

Congratulations!

You are now the owner of a sophisticated microprocessor-based audible altimeter. The *Skytronic* determines the altitude based on your ground setting and generates a powerful acoustic signal at your preset altitude. You may choose the altitude for the audible alert to correspond with your skydiving needs (to signal the breakoff or the end of an AFF sequence, for instance) and then you may read this setting on the altimeter's high-contrast liquid crystal display. The altitude can

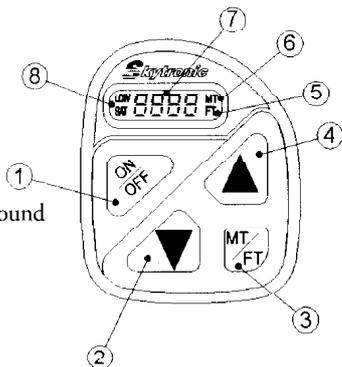
be displayed in feet or meters by just pressing a button. The *Skytronic* is also able to determine your speed and will signal the approach of the danger zone (under 1,600') if your speed exceeds 100 f/s. This feature enhances altitude awareness, calls attention to loss of altitude awareness, and most assuredly will help prevent accidents. The *Skytronic* audible altimeter can also calculate your highest altitude reached and your total freefall time over a given period of time.

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Guide to the Skytronic

- 1 - On/off button
- 2 - Decrement button
- 3 - Unit of measure button
- 4 - Increment button
- 5 - Feet indicator
- 6 - Meters indicator
- 7 - Multifunction LCD (altitudes, sound type, statistics)
- 8 - Low battery indicator



Section 1 - The basics

SWITCHING ON

Push the on/off button  at the drop zone and keep it depressed until the display lights up entirely (this takes about 4 seconds). All the display indicators light up for about 10 seconds. At the same time the *Skytronic* is executing a self test procedure, checking the battery charge and presetting the ground reference using the place where it is switched on. Then, you will hear a 5 seconds test sound

(intermittent or continuous, depending on the user choice). At this point the display will show the value 0 (ground reference) and the unit of measure (FT for feet or MT for meters). The *Skytronic* is also equipped with a sophisticated self-adjustment system to allow for changes of air pressure and temperature when the weather changes.

WARNING ALTITUDE SETTING

To set and check the altitude setting, press both buttons  and  and keep them depressed until the display starts blinking (about 4 seconds). The display blinks showing the warning altitude (feet or meters). When you push button  the warning altitude increases by units of 30 feet (10 meters), and when you push button  it decreases by units of 30 feet (10 meters). You can switch between feet and meters by simply pressing the unit of measure button  - the

display will show alternately FT or MT every time the button  is pushed. After 4 seconds without touching the buttons, the *Skytronic* goes back to the standard mode, confirming the altitude set with a beep.

ALTITUDE WARNINGS

The *Skytronic* reminds you while climbing of the warning altitude set. To avoid repeated signals, the warning signal is then disabled 300 feet (100 meters) around the warning altitude set (this prevents repeated warnings when

the airplane needs to hold a pattern around the preset altitude, but makes it important to jump at least 300 feet (100 meters) above the preset warning altitude to hear the signal in freefall. When descending through the preset warning altitude the *Skytronic* sends a 5 second signal (intermittent or continuous, depending on user selection). Below the fixed altitude of 1,600' (500 meters) the *Skytronic* will send a second warning signal if the vertical speed exceeds 100 f/s (30 m/s). From this altitude on down, every time the vertical speed exceeds the 100 f/s (30 m/s)

limit, the *Skytronic* will emit the warning signal to advise of the dangerous situation.

SWITCHING OFF

To switch the *Skytronic* off press the on/off button  and keep it pressed until the information on the LCD disappears (this takes about 4 seconds). The instrument is now off. There is also an automatic switch-off function that shuts the *Skytronic* off after 14 hours of activity. It is recommended that you switch the *Skytronic* off at the end of the

day to avoid wasting your batteries.

BATTERIES

The life of your *Skytronic* batteries depends on how often you use them. The *Skytronic* is powered by two lithium batteries having a shelf life of about 10 years when not in use. The two batteries, located at the instrument base, can be easily replaced (see below, "Replacing Batteries"). The real lifetime depends on the frequency of use as well as battery age. If the mul-

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tifunction display contrast becomes weaker, the batteries are nearing exhaustion. A special battery check circuit warns when the batteries are getting exhausted by turning on the LOW BAT indicator. If this condition occurs, replace the batteries as soon as possible to keep the instrument performing at its best.

Section 2 - The details

ADVANCED FUNCTIONS

Selection of the acoustic warning

The *Skytronic* can produce two different warning sounds: one continuous and one intermittent. To choose the sound that works best for you, press button  while in altitude setting mode (blinking display). The display now shows the symbol (Sn) and the letter I or C, for intermittent or continuous respectively. Press button  and the warning sound switches from continuous

to intermittent, and vice versa. After 4 seconds without touching the buttons, the *Skytronic* goes back to the standard mode, confirming your choice with a short beep.

Altitude indication (feet or meters)

The *Skytronic* can show the altitude from the ground, just like a digital altimeter. The altitude change is processed in real time and shown on the multifunction display. The unit of measure can

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be switched to either feet or meters by pressing the button . When the instrument shows the altitude in feet, the display shows the altitude in feet until 9999 feet. From 10,000 feet on, the display shows thousands of feet, followed by a point and then hundreds and tens of feet. The reading 4500 FT stands for 4,500 feet, while 12.35 FT stands for 12,350 feet.

Total freefall time

The *Skytronic* recognizes your exit and opening time, so it can calculate your freefall time.

Pushing button  and keeping it depressed will display the time in minutes and seconds (separated by a point). This is the total freefall time accumulated from the last data reset (see below). The maximum displayed freefall time is 99.99, equal to 1 hour, 39 minutes, and 59 seconds.

Highest altitude

The *Skytronic* records the highest altitude reached. Pushing button  and keeping it depressed will display the highest altitude reached from the last data reset (see below).

Statistical data reset

If you wish, you may calculate the accumulated freefall time over an entire event (like a boogie, a training course, or a week-end). From the standard mode go to the altitude setting mode pressing the two buttons  and  together until the display blinks. Then, push button  going to the warning sound selection (the display shows the symbol (Sn). At this point, push button  again: the display shows alternatively the highest altitude and the total freefall time. Pushing the two buttons  and  again will

reset the values and the *Skytronic* will begin accumulating new data.

How to set the altitude when the drop zone is different from the take-off place

When jumping at a different place from the airport, the warning altitude set must be calculated to reflect the altitude difference of the two places. If you usually set the warning altitude at 3,600' (1200 meters) and the new landing zone is 600' (200 meters) higher, the new warning altitude must be set at 4,200' (1400 meters). On the other

hand, if the landing zone is 600' (200 meters) lower than your take off point, the new warning altitude must be set at 3,000' (1000 meters). In either case, switch the *Skytronic* off and on again before making another jump at the new drop zone.

MAINTENANCE

Battery replacement

The *Skytronic* is powered by two lithium batteries – Type CR2040 – available in most electronics and photography stores.

Parasport Italia has these batteries

in stock. The batteries can be replaced as follows:

- Remove the battery compartment cover (recognizable by the word BATTERY at the back of the instrument) by unscrewing the two screws.
- Remove the two batteries.
- Insert the new batteries, taking care not to invert the polarity. The battery side with the + sign must be facing out.
- Close the battery compartment cover and tighten the two screws -- do not over tighten.
- Turn the instrument on,

checking that the replacement has been done correctly.

INSTRUMENT CARE

The *Skytronic* has been designed and built for reliability and durability, but there are some simple maintenance rules that must be followed:

- a) Don't drop the instrument, and avoid dropping heavy objects on it.
- b) If the *Skytronic* is carried in the gear bag without the protection of the leather hat or the helmet, put it back in its carrying box.

c) Don't press on the display because it could be permanently damaged.

d) Keep the *Skytronic* in a clean and dry place.

e) Don't leave the instrument in the sun for an extended period of time.

Troubleshooting

What to do if...

The Skytronic doesn't switch on

- Check that the batteries are correctly inserted, with the + sign facing out.
- Check that the batteries are still good. When were they last replaced? Try another set, just in case.
- Push on the buttons with the fingertips, not with the fingernails.

The Skytronic doesn't switch off

- Push on the buttons with the fingertips, not the fingernails. An incorrect pressure may not activate the switch.

The multifunction display has low contrast, or the LOW BAT indicator is on.

- The batteries are low. Replace the batteries with a new set as soon as possible.

Moving from a warm to a cold

place (and vice versa) the display starts showing numbers other than zero.

- The *Skytronic* pressure sensor compensates for the temperature, but is still sensitive to wide temperature variation. When moving from a very warm room to a very cold place, it is suggested that you let the instrument acclimate 5 minutes before reading the display. Temperature changes between the inside and the outside of an airplane (especially if the *Skytronic* is installed in an helmet or a leather hat) are absolutely negligible.

The display shows a value different from zero on the ground.

- The *Skytronic* uses atmospheric pressure to determine altitude. Sometimes weather conditions may cause wide pressure changes which affect the readings at the ground, similar to what happens to standard altimeters. When in doubt, switch the instrument off and on again.

Warning!

Remember – THIS IS ONLY A BACKUP INSTRUMENT! It is strongly recommended that you not rely exclusively on an instrument for checking the altitude. Take care to follow the instructions contained in this manual, and you will get the best performance from your *Skytronic*. In particular, pay attention to battery maintenance (see the paragraph "Batteries"). Data can be lost or altered in almost any electronic memory product under certain circumstances. The manu-

facturer assumes no responsibility for data lost or otherwise rendered unusable from improper use, damage, repairs, defects, battery replacement, use after the specified battery life expires, or any other cause.

Quick reference

Switching on

Push button  and keep it depressed until the display is turned on. When the instrument sounds it is ready to jump.

Warning altitude set

Press buttons  and  together until the display blinks (this takes about 4 seconds). Choose the unit of measure by pressing button  selecting feet or meters. Push button  to increase the warning altitude. Press button  to decrease the

warning altitude. By releasing the buttons, the new warning altitude will be set after about 4 seconds. Check the warning altitude while climbing.

Switching off

Push button  and keep it depressed until the display is switched off. At this point the instrument is off.