ROCKET R

User *manual*

AIVIUK BEYOND THE GLIDE

High-performance *aerodynamics*

WELCOME

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

We would like to share with you the excitement and passion that went into the process of creating this harness.

The ROCKET R is our high-performance harness, designed to deliver maximum efficiency in competition. It stands out for its aerodynamic profile and exceptional pilot comfort.

Its fully inflated shape has been carefully engineered to optimise performance. Our R&D team has focused much of its research on minimising drag and improving stability. Every detail has been refined using CFD simulations and flight tests.

We are sure you will enjoy flying competitions and distances 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 our website.

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 ROCKET R 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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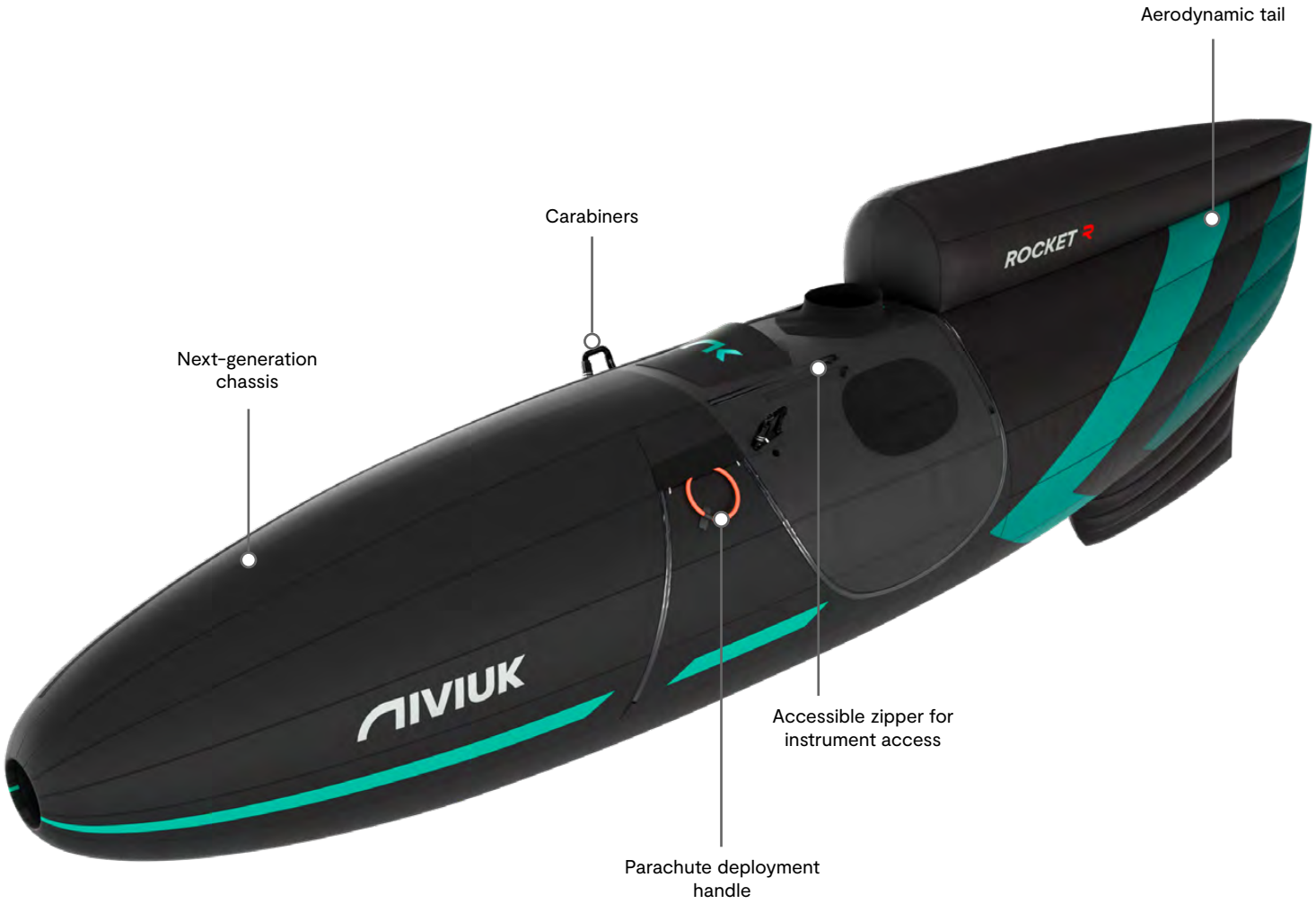
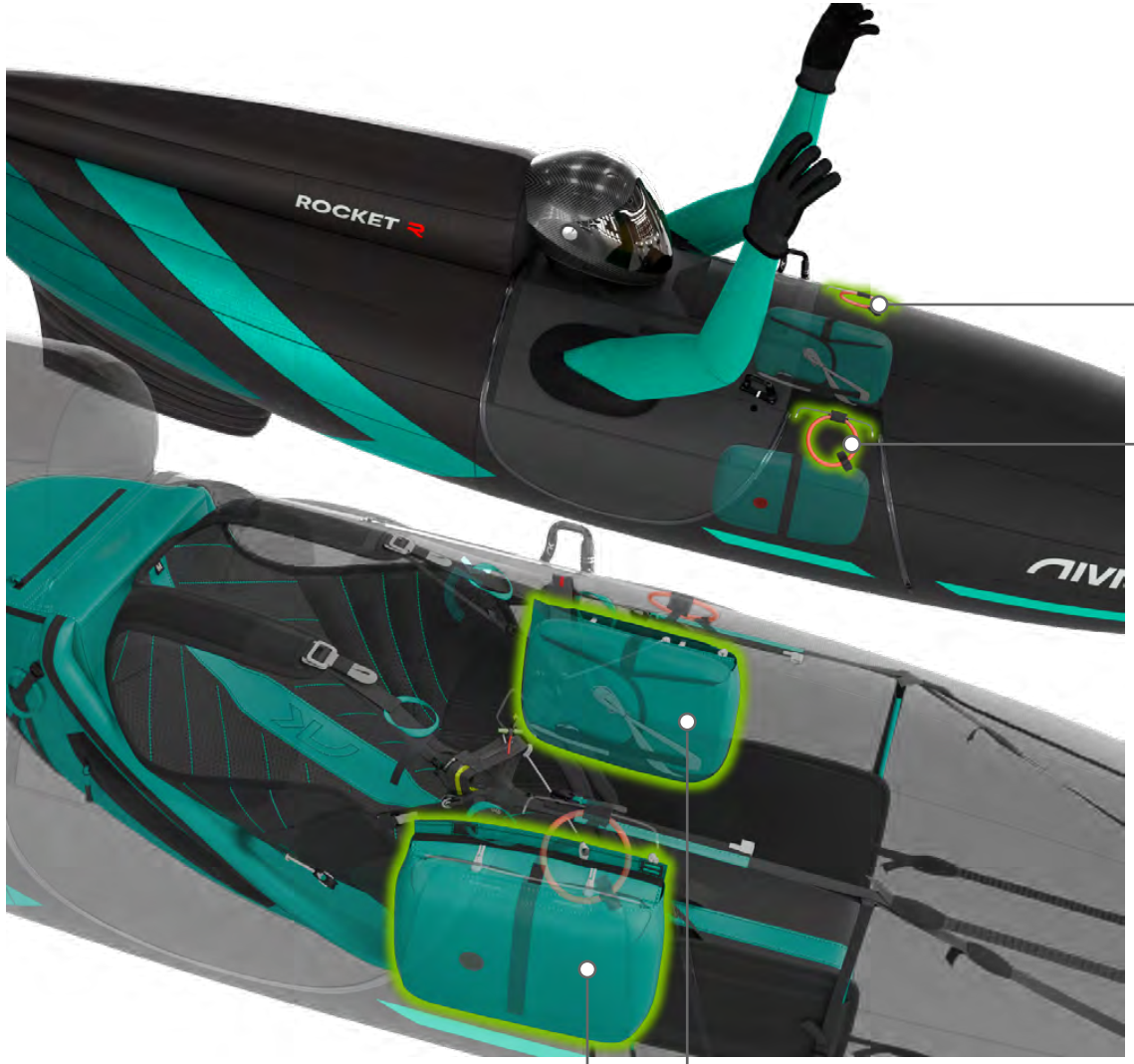
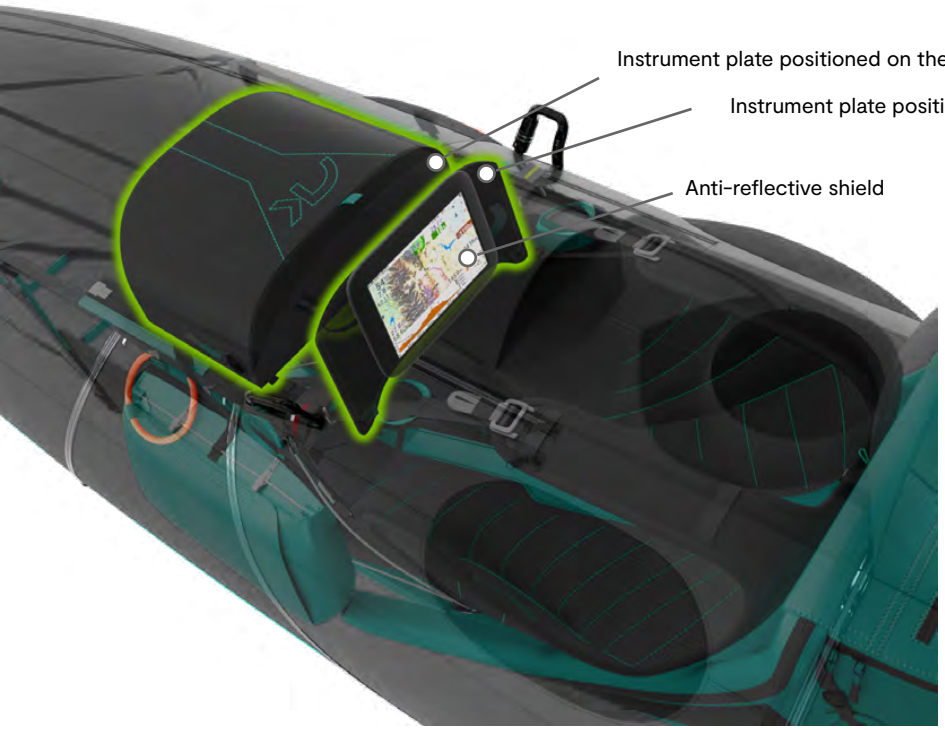
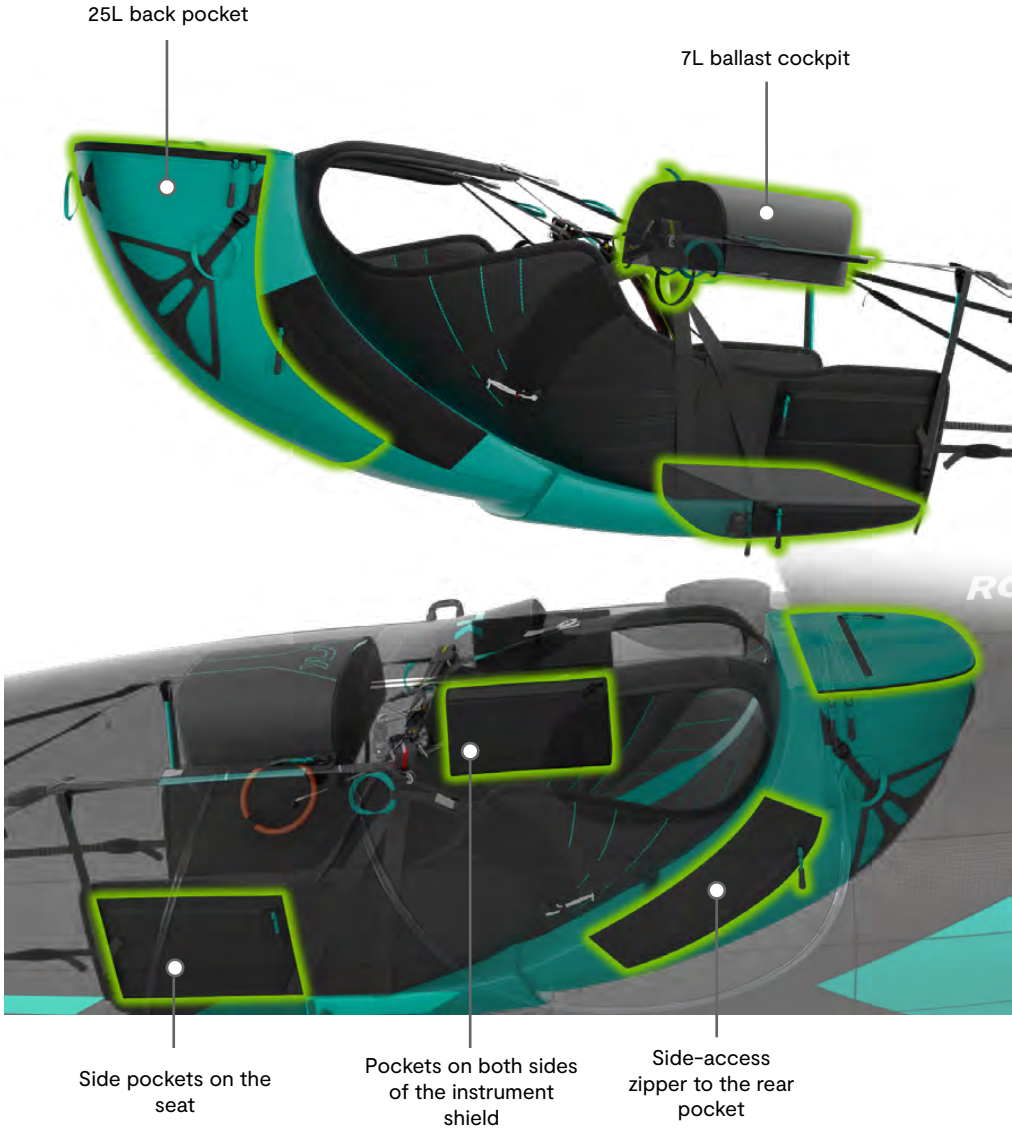
1. GENERAL CHARACTERISTICS

1.1 OVERVIEW OF THE HARNESS

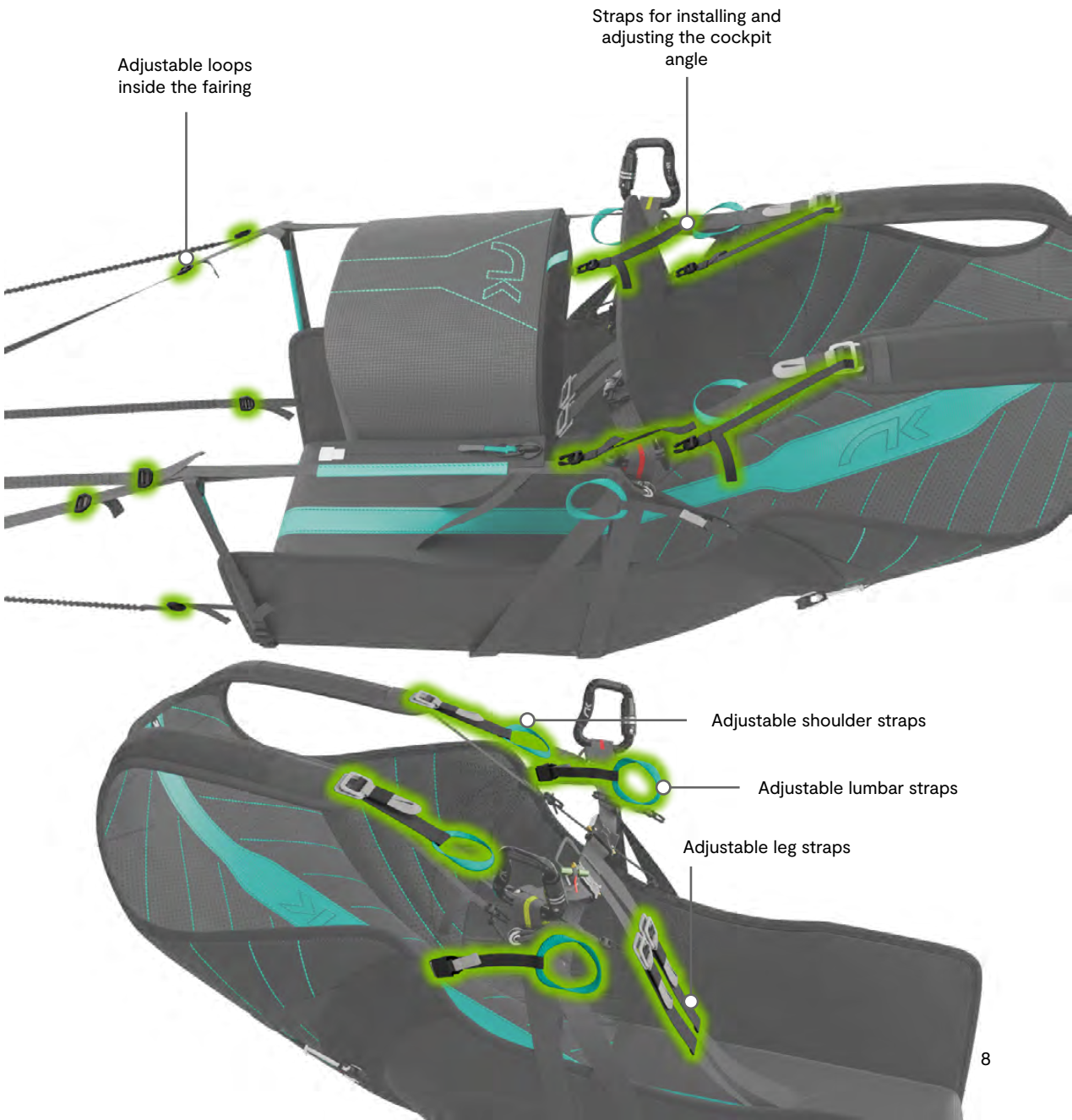


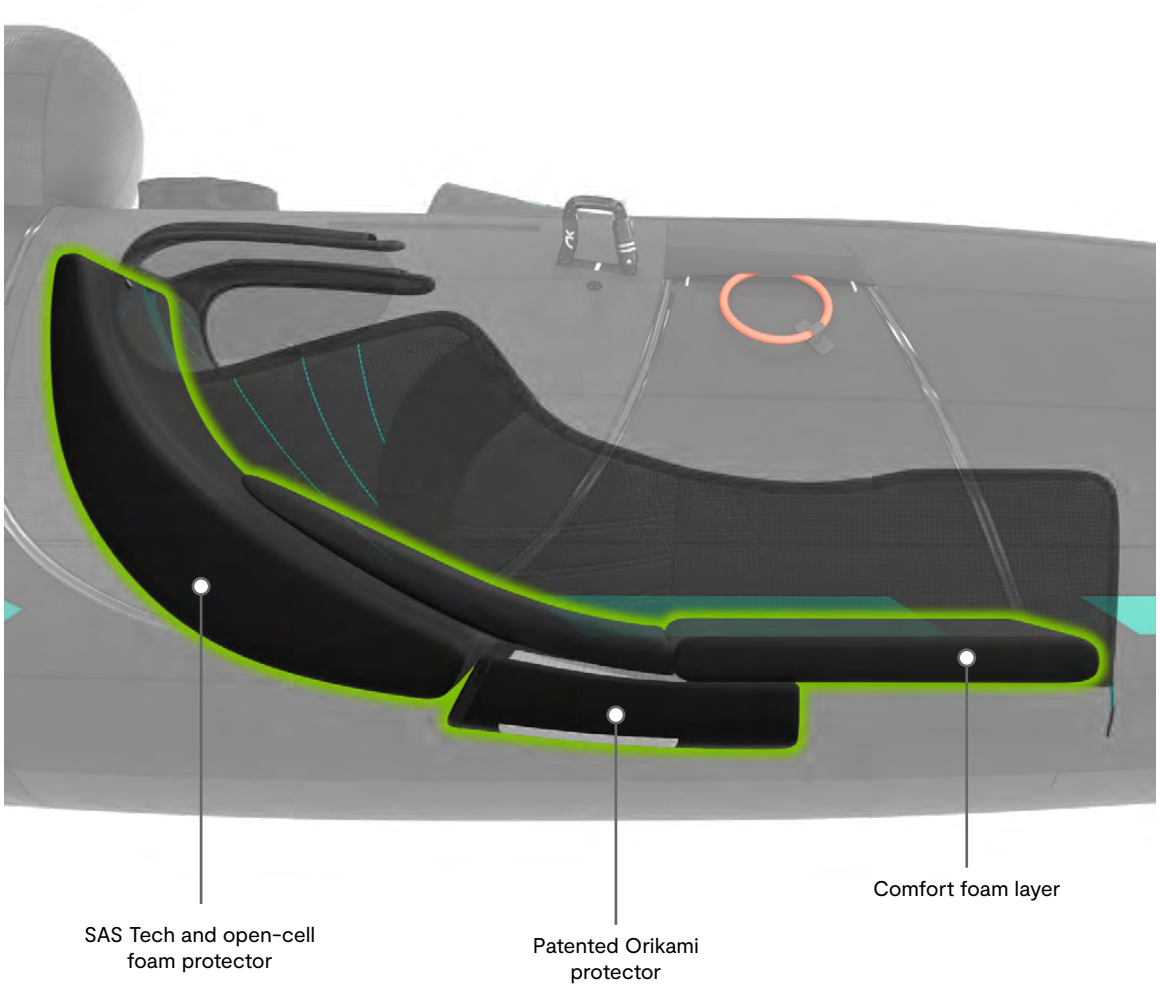

ROCKET R
Parachute deployment handles
Dual parachute compartments


Instrument plate positioned on the ballast cockpit
Instrument plate positioned close to the pilot's field of view
Anti-reflective shield


25L back pocket
7L ballast cockpit
Side pockets on the seat
Pockets on both sides of the instrument shield
Side-access zipper to the rear pocket


Adjustable ventral straps


Adjustable loops inside the fairing
Straps for installing and adjusting the cockpit angle
Adjustable shoulder straps
Adjustable lumbar straps
Adjustable leg straps


SAS Tech and open-cell foam protector
Patented Orikami protector
Comfort foam layer

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

1.3 TECHNICAL DATA

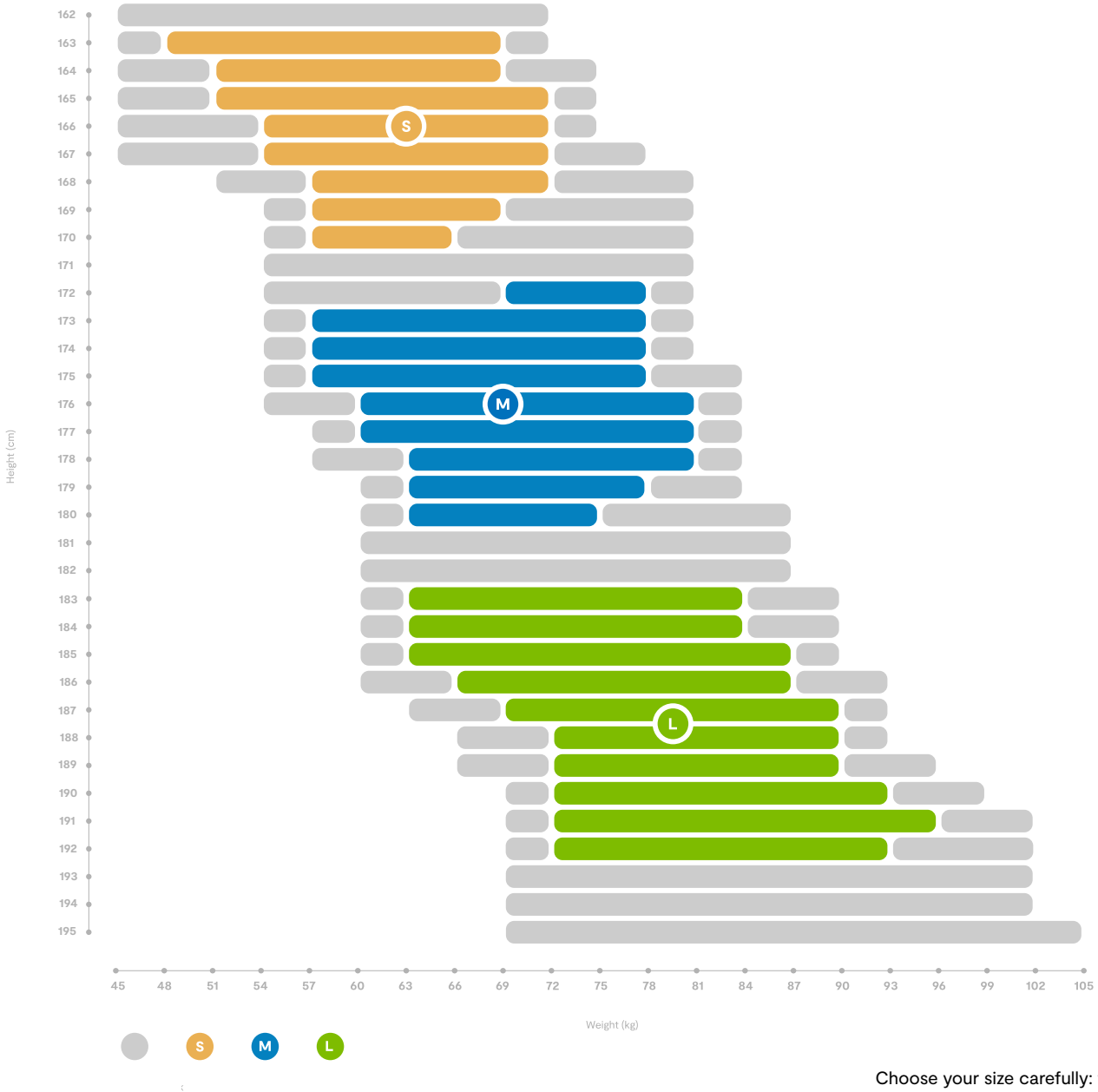
1.3.1 Specification table

			S	M	L
Weight		kg	8,9	8,9	9,4
Back length		cm	60	60	69
Seat base	Width	cm	34	34	34
	Length	cm	38	38	43
Cockpit volume		L	7	7	7
Under seat pocket volume		L	2	2	2
Back pocket volume		L	25	25	27
Total ballast volume		L	10	10	10
Rescue compartment volume		L	7 (x2)	7 (x2)	7 (x2)
Carabiner distance		cm	43	43	43
Max. load		kg	120	120	120
Certification			EN	EN	EN

The total weight of the harness may differ ±5% due to variations in the weight of the fabric supplied by the manufacturers.

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

1.3.2 Weight and height range table



To be tried on!
It depends on the back and leg length.

Choose your size carefully: the Rocket R has been designed with a slim fit cut to deliver maximum performance.

1.4 TARGET GROUP

- **Competition:** Created to compete at the highest level. Every detail is designed to help you gain altitude, efficiency and speed, making the most of thermals. The ROCKET R is the perfect partner in any competition task.

- **Cross-Country**: Uncompromising performance, even on the longest flights. It combines stability, aerodynamics and exceptional comfort, allowing you to maintain a high level of energy and concentration for hours. Ideal for pilots looking to eke out every kilometre. ompetición.

1.5 CHARACTERISTICS

- **Optimised aerodynamics**

The shape of the ROCKET R has not only been optimised with CFD for aerodynamics and stability, but its design also minimises seams and deformations, creating a perfectly smooth, taut, crease-free surface. Special attention has been given to internal pressure and the rigidity of the harness, which, thanks to the use of Nitinol, maintains a uniform and stable shape even in thermals and turbulence.

The geometry remains intact at all times, which not only enhances performance but also ensures pleasant in-flight behaviour.

- **Comfort from head to toe**

The ROCKET R features a new-generation chassis, inherited from the Drifter 2, with an additional integrated foam layer. It offers maximum comfort with consistent support for the back, legs and hips.

Designed with a slim-fit adjustment, the ROCKET R is engineered to deliver maximum performance. Its relatively narrow seat enhances aerodynamics and control, offering an optimized experience for pilots seeking top-level capabilities.

- **Stability and manoeuvrability**

The stability of the chassis has been designed to achieve total connection between the pilot and the air mass. The ROCKET R offers a progressive response to wing movements, improving handling and performance during glides.

Maneuverability remains responsive without sacrificing stability, allowing for truly precise piloting.

1.6 DESIGN PROCESS

The Niviuk team has carried out thorough and meticulous work. Throughout the development process, multiple adjustments were made following flight tests with various prototypes, assessing their performance in all kinds of conditions. This intense effort has made it possible to create an innovative and modern harness, the result of our team's extensive experience.

As a result, every Niviuk product undergoes a rigorous final inspection before reaching your hands.

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.

To ensure a perfect fit for every pilot, several easy-to-use adjustment straps have been incorporated. On the ROCKET R, the backrest inclination and the length of the shoulder straps can be easily adjusted to match each pilot's torso position. The pod inclination and tension can also be adjusted for all leg configurations.

2.2 CONNECTING THE HARNESS TO THE WING

The ROCKET R has two main 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

- **Adjusting the harness**

1) Install the seat's side bars.

2) Insert both arms into the shoulder supports, as if putting on a vest.

3) Close the T Lock system by guiding the central strap between the legs and securing it on both sides to form the ventral strap.

4) Position the cockpit and secure it using the side zippers and clip straps.

5) Attach the instrument tray (the closest cockpit) using the anti forget system and the clip straps.

6) Close the fairing zipper up to the neck.

7) Insert the feet into the fairing, placing them directly on the footboard; the magnetic closure will engage automatically.

- **Pilot position**

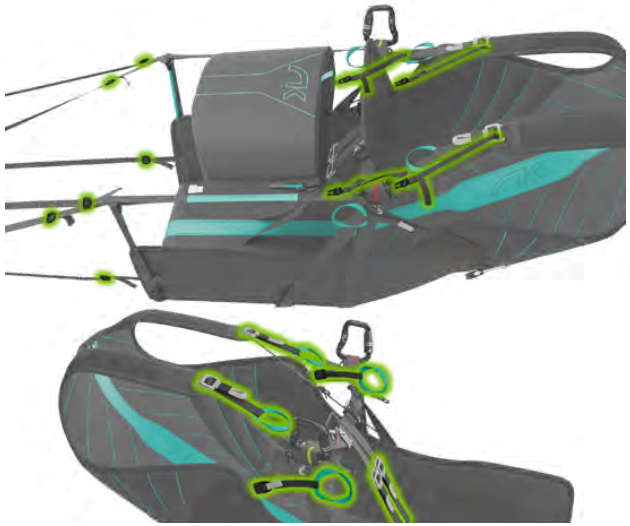
The ROCKET R can be adjusted to regulate the angle of the pilot.

This angle can be adjusted using different straps: The dorsal straps, which adjust the backrest inclination; and all loop ended straps located inside the fairing, which allow the pilot's position to be modified. The legs offer three configurations to adjust posture and support, as well as the fairing tension.

The angle of the instrument cockpit can also be adjusted to adapt it to the pilot's posture in flight position.

The seat incorporates a foam cushion located underneath, which can be removed in case the ventral strap feels tight, in order to provide more space in the torso area.

(!) Any change to the seat angle, even a minor one, can significantly affect performance in flight. To achieve optimal results, adjustments must be made taking into account the expected ballast position for the flight and its distribution, as well as any equipment carried on the back or in pockets. This ensures proper stabilization and correct aerodynamic alignment of the seat's nose position during flight.



- **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, ensuring that all ballast is loaded into the harness, and adjust the shoulder straps symmetrically.

The arm passage area provides maximum freedom of movement without deforming the fairing, thereby optimizing aerodynamic drag in all phases of flight.

- **Leg loops**

With the ROCKET R the leg loops cannot be adjusted.

- **Pod**

It is essential that the pod is correctly adjusted so that the pilot is comfortable during flight. The pod can be adjusted to the pilot's leg length thanks to the straps located on the inner sides, which also allow fine adjustment of the footplate inclination and tension.

The ROCKET R features an automatic adjustment system in the nose (the front section of the pod), which adapts to the pilot's leg length. This system is based on a flexible internal Nitinol structure that naturally regulates the distance between the footplate and the tip of the pod, ensuring constant and ergonomic contact for different pilot sizes.

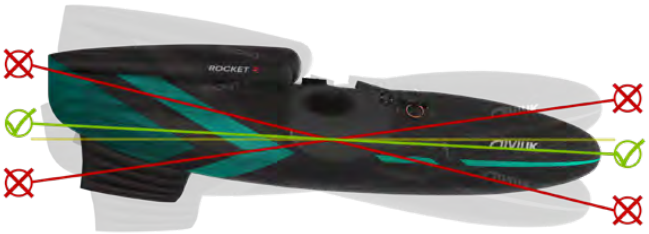
In addition, an optional foot pad can be mounted on the footplate, ensuring an optimal position even for pilots with shorter legs.

The inclination of the pod defines the seat position and has a direct influence on flight behaviour and the sensations transmitted to the pilot. Correct pod adjustment is essential to optimise flight performance, as shown in the ROCKET R video tutorial. Adjust the pod using a hang simulator before your first flight.

The magnetic closure facilitates entry and exit, similar to a conventional harness, while maintaining airtightness.

The elastic leg adjustments support the pod at hip height while standing, making it more comfortable to handle. This is particularly

useful during take off, as the pilot's posture or technique may make it difficult to keep the pod in the correct position to step into and close it properly. The use of this elastic is not mandatory, as it is generally easy to enter the pod after take off.



- **Anti-forget system**

The leg straps of the ROCKET R are secured using a T Lock system. In flight safety has been further enhanced by the integration of an anti forget system, incorporated directly into the pod closure.

- **Replacing the shell**

The entire shell of the ROCKET R is removable, allowing it to be easily replaced if necessary. To do so, follow these steps:

1)Disconnect the footplate from the pod nose.
2) Unfasten the zipper and attachments of the parachute compartments.
3) Disconnect the carabiners.
4) Remove the speed bar lines.
5) Separate the chassis from the external structure.

Before your first flight, the new shell must be adjusted by following the same procedure in reverse order.

- **Built-in ventilation**

A zip opening allows air to enter and flow from the feet to the head, creating a refreshing airflow inside the pod. The ventilation system can even be used in thermals thanks to its Nitinol structure, which keeps the outer surface under tension.

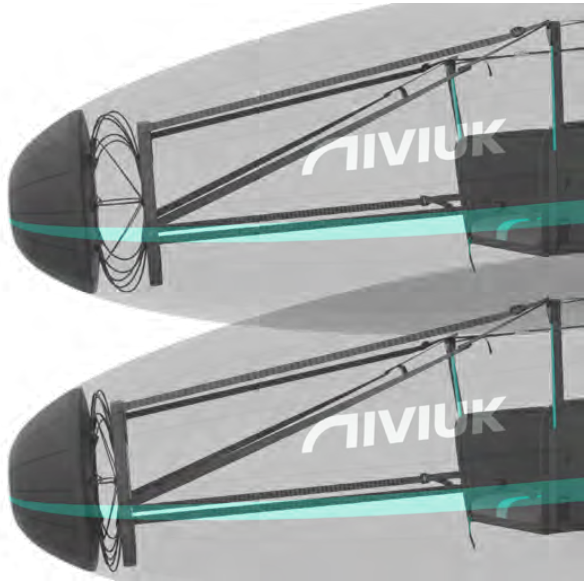
- **Speed-bar**

The ROCKET R comes equipped with an asymmetric three step speed bar, allowing for smoother acceleration. 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.

The speed bar can be installed in either direction, depending on whether the first step is taken with the right or left foot. The orientation of the speed bar should only be reversed when it is attached to the footplate.

(!) 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 PROTECTORS

Safety on the ROCKET R has been further enhanced by the addition of a double foam protection system.

Under the seat, the revolutionary patented Orikami protector has been optimised to offer the best balance between thickness and its exceptional high impact-absorption capacity. Across the entire seat surface, a thick layer of comfortable foam has been added, further reinforcing shock absorption and cushioning in the event of an impact. On the back, a combination of SAS Tech foams and a thicker, more flexible open-cell foam ensures complete protection for the pilot.

Both protectors are housed in their dedicated zipped compartment, allowing for quick access and easy replacement.

2.5 INSTALING THE PARACHUTE

The ROCKET R has two parachute compartments integrated into each side at the front of the carabiners. They provide full visibility and easy, direct access from both sides. The container design is compatible with the emergency parachutes commonly used with this type of harness, ensuring correct and secure integration.

(!) The parachute must be correctly installed inside the designated container, following the emergency system installation instructions. Incorrect installation or poor maintenance may make deployment difficult or even impossible.

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. Watch the video tutorial here.

(!) Once the rescue installation is complete, practice and perform a rescue extraction in a simulator.

2.6 COCKPIT

The ROCKET R integrated cockpit offers clear visibility of instruments at all times, protected under an anti-reflective shield which was aerodynamically optimised using CFD simulations.

Access to the instruments is simple and does not interfere with piloting, thanks to a very accessible zip.

The system offers two cockpit configurations: one with an instrument plate positioned close to the pilot's field of view, and another set further forward, on the ballast cockpit.

To install the cockpit on the harness, it must be connected to the pod using the side zippers and the adjustable clip straps. The instrument plate must be attached using the anti forget system and the elastic clip straps. Finally, close the pod zipper up to the neck.

Using the adjustment straps, the angle of the instrument cockpit can be fine tuned to adapt it to the pilot's posture in flight position.

2.7 STORAGE

The ROCKET R features multiple storage options, specifically designed for competition use.

The rear pocket offers a generous 25 L volume, complemented by two zip pockets on both sides of the backrest.

On both sides of the instrument shield, there are two easy-access pockets for storing a radio, tracker, or food – everything accessible without opening the pod or compromising internal pressure. One features a zip closure, while the other has a magnetic closure.

It features side pockets on both the backrest and the seat, as well as an under seat pocket to carry additional weight.

The ballast cockpit, meanwhile, provides a generous 7 L capacity for hydration systems or ballast, depending on pilot needs.

You can check the exact volume of each pocket in section 1.3 Technical Data.

2.8 RUCKSACK AND PACKING

To pack the ROCKET R, unclip the buckle and remove the seat's side bars. Then gather the nose of the pod towards the chassis and fold the sides of the harness inwards, holding it by the carabiners.

(!) Place the wing on top and, before packing all the equipment into the rucksack, fold the tail over the body of the harness, ensuring that the Nitinol rods maintain a shape that is as rounded as possible. Although they can withstand significant deformation, correct folding is recommended to preserve their shape and durability.

For comfortable and safe transport, the Kargo 220 backpack offers the ideal volume, providing sufficient capacity for the ROCKET R and all your equipment while keeping everything in perfect condition.

2.9 THE PERFECT SETUP

Take your performance to the next level by combining the ROCKET R with the Icepeak X One competition wing and the Aero Speedarms. This setup is specifically designed to reduce aerodynamic drag and maximise performance in competitions or long distance flights.

2.10 OPTIONAL ACCESSORIES

La ROCKET R is designed to carry:

- Ballast
- Camel back
- Drink tube
- Pee tube

3. IN FLIGHT

3.1 PRE-FLIGHT CHECKS

For maximum safety, carefully and thoroughly check your equipment before your first flight, and repeat the same sequence before every flight.

Pay special attention to the following aspects:

- 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.
- Before take off, check once again that:
    - The T Lock closing system, the anti forget system and the pod zipper are correctly secured.
    - Both parachute containers are properly closed.
    - Both deployment handles are firmly attached to the Velcro and fully inserted into their 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.

(!) Stay away from mountain relief if you need to use your hands to get into the harness, although this is not necessary with the ROCKET R. 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

BBefore 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, exit the pod by opening the magnetic closure with your feet, and move into a standing position to prepare for landing.

3.4 FLYING ABOVE WATER OR LANDING IN WATER

(!) Flying over water exposes the pilot to the risk of landing in it. This situation can be extremely dangerous, which is why wearing a life jacket during an SIV course is essential. We recommend avoiding such situations whenever possible.

Immediately after a water landing, the protections of the harness may float, creating a risk of the pilot becoming trapped underwater. Before impact, it is advisable to loosen the buckles—without compromising safety—to allow enough time to exit the harness quickly and avoid possible drowning.

If the harness gets wet due to falling into the water, both the harness and all its components, such as the protections, must be completely dried before being used again.

The parachutes must also be removed and allowed to dry completely. Once dry, they must be correctly packed and reinstalled in the harness. Refer to the “Installing the parachute” section.

(!) 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 ROCKET R 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 ROCKET R is not recommended for tandem operation.

4.3 OTHER

- The ROCKET R 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 ROCKET R stands out for its exceptional robustness and will accompany you through many hours of flight. Designed to deliver a long service life and reliable performance, it is a high level competition harness made from top quality, resistant and durable materials.

To prevent wear or damage to the harness, it is important to avoid dragging the harness on the ground, over stones or abrasive surfaces. 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. Do not use detergents. Allow it to dry naturally in a well-ventilated area without direct sun light.

5.2 STORAGE

Keep your equipment in a cool, dry place away from solvents, fuels or oils.

Whenever possible, avoid exposing the harness to humidity and heat.

Do not expose it unnecessarily to UV radiation (sun light), other than in normal flight.

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 60ºC.

Weight should not be laid on top of the equipment.

When storing the harness in a rucksack, make sure to avoid any deformation. Refer to the “Rucksack and packing” section for instructions on proper storage.

Never store it when it is still damp or wet. 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.

5.3 CHECKS AND INSPECTIONS

It is recommended that any inspection and/or replacement of harness components be carried out only by the manufacturer or authorised personnel. Only the manufacturer and professional repairers will use materials and techniques that ensure the correct functionality of the harness in accordance with its certification.

In addition to the preventive checks before each flight, the ROCKET R should be carefully and thoroughly inspected every time either of the two parachutes is repacked, usually once a year.

Additional inspections should be carried out after any impact, hard landing or take-off, as well as if there are any signs of wear or possible damage.

We recommend that the harness be inspected by an authorised workshop every 2 years or after 100 hours of flight.

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 2 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.
- In the event that the external pod (shell) suffers significant damage, it can be purchased separately and easily fitted onto the same base structure. To place an order, please contact your local dealer.

5.4 REPAIRS: NIVIUK SERVICE

Repairs to your ROCKET R 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.

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.

Any modification of the harness carried out in a workshop other than the Niviuk Service will invalidate the product warranty. Niviuk cannot be held responsible for any issues or damage resulting from modifications or repairs performed by unqualified professionals or those not approved by the manufacturer.

5.5 PRODUCT REGISTRATION

You can register your ROCKET R on the Niviuk website in the MyNiviuk section 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 HARNESS MATERIALS & COMPONENTS

MATERIALS

Shell	70D/20D
Body	70D/210D
Main webbings	Polyester Webbing 25T

COMPONENTES

Carabiners	Automatic 40mm

8.2 COMPATIBILITY

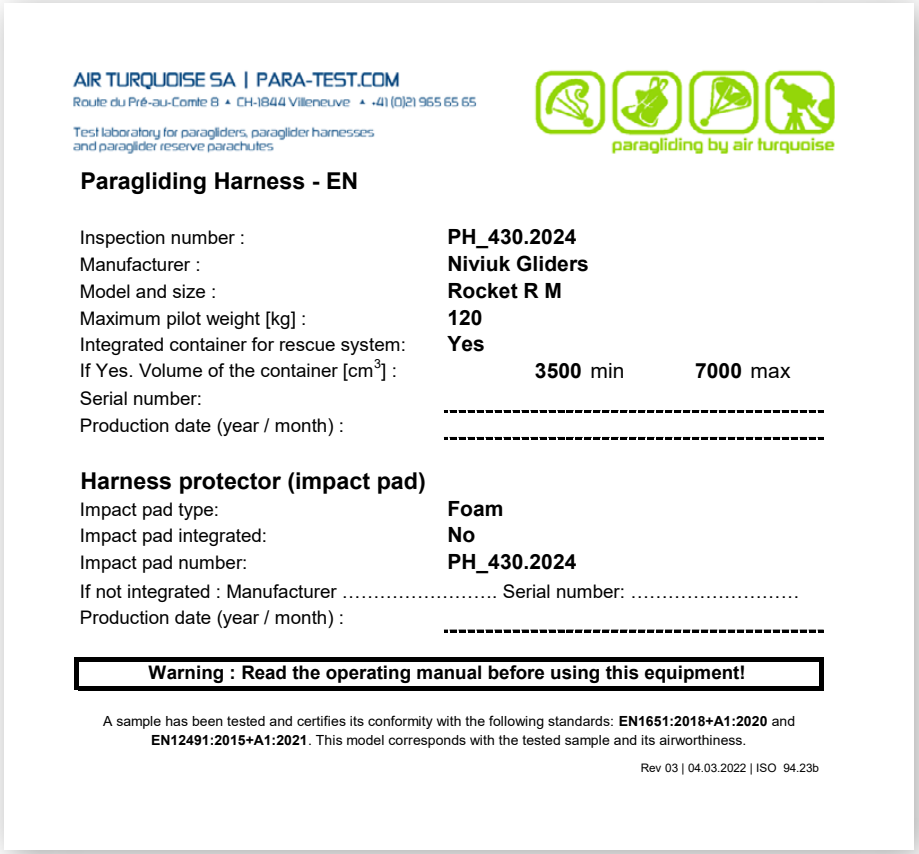
	ROCKET R
PEAK 6 EN/LTF D	●
ICEPEAK X-ONE CCC	●

● **Recommended:** ideal for your wing

✻ **Compatible:** suitable for your wing, depending on your preferences

8.3 CERTIFICATION

You will find the certification certificates on the product page.



AIR TURQUOISE SA | PARA-TEST.COM
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Test laboratory for paragliders, paraglider harnesses
and paraglider reserve parachutes

paragliding by air turquoise

Paragliding Harness - EN

Inspection number :	**PH_430.2024**
Manufacturer :	**Niviuk Gliders**
Model and size :	**Rocket R M**
Maximum pilot weight [kg] :	**120**
Integrated container for rescue system:	**Yes**
If Yes. Volume of the container [cm^3] :	**3500** min **7000** max
Serial number:	----------
Production date (year / month) :	----------

Harness protector (impact pad)

Impact pad type:	**Foam**
Impact pad integrated:	**No**
Impact pad number:	**PH_430.2024**

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

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