SKYWALK

PRO GUIDE

X-ALPS 4

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1 INTRODUCTION

Welcome to skywalk!
Congratulations on the purchase of your new X-ALPS4 and thank you for your trust in us and in our products. In this manual you will find product-specific information that will help you quickly get to know your new paraglider to ensure your fun for a long time. General information about the most important safety-relevant points for handling your paraglider can be found in the attached „BASIC GUIDE".

We are always open for questions, comments or critique and are happy to provide you at any time with further information!

Your skywalk Team
PURE PASSION FOR FLYING

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The latest version of the manual can be found on
www.skywalk.info

2 DESCRIPTION

The X-ALPS4 is especially designed for the requirements of Hike & Fly competitions. Developed with the technological know-how of our R&D team and the intense experience of our X-Alps athletes. The result is an ultra-lightweight wing with unparalleled performance. The X-ALPS4 boasts with its smoothness and a very precise handling. The new profile, the line geometry and skywalk's innovative Speed Control, which makes it possible to control the angle of attack in turbulent air at high speeds with the rear risers, make the X-ALPS4 undisputedly the most potent three-line available!

PILOT REQUIREMENTS

The X-ALPS4 is designed for pilots well practised in recovery techniques, who fly very actively and have significant experience of flying in turbulent conditions.

SCOPE OF DELIVERY

The X-ALPS4 comes standard with Softbag light, compression strap, glider backpack and "BASIC GUIDE".

3 TECHNICAL DATA

Size	XS	S	M
Cell number	82	82	82
Area flat (m²)	20,70	21,70	22.80
Wingspan flat (m)	12,04	12,32	12,63
Aspect ratio flat	6,99	6,99	6,99
Area projected (m²)	17,49	18,34	19,27
Wingspan projected (m)	9,71	9,94	10,19
Aspect ratio projected	5,40	5,40	5,40
min. profile depth (cm)	31	32	33
max. profile depth (cm)	203	208	213
Middle line length without risers (m)	6,87	7,04	7,21
Line consumption (m)	240	246	252
Weight (kg)	3,5	3,7	3,9
Take-off weight from - to (kg)	70-85	70-95	85-105
Winch certified	yes	yes	yes
JET FLAP Technology	no	no	no
Paramotor homologation	no	no	no
Accelerator	yes	yes	yes
Maximum speed bar travel (mm)	180	180	180
Brake line travel max. (cm)	52	54	56
Trimmers	no	no	no
Number of seats	1	1	1

4 LINE SYSTEM

The layout of the suspension points is designed for optimal load distribution and a long lifespan. With all considerations and calculations however, our focus is always on safety. The mix of materials used on the lines of the X-ALPS4 is an ideal combination of durability, low stretch and low drag.
The skywalk X-ALPS4 has 3A-, 3B-, 2C-, and 1 stabilo line. The main-stabilo is connected with the B-riser. The brake lines are not load-bearing and lead from the trailing edge over the main brake lines through the low-friction rings on the C-risers to the brake handles.
A marking on the main brake line indicates the position of the handle attachment.
This setting should not be lengthened, for example, to provide more brake travel in extreme flight situations or during landing, nor shortened such that the glider is flown constantly with some brake on.

To provide a better overview and to make sorting easier:
- → the A-mainlines have a red loop cover.
- → the BI, BII-mainlines have a yellow loop cover.
- → the C-mainlines and the BIII-mainline have a blue loop cover.
- → the stabilo lines have a pink loop cover.
- → the mainbrake lines are orange.
- → the remaining lines are unsheated.

The lines are attached with loops to oval shackles and secured with rubber rings.

The skywalk X-ALPS4 has 4 risers per side:
- → the two inner A-mainlines lead to the inner A-riser, the outer A-line leads to the outer A-riser.
- → the two inner B-mainlines as well as the stabilo lines lead to the B-riser.
- → the outer B-mainline as well as the C-mainlines lead to the C-riser.

5 ACCELERATION SYSTEM

The skywalk X-ALPS4 can be equipped with a foot-operated acceleration system. The acceleration system effects the A1, A2 and B-risers. Both risers are equipped WITHOUT trimmers.

SPEED CONTROL HANDLE

Handle on rear riser. This handle allows the pilot to even out turbulence, speed and pitch while flying on speed bar without having to release the speed bar. Pull down the handle, but only so far that the line shackles on the rear riser don't drop below the line shackles on the A-riser.

A schematic drawing of the risers can be found at page 14.

CAUTION

WHEN FLYING AT TRIM SPEED, THE HANDLE SHOULD ONLY BE USED FOR STEERING THE GLIDER IN CASE OF EMERGENCY.

6 FLIGHT TECHNIQUES AND CHARACTERISTICS

WINCHTOWING

The skywalk X-ALPS4 is well suited for winch towing. Make sure that you only use certified winches and that you climb from the ground at a flat angle.

The pilot must have had proper towing instruction and must ensure that the winch operator has had proper training that includes paragliders. When launching on a winch, always fly with a lot of feeling and don't brake too much as your glider will already have an increased angle of attack. We recommend the use of a towing adapter.

FLYING WITH A MOTOR

Currently, the X-ALPS4 has no certification for flying with a motor. You can find out the current status of motor certification at any dealer or importer, or by asking skywalk directly.

You can find further information on practices and characteristics of flying in the enclosed "BASIC GUIDE".

7 DESCENT TECHNIQUES

BIG EARS

In contrast to the spiral dive, with big ears your forward speed is higher than your sink speed.
This descent method is used to quickly leave dangerous areas in a desired horizontal direction. The danger of canopy disturbances in turbulent air is greatly reduced with big ears.
Proceed as follows:
- → Hold the outer A-lines, which are suspended on separate A-risers, below the line shackles and pull down on the lines or risers.
- → Keep the brake handles and the outer A-lines in your hands during the maneuver. The glider remains controllable with weight shifting.
- → To increase both sink rate and forward speed, you can also optimize this maneuver with the speed bar.
- → To recover from the maneuver, release the A-lines and the glider normally will open by itself.
- → To speed up the opening, pull on the brakes lightly. It is better to first open one side and then the other to minimize the risk of a possible stall.

Examples:
- → If the pilot is surprised near a summit with little ground clearance by strong wind or a thundercloud, neither a B-stall nor a spiral dive can help.
- → If the pilot is stuck in very strong lift, it is advisable to exit the lift band with the use of big ears and to find sinking air in which to lose altitude.

B-LINE STALL
This manoeuvre is not possible with the X-ALPS4. For fast descent use a spiral dive or big ears.

You can find further information about descent techniques in the enclosed "BASIC GUIDE".

8 EXTREME FLIGHT

COLLAPSES
The skywalk X-ALPS4 has been certified with special folding lines. The provocation of side and front collapses by pulling on the A-risers is not possible and can lead to unpredictable reactions!

You can find further information about extreme flight behavior in the enclosed "BASIC GUIDE".

9 MATERIALS

The skywalk X-ALPS4 is manufactured from the highest quality materials.
skywalk has selected the best possible combination of materials with regard to resilience, performance and longevity. We are aware that the durability of the glider is a deciding factor in the pilot's satisfaction.

WINGS AND RIBS

Upper sail:	Porcher Skytex 27g
Lower sail:	Porcher Skytex 27g
Ribs:	Porcher Skytex 27g hard

LINES

A, B, C Main lines:	Edelrid 8000-U230/190/130
A, B, C Middle lines:	Edelrid 8000-U90/70
A, B, C Top lines:	Liros DC60/35
Brake lines:	Liros DFLP 200/32, DC35 Edelrid 8000-U130/50

RISERS
The risers are made of 6mm Dyneema webbing. Stretching values, strength and stability of this material is among the highest of all webbing products available.

10 HOMOLOGATION

The X-ALPS4 is certified to LTF 09 and EN926-1, EN926-2 in the category D.
Special folding lines were used when X-ALPS4 was going through certification. Without these folding lines, asymmetric and symmetric collapses (tucks and frontals) may not behave or recover as they did in certification tests. The folding lines have a special setting according to the LTF/EN D requirements.
At the canopy, the folding lines are attached to special loops at the test model. At the lower end, their three main lines are attached to a special riser. Please contact skywalk if you have any questions regarding use of the folding lines and riser.
The X-ALPS4 is defined as a lightweight sport aircraft with an empty weight of less than 120kg in the paraglider category. The many homologation tests are the last hurdle in the development of a skywalk paraglider. The homologation test flights only take place when the test team is completely happy with the glider development.

We remark that the certification results will differ during flight in thermals or turbulent air. The homologation informs solely regarding the paraglider performance during extreme-flight- manoeuvres performed in stable air conditions. These extreme-flight-manoeuvres during the homologation process should thus not be over-valued.

Remember that certification maneuvers were carried out with a harness in the group GH with a carabiner distance (middle to middle) of 42-46 cm. If another harness is used, the glider may display flight characteristics that differ from those in the description.

11 PACKING INSTRUCTIONS

Carefully packing your paraglider guarantees a consistently high level of quality. Stick to the packing instructions described here to protect the Rigid Foils and use the included Packing Tubes to avoid unnecessary bending of the Rigid Foils. The supplied Softbag simplifies the packing process.

Gather up your glider and place it on the Softbag. At the bottom of the Softbag is a toggle button where you can attach the risers later. The trailing edge of the glider should lie in the direction of the toggle button.

Lay the Rigid Foils of the leading edge on top of one another. It's best to start from the middle and work on one half of the glider, then do the second half and place its Rigid Foils next to those of the first half.

Turn the entire leading edge 90° on its side and fix the glider with the first compression band to the Softbag.
Attention: With this technique, the glider is like an accordion from wingtip to wingtip and is not folded in the middle! This protects the middle cells and the Rigid Foils from unnecessarily stress.

Now sort the rest of the glider lengthwise to the trailing edge and fix it with the remaining compression bands.

Pass the two risers through the rubber loop and attach them with the carabiner loops to the toggle button.

Carefully close the zipper, making sure you do not pinch any lines or glider material. Attach the first Packing Tube about a third of the way down and fold the leading edge over the Packing Tube. Make sure that the side of the Softbag with the lettering is at the bottom.

Fix the second Packing Tube about two-thirds of the way down and fold the end over the Packing Tube.

Close the plastic clip.

Finally, use the compression bands to compress the Softbag even more.

Tip: For a particularly gentle storage, lay out the Softbag lengthwise when not using the paraglider.

12 CLOSING WORDS

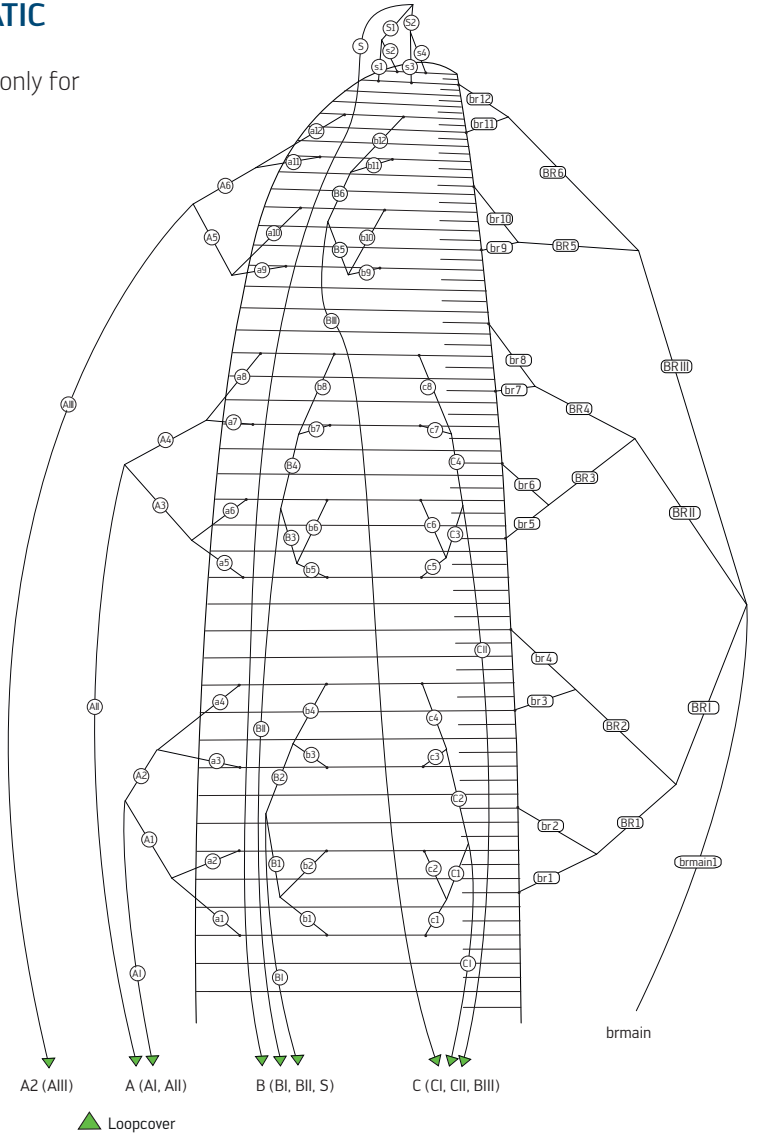
The skywalk X-ALPS4 is at the pinnacle of paraglider development in the market for ultralight high performance gliders and shows what is possible regarding performance, safety and innovation. It cost us a lot of time to develop this glider, but it was also a lot of fun. In this development we recognize the challenge of making the right product for every area and individual taste. We are pleased if you notice this during your first flight and if you feel a certain unity with your glider from the very beginning.
The X-ALPS4 will provide you with plenty of joy over many years if you treat it and care for it properly. Respect for the demands and dangers of our sport are essential for successful and beautiful flights.

Even the safest paraglider can be dangerous due to misjudgments of meteorological conditions or pilot error. Always remember that flying sports are potentially risky and that you are responsible for your own safety. We advise you to fly carefully and to respect laws in the interest of our sport, because every pilot always flies at his or her own risk!

WE WISH YOU A LOT OF FUN WITH YOUR NEW GLIDER AND ALWAYS HAPPY LANDINGS!!
Your skywalk Team

13 LINE SCHEMATIC

This line schematic is only for illustration purposes.

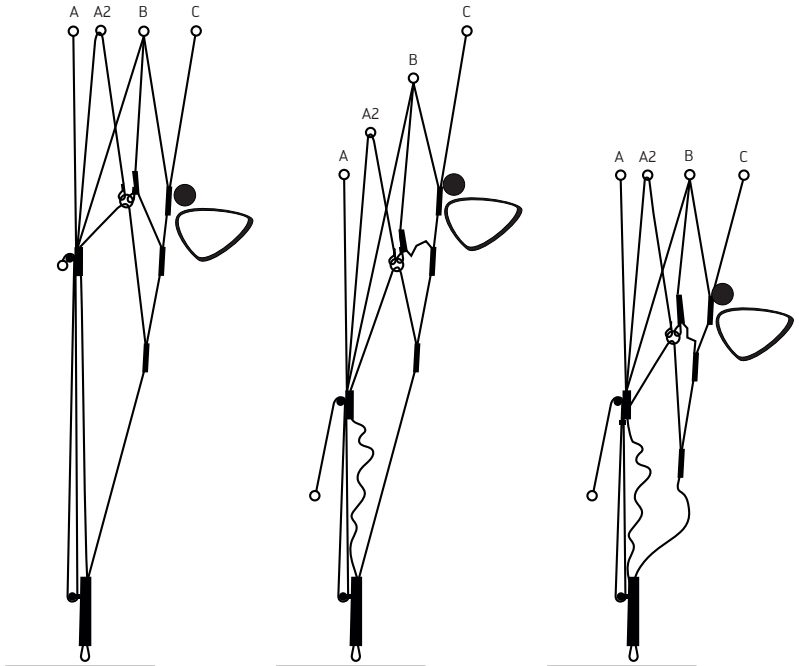


14 LINE LENGTH

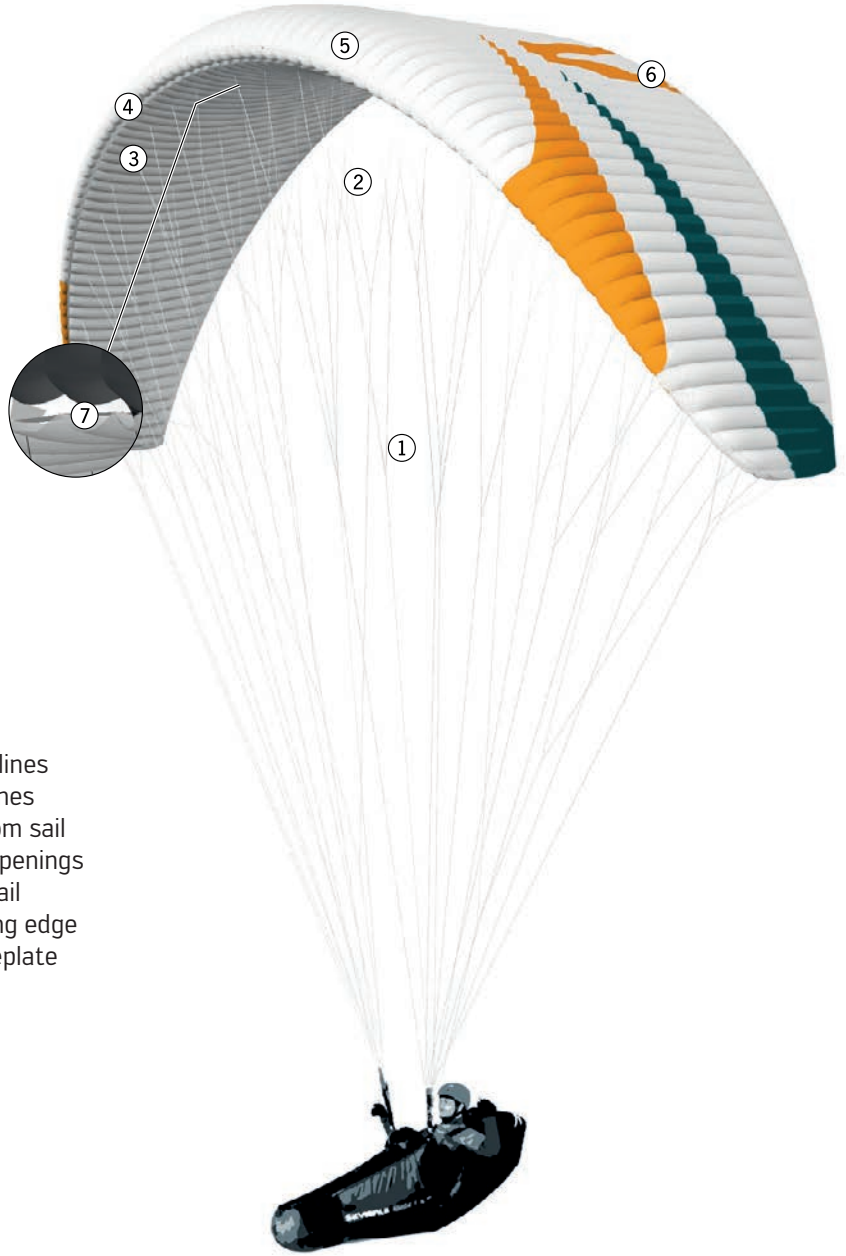
Total line length X-ALPS4 size: XS, S and M: www.skywalk.info

Single line length X-ALPS4 size: XS, S and M: www.skywalk.info

15 RISERS AND SPEED CONTROL



16 OVERVIEW GLIDER



1 Main lines
2 Top lines
3 Bottom sail
4 Cell openings
5 Top sail
6 Trailing edge
7 Nameplate

17 TEST PROTOCOL

Date:			
Customer, Name:			
Adress:			Phone:
Glider:	Size:	Serial number:	
Type certificate number:		Date of last check:	
Date of first flight:	Year of construction:		

Accomplished checking:	Results [+/–]:	Description of failure:	Suggested repairs:
Identification:	+ -		
Visual check of canopy:			
Upper surface:	+ -		
Lower surface:	+ -		
Profiles:	+ -		
Line flares:	+ -		
Leading edge:	+ -		
Trailing edge:	+ -		
Crossports:	+ -		
Visual check of lines:			
Seams:	+ -		
Abrasion spots:	+ -		
Core withdrawals:	+ -		
Visual check of connectionparts:			
Suspension line screw locks:	+ -		
Risers:	+ -		
Length measurement:			
Risers:	+ -		
Lines:	+ -		
Examinations of the canopy:			
Firmness of canopy:	+ -		
Porosity:	+ -		

Examinations of the lines:			
Firmness of main lines:	☐ ☐ ☐ ☐ ☐ daN		
	Results [+/–]:	Description of failure:	Suggested repairs:
Visual check of trimming:	+ -		
Checkflight necessary?	+ -		
Type certificate patch?	+ -		
Identification plate?	+ -		

Condition:

- ☐ New
- ☐ Very good condition
- ☐ Good condition
- ☐ Well used
- ☐ Heavily used, but within homologation standards, frequent checks required
- ☐ No longer airworthy, outside of the limit values.

Repairs made?:

Signature of tester:	Date:
Name of tester:	Firm stamp:

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