CONNECT 2

manual

Disclaimer and Exclusion of Liability

Use of this harness is in all cases solely at the USER'S OWN RISK. THE CERTIFICATION AND THE WARRANTY SHALL BE RENDERED INVALID if any technical modification or improper repairs are made to it.
Pilots are responsible for their own safety. Before every flight, a pilot must check whether the harness is airworthy and only launch if it is fit to fly.
The pilot must check the weather forecast and should not fly unless both current and forecasted conditions guarantee a safe flight.
The harness may only be used if the pilot has a licence which is valid for the area or is 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 exclusion of liability and warranty conditions, the harness (attached to a paraglider) may not be used in any of the following situations:

1. the pilot has carried out repairs to the harness, unauthorised repairs have been made to the harness or repairs have been carried out using parts which are not originals;
2. the take-off weight is not within the permissible take-off weight range;
3. there is rain and/or snow;
4. the pilot is carrying out aerobatics / extreme flying or flight manoeuvres at an angle greater than 60°;
5. the pilot has insufficient experience with the harness;
6. the pilot has incorrect equipment or inadequate equipment (reserve, helmet, footwear etc);
7. the harness is to be 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 have not been approved;
9. the pilot intends to use the harness for a purpose which is not connected with paragliding e.g. this harness is not a parachute harness and not intended for use as such.
10. the harness is wet or damaged through wear, or there are any sticky substances on it.

CONNECT 2 HARNESS

1. Technical Data

Use	Paraglider harness
Maximum clip-in weight	120 kg
Hang height	39 cm
Distance between carabiners	37 - 48 cm (DHV test distance 42 cm)
Weight (excl. reserve)	5.7 – 5.9 kg (M-L-XL)
Protection	Foam protection with polycarbonate against periodic loading
Installation of Reserve	Integrated container under the seat, side deployment handle.

2. General Information

2.1 The concept

The CONNECT 2 is one of the newest generation of paraglider harnesses, designed to be used by a wide range of pilots. It is ideal for both the ambitious beginner and social pilot and also the experienced pilot.

In its design, particular importance was placed on simple operation, a high level of comfort and pilot safety.

2.2 Safety

With the CONNECT 2, the optimum hang point and excellent integration of the protection ensure pilot safety.

The hang point is selected in such a way as to ensure that the pilot gets maximum feedback but without a “jittery” impression being created.

There are two aspects to the protection, namely back protector and recommended optional side protectors, and these create a unified whole. The protectors are integrated in pockets which have been designed for this purpose. They are accessible from the side next to the hang point and from behind through the pocket. The polycarbonate panel integrated in the outside of the harness (Lexan panel) is inserted from underneath into the outer covering.

The side protectors are contained in specially-designed side pockets inside the harness and held in this position by an elastic cord on the edge of each pocket. The pockets are attached firmly to the harness and ensure that the side protectors are held in the correct position. The back protection is inserted through an opening in the back pocket and stays in the correct place because of its shape.

2.3 The speed system

The CONNECT 2 is designed to use a speed bar. The pulley required is optimally positioned to ensure perfect load transfer. The cord inside the harness ensures energy-saving and efficient use of the speed bar. (SWING gliders come with lines, drawstring stopper and speed bar (easy speed system)) See 4.3.

3. The reserve system

There is a container underneath the seat of the CONNECT 2, which is the right size for a reserve system to be carried. It is closed using a system of flaps and the deployment handle pins. This gives the reserve good protection against dirt and moisture and accidental deployment.

However if your harness should ever get wet (e.g. because you land in water) the reserve system must be dried out and repacked before your next flight.

The deployment handle included belongs to the CONNECT 2 container.

CAUTION: Only this original deployment handle may be used!

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

Before it is fitted, the reserve is attached to the **CONNECT 2** using the bridle. This is designed as a V-bridle which is attached to the shoulder straps of the CONNECT 2. If there is an emergency deployment, this ensures that the force of the reserve goes in the bridle. The hang point to the shoulder straps means that the pilot is in an appropriate position if a landing is made using the reserve.

3.1 Fitting the reserve

The reserve is fitted as described below:

Fitting the bridle: the connection lines are placed through the reserve system's riser. Then the reserve system is placed 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 (see Figs. 1 to 3). Alternatively, a steel screw shackle with a minimum diameter of 7mm can be used. Take particular care that the screw cannot turn (use rubber bands to stop movement) since this could result in dangerous cross-loading and friction. This connection gives a greater shock-breaking strength than the previous method (see Fig. 4).

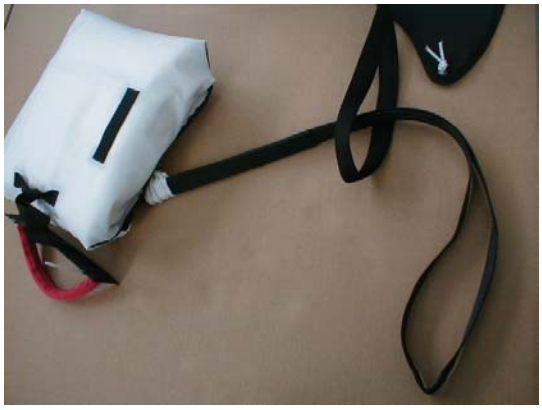

Fig. 1

Fig. 2

Fig. 3

Fig. 4

3.1.1 Fitting the deployment handle to the inner container

The deployment handle must be fed through the correct loop on the inner container in such a way that the connection band between the handle and the inner container is only put under tension after the locking pins of the deployment handle have been completely released by pulling. Please follow the instructions for your rescue system.

CAUTION – RISK TO LIFE: In some situations the reserve may be difficult to operate or may not deploy at all if the above instructions have not been followed.

Make sure that it has been attached correctly by carrying out a trial deployment.

3.1.2 Fitting the reserve system

The reserve system is fitted in the outside container of the CONNECT 2 as follows.

Note the side attachment of the rescue bridle loop.

3.1.3 Closing the container

Elastic fasteners are found in the loops of the lowest flap (see Fig. 1). A pack cord is threaded through each of these. These are used to close the container. A deployment handle pin is placed through each of the fasteners and this closes the container. Afterwards, **remove the pack cords**. See Figs. 1 and 2 for the correct order when closing the flaps. The remaining ends of the pins are put in the pockets on the outside of the harness.

Fig. 1

Fig. 2

3.1.4 CAUTION: RISK OF ACCIDENT

A trial deployment must be carried out after the reserve system has been fitted for the first time (seated in the harness from the flying position) to verify that it operates properly (compatibility test). It should be checked that the container is properly closed as part of the pre-flight check before each launch.

3.1.5

Since 1 January 1998 in Germany every new combination of reserve and harness/outside container must be inspected after the first packing by the manufacturer of the harness or the reserve, or by someone authorised by them (dealer, flying school). It must be possible to deploy the reserve from the flying position without any problem and according to the guidelines in the manufacturer's instructions. The inspection must be recorded in the reserve's packing certificate (compatibility test).

4. Adjustment options for the CONNECT 2

The CONNECT 2 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.

The back protector (and optional side protector) must be fitted before the CONNECT 2 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

The first adjustment is to the seating position and size of the harness. The seating position is adjusted by the opening angle of the harness. Decide the angle at which you want to sit (angle between back and thigh - upright or inclined position). The angle of adjustment ranges from approx. 70° to 100°. The adjustment is made using the side buckles (Fig. 1) which you will find at about chest height. If the harness is shortened here, the seating angle will be smaller (upright position); if it is lengthened, the seating angle increases (inclined position).

Fig. 1 – Adjusting the back (upright or inclined position)

The second adjustment is to the angle of the seat, whereby you can decide how “deep” you wish to sit in the harness. A comfortable seating position should be chosen which is suitable for the size of the pilot, so that no further adjustments need to made during flight.

Fig. 2 – Seat angle adjustment / Seat depth

Adjusting the shoulder straps allows the harness to be altered according to the height of the pilot. This is done using the adjustment straps integrated in the shoulder padding.

Fig. 3 – Shoulder strap adjustment

The chest strap controls the distance between the two carabiners (hang point) and can be altered from 37 to 48 cm. The smaller the distance between the hang points, the less the glider responds to weight shifting.

Paragliders are tested by the German Hanggliding and Paragliding Association (DHV) at a standard distance of 42cm (between the centres of each carabiner).

Fig. 4 – Chest piece adjustment/ Hangpoint distance

4.2 Adjusting the leg loops

The leg loops are attached to the chest strap using the T-lock system and provide additional safety. Test the adjustment of the leg loops while standing, walking and sitting and choose the width which is best for you (simulate the launch procedure). Once again, it is best to use a simulator to do this. If you need to use your hands to get into the right position when flying, the seating angle must be checked again and the leg loops adjusted accordingly.

The adjustment is correct if you are able to get into your flying position without using your hands.

The type of clothes you are wearing makes a difference here, because they can make it either easier or more difficult for you to “settle into” the harness.

The leg loops are adjusted using the buckles. Make sure that the leg loops are even.

4.3 Adjusting the speed bar

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

The speed bar line is first fed through the optional drawstring stopper. Then from above through the pulley attached in the harness, inside the harness and out through the metal loops. Finally the speed bar line is fed through the ring attached at the front under the seat, which is attached with elastic. You can then attach the line to the speed bar, after you have measured it. The system for attachment to the paraglider harness can vary depending on the manufacturer (Brummel hook, carabiner etc.). **The correct length for the speed bar should be determined using the simulator.**

CAUTION – RISK OF ACCIDENT: 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.** If it is, there is increased danger because the trim angle is reduced, causing the glider to be accelerated. This cannot be rectified during flight, since the speed system cords are under tension.

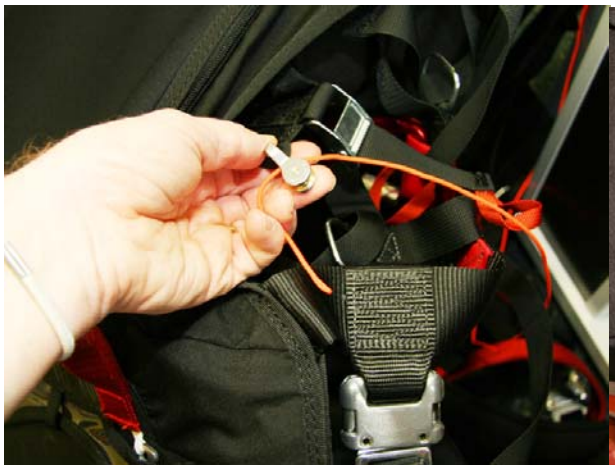

Fig. 1 – speed bar line through pulley

Fig. 2 – speed bar line through loop, ring and speed bar

5. Pockets

The CONNECT 2 has a generously sized and aerodynamically shaped rear section. It also has neoprene pockets on both sides of the harness in which you can keep small items. These pockets are designed in such a way that the contents will not fall out if the zips are not closed.

There is a pocket with an elastic cord in the rear section / storage compartment of the harness. You can use this for e.g. a radio or drink bottle (CamelBak, SIGG etc). A drinking tube for the pilot can be fed through an opening on the upper edge of the storage compartment. To fix the tube more securely to the shoulder strap, it can be inserted through specially-designed loops. This ensures proper use by the pilot during flight.

6. Towing

The CONNECT 2 is also suitable for towing. The appropriate towing devices are available from specialist stores. They are attached to the main carabiners.

7. Tandem flights

The CONNECT 2 is also suitable for use in tandem flights. It can be used by both the pilot and the passenger. Its special design, intended to allow for good leg movement, makes the launch run easier for both the pilot and the passenger.

CAUTION: Be careful that the passenger's harness does not have a reserve. This would create a risk of accidental release by the pilot during launch or in flight (side deployment handle).

8. Flying with the Swing CONNECT 2

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 / secured?
- 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.

9. Looking after your harness / Repairs

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.

CAUTION – RISK TO LIFE: 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 never 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.

10. 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.

11. Internet – Product information and safety notices

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

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

dhv.de You can also find data and information about our products on the DHV website **www.dhv.de**.

We hope you have fun and many enjoyable flights

The SWING Team