 3.6, "Personal Adjustment and High Altitude Dives".

WARNING!
SET THE CORRECT PERSONAL/ALTITUDE ADJUSTMENT MODE!
When diving at altitudes greater than 700 m [2300 ft] the personal/altitude adjustment feature must be correctly selected in order for the computer to calculate no-decompression status. The diver should also use this option to make the calculation more conservative, whenever it is believed that factors which tend to increase the possibility of decompression sickness exist (see Section 3.6). Failure to properly select the personal/altitude adjustment mode correctly will result in erroneous data and can greatly increase the risk of decompression sickness.

WARNING!
THE FAVOR AIR IS NOT INTENDED FOR USE AT ALTITUDES GREATER THAN 2400 m (8000 ft)!
Diving at altitudes above this limit may significantly increase the risk of decompression sickness.

When diving at higher altitudes (above 700 m/2300 ft), it is essential that the entered altitude mode, i.e. maximum altitude limit of the FAVOR AIR, exceeds or is equal to the altitude of the dive site. The altitude mode indicator must show either A1 or A2, depending on the altitude.

Decompression Dives

WARNING!
DO NOT USE THIS INSTRUMENT TO CONDUCT DECOMPRESSION DIVES!
Suunto does not recommend this instrument to be used to conduct decompression dives. However, if through carelessness or emergency a diver is forced to exceed the no-decompression limits on a dive, the FAVOR AIR will provide decompression information required for ascent. After this the FAVOR AIR will continue to provide subsequent interval and repetitive dive information.

Emergency Ascents

In the unlikely event that the FAVOR AIR malfunctions during a dive, follow the emergency procedures provided by your certified dive training agency or, alternatively, immediately ascend at a rate slower than 10 m/min [33 ft/min] to a depth between 3 and 6 meters [10 to 20 ft] and stay there as long as your air supply will safely allow.

Higher Risk Dive Profiles

The user must understand that all decompression devices (decompression tables and/or dive computers) are based on mathematical models and that many experts are currently concerned that these models may not under certain conditions adequately describe the physiological phenomena. These conditions are presently identified as dives which incorporate the following:

- SAWTOOTH PROFILES where the diver alternates between greater and shallower depths repeatedly throughout the dive.

- REVERSE PROFILES where the diver spends most of the dive at shallow depths and then descends to the maximum depth shortly before surfacing.

- CONSECUTIVE DIVES where the diver performs repetitive dives to approximately the same maximum depth with only short surface intervals between dives. The risk of decompression sickness increases when depth and the number of repetitive dives increase and when the surface intervals are shortened.

- MULTIDAY DIVES repetitive dives performed during several consecutive days.

- DECOMPRESSION DIVES any dive during which the no-decompression limit has been exceeded or the diver is advised by the computer that he may not return directly to the surface.

WARNING!
DIVE PRACTICES WHICH INCLUDE THE ABOVE DESCRIBED "HIGHER RISK DIVE PROFILES" ARE BELIEVED TO INCREASE THE RISK OF DECOMPRESSION SICKNESS AND AS SUCH CONSIDERED POTENTIALLY DANGEROUS AND SHOULD BE AVOIDED EVEN IF THEY CONFORM TO THE MATHEMATICAL MODEL!

Dive Computer Limitations

While the FAVOR AIR is based on current decompression research and technology, the user/diver must realize that the computer cannot monitor the actual physiological functions of an individual diver. All decompression schedules currently known to the authors, including the U.S. Navy Tables, are based on a theoretical mathematical model which is intended to serve as a guide to reduce the probability of decompression sickness.

The mathematical model uses a constant ascent rate of 10 m/min [33 ft/min] already in the early stage of ascent to prevent the formation of microbubbles. Therefore, it is critical that a proper ascent rate is always used.

The reader/diver is forewarned that individual physiological differences, severe environmental conditions and predive activities, especially those which tend to increase dehydration, may increase the risk of decompression sickness.

As a safety precaution, Suunto recommends that divers using the FAVOR AIR should maintain no less than 10 minutes no-decompression time remaining at all times during the dive. This is especially important for divers in poor physical condition, in cold water or other arduous conditions.

Historically divers have been advised to always include a margin of safety in their diving activities. Suunto supports these practices and strongly recommends that the diver make the deepest portion of the dive near the beginning of the dive and gradually progress into shallower depth, allowing time for a 3 to 5 minutes

"safety stop" at a depth range of 3 to 6 meters (10 to 20 ft). This is believed to be effective in further reducing the risk of decompression sickness.

Furthermore, the reader/diver is advised that any dive carries some risk of decompression sickness and neither the authors, nor SUUNTO OY will assume any responsibility or liability for accidents or injuries which might occur for any reason.

WARNING!
DO NOT USE THE FAVOR AIR WITH NITROX MIX!
The mathematical tissue calculation model of the FAVOR AIR and the materials in contact with the breathing gas has been designed for use with standard breathing air only (approximately 21% oxygen and 79% nitrogen by volume). Therefore, the FAVOR AIR must not be used for diving with "Nitrox" or other mixed gases.

3. GETTING ACQUAINTED AND DIVING WITH THE FAVOR AIR

This section contains instructions on how to operate the FAVOR AIR and interpret its displays. Each display has been carefully designed to provide important information you will need to plan your dive or dive series.

You will find that the FAVOR AIR is easy to use and read. Each display shows only the data relevant to that specific diving situation. For example, while you are on a dive, surface interval data is irrelevant and therefore not shown. On the other hand, while you are on the surface after a dive, remaining no-decompression time for that dive is irrelevant and therefore replaced with information for your next dive.

3.1 INSTALLATION

When purchasing the FAVOR AIR, have your dealer attach it to the first stage of your regulator. If you decide to attach it yourself, follow the steps outlined below:

1. Remove the high pressure (HP) port plug on the first stage of your regulator using an appropriate sized wrench.
2. Thread the high pressure hose of the FAVOR AIR into the port of your regulator with your fingers. Tighten the hose fitting with a 16 mm [5/8"] wrench. DO NOT OVERTIGHTEN!
3. Attach the regulator to a charged scuba cylinder. Slowly open the valve. Check for leaks e.g. by submerging the regulator´s first stage in water. If leaks are detected, consult your dealer.

CAUTION!
BEFORE DIVING, MAKE SURE THAT THE FAVOR AIR IS PROPERLY ATTACHED TO THE FIRST STAGE OF YOUR REGULATOR BY AN AUTHORIZED DEALER!

3.2 USE OF WATER CONTACTS AND TAP SWITCH

The FAVOR AIR has three water contacts on the face of the instrument:

COM:	common contact
PLAN/ON:	activation and dive planning contact
TIME/MODE:	time display and mode selection contact

The FAVOR AIR also has a movement sensitive tap sensor on the right side of the console. This is used to activate the backlite and to retrieve the time during diving.

3.2.1 Water Contacts

On the surface the FAVOR AIR is operated by simultaneously touching the COM contact and one or two of the other contacts. When doing this, your finger tips should be wet or moist to establish the necessary electric contact. When submerged these contacts are automatically connected by the conductivity of the water.

The FAVOR AIR is controlled on the surface with the COM (common), PLAN/ON and TIME/MODE contacts as follows:

Activation: touch the PLAN/ON and COM contacts.
Dive planning: once the FAVOR AIR has been activated, touch the PLAN/ON and COM contacts.
Clock: once the FAVOR AIR has been activated, touch the TIME/MODE and COM contacts for two seconds. The time is then displayed for four seconds.

When the TIME/MODE and COM contacts are touched for over three seconds, the display will start to scroll through the below mentioned modes. Lift your fingers when the desired mode is displayed.

Logbook memory:	at LOG the logbook memory is accessed.
Dive history memory:	at HIS the history memory is accessed.
Personal/altitude adjustment setting:	at Alt the personal and/or altitude adjustment mode can be set.
Time setting:	at Set the time and date can be adjusted.
Return:	you can at any time exit the above modes by touching all three contacts at the same time. First make contact between the PLAN/ON and TIME/MODE contacts, e.g. by covering both contacts with your right thumb. Without lifting your right thumb, touch the COM contact with your left thumb. Alternatively, you can exit the modes simply by submerging the FAVOR AIR in water.

You may sometimes encounter problems in using the contacts, or the FAVOR AIR may activate on its own. The reason for this is probably contamination or invisible marine growth that may create an unwanted electric current between the water contacts. It is therefore important that the FAVOR AIR be carefully washed in fresh water after the day's diving is completed. The contacts can be cleaned with a soft pencil eraser.

3.2.2 Tap Switch

The tap switch is used to activate the backlite and to retrieve the time during diving. The

tap switch is used by tapping, pressing or squeezing for example by holding the console in your right hand and pressing with your right hand thumb the movement sensitive area on the right hand side of the computer-console. This area is in the middle of the right side at the level of the "time" water contact text.

The light can be activated on the surface in all modes and during diving. On the surface only the light will be activated when tapping. During diving the light will be activated when tapping once and the clock will be displayed when tapping twice.

NOTE: When using the tap switch the lamp goes on for 10 seconds within one second after releasing the pressure (not by pressing harder). A very small movement is needed to activate the lamp. During diving the current time is displayed within one second after releasing the pressure for the second time.

The sensor area is limited in order to minimize unintentional light activation.

With a little try and error you will quickly figure out how to use the tap switch. Do the practicing in a dark room so you can see when the light goes on.

NOTE: The light can only be activated when the computer is on. The lamp goes automatically off after approximately 10 seconds from activation.

NOTE: For safety reasons the lamp will not come on or it will turn off after a couple of seconds, if the battery voltage is low (the low battery symbol is displayed).

3.3 BEFORE DIVING

3.3.1 Activation, Prechecks and Battery Warning

When deactivated the time display is always shown. In this mode the FAVOR AIR is ready for use and will activate if submerged. However, it is necessary to turn it on before diving to check the personal/altitude adjustment setting, battery power, cylinder pressure etc. This is done, either by immersing it in water for a couple of seconds or by connecting the PLAN/ON and COM contacts with your wet fingertips.

Once activated, the first display, the STARTUP, will turn on showing all available display elements. A few seconds later the battery power indicator is shown. Next, the two alternating READY displays will appear confirming that the activation is complete. At this time, perform your precheck making sure that:

- the FAVOR AIR operates and provides a complete display
- the low battery indicator is not on
- the personal/altitude adjustment setting is correct
- the scuba cylinder valve is open
- the instrument displays correct units (m, ◦C, bar [ft, ◦F, psi])
- the instrument displays correct temperature
- the buzzer beeps

- you have enough air for your planned dive. You should also check the pressure reading against your back-up pressure gauge.

The FAVOR AIR is now ready for diving. If the FAVOR AIR is not taken on a dive after activation, it will automatically switch off to the time display after 10 minutes to conserve the battery power.

The FAVOR AIR does not need to be reactivated for repetitive dives. It will remain active until it has calculated that all residual nitrogen has off-gassed. This may take up to 48 hours, as described in Section 6.1, "Operating Principles".

If the battery symbol is displayed the FAVOR AIR should not be used.

Personal Adjustment and High Altitude Diving

WARNING!
SET THE CORRECT PERSONAL/ALTITUDE ADJUSTMENT MODE!
When diving at altitudes greater than 700 m [2300 ft] the personal/altitude adjustment feature must be correctly selected in order for the computer to calculate the no-decompression status. The diver should also use this option to make the calculations more conservative, whenever it is believed that factors which tend to increase the possibility of decompression sickness exist (see Section 3.6). Failure to properly select the personal/altitude adjustment mode correctly will result in erroneous data and can greatly increase the risk of decompression sickness.

WARNING!
THE FAVOR AIR IS NOT INTENDED FOR USE AT ALTITUDES GREATER THAN 2400 m (8000 ft)!
Diving at altitudes above this limit may significantly increase the risk of decompression sickness.

If you are diving at higher altitudes, make sure that the altitude mode has been set according to the altitude of your dive site.

For information on how to select the correct altitude setting and how to use the personal adjustment, see Section 3.6, "Personal Adjustment and High Altitude Dives”.

Battery Power Indicator And Low Battery Warning

The FAVOR AIR has a unique graphic Battery Power Indicator designed to give you an advance notice of impending need to change the battery.

The Battery Power Indicator will always be seen during activation for three seconds. The following table 3.1 shows the various warning levels.

Table 3.1 Battery Power Indicator

Battery Voltage	Display after activation	Operation	Note	
over 3.4 V	upward pointing segment	normal		
3.4 V ... 3.2 V	horizontal segment	battery change is recommended		
3.2 V ... 3.0 V	downward pointing segment + LOW	don´t dive, change the battery	light not available + battery symbol	
less than 3.0 V	lowest segment + LOW	don´t dive, after three more activations the computer stays deactivated until the battery has been replaced	light not available + battery symbol	

After activation the Low Battery Warning is indicated by the battery symbol.

If the battery symbol is displayed in the surface mode or if the display is faded or weak, the FAVOR AIR should not be used. It indicates that the battery is too low to operate the FAVOR AIR. If the low battery symbol appears during a dive, you should abort the dive and begin ascent to the surface.

NOTE: The backlite can not be activated, when the low battery warning is indicated by the battery symbol.

NOTE: Temperature affects the battery voltage. If the FAVOR AIR is stored at temperatures below freezing point, the low battery warning may be displayed even though the battery has enough capacity in warmer conditions. Make sure that the low battery warning disappears before diving.

3.3.2 Dive Planning

It is possible at any time on the surface to enter the DIVE PLANNING mode, simply by touching the PLAN/ON and COM contacts. The display will rapidly cycle through the no-decompression limits for various depths from 9 m [30 ft] to 45 m [150 ft] in 3 m [10 ft] increments. It takes about 45 seconds to run through the complete cycle, after which the FAVOR AIR will automatically return to the READY display.

Higher personal/altitude adjustment modes will shorten the no-decompression time limits. These limits for different personal/altitude adjustment mode selections are shown in Tables 6.1 and 6.2 in Section 6.1, "Operating Principles".

Dive Numbering Shown During Dive Planning

Several repetitive dives are considered to belong to the same repetitive dive series when the FAVOR AIR has not deactivated itself. The first dive of the series will be numbered as DIVE 1, the second as DIVE 2, the third as DIVE 3 etc.
When the surface time has been less than 10 minutes, the dives are considered to be the same. The dive number will not change for the second part of such a dive and the dive time will start where it left off.

3.3.3 Calendar Clock Function

The calendar clock is always shown on the display when the FAVOR AIR is deactivated. In this mode the power consumption of the FAVOR AIR is minimal.

Once the FAVOR AIR is activated the TIME display can be retrieved any time on the surface by touching the TIME/MODE and COM contacts for about two seconds. When diving, the TIME display can be retrieved by pressing the tap switch twice. The current time and date will be shown for four seconds.

When diving, the dive entry time and date is registered in the logbook memory. Remember always to check before diving that the clock is set, especially when traveling to different time zones. For adjusting the clock, refer to Section 4.4, "Setting Time and Date".

In the metric version of the FAVOR AIR, the 24-hour time system is used, while in the imperial version the 12-hour time system is used.

3.4 DIVING

3.4.1 Basic Dive Data

The FAVOR AIR will remain in the SURFACE mode at depths less than 1.8 m [6 ft]. At depths greater than 1.8 m the FAVOR AIR will go into the DIVE mode.

Each piece of information on the display is clearly marked. During a no-decompression dive, the following information will be shown:

- the available no-decompression time in minutes is shown as NO DEC TIME. It is calculated based on the five factors listed in Section 6.1, "Operating Principles".

- your present depth is shown in meters [ft].

- the personal/altitude adjustment setting (A0, A1, or A2).

- the cylinder pressure and air time. Discussed in section 3.4.2.

In the lower left corner the following information will alternate:
- the elapsed dive time in minutes, shown as DIVE TIME, for 11 seconds.
- the maximum depth during this dive in meters [ft], indicated as MAX, for about 3 seconds.
- the water temperature, with ◦C for Centigrade [or ◦F for Fahrenheit], for about 2 seconds.

3.4.2 Cylinder Pressure Data

The air pressure of your scuba cylinder in bars [psi] will be shown digitally in the lower right corner of the display. Anytime you enter into a dive, the remaining air time calculation begins. After 30 - 60 seconds (sometimes more, depending on your air consumption), the first estimation of remaining air time will be shown in the center window of the display. The calculation is always based on the actual pressure drop in your cylinder and will automatically adapt to your cylinder size and current air consumption.

The change in your air consumption will be based on constant one second interval pressure measurements over 30 - 60 second periods. An increase in air consumption will influence the remaining air time rapidly, while a drop in air consumption will increase the air time slowly. Thus a too optimistic air time estimation, caused by a temporary drop in air consumption, is avoided.

The calculations of the remaining air time include a 35 bar [500 psi] safety buffer. This means that when the FAVOR AIR shows the air time to be zero, there is still about 35 bar [500 psi] pressure left in your cylinder depending on your air consumption rate. With a high consumption rate the limit will be close to 50 bar [725 PSI] and with a low rate close to 35 bar [500 PSI].

NOTE**:** Filling your BC will affect the air time calculation, due to the temporary increase in air consumption.

NOTE: A change of temperature will affect the cylinder pressure and consequently the air time calculation.

Low Air Pressure Warnings

The FAVOR AIR will warn you with three audible double beeps and a blinking pressure display when the cylinder pressure reaches 50 bar [725 psi]. The following three double beeps are heard when the cylinder pressure reaches 35 bar [500 psi] and the remaining air time reaches zero.

3.4.3 Ascent Rate Indicator

The ascent rate is shown graphically with a pointer in the upper left corner, next to the notation ASC RATE, as follows:

Ascent rate indicator	Ascent speed
No segments	Below 5 m/min [16 ft/min]
Pointer in the lowest position	5 - 7 m/min [16 - 23 ft/min]
Pointer in the second lowest position	7 - 9 m/min [23 - 30 ft/min]
Pointer in the horizontal position	9 -11 m/min [30 - 36 ft/min]
Pointer in the upper position	Above 11 m/min [36 ft/min]
Blinking SLOW	Above 10 m/min [33 ft/min]

The SLOW warning alternates with the current depth. The SLOW warning is an indication that the maximum ascent rate has been exceeded continuously, whereas the ascent rate indicator shows present ascent speed.

Whenever the SLOW warning appears, you should immediately slow down or stop your ascent until the warning disappears. You must not ascend shallower than 3 m [10 ft] with the SLOW warning on. If you reach this depth with SLOW on, you must stop at this depth and wait until the warning disappears.

WARNING!
RAPID ASCENTS INCREASE THE RISK OF INJURY!
Do not exceed the maximum recommended ascent rate.

You must never surface with the SLOW warning on. If you do this, the warning will

continue to flash until the unit deactivates itself in a normal manner. This may take up to 40 hours.

WARNING!
DO NOT ATTEMPT TO DIVE FOLLOWING A SURFACE INTERVAL DURING WHICH THE SLOW INDICATOR REMAINS ACTIVATED!
Violation of the maximum ascent rate may invalidate the calculations for the next dive.

NOTE: SUUNTO highly recommends a safety stop at the end of every dive in the range of 3m - 6m [10ft - 20ft] for 3 - 5 minutes.

3.4.4 Audible and Visual Alarms

The FAVOR AIR features audible and visual alarms to alert you when you are approaching dangerous situations or to acknowledge certain commands given by you.

Acknowledgement of commands using the water contacts: a short single beep, occurs when:
- the FAVOR AIR is activated
- the water contacts are connected in the surface mode

Potential danger situations during a dive: three beeps, occurs when:
- the no-decompression dive turns into a decompression dive. An arrow pointing upwards and the decompression warning CEILING/ASC TIME will appear.

Cylinder pressure and air time alarms: three double beeps, occurs when:
- the cylinder pressure reaches 50 bar [725 psi]. The cylinder pressure display will start to blink.
- the cylinder pressure reaches 35 bar [500 psi].
- the calculated remaining air time reaches zero.

Immediate danger: continuous beeps, occurs when:
- the maximum allowed ascent rate, 10 m/min [33 ft/min], is exceeded. A blinking SLOW warning will alternate with the depth display.
- the ceiling depth is exceeded. A downward pointing arrow and a blinking error warning Er will appear. You should immediately descend to or below the ceiling. The FAVOR AIR will otherwise enter a permanent error mode in three minutes, indicated by a non-blinking Er.

Immediate out-of-range danger, occurs when:
- the ceiling descends deeper than 9 m [30 ft]. A blinking error warning Er appears. You should immediately ascend to or below the ceiling.

- the ceiling descends to 12 m [39 ft]. A permanent error warning Er appears. In this mode the FAVOR AIR can only be used as a depth gauge and timer.

The permanent ERROR MODE is shown by a non-blinking Er in the center of the display. Once in ERROR MODE, the FAVOR AIR will continue to display current depth and dive time. You should immediately ascend to a depth of 3 to 6 m [10 to 20 ft] and remain at this depth until air supply limitations require you to surface. When the surface has been reached, no further diving or flying should take place for a minimum of two days.

3.4.5 Decompression dives

WARNING!
DO NOT USE THIS INSTRUMENT TO CONDUCT DECOMPRESSION DIVES!
Suunto does not recommend this instrument to be used to conduct decompression dives. However, if through carelessness or emergency a diver is forced to exceed the no-decompression limits on a dive, the FAVOR AIR will provide decompression information required for ascent. After this the FAVOR AIR will continue to provide subsequent interval and repetitive dive information.

Rather than requiring you to make stops at fixed depths, the FAVOR AIR permits you to decompress within a range of depths.

Background

When your NO DEC TIME becomes zero, your dive becomes a decompression dive, i.e. you must perform one or several decompression stops on your way to the surface. The NO DEC TIME on your display will be replaced by a flashing notation CEILING/ASC TIME.

WARNING!
YOU SHOULD ASCEND AND BEGIN DECOMPRESSION IMMEDIATELY WHEN THE FAVOR AIR SHOWS YOU THAT DECOMPRESSION IS REQUIRED!
Note the upward pointing arrow.

The ascent time (ASC TIME) is the **minimum** amount of minutes needed to reach the surface in a decompression dive. It includes:
The time needed to ascend to the ceiling at an ascent rate of 10 m/min [33 ft/min],
plus
The time needed at the ceiling. The ceiling is the shallowest depth to which you should ascend,
plus
The time needed to reach the surface after the ceiling has been removed.

WARNING!

YOUR ACTUAL ASCENT TIME MAY BE LONGER THAN DISPLAYED BY THE FAVOR AIR

The ascent time will increase if you:
- remain at depth,
- ascend slower than 10 m/min [33 ft/min], or
- make your decompression stop deeper than at the ceiling.
These factors will also increase the amount of air required to reach the surface.

WARNING!
NEVER ASCEND ABOVE THE CEILING!
You must not ascend above the ceiling. In order to avoid doing so by accident, you should stay slightly below the ceiling. The ceiling zone is the shallowest depth range to which you should ascend when in decompression.

Display Below Ceiling Zone

The CEILING/ASC TIME symbol and upwards pointing arrow indicate that you are below the ceiling zone. You should start your ascent immediately.

Display At Ceiling Zone

When you reach the ceiling zone, the display will show you two arrows pointing toward each other. The two arrows pointing toward each other will be shown between the minimum ceiling and 1.8 m [6 ft] below the minimum ceiling. All decompression stops must be performed at or below the ceiling depth range.

The depth of the ceiling will depend on your dive profile. It will be fairly shallow when you enter the decompression mode, but if you remain at depth, it will move downward and the ascent time will increase.

The ceiling depth will be shown on the left side of the center window.

When the sea is rough, it may be difficult to maintain a constant depth near the surface. In this case, it will be more manageable to maintain an additional distance to the ceiling, to make sure that the waves do not lift you above the ceiling. SUUNTO recommends that decompression takes place deeper than 4 m [13 ft], even if the indicated ceiling is shallower.

NOTE: It will take more time and more air to decompress below the ceiling than at the ceiling.

During decompression, ASC TIME will count down toward zero. When the ceiling moves upwards, you can ascend to the new ceiling. You may surface only when the ascent time reaches zero and CEILING/ASC TIME is replaced by NO DEC TIME.

Display Above Ceiling

If you ascend above the ceiling, a downward pointing arrow will appear and a continuous beeping starts. In addition, a blinking error warning Er reminds you that you have only three minutes to correct the situation. You must immediately descend to or below the ceiling.

If you continue to violate the decompression requirements, the FAVOR AIR goes into a permanent ERROR MODE. In this mode you must not dive again for at least two days. See also Section 3.7, "Error Conditions".

WARNING !
NEVER LET THE CEILING DEPTH DESCEND DEEPER THAN 9 m [30 ft]!
When the ceiling is deeper than 9 m [30 ft], a blinking error warning Er will appear and when the 12 m [39 ft] ceiling is reached the FAVOR AIR will go into a permanent error mode.

WARNING!
ALWAYS COMPARE THE ASCENT TIME TO THE REMAINING AIR TIME AND AIR PRESSURE!
It is important that you have sufficient air to make proper decompression stops.

3.5 AT THE SURFACE

3.5.1 Surface Interval

An ascent to any depth shallower than 1.8 m [6 ft] will cause the DIVING display to be replaced by the two SURFACE displays, giving the following information:

Display I
- The surface time in hours and minutes (separated by a colon), telling the duration of the present surface interval. It is shown above SURF TIME in the center window of the display.
- The dive time in minutes, i.e. the total duration of the most recent dive, is displayed next to DIVE TIME in the lower left corner.
- The maximum depth of your most recent dive in meters [ft] is shown in the same position as your depth readings during the dive. The MAX indicator is then shown next to the value. The SLOW warning will blink over the maximum depth, if you have surfaced with the SLOW warning on.
- The no-flying warning is indicated by a blinking airplane.
- The present cylinder pressure in bars [psi].

Display II

- The present depth in meters [ft].

- The desaturation/no-flying time in hours and minutes is shown next to the non-blinking airplane in the center window of the display.
- The temperature in ◦C [◦F] is shown in the lower left corner.
- The present cylinder pressure in bars [psi].

If you start a new dive after less than 10 minutes at the surface, the FAVOR AIR interprets this as a continuation of the previous dive. The DIVING display will return, the DIVE number will remain unchanged, and DIVE TIME will continue from where it left off. After 10 minutes on the surface, subsequent dives are by definition repetitive. The DIVE counter displayed in the dive planning mode will progress to the next higher number if you make another dive after 10 minutes of surface interval time.

Dive Planning

You may, at any time on the surface, enter the DIVE PLANNING mode in the manner described in Section 3.3.2, by touching the PLAN/ON and COM contacts. The FAVOR AIR will take into account the residual nitrogen caused by your previous dives. The no-decompression times given for different depths will therefore be shorter than before your first dive.

You may also read the time by touching the TIME/MODE and COM contacts, as described in Section 3.3.3.

3.5.2 Flying After Diving

The no-flying time is shown in the center window next to the non-blinking airplane image. The blinking airplane is a reminder, when the alternative display showing surface time is on. Flying or traveling to a higher altitude should be avoided anytime the airplane symbol is displayed.

The no-flying time displayed by the FAVOR AIR is always at least 12 hours or equivalent to the so-called desaturation time (if longer than 12 hours). When this time has elapsed, the residual nitrogen is no longer a factor for subsequent dives. At this time the FAVOR AIR will automatically deactivate itself.

In the permanent ERROR mode the no-flying time displayed is 39 hours 59 minutes.

Flying or traveling to a higher altitude after a dive may significantly increase the risk of decompression sickness.

WARNING!
YOU ARE ADVISED TO AVOID FLYING ANY TIME THE COMPUTER DISPLAYS THE

DO NOT FLY WARNING, INDICATED BY AN AIRPLANE!
Further, the Divers Alert Network (DAN) advises as follows:
- A minimum surface interval of 12 hours would be required in order to be reasonably assured a diver will remain symptom free upon ascent to altitude in a commercial jetliner (altitude up to 2400 m [8000 ft]).
- Divers who plan to make daily, multiple dives for several days, or make dives that require decompression stops, should take special precautions and wait for an extended interval beyond 12 hours before flight.
Further, the Undersea and Hyperbaric Medical Society (UHMS) suggests divers using standard air tanks and exhibiting no symptoms of decompression sickness wait 24 hours after their last dive to fly in an aircraft with cabin pressure up to 2400 m [8,000 ft]. The only two exceptions to this recommendation are:
- If a diver had less than 2 hours total accumulated dive time in the last 48 hours, then a 12 hour surface interval before flying is recommended.
- Following any dive that required a decompression stop, flying should be delayed for at least 24 hours, and if possible, for 48 hours.
Suunto recommends that flying be avoided until all the DAN and UHMS guidelines and the FAVOR AIR wait to fly conditions are satisfied.

WARNING!
THERE CAN NEVER BE A FLYING AFTER DIVING RULE THAT IS GUARANTEED TO PREVENT DECOMPRESSION SICKNESS COMPLETELY!

3.6 PERSONAL ADJUSTMENT AND HIGH ALTITUDE DIVES

The FAVOR AIR can be adjusted for increasing the conservatism of the mathematical model or for diving at altitude.

WARNING!
SET THE CORRECT PERSONAL/ALTITUDE ADJUSTMENT MODE!
When diving at altitudes greater than 700 m [2300 ft] the personal/altitude adjustment feature must be correctly selected in order for the computer to calculate the no-decompression status. The diver should also use this option to make the calculations more conservative, whenever it is believed that factors which tend to increase the possibility of decompression sickness exist. Failure to properly select the personal/altitude adjustment mode correctly will result in erroneous data and can greatly increase the risk of decompression sickness.

WARNING!
THE FAVOR AIR IS NOT INTENDED FOR USE AT ALTITUDES GREATER THAN 2400 m (8000 ft)!
Traveling to a higher elevation can temporarily cause a change in the equilibrium of dissolved nitrogen in the body with the surroundings. It is recommended that the diver allow the body conditions to stabilize over a period of at least three hours before beginning to dive at altitude.

Altitude Adjustability

When programming the FAVOR AIR for the correct altitude, the diver needs to select the correct altitude mode according to Table 3.2. As a result the FAVOR AIR adjusts its mathematical model according to the entered altitude, giving shorter no-decompression times at higher altitudes (Tables 6.1 and 6.2).

The entered personal/altitude adjustment mode is indicated by A0, A1, or A2. Section 4.3, Personal/altitude Adjustment Setting describes how the altitude mode is adjusted.

Table 3.2 Altitude ranges.

Altitude mode	Altitude range
A0	0 - 700 m [0 - 2300 ft]
A1	700 - 1500 m [2300 - 5000 ft]
A2	1500 - 2400 m [5000 - 8000 ft]

Personal Adjustability

The factors, which tend to increase the possibility of decompression sickness, include but are not limited to:
- cold exposure - water temperature less than 20 ◦C [68 ◦F]
- the diver is below average physical fitness level
- multiday or repetitive dive exposure
- diver fatigue
- dehydrated conditions
- previous history of decompression sickness

This feature should be used to adjust the computer to intentionally introduce a factor to make it more conservative according to personal preference by entering a higher altitude mode than required in table 3.2 (i.e. diving at sea level with the personal/altitude adjustment set at A1 or A2). The no-decompression limits are then shortened accordingly (Tables 6.1 and 6.2).

3.7 ERROR CONDITIONS

The FAVOR AIR is provided with warning indicators that advise the user to react to certain situations that would otherwise give rise to a significantly increased risk of decompression sickness if left unattended. If you do not respond to its warnings, it will enter a permanent ERROR MODE, indicating that the risk of decompression sickness has greatly increased. If you understand and operate the FAVOR AIR sensibly, it is unlikely that you will ever put the FAVOR AIR into the ERROR MODE.

The permanent ERROR MODE is shown by a non-blinking Er in the center display. Once in ERROR MODE, the FAVOR AIR will continue to display current depth and dive time. You should immediately ascend to a depth of 3 to 6 m [10 to 20 ft] and remain at

this depth until air supply limitations require you to surface. When the surface has been reached, no further diving or flying should take place for a minimum of two days.

Omitted Decompression

The ERROR MODE results from omitted decompression, when the diver stays above the ceiling for more than three minutes. During this three-minute period the Er warning will blink alternating with the CEILING/ASC TIME display. The FAVOR AIR will continue to function normally, if the diver descends below the ceiling within three minutes.

After this the FAVOR AIR will enter a permanent ERROR MODE. In the permanent ERROR MODE the FAVOR AIR will not show no-decompression or ascent times. Only a permanent Er warning is shown in the center window. However, all the other displays will function as before, to provide information for ascent.

In the surface mode, the CEILING/ASC TIME symbol will blink in the center window and at the dive planning mode a permanent Er is shown instead of no-decompression times .

Extreme Ceiling Depth Or Decompression Range

When the ceiling descends to a depth deeper than 9 m [30 ft] or when the ASCent TIME is longer than 63 minutes, the Er warning will start to blink in the center window. If the diver immediately ascends, the FAVOR AIR will continue to function normally after the ceiling is back to 9 m [30 ft] or the ASCent TIME is shorter than 63 minutes.

If the ceiling descends to the depth of 12 m [39 ft] even momentarily the FAVOR AIR will enter the permanent ERROR MODE.

4. MENU BASED MODES

The menu based functions include the logbook and history memories, the personal/altitude adjustment setting, and the date and time setting. The menu based functions are activated using the water contacts. Keep your fingers on the TIME/MODE and COM contacts while the FAVOR AIR scrolls through the menu.

The desired mode is selected by breaking the finger contact when the desired mode is indicated on the display:

- LOG: Logbook Memory. The Logbook gives a summary of the nine most recent dives.
- HIS: Dive History Memory. The Dive History is a summary of all dives recorded by the FAVOR AIR.
- Alt: Personal/Altitude Adjustment Setting
- Set: Date and Time Setting

When scrolling through the menu, a pointer at the upper left side of the display will indicate the scrolling sequence. Make sure that the contacts and the instrument itself are dry and clean before trying to use the menu based modes.

NOTE: The menu based modes can be activated only when 10 minutes have elapsed after the dive.

All menu based modes can be deactivated by the RETURN command, i.e. by connecting all three contacts simultaneously, or by immersing the FAVOR AIR in water.

Fig. 4.1 MENU
The FAVOR AIR will scroll through the above displays.

4.1 LOGBOOK MEMORY

The FAVOR AIR has a sophisticated high capacity Logbook Memory.

The logbook memory is activated by touching the TIME/MODE and COM contacts until LOG appears. It will give access to the nine most recent dives made.

The following information will be shown on three alternating displays:

DISPLAY I, main display:
- maximum depth
- dive number
- dive time
- personal/altitude adjustment setting
- the minimum NO DEC TIME or maximum ASC TIME reached during the dive
- SLOW if the diver has surfaced with this warning on

- downward pointing arrow if the ceiling was violated
- Er in the center window, if the ceiling was permanently (over 3 min) violated or if the 12 m [39 ft] ceiling was reached or if the ASC TIME was over 63 min.

DISPLAY II:
- average depth
- surface interval time before dive
- temperature at the maximum depth

DISPLAY III:
- dive entry time and date

The data of the most recent dive is shown first as DIVE 1 (the first dive in the memory). Next preceding dives are recalled by touching the TIME/MODE and COM contacts. A brief touch of the contact will bring you to the preceding dive (DIVE 2), continuous contact scrolls through the preceding dives (DIVE 3, ... DIVE 9, DIVE 1 again etc.). Only DISPLAY I is shown, while scrolling the dives. The desired dive is selected by breaking the contact when that dive appears on the display.

The dives can be scrolled backwards by touching the PLAN/ON and COM contacts.

When new dives are added after nine dives, the oldest dives are deleted. The memory will always retain the nine most recent dives. The contents of the memory will remain even when the battery is changed (assuming that the replacement has been done according to the instructions).

NOTE: Dives shorter than one minute are not registered.

NOTE: The dive numbers shown in the dive planning mode do not match with the ones shown in the logbook.

In the dive planning mode the dives are numbered according subsequent repetitive dives within a dive series, whereas in the logbook the dives are numbered according to memory address.

NOTE: The logbook contains test dives made in the factory. These dives will be deleted after you have performed nine dives.

Fig 4.2 LOGBOOK, DISPLAY I
This display will alternate with DISPLAYS II and III.
The maximum depth of the second recent dive was 28.6 m [94 ft] and the total dive time 29 min. The personal/altitude adjustment mode was set to A1 and the minimum no-decompression time during the dive was 3 minutes.

4.2 DIVE HISTORY MEMORY

The Dive History is activated by touching the TIME/MODE and COM contacts until HIS appears. This mode will show:
- the maximum depth ever reached
- the total number of dives
- the total accumulated dive time in hours

999 dives and 999 hours of diving can be registered. When these maximum values are reached, the counters will start again from 0.

NOTE: The maximum depth will be zeroed, if the depth of 97.6 m [320 ft] is exceeded.

NOTE: The dive and dive time counters in the History Memory contain some test dives made in the factory (e.g. DIVE 2, DIVE TIME 1 h). The maximum depth is, however, zeroed.

4.3 PERSONAL/ALTITUDE ADJUSTMENT SETTING

The current personal/altitude adjustment mode is shown when diving as well as on the surface display. If the mode does not match the altitude or conditions (see Chapter 3.6), it is imperative that the diver enter the correct selection before diving.

The new personal/altitude adjustment setting is entered in the following way. In these figures the contacts which are connected are highlighted.

1. Activate the personal/altitude adjustment setting mode by connecting the TIME/MODE and COM contacts continuously. Release your fingers immediately when Alt is pointed on the display. Within a couple of seconds the present personal/altitude adjustment setting is shown.

2. Connect the PLAN/ON and COM contacts until all three personal/altitude adjustment modes appear. Release your fingers immediately at this point. The current mode is now blinking. Wait at least two seconds but not more than four seconds before the next step.

3. Connect again the PLAN/ON and COM contacts until the blinking personal/altitude adjustment mode starts to scroll. Release your fingers when the desired mode is blinking. Wait at least two seconds but not more than four seconds before the next step.

4. Connect the TIME/MODE and COM contacts to confirm this new personal/altitude adjustment mode. The blinking will stop and the other mode indicators will disappear.

5. The process is ended by the RETURN command, i.e. by connecting all three contacts at the same time. The FAVOR AIR will return to the surface mode.

WARNING!
ALWAYS RECHECK THE PERSONAL/ALTITUDE ADJUSTMENT SETTING TO ENSURE THAT IT IS NOT SET FOR AN ALTITUDE LESS THAN THAT OF THE DIVE

SITE!

4.4 TIME AND DATE SETTING

The current date and time is read by connecting the TIME/MODE and COM contacts for about two seconds, as described in Section 3.3.3, "Calendar Clock Function".

Once the Time Setting mode is activated the principle when adjusting the clock is that:
- the TIME/MODE and COM contacts scroll through the different displays,
- the PLAN/ON and COM contacts change the values of the selected display.

In these figures the contacts which are connected are highlighted.

Thus, to set the time, do as follows:

1. Activate the Time Setting mode by connecting the TIME/MODE and COM contacts continuously to scroll through the menu. Release your fingers immediately when Set appears on the display. The Time Setting display will now be shown.

2. The hour display starts to blink immediately. If you want to change it, keep the PLAN/ON and COM contacts connected. The hours will start to scroll. Release your fingers immediately when the correct value is displayed. [To change the A or P for a.m. or p.m. scroll the hours past 12:00].

3. To scroll through the minutes, month and date, keep the TIME/MODE and COM contacts connected. Release your fingers when the display you wish to change is blinking. Repeat step 2 to change this value.
NOTE: In case of the minutes and date, the change is made separately for both digits, as shown by the blinking digit. In case of the hours and month, the complete number is changed simultaneously.

4. Repeat steps 2 and 3 to change any additional values.

5. Exit the Time Setting mode with the RETURN command, i.e. by connecting all three contacts at the same time. First make contact between the PLAN/ON and TIME/MODE contacts and after that with the COM contact.

NOTE: The clock is on (time is elapsing) when setting it and exiting the Time Setting mode. It is not possible to reset the seconds.

Remember to regularly check that the clock is on time especially when traveling to different time zones, as the entry time of all dives is stored in the logbook memory.

5. CARE AND MAINTENANCE

The FAVOR AIR dive computer is a sophisticated precision instrument. Remember to treat it as such! It has been designed to withstand the rigors of scuba diving. It has a rigid housing, installed in a durable thermoplastic console boot and its display is protected by a replaceable display shield.

The user should wash and rinse the unit in fresh water after every use. Protect it from shocks, extreme heat or direct sunlight and chemical attack. The FAVOR AIR cannot withstand the impact of heavy objects like scuba cylinders, nor chemicals like acetone and alcohols (ethanol, isopropanol).

NOTE: Keep the water contacts clean to assure correct operation of the FAVOR AIR. Store the FAVOR AIR in a dry place.

NOTE: Frequently check the battery compartment for moisture through the transparent battery cover of the FAVOR AIR, especially after battery replacement.

The FAVOR AIR should be serviced every two years or after 200 dives (whichever comes first) by an authorized dealer. This service will include a general operational check and battery replacement. The service requires special tools and training. Therefore, it is advisable to contact an authorized Suunto dealer for biennial service. Do not attempt to do any servicing that you are not trained for.

The FAVOR AIR will display a battery symbol as a warning when the power gets too low. When this happens, the FAVOR AIR should not be used until the battery has been replaced (see also chapter 3.3.1/Battery warning).

5.1 MAINTENANCE

If left without care for an extended period, a thin film (often invisible to the eye) will cover the unit. Much like the buildup on the glass of an aquarium, this film is the result of organic contaminates found in both salt and fresh water. Suntan oil, silicone spray and grease will speed up this process. As a result of this buildup, moisture could be trapped next to the contacts and may not allow your FAVOR AIR to operate properly.

The water contacts can be cleaned with a soft pencil eraser.

IMPORTANT: The FAVOR AIR should be soaked, then thoroughly rinsed with fresh water after each dive. Make sure that all salt crystals and sand particles have been flushed out of the console. At the end of a dive trip, the FAVOR AIR should be rinsed thoroughly and then dried with a soft towel.

The computer unit will periodically need to be removed from the console boot and cleaned before storage.

IMPORTANT: When removing the computer from the console, check the battery compartment for possible moisture or water. This is easily done through the transparent

lid covering the compartment. DO NOT use the FAVOR AIR if you detect any moisture or water inside.

CAUTION!
- do not use compressed air to blow water off the unit
- do not use solvents or other cleaning fluids that might cause damage
- do not test or use the FAVOR AIR in pressurized air.

5.2 ASSEMBLY AND DISASSEMBLY

The FAVOR AIR can be disassembled. This needs to be done partly or completely when:

- adding or removing the compass unit
- cleaning or replacing the display shield
- cleaning the unit thoroughly
- replacing the regulator hose
- replacing the battery.

Compass Unit, Display Shield or Replacement of the Battery

1. Unscrew the two screws at the bottom of the unit.
2. Pull out the crossbar.
3. Remove or install the display shield, the compass module or the rear cover for battery replacement (see chapter 5.3 for battery replacement).
4. Refit the crossbar.
5. Fasten the two screws.

Compass Module

The compass module itself is mounted very tightly into the boot and it should preferably not be removed. If necessary, bring the console to an authorized dealer.

Computer Removal

This needs to be done for cleaning the inside of the console or for replacing the hose:

1. Remove the crossbar as described above.
2. Pull out the compass module, if fitted.
3. Lift out the display shield.
4. Open the rear cover.
5. Carefully remove the computer by pressing at the top edge of the front side of the FAVOR AIR. DO NOT press on the LCD display itself (see chapter 5.1 for cleaning the console).
6. Reassemble the FAVOR AIR by carrying out the above steps in reverse order.

Ensure that the console fits properly into the console before assembling the rear cover.

5.3 BATTERY REPLACEMENT

NOTE: It is advisable to contact an authorized Suunto dealer for battery replacement. It is imperative that the change is made in a proper manner to avoid any leakage of water into the battery compartment. Do not attempt to open the FAVOR AIR before reading this entire set of instructions.

CAUTION!
DEFECTS CAUSED BY IMPROPER BATTERY INSTALLATION ARE NOT COVERED BY THE WARRANTY!

CAUTION!
WHEN THE BATTERY IS CHANGED, ALL NITROGEN UPTAKE IS LOST!
The FAVOR AIR must therefore have turned itself off before battery change or you must wait for 48 hours between dives before you may dive again.

All history and logbook data will remain in the FAVOR AIR memory after the battery change.

When working with the battery compartment, cleanliness is extremely important. Even the smallest piece of dirt may cause a leakage when you dive.

When battery replacement is needed

See chapter 3.3.1 Activation, Prechecks and Battery Warning

Battery Kit

Battery replacement kits are available from your authorized Suunto dealer. The battery replacement kit contains:
- One 3.6 V lithium battery (Saft LS14250), size 1/2 AA (ANSI) or 1/2 R6 (IEC), spare part number K5504.
- One 31.4 mm x 1.78 mm 70 Shore A hardness nitrile O-ring lubricated with silicone grease, spare part number K5664.

Special Notes

Open the FAVOR AIR only in a dry and clean place at room temperature 18 - 25°C (65 - 78°F).

Make sure that the water contacts and the instrument itself are dry and clean.
The FAVOR AIR should be on a non-conductive surface to avoid electric connection between the water contacts. Make sure that the water contacts are not connected while installing a new battery.

Do not touch the contact surfaces of the battery. The battery must be mounted in a correct way. Reversed polarity will cause a loss of calibration data or memories.

The FAVOR AIR will not loose its calibration data or the logbook and history memories, if the instructions of this manual are carefully followed.

The altitude mode will remain as it was before, whereas the time and date will be zeroed.

Battery Replacement

The battery and the buzzer are located in the back of the FAVOR AIR in a separate compartment. To change the battery, do as follows:

1. Disassemble the computer console, including the back cover, as described in Section 5.2, "Assembly and Disassembly". You do not need to remove the high pressure hose.
2. Thoroughly rinse and dry the computer.
3. Open the securing ring of the battery compartment lid by pushing it down and turning it counterclockwise. If finger power is not sufficient, you may use a pencil or screwdriver. Lay the pencil or screwdriver over the ring into the slots and turn the ring with it.
4. Remove the ring.
5. Carefully remove the lid with the beeper attached to it. The lid can be removed by pressing with your finger on the outermost edge of the lid while at the same time pulling with your nail at the opposite side. Do not use sharp metal objects as they might damage the O-ring or the sealing surfaces.
6. Remove the O-ring and the colored battery holder.
7. Note the polarity of the battery. Carefully remove the old battery and wait at least 1 minute before installing the new one.
Do not damage the electrical contacts or the sealing surface.
8. Check for any traces of flooding, particularly between the beeper and the lid, or for any other damage. If any moisture or water are observed, refer to Section 5.4, "Battery Compartment Inspection". Also check the condition of the O-ring, because a defective O-ring may indicate sealing or other problems. Dispose of the old O-ring, even if it seems to be in good condition.
9. Check that the battery compartment, battery holder and lid are clean. Clean if necessary. Fresh water is allowed, provided that you dry everything properly before the reassembly. Inspect the gold plated battery contacts for corrosion and clean them if needed.

CAUTION!
DO NOT USE SOLVENTS OR CLEANING AGENTS FOR THE CLEANING;
THEY MAY DAMAGE THE FAVOR AIR.

10. Orient the 3.6 V battery according to the "+" and "-" marks at the bottom of the battery compartment. Gently insert the new battery in the battery compartment.

Checking the FAVOR AIR. See chapter 3.3.1 Activation, Prechecks and Battery Warning.

After the battery replacement the FAVOR AIR should show the time 0:00 [12:00 Am] and date 01/1. The colon (:) should be blinking. Activate the FAVOR AIR by touching the PLAN/ON and COM contacts and check the startup functions. If the displays are not correct, remove the battery again, wait at least 1 minute, re-install the battery and activate the FAVOR AIR again.

If the displays still are not correct, or if there is a permanent LOG-display on the LCD, the FAVOR AIR has lost its calibration data. Please, return the FAVOR AIR to Suunto for recalibration.

11. Reinstall the battery holder in its correct position.
12. Check that the O-ring is clean, undamaged and treated with silicone grease. Mount the O-ring around the rim of the battery compartment lid. Check that the O-ring is completely set in its groove. Be very careful not to get any dirt on the O-ring or its sealing surfaces.
13. Carefully press the lid onto the battery compartment with your thumb, while making sure that the O-

ring is not at any point protruding out on the edge.
14. Put your other thumb through the locking ring with the "ribs" facing the hand. Press this thumb firmly against the lid and release the other one. Make sure that the lid is pressed down completely!
15. Turn the locking ring clockwise with your free thumb and fingers until it snaps into its locked position.

CAUTION!
MAKE SURE THAT THE LID IS COMPLETELY PRESSED DOWN WHEN TURNING THE LOCKING RING!
The battery compartment hooks may get seriously damaged if the locking ring is used to press the lid down.

16. Push the FAVOR AIR back into the console and reassemble the display shield, cross bar and screws.
17. Set the correct time and date (and personal adjustment/altitude mode, if necessary). The FAVOR AIR is now ready for use.

CAUTION !
AFTER THE FIRST DIVE CHECK FOR POSSIBLE MOISTURE UNDER THE TRANSPARENT BATTERY COMPARTMENT LID, WHICH WOULD INDICATE A LEAK!
This can easily be done looking through the triangular holes in the back of the console.

5.4 BATTERY COMPARTMENT INSPECTION

Frequently check the battery compartment for moisture through the transparent battery cover of the FAVOR AIR. This is important especially after the battery has been replaced. If you find moisture inside the transparent battery compartment lid, there is a leak.

DO NOT use the FAVOR AIR if you detect any moisture or water inside.
A leak must be corrected without delay, as moisture will seriously damage the computer, even beyond repair. Suunto does not take any responsibility for damage caused by moisture in the battery compartment, if the instructions of this manual are not carefully followed.

In case of a leak immediately bring the FAVOR AIR to an authorized Suunto dealer/distributor.

6. TECHNICAL DESCRIPTION

6.1 OPERATING PRINCIPLES

The Suunto FAVOR AIR is a multi-functional sport diving instrument, which provides information on depths, times and decompression requirements. Its electronic microprocessor mathematically models the absorption and release of nitrogen during all phases of diving, including ascents, surface intervals and repetitive dives.

WARNING!
DO NOT ATTEMPT TO USE THE FAVOR AIR WITHOUT FIRST READING THE

ENTIRE OWNER'S MANUAL!
The FAVOR AIR must be activated before diving and operated correctly to provide accurate and correct information.

No-Decompression Limits

The no-decompression limits displayed by the FAVOR AIR upon activation are for most dives to a single depth slightly more conservative than those permitted by the U.S. Navy tables, Tables 6.1-2.

TABLE 6.1 NO-DECOMPRESSION TIME LIMITS (min)
FOR VARIOUS DEPTHS [m] FOR THE FIRST DIVE OF A SERIES

Personal/high altitude adjustment mode

Depth [m]	A0	A1	A2
9	---	153	104
12	125	89	66
15	71	57	42
18	52	39	30
21	37	29	23
24	29	24	19
27	22	18	15
30	18	14	12
33	13	11	9
36	11	9	8
39	9	7	6
42	7	6	5
45	6	5	5

Table 6.2 NO-DECOMPRESSION TIME LIMITS (min) FOR VARIOUS DEPTHS
[ft] FOR THE FIRST DIVE OF A SERIES

Personal/high altitude adjustment mode

Depth [ft]	A0	A1	A2	U.S. Navy
30	---	149	102	---
40	120	86	65	200
50	69	56	41	100
60	51	38	29	60
70	36	29	23	50
80	28	23	19	40
90	22	18	15	30
100	17	14	11	25
110	13	11	9	20
120	10	9	8	15
130	9	7	6	10

140	7	6	5	10
150	6	5	4	5

Unlike the U.S. Navy tables, the FAVOR AIR interpolates between depths, giving a diver "credit" for time spent in shallower water, rather than calculating no-decompression limits based on the maximum depth of a dive. As a result, multi-level no-decompression dive times permitted by the FAVOR AIR are often longer than those that would be allowed by the U.S. Navy tables.

WARNING!
THE USER SHOULD BE AWARE THAT ANY DIVE, INCLUDING ONES WITHIN THE U.S. NAVY TABLES OR THE FAVOR AIR LIMITS, DOES CARRY SOME RISK OF DECOMPRESSION SICKNESS!

Compartments and Half Times

When you dive with the FAVOR AIR, it measures and displays depths and times as your dive progresses. It shows you available no-decompression time and possible decompression required based upon the following five factors:
1. your present depth,
2. excess nitrogen absorbed during earlier portions of the dive,
3. residual nitrogen remaining from previous dives,
4. the no-decompression limits that apply to that depth,
5. the personal/altitude adjustment mode in use.

Back on the surface, the FAVOR AIR will continue to calculate the no-decompression dive times available for various depths on the next dive. As the surface interval increases, so does the available dive time for the next dive.

To perform these calculations, the FAVOR AIR continuously models the absorption and release of excess nitrogen from theoretical compartments. Each compartment absorbs and releases nitrogen at a different rate. The compartments that absorb and release nitrogen rapidly are believed to have a high tolerance for excess nitrogen, whereas compartments that absorb and release nitrogen more slowly are believed to be more sensitive.

The no-decompression limits in the U.S. Navy tables are based upon six theoretical compartments for single dives, and one compartment for surface intervals and repetitive dives. If you are familiar with table theory, you may know that they are characterized by half times (i.e. the time required for 50 % equilibration to a pressure change) ranging from 5 minutes to 120 minutes.

The FAVOR AIR includes the same six compartments, and two additional compartments for an increased range of the mathematical model. The calculations are based on all eight compartments for all phases of diving, including surface intervals and repetitive dives. The FAVOR AIR's half times range from 2.5 to 320 minutes. The multi-level tissue calculations are based on the modified Haldanean principle incorporating

the Doppler meter silent microbubble research done by Dr. Spencer.

Altitude Diving

The atmospheric pressure is lower at high altitudes than at sea level. After traveling to a higher altitude, the diver will have additional nitrogen in his body, compared to the equilibrium situation at the original altitude. This "additional" nitrogen is released gradually in time and equilibrium is reached within a couple of days.

Before high altitude diving the FAVOR AIR must be set to high altitude diving mode to take this into account. The maximum partial pressures of nitrogen allowed by the mathematical model of the FAVOR AIR are reduced according to the lower ambient pressure. As a result the allowed no-decompression limits are considerably reduced.

Surface Intervals

The FAVOR AIR requires a minimum surface interval of 10 minutes between dives. If a surface interval is shorter than 10 minutes, the FAVOR AIR dive counter and dive timer treat the next dive as a continuation of the previous dive. It adds the dive times, and calculates no-decompression limits or decompression stops based on excess nitrogen absorbed on both dives. In this regard, it is similar to the U.S. Navy tables.

Depth Limits

WARNING!
SUUNTO STRONGLY RECOMMENDS THAT SPORT DIVERS LIMIT THEIR MAXIMUM DEPTH TO 40 m [130 ft]!

However, the FAVOR AIR will calculate below that depth to provide a wide margin of flexibility if, through carelessness or emergency, you are forced to exceed this recommended depth limit for a dive.

6.2 TECHNICAL SPECIFICATION

Dimensions and weight:
- Length: 145 mm [5.7 in] (without hose)
- Width: 72 mm [2.8 in]
- Depth: 46 mm [1.8 in]
- Weight: 310 g [0.23 lb] (without hose and compass module)

Depth Gauge:
- Temperature compensated pressure sensor
- Salt water calibrated (in fresh water the readings are about 3% smaller)
- Depth display range: 0 to 90 m [295 ft]

- Accuracy: ± 1 % FS (0 to 60 m [200 ft] at 20◦C [68◦F])
- Resolution: 0.1 m [1 ft]

Scuba Cylinder Pressure Gauge:
- Rated working pressure: 300 bar [4000 psi], maximum allowed pressure 350 bar [5000 psi]
- Resolution: 1 bar [10 psi]

Temperature display:
- Resolution: 1◦C [1.5◦F]
- Display range: - 20 ... +50◦C [- 4 ... +122◦F]
- Accuracy: ± 2◦C [± 3.6◦F] within 20 minutes of temperature change

Calendar Clock:
- Accuracy: ± 2.5 s /24 h
- 24 h clock display [12 h display in imperial version]
- Day and month

Other displays:
- Dive time: 0 to 199 min (999 dive hours in the history memory)
- Surface time: 0 to 39 h 59 min
- Dive counter: 0 to 255 dives (999 dives in the history memory)
- No-decompression time: 0 to 199 min (- - after 199)
- Ascent time: 0 to 63 min (- -/Er after 63)
- Ceiling range: 3 to 9 m [10 to 30 ft]: blinking Er (ERROR) from 10 to 12 m [30 to 39 ft], after that permanent Er (ERROR) mode

Operating Conditions:
- Normal altitude range: 0 to 2400 m [8000 ft] above sea level
- Operating temperature: 0 to 40◦C [32◦F to 104◦F]
- Storage temperature: -20◦C to +50◦C [-4◦F to +122◦F]
  It is, however, recommended that the unit be stored in a dry place at room temperature.

NOTE: Do not leave the FAVOR AIR in direct sunlight!

Battery
- One 3.6 V lithium battery (Saft LS 14250), size 1/2 AA (ANSI) or 1/2 R6 (IEC), spare part number K5504 + O-ring 31.4 mm x 1.78 mm 70 ShA, spare part number K5664
- Battery life: typically more than 2500 hours (at 20◦C [68◦F]). The typical expected battery life of 2500 hours might go down to approximately 2400 hours if the backlite is used about 5000 times.

7. WARRANTY

NOTE: The warranty arrangements are different in different countries. Information is contained in the FAVOR AIR packaging regarding the warranty benefits and requirements applicable to your purchase.

The Suunto FAVOR AIR is warranted against defects in workmanship and materials for a period of two years after purchase to the original owner subject to and in accordance with the terms and conditions set forth below:

This warranty does not cover damage to the product resulting from improper usage, improper maintenance, neglect of care, alteration or unauthorized repair. This warranty will automatically become void if proper preventive maintenance procedures have not been followed as outlined in the use and care instructions for this product.

If a claim under this or any other warranty appears to be necessary, return the product, freight prepaid, to your Suunto Dealer or qualified repair facility. Include your name and address, proof of purchase and/or service registration card, as required in your country. The claim will be honored and the product repaired or replaced at no charge and returned in what your Suunto Dealer determines a reasonable amount of time, provided all necessary parts are in stock. All repairs made, not covered under the terms of this warranty, will be made at the owner's expense. This warranty is non-transferable from the original owner.

All implied warranties, including but not limited to the implied warranties of merchantability and fitness for a particular purpose, are limited from the date of purchase and in scope to the warranties expressed herein. Suunto shall not be liable for loss of use of the product or other incidental or consequential costs, expenses or damage incurred by the purchase. All warranties not stated herein are expressly disclaimed.

Some states do not allow the exclusion or limitation of implied warranties of consequential damages, so the above exclusions or limitations may not apply to you. This warranty gives you specific legal rights, and you may also have other rights that vary from state to state.

This warranty does not cover any representation or warranty made by dealers or representatives beyond the provisions of this warranty. No dealer or representation is authorized to make any modifications to this warranty or to make any additional warranty.

This Instruction Manual should be kept with your FAVOR AIR.

8. GLOSSARY

Altitude dive A dive made at an elevation above 700 m [2300 ft] above sea-level.

Air time The amount of dive time remaining, based on a calculation of cylinder pressure and present air consumption.

Ascent rate The speed at which the diver ascends toward the surface.

ASC RATE Abbreviation for ascent rate.

Ascent time The minimum amount of time needed to reach the surface in a decompression dive.

ASC TIME Abbreviation for ascent time.

Ceiling On a decompression dive the shallowest depth to which a diver may ascend based on computer nitrogen load.

Ceiling zone On a decompression dive the zone between the ceiling and the ceiling plus 1.8 m [6 ft]. This depth range is displayed with the two arrows pointing toward each other (the "hour glass" icon).

Compartment See "Tissue group".

DCS Abbreviation for decompression sickness.

Decompression Time spent at a decompression stop or range before surfacing, to allow absorbed nitrogen to escape naturally from tissues.

Decompression sickness Any of a variety of maladies resulting either primarily or secondarily from the formation of nitrogen bubbles in tissues or body fluids, as a result of inadequately controlled decompression. Commonly called "bends" or "DCS".

Dive series A group of repetitive dives between which the FAVOR AIR indicates some nitrogen loading is present. When nitrogen loading reaches zero the FAVOR AIR deactivates.

Dive time Elapsed time between leaving the surface to descend, and returning to the surface at the end of a dive.

Half-time After a change in ambient pressure, the amount of time required for the partial pressure of nitrogen in a theoretical compartment to go half-way from its previous value to saturation at the new ambient pressure.

HP Abbreviation for high pressure (= cylinder pressure).

Multi-level dive A single or repetitive dive that includes time spent at various depths and whose no-decompression limits are not determined solely by the maximum depth attained.

No-decompression time The maximum amount of time a diver may remain at a particular depth without having to make decompression stops or remain below a ceiling during the subsequent ascent.

No-decompression dive Any dive which permits a direct, uninterrupted ascent to the surface at any time.

NO DEC TIME Abbreviation for no-decompression time limit.

Repetitive dive Any dive whose no-decompression time limits are affected by residual nitrogen absorbed during previous dives.

Residual nitrogen The amount of excess nitrogen remaining in a diver after one or more dives.

SURF TIME Abbreviation for surface interval time.

Surface interval time Elapsed time between surfacing from a dive and beginning a descent for the subsequent repetitive dive.

Tissue group Theoretical concept used to model bodily tissues for the construction of decompression tables or calculations.