



# ALBA

## MANUAL

Version 1/2019

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Congratulations on buying your  
**ALBA 85,105,130**  
Rescue system and welcome to 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 **ALBA 85,105,130**.

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 rescue system 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.

***It is strictly prohibited to use the ALBA 85,105,130***

- ***beyond the maximum recommended weight***
- ***for skydiving***
- ***With damaged canopy, lines, connection belt or seams or***
- ***without regular check(check interval)***
- ***without the original manufacturer´s inner container.***

## **WARNING**

***Not suitable for use at speeds of more than 32 m/s (115 km/h).***

The use of this rescue system 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 paraglider.

Your rescue system is made with great care and state of the art and is pattern tested as a light rescue system for tandem flying.

All technical data and instructions 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)).

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

Each alteration (lines, canopy) is dangerous and reactions are not predictable. Your glider 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 rescue system is properly checked at regular intervals.

## **Environmental aspects**

The materials of which a paraglider is made require a special waste disposal. So please send disused gliders 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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ICARO Paragliders, all other rights are reserved.

## To get to know your **ALBA 85,105,130**

Technical data	ALBA 85	ALBA 105	ALBA 130
area	23,90 m <sup>2</sup>	29,00 m <sup>2</sup>	35,80 m <sup>2</sup>
TOTAL LENGTH (end of the riser to canopy top uninflated)	435 cm	477 cm	530 cm
Number of cells	13	14	16
Weight including container	1,4 kg	1,65 kg	1,95 kg
Volume of packed RS	3018 ccm <sup>3</sup>	3458 ccm <sup>3</sup>	3850 ccm <sup>3</sup>
Maximum payload	85 kg	105 kg	130 kg
Rate of descent by max. payload	5.45 m/sec	5,4 m/sec	5,45 m/ sec

The ALBA 85, 105, 130 rescue system is made from high quality light materials and has a circular canopy and a middle line. Manually deployable rescue system is suitable paragliding pilots in an emergency situation.

ALBA 85,105,130 rescue systems from ICARO are characterized by a high level of reliability and maximum material strength. Fastest inflation while maintaining moderate sink rates are features of these systems.

The material is air permeable, strong nylon. There are bands sewn into the main seams to strengthen the canopy. The base and side edges are reinforced with bands.

## What to do when it happens?

In an emergency situation, the handle of the rescue system is given a sharp pull. The special thread which holds the closing splint breaks. The pilot throws the container into the air. As the suspension lines become tight, the container will fall away and the reserve will open.

After opening, pull the paraglider on one side of the C or B risers or brake lines. Thus you prevent a V- emplacement between paraglider and rescue equipment and thus the dangerous commuting. Land with the skydiving technique (legs together, slight bend in the knees), roll off, run around the cap (wind in the back) and pull in the parachute and parachute so as not to be ground over the ground.

***When you are flying recurrently grab the position of the handle so you can find it in an emergency!!***

***If you have enough height, first try to resolve the problem and stabilize the glider as far as possible (danger of screwing of the bailout). If you have not enough height don't hesitate for pulling the rescue. Do not forget to unhand the rescue handle! Don't use of this rescue system with any alternative inner container: the speed of opening and opening shock test has been completed using the inner container supplied.***

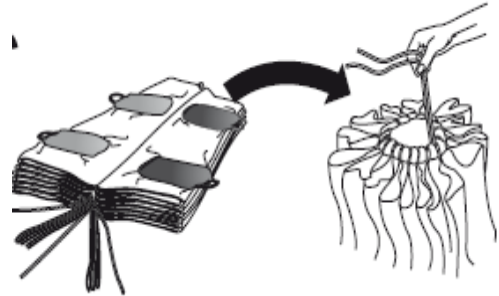
## Packing Instructions

Before packing the rescue system it is important that the canopy is spread out on the ground for about six hours.

If possible, it would be even better to hang it in the air one night long. Before the rescue system gets packed, it must be looked over. If it has been deployed, it must be properly checked. After having the rescue system packed, please ensure that rescue system and harness fit to each other. The force measured in the deployment handle should be between 50 and 80 N.

In order to stretch the canopy, the top must be fixed to a fixed object. Lay down the canopy carefully and divide the tracks.

For this purpose use the auxiliary loops on the outside of the cap along the web seams. Pull a help line through the upper fold loops and tighten the canopy.



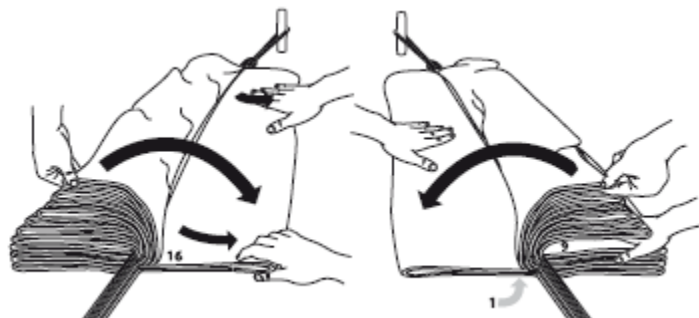
Next, the suspension lines are sorted. It is important to make sure that the lines are on the outside and the middle lines in the middle. There are no lines to go across the other lines or have knots and entanglements.



After arranging the segments are divided into two equal halves. The same number of segments, so that the cap is then a flat surface. The weighting of the cap base with sandbags or similar.



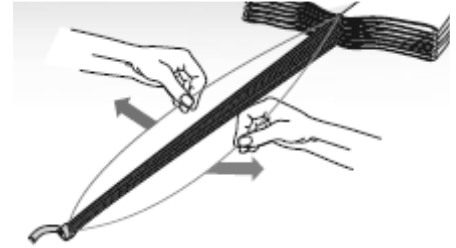
Then the left side is folded on the right, and then each segment individually again returned to its old side where the segments must be laid precisely to each other. (pay attention to the numbering of the segments, the first segment on the left is the 1.



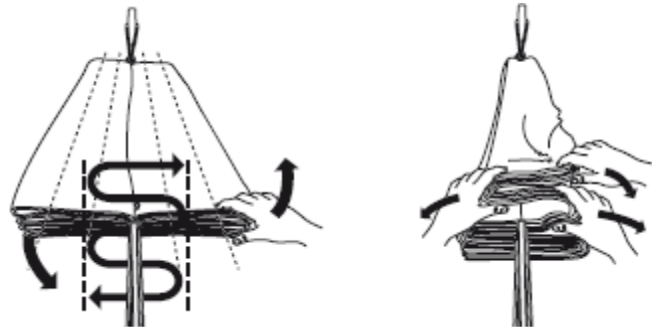
The same with the other side.

Then check if there are as many segments on the left and right sides. Carefully align the entry edges at the base of the canopy and place them on top of each other.

Then check whether the two top and bottom suspension lines run without any loops, knots or other entanglements from the base of the cap to the connection belt.



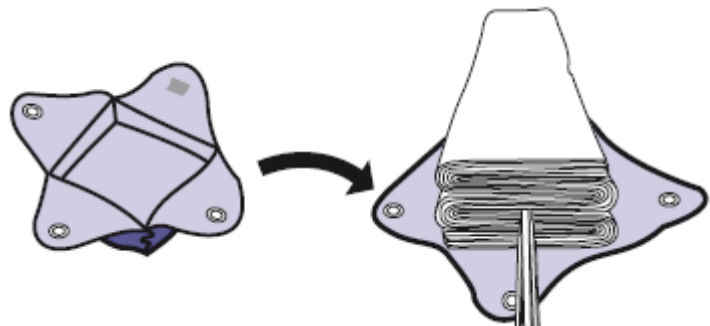
Now the left third is placed on the middle and the right third is pushed under the middle (S-hit)



Synchronously, the upper part is also launched. Release the cap from the upper attachment.

## ***At least now the packing line must be removed!***

Slide the container under the canopy base so that the part with the rubber loop is under the canopy.



Then fold the cap accordion-like from the crown to the base of the canopy so that it fits into the inner container. Close the rear and the two side container leaves.

The suspension lines are laid with the help of two finger loops. The resulting loops are secured with rubber rings and the lines are placed in the container.



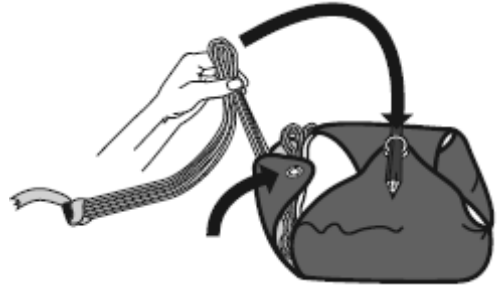
***This rescue system has been tested and found compliant using the original manufacturer's inner container. Use of any other inner container may produce different results, including failures.***



Use new rubber rings every time you pack. This special rubber rings you get at ICARO Paragliders.

Using a packing line, the rubber loop of the inner container is pulled through the eyelets, closed with the last loop of the suspension

Make a note of the pack in the packing instruction booklet.



### Connecting rescue system with the handle

Most of the harnesses have a corresponding release handle for the rescue parachute container integrated in the harness. This release handle must be connected to the inner container.

The ICARO inner container has two loops where the handle of the harness can be inserted (center, side).

Handles for front and back containers are always hung in the central loop, for side containers and for containers under the seat board, the side loop is used.



The rescuer handle must be firmly connected to the loop that is attached to the inner container.

***Note the installation instructions for the rescue equipment in the manual of your harness.***

***If the handle does not match your inner container, contact your dealer or your harness dealer.***

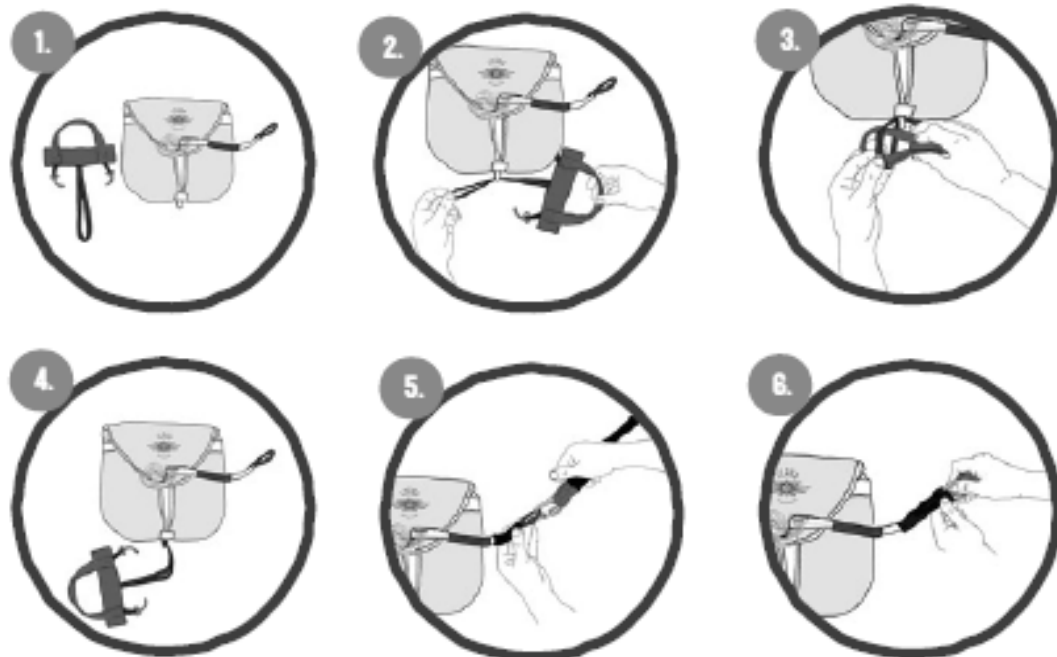


## Connecting the rescue device with the harness

As a connection between the harness of the harness and the strap of the rescue system is a Schnellschraubglied steel with at least 8 mm diameter and a breaking load of 24 kN.

Special attention must be paid to the fact that the quick-action member cannot rotate.

For this purpose, above and below the Schnellschraubglied fix the connection belt and the strap with fabric tape, cable ties, strong rubber rings, etc., against rotation. Otherwise there can be dangerous cross-loads.



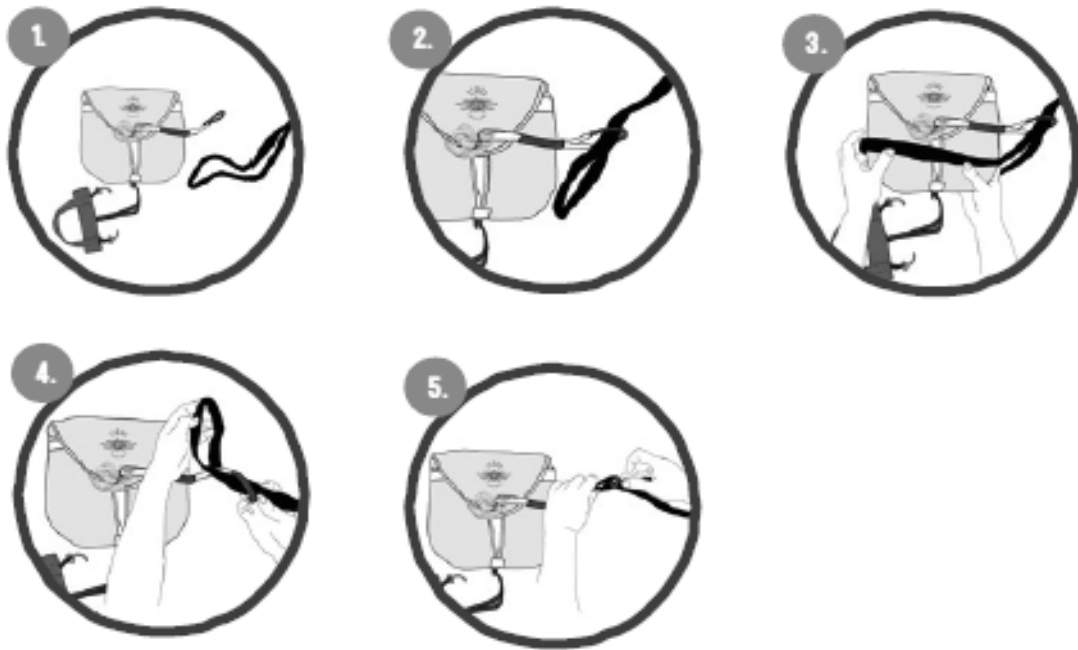
As an alternative to this connection method, you can also connect the strap of the harness with the strap of the rescue device without a Schraubglied.

For this, the carrying strap of the rescue device is inserted through the connecting belt, the inner container of the rescue device through the carrying strap and the resulting loop tightened.

***The loop must be tight around the strap.***

To prevent this connection from loosening, the same securing method is used as with the quick-action member, in which these fixations are placed **above and below the node**.

Loosens the connection and the two straps are no longer tightened, would arise when opening the rescue device by the resulting friction (by tightening the two straps) such a burden that the risk of tearing the straps is given.



***It is important to pay attention to the symmetry of the two halves both in the connection belt on the harness and the carrying strap of the rescue device. For rescue systems with two main lines, both lines must be looped into the connection belt.***

After inserting the rescue system in the container provided on the harness this is closed according to the description of each harness.

### **Compatibility- check**

A control of every new combination of rescue system and harness/outer container has to 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 has to be correct and in conformity to the construction guidelines.

***The check has to be recorded in the documentation of the rescue system. The throwing movement should be practiced every time the rescue system is repacked.***

### **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
- 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!!

***The tensile force for triggering may be max. amount to 70N. The throwing motion of the rescue system should be practiced every time when it is repacked under conditions that are as realistic as possible.***

## Care, Maintenance and repair

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### Care Instructions

- Please do not store your rescue system in the vicinity of acids, grease, oils or paint. To ensure safe operation, the system needs proper maintenance and care.
- Do not store your rescue system in extreme temperatures or humidity (more than 30<sup>0</sup> C Or 55-65% humidity).
- A humid or wet canopy needs repacking.
- Exposure to UV-rays causes deterioration the fabric.
- Please only use clean and fresh water to clean your rescue system or container.
- Wet cloth stored in warm conditions will begin to mould and significantly lose structural strength. Rescue systems in this condition must be brought to the manufacturer to be checked out.

***It may take several days your second chance 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

***Repairs and replacement of parts may only be carried out by an authorized specialist or the manufacturer. Only original spare parts are to be used!***

***Any modification to the rescue equipment, other than those approved by the manufacturer, will result in forfeiture of the sample test of the equipment.***

***If any damage is found during the control of the rescue system which affects the airworthiness of the device, the parachute must be returned to the manufacturer / sample supervisor for repair. This also applies to damage whose effects on the airworthiness of the system can not be clearly determined.***

ICARO Paragliders can not be held liable for errors made by check-ups or persons performing the check. They always work on their own responsibility!

If in doubt about the proper performance of the checks or the airworthiness of the device, always contact the ICARO Paragliders or, if necessary, send the device directly to us for inspection. Use Limitations, packing- and check intervals

### Packing and check interval

**12 month;** the rescue system also must be aired recurrent

#### Check interval

**2 years;** when the rescue system was opened after a flight accident the rescue system is to be checked.

***Without regular certified inspections, your glider will loose its pattern test result and warranty.***

## Use limitation

**10 years;** The rescue system is allowed to be used for a time span of 10 Years by observance of the regulations for packing and checking. Certification is no longer valid thereafter.

The certified life span can be extended by a further three years, if the rescue system is checked by the manufacturer every year.

**Important: *Packing and checks of the rescue system must be documented otherwise warranty is cancelled.***

## Terms of the warranty

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

***Warranty is only guilty 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.
- 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?

- Rescue equipment,
  - which has been thrown for a emergency,
  - 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 rescue system 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 or humidity
  - caused by force majeure.
  - caused by the paramotor (Oil, fuel, damage in cause of the prop)
- 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.***

Team ICARO thank you for your trust in our products.

Should you have any questions, ideas or criticism please contact us.

This paraglider has been developed and produced by modern technology and will give you years of pleasurable and unforgettable flight experiences.



## Annex

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

<b>Checksheet for rescue systems</b>					
Client (Name, Address):					
Type / size / year of construction :			Serial number:		
Certification number:			Date of last inspection:		
			Memos	yes	no
Was an emergency tripping necessary?					
Where did you land after this emergency tripping?					
Necessary repairs?					
Was there a splashdown?					
Canopy	Visible damages?				
	Any dirt on the canopy ?				
	Holes in the canopy?				
	Seams ok?				
	Notations on the panels ok?				
	Certification stamp readably?				
	Apex fixing loops ok?				
Lines	Visible damages?				
	Seams ok?				
	Middle lines frayed?				
	Connection middle line to suspension lines on the top ok?				
	Suspension lines frayed?				
Inner container	Visible damages?				
	Loops for the deployment handle ok?				
	Rubber loop ok?				
	Eyelets ok?				
	Deployment handle correct fixed?				
Container correct closed?					
Compatibility check effected?			Additional repairs carried out? Which?		
Pack control booklet noted?					
Inspection stamp affixed?					
<b>Overall result of the rescue system</b>			<b>Next inspection:</b>		
As new					
Very good					
Used					
Much used					
certification only for one year					
not airworthy					
			Date, name and signature of the checker		

## ***Description of the rescue system***

