ARROW P

SERIES

USER MANUAL

CROSS-COUNTRY | HIKE & FLY | FOAM PROTECTION | INFLATABLE PROTECTION

ARROW P

BEYOND YOUR LIMITS

WELCOME

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

We would like to share with you the excitement and passion that went into the process of creating this harness. The Arrow P is the lightest pod harness in its category. An ultra-light pod harness, with fairing and aerodynamics designed to obtain the best performance. Practical, easy to use and compact: carry it comfortably on all your adventures. Optimised in every aspect, the ARROW P is one of the most stable harnesses and offers exceptional comfort and ergonomics for its weight.

The ARROW P joins the new generation of Niviuk harnesses, with the aim of responding to the needs of all those pilots who want to go further.

From **1.67 kg**.

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.

Niviuk Gliders & Air Games SL
C/ Del Ter 6 - nave D
17165 La Cellera de Ter - Girona - Spain
+34 972 422 878
info@niviuk.com
www.niviuk.com

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 our website at www.niviuk.com

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 ARROW 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.

CONTENTS

1. USER MANUAL 5
1.1 Overview of the harness 5
1.2 Technical data 8
1.3 Target group 9
1.4 Design process 11

2. UNPACKING AND ASSEMBLY 12
2.1 Assembling the harness 12
2.2 Connecting the wing 12
2.3 Adjusting the harness 12
Pilot position 12
Chest straps 13
Shoulder straps 13
Leg loops 13
Pod 13
Speed-bar 13
2.4 Replacing the pod 14
2.5 Optional accessories 14
Ballast 14
Camelbak 14
Drink tube 14
Pee tube 14

3. IN FLIGHT 15
3.1 Pre-flight checks 15
3.2 Launch 15
3.3 Landing 16
3.4 Flying above water or landing in water 16

4. TYPES OF FLYING 17
4.1 Winch flying 17
4.2 Tandem 17
4.3 Other 17

5. CARE AND MAINTENANCE 18
5.1 Maintenance 18
5.2 Storage 18
5.3 Checks and inspections 19
5.4 Repairs 19
5.5 Niviuk Service 20
5.6 Product registration 20

6. SAFETY AND RESPONSIBILITY 21

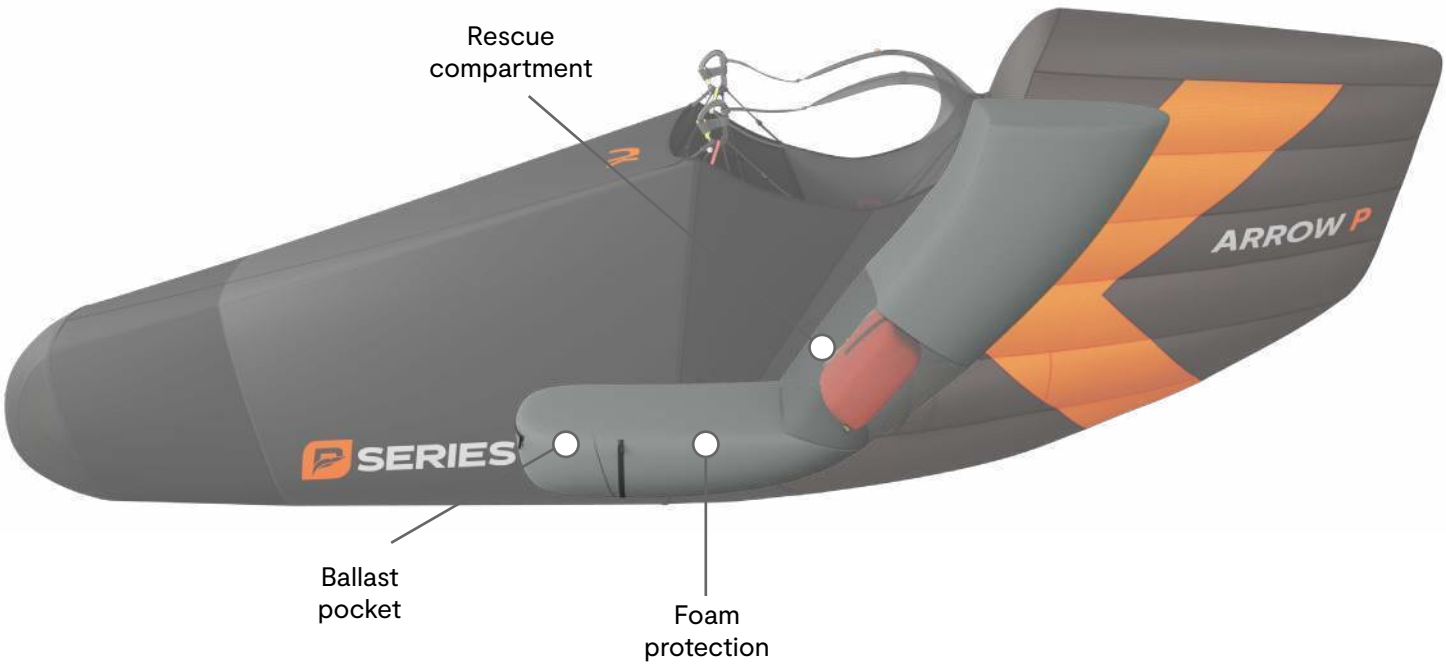
7. GUARANTEE 21

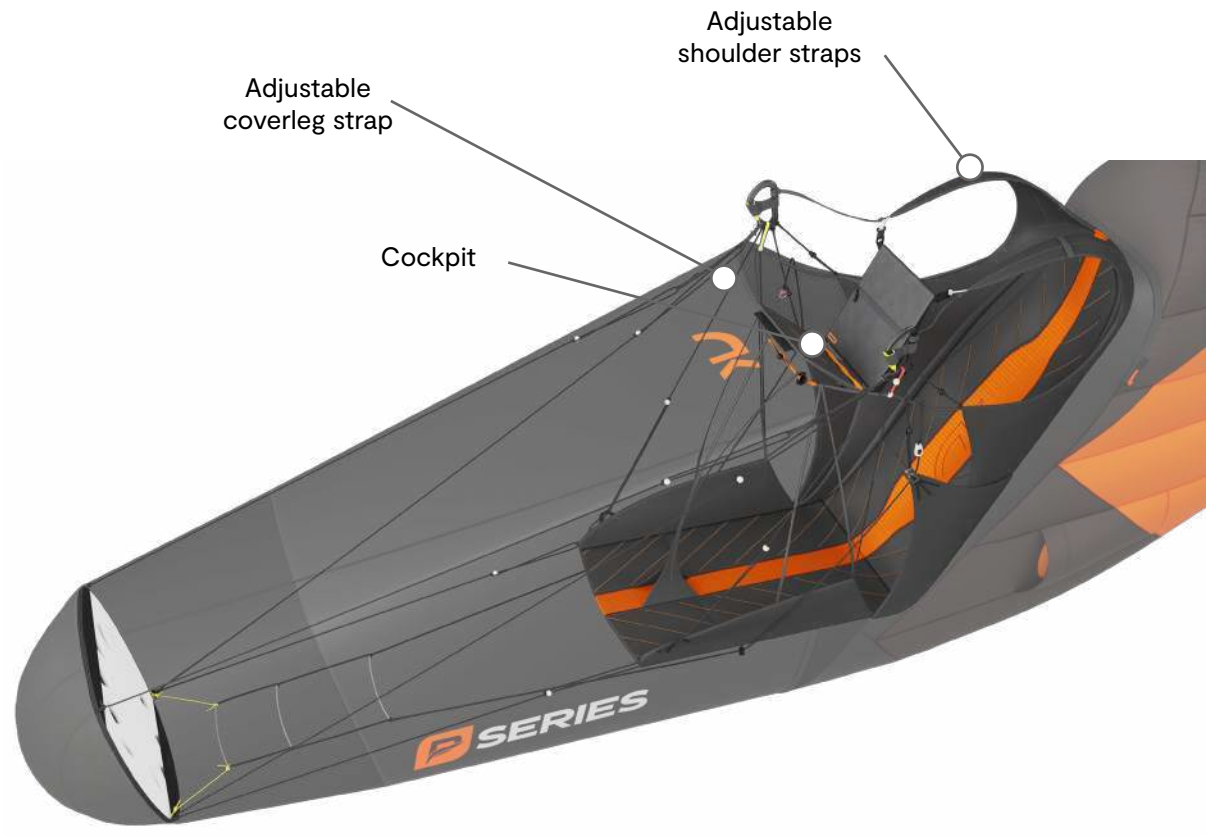
8. SPECIFICATIONS 21
8.1 Harness materials 21
8.2 Compatibility 21
8.3 Certification 22

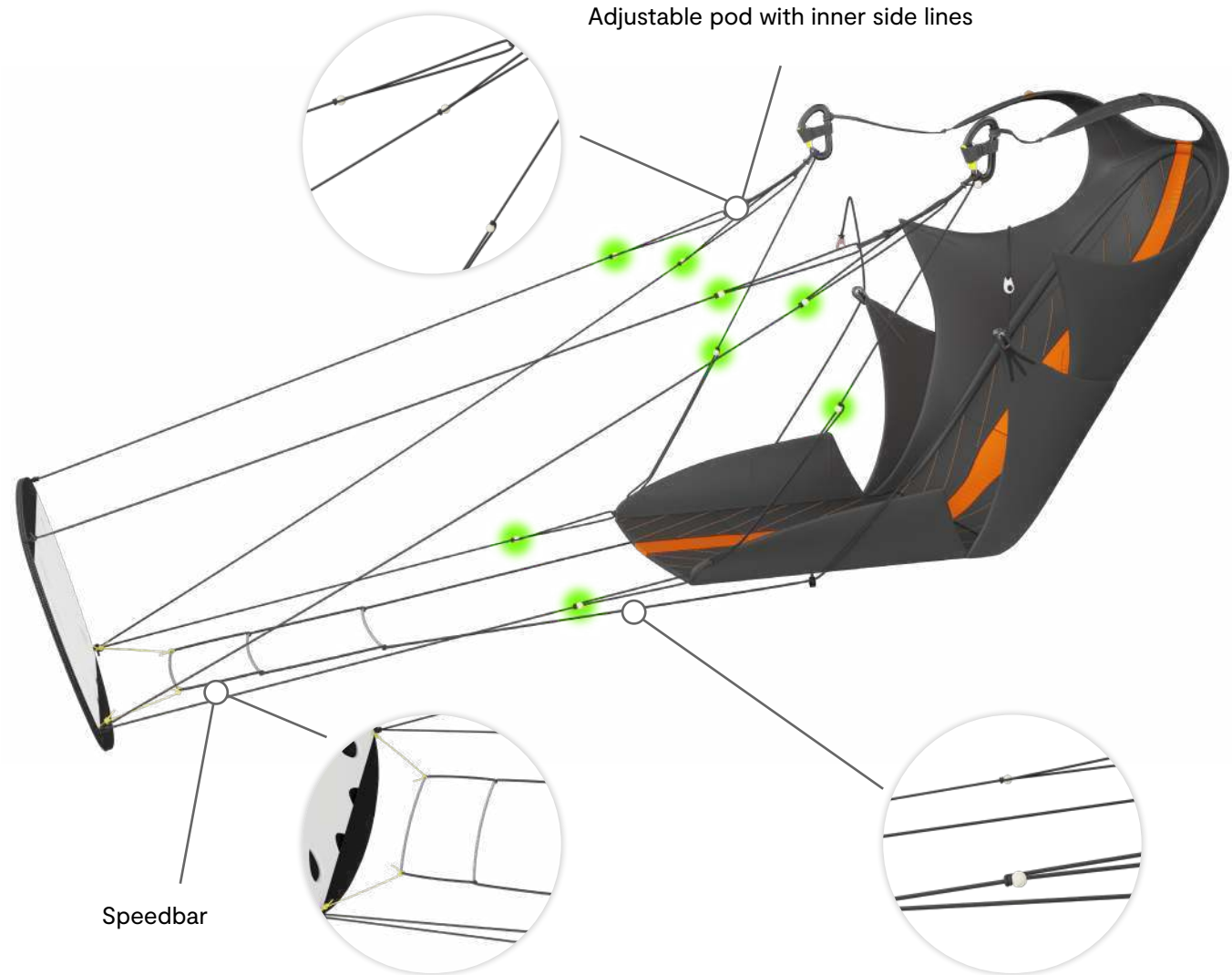
1. GENERAL CHARACTERISTICS

1.1 Overview of the harness

3D-modelled
seat
ARROW P
P SERIES


Rescue
compartment
ARROW P
P SERIES
Ballast
pocket
Foam
protection


Adjustable
shoulder straps
Adjustable
coverleg strap
Cockpit
P SERIES


Adjustable pod with inner side lines
Speedbar

1.2 Technical data

Specification table

	S	M	L
Weight *	1,67 kg	1,69 kg	1,82 kg
Pilot height	160-172 cm	170-182 cm	178-195 cm
Back length	60 cm	60 cm	64 cm
Seat base width	33 cm	33 cm	35 cm
Seat base length	47 cm	50 cm	53 cm
Under seat pocket	4 L	4 L	5 L
Rescue compartment volume	4-6 L	4-6 L	4-6 L
Carabiner distance	41-43 cm	41-43 cm	43-45 cm
Maximum load	120 kg	120 kg	120 kg
Harness certification	EN	EN	EN
Protection certification	EN/LTF	EN/LTF	EN/LTF

*Carabiners and speedbar included in weight

(!) **Important notice:** the sizes of this model are different from any other Niviuk harness. Please follow the specifications provided.

Weight and height range table

1.3 Target group

Cross-country and Hike & Fly

The ARROW P has been designed for the most demanding hike & fly pilots. An ergonomic and compact harness perfectly suited for XC flights as well as vol biv adventures in the mountains. Travel long distances on foot or in the air with a lightweight, stable and comfortable harness. Ideal also for hiking, thanks to its lightness and compactness, which together with the Expe Race backpack will make you forget that you are carrying a paragliding kit on your back.

The ARROW P, a harness for all pilots

The knowledge gained from the development of the Arrow and Drifter 2 harnesses has been applied to design an extremely light pod harness with a fairing, that offers high performance and aerodynamics. The ARROW P is very compact and easy to pack.

P Series harness with fairing

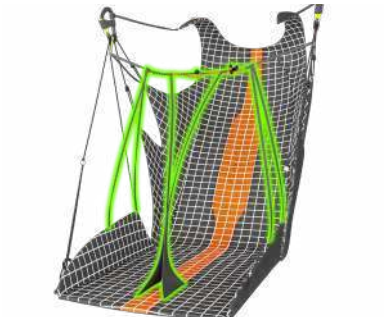
Thanks to technical know-how and optimisation of materials, we have been able to develop the ARROW P: one of the lightest pod harnesses with a fairing on the market, without sacrificing the features and performance of the standard model. It has been extensively researched in terms of structure, materials, durability and strength. Big teamwork to offer the best quality in all aspects.

Super-light

An ultralight harness, from 1.67 kg, the perfect partner for hike & fly enthusiasts. Like all our P Series products, light materials have been used for its development. The pod is made of D70, a lightweight fabric with good tear resistance, and the rest is made of Lycra light for added stretch. The inside of the inflatable fairing is made from Skytex 27 g and Skytex 32 g is used on the outside.

100% comfortable

Introducing a harness with exceptional comfort, thanks to the 3D-modelled seat. Ergonomic structure adapted to your needs. The triangulation system used optimises stability, which translates into comfort and improved efficiency in accelerated flight.



Aerodynamic performance

The pod optimises its aerodynamic shape, reducing drag. This makes it more balanced in yaw, resulting in a more stable, high-performing and precise harness.

Excellent stability in flight

In order to ensure total comfort, our R&D team has worked hard on the chassis to guarantee a high level of flight stability. Thanks to the triangulation system applied, the ARROW P is a stable harness that better absorbs excess movements transmitted to the pilot, making it more efficient, especially in accelerated flight.

Protection system

We have worked to develop a very compact foam protection that offers the best compromise between lightness and impacts absorption. At 14 cm thick and weighing 300 g, it is made of three different layers of low density foam. This protection helps to provide a very comfortable seat without the need for a seat plate on the harness.
We are developing an inflatable protection that you can order additionally, to complete your Arrow P.

1.4 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 ARROW P to mould to the pilot's body shape. On the ARROW P, the chest strap is adjustable and the shoulder straps can be adjusted to your preference with a simple loop on the maillon. It also has adjustable back and lumbar straps to adapt the angle of the harness and further match the pilot's body shape.

2.2 Connecting the harness to the wing

The ARROW P has two carabiners to connect the harness to the paraglider. The right carabiner is connected to the right riser of the wing, both of which are green. The left carabiner is therefore connected to the left riser, both of which are red.

2.3 Adjusting the harness

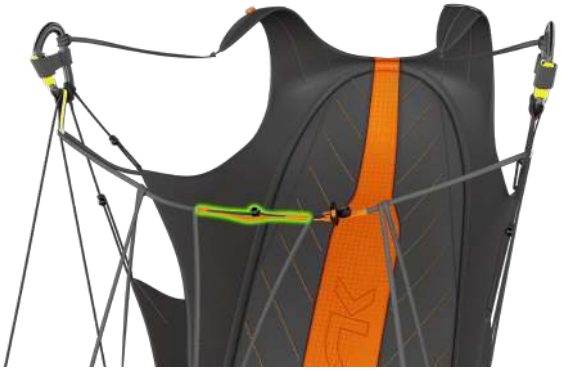
Pilot position

The ARROW P can be adjusted to regulate the angle of the pilot. This angle can be varied by adjusting the appropriate straps.

It is also possible to vary the angle of the back and the shoulder straps.

Chest straps

The chest strap, which controls the distance between the two carabiners, can be adjusted in flight from 41.5 cm to 44 cm in size M. For the first flight with the ARROW 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 ARROW P. When the chest strap is tighter, the wing feels more stable. However, over-tightening the strap may enhance the "twist" effect. A wide distance between carabiners increases the turning capacity.



Shoulder straps

The adjustment of the shoulder straps depends on the height of the pilot. To get the optimal adjustment, sit up straight with chest strap and legs loops closed and adjust the shoulder straps symmetrically. The shoulder straps can be adjusted to your preference with a simple loop on the maillon.

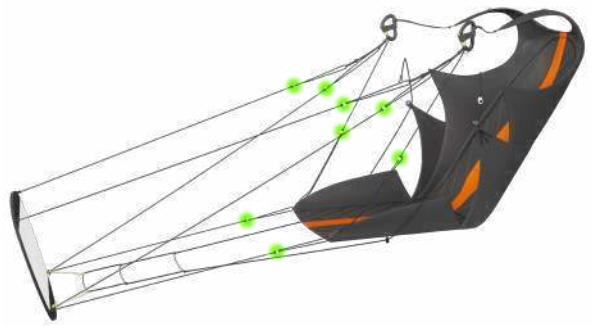
Leg loops

With the ARROW P the leg loops cannot be adjusted.

Pod

The pod can be adjusted to fit the size of the pilot's legs thanks to the cords situated at the side of the inside of the pod. It is essential that the pod is correctly adjusted so that the pilot is comfortable during flight. Adjust it in a hang frame before your first flight.

Niviuk R+D pilots provide the following tip for getting into the pod without getting stuck: put your left leg in first, and then put your right leg in. A good tip that works for any type of pod, just reverse the order of the legs as the diagonal closes!

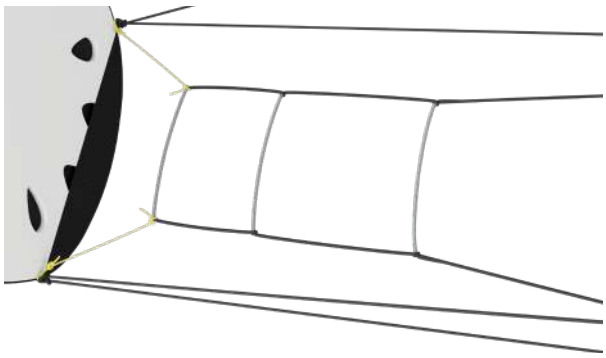


Speed-bar

The ARROW P comes fitted with a speed-bar. It is important to adjust the harness before adjusting the speed-bar, as the length of the speed-bar depends on the positioning of the legs.

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

Sit the harness and adopt your flying position to adjust the cords symmetrically 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 Replacing the pod

The ARROW P pod can be removed with a zip for easy replacement.

2.5 Optional accessories

Ballast	Drink tube
Camelbak	Pee tube

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 fully inserted into the 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.

After a water landing, the foam back protector floats and there is a risk of the pilot being pushed underwater. The pilot should wear a life jacket to avoid this occurrence. 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.

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

4. TYPES OF FLYING

4.1 Winch flying

The ARROW 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

The ARROW P is not recommended for tandem operation.

4.3 Other

The ARROW 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 Maintenance

The materials used in the ARROW P have been carefully selected to ensure maximum lightness. Like all our P Series products, light materials have been used for its development. The pod is made of D70, a lightweight fabric with good tear resistance, and the rest is made of Lycra light for added stretch. The inside of the inflatable fairing is made from Skytex 27 g and Skytex 32 g is used on the outside.

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.

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 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.

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 well-ventilated 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 ARROW 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.

5.4 Repairs

Repairs to your ARROW 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.

5.5 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 of our web site at:

https://niviuk.com/en/niviuk-service

5.6 Product registration

You can register your ARROW P on the Niviuk website in the MyNiviuk section and enjoy many benefits.

https://niviuk.com/productregister

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.

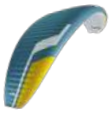
If you notice any defects in your harness, please contact Niviuk immediately for a more thorough inspection.

8. SPECIFICATIONS

8.1 Harness materials

Tail	Skytex 32 g
Coverleg	D70
Coverleg elastic front part	Light lycra
Body	D70
Main webbings	Liros dyneema 4 mm

8.2 Compatibility

Recommended	Compatible
Klimber P Ikuma P	 Hook Ikuma Artik Artik R Hook P

8.3 Certification

You will find the certification certificates on the product page at www.niviuk.com

AIR TURQUOISE SA | PARA-TEST.COM
Route du Pré-au-Comte 8 ▲ CH-1844 Villeneuve ▲ +41 (0)21 965 65 65

Test laboratory for paragliders, paraglider harnesses
and paraglider reserve parachutes

paragliding by air turquoise

Paragliding Harness - EN

Inspection number :	**PH_407.2023**
Manufacturer :	**Niviuk Gliders**
Model and size :	**Arrow P M**
Maximum pilot weight [kg] :	**120**
Integrated container for rescue system:	**Yes**
If Yes. Volume of the container [cm^3] :	**4000** min **6000** max
Serial number:	----------
Production date (year / month) :	----------

Harness protector (impact pad)

Impact pad type:	**Foam**
Impact pad integrated:	**No**
Impact pad number:	**MISC_255.2023**

If not integrated : Manufacturer …… Serial number: ……

Production date (year / month) : ----------

Warning : Read the operating manual before using this equipment!

A sample has been tested and certifies its conformity with the following standards: **EN1651:2018+A1:2020** and **EN12491:2015+A1:2021**. This model corresponds with the tested sample and its airworthiness.

Rev 03 | 04.03.2022 | ISO_94.23b

Niviuk Paragliders
C/ del Ter, 6
La Cellera del Ter - 17165
Spain
info@niviuk.com
niviuk.com