

## SKYWALK

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## 1 INTRODUCTION

## Welcome to skywalk!

Congratulations on the purchase of your new X-ALPS6 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

 $\label{eq:Edition 1.2 / 10_25}$  The latest version of the manual can be found on

www.skywalk.info



#### 2 DESCRIPTION

The X-ALPS6 was developed to meet the extreme challenges of the Red Bull X-Alps. It is a high-performance tool for pilots who need to rely on every detail. Whether you're facing a steep ascent, a technical take-off site, or long XC flights in rough conditions – the X-ALPS6 delivers uncompromising efficiency, precise control, and absolute reliability, even when conditions push you to the limit.

#### PILOT REQUIREMENTS

The X-ALPS6 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-ALPS6 comes standard with SOFTBAG, Packing Tube and "BASIC GUIDE".



#### 3 TECHNICAL DATA

Size	75+	85+	95+	105+
Cell number	73	73	73	73
Area flat (m²)	220,40	21,48	22,60	23,70
Wingspan flat (m)	11,56	11,86	12,16	12,46
Aspect ratio flat	6,6	6,6	6,6	6,6
Area projected (m²)	17,63	18,56	19,53	20,48
Wingspan projected (m)	9,54	9,79	10,04	10,29
Aspect ratio projected	5,18	5,18	5,18	5,18
max. profile depth (m)	2,17	2,23	2,29	2,34
Middle line length without risers (m)	7,18	7,37	7,56	7,75
Line consumption (m)	197	202	207	212
Weight (kg)	3,45	3,60	3,75	3,80
Take-off weight, certified from-to (kg)	55-78	70-88	75-98	85-108
Winch certified	yes	yes	yes	yes
JET FLAP Technology	no	no	no	no
Paramotor homologation	no	no	no	no
Accelerator	yes	yes	yes	yes
Maximum speed bar travel (mm)	150	160	160	160
Brake line travel max. (cm)	48	49	50	52
Trimmers	no	no	no	no
Number of seats	1	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-ALPS6 is an ideal combination of durability, low stretch and low drag.

X-ALPS6 is equipped with three A- and three B- main lines per side. The brake lines are not load-bearing and lead from the trailing edge over the main brake lines through the brake pulleys on the B-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.

4 Description Technical Data I Line System 5



# To provide a better overview and to make sorting easier, the lines have different colors:

- → the A-main lines are magenta.
- → the B-main lines are blue.
- → the main brake lines are orange.

The lines are attached with loops to oval shackles and secured with plastic inserts.

## The skywalk X-ALPS6 has 3 risers per side:

- → the as1 and as2 main lines lead to the A1-riser.
- → the as3 main line leads to the A2-riser.
- → the B main lines lead to the B-riser.

A schematic drawing of the risers can be found at the end of the manual.

## **5 ACCELERATION SYSTEM**

The skywalk X-ALPS6 can be equipped with a foot-operated acceleration system. The acceleration system effects the A-risers.

Exact lengths of the accelerated risers can be found at the end of the manual.

#### **B-RISER CONTROL**

A handle on the B-riser allows the pilot to even out turbulence, speed and pitch while flying on speed bar without having to release the speed bar.

At trim speed, make sure to set only short, corrective impulses, otherwise there is a risk of stalling the wing due to strong inputs!

Any other adjustable, removable or variable devices are not available.

## **6 FLIGHT TECHNIQUES AND CHARACTERISTICS**

#### WINCHTOWING

The skywalk X-ALPS6 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-ALPS6 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:

- → Step on the speed bar 50%.
- → Grab the outer B-lines (bs3) above the line shackle with your palms facing outward and pull the lines down carefully.
- → Keep the brake handles and the outer B-lines in your hands during the maneuver.
- → To recover, slowly release the B-lines. The glider usually will reinflate by itself.
- → As soon as the glider is fully open, release the speed bar.

## Examples:

- → If the pilot is surprised near a summit with little ground clearance by strong wind or a thundercloud a spiral dive can't 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 maneuver is not possible with the X-ALPS6.

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-ALPS6 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-ALPS6 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. The ultra-lightweight construction requires careful handling. Spare parts can be obtained from skywalk.

#### WINGS AND RIBS

Upper sail:	 Dominico 10D
Lower sail:	 Dominico 10D

Ribs: Porcher Skytex 27 hard

#### LINES

Main lines:	Edelrid 8001U - 340/190/130; Liros PPSLS 125
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Middle lines: Edelrid 8001U - 190/130/90/70/50
Top lines: Edelrid 8001U - 90/70/50, 9200-30

Brake lines: Liros DFLP 200/32: Edelrid 8001U - 190/50, 9200-30

#### **RISERS**

Cousin Freres 7 mm webbing

#### **PULLEYS**

Ronstan ball bearing

#### SHACKLES

Jootech oval

## 10 TRIM CHECK

Since a trim change has a greater effect with two line levels, we recommend checking the trim after the first 25 flying hours.

To simplify trimming, the B-mainlines have been equipped with an additional loop, which allow the checkcenter to make a quick correction.

#### 11 HOMOLOGATION

The X-ALPS6 is certified to EN926-1, EN926-2 in the category D and to LTF category D. The X-ALPS6 is defined as a lightweight sport aircraft with an empty weight of less than 120 kg 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-maneuvers performed in stable air conditions. These extreme-flight-maneuvers 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 40-48 cm. If another harness is used, the glider may display flight characteristics that differ from those in the description.

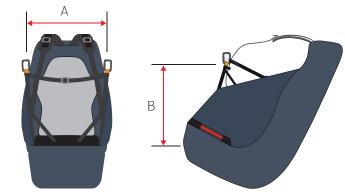
#### **FOLDING LINES**

Special folding lines were used when X-ALPS6 was going through certification. Without these folding lines, collapses may not behave or recover as they did in certification tests. The folding lines have a special setting according to the homologation requirements. The folding lines are attached to special loops directly in the cell openings at the leading edge. At the lower end, the riser of the folding lines is hooked into the main carabiner. During the flight, the folding lines are loose and not under tension.

Please contact your skywalk dealer if you have any further questions regarding use of the folding lines.



#### HARNESS MEASUREMENTS DURING THE TEST FLIGHTS



Width of harness attachment points

Height of harness attachment points

Total w	eight in flight (kg)
Width	(cm-measurement ,A')
Height.	(cm-measurement .B')

< 80	80-100	> 100
$40 \pm 2$	$44 \pm 2$	$48 \pm 2$
40 ± 1	42 ± 1	44 ± 1

## 12 CLOSING WORDS

The skywalk X-ALPS6 is at the pinnacle of paraglider development in the market for ultralight high performance wings 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-ALPS6 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.

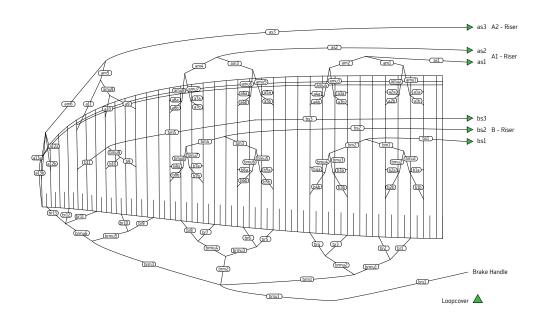
Even the safest paraglider can be dangerous due to misjudgments of meteorological conditions or pilot error. Always remember that flying sports are potentially risky and that you are responsible for your own safety. We advise you to fly carefully and to respect laws in the interest of our sport, because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

The total line length has to be measured under a tension of 50 N. The difference between the measured length and the original length should not exceed  $\pm$  10mm. Compliance of the test sample's suspension lines, brake lines and risers were checked by the testing laboratory after the test flights were completed.

Total line length and single line length X-ALPS6 size 75+, 85+, 95+ and 105+: www.skywalk.info

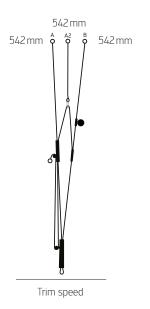
10 Homologation | Closing Words



## **15 RISERS**

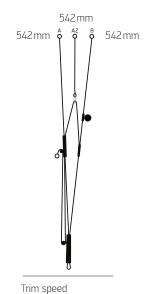
The difference between the measured riser lengths and the original riser lengths should not exceed  $\pm 5$ mm.

X-ALPS 6, size 75+



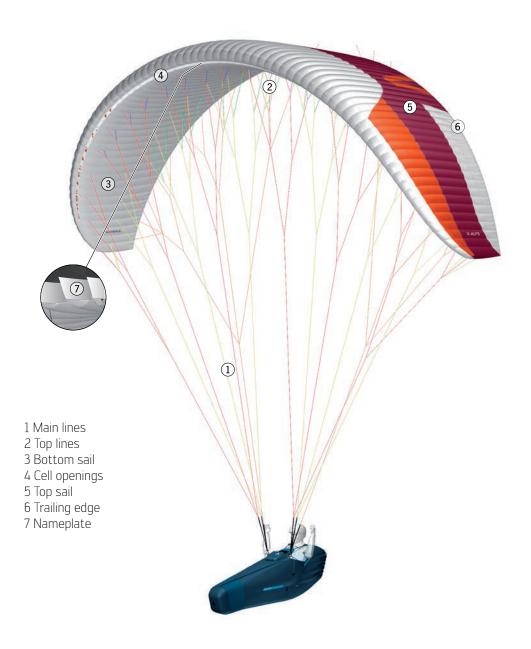
542 mm 8
465 mm A2
390 mm A2
Accelerated flight

X-ALPS6, sizes 85+, 95+and 105+





## **16 OVERVIEW GLIDER**



## SKYWALK

#### 17 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 tube to avoid unnecessary bending or kinking of the Rigid Foils. The supplied SOFTBAG simplifies the packing process.



Gather your glider and lay it next to the SOFTBAG. The lines should protrude out of the trailing edge. At the bottom of the SOFTBAG there is a riser bag, here the risers will be stowed away later. The trailing edge should be in the direction of the riser bag.





With this technique, the glider lies together like an accordion from wing tip to wing tip and is not folded in the center of the glider. Thus, neither the center cells nor the Rigid Foils are subjected to increased stress. The openings at the leading edge must be aligned with the center of the SOFTBAG





Secure the glider with the webbing straps.



Make sure that the openings at the leading edge are neatly aligned. The Rigid Foils on the stabilos must also be pulled up towards the remaining leading edge.



Now sort the rest of the canopy lengthwise to the trailing edge, making sure that the Rigid Foils lie neatly lengthwise and are not twisted.





Stow the risers into the riser bag and place the lines into the SOFT-BAG



Carefully close the zipper, being careful not to pinch any lines or paraglider material. Place the packing tube at the level of the second webbing strap.



Fold the leading edge over the Packing Tube. Fold the other end over the folded side.





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

14 Packing Instructions Packing Instructions



18 TEST PROTO	COL			Date:	Examina
Customer, Name:					-
Adress:				Phone:	Firmness
					Visual che
					Checkfligh
Glider:	Size:		Serial number:		Type certi
Type certificate number:			Date of last check:		Identifica
Date of first flight:	Year of co	onstruc	tion:		Condition:
Accomplished checking:	Results [-	±/ <u>−</u> 1.	Description of failure:	Suggested repairs:	Conditions
Identification:	+	- -	bescription of randre.	Juggested repairs.	
Visual check of canopy:					
Upper surface:	+	-			
Lower surface:	+				
Profiles:	+	<u> </u>			
Line flares:	+	Ē			Repairs m
Leading edge:	+	<u> </u>			
Trailing edge:	+	<u> </u>			
Crossports:	+	<u> </u>			
·			I.	1	
Visual check of lines:					
Seams:	+	-			Signature
Abrasion spots:	+	-			Jognatare
Core withdrawals:	+	-			
Visual shoots of source tie			•	-	
Visual check of connection	onparts:				
Suspension line screw locks:	+	-			
Risers:	+	-			Name of
Length measurement:					
Length measurement.					
Risers:	+	-			
Lines:	+	-			
Examinations of the cand	ору:				
				T	
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					
Goo	d condition					
Wel	used					
Heavily used, but within homologation standards, frequent checks required						
	No longer airworthy, outside of the limit values.					
		e or the little values.				
Repairs made?:						
Signature of tester:		Date:				
Signature or tester.		Butc.				
Name of tester:		Firm stamp:				

16 Test Protocol Test Protocol 17

