Monitor User's Guide

1.0 INTRODUCTION

The sport diver needs to be aware of the effects of pressure and time on his or her body during a dive, between dives, and after diving. These effects are constantly changing and are influenced by several factors which are not always apparent to the diver. The MONITOR is designed to constantly measure all these factors and to advise the diver when it is acceptable continue the dive, or when it is necessary to return to the surface, and how this return should be made.

The MONITOR simulates the absorption and release of gas by the diver's body and computes the time which the diver can spend underwater and remain within acceptable no-decompression limits. The MONITOR cannot take direct readings from the diver's body, and cannot therefore take into account variations in the diver's physique and condition. However, the simulation procedure is based on the experience of many thousands of dives and has been in use for more than five years.

The MONITOR is a full-feature no decompression computer, intended for dives without decompression stops. It advises the diver of the remaining time which can be spent at the current depth without the need for decompression stops during the ascent. Should the diver exceed this time, then it will give assistance in conducting a safe ascent with any stops required. It is in continuous operation throughout its battery life, and will follow all changes in ambient pressure, whether due to diving, flying in aircraft, or visits to high altitude sites, and advises the diver of the safe diving possibilities in all situations.

1.1 NO-DECOMPRESSION DIVES

NO STOP

On every dive, whether it is carried out using conventional tables or using an electronic dive monitor, the diver goes through a decompression phase after leaving the maximum depth. Since pressure reduces during the ascent, the diver's body releases gas as a result of decompression, and this is why the ascent must be kept within a safe rate (the MONITOR requires that you do not exceed a rate of 10 meters or 33 ft. per minute). After arriving at the surface the diver still has a higher than normal level of gas absorbed in the body tissues, and this will be released slowly during the Surface Interval. This is also a decompression phase and forms an important part of the calculation for a repetitive dive when using conventional tables.

For these reasons, it is not accurate to describe any dive as a "No-Decompression" dive since decompression always takes place, and must always be built into the dive plan. This type of dive is better called a "No-Stop" dive as the dive plan will allow for the ascent to be made without making stops at shallow depths specifically for the purposes of decompression. The MONITOR is designed specifically for this type of diving.

1.2 DECOMPRESSION DIVING

DECO

Under this title we include dives in which the dive plan specifically provides for making decompression stops during the ascent, or allows for the possibility that such stops may become necessary.

1.3 REPETITIVE DIVES

When the diver wishes to make more than one dive during a period, or plans to dive frequently over a period of days, then the dive plan must take into account any absorbed gas which is still present in the body following the previous dive or series of dives. When conventional tables are used this involves a series of calculations to determine the Residual Nitrogen Time or penalty which must be incorporated in the plan for the next dive. The MONITOR automatically computes the current levels of gas absorbed in the body tissues and constantly updates this information so that, at any time, it can predict the time which the diver can spend at a given depth without the need for stops. This function is totally automatic and requires no calculations whatsoever by the diver.

1.4 RECTANGULAR PROFILE DIVES

Most published diving tables are designed for dives which are presumed to be carried out at their maximum depth for the total duration of the dive. This is called a Rectangular Profile Dive and represents the most extreme dive which could be described by the depth and time parameters. The MONITOR will generally give a shorter bottom time for this type of dive than most printed No-Decompression tables.

1.5 MULTILEVEL DIVES

In practice, sport divers often carry out dives which do not involve spending the entire dive at the maximum depth. Any part of the dive which is spent at a lesser depth involves less absorption of gas by the diver's body and may increase the total time which the diver can spend on the dive. Therefore, a dive during which the diver ascends gradually from the maximum depth will result in improved release of gas from the diver's body during this ascent and a consequent increase in the permissible dive time.

1.6 DIVING SAFELY

It is the personal responsibility of every certified diver to ensure that they dive with an acceptable margin of safety. **The abilities of divers vary, and some divers may wish or need to provide a greater margin of safety than others.** Conventional dive tables are intended to provide safe no-decompression procedures for diving but cannot guarantee that all users will enjoy the same margin of safety. Hence, no decompression table will not guarantee that the user is free from any risk of decompression sickness. The use of any such table accepts this risk. The MONITOR uses a decompression algorithm derived from the work of Professor A.A. Buhlmann at the Hyperbaric Research facility of the University Hospital of Zurich. The algorithm has been developed following a long research program and has been incorporated in electronic dive monitors in use over the last five years, covering many thousands of dives at all altitude levels to 4000m (13,200 ft.)

WARNING: Wearing the MONITOR will not prevent the possibility of decompression sickness, but using it sensibly will greatly reduce this risk. However, any sport diver must accept that there is no device or procedure which will totally prevent the possibility of a decompression accident.

Divers vary in their physical makeup, their level of fitness, and other physiological criteria. The safe diving predictions offered by conventional tables and the simulation offered by an electronic dive monitor are based on average subjects, but incorporate safety margins. **If any diver believes himself or herself to be prone to decompression sickness for any reason, then they should not dive.** When using the MONITOR it is quite simple to ensure that you always stay within the given limit by **leaving the bottom** or your present depth **with a few minutes of Non-Stop time remaining**. Additionally, **take particular care not to exceed the correct ascent rate (10m/33 ft.).**

2.0 FEATURES OF THE MONITOR

The MONITOR is a completely automatic dive computer which constantly monitors the ambient pressure and provides indications of the diver's current status and next dive possibilities.

Only the information currently required is displayed, in order to reduce to a minimum the possibility of confusion while in use. (Fig. 1)

It switches on automatically when submerged, or it can be switched on manually at any time. The MONITOR has no parts requiring attention or replacement by the user, and no mowing parts. Apart from keeping the instrument clean and free from shocks and excessive heat, no special maintenance is required.

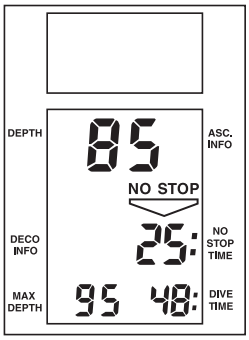

Figure 1 - Monitor 1 Display

The MONITOR can be used at altitudes up to 4000 meters (13,200 feet) and continues to monitor the diver's status during changes in altitude or while flying in an aircraft.

The MONITOR must only be used for dives using compressed air. It is intended for use by trained and qualified sport divers and is not intended to take into account the longer exposures and extreme conditions associated with professional diving.

Although the MONITOR will function reliably at depths down to 99.9 meters (330 ft.), it is recommended that divers do not dive beyond the limits laid down by the certifying agencies for divers of their qualification level.

The MONITOR is a personal instrument which should accompany the diver during all dives and surface intervals and for the period following the dive when the screen is still indicating the presence of some residual gas. It should not be passed on to another diver unless it is completely clear of data from a previous dive, or for a period of 24 hours since a previous dive by either diver.

It is also important that neither diver should have experienced a significant change in altitude.

2.1 THE MONITOR DISPLAYS:

— Current dive depth
— Maximum depth reached
— Dive time
— No-stop time remaining
— Decompression. stop required warning
— Depth of deepest decompression stop
— Time at deepest decompression stop (M2 only)
— Total ascent time (M2 Only)
— Desaturation time
— Surface interval
— No flying warning
— 9 dive memory
— Time to adapt to altitude
— Altitude indicator
— Fast ascent warning
— Low battery warning
— Missed decompression warning
— Mode indicator
— Next dive no-stop time predictions
— Dive number (in memory)
— Units indicator
— Tissue number for incomplete decompression

2.2 ACTIVATING THE MONITOR

The MONITOR is always ready for use and will operate if the diver simply submerges it. It is not necessary to switch it on before diving. However, should the diver wish to pre-activate the computer he would touch contacts A and B at the same time. This activates the screen. To review the NEXT DIVE information touch contacts A and B a second time. The computer will review various depths and their No-Stop times.

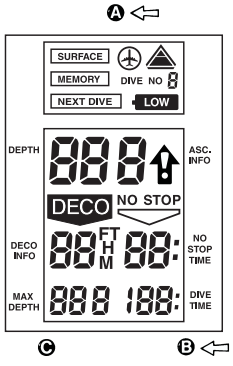

Figure 2

To make good contact it may be necessary to moisten your fingertips. When activated in this way the MONITOR will display all elements for 5 seconds, allowing the diver to confirm that all display elements are functioning (Fig. 2). This is followed by the MONITOR going into "ready" mode.

If there is no change in the diver's status in the following three minutes the MONITOR will switch off the display to conserve battery power.

If a change in altitude sector is detected by the MONITOR at any time, it will switch on the display in SURFACE mode and will display the ALTITUDE SECTOR INDICATOR and the time required to adapt to the new altitude.

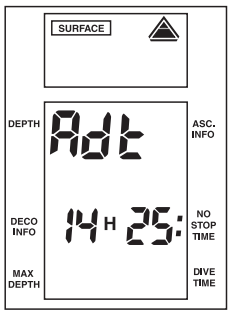

Figure 3

If this occurs while the MONITOR is still in "ready" mode following a previous dive, then this display will replace the "desaturation time" display. The MONITOR requires a period of 35 minutes to establish a change

in altitude sector so it is important when diving at altitude to allow a period of at least 35 minutes to elapse between arriving at the altitude dive site and entering the water. If it proves necessary to start the dive during this period then activate the MONITOR manually by touching contacts A and B. (Fig. 3)

2.3 CURRENT DEPTH

The largest size digits on the display are reserved for the current depth indication and are located near the center of the display. Depth is displayed in meters and tenths down to a depth of 99.9 meters or in feet to a depth of 330 ft. This display is first activated at approximately 0.5m (2 ft.), - - - indicates that the depth is less than this. As the oceans and waters of the Earth vary in their salinity, and therefore in their density, the MONITOR is calibrated in the safest case, fresh water. This means that in water of high salinity (sea water) the MONITOR will indicate a depth slightly greater than the actual depth. This means that the MONITOR will never indicate that you are shallower than your actual depth, which could cause problems if you wished to use the depth reading for conventional dive table calculations. In fact, the MONITOR uses only the pressure reading in computing decompression requirements and does not need to take into account the depth displayed.

2.4 MAXIMUM DEPTH REACHED

In the bottom left corner of the display is the maximum depth reached during the current dive. This display is only activated if the maximum depth is at least 1 meter (3 ft.) deeper than the current depth.

2.5 DIVE TIME

The bottom right corner of the display indicates the total elapsed time of the dive since descending past approximately 1.2 meters (4 ft.) to a maximum of 199 minutes. The flashing colon to the right of the figures indicates that the "clock" is running.

2.6 NO STOP TIME REMAINING

Immediately above the DIVE TIME display is the display indicating the length of "time remaining" at the current depth without the need for decompression stops. This is confirmed by the NO STOP sign with a downward arrow immediately above it. In a normal dive this value will increase as the diver ascends towards the surface. When the display shows "99:" this indicates a NO STOP Time Remaining of 99 minutes or more.

2.7 DECOMPRESSION STOP REQUIRED

When the NO STOP "time remaining" figure is less than zero, the NO STOP indicator is switched off and a DECO indicator appears immediately to its left. This indicates that a decompression stop will be required during the ascent, and immediately below it indicates the depth at which the stop should be made. The MONITOR 2 also shows time at the stop and total ascent time (figure 4). Directly to the right of the decompression stop is the stop time. When the stop time counts down to zero, you may proceed to the next shallower stop. Above the stop time is the total ascent time. This is the total amount of time it takes to complete all the decompression stops and the amount of time to ascend to the surface at 33 feet/ min.

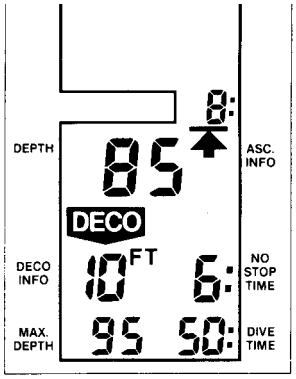

Figure 4 - Monitor 2 Decompression Screen Deco Stop = 10 ft Time at Deco Stop = 6 min Total Ascent Time = 8 min

The decompression stop depth indicated is the shallowest depth at which the stop can be carried out, sometimes known as the "ceiling". Should surface conditions require it, decompression can be carried out at a deeper depth, until the MONITOR indicates that it is time to surface. In this case the total decompression time will be slightly extended.

On a dive with a gradual ascent it may be possible that the MONITOR indicates the need for a shallow decompression stop but during the ascent the display may indicate that the stop is no longer necessary, or that the first stop may be at a shallower depth. This will be as a result of the computers' simulated release of gas from the body during the gradual ascent, thus modifying the diver's saturation status.

In extreme cases stops may be required below 24m (80 ft.) for sea level dives, or 21m (68 ft.) for altitude dives.

2.8 MISSED DECOMPRESSION WARNING

When the DECO arrow described above flashes, this indicates that the diver

has ascended past a depth level at which a decompression stop should be made. The diver must descend until the warning ceases to flash. While the warning is flashing, the MONITOR suspends computation of the desaturation. If the diver surfaces the warning will continue to flash and after 5 minutes the number of the fastest tissue which is insufficiently decompressed will be displayed at the top right of the screen. (Fig. 5).

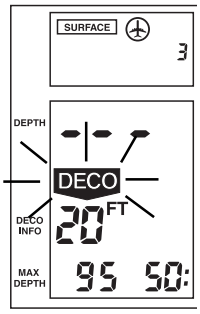

Figure 5

The MONITOR will then go into "emergency" mode which blocks all further computation for 24 hours, but continues to display the maximum depth and the dive time. In any situation in which the warning has been activated for at least 3 minutes, the DECO warning will be entered in the dive MEMORY for this dive.

WARNING: In any situation when decompression has been missed, there is a risk of decompression sickness and the diver's condition should be carefully checked over the next 24 hours, and no further dives should be undertaken.

UNDER NO CIRCUMSTANCES CONSIDER REIMMERSING THE DIVER TO ATTEMPT RECOMPRESSION!

2.9 FAST ASCENT WARNING

Immediately to the right of the current depth display is the fast ascent warning. It is an upward arrow enclosing the exclamation mark. The correct rate of ascent is 10m/min. (33 ft./min.). If the diver ascends at a rate in excess of 12m/min. (39 ft/min.), the warning is activated. If the rate of ascent exceeds 16m/min. (52 ft./min.), the warning will flash. If the ascent is such that the warning flashes for more than 15 seconds, then the warning will be entered in the memory for that dive.

2.10 MODE INDICATOR

The uppermost area of the display is reserved for information which is displayed only when the diver is on the surface. The left part of this area contains MODE indicator. When this section is completely blank then the MONITOR is in "ready" mode, or is diving. It can be switched to "ready" mode by touching contacts A and B. Following a dive, or on detection of a change in altitude sector, it will automatically change to SURFACE mode. While in "ready" or SURFACE mode, a second touch on contacts A and B will activate NEXT DIVE mode. If the MONITOR is in "ready" or SURFACE mode, touching contacts B and C will activate MEMORY mode.

2.11 WAIT TO FLY WARNING

Following a dive, the diver's body will still be releasing gas for a period of time. A further reduction in pressure, such as that resulting in flying in an aircraft will result in further decompression which could provoke decompression sickness.

Pressurized aircraft are not pressurized to surface pressure but to a pressure equivalent to a high altitude diving site. After a dive, the MONITOR therefore warns that the diver should wait before flying in a pressurized aircraft. This is indicted by an aircraft symbol inside a circle in the upper part of the display.

The diver should not fly while this is activated. Should the diver plan to fly in an unpressurized aircraft, it is recommended that the flight should not be commenced until the MONITOR indicates that the diver is completely desaturated.

In addition to the Wait-to-fly indicator, the MONITOR 2 will also display the number of hours directly beneath the indicator, e.g. 4h.

2.12 ALTITUDE INDICATOR

Since the atmospheric pressure at which the diver starts the dive has an influence on the computation, this must first be measured. The MONITOR is constantly sampling the atmospheric pressure and is therefore "aware" of the altitude sector in which the diver is starting the dive. Four altitude sectors are indicated, using the triangular symbol in the upper part of the display. No symbol indicates Sector 0, sea level; an empty triangle

indicates Sector 1; the bottom half of the triangle is filled in to indicate Sector 2; and the top half of the triangle is additionally filled in to indicate Sector 3.

2.13 LOW BATTERY WARNING

LOW

The battery has a long life-span (see Technical data), but as it reaches a predetermined reserve of power the

LOW warning will appear in the upper half of the display, only while at the surface. This indicates that the battery should be replaced soon. However, the reserve is such that the MONITOR will continue to function normally for some time. During normal use the battery should not be removed from the MONITOR as it is in

continuous use. It should be removed only for replacement by an Authorized Distributor. Only an original MONITOR Lithium battery can be used as a replacement.

2.14 TOTAL ASCENT TIME (Monitor 2 only)

8:

On the MONITOR 2, the total time required for a safe ascent to the surface is indicated whenever decompression stops are necessary. This time includes the ascent carried out at 33 ft/min, plus all the necessary decompresion stops, up to a total of 99 minutes (99: indicates 99 minutes or more). The indication consists of an upward arrow meeting a surface line with the number of minutes indicated above.

2.15 SURFACE MODE

DECO INFO | 2 H 10: | NO STOP TIME

When the diver leaves the water after a dive, for 10 minutes the MONITOR will continue to display the maximum depth and total time of the dive. If the diver reenters the water during this period, this reentry will be considered a continuation of the previous dive. If there is no reentry, then after the 10 minute period, the MONITOR will change to SURFACE mode, and the dive will be entered in the MEMORY, together with the preceding SURFACE INTERVAL. At the DECO info position the diver's DESATURATION TIME will be displayed. This is the time required for the body to return to its original saturation state. Any dive under taken during this period is a repetitive dive, while a dive undertaken after the expiry of the period will be considered a "first dive." When the DESATURATION TIME reaches zero the MONITOR will automatically switch off, The WAIT TO FLY TIME is also indicated in SURFACE mode.

2.16 NEXT DIVE MODE

NEXT DIVE

Touching contacts A and B while the MONITOR is switched on will activate NEXT DIVE mode. During the first 5 seconds, the surface interval since the last dive will be displayed at the DECO INFO position, confirmed by "Int" at the MAX DEPTH position. If the MONITOR is not in SURFACE mode, due to the DESATURATION TIME being completed, then the SURFACE interval will not be displayed since it plays no part in the computation of the next dive.

The MONITOR will then scroll the NEXT DIVE NO STOP predictions for dives in the 9m (30 ft.) to 42m (140 ft.) range. Dives will be displayed in 3m (10 ft.) increments for approximately 3 seconds When the sequence is complete the MONITOR will return to its previous mode.

The diver will become familiar with the predictions for a first dive, and will note that they are reduced for a repetitive dive, according to the length of the SURFACE interval. They can be expected to increase as the SURFACE interval increases and the DESATURATION TIME decreases, eventually becoming "first dive" times when the DESATURATION TIME reaches zero. The predicted times assume a rectangular profile dive. If the MONITOR detects a high altitude sector, this will be displayed, and the predicted times will be shorter than those for sea level dives.

2.17 MEMORY MODE

MEMORY

Touching contacts B and C while the MONITOR is switched on will activate MEMORY mode. The MONITOR retains details of the diver's last 9 dives in its memory, Dive 1 is the last dive, Dive 2 is the dive before that, etc. A new dive becomes Dive 1, and the 9th dive is erased from the memory. A dive to less than 1.2m (4 ft.) and less than 3 minutes will not be recorded.

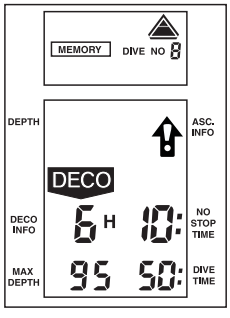

Figure 6

The memory will retain the following details:

— Maximum depth reached

— Total Time

— Altitude sector

— Preceding surface interval, for repetitive dives

— Fast ascent warning if it flashed for more than 15 seconds

— DECO warning if decompression was missed

— If a dive was commenced during the altitude adaption period, the adaptation time remaining will be recorded in place of the surface interval time. (fig. 6)

If contact is maintained, all 9 dives will be recalled consecutively, following which the MONITOR will return to its previous mode. If left in a dive memory, it will automatically return to the previous mode after 3 minutes.

3.0 DIVING WITH THE MONITOR AT SEA LEVEL

BEFORE THE DIVE

Review the predicted NO STOP times for the planned depth of your dive; touch contacts A and B once to activate the MONITOR, and a second time to enter NEXT DIVE mode. Remember that the MONITOR is designed for NO STOP

diving so your dive plan should aim to keep within the indicated NO STOP time at the current depth. Should the dive site be appropriate, you may allow for some additional time to be spent at a lesser depth, after leaving your maximum depth, as long as you always remain within the currently indicated NO STOP time. In either case, ensure that your air supply is adequate for the dive planned, and includes a reserve for contingencies.

ENTERING THE WATER

There is no further need to worry about activating the MONITOR as it will automatically detect your entry into the water and will commence timing the dive as you pass 1.2m (4 ft.). The upper part of the display remains clear during the dive and all information will be located in the lower part of the computer.

DESCENDING

As you descend, the dive time will increase, the flashing colon confirming that the “clock” is running. The current depth will be shown, but as long as you are still descending the maximum depth display will be clear. Throughout the descent the NO STOP time display will indicate the time remaining, decreasing as you go deeper. If you remain at a depth for a period you will note that the NO STOP time counts down as the minutes pass (Fig. 3). When this time shows only one or two minutes, you should start to prepare to leave the bottom if you plan to make a NO STOP dive. If you leave the bottom before NO STOP time expires you will see that the NO STOP time displayed increases as you ascend. This means that, subject to having sufficient air, you can continue the dive at the shallower level to the limit of the NO STOP time indicated. As soon as your current depth is 1m (3ft.) less than your maximum depth, the maximum depth will be displayed. Should you descend deeper than this depth later in the dive the depth will increase to match that reached.

ASCENDING

During the ascent from a NO STOP dive you have only to ensure that the FAST ASCENT WARNING is not activated. Should it be activated, you should halt your ascent until it disappears and then continue at a slower rate. It is not a serious contravention if the warning appears occasionally, but it should not be allowed to remain, or to flash.

You should aim to stay within the NO STOP limits since the MONITOR is designed for NO STOP diving. However, if you find that you have exceeded the NO STOP time and the MONITOR is displaying the DECO warning, then note the decompression stop displayed and hold your position at this depth until the display indicates a shallower stop, or that you are free to surface (99: in NO STOP time display). If you enter the DECO mode indicated then it is important that you follow the ascent schedule indicated by the MONITOR. However, it is the user’s responsibility to ensure that they have a sufficient supply of air to carry out the decompression indicated.

During the ascent you should check that the FAST ASCENT WARNING is not displayed continuously, ensuring that your are ascending at a safe rate. It is particularly important that you do not exceed the correct ascent rate as you approach the surface, in the last 10m (33 ft.) of the ascent.

BACK AT THE SURFACE

When you leave the water, the MONITOR will be displaying the TOTAL TIME and MAX DEPTH of the dive. If you dive again within the next ten minutes this will treated as a continuation of the last dive. At the end of the ten minute the MONITOR will change to SURFACE mode, indicating the DESATURATION TIME and the WAIT TO FLY symbol.

PLANNING ANOTHER DIVE

If a DESATURATION TIME is still displayed then your next dive will be influenced by the residual gas still retained in your body from the previous dive. Touching contacts A and B will activate NEXT DIVE mode and will show your current NO STOP limits for a range of depths. If the time shown for the depth you plan is too short, you have two options:

- Limit the depth of the dive to a depth where the NO STOP time indicated is acceptable.

- Continue the Surface Interval until your body has released more gas, which should give longer NO STOP times.

A REPETITIVE DIVE

The procedure will be just the same as for the first dive, except that you will probably start the dive with the MONITOR in SURFACE mode, still indicating your desaturation time. The MONITOR will give the same range of information as for the first dive, but will take into account the residual gas still remaining in your body from the previous dive.

After the dive, the details entered into the memory will include the surface interval preceding the dive.

3.1 A DIVE AT HIGH ALTITUDE

BEFORE THE DIVE

If you occasionally inspect the display of the MONITOR as you are traveling to the high altitude dive site you will see the ALTITUDE SECTOR and the ADAPTATION time indicated. This is the time after which your body is considered desaturated and stable at the given altitude. A dive during this period will involve an allowance for the residual gas in your body. After the ADAPTATION time has expired, the MONITOR will return to READY mode and you can start your dive in a zero saturation state.

When you review your NO STOP time predictions you will note that the times given are shorter than those for sea level dives.

DURING THE DIVE

The only differences you will be aware of are that, should you exceed your NO STOP time, the depths at which decompression stops should be carried out are not the same as for sea level diving.

AFTER THE DIVE

The entry in the MEMORY will also include the ALTITUDE SECTOR indicator, otherwise the entry will be the same as for a sea level dive.

4.0 CARE OF THE MONITOR

Your MONITOR is a high precision instrument and will serve you well if treated with due care. Following a few simple rules and procedures will ensure that you enjoy trouble free use of the MONITOR.

Always wash the MONITOR in fresh water after a dive. Avoid the possibility of salt water drying on the case and on the contacts. Dry it off and keep it in its protective pouch between and after dives.

Take care not to drop the MONITOR onto a hard surface or subject it to hard knocks.

Do not leave the MONITOR exposed to extreme heat, such as in direct sunlight, or cold for a prolonged period. Such treatment could permanently damage some components.

Do not attempt to open the back of the case. This will invalidate the warranty. Battery replacement can only be performed by an authorized service agent. Do not cover or insert anything into the holes in the case back.

If you are using a console model, take care not to let your console swing free during a dive as this will allow it to come into contact with hard objects. For traveling, you may prefer to detach the console from the regulator so that it can be packed in a protected position.

5.0 TECHNICAL DATA

The MONITOR incorporates a model of the gas absorption and release of the human body which classifies the various tissue types in the body to six groups. These groups are differentiated by the rate at which the absorb and release gas (their “half-times”), as indicated in the following table:

Tissue Number	Half-time (minutes)	Tissue type
1	6	Blood
2	14	Central Nervous System
3	34	Muscles
4	64	
5	124	Skin
6	320	Joints

The model also recognizes the fact that the gas release is slowed down by the reduced rate of the flow of blood to the lungs during and after diving.

The Tissue Number displayed on the screen after a dive where decompression has been missed is that of the fastest tissue group affected.

ALTITUDE RANGE

Sea level to 4000m (13,200 ft) in 4 sectors:

Sector 0 ..... 0-1000m (0-3280 ft.)

Sector 1 ..... 600-1900m (1970-6230 ft.)

Sector 2 ..... 1400-2800m (4600-9200 ft.)

Sector 3 ..... 2300-4000m (7550-13200 ft.)

It is acceptable for different instruments to display different sectors when they are operating in the overlap areas of the sectors. This difference should not be more than one sector, and they should not indicate altitude when at sea level. In this case, they should be checked by a service agent.

DEPTH RANGE: ..... 0 to 99.9m (330 ft)

TIME MEASUREMENT: ..... 0 to 199 minutes, quartz timing

TEMPERATURE RANGE: ..... 14°F to 122°F