

ADVANCE

advance thun ag  
uttigenstrasse 87  
ch 3600 thun

+41 33 225 70 10  
www.advance.ch

info@advance.ch  
support@advance.ch



# Getting Started

**ADVANCE** LIGHTNESS<sup>3</sup>

English

# Welcome to ADVANCE

Thank you for choosing ADVANCE. We are one of the worldwide leading paraglider manufacturers, based in Switzerland. Since 1988 we have consistently followed our own plans and ideas for both development and production. The LIGHTNESS 3 is a very comfortable harness, both in flight and for its general handling; and it provides even more protection. A choice of standard or lightweight speedbag widens its range of use: not least of which are

long cross countries where the optional Windshield adds to comfort in flight.

We hope that the LIGHTNESS 3 will bring you many enjoyable hours in the air

## Getting Started

This guide gives you a brief look at using the LIGHTNESS 3, but it does not replace the manual which you can download from [www.advance.ch/download](http://www.advance.ch/download).



## Handle with Care

The contents of the LIGHTNESS 3 package are made of lightweight materials, and should be handled with care. The harness and rucksack will give long and faithful service – but only if treated carefully. LIGHTNESS 3 products should never be dragged over the ground. All the zips are intended for light loadings and should never be closed against high tension. Pointed and sharp objects should never go in the harness back compartment, the rucksack or its side pockets:

they can damage the material. When accelerating make sure your feet stay centred in the speedbag and squarely on the carbon footboard, so that your shoes do not strain and damage the speedbag material.



# Delivery & Options

Every ADVANCE product has to be checked by the retailer before delivery for complete package contents and correct basic settings.

In the LIGHTNESS 3 delivery package:

- Harness with standard or light speedbag, including carbon footboard and integrated cockpit
- Detachable instrument plate with the standard speedbag
- Entry assist with light speedbag
- EN/LTF certified foam protector under the seat
- SAS-TEC protection in the back
- Back comfort foam
- 2 Edelrid Alias Alu carabiners
- Reserve handle connected to four-flap inner container
- LIGHTPACK 3
- COMPRESSBAG

## Options

- Windshield\*
- Entry assist for standard speedbag
- Radio pocket for mounting on shoulder strap

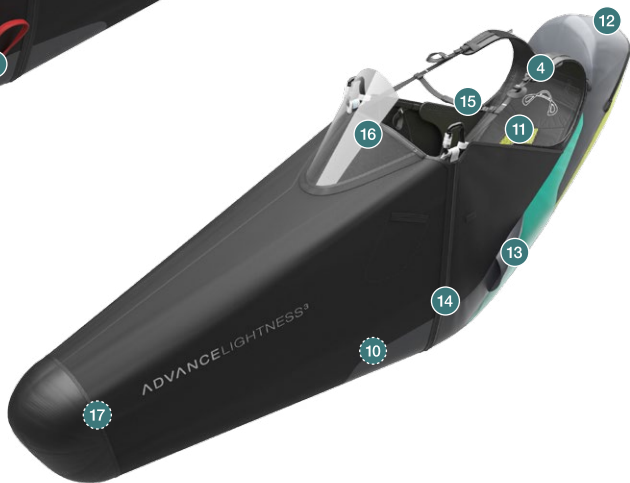


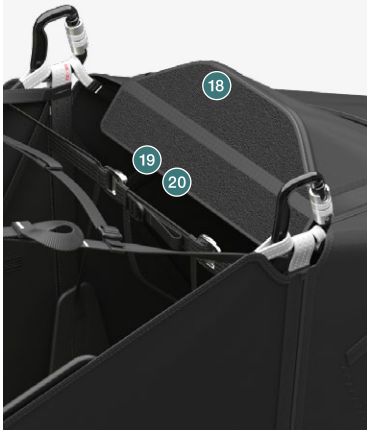
\* only compatible with standard speedbag





- 12 Air-filled neck spoiler
- 13 Air intake for neck spoiler
- 14 Relief tube exit
- 15 Small chest strap
- 16 Optional Windshield for standard speedbag
- 17 Carbon footplate





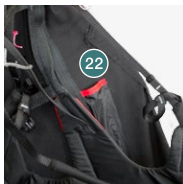
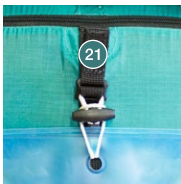
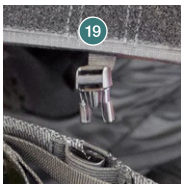
18 Cockpit with cockpit plate (detachable on standard speedbag)

19 Click buckles on the cockpit plate for fixing cockpit to chest strap

20 Cable exit for external battery

21 Camelbak holder in back pocket

22 Relief tube exit (standard speedbag)



# Features Rucksack

- 1 Circumferential zip
- 2 Rucksack handle
- 3 Ergonomically shaped, adjustable shoulder straps
- 4 Large stretch side pocket
- 5 Wrist loop
- 6 Netting pocket
- 7 Elasticated waist strap pocket
- 8 Elasticated side pocket



- 9 Waist strap pocket with zip
- 10 Ergonomic waist strap
- 11 Ergonomic mesh back support





# Speedbag & Speed system

## Closing the Speedbag

The LIGHTNESS 3 speedbag is closed by the Closure Remember System (CRS). This safety device is directly attached to the chest/leg straps, and alerts the pilot to the status of the leg straps when the speedbag top is closed. After CRS closure the speedbag with the ball.

## Getting the feet into the speedbag

Take off with a pronounced forward-leaning body position and keep this after lift off, so that you don't slide down too low in the harness. You can then best reach the right foot into the speedbag which will be trailing below and slightly behind. A glance below at the speedbag opening makes this easier. The speedbag closes automatically when both feet are stretched out in it on the footboard.

## Using the speed loop

Both LIGHTNESS 3 speed loop rungs are centrally reinforced. This makes them more comfortable on the feet but also easier feel a rung centre. Make sure that the speed lines are not set too short – so that the full accelerate range is available. Accelerate with one foot only, and leave the other on

the footboard. To accelerate more, push the first rung to the footboard and put the other in the second speed rung. Make sure your heels do not push into the bottom of the speedbag and overstress the material.



(CRS) Closure Remember System

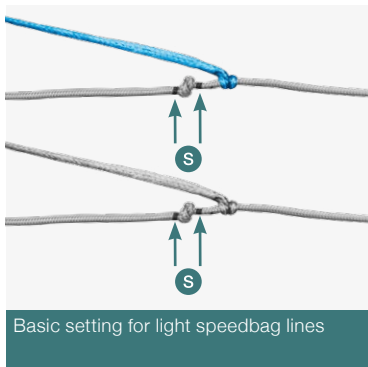
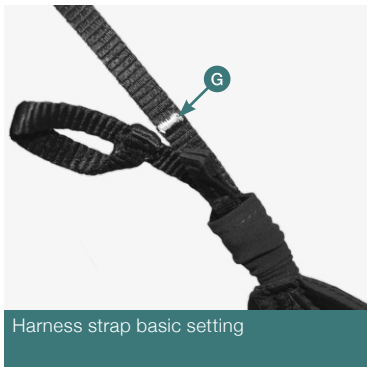
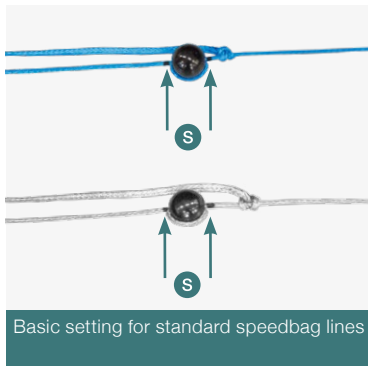
# Adjusting the harness

Individual adjustment of the LIGHTNESS 3 is easy, even though there are a variety of setting possibilities. All adjuster straps and buckles have a basic setting.

## 1. Your basic settings

Always start from the basic settings. These are indicated by grey sewing on the harness straps **G** and black pen marks on the speedbag lines **S**.

Pack the back pocket and put on the LIGHTNESS 3. Close the chest strap, the Closure Remember System and the



speedbag and then hang the harness and yourself in a harness support frame by its carabiners.

## 2. Speedbag adjustment

Correct speedbag length setting is essential. This defines the body centre of gravity position and therefore sets the speedbag angle in flight. For best aerodynamics the underside of the speedbag should be horizontal. First, completely loosen the upper, blue speedbag lines **1**. Then set the

correct flying angle with the grey speedbag lines **2**. If the result is too steep (speedbag nose down) shorten these lines (C of G goes back): too flat (speedbag nose up), lengthen them. Make small corrections (2 cm steps max) to obtain the correct length. Then shorten the upper blue lines **1** for the desired footboard angle – comfortable feet. Finally set the lower blue lines



(leg support) **3** so they are lightly loaded.

### **3. Adjusting the upper body recline angle**

Set the desired back angle with the back straps **4**. Then adjust the shoulder straps **5** to your personal taste – looser when flying, or providing light support – but not pressing on the shoulders too much.

### **4. Fine adjustments**

The lower back strap **6** sets the degree of lumbar (lower back) support. It also can play a part in finding the best body position if the speed bag lower surface is still not horizontal.

The thigh straps **7** increase the degree of support for your thighs provided by the seat surface: you can pull them in until your legs are comfortable.

### **5. Chest strap adjustment**

The chest strap **8** sets the distance between the carabiners. ADVANCE recommend approximately a shoulder width.

### **6. Small chest strap adjustment**

The small chest strap **9** holds the shoulder straps in position for takeoff and landing. They can be adjusted to any position.

### **7. Final check of settings**

Once again check that the speedbag is horizontal, best done by an outside observer. Make sure the front of the harness seat does not press the backs of the knees. If it does, loosen the thigh straps **7**.

Repeat the adjustment process as often as necessary.

# Installing a reserve

Fitting a reserve into a harness must be done by a skilled person – your safety depends on it! The LIGHTNESS 3 manual explains the steps required in detail. Make sure that your reserve conforms to the volume range certified for your LIGHTNESS 3, Size S: 3 to 5.5 litres, size M: 3 to 6 litres, size L: 3 to 6.5 l.

As a rough approximation you can use the reserve weight/volume factor (reserve weight in kgs x 2.7 = volume in litres).

Depending on packing technique and skill a reserve that conforms to the certified volume limits – if calculated by this formula – may still not release properly. In every case a personal test release (compatibility test) is the only way to make sure that a

particular reserve will work with the LIGHTNESS 3.

**!** **Attention:** If the volume of the packed reserve lies within the upper third of the certified volume range, it is especially important to observe that the reserve has been correctly folded to conform to the length of the inner container.

**!** **Attention:** Use only the original reserve handle which is permanently attached to the inner container.



# Packing

The LIGHTNESS 3 comes with a compression inner bag, so that the paraglider takes up minimum space in the LIGHTPACK 3. The COMPRESSBAG is perfectly coordinated with LIGHTNESS 3 and LIGHTPACK 3.

Pack your paraglider to the COMPRESSBAG's tapered shape. Close the side zips to minimise the COMPRESSBAG volume.

Now lie the COMPRESSBAG in the rucksack and push it all the way down. Lie the folded harness on top, protector

uppermost, on the paraglider and pull in the rucksack tapes over harness and glider. The rucksack side zips will close easily.

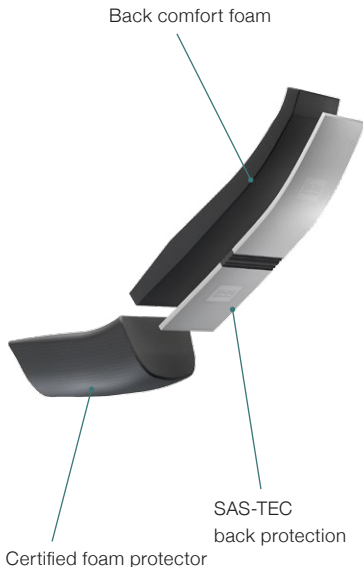


# Removing the protector

Both LIGHTNESS 3 protector and comfort foam are easy to remove, e.g. for saving weight in extreme cases (VolBiv). For these requirements the LIGHTNESS 3 can also be flown without foam protector (~ 450 gm) and SAS-TEC crash protection (~ 270 gm). A sleeping bag, for example, could be stowed in the main protector space, and a foldable iosmat replace the comfort foam. We have to generally advise against these measures on the grounds of safety.

Flying without comfort foam (~ 150 g) is possible, but might compromise comfort on a long flight.

When reinstalling the SAS-TEC crash protection and the main protector care must be taken to ensure that all components return exactly to their original positions.



# Fitting the Windshield

The optional Windshield\* markedly reduces windchill and its associated body cooling. Continuous wind noise is also suppressed in transiting flight, especially when accelerated.

First clip it to the press stud on the left side of the harness. Lead it through the elastic strap on the speedbag and clip it on the right side.

To avoid scratches and damage the screen should be unclipped after flight, put in its

bag and stowed in the COMPRESSBAG inside the folded glider.



\* only compatible with standard speedbag

# Warranty & Service

Set up a MyADVANCE-Account on [www.advance.ch/warranty](http://www.advance.ch/warranty) and register your harness direct online after purchase. You will then benefit from the extended ADVANCE warranty. This is valid for 3 years and covers defects that can be attributed to manufacturing faults.

In the MyADVANCE-Account you can find all the documentation for your harness as PDF, e. g. manual and other information. You can also look at spare parts for your product and ask ADVANCE support direct.

Your LIGHTNESS 3 should be regularly inspected, and have a check every 24 months. If damage is identified the harness should be taken straight away to an authorised Service Centre. You can find all the information about the worldwide ADVANCE Service Network on [www.advance.ch](http://www.advance.ch).