KOOPER P

User manual





All in one

WELCOME

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

We would like to share with you the excitement and passion that went into the process of creating this harness. The KOOPER P is Niviuk's most versatile reversible harness. With separate leg loops, its modular structure allows for various configurations, so it can be utilised for different flying disciplines.

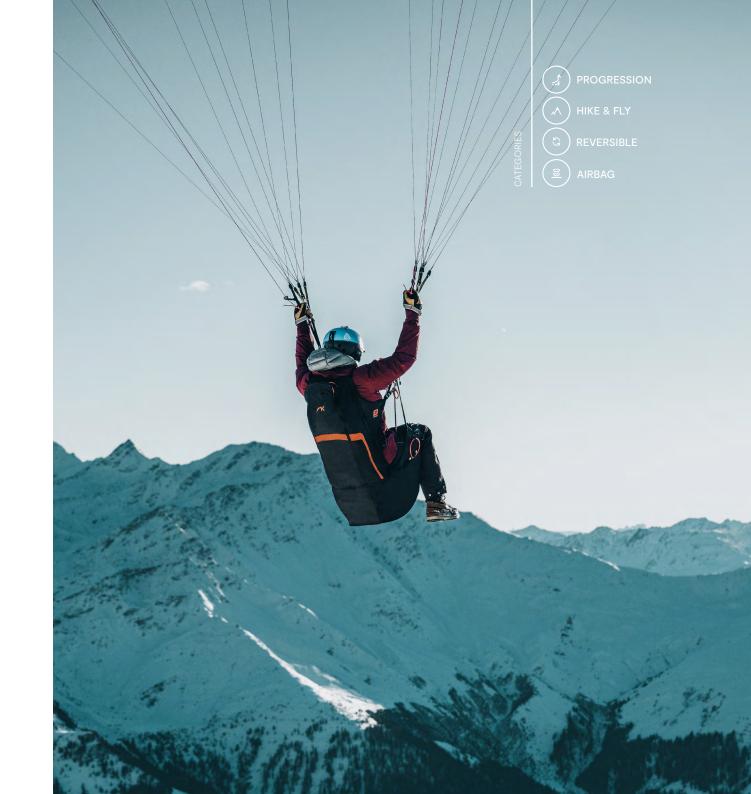
Ideal for hike & fly, thermalling and soaring, it can also be used for speed flying.

Lightweight, ergonomic, compact and safe, it has an airbag and an integrated emergency parachute compartment.

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 KOOPER P 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









Ultra-light P Series twostep speed-bar





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. Video tutorial KOOPER P



1.3 TECHNICAL DATA

1.3.1 Specification table

			S	М	L
Weight ¹		kg	2,09	2,23	2,30
Pilot height		cm	155-172	168-185	183-200
Back length		cm	61,5	64,5	70
Seat base	Length	cm	42,5	45	47,5
Back pocket volui	me	L	23	29	36
Rescue compartn	nent volume	L	3,7-5,5	3,7-6	3,7-6,5
Rucksack volume	2	L	67	67	85
Harness volume		L	21	23,5	26
Carabiner distance	e	cm	40-47	40-47	40-47
Max. load		kg	120	120	120
Certification			EN/LTF	EN/LTF	EN/LTF

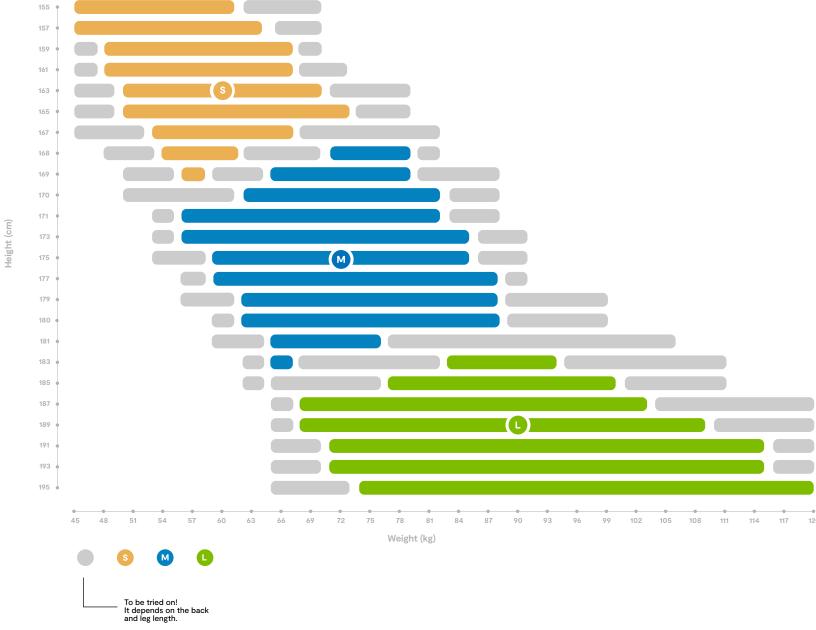




^{&#}x27;With all accessories (speedbar & rescue pod). / 'Without the harness inside.

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

1.3.2 Weight and height range table







1.4 TARGET GROUP

Hike & Fly

At just 2.17 kg in size M, the KOOPER P is very light and compact, ideal for adventures where weight and volume are critical. Its reversible design with a fully detachable backpack allows you to adjust its use according to your needs in the mountains.

Beginner and progression

Easy to use, this harness is perfect for beginner pilots looking to progress with confidence and stability for their first thermal flights.

Soaring, ground handling and speed flying

The KOOPER P is perfect for practising inflation, soaring and even speed flying, thanks to its innovative split leg loop system that provides more freedom of movement and comfort when standing.

Modules

The modular design of the KOOPER P allows for a weight reduction of up to 70%. With just a couple of adjustments, you can remove the outer shell, airbag and parachute, leaving only the seat structure to convert it into an ultra-lightweight harness. This functionality is perfect for ground handling, dune soaring or speed flying, adapting easily to each activity and ensuring maximum comfort.

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 of our team. All NIVIUK products undergo a thorough final inspection.



2. UNPACKING AND ASSEMBLY

2.1 ASSEMBLING THE HARNESS

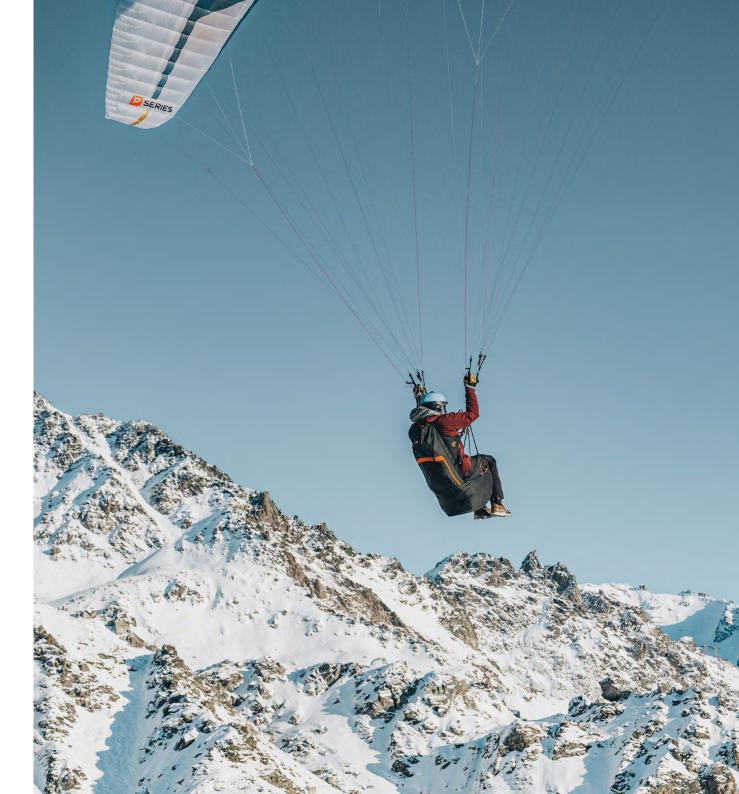
Before your first flight we recommend making the initial adjustments of the harness using a hang frame.

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 fit each pilot's body shape. On the KOOPER P, the chest strap, backrest inclination and shoulder straps are fully adjustable, matching the pilot perfectly.

2.2 CONNECTING THE HARNESS TO THE WING

The KOOPER P has two main carabiners that must be connected to the paraglider. The carabiner on the right must be connected to the right side of the sail, both of which are green. The left carabiner must be connected to the left riser, both of which are red.



2.3 PILOT POSITION

· Pilot position

The entire structure of the KOOPER P has been modelled in 3D for best possible ergonomics and to optimise it for all body types.

The KOOPER P allows you to adjust the angle of the backrest by adjusting the inner back straps.

You can also adjust the chest strap and shoulder straps. The back design has been optimised with a compact foam that provides excellent support. This design allows for greater freedom of movement and a natural fit to the pilot's body.

Chest strap

The chest strap, which controls the distance between the two carabiners, can be adjusted in flight from 40 cm to 47 cm. For the first flight with the KOOPER P, we suggest that the strap is set to the middle position, and then gradually ensure that the option that best suits your needs is selected in flight. The optimal adjustment will depend on the type of wing you are flying with the KOOPER P. When the chest strap is tighter, the wing feels more stable. However, overtightening the strap may enhance the "twist" effect. A wide distance between carabiners increases the turning capacity.

The chest strap and leg loops are connected via a single strap that attaches directly to the carabiners. This closing system is simple and practical, making putting the harness on easy. The pilot can choose to step into the harness or open and close the carabiners with each use.

Shoulder straps

The adjustment of the shoulder straps will depend on the pilot's height. To do this optimally, sit up straight with the buckles closed, and adjust the shoulder straps symmetrically. The shoulder straps can be adjusted by pulling the orange strap.



Leg loops

The separate leg loops of the KOOPER P ensure comfort and stability in flight.

When using the harness frame alone, the red metal clip between the legs can be easily opened to provide greater comfort and freedom of movement when ground handling or soaring. By leaving the clip unfastened, the legs can move easily.

However, when flying the entire harness, it is recommended to keep this clip closed to ensure greater stability, optimal comfort and a long operational life.



The KOOPER P includes an ultralight P Series twin-step speed-bar, attached to the harness with Dyneema cords.

The speed-bar is adjustable and you can move the knot, as in other similar systems, to adapt it to the right length and connect it correctly to the wing.

Use a hang frame to adjust the speed-bar before your initial flight.



PLEASE NOTE: to adjust the speed-bar, sit the harness and adopt your flying position. Ensure the cords are symmetric on both sides. If the cords are set too short, they can cause constant tension on the speed system, which could be dangerous. Please remember that it is always preferable for the speed-bar to be set longer than shorter.







2.4 INSTALLING THE PROTECTOR

The KOOPER P is equipped with a self-inflating airbag with excellent shock absorption capacity. It is effective even during launch, thanks to its self-inflating system designed with Nitinol, which keeps its shape in any situation. It guarantees maximum safety with excellent results achieved during impact tests.

2.5 INSTALLING THE PARACHUTE

The KOOPER P has space for an integrated parachute container, located inside the airbag, under the bottom of the seat. It is quick and easy to access and install. Deployment is fast and simple, thanks to the easily locatable handle on the right-hand side.

We have focused on the safety and comfort of the pilot by integrating an inner rescue container, which is exclusive to this harness. This makes its daily use 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.

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.

If you would like to add a second parachute, you can add a front-mounted rescue using the Kase P.

2.6 COCKPIT

The KOOPER P is designed without a cockpit, but the NDesk is an optional cockpit that can be added. The NDesk combines functionality and practicality, and is easily attached to the carabiners. It is the ideal accessory to keep your belongings and instruments organised during the flight.

2.7 STORAGE

As for the storage of the KOOPER P, the back pocket is spacious and has a fully opening zip for easy access to your belongings.

2.8 ACCESSORIES

The KOOPER P comes equipped with practical accessories to simplify your flying experience.

Velcro on the left shoulder strap allows you to securely and accessibly attach your flight instruments.





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.
- The glider is correctly connected to the harness and both carabiners are secured with their locking mechanisms closed.
- All pockets are properly closed and items hanging from the harness are secured/attached.
- Check again that you have secured the chest strap and leg loops before launch.
- The parachute container is properly closed.
- The deployment handle is secured and the rods/pins inserted into their designated pockets.

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.

!

CAUTION: 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 in the harness to assume a standing position. 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 back 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 above water during a cross-country flight or SIV course exposes the pilot to the risk of a water landing. This situation is very dangerous and flying with a life jacket is essential during an SIV course. 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, the protectors and the harness 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 BACKPACK AND PACKING

Whether the KOOPER P is reversible is your decision.

Harness and backpack are delivered together and can be configured by the pilot. The backpack is completely removable. If you want to use the reversible system, just zip them together. If you prefer to carry your harness in another backpack, simply undo the zip and use them independently.

The backpack, with its intelligent reversible system, is designed so that the canopy rests directly on your back, providing structure and optimising comfort during transport.



3.6 FEATURES OF THE BACKPACK

The KOOPER P rucksack is based on the design of our Expe backpacks. It is light, practical and comfortable. It has a base capacity of 60L for sizes S and M; extendable up to 70L for size L.

Its ergonomic and functional design includes shoulder straps with soft flask pockets and Velcro. It has large Lycra side pockets, a zip side pocket and a front pocket.

It also has a pole or ice axe attachment system on the front. Adjustable straps and a padded backrest ensure comfort during long hike & fly tours



4. TYPES OF FLYING

4.1 WINCH FLYING

- · The KOOPER P is suitable for winch launching.
- The winch release is attached by means of the main carabiners on the risers, where the wing is attached.

4.2 TANDEM

Although not specifically designed for this purpose, the KOOPER P is suitable for tandem flights, offering a versatile and functional option.

It is perfectly compatible with our Takoo, Bi Roller and Bi Skin tandem gliders, making it a practical alternative as a tandem harness.

On tandem flights, the KOOPER P is mainly used for the passenger due to its lightness and comfort. In some cases, the pilot can also use it, especially if they choose to fly without an emergency parachute.

4.3 OTHER

- The KOOPER P 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 MATERIALS

The materials used in the KOOPER P have been carefully selected to ensure maximum lightness. Like all our P Series products, light materials have been used for its development. A large part of the harness is made of D70, a lightweight fabric with good tear resistance.

The most exposed areas, such as the base of the airbag and the rucksack, are reinforced with robust materials such as 420D Oxford and 210D, guaranteeing a long operational life.

This combination of materials reduces weight to a minimum without compromising durability and optimising comfort.



PLEASE NOTE: the lightweight products in the P series are more sensitive. Therefore, NIVIUK recommends being extremely careful with the handling and care of these products.

5.2 MAINTENANCE

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.

5.3 STORAGE

Store all your paragliding 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.

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 $60^{\rm o}$ 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.



5.4 CHECKS AND INSPECTIONS

In addition to daily and pre-flight checks, the KOOPER P 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 aluminium 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.

5.5 REPAIRS

Repairs to your KOOPER P may only be carried out by the manufacturer or qualified and authorised personnel. This ensures that the most appropriate materials and correct repair techniques are applied.

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

5.6 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 <u>Niviuk Service section</u> of our web site.

5.7 PRODUCT REGISTRATION

You can register your KOOPER P 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 high-risk 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, 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 use this equipment if you have not been properly trained 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 paraglider 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



	KOOPER P
KOYOT EN/LTF A	*
F HOOK EN/LTF B	*
HIKO EN/LTF B	*
IKUMA EN/LTF B+	*
SKIN EN/LTF B	
ROLLER EN 926-1	
BI ROLLER EN/LTF B	*
TARGET EN/LTF A	*
TAKOO EN/LTF B & DGAC	*
KOYOT P EN/LTF A	
HOOK P EN/LTF A+	
KODE P EN/LTF A	
HIKO P EN/LTF B	
IKUMA P EN/LTF B+	*
ARTIK P EN/LTF C	*
SKIN P EN/LTF B	*
BI SKIN P	*

- Recommended: ideal for your wing
- Compatible: suitable for your wing, depending on your preferences

8.2 CERTIFICATION

You will find the certification certificates on the product page.





