## SKYWALK



# PRO GULDE

SPICE2

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#### 1 INTRODUCTION

#### Welcome to skywalk!

Congratulations on the purchase of your new SPICE2 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 SPICE2 is pre-destined for performance-seeking cross-country hunters who like to optimize their XC gear down to the smallest detail in weight and packing size. At 3.3 to 3.8 kilograms, the four sizes of the XC sportster are record-breakingly light, and the latest innovations allow you to easily access its enormous performance potential The SPICE2 feels solid in the air and can be flown very efficiently on bar via the SPEED CONTROL, making it one of the most powerful gliders in its class.

The wing is perfectly adapted to the needs of XC pilots who like to explore new terrain. The SPICE's healthy balance gives you the confidence to solve tricky cross-country and bivouac flying situations at any time

#### PILOT REQUIREMENTS

The SPICE2 is for pilots who master the exit of abnormal flight conditions, who fly actively and regularly, and who understand the implications of flying a paraglider with reduced passive safety.

The lightweight design requires a certain amount of caution in handling.

#### SCOPE OF DELIVERY

The SPICE2 comes standard with inner bag, compression strap, riser bag and "BASIC GUIDE".



#### 3 TECHNICAL DATA

Size	XXS	XS	S	М
Cell number	70	70	70	70
Area flat (m²)	22,00	23,43	24,90	26,93
Wingspan flat (m)	11,9	12,3	12,7	13,2
Aspect ratio flat	6,43	6,43	6,43	6,43
Area projected (m²)	18,6	19,8	21,06	22,8
Wingspan projected (m)	9,3	9,6	9,9	10,3
Aspect ratio projected	4,64	4,64	4,64	4,64
min. profile depth (cm)	50,3	51,9	53,5	55,6
max. profile depth (cm)	231,3	238,7	246,1	255,9
Middle line length without risers (cm)	681,4	703,2	724,9	753,9
Line consumption (m)	269,7	278,3	286,9	298,4
Weight* (kg)	3,3	3,4	3,6	3,8
Take-off weight, certified from-to (kg)	60-87	75-97	85-107	95-117
Take-off weight, recommended from-to (kg)	65-85	80-95	90-105	100-115
Winch certified	yes	yes	yes	yes
JET FLAP Technology	yes	yes	yes	yes
Paramotor homologation	no	no	no	no
Accelerator	yes	yes	yes	yes
Maximum speed bar travel (mm)	150	150	170	170
Brake line travel max. (cm)	51	53	55	57
Trimmers	no	no	no	no
Number of seats	1	1	1	1

\* with Dyneema-riser. Weight with Regular-riser approx. +160g

#### **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 SPICE2 is an ideal combination of durability, low stretch and low drag.

The skywalk SPICE2 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:

- → the Al, All, AllI-main lines and the A-risers are red.
- → the BI, BII, BIII-main lines are yellow.
- → the Cl, Cll, Clll-main lines are blue.
- → the main stabilo lines are orange.
- → the main brake lines are orange.

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

#### The skywalk SPICE2 has 3 risers per side:

- → the A-lines lead to the A-riser.
- → the B-lines as well as the stabilo lines lead to the B-riser.
- → the C-lines lead to the C-riser.

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

#### **5 ACCELERATION SYSTEM**

The skywalk SPICE2 can be equipped with a foot-operated acceleration system.

The acceleration system effects the A- and B-risers. Exact lengths of the accelerated risers can be found at the end of the manual.

#### SPEED CONTROL

The system allows the pilot to even out turbulence, speed and pitch while flying on speed bar without having to release the speed bar. A strap connects the C-riser to the pulley on the B-riser. To use the SPEED CONTROL, grab the C-riser above the strap and pull the riser downward. Only pull 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 accelerated risers as well as the functionality of the SPEED CONTROL can be found on page 12. Any other adjustable, removable or variable devices are not available.



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

MAKE SURE THAT THE C-RISER IS NOT PULLED DOWN INDIVIDUALLY, IT IS ESSENTIAL THAT THE ENTIRE SYSTEM IS ACTUATED.

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

#### WINCHTOWING

The skywalk SPICE2 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 SPICE2 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 above the line shackles and pull down on the lines.
- → 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.
- ightarrow 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.

#### SKYWALK SPICE2

#### **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**

We don't recommend this descent technique with the SPICE2. For fast descent use a spiral dive or big ears.

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

#### **8 MATERIALS**

The skywalk SPICE2 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. Spare parts can be obtained from skywalk.

#### WINGS AND RIBS

Upper sail: Dominico TX-Light / 10D

Lower sail: Dominico 10D

Ribs: Porcher Skytex 27g hard

**LINES** 

A, B, C Main lines: Liros PPSLS 180/125, PPSL 200/160 A, B, C Middle lines: Edelrid 8000-U135/90/80/70/50

A, B, C Top lines: Liros DC 60/35

Brake lines: Liros DFLP 200/32, DC 35; Edelrid 8000-U135/70/50

**RISERS** 

Dyneema-riser: Liros 6mm Dyneema

Regular-riser: Güth & Wolf 12mm webbing

SHACKLES PULLEYS

Dyneema-riser: Jootech oval Ronstan ball bearing

Regular-riser: Jootech triangular

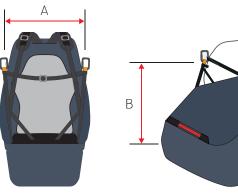
#### 9 HOMOLOGATION

The SPICE2 is certified to LTF 09 and EN926-1, EN926-2 in the category C. The SPICE2 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-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.

#### HARNESS MEASUREMENTS DURING THE TEST FLIGHTS



Width of harness attachment points

Height of harness attachment points

Total weight in flight (kg)	< 80	80-100	> 100
Width (cm-measurement ,A')	$40 \pm 2$	$44 \pm 2$	$48 \pm 2$
Height (cm-measurement ,B')	$40 \pm 1$	$42 \pm 1$	$44 \pm 1$

8 Descent techniques | Materials Homologation 9

#### 10 CLOSING WORDS

The skywalk SPICE2 is at the pinnacle of paraglider development in the market for ultralight sports class 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.

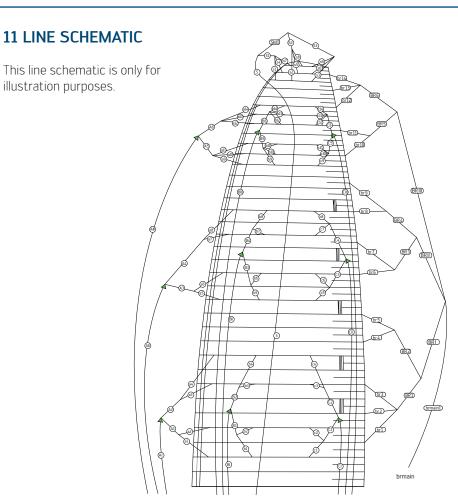
The SPICE2 will provide you with plenty of joy over many years if you treat it and care for it properly. Respect for the demands and dangers of our sport are essential for successful and beautiful flights.

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





C (CI. CII. CIII)

#### 12 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.

B (BIII BII BI S)

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 SPICE2 size XXS, XS, S and M: www.skywalk.info

A (AIII, AII, AI)

Single line length SPICE2 size XXS, XS, S and M: www.skywalk.info

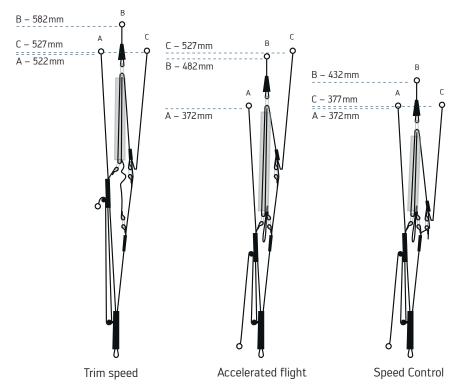
A Loopcover

### **SKYWALK** SPICE2

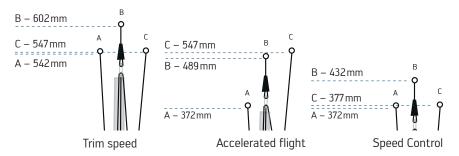
#### 13 RISERS

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

#### SPICE2, size XXS and XS



#### SPICE2, size S and M



#### **14 OVERVIEW GLIDER**



12 Risers Overview Glider 13



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	construct	tion:			
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	i:		
Firmness of main lines:			daN
	Results [+/-]:	Description of failure:	Suggested repairs:
Visual check of trimming:	+ -		
Checkflight necessary?	+ -		
Type certificate patch?	+ -		
Identification plate?	+ -		
Good Well L	y used, but within ho	mologation standards, fred le of the limit values.	quent checks required
Signature of tester:		Date:	
Name of tester:		Firm stamp:	

14 Test Protocol Test Protocol 15



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