SHERLOCK

User manual





An professional partner

WELCOME

We welcome you to our team and thank you for the trust you have placed in our SHERLOCK harness.

We would like to share with you the excitement and passion that went into the process of creating this harness. The SHERLOCK is the new tandem harness for the pilot, designed for commercial and recreational tandem flying.

The SHERLOCK offers a high level of comfort for long working days. The semi-rigid structure of the backrest and seat mould perfectly to the body and provide excellent support. The harness is very compact and ergonomic, with split leg loops and support right down to the knees. Comfortable, easy-to-use and durable.

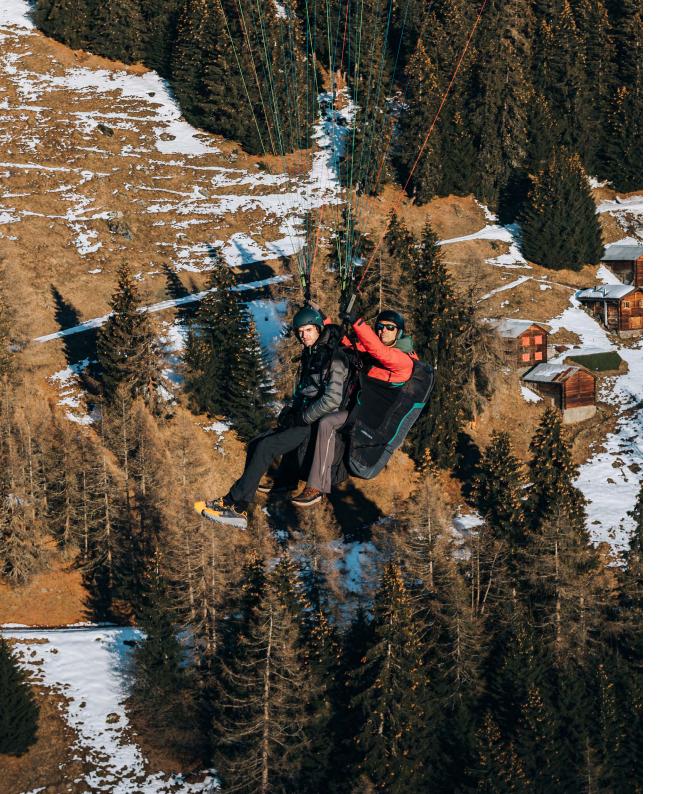
It is designed to be used with the tandem harness for the passenger, the WATSON 2. They are the perfect match for both pilot and passenger to enjoy great recreational flights.

We are sure you will enjoy flying with this harness and you will soon discover the meaning of our philosophy:

"Give importance to the small details to make big things happen".

This is the user manual and we recommend you read it carefully.





USER MANUAL

This manual provides the necessary information on the main characteristics of your new harness.

Whilst it provides information, it cannot be viewed as an instructional handbook and does not offer the training required to fly this type of harness. Training can only be undertaken at a certified paragliding school and each country has its own system of licensing. Only the aeronautical authorities of respective countries can determine pilot competence. You can get more information from <u>our website</u>.

The information in this manual is provided in order to warn you against adverse flying situations and potential dangers. Equally, we would like to remind you that it is important to carefully read all the contents of your new SHERLOCK manual.

Misuse of this equipment could lead to severe or irreversible injuries to the pilot, even death. The manufacturers and dealers cannot be held responsible for misuse of the equipment. It is the responsibility of the pilot to ensure the equipment is used correctly.

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1. GENERAL CHARACTERISTICS

1.1 OVERVIEW OF THE HARNESS

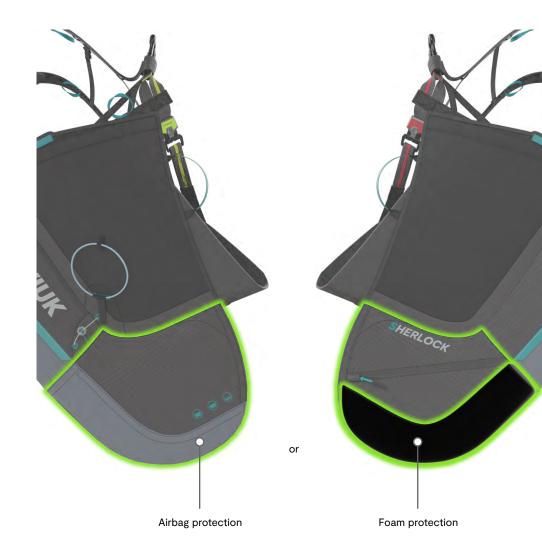








Camera pockets on both sides











1.2 VIDEO TUTORIAL

Check out the video tutorial with the explanation of all the features and functionalities of the harness on our YouTube channel.



1.3 TECHNICAL DATA

			М	L
Weight		kg	2,80*	2,95*
Pilot height		cm	160-183	180-200
Back length		cm	60	66
Seat base	Width	cm	48	52
	Lenght	cm	42	48,5
Back pocket volume		L	15	17
Rescue compartment volume		L	13	13
Carabiner distance		cm	43-54	43-54
Maximum load		kg	120	120
Certification			EN/LTF	EN/LTF

^{*} The total weight of the harness includes the additional airbag covering.

The total weight of the harness may differ $\pm 2\%$ due to variations in the weight of the fabric supplied by the manufacturers.





1.4 TARGET GROUP

Tandem professionals

The SHERLOCK is a very practical harness for everyday use by professional tandem pilots. Comfortable, easy-to-use and durable. It is the perfect partner for our passenger harness, the Watson 2.

1.5 DESIGN PROCESS

The NIVIUK team has done extensive and meticulous work. Distinctive adjustments were made as a result of flight testing of the various prototypes. These were tested in all flight conditions. This intensive development of an innovative and modern harness has been made possible by the extensive experience and dedication of our team. All NIVIUK products undergo a thorough final inspection.

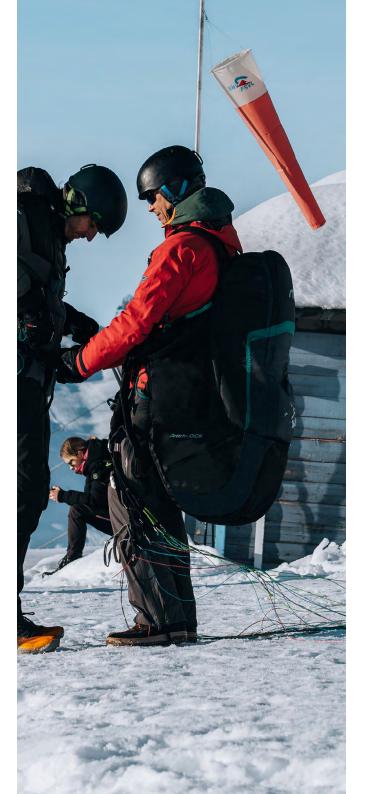
2. UNPACKING AND ASSEMBLY

2.1 ASSEMBLING THE HARNESS

Before your first flight we recommend making the initial adjustments of the harness using a hang frame.

Position the harness and hang it from the carabiners. Sit in the harness and close it. Using the straps, adjust it to your individual preference.

A number of easy-to-use adjustable straps allow the harness to mould to the pilot's body shape. On the SHERLOCK, the chest strap is adjustable and the shoulder straps can also be adjusted. It also has adjustable back straps to adapt the angle of the harness and further match the pilot's body shape.



2.2 CONNECTING THE PILOT AND PASSENGER HARNESSES TO THE WING

The pilot's SHERLOCK harness must at all times be connected to the passenger's harness via the spreader bars, using the two main carabiners, which must be 40 mm self-locking carabiners. The spreader bars, in turn, are connected to the wing by means of a self-locking stainless steel carabiner.

The carabiner on the right side of the SHERLOCK, green in colour, has to be connected to the back right of the spreader bar, also green in colour. The left carabiner has to be connected to the back left of the spreader bar, both of which are red.

The upper attachment point of each spreader bar - green on the right side and red on the left side - must be connected via a stainless steel carabiner to the risers of the wing, which match the same colour-coding.





2.3 ADJUSTING THE HARNESS

Pilot position

The SHERLOCK's backrest inclination can be adjusted to regulate how reclined the pilot flies. This angle may be varied by adjusting the back straps accordingly.

In addition, the SHERLOCK has two blue side handles, at waist height, to ease into the seated position in flight. Depending on the passenger's size and weight, the pilot may sometimes be too close to the passenger during launch. By using these handles it is possible to get into the harness and correct your sitting position.

(!)

TIP: The side handles are also very useful for holding the harness and transporting it to take-off.



Chest strap

The chest strap, which controls the distance between the two carabiners, can be adjusted in flight from 43 to 54 cm. For the first flight with the SHERLOCK, we suggest setting the chest strap to an intermediate length, and then adjust accordingly. When the strap is tighter, the stability is greater. However, over-tightening the strap may enhance the "twist" effect. A wide distance between carabiners increases the turning capacity.

The T-Lock system that secures the pilot in the harness consists of two Edelrid buckles. This system has been specially designed to offer maximum safety and simplicity.

Shoulder straps

The shoulder straps can be adjusted to the pilot's preferred setting by pulling the blue strap. This adjustment will depend on the pilot's height. To do this optimally, the pilot should sit upright with the T-Lock buckles, and the shoulder straps should then be symmetrically adjusted.

Leg loops

On the SHERLOCK, the leg loops can be adjusted. This should be done before launch and once the leg loops are closed. Then the length can be adjusted by pulling the blue loop.





2.4 INSTALLING THE PROTECTOR

The SHERLOCK offers the possibility of using two types of protector: airbag or foam.

The new airbag protector, pre-inflated at launch thanks to the incorporated Nitinol rods, keeps its shape in any situation. It guarantees maximum safety with excellent results during impact tests.

Although the airbag already provides outstanding protection, the SHERLOCK also comes with a foam protector (divided into 2 parts) that is placed inside the airbag. To install it, you must remove the airbag cover by unfastening the Velcro, open the zip on the left side of the airbag, and place the foam inside, in the indicated position. First, you should insert the right part of the foam, which is farthest from the zipper, and then the left part.

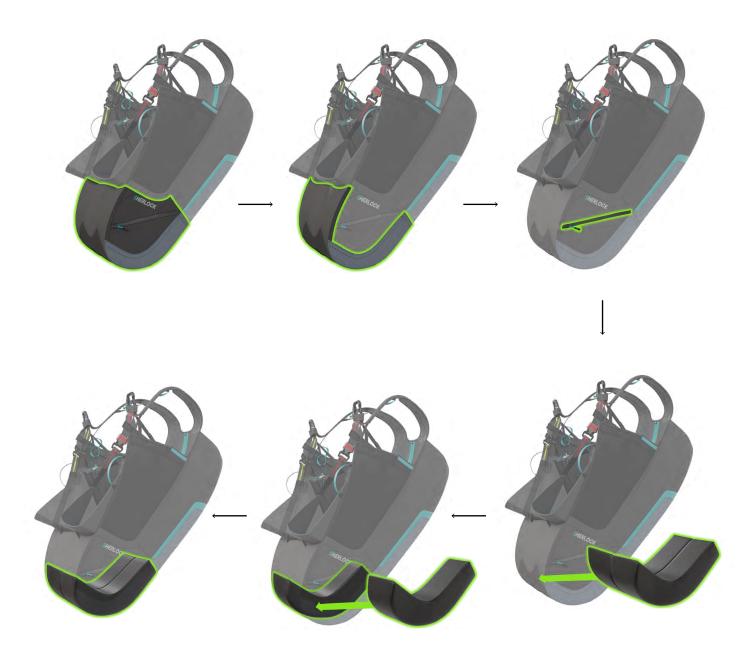
The harness is certified with and without the foam protector. Relax in flight with a technologically advanced protector that fits your preferences.



TIP: if flying without the foam protector, the airbag pocket can be accessed using the same zip, where the ultra-fast folding Koli Bag can be stored. If choosing this option is important to be careful, as the airbag protector can be damaged if incorrectly used.

Choose the protector

that best suits your preferences:	FOAM	AIRBAG
Lightness	×	✓
Durability	~	~
Compression volume	×	~
Protects during all flight phases	✓	/





2.5 INSTALATING THE PARACHUTE

The SHERLOCK has been designed with the aim of integrating every detail, ensuring that everything is in its place, with no element protruding. For example, the parachute V-bridle is fully integrated, significantly improving practicality.

The SHERLOCK has space for one integrated emergency parachute, located at the rear of the backrest and easily accessible. We have focused on safety and comfort by integrating these elements, so that the daily use of the harness is much more comfortable and practical.

Please note: the parachute must be fitted inside the container. If it fits too loosely in the inner container there is a possibility that it may twist or that the lines or webbing may not be positioned correctly, which may make it difficult or impossible to deploy the parachute. The volume of the parachute compartment of the SHERLOCK is 13 litres.

Your safety depends on the correct installation of the parachute. This process must be carried out with care and we therefore recommend that it is performed by qualified personnel.

STEP 1

Start by connecting the rescue channel of the harness to the spreader bar.





STEP 2

Open all the zippers and pass the spreader bar pilot attachment point inside the channel as shown.







STEP 3

Attach the channel to the spreader bar by closing the small zip, then pass the Lycra loop around the pilot carabiner and place it below it.



STEP 4

Then attach the carabiner to the pilot attachment point.





STEP 5

Unzip the V-bridle channel and connect the V-bridle to the spreader bars.







STEP 8

You must insert the deployment bag facing to the back of the back part of the body as shown.





STEP 6

Then place the V-bridle into its channel and close it until the top of the spreader bar. At this moment, it must be closed as shown.



STEP 9

The webbing of the deployment handle will go diagonally as shown.





STEP 7

Connect the rescue risers to the V-bridle and attach the deployment handle to the loop on the opposite side of the deployment bag.





STEP 10

Pass the nylon rod through the handle pocket, then through the small hole at the bottom. No need to correctly place the handle for now. The webbing of the handle must pass below and on the right side of the closing loop. It's normal if your webbing is a bit taut; don't worry.







STEP 11

Use a piece of paraglider line or thin string to pull the loop through the hole on panel number 2 and close the small zip on the right side while keeping the string taut with the other hand.



STEP 13

Close the small zip on the right and close panel number 3 as shown.





STEP 14

Pull the main zip a few centimeters as shown and close panel number 4.





STEP 12

Now go to the top and close the main zip all the way.





STEP 15

Pass the nylon rod inside the rescue loop (be careful not to pass it inside the pulling string).





STEP 16

Close the main zip to the top and close the Velcro.





STEP 17

Pull on the webbing to release the tension on the outside; it will help you to place the deployment handle correctly in its pocket. You can now place the end of the nylon rod inside the lower hole.



STEP 18

Make sure to stick the two Velcros correctly inside the deployment handle pocket. Finally, the deployment handle must be located as shown. Use the small Velcro on the top of the deployement handle to locate it correctly.



When all is set, train yourself to know where the deployement handle is and always check your parachute is secured before going to fly.



2.6 OPTIONAL ACCESSORIES

The design of the SHERLOCK includes several practical compartments, designed to hold all flight accessories and equipment:

- A large rear storage pocket, with 15 litres of volume in size M, and 17 litres in size L. This pocket has separate zip and Lycra compartments, for easier organisation.
- · Side pockets on both sides for storing photographic equipment (cameras, SD cards...), designed for quick and safe access.



3. IN FLIGHT

3.1 PRE-FLIGHT CHECKS

For maximum safety, check your equipment thoroughly, using the same sequence, before every flight.

Check the following:

- There is no visible damage to the harness or carabiners that could affect the flight.
- All buckles, straps and zips are connected/closed. The buckles should snap into place when you close them (a gentle tug on them verifies this). Be especially careful in snowy or sandy areas.
- That the glider is correctly connected to the spreader bars, which in turn are connected to the pilot and passenger harnesses. All carabiners are locked.
- All pockets are properly closed and items hanging from the harness are secured/attached.
- · Check again that you have locked all carabiners before take-off.
- · The parachute container is properly closed.
- The parachute deployment handle rods/pins is fully inserted and secured in their pocket.

3.2 LAUNCH

Make sure the weather conditions are suitable for your skill and experience level. If you make the decision to fly, put on the harness and make sure all buckles are closed correctly and your legs are through the leg loops. Your life depends on it.

For your safety, before launching always repeat the same sequence of your pre-flight check.



TAKE CARE: stay away from mountain relief if you have to use your hands to get into the harness. You should always have your hands on the brakes when near terrain.

If you need to use your hands to get into the harness, try adjusting the harness using a hang frame.

3.3 LANDING

Before landing, slide your legs forward, move forward in the harness and adopt a position as if you were standing in the air, the same instructions must be given to the passenger. Never land whilst still in the seated position as this may cause a back injury. Standing up before landing is an active safety decision and is much more effective than relying on the passive system of the protector. It is not necessary to adjust the harness before landing. Simply straighten your legs and get into a standing position and prepare to land.

3.4 FLYING ABOVE WATER OR LANDING IN WATER



TAKE CARE: flying over water exposes the pilot and passenger to the risk of landing in water. If the foam back protector is used, it floats and there is a risk of being pushed underwater. This can be a very dangerous situation and wearing life jackets is essential for both pilot and passenger. We recommend avoiding this situation whenever possible.

Before hitting the water, it is recommended to undo the buckles (without compromising safety) and to have enough time to get out of the harness quickly to avoid drowning. This way you will be able to reach the safety boat more easily.

If the harness gets wet due to falling into the water, it must be removed from the water to dry completely. The parachute must also be removed to dry completely. Once dry, it has to be packed correctly and installed in the harness again. See the section on "Installing the parachute".

Do not store your equipment if it is still wet or damp - wait for it to dry completely.

3.5 RUCKSACK AND PACKING

The recommended rucksack for transporting your SHERLOCK, and especially with the TAKOO glider, is the KOLI PRO. This rucksack is not included in the scope of delivery, but its purchase is recommended. It is perfect for transporting all the equipment comfortably and with plenty of space.



4. TYPES OF FLYING

4.1 TANDEM

 The SHERLOCK is especially designed for dual flying and is a very practical harness for everyday use by professional tandem pilots. It is the elementary partner to our Watson 2, which is the only reversible passenger harness on the market.

4.2 OTHER

- The SHERLOCK is not designed or recommended for aerobatic or acro flying.
- We consider extreme or acrobatic flights to be any form of piloting different than standard flights. Learning aerobatic/ acrobatic manoeuvres should be conducted under the supervision of qualified instructors within a school environment and over water with all safety/rescue elements in place.



5. CARE AND MAINTENANCE

5.1 MAINTENANCE

- The SHERLOCK is very robust and will have a long operational life. It offers a good compromise between light weight (from 2.65 kg) and durability. Made of durable materials for use on an infinite number of flights. In addition, the coating protecting the airbag can be replaced in the event of damage.
- We recommend checking the harness after every impact, bad launch or landing, and if it shows signs of damage or heavy wear.
- We recommend the harness is fully inspected in an authorised workshop every two years and the carabiners are also changed every two years.
- To prevent wear or damage to the harness, it is important to avoid dragging the harness on the ground, over stones or abrasive surfaces.
- Do not expose it unnecessarily to UV radiation (sun light), other than in normal flight.

- Whenever possible, keep the harness away from moisture and heat
- Store all your flying equipment in a cool, dry place, and never store it when it is wet or damp.
- Keep your harness as clean as possible by regularly wiping off dirt with a plastic brush and/or a damp cloth. If the harness is very dirty, clean it with water and mild soap. Allow it to dry naturally in a well-ventilated area without direct sun light.

5.2 STORAGE

- Keep your equipment in the in a cool, dry place away from solvents, fuels or oils.
- Do not leave the gear inside a car boot, as cars left in the sun can become very hot. The inside of a rucksack can reach temperatures up to 60°C.

- Weight should not be laid on top of the equipment.
- When storing the harness in a backpack, care must be taken that it does not become deformed. Never store it when still damp. Never use detergents to clean it. Dry the harness in a wellventilated area. If your parachute gets wet (e.g. if you fall into water) it must be removed from the harness, dried and repacked before being put back into the container.
- It is recommended that any repair and/or replacement of the harness components should only be carried out by the manufacturer or authorised personnel. Only the manufacturer and authorised professionals use the materials and techniques that will ensure the correct functionality of the harness, according to its certification.



5.3 CHECKS AND INSPECTIONS

In addition to daily and pre-flight checks, the SHERLOCK must be thoroughly inspected at every parachute repack, which is normally once a year. Additional checks should be carried out after every impact, bad launch or landing, or in case of signs of damage or wear.

Every two years or 100 flying hours (whichever comes first), the harness must be inspected in an authorised workshop.

If in doubt, contact a professional. These are the required inspections:

- Check webbing and buckles for damage, especially in areas that are not easily visible, such as the inside of attachment point webbing, where the carabiner rests.
- All seams must be intact and any damage must be repaired immediately.
- The main aluminum carabiners must be replaced every two years or 500 flying hours or if they have any signs of damage. Impacts can create undetectable damage that can result in structural failure under continuous loading.

5.4 REPAIRS

Repairs to your SHERLOCK may only be carried out by the manufacturer or qualified and authorised personnel. This is the only way to ensure that the right materials are used and that the correct repair techniques are applied without damaging the product.

If you are not qualified to do so, do not attempt to repair the harness yourself.

5.5 NIVIUK SERVICE

Niviuk Service is our official workshop offering a quality service, based on the care and maintenance of flight equipment. Thanks to the knowledge, technologies and procedures we have acquired over the years, we can repair any flying equipment.

We want to guarantee the safety and durability of your new product, so our official workshop is the perfect place to have it serviced and/or repaired.

Every two years, your equipment should be checked by a professional.

For more information, please consult the Niviuk Service section.

5.6 PRODUCT REGISTRATION

You can register your SHERLOCK on the Niviuk website in the <u>MyNiviuk section</u> and enjoy many benefits.

6. SAFETY AND RESPONSIBILITY

It is well known that free-flying with a paraglider is considered a highrisk sport, where safety depends on the person who is practicing it.

Incorrect use of this equipment may cause severe, life-changing injuries to the pilot and/or the passenger, or even death. Manufacturers and dealers cannot be held responsible for your decisions, actions or accidents that may result from participating in this sport.

You must not fly with this equipment if the pilot is not qualified to use it. Do not take advice or accept any informal training from anyone who is not properly qualified as a flight instructor.

7. GUARANTEE

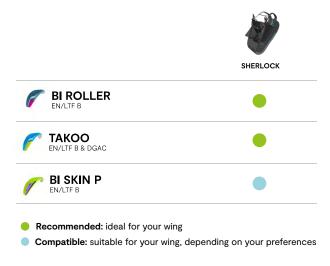
- The equipment and components are covered by a 2-year warranty against any manufacturing defect.
- The warranty does not cover misuse of the equipment.
- Any modification of the harness or its components invalidates the guarantee and its certification.
- If you notice any defects in your harness, please contact Niviuk immediately for a more thorough inspection.





8. SPECIFICATIONS

8.1 COMPATIBILITY



8.2 HOMOLOGATION

You will find the certification reports on the product page.





