## SKYWALK

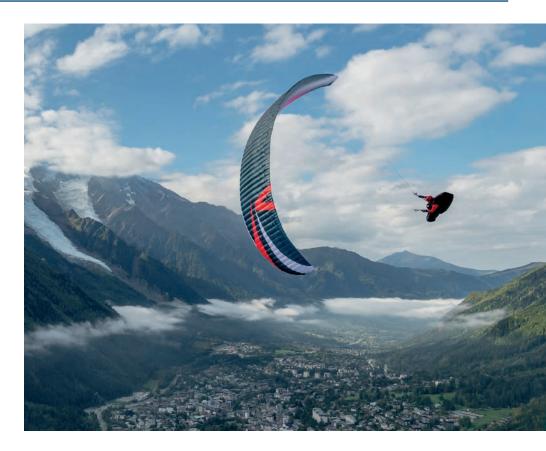
# PRO GUIDE

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## SKYWALK ARAK

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#### **1 INTRODUCTION**

#### Welcome to skywalk!

Congratulations on the purchase of your new ARAK 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 Edition1 / 12\_18 The latest version of the manual can be found on www.skywalk.info

#### **2 DESCRIPTION**

Have you always wanted to fly a paraglider that fulfills your every need? ARAK is your first choice!

Our third model in the intermediate class cuts through traditional categories and combines everything you want from a paraglider. The ARAK stands for easy handling, rich performance and, above all: lots of fun.

These features make the ARAK a true all-rounder and the perfect companion for your next adventure!

#### PILOT REQUIREMENTS

The ARAK's high level of performance and its forgiving handling make it suitable from occasional pilots to ambitious thermal flyers and XC pilots.

#### SCOPE OF DELIVERY

The ARAK comes standard with inner bag, compression strap, glider backpack, riser bag and "BASIC GUIDE".



#### **3 TECHNICAL DATA**

Size	XXS	XS	S	М	L
Cell number	57	57	57	57	57
Area flat (m²)	21,40	23,30	24,80	26,40	28,60
Wingspan flat (m)	10,75	11,22	11,58	11,94	12,42
Aspect ratio flat	5,40	5,40	5,40	5,40	5,40
Area projected (m²)	18,30	20,00	21,30	22,60	24,50
Wingspan projected (m)	8,60	8,98	9,26	9,55	9,93
Aspect ratio projected	4,03	4,03	4,03	4,03	4,03
min. profile depth (cm)	58	61	63	65	67
max. profile depth (cm)	242	253	261	269	280
Middle line length without risers (m)	6,28	6,56	6,77	6,98	7,26
Line consumption (m)	242	253	261	269	280
Weight (kg)	4,1	4,3	4,5	4,7	5,0
Take-off weight from - to (kg)	50-75	65-85	70-95	85-105	95-120
Extended weight range (kg)	75-80	85-90	95-100	105-110	120-125
Winch certified	yes	yes	yes	yes	yes
JET FLAP Technology	yes	yes	yes	yes	yes
Paramotor homologation	no	no	no	no	no
Accelerator	yes	yes	yes	yes	yes
Maximum speed bar travel (mm)	150	150	170	170	170
Brake line travel max. (cm)	60	62	64	66	69
Trimmers	no	no	no	no	no
Number of seats	1	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 ARAK is an ideal combination of durability, low stretch and low drag.

The skywalk ARAK has 3 A-, 3 B-, 3 C-, 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 brake pulleys 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 lines have different colors:

- $\rightarrow$  the AI, AII, AIII-lines and the A-risers are red.
- $\rightarrow~$  the BI, BII, BIII-lines and the B-risers are yellow
- $\rightarrow~$  the CI, CII, CIII-lines are blue.
- $\rightarrow$  the stabilo lines are orange.
- $\rightarrow$  the brake lines are orange.

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

#### The skywalk ARAK has 4 risers per side:

- $\rightarrow\,$  the two inner A-mainlines lead to the inner A-riser, the outer A-line leads to the outer A-riser.
- $\rightarrow$  the B-lines as well as the stabilo lines lead to the B-riser
- $\rightarrow~$  the C-lines lead to the C-riser

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

#### **5 ACCELERATION SYSTEM**

The skywalk ARAK 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. Exact lengths of the accelerated risers can be found at the end of the instruction.



#### **6** FLIGHT TECHNIQUES AND CHARACTERISTICS

#### WINCHTOWING

The skywalk ARAK 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 ARAK 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:

- $\rightarrow\,$  Hold the outer A-lines, which are suspended on separate A-risers, below the line shackles and pull down on the lines or risers.
- $\rightarrow\,$  Keep the brake handles and the outer A-lines in your hands during the maneuver. The glider remains controllable with weight shifting.
- $\rightarrow~$  To increase both sink rate and forward speed, you can also optimize this maneuver with the speed bar.
- $\rightarrow~$  To recover from the maneuver, release the A-lines and the glider normally will open by itself.
- $\rightarrow\,$  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.
- $\rightarrow\,$  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**

The B-lines are pulled down symmetrically 15-20cm. Keep the brake handles in the respective hands. The airflow on top of the profile largely detaches and the paraglider descends without flying forward. Pulling hard on the B-risers allows you to decrease the area of the wing and increase your sink rate, but this also increases the risk of the wing forming a rosette to the front. If this happens, recovery from the B-stall immediately! You can exit the stall by quick and symmetric release of the B-lines. The paraglider will pitch forward and pick up speed. At no time you may use the brakes in this case! If the wing doesn't reopen you may speed up the opening process by gently braking.

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

#### **8 MATERIALS**

The skywalk ARAK 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 38g / Dominico Dokdo 32g
Lower sail:	Dominico Dokdo 32g
Ribs:	Dominico Dokdo 32g hard

#### LINES

A, B, C Main lines: A, B, C Middle lines: A, B, C Top lines: Brake lines: Liros PPSLS 180/125 Liros PPSLS 125 Liros DC 60 Liros DFLP 200/32, PPSLS 125/65, DC 60

#### RISERS

The risers are made of 12mm webbing. Stretching values, strength and stability of this material is among the highest of all webbing products available.

#### 9 HOMOLOGATION

The ARAK is certified to LTF 09 and EN926-1, EN926-2 in the category B. The ARAK 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 extremeflight- 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.



#### **10 CLOSING WORDS**

The skywalk ARAK is at the pinnacle of paraglider development in the market for intermediate 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 ARAK 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!

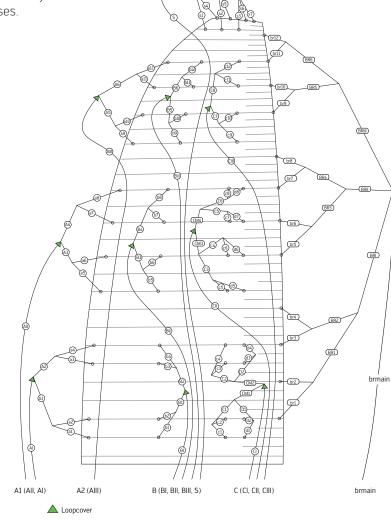
#### WE WISH YOU A LOT OF FUN WITH YOUR NEW GLIDER AND ALWAYS **HAPPY LANDINGS!!**

Your skywalk Team



#### **11 LINE SCHEMATIC**

This line schematic is only for illustration purposes. ഹ , ഞ



#### **12 LINE LENGTH**

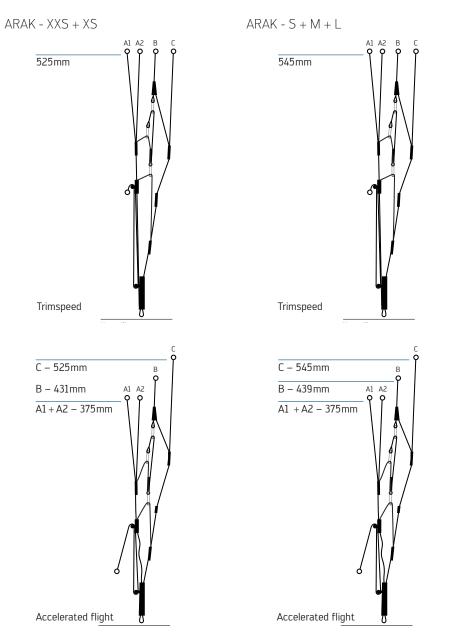
Total line length ARAK size: XXS, XS, S, M, and L: www.skywalk.info

Single line length ARAK size: XXS, XS, S, M, and L: www.skywalk.info

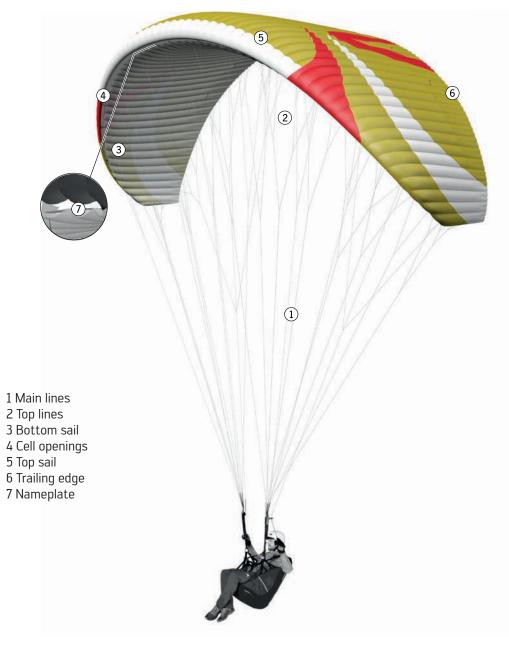
## SKYWALK ARAK

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#### **13 RISERS**



**14 OVERVIEW GLIDER** 



## SKYWALK ARAK

15 TEST PROTOCO	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 connection	inparts:		
Suspension line screw locks:	+ -		
Risers:	+ -		
Length measurement:			
Risers:	+ -		
Lines:	+ -		
Examinations of the cano	ipy:		
Firmness of canopy:	+ -		
Porosity:	+ -		

Freemingstigners of the lines			
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?	+ -		
Good co   Well use   Heavily   No long   Repairs made?:	ed used, but within hor	nologation standards, free e of the limit values.	juent checks required
Signature of tester:		Date:	
Name of tester		Firm stamp.	

Skywalk GmbH & Co. KG Windeckstr. 4 | 83250 Marquartstein +49 (0) 8641/69 48 40 info@skywalk.info | www.skywalk.info

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