



CONNECT Light
Manual

CONNECT LIGHT HARNESS

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DISCLAIMER AND EXCLUSION OF LIABILITY

Use of this harness is solely at the USER'S OWN RISK. THE CERTIFICATION AND THE WARRANTY SHALL BE RENDERED INVALID if changes of any kind or improper repairs are made to this harness.

Pilots are responsible for their own safety. Before every flight, the pilot must check that the harness is air-worthy and must launch only if it is fit to fly.

The pilot must check the weather forecast and only fly if both current and forecasted conditions guarantee a safe flight.

The harness may only be used with a pilot's licence which is valid for the area or under the supervision of an approved flying instructor. There shall be no liability on the part of third parties, in particular the manufacturer and distributor.

In terms of the warranty and guarantee conditions, the harness, in combination with a paraglider, may not be flown if any of the following situations apply:

1. there have been unauthorised repairs or the pilot has carried out repairs himself, or repairs have been made using parts which are not genuine;
2. the pilot's take-off weight does not fall within the permissible overall take-off weight range;
3. the glider is flown in rain or or snow;
4. aerobatics / extreme flying or flight manoeuvres at an angle greater than 90° are carried out;
5. the pilot has insufficient experience or training;
6. the wrong equipment or inadequate equipment (reserve, helmet, footwear etc) is used;
7. the harness is used for winch launching using a winch which has not been inspected or by non-licensed pilots and/or winch operators;
8. modifications have been made to the harness which are not approved;
9. the harness is opened in free fall - this is not a parachute harness.

1 Technical Data

Use	Paraglider harness
Maximum clip-in weight	120 kg
Hang height	M – L = 41cm / XL = 45cm
Distance between carabiners	37 - 48 cm
Weight, incl. carabiner hooks, excl. reserve	approx. 3.2 kg
Protection	CYGNUS AIRBAG with 3 cm thick high density foam protector
DHV-crash test	14.7 G negative
DHV-certification	GS-03-0311-0404
Installation of reserve	Integrated container under the seat, side deployment handle

2 GENERAL INFORMATION

2.1 The concept

The CONNECT Light is a light-weight paraglider harness, designed for a wide range of use. It is ideal for long walks to launch sites away from crowded flying sites, thanks to its weight-optimisation and the fact that it is very small when packed up. The design of the harness is aimed at comfort and safety, meaning that we can recommend it both for occasional pilots and for experienced pilots looking for a harness for long cross-country flights.

2.2 Safety

With the CONNECT Light, pilot safety is ensured by the optimum hang point and use of the CYGNUS Airbag, combined with a 3cm thick high density foam protector. The hang point has been selected in such a way that it gives the pilot maximum feedback, but without conveying a “jittery” impression.

The CYGNUS Airbag System is firmly attached to the harness and inflates by dynamic pressure during launch. The Mylar-ring plate integrated in the base of the harness means that the airbag is partially inflated even before launch. The partial inflation, together with the 3cm thick high density foam protector, ensure good protection even at the start of the launch procedure.

2.3 Speed system

The CONNECT Light is designed for use with a speed bar. The pulley necessary for this is optimally positioned to ensure perfect load transfer. The cord inside the harness ensures energy-saving and efficient use of the speed bar.

3 THE RESERVE SYSTEM

There is an appropriately-sized container underneath the seat of the CONNECT Light for a reserve system to be carried. This is closed using a system of flaps and by the deployment handle pins. This gives the reserve system good protection against dirt and moisture, and against accidental deployment. If your harness should get wet (e.g. you land in water), the reserve system must be dried out and repacked before your next flight. Only the deployment handle provided should be used for the CONNECT Light container.

WARNING! No other deployment handle should be used!

The handle must be fastened using its loop to the inner container of the reserve. Contact the manufacturer of the reserve if the inner container does not have an attachment loop.

Before it is fitted, the reserve is attached to the CONNECT Light using the bridle. This is designed as a V-bridle which is attached to the shoulder straps of the CONNECT Light. If there is an emergency deployment, this ensures that the force of the reserve goes into the harness. The hang point on the shoulder straps results in a pilot position which will minimise injury if a landing is made using the reserve.

3.1 Fitting the reserve

The reserve is fitted as described below:

3.1.1

Fitting the bridle: the connection line is placed through the reserve system's riser. The reserve system is then put through the loop which is tightened and must be secure around the riser. If the reserve system has two main lines, both lines must be fed into the bridle.



Alternatively, a steel quick link with a minimum diameter of 8 mm can be used. (WARNING: Take particular care that the screw cannot turn since this could result in dangerous cross-loading). This connection gives a greater shock-breaking strength than the previous method.



3.1.2

Fitting the deployment handle to the inner container: the deployment handle is fed through the appropriate loop on the inner container (please follow the instructions with your reserve), i.e. an outside one rather than the middle one. The handle's black loop must be attached to the loop of the reserve system's inner container, then the whole handle must be pulled through the loop, to ensure a tight fitting. The connecting band between the handle and the inner container must not be stretched until the deployment handle locking pins have been inserted.

CAUTION! If the instructions above are not followed, it may be difficult or impossible to deploy the reserve system.

You must check that it has been correctly fitted by carrying out a test deployment.



3.1.3

Fitting the reserve system: the reserve system is fitted in the outside container of the CONNECT Light.

Note in this picture that the deployment handle loop is attached to the side



3.1.4

Closing the container: the elastic fasteners are found in the loops of the lowest flap (see Fig. 1). A pack cord is threaded through each of these. Using these pack cords, the flaps of the container are closed (follow the pictures from left to right)



The deployment handle pins are then threaded through the elastic loops and underneath the transparent access cover. The pack cord must then be removed. Finally, the deployment handle is inserted under the cover incorporated in the harness

3.1.5

Attaching a safety line: This line should prevent accidental deployment of the reserve system and it should have a breaking strength of 5kg (available from specialist shops or directly from SWING). To attach it, use a needle to feed it through the top band and deployment handle and knot it (see picture).

WARNING – ACCIDENT RISK!

After the reserve system has been fitted for the first time, a trial deployment must be carried out to verify that it operates properly (seated in the harness in the flying position). You should check that the container is properly closed as part of the pre-flight check before each launch.

It has been a requirement in Germany since 1 January 1998 that, after it has been packed for the first time, every new combination of reserve and harness/container must be inspected by the manufacturer of the harness or the reserve, or by an authorised agent (e.g. dealer, flying school). It must be possible to deploy the reserve from the flying position without any difficulty and according to the guidelines in the manufacturer's instructions. The inspection must be recorded in the reserve's packing certificate.



4 **ADJUSTMENT OPTIONS FOR THE CONNECT Light**

The CONNECT Light has various adjustment options so that pilots can adjust the harness according to their particular wishes and preferences. Pilots should take their time in doing this because it will provide a high level of comfort if done correctly.

The high density foam protector and reserve system must be fitted before the CONNECT Light is adjusted.

We recommend that you hang the harness in a simulator (or frame etc) when making the adjustments.



4.1 **Adjusting the seating position**

First, adjust the seat depth in the harness. Decide whether you want to sit "lower" or "higher" in the harness. The adjustment is made using the side buckles (see picture) which you will find underneath the main hangpoint. If shortened, the seating angle will be greater (you will sit "higher"); if it is lengthened, the seating angle is smaller (you will sit "lower"). A comfortable seating position which is appropriate for the pilot's build should be chosen, so that it does not need to be altered again during flight.

The side buckles are at approximately chest height. These are used to alter the angle of the back, the angle between thigh and back (whether the upper body is upright or inclined). It can be adjusted to an upper body flight position between 60° (inclined) and 90° (upright). For the optimum flying position, we recommend that you imagine there is a line running between the two carabiners, and this is 15cm from your body. This corresponds to an upper body angle of approx. 80°.



By adjusting the shoulder straps, the harness can be altered according to the height of the pilot. This is done using the adjustment straps integrated in the shoulder padding. During launch, the adjustment straps should not be tightened too much, because this will restrict your freedom of movement. A special holding system and elastic webbing hold the shoulder straps in place during launch.



The chest piece controls the distance between the two carabiners and can be altered to between 37 and 48 cm. The smaller the distance, the less the glider will react to weight-shifting. Paragliders are tested by the German Hanggliding and Paragliding Association (DHV) with a standard distance of 42cm (distance from the middle of one carabiner to the middle of the other).



4.2 Adjusting the leg loops

The leg loops can be adjusted according to the individual pilot's needs.

Once the leg loops have been adjusted successfully, it should not be necessary to alter them again during flight. After you have adjusted them, check whether you are able to get into your flying position easily without using your hands (simulating the launch procedure). Once again, it is best to use a simulator here. If you need to use your hands to get into the correct position, the seating angle must be checked again and the leg loops adjusted accordingly. Bear in mind that the clothing you will be wearing when flying plays an important part, so wear your flying gear when doing this. The position of the leg loops must allow you enough freedom of movement for launch.



The adjustment is correct if you are able to get into your flying position without using your hands and if you have adequate freedom of movement for your launch run-up. Make sure that the leg loops are symmetrical.

4.3 Adjusting the speed bar

After you have set up the best seating position, the speed system must be adjusted. The pulleys needed are already on the harness.

The speed bar line is first fed through the rings attached with elastic to the front edge of the seat. Then feed it through the metal loops on the side of the harness (see picture) and then to the pulley which is attached to the side of the rear of the seat. Next feed it through the pulley (see picture) and upwards to the paraglider riser. The system for attachment to the paraglider harness can vary from one manufacturer to the next (Brummel Hook, carabiner etc). The correct length for the speed bar should be determined using the simulator.

WARNING – ACCIDENT RISK!

Before you make your first flight, check the adjustment of the speed system on a suitable training slope. Never launch if the speed bar is too short, because this creates increased risks due to the decreased angle of canopy attack, and this cannot be reversed during flight because there is tension on the speed bar.



5 OTHER FEATURES

5.1 Cross-bracing

There is no cross-bracing with the CONNECT Light. The geometry of the harness is such that this is not necessary.

5.2 Pockets

The CONNECT Light has a generously sized and aerodynamically shaped rear section which has a large storage pocket. It also has pockets on both sides of the harness, which are designed in such a way that the contents will not fall out accidentally.

There are two large metal loops on the lower corners of the rear section, which will hold the ends of telescopic walking sticks, with the handles being held in special pockets. Elastic fastenings hold them firmly in place.

The walking sticks should not exceed 60cm in length (CONNECT Light size "M") to 65cm in length (CONNECT Light size "XL").

5.3 Towing

The CONNECT Light is also well-suited for towing.

We recommend use of the SWING Pro - Tow aid, which will ensure an optimal hang point for the tow release.

5.4 Tandem flights

The CONNECT Light is suitable for tandem flights, but it is not recommended that the pilot uses it, because the passenger covers up the opening for the CYGNUS AIRBAG and thus prevents optimal protection.

However, we do recommend the CONNECT Light for use by the passenger in tandem flights, because it is light-weight and is small when packed up.

6 FLYING WITH THE CONNECT Light

It is essential that you thoroughly check all equipment before launch.

Always check the following as part of the pre-flight check:

- Are the harness and the speed system correctly adjusted?
- Is the reserve system in order or does it need to be inspected/repacked?
- Are all pockets closed?
- Are the reserve deployment handle and pins in the correct position?
- Are both carabiners properly closed/locked?
- Is there a cord to prevent unintentional activation of the deployment handle (5kg breaking strength)?
- Was there a clearly audible 'click' when you did up the buckles and do they stay closed when in use? (Be particularly careful if there is snow or ice: always keep buckles free of snow and ice)

7 LOOKING AFTER YOUR HARNESS/ REPAIRS

When you are packing up the CONNECT Light, pay attention to how the front part of the harness is folded and stored. The Mylar plate incorporated here gives the Airbag its shape, contributing to partial inflation of the Airbag, and it should therefore not be bent.

The inlet valve and Airbag cover must be inspected regularly, particularly after a collision (for damage to any parts or tears).

As a rule, there is no fixed inspection programme for harnesses. However, we recommend that you send the harness to the manufacturer (or to an agent approved by the manufacturer) for an assessment and inspection at least every two years.



WARNING! We recommend in particular that you change the aluminium carabiners at least every two years. Unintentional knocks can cause tiny cracks in the aluminium which reduce the breaking strength of the aluminium and, in the worst case scenario, could cause the carabiner to break.

Although the harness is made from materials of the highest quality (Cordura, Polyester webbing etc.) you must be careful that you do not drag the harness across the ground or expose it for unnecessary periods of time to UV light, heat or moisture.

Only the manufacturer (or an agent approved by the manufacturer) may carry out repairs and replace parts because the certificate of airworthiness and the warranty only cover the use of original materials and parts.

If the harness gets dirty, clean it with luke-warm, soapy water.

The buckles on the harness must be kept clean at all times and, if necessary, oiled lightly with a few drops of sewing machine oil (or bicycle oil). You should do this at least once a year.

8 WARRANTY

The manufacturer must be notified immediately of any defects in the product, variations or changes in flight behaviour and any warranty claims and, if necessary, the harness must be made available for inspection by the manufacturer.

9 INTERNET – PRODUCT INFORMATION AND SAFETY NOTICES

swing.de Swing now sends relevant product and safety information by e-mail to all registered customers. If you would like to receive this, please register your name through our website. We will not provide your e-mail address to any third parties.

Our website: **www.swing.de**

dhv.de There is also data and information about our products on the DHV website **www.dhv.de**.

We hope you enjoy yourself and have many memorable flights!

The **SWING Team**