

# MANUAL



REV | #2.0



## WARNING!

The SOLO is intended to be a backup device and must not be relied upon as your primary means of maintaining altitude awareness. Use the SOLO at your own risk.

When testing the SOLO II on the ground the alarms sounds may be perceived louder than in freefall, due to the lack of outside wind noise and pressure changes.

Do not put the SOLO II directly next to the ear while testing the alarm sounds on the ground, as the SOLO II alarm volume is very loud. It may cause pain or damage to the ear.

The SOLO II must be mounted correctly, to ensure the alarms are audible during freefall. Always ensure the SOLO II is mounted correctly prior to jumping.

The SOLO II must be active (powered on) prior to entering the airplane.

## INTRODUCTION

Congratulations on purchasing your new SOLO III!

The SOLO II design is based upon the latest findings in microcomputer technology and freefall parameters.

The SOLO II is fully automatic. It continually records the ambient air pressure and temperature and adjusts the electronic circuitry to the local elevation.

The SOLO II's small and ergonomic design provides the user with comfort and less bulk when used inside a soft or hard-shell helmet. Rigging materials are included for those wishing to mount the audible on the outside of a helmet.

The SOLO II can be mounted on the outside of any type of helmet by means of the enclosed ties.

The SOLO II is specifically designed for advanced skydiving disciplines: Relative Work, Free Flying, Student, Tandem, and AFF

Please read ALL of the instructions prior to actual skydiving use. It is a very good idea to practice ACCESS'ing the SOLO II and setting the warning values on the ground prior to your first jump with the SOLO II.

For further information or to ask questions about SOLO II or any other L&B altitude awareness instrument, please visit our website and our Product Support Forum at:

www.L-and-B.dk

## INSTRUCTIONS

### Power ON

The SOLO II has been powered off prior to shipping from our factory. To turn the power on, press and hold any key until the unit beeps, then release the button. SOLO II runs a self-test and sounds three beeps.

### Perform ACCESS

General note: The SOLO II goes out of ACCESS if no button has been pressed within 5 sec. ALL functions (except Power ON) can be performed ONLY when the SOLO II is in ACCESS mode.

1. Press and release quickly
2. When the ACCESS indicator light illuminates, immediately press and keep it pressed
3. When the ACCESS indicator illuminates again, release immediately

The SOLO II now displays three preset warning altitude lights.

### Setting the Warning Altitudes

The SOLO II factory altitude warning settings are:

- 1st warning: 4,500 ft.
- 2nd warning: 3,000 ft.
- 3rd warning: 1,500 ft.

The setting of warning altitudes can be performed either on the ground or in the airplane during climb to jump altitude.

### 3 warning alarms

1. Press
2. Press OR to change the 1st warning altitude
3. Press
4. Press OR to change the 2nd warning altitude
5. Press
6. Press OR to change the 3rd warning altitude

### Sequence of warning alarm lights

Please note that when setting the warning altitudes, it is possible to set the 1st warning alarm altitude lower than the 2nd, or even the 3rd warning altitude indicator. The 2nd warning altitude indicator could be set to a higher value than the 1st warning alarm indicator, or a lower value than the 3rd warning altitude indicator, and so on. This is not a problem; when the SOLO II exits ACCESS mode, it will automatically sort and store the warning alarms such that the highest warning altitude become the 1st warning alarm, the next highest warning altitude becomes the 2nd warning alarm, and the lowest warning altitude becomes the 3rd warning alarm.

### 2 warning alarms

It is possible to only have 2 warning alarms. The procedure is the same as above, but choose same altitude for the 1st, 2nd and 3rd warning alarms (the SOLO II then sounds only the 2nd and 3rd warning alarms).

### 1 warning alarm

It is possible to only have 1 warning alarm. The procedure is the same as above, but choose same altitude for all 3 warning alarms (the SOLO II then sounds only the 3rd warning alarm).

### Testing the alarm sounds

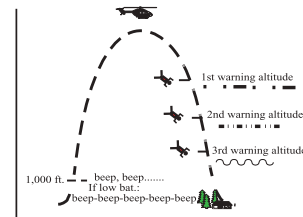
Press and hold

### Power OFF

The SOLO II can be manually powered OFF to further extend the battery life time when not in use. The preset warning altitudes are stored in non-volatile memory when the SOLO II is powered OFF. When powered OFF, the SOLO II cannot be used for jumping.

Press repeatedly until the OFF indicator light illuminates. Press and hold OR until the altitude warning light display starts to count down (from 65, 60, 55, etc.), then release.

### 1,000 Feet Test



At 1,000 feet +/-100 feet, the SOLO II sounds a sequence of beeps. These beeps have two functions:

1. The beeps indicate that SOLO II has calibrated itself to the local ground elevation and is ready to jump.

2. 3 or 4 flashes: Unit is not functioning properly  
Remedy: Perform reset

If the unit does not function correctly, even after replacing the batteries and pressing reset, perform following:

Press and hold while resetting. The SOLO II resets to factory altitude warning settings.

If the unit is still faulty, please contact your local dealer or LARSEN & BRUSGAARD.

### Prior to Jumping

The SOLO II normally continuously adjusts itself to the local elevation. However, if the "READY" indicator light flashes, the unit has not adjusted itself to the local elevation and it must be powered OFF and ON prior to jumping.

### Setting a Drop Zone (DZ) Offset

If the DZ elevation is higher or lower than that of the take-off airport, take this into account when setting your alarm altitudes; don't forget to reset the warning altitudes when you return to your normal DZ environment.

### Low Battery

When the 'Low Bat' indicator illuminates, replace the batteries. If the battery voltage is low, the SOLO II sounds 5 short beeps when climbing through 1,000 feet.

### Battery replacement

Carefully remove screw from battery cover and remove batteries. Install new batteries using the correct polarity. Use only Renata CR-2325.

Note: Reset the SOLO II after replacing batteries.

### Reset

Press a paperclip into the tiny hole on the rear side of the unit and release. The unit restarts.

Note: Reset the unit after battery replacement and when trouble shooting.

### Air Filter

The SOLO II is water resistant against minor splashes of water.

The Air Filter is the white circular part mounted on the side of the unit. If it becomes wet, let the SOLO II dry in a warm place for 48 hours.

NOTE: The Air Filter must be replaced if jumping is resumed quickly or if the SOLO II has been submerged into water. Air Filter removal tooling kit is an accessory which can be purchased separately.

### Mounting the SOLO II

The SOLO II can be mounted on the outside of a helmet. Loop the wax cord through the four mounting holes and fasten with knots to the helmet.

NOTE: Make sure that there is no material between the SOLO II loudspeaker hole and your ear.

### Trouble-shooting

When the SOLO II detects an internal fault, the warning altitude "65" LED flashes 2 to 4 times. At the same time the unit beeps every minute.

The "65" LED flashing codes are as follows:

## SPECIFICATIONS

Dimensions: 55 x 40 x 11 mm  
(2.16 x 1.57 x 0.43 inches)

Weight: 24 grams (0.8 oz.)

Battery type: 2 x CR 2325 or equivalent

Battery Life Time: 2.5 years or 500 jumps

Freefall alarm sounds:

1st warning: One 3 second pulsating alarm if vertical airspeed exceeds 13 m/sec at preset altitude.  
Sound sequence: Pulsating, low repetition

2nd warning: One 4 second pulsating alarm if vertical airspeed exceeds 13 m/sec at preset altitude.  
Sound sequence: Pulsating, high repetition

3rd warning: Siren alarm as long as vertical airspeed exceeds 29 m/sec at or below the preset altitude. Sound sequence: High pitch continuous siren

Alarm output volume: 120 dB

Calibration Range: 0 to 6,500 feet

Altitude selection interval: 500 feet

Operating altitude: 0 to 40,000 feet

Accuracy: ± 100 feet

Operating Temperature Range: -20° C to +50° C (-4° F to +122° F)

Meets or exceeds EEC/89/336  
L&B part no.: 205112  
NATO Stock no.: 6675-22-620-5097

## WARRANTY

The following conditions apply to the SOLO II warranty:

Within 12 months after delivery, damage or defects in the unit that are proven to be caused by faulty manufacture will be repaired by LARSEN & BRUSGAARD at no cost to the end user.

To make a claim under this warranty, send the unit to an authorized dealer, or directly to LARSEN & BRUSGAARD, together with the dated purchase invoice or receipt. The warranty becomes void if damage is caused by external circumstances, or if the unit has been serviced or repaired by third parties unauthorized by our national agents or LARSEN & BRUSGAARD.

All further claims, especially for defects after skydiving accidents, are excluded. LARSEN & BRUSGAARD has no obligation to honor any extension of warranty granted by any national agent.

## WAIVER OF LIABILITY:

The buyer and user of the SOLO II indemnify the manufacturer and vendor from any liability for damage incurred before, during and after skydiving with the instrument.