



Tandem - Passenger Harness



MANUAL

VERSION 1/2021

TABLE OF CONTENTS

<u>TO GET TO KNOW YOUR BATIS 2</u>	3
TECHNICAL DATA	3
OPERATION OF THE PROTECTOR	3
POSITION SETTING	4
<u>FLYING WITH THE BATIS 2</u>	5
<u>CARE AND REPAIR INSTRUCTIONS</u>	6
<u>TERMS OF WARRENTY</u>	7
<u>ANNEX</u>	9
CHECK RECORD FOR ICARO HARNESSSES	9

Congratulations on buying your
BATIS 2
harness and welcome the family
of ICARO - pilots!

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

This manual gives you information on the entire specific and general characteristics of the harness.

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.

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.

The use of this harness is entirely at your own risk.

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

Do not fly unless you are personally willing to assume all risks inherent in the sport of paragliding and all responsibility for any property damage, injury, or death, which may result from use of this sport.

Your harness is made with great care and state of the art, tested according European Standards EN 1651:1999¹, and Notification of the Federal Aviation Administration of Germany ² Its pattern tested as harness with foamed rubber protector is suitable for training and tandem flying.

It is strictly prohibited to fly the harness

- ***with damaged carabines, belts, buckles or protector***
- ***outside the specified weight range***
- ***in aerobatics***
- ***This product has been designed exclusively for paragliding. Any other activity such as skydiving or base jumping is absolutely forbidden.***

¹ *Harnesses –Requirements and test methods*

² *„Directives about airworthiness for hang- and paragliders (LTF NFL II 91/09)“.*

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 home page (www.icaro-paragliders.de).

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

Each alteration is dangerous and reactions are not predictable. Your harness will lose its pattern test result and warranty.

The manufacturer or distributor assumes no responsibility for accidents occurring while using it.

Every pilot must ensure that the harness is properly checked at regular intervals.

Environmental aspects:

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!

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To get to know your BATIS 2

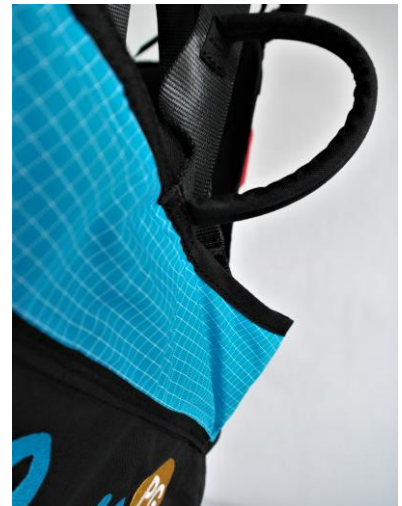
Allowed for training	yes
Allowed /certified for aerobatics	yes / yes
Allowed /certified for aerobatics	no/ no
Allowed /certified for towing	no/ no
Allowed /certified for flying with motor drive	no/ no

Technical data	
Harness	GH
Size	one size
Harness weight (kg)	2,7
Maximum take-off weight (kg)	120
Passenger size (cm)	150 - 190
Hangpoint height (cm)	46
Seat depth (cm)	45
Seat width (cm)	40
Check Intervall	2 years

The BATIS 2 is a harness for the use in a not motorized paraglider and is designed as a tandem passenger harness. It has no integrated rescue system container.

The straps for the passenger for take-off and flight as well as the chest strap with integrated fall protection ensure a high level of safety for the passenger.

The small pack size and low weight as well as the packing bag with integrated vario holder make handling easier for the pilot.



The protection on the bottom of the harness can be replaced if necessary / if it is defective.



Operation of the protector

The BATIS 2 has a type certified back protector made out of a special foam, which is sewn in a nylon fabric cover. Before every take off you have to check that the protector is completely filled up with air. Especially on low temperatures and after long disuse of the protector (if compressed during storage) it may take a little longer to be inflated completely.

During a hard landing the air inside of both protector systems will be compressed and the air will be deflated through the seams of the nylon fabric cover. The resulting deceleration distributes the impact energy over a longer period and protects the spine from extreme peak loads. However, even the best back protection does not warranty the prevention of back injuries.

For this reason, the protector should not be used for unnecessary seat board landings. With every use the protector will be less efficient and the effect of protection less - even if no damage is visible. If a damage is visible the protector is not to be used anymore as well as after a hard landing.

Position setting

Adjusting the lateral chest belts

Adjusting the lateral chest belts take place as the third step and offers on one side again the variation of the seating position. On the other hand, you adjust with the lateral chest belts the most comfortable seating position. During the adjustment pay attention to the fact that the body load is distributed equal on shoulder belt and lateral chest belt.

Adjusting the shoulder belts

Please note that with correct adjusting the shoulder belts are felt with light pressure on the shoulders. With the shoulder belts you adjust the harness on the pilot's height, but also you adjust the seating position between upright and lying.

Adjusting of the leg belts

When you put the harness on, please take care that the Click-Lock-buckles are closed correct and audible. The leg belts should be fastened tight but should leave your legs still enough space to move during take-off and landing phase. ***We recommend in any case that all adjustments and settings are done in start position of the passenger before the flight to warranty an optimal comfort.*** The buckles of the chest and leg straps are secured against unintentional opening. To open these buckles, you have to push both buttons of the buckle at the same time.

Adjust the chest belt

The Triple Lock buckle is the most innovative and safest buckle in the EDELRID range, as it is not possible to open the buckle unintentionally under load. Despite the high level of security, Triple Lock buckles are quick and easy to use. Three movements are required to open the buckle:

1. relieve (press the latch) and press the button,
2. Bend the buckle and
3. Release the button.



The chest strap should not be tightened too tight. This setting is important because it affects the overall stability of the harness. The closer, the more stability. The further, the more unstable, the lower the risk of twisting and the more effective weight shifting.

Flying with the BATIS 2

It is important to perform a preflight check before taking off. Please give the following points your special attention.

- Check the harness and carabiners completeness.
- Check that the (optional) front parachute pocket is correctly closed.
- Check that your harness adjustments have not changed.
- Check the connection risers / harness as well as the self-locking karabiners (locked and secured).
- Make certain to close all buckles, pockets and especially the Air-Bag zipper with its locking mechanism.
- Double check that all buckles are fully locked and secured by pulling firmly on them. Check that no line, tab or cloth is stuck / jammed in the buckles.

Tightening the chest strap provides more stability but less harness piloting efficiency. It increases the risk of riser twisting. On the contrary, loosening the strap provides more efficiency but can be dangerous in turbulent aerology while increasing the risk of falling towards the collapsed side of your glider and without being able to efficiently counteract the situation.

Stand up inside the harness and adopt an upright position in order to run to dissipate horizontal speed. Do not land whilst in the seated position, this could be dangerous.

Tandem flights

The BATIS 2 is only suitable as a passenger harness.

Towing

The BATIS 2 is suitable for towing if the main carabiners are used as attachment points for the towing release. There are no separate attachment points to mount a towing release.

Please check the towing release manual for a correct adaption on the harness

Behavior in particular cases

During water and strong wind landings the pilot should disconnect himself as soon as possible from the paraglider / harness after landing. For that please loosen the leg belts and then open the leg and chest buckles.

For tree landings, etc. the pilot should first secure himself against a possible crash and should wait for professional help.

Contrary to above recommendations, it is possible that a different behavior as described is required. The variety of possible situations not allows a universal or general advice for the right behavior. The right behavior is a case-to-case decision in full responsibility of the pilot

Care and repair Instructions

Care Instructions

- 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 second chance.
- It may take several days for your harness and your rescue system to dry out completely especially the lines of the rescue system, which take longer than the fabric.
- Do not fold and store your rescue system prematurely if it not completely dry. Mildew may damage your harness and your rescue system.

Repairs

The seal of approval can only be preserved if original parts are used. If you discover any damaged parts to the harness which might impede deployment, please send it back to the manufacturer to be repaired.

Repairs can only be carried out by the manufacturer or from the manufacturer authorized persons.

The aluminum karabiners should be changed every two years at the latest as the aluminum might get micro cracks from impacts during use.

Inspection

After 24 months, it is important to have your harness inspected by a trained ICARO technician.

Without regular certified inspections, your harness will lose its certification and warranty.

Only an authorized technician who has been trained by ICARO paragliders is authorized to sign and date the harness certification label and sign the manual.

Terms of warranty

ICARO paragliders warranty is 24 months 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?

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 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 harness was 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.

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 paramotor (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 warrenty carries on.

The period of warrenty 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.

Annex

Check record for ICARO harnesses					
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?				
	Container properly closed?				
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?					
Overall result		Next inspection:			
As new					
Very good		Next inspection when using the harness commercial:			
Used					
Much used					
certification only for one year					
not airworthy		Date, name and signature of the checker			