



# MANUAL

Version 1/ 2021



## TABLE OF CONTENTS

<u>TO GET TO KNOW YOUR YOUR XEMA 2.....</u>	<u>5</u>
TECHNICAL DATA.....	5
SIZE INDEX .....	5
SPEED SYSTEM .....	6
<u>ADJUSTMENT OF XEMA 2 .....</u>	<u>7</u>
ADJUSTMENT OF THE BACK POSITION.....	7
ADJUSTING THE TILT OF THE SEAT BOARD .....	8
ADJUSTMENT OF SHOULDER STRAPS .....	8
ADJUSTMENT OF LEG STRAPS .....	8
ADJUSTMENT OF CHEST STRAPS .....	8
STABILICER .....	9
RUBBER FOR REPOSITING THE SPEED BAR.....	9
<u>FITTING THE RESCUE SYSTEM .....</u>	<u>9</u>
COMPATIBILITY- CHECK.....	12
<u>FLYING WITH THE XEMA .....</u>	<u>12</u>
CORRECT HANDLING OF THE RESCUE SYSTEM.....	13
FOLDING THE HARNESS AND USING THE RUCKSACK.....	14
OPTIONAL ACCESSORY .....	14
<u>CARE AND REPAIR INSTRUCTIONS .....</u>	<u>15</u>
CARE INSTRUCTIONS.....	15
REPAIRS .....	15
INSPECTION .....	16
<u>TERMS OF WARRANTY .....</u>	<u>16</u>
<u>ANNEX.....</u>	<u>18</u>
CHECKSHEET .....	19
DESCRIPTION SEAT .....	20

Congratulations on buying your

# XEMA 2

and welcome to the family  
of ICARO - pilots!

Before you get to know your system please read the manual, there is important information inside.

Your harness is made with great care and state of the art.

Before delivery to our dealers and flight schools, every single harness is piece checked by ICARO paragliders. Our team also carries out check flights with individual devices, but only on a random basis. For this reason, each new ICARO harness must be checked again by the dealer or the flight school before delivery and this date must be entered on the nameplate. From this point in time, both the deadline for the first 2-year check and the term of the warranty begin. This manual gives you information on the entire specific and general characteristics of the harness.

It is tested according to European Standards EN 1651: in the currently valid version, and Notification of the Federal Aviation Administration of Germany.

It may only be used for the purposes described in this manual.

***The use of this harness is at your own risk and must not be flown:***

- ***outside the specified weight range***
- ***with damaged carabines, belts, buckles or protector***
- ***with motor and in aerobatics.***

Before starting for the first time, you should set up your harness with the help of a simulator, then not only put on your paraglider to check compatibility with your harness, but also carry out the first start and handling exercises.

Ground handling trains and refines the start-up technique. You can consciously and stress-free get to know the reactions of your paraglider in combination with your harness, and then deal with it in the air better, more effectively and safely. During the first flights you should do the last fine adjustments to your harness because only with optimal seating comfort you can not only fly stress-free but also optimize the flight characteristics of your paraglider.

All technical data and instructions in this manual were drawn up with great care. ICARO Paragliders cannot be made responsible for any possible errors in this manual.

Should you decide to sell this harness at a later date, please pass on this manual to the new owner.

All technical data and instructions in this manual were drawn up with great care. ICARO Paragliders cannot be made responsible for any possible errors in this manual.

Important information in this manual is written in *fat cursive writing*. Any important changes to this manual will be published in our homepage ([www.icaro-paragliders.de](http://www.icaro-paragliders.de)).

Every pilot bears the responsibility of his/her own safety. The manufacturer or distributor assumes no responsibility for accidents occurring while using it.

No warranty of any kind can be made against accidents, injury, equipment failure, and/or death. It is assumed that the pilot is in possession of the necessary qualifications and provisions of any relevant laws are observed.

***Any changes to the harness (e.g. straps, shackles, protector) are dangerous and can lead to unwanted reactions of the paraglider. When our harnesses leave production, they are within the permissible tolerance range. This is very narrow and must not be changed under any circumstances, as this no longer warrantys the optimum balance between performance, handling and safety, no longer conforming to the sample-tested harness and thus no longer being type-tested.***

### **Environmental aspects:**

After we are concerned not only with quality but also with environmental protection, we also want to provide our active contribution here. The materials of which a harness is made require a special waste disposal. So please send disused ICARO - harnesses back to us. We will care about a professional waste disposal without costing for you.

Please do our nature-near sport in a way which does not stress nature and environment! Please do not walk beside the marked ways, do not leave your litter, do not make unnecessary loud noises and respect the sensitive balance in the mountains.

**Especially at the launch site consideration is needed!**

**ICARO** paragliders

Hochriesstraße 1, D-83126 Flintsbach

Telefon: +49 (0)8034 909700

Telefax: +49 (0)8034 909701

Email: [office@icaro-paragliders.com](mailto:office@icaro-paragliders.com)



This manual is copyrighted. Partial reproduction is allowed only after prior approval by ICARO paragliders, all other rights are reserved.

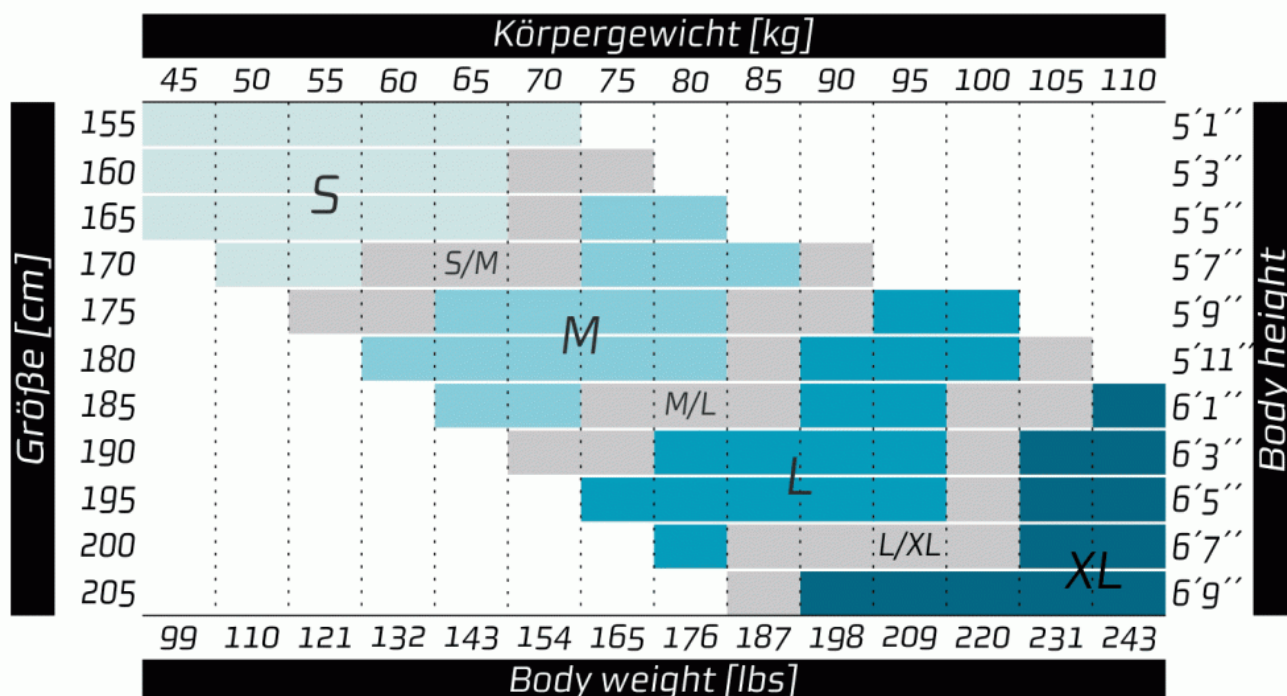
## To get to know your Your XEMA 2

Allowed for training	yes
Allowed /certified for aerobatics	no/ no
Allowed /certified for flying with passengers	yes/ not tested
Allowed /certified for flying with motor drive	no / not tested

### Technical data

Designated use		Paraglider harness GH			
Size		S	M	L	XL
Distance between karabiner and seat (cm)		43	45	47	48
Total weight without reserve parachute (kg)		3,8	4,0	4,2	4,4
Distance between karabiners (min -max) (cm)		37 - 48		37 - 51	
Maximum weight (kg)		120			
Volume rescue-container		4,5 lt scalable to 5,5lt			
Seat	Breadth in front (cm)	30	32	34	35
	Breadth posterior (cm)	33	35	37	38
	Length (cm)	35	37	39	40
Type of protection	Airbag spring system (fills and holds the airbag regardless of the dynamic pressure)				
Reserve parachute housing	Under the seat, with lateral handle				
Check interval	24 month / 150 operating hours				

### Size index



To be tried on (depends on the back and legs length)

The XEMA 2 is our new reversible intermediate harness and the further developed replacement to our well-proven XEMA 2 but not only facelifted, there are more features:

- New design
- Rigid polypropylene seat
- Self-inflating airbag protection
- Enhanced rescue parachute handle
- Redesigned rucksack
- Optional Light shield back protection

Plenty of features, comfortable and safe, thanks to the geometry of the strap system, with an excellent balance between maneuverability and stability. With this new harness, we are once again recommending our consolidated self-inflating air bag system, which consists of a steel spring that generates the force needed to expand the air bag, always making it ready for potential impact.

This means that your protective capacities are at 100% before you even start your take-off run, and that they remain as such for the entire flight. The spring also guarantees a consistent form for the airbag and therefore performance over a long period of time, in any humidity, temperature or prolonged storage in the rucksack.

To prevent the pilot from coming out of the harness if he forgets to fasten the leg-straps, the harness is equipped with the most effective T-lock safety system.

The red SOS- label with white lettering is readily visible in a pocket on the right shoulder -strap padding. It is easy to pull out, and it is fastened to the harness to prevent it from being lost. On the back of this label, you can write the information that you think should be given to rescue personnel in case of accident.



The XEMA 2 has a spacious dorsal pocket and two side pockets, positioned respectively on the sides of the harness with zips to close them. A container for the camel-bag is fitted in the rear pocket.

Position your camel-bag in the rear pocket.

The optional back protection is inserted through a zipper in the dorsal pocket.

The right and left side of the main suspension are marked by eyelets in different colors.

### **Speed system**

All necessary deflection pulleys to install the speed system are mounted. The rope guide was chosen to provide easy and comfortable use of the speed system also for longer periods of time.

Connect the footstool with the rubbers on the left and right side for the retrieval to work and put the ropes which are attached at the foot bar through the rings



at the front right and left of the harness from the outside and then through the eyelets on the side.

Afterwards put the ropes which are now running inside the harness through the pulley which can be found at the left and right of the sitting board.

The ropes which have been put through the eyelets and the pulley need to be bypassed on the outside along the harness bands and fastened with the brummel hook.



Adjust the length of the rope in this way that both legs are straightened completely when flying maximum speed (both pulley of the risers are laying on top of each other).

***Please pay attention that the glider will not be pre-accelerated, while the accelerator is loosened, when the acceleration ropes are set too short.***

***The description refers to the rope characteristics of an ICARO harness. When using a different harness, the application can be different.***

## Adjustment of XEMA 2

---

The harness can be adjusted in many ways to the individual needs and likings of each pilot.

***The inclination of the back and the seat board can only be adjusted in the simulator. Special buckles prevent the setting from changing during the flight.***

Upon delivery, the XEMA 2 is already set to a standard ergonomics (except for the size of the pilot).

***Therefore, we recommend only adapting the harness in size to the pilot and leaving the other settings as they have been made in the factory.***

If you adjust belt, then you can always put it back to the red factory settings.

***Conduct the adjustments with the rescue system installed.***



### Adjustment of the back position

This adjustment allows you to select the inclination of the torso with respect to the vertical flight axis.

The XEMA 2 uses a newly conceived adjustment buckle.



Our harness is supplied with the adjustment locked. To change the setting, you must first remove the strap from the lock, then you can adjust the inclination of the torso to make it more vertical by pulling the strap forward, or more reclined by pulling the light grey strap in the opposite direction.

***A sitting position ensures a low inertia and thus prevents twisting. The horizontal position reduces aerodynamic drag and allows best glide in accelerated flight.***

### **Adjusting the tilt of the seat board**

This adjustment varies the angle between the legs and the back (seating depth), distributing the load between the seat and the back, thereby providing the pilot with greater comfort. If you want to change the adjustment, you must first loosen the strap. The more the seat board is tilted backwards, the easier it is to "slip in" into the harness after takeoff.



### **Adjustment of shoulder straps**

Shoulder-strap adjustment enables the harness to be adjusted to the pilot's height. The adjustment buckle is situated low down, near the rear edge of the seat.

The shoulder-straps also support part of the torso weight to improve comfort. After that you have determined the correct position for the seat and back, adjust the shoulder straps so that they are in contact with your shoulders, neither too loose nor too tight.

The adjustment of the shoulder straps is done while standing. They are dressed so far that you can just stand upright.

***The shoulder straps must be tightened in a relaxed position so that a light pull is felt on the shoulders.***

### **Adjustment of leg straps**

Pull the leg straps tight before starting, but make sure they do not cut in or squeeze.

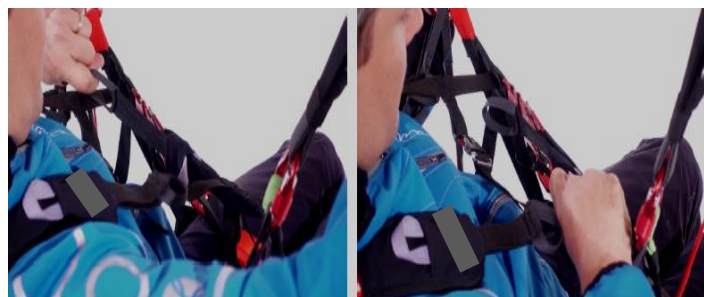
Due to a special design the leg straps will not hinder your running at the start. Because they are tied tight, the front of the seat is lifted and helps you getting into the harness. By slipping back in the gear, the leg straps loosen a bit after start.



### **Adjustment of chest straps**

The adjustment of the harness chest strap controls the distance between karabiners and affects the handling and stability of the glider.

The risk of twisting is also strongly affected by the seating position of pilot.





Excessive tightening the chest strap increases stability but also the risk of twists following glider collapse, and it also increases the frequency of getting collapses due to poor feedback from the glider. Lengthening of the chest strap gives more feedback from the glider but decreases stability.

ICARO paragliders recommends following settings:

Take off weight	< 80kg	80 kg -100 kg	> 100kg
Horizontal distance of the main karabiners	37 cm – 42 cm	42 cm – 46 cm	46 cm – 51 cm

In flight, this setting can be opened gradually until you find your own optimal setting.

***Each setting the harness must be done with rescue system and be symmetrical on both sides!***

### **Stabilicer**

This small but important adjustment makes it possible to stabilize the harness when you exert pressure on the speed-bar, preventing excessive tilt of the back.

Its mode of operation is very simple: when you push the speed- bar, this small plastic buckle blocks the shoulder -straps at the point at which they slide in the chest strap, making the entire strap system more rigid and improving overall harness stability.

### **Rubber for repositioning the speed bar**

The XEMA 2 is equipped with a rubber to adjust the speed bar. With a simple knot on the speed bar, the right position for each type of use can be made.

## **Fitting the Rescue system**

---

The housing for the reserve parachute is below the seat in the front part of the harness.

The black loop attached to the handle itself should be passed into the loop on the deployment bag, and then the entire handle should be passed through its own loop and pulled tight. For easier extraction, the loop attached to the deployment bag should be positioned laterally with respect to the centre of the reserve parachute.



***XEMA 2 is supplied with a handle for reserve parachute extraction. It is identified with the number 6; this handle alone should be used for this***

***purpose. If your deployment bag does not have this loop, please contact the retailer from whom you purchased the reserve parachute.***

### **Attachment of the connection belt with the harness**

#### **First method (not steerable system):**

For connecting the two belts use a fixable 24 KN- snap hook. It is especially important that the snap hook cannot twist to prevent traverse stress of the snap hook.

Therefore, use cable fixer, adhesive tape or strong rubber bands and pull it **above and below the snap hook** around the belts.



#### **Second fixing method (not steerable system):**

Put the belt of the rescue system through the connection belt of the harness and than the rescue system trough the harness belt as shown in the photo.



It is just as especially important that the knot is very tight fastened.

Therefore, use cable fixer, adhesive tape or strong rubber bands and pull it **above and below the knot** around the belts.

***Please pay attention to the symmetry of both lines. Neither side of the loop must be longer than the other.***

#### **Third system (for steerable and not steerable systems with double connection point):**

If you are using a reserve parachute with directional control and dual bridle, or if your reserve parachute has a double -riser bridle, it can be connected to the harness using the two loops positioned at the base of the harness bridle near the padded shoulder straps.

In this case, the harness's reserve parachute bridle will not be used, and so it should be folded, fastened using two elastic bands, and positioned under the cover behind the pilot's neck.

The two connections should be made using screw -lock karabiners with a breaking strength of at least 1,400 kg.

In any case, it is important to verify that the length of the bridle is sufficient to position the reserve parachute inside the harness pocket, and that there is sufficient play to enable the parachute to be taken out of the pocket without causing the reserve parachute deployment bag itself to open during extraction.

***To prevent anomalous lateral loads, the bridle should be attached to both the loops on the shoulder straps. Not to just one of them.***

The XEMA 2 can vary the volume of the parachute container ( from 4,5 liter to 5,5 liter) to adapt to the size of the various reserve parachutes on the market. This

is possible by means of a zipper found inside the container. Insert the parachute in the harness container with the handle visible toward the outside and with the handle coupling loop to the float bag facing upward. Immediately position the handle in its specific housing.



Introduce a thin rope (like paraglider line) into each elastic loop which you will use to help close the container.

Insert the elastic loops into the smallest of the eyelets, marked with number 1.

Take the bridle cover zipper tab all the way to the right, then partially close it, moving the zipper about 10 cm to the left.



Then start to close the parachute container flaps, following the numerical progression and/or the sequence in the photograph.

Introduce the handle's metallic pins into the elastic loops and under the transparent cover.

The cord must absolutely be removed at the end of this phase and must be extracted slowly to avoid damaging the elastic loops due to excessive friction between the parts.

In the end the zip should be completely closed until introducing the zip pull under the cover behind the left shoulder –strap.



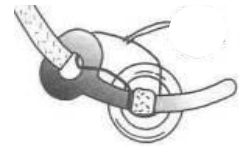
***Deployment of the reserve parachute should be perfectly feasible from the normal flying position.***

***Remove the cords used to help pack the rescue system!***

To avoid unwanted release of the rescue system, the closing splint must be held with a special thread (50 N) which is made with certified material.

***A higher breaking force could otherwise endanger the release of the rescue system!***

***After installing the first rescue system it is essential to conduct test activation (in flight position, sitting in the harness).***



## **Compatibility- check**

A control of every new combination of rescue system and harness/outer container must be carried out by either the producer of the harness or the rescue system or an authorized person (dealer or flight instructor). The activation of the rescue system in flight position must be correct and in conformity to the construction guidelines. The check must be recorded in the documentation of the rescue system. The throwing movement should be practiced every time the rescue system is repacked. The pulling force for triggering may not exceed 70N.

## **IMPORTANT POINTS TO LOOK OUT FOR:**

- **Check (steady)**
  - connection of the rescue system to your harness
  - connection of the harness and deployment handle
  - the closing splint must be held with a special thread
  - aluminum karabiners; aluminum might get micro cracks from impacts during use
- **line from the fixing loops is removed (after each packing)**
- **Check compatibility of rescue system and harness**
- **Before each start with your glider, you have to check the container is closed!!!**

## **Flying with the XEMA 2**

---

### **Walk & fly**

In backpack mode, telescopic sticks, bottles and other things find their place in the two elastic Lycra pockets. The pockets are accessible when walking. Clothes and other things can be trapped on the backpack with the elastic band. There is a small zip pocket on the outside of the backpack. A net can be pulled from this, with which a helmet can be attached to the outside. Two hooks are attached to the net for attachment. Attaching the helmet to the outside gives you more storage space in the backpack.

The XEMA 2 has storage options for a Camelbak or similar systems in carry mode or flight mode. In backpack mode, the tube is fed through the plastic hole and along the backpack shoulder strap.

### **Flight preparation**

In flight mode, the XEMA 2 has a spacious back pocket in which the backpack can easily be stored. The remaining storage space can be used for clothes, camel bags, etc.

On the left and right side is a pocket made of elastic mesh with a zip. In addition, there are securing loops for cell phones, cameras, etc.

The tube of the Camelbak is fed through the plastic hole and through the two rubber loops.

***For maximum safety, use a complete and consistent system of pre-flight checks and repeat the same mental sequence every flight.***

Check that

- all buckles are fastened. Take particular care in the case of ice or snow.
- always clean off snow or ice before fastening buckles.
- the reserve parachute handle is fastened in its correct position, and the pins are firmly inserted.
- pockets and zips are closed.
- the paraglider is connected correctly to the harness, and that both karabiners are locked closed by means of their locking system.
- the speed bar is attached correctly to the glider.

The XEMA 2 is basically very well suited and for use in **double seater flying**. It can be used for both the pilot and the passenger. However, the passenger should not have installed a rescue device in his harness, as a possible false triggering of the rescue device by the passenger cannot be prevented by the pilot.

The XEMA 2 harness can be used for **towed launches**. The tow bridle release should be hooked directly to the main karabiners, ensuring that the karabiners are positioned with the opening bar facing the rear. For further details, refer to the documentation provided with your tow release, or ask a qualified towing instructor at your flying site.

### **Correct handling of the rescue system**

To prevent unintentional operating of the rescue system most harness models with a handle mounted on the side (Tube- , side- , back containers) offer additional safeguards. Depending on the model ICARO harnesses one or two cover plates attached to the rescue handle are used to be stuck into two flaps and are secured with an additional Velcro. This ensures that lines cannot interlock with the handle pad and the rescue system opens unintentionally (e.g. during ground handling).

This fallback system for rescue handles is highly effective and therefore used in many other harnesses. The used material for handle pads and the Velcro provides a warranty for functionality and safety against unintentional loosening. The new material is stiff and therefore

***ICARO paragliders recommends bending the handle pad a couple of times and opening and closing the Velcro before each installation. Thus, the web of the handle becomes softer and the adhesion of the Velcro decreases.***

Also, the triggering technique is an essential factor to reduce the required release force. Another problem may arise when the rescue system must be operated with the other hand.

***Therefore, we recommend to train (before repacking the rescue system, during g-force trainer) these methods.***

It is vital to feel periodically for the position of the reserve parachute deployment handle during normal flight, so that the action of reaching for the reserve parachute handle becomes instinctive in an emergency.

in emergency situations, the deployment procedure is as follows:

- look for the reserve parachute handle and grasp it firmly with one hand

- pull the handle outwards in order to extract the reserve parachute from the harness container
- look for a clear area, and, in a continuous motion, throw the reserve parachute away from yourself and the paraglider

To keep the paraglider from interfering with the rescue parachute, proceed as follows opening:

If the leading edge of the paraglider is facing upward, grip the back risers or the brakes and pull them toward you to help deflate. If instead the leading edge of the paraglider is facing downward, pull the back risers or a brake and rotate the paraglider with the leading edge upward and then pull both brakes or back risers to help deflate the paraglider wing

On landing, adopt an upright body position, and ensure that you perform a PLF (Parachute Landing Fall) to minimize the risk of injury.

Before landing, slide your legs out and off the seat surface, so that you take up a standing position. Never land in the seated position; it is extremely dangerous for your back even if you have foam dorsal protection, which provides exclusively passive protection. Standing up before landing is an active safety precaution, and it is much more effective than passive forms of protection.

There are no specific problems connected to flying above water using a XEMA 2 harness, but in any case, landing in water is always dangerous. ICARO Paragliders recommends using a suitable lifejacket when flying above water.

### **Folding the harness and using the rucksack**

To change from harness to backpack configuration,

- completely open the back pocket and enlarge the backpack inside.
- Turn the entire structure upside down and fold the seat against the harness back, leaving the whole set of belts and buckles inside the sandwich that is created between the back and seat. Put the previously folded paraglider above the harness airbag.
- Pull the part of the back pocket and finally the closure of the rucksack over the paraglider. To close the zipper easily, press the backpack together so that the air remaining in the paraglider and airbag can escape. In the upper part there is enough space for the instruments, the helmet, and some items of clothing. Once the equipment is stowed away, the four side straps must be tightened so that the contents are compact and stable for comfort. The adjustment straps on the shoulder straps of the backpack can also be used for this purpose.
- Do not fold the rigid Lexan part on itself as sharp folds could be created, damaging it. This would cause airbag deformation which could compromise correct function.
- When preparing for flight, perform operations in reverse order and, finally, fold the part of the backpack in the rear harness pocket.

### **Optional accessory**

#### **Leg extension**

The leg extension is intended to facilitate the extended leg posture and as a footrest to serve. Some pilots find this posture to be the more comfortable position instead of simply dangling their legs. To assemble the footrest, please follow the instructions for use.

## Back protection

A back protection (optionally available) with TÜV certification (level 2) can be built into the XEMA 2, which is stowed in the bag located in the back pocket. The damping factor of this protector is so high that 94% of the impact force is dampened.



## Quick-out carabiner

"Quick-out" carabiners can be used with the XEMA 2. Instructions for their correct installation can be found in the instructions for use of these special carabiners.

# Care and repair Instructions

---

## Care Instructions

- Packing the harness is similar to all the other harnesses with the only difference being **in folding the rear part of the airbag which, in order to keep it intact, should be folding last above the rear part of the harness.**
- To maintain your harness in good condition, please ensure that the harness does not get dragged along the ground, the karabiner does not get hit against rocks and avoid over exposure to sunlight, heat or humidity.
- If you wish to clean your harness it is best to use warm water and a soft sponge.
- Store your harness in a dry and dark place, ideally between 5° and 30° Celsius. Do not store it near chemicals or petrol.
- If you will not fly for longer period, take it out of its pack.
- Avoid storing your harness for days at a time in a hot car.
- If the harness has become wet, lay it out so that air can get to all areas of the fabric, also your rescue system. Before the next flight, it is essential to dry the rescue equipment and repack it.

***Drying your harness and rescue equipment can take several days and is important for the material***

- Prolonged exposure to UV radiation damages the harness. For this reason, never leave it lying in the sun unnecessarily, but after flying, pack it back in its backpack.

## Repairs

Repairs and replacement of parts may only be carried out by an authorized specialist or the manufacturer. Only original spare parts may be used! If any damage is detected during control of the harness that affects airworthiness, the harness should be returned to the manufacturer for repair. This also applies to damage whose effects on the airworthiness of the system cannot be clearly determined.

ICARO Paragliders cannot be held liable for any errors made by check-teams not authorized by ICARO paragliders or by persons performing the check. They always work on their own responsibility!

***Any modifications to the harness other than those approved by the manufacturer will result in forfeiture of the sample test of the equipment.***

### **Inspection**

**Verification interval:** 24 months or 150 hours, whichever comes first.

***Without this inspection, the sample test of the harness will expire!***

**Recommendation: *Aluminum carabiners should be exchanged after two years at the latest, as they can get hairline cracks if handled improperly and are therefore dangerous.***

## **Terms of warranty**

---

ICARO paragliders guarantees 24 month for the proper processing, an operation within the allowable limits of proper operation and the fulfillment of the eligibility criteria of harness equipment at the time of first delivery by ICARO paragliders.

***Warranty is only valid for ICARO products with LTF/ EN certification.***

### **What is covered by the warranty?**

Provided that ICARO paragliders accept the fault the warranty contains all necessary spare parts related to the replacement or repair of defective parts and working time.

ICARO paragliders accept no freight costs (outbound and return transportation).

### **What are the conditions of the warranty?**

- ICARO paragliders needs to be informed immediately after the discovery of a defect and the defective product must be sent to us for testing.
- The harness was used in normal circumstances and maintained according to the instructions. This includes in particular the careful drying, cleaning and storage.
- The the harness were used only within the applicable guidelines and all rules have been complied with all times.
- All flights must be accounted for within the flight book.
- There were only original spare parts used and checks, exchange and / or repairs were conducted by an authorized dealer or by ICARO paragliders company / person and properly documented.
- A fully and correctly completed warranty card must be sent at least 6 weeks after buying the glider to ICARO paragliders commercial. Alternatively can this be sent via the appropriate online form on [www.icaro-paragliders.com](http://www.icaro-paragliders.com).



### What is excluded from warranty?

- Harnesses
  - that are used for training purposes, Acro or other official competitions,
  - which were involved in an accident,
  - which have been changed by yourself,
  - that were not purchased from an authorized dealer / flight school,
  - where the required inspection intervals were not met and the verification of the harness was not conducted by a ICARO paragliders authorized operation / person
- Damage
  - which has occurred due to improper treatment (i.e. storage in humidity, heat or direct sunlight)
  - caused by solvents, salt water, insects, sun, sand, humidity or “debag-jumps”.
  - caused by force majeure.
  - caused by the Para motor (Oil, fuel, damage in cause of the prop)
- Parts that need to be replaced due to normal wear and tear,
- Discoloration of the cloth material used,

In case of a concluded claim the period of warranty carries on. The period of warranty and the connected claim are not prolonged and are only valid until the original date of expiry. The freight costs (transport to and from) are not paid by ICARO paragliders.

We have made every effort to ensure that the information in this manual is correct. But please always keep in mind that it is only intended as a guide. These instructions are subject to change without notice.

You can always find the latest information on  
XEMA 2 at [www.icaro-paragliders.com](http://www.icaro-paragliders.com).

**ICARO** paragliders  
Hochriesstraße 1, D-83126 Flintsbach  
Telefon: +49 (0)8034 909700  
Telefax: +49 (0)8034 909701  
Email: [office@icaro-paragliders.com](mailto:office@icaro-paragliders.com)



## Annex

---

Please fill in the warranty card which you find on our homepage [www.icaro-paragliders.com](http://www.icaro-paragliders.com) and send it to us.

### Inspection of ICARO harnesses

Each ICARO harness, irrespective of type, shall undergo a visual inspection, including:

- Seat board for breakage or cracks, check straps for visible damage, cracks, chafing or fraying or open seams. Check all buckles, carabiners and other fastening and connection parts for corrosion, mechanical damage and proper function.
- All accelerator pulleys should be checked for tightness and firmness, the return rubber at the front of the seat area and the accelerator fixing rubber for brittleness.
- In the case of airbag protectors, the entire air filling area must be checked for cracks and other damage as well as for proper filling. For this you can use a hair dryer (cold level) and blow in the opening to check the function of the airbag and its tightness.
- For foam protectors, check all sizing of the jacket around the foam. In the case of reversible harnesses, leak tightness and damage must also be checked, especially on the area to be filled with air

***Repairs to the protectors and load-bearing parts of the harness may only be carried out by ICARO paragliders or a person / company authorized by ICARO paragliders.***

The 2-year check is to be confirmed after the check with date, name and signature.

***If the harness has been checked independently, from this point no longer the sample test is valid. The same applies when selling the harness.***

Confirmation of the inspection properly and according to the company's instructions by a person authorized by ICARO paragliders is carried out by means of a stamp.

This verification stamp must be completed in full (time of the next inspection, place, date, and signature and name of the inspector.) The inspection must be noted on the harness (eg nameplate) with the appropriate verification stamp.

<b>Check sheet for harnesses</b>					
Client (Name, Address):					
Type / size / year of construction :			Serial number:		
Certification number:			Date of last inspection:		
			Memos	yes	no
Seat strap system	Visible damages?				
	Areas of abrasion?				
Seat board	Visible damages?				
	Positioning of the straps ok?				
Straps	Visible damages?				
	Course of the straps?				
	Seams ok?				
Buckles and carabines	Visible damages?				
	Condition (closing properties, operation) ok?				
	main carabines (condition, age)				
	Operativeness ok?				
Protectors  Airbag -/ Foamed material	Visible damages?				
	Seams ok?				
	Valve ok?				
	Tightness airbag/ foam protector sheeting?				
	Conditions of any reinforcements ok?				
Speed bar	Visible damages?				
	Fixing rubber ok??				
	Return pulleys ok?				
	Lines ok?				
Rescue system	Visible damages?				
	Identification plate ok?				
	V-lines				
	Handle fitted and connected?				
Backpack (reversible harnesses)	Visible damages?				
	Zip ok?				
	Buckles ok?				
	Seams ok?				
Compatibility check effected?		Additional repairs carried out? Which?			
Type label affixed?					
Inspection stamp affixed?					
<b>Overall result</b>			<b>Next inspection:</b>		
As new					
Very good		<b>Next inspection when using the harness commercial:</b>			
Used					
Much used		Date, name and signature of the checker			
certification only for one year					
not airworthy					

## Description of the harness

