PRO GUIDE

/ JOIN'T 5

INHALT

1 INTRODUCTION

Welcome to skywalk!
Congratulations on the purchase of your new JOIN'T5 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

Version 1.1/12_24
Die aktuellste Version des Handbuches findest du auf
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2 DESCRIPTION

The JOIN'T5 was specifically designed to meet the demands of professional tandem flying. With its reliable launch characteristics and playful flight dynamics, the JOIN'T5 is the ideal partner for demanding workdays. Practical features such as the big ears aid and adjustable brake pulley height make handling even easier.
Its robust construction, with additional reinforcements in high-stress areas, ensures maximum durability and long-lasting enjoyment, even with intensive use in professional settings.

PILOT REQUIREMENTS

The JOIN'T5 is suitable for all tandem pilots including tandem pilot training.

SCOPE OF DELIVERY

The JOIN'T5 comes standard with inner bag, compression strap, riser bag and "BASIC GUIDE".

3 TECHNICAL DATA

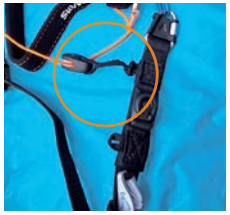
Size	**200**	**220**	**240**
Cell number	49	49	49
Area flat (m²)	38,00	41,20	44,00
Wingspan flat (m)	14,33	14,92	15,41
Aspect ratio flat	5,4	5,4	5,4
Area projected (m²)	32,38	35,11	37,49
Wingspan projected (m)	11,46	11,93	12,33
Aspect ratio projected	4,05	4,05	4,05
max. profile depth (cm)	327	341	352
Middle line length without risers (m)	8,06	8,41	8,69
Line consumption (m)	440	466	488
Weight (kg)	6,8	7,1	7,7
Take-off weight, certified from-to (kg)	100-200	110-220	130-240
Winch certified	yes	yes	yes
JET FLAP Technology	yes	yes	yes
Paramotor homologation	no	no	no
Speed bar	no	no	no
Brake line travel max. (cm)	66	68	70
Trimmers	yes	yes	yes
Trimmer range (mm)	150	150	150
Number of seats	1+2	1+2	1+2

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 JOIN'T5 is an ideal combination of durability, low stretch and low drag.
The skywalk JOIN'T5 has 3 A-, 3 B-, 3C-, 2D- 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 D-risers to the brake handles.

The brake pulley height can be optimally adjusted to suit the pilot's ergonomics. A second loop positioned slightly lower on the riser provides an alternative mounting option for the brake pulley. When the pulley is attached in this lower position, the brake line must be extended by 5cm. A marking on the main brake line indicates the position of the handle attachment.

This is the standard setting when the brake pulley is mounted on the upper loop.



THE EXTENDED BRAKE TRAVEL WILL IMPACT THE WING'S FLIGHT CHARACTERISTICS. IN CHALLENGING TAKEOFF CONDITIONS, IT IS ESPECIALLY IMPORTANT TO NOTE THAT THE WING WILL REQUIRE INCREASED BRAKE INPUT.

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

→ the A-lines and the A-risers are red.
→ the B-lines are yellow.
→ the C-lines and the D-lines are blue.
→ the stabilo lines and the brake lines are orange.

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

The skywalk JOIN'T5 has 5 risers per side:

→ the two inner A-mainlines lead to the A1-riser, the outer A-line leads to the A2-riser.
→ the B-lines as well as the stabilo lines lead to the B-riser.
→ the C-lines lead to the C-riser.
→ the D-lines lead to the D-riser.

5 ACCELERATION SYSTEM

The JOIN'T5 comes equipped with a very efficient and long trimmer range that makes it possible to increase the speed by lengthening the rear risers. Open the trimmer on both sides to avoid asymmetry and the resulting negative flight behavior.
When flying the JOIN'T5 in the lower weight range, we recommend slightly opening the trimmer for optimal flight behavior.

The trimmer strap is easily secured with the EASYFIX magnet.
To release, simply slide the magnet from top to bottom, allowing for quick and effortless adjustments.
A schematic drawing of the risers can be found on page 14.

THE RED TRIMMER STRAP IS NOT AN ATTACHMENT LOOP!

6 FLIGHT TECHNIQUES AND CHARACTERISTICS

WINCHTOWING

The skywalk JOIN'T5 is 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 JOIN'T5 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

The JOIN'T5 covers a very wide weight range. As a result, it responds slightly slower during extreme flight maneuvers and descent methods when flown at the lower end of the weight range. Pilots may notice a delayed reaction in such scenarios.

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 (according to DHV teaching instructions):

→ Grab the outer A-lines, which are suspended on the A2-risers below the line shackles with your palms facing outward and pull the lines down.
As an option, an big ear support system with CLAMCLEAT can be found on the riser.
This system allows you to fix the outer A-lines in the CLAMCLEAT to save energy.
The cover must be removed before using the system.
→ To increase both sink rate and forward speed, you can also optimize this maneuver with the trimmers.
→ To exit the maneuver, release the outer A-lines or remove them from the CLAMCLEAT beforehand. The glider usually will reinflate by itself.
→ To speed up reinflation, pull lightly on the brakes. Another proven technique is to first re-inflate one side of the glider, then the other. This can reduce the risk of a 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

The B-lines are pulled down symmetrically 15-20 cm. 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!

IN THE UPPER WEIGHT RANGE, THE FORCES ARE VERY HIGH, MAKING THE B-STALL VERY DIFFICULT TO PERFORM.

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

8 MATERIALS

The skywalk JOIN'T5 is manufactured from the highest quality materials. skywalk has selected the best possible combination of materials with regard to resilience, weight 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:	Myungjin MJ40 MF / MJ32 MF
Lower sail:	Myungjin MJ32 MF
Ribs:	Porcher Skytex 40 hard

LINES

Main lines:	Liros TSL 500, NTSL 350/280, PPSL 120
Middle lines:	Liros TSL 280/190, DSL 70
Top lines:	Liros PPSL 120, DSL 70
Brake lines:	Liros DFLP 200/32, PPSL 120/180, DSL 70

RISERS
Güth & Wolf 20mm webbing

TRIMMER
Rollercam

SHACKLES
Jootech Triangle

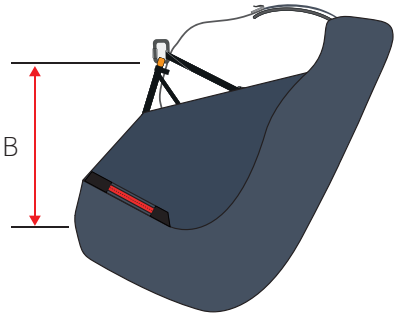
9 HOMOLOGATION

The JOIN'T5 is certified to NfL 2-565-20 and EN926-1, EN926-2 in the category B.
The JOIN'T5 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.

HARNESS MEASUREMENTS DURING THE TEST FLIGHTS

Width of harness attachment points



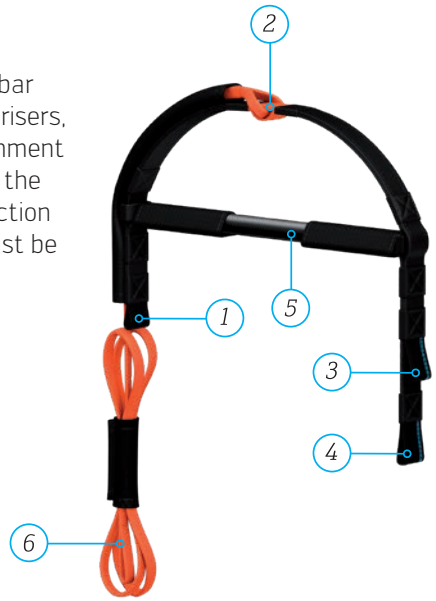
Height of harness attachment points

Total weight in flight (kg)	← 80	80-100	→ 100
Width (cm-measurement ‚A')	42 ± 2	46 ± 2	46 ± 2
Height (cm-measurement ‚B')	40 ± 1	42 ± 1	44 ± 1

10 TANDEM SPREADER BAR

The optionally available tandem spreader bar serves as the connection point between the risers, passenger, and pilot. Ensure that the attachment loop for the main carabiner is connected to the risers without any twists. The proper connection between the harness and the paraglider must be carefully checked before every launch.

1 - Pilot attachment loop
2 - Main carabiner suspension
3 - Attachment loop for heavier passenger
4 - Attachment loop for lighter passenger
5 - Carbon pole
6 - V-Line



11 CLOSING WORDS

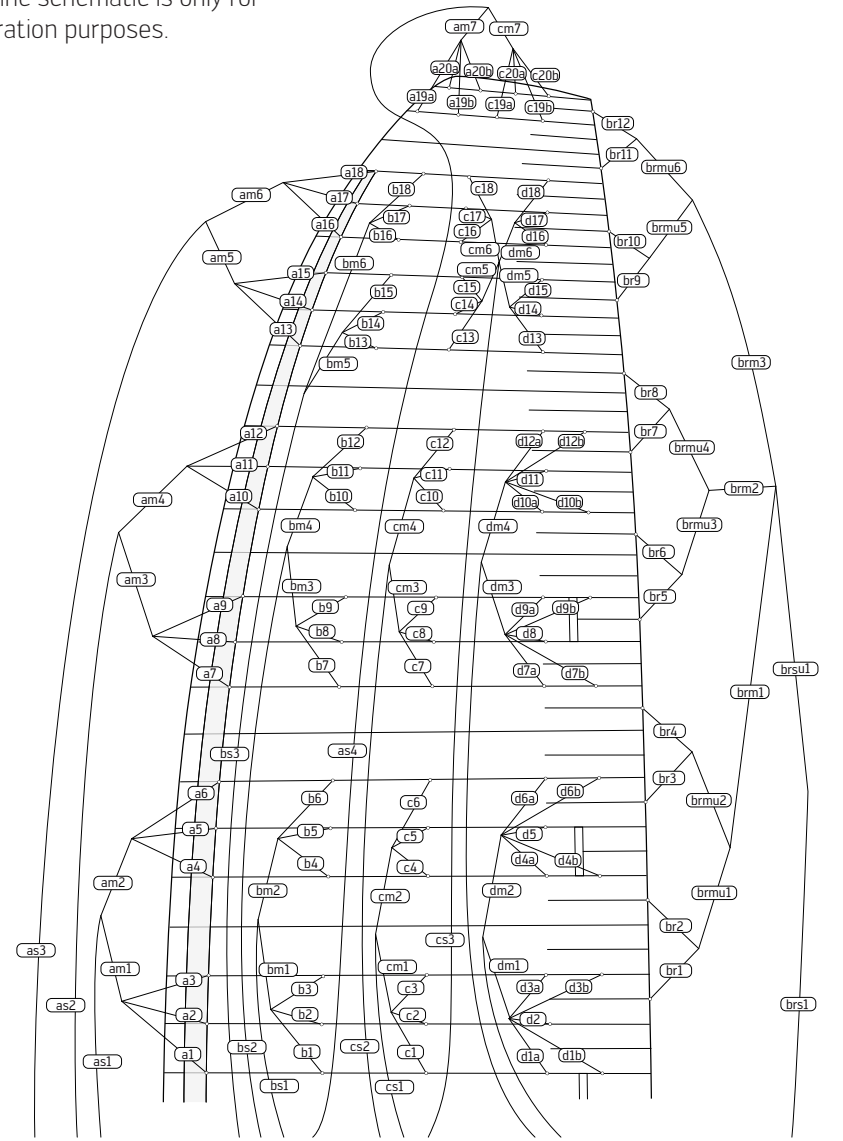
The skywalk JOIN'T5 is at the pinnacle of paraglider development in the market for tandem gliders and shows what is possible regarding performance, safety and innovation.
It cost us a lot of time to develop this glider, but it was also a lot of fun.
In this development we recognize the challenge of making 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 JOIN'T5 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

12 LINE SCHEMATIC

This line schematic is only for illustration purposes.



A2 (as3) A1 (as1, as2) B (bs1, bs2, bs3, as4) C (cs1, cs2, cs3) D (ds1, ds2) Brake Handle

13 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 ± 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 JOIN'T5 size 200, 220 and 240:
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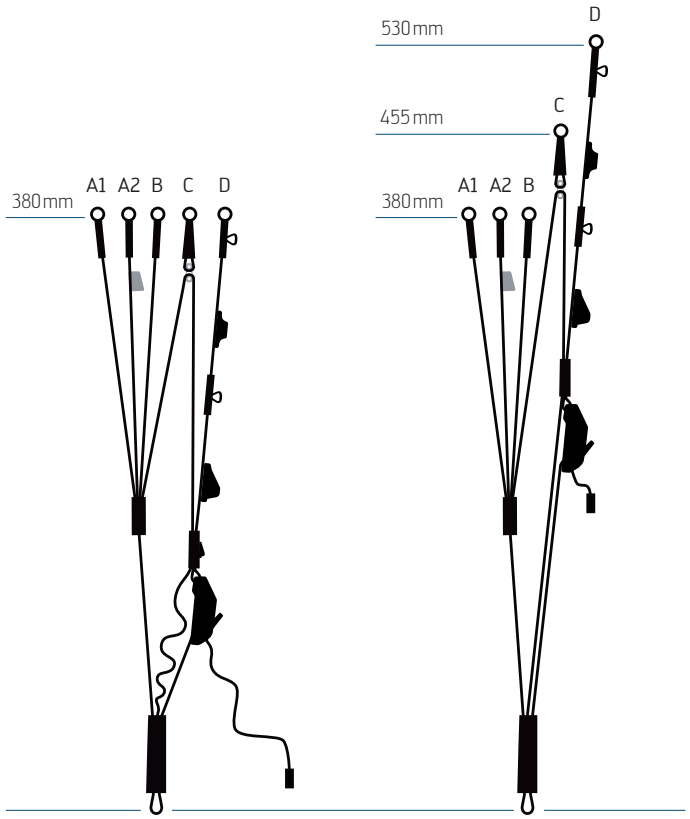
14 RISERS

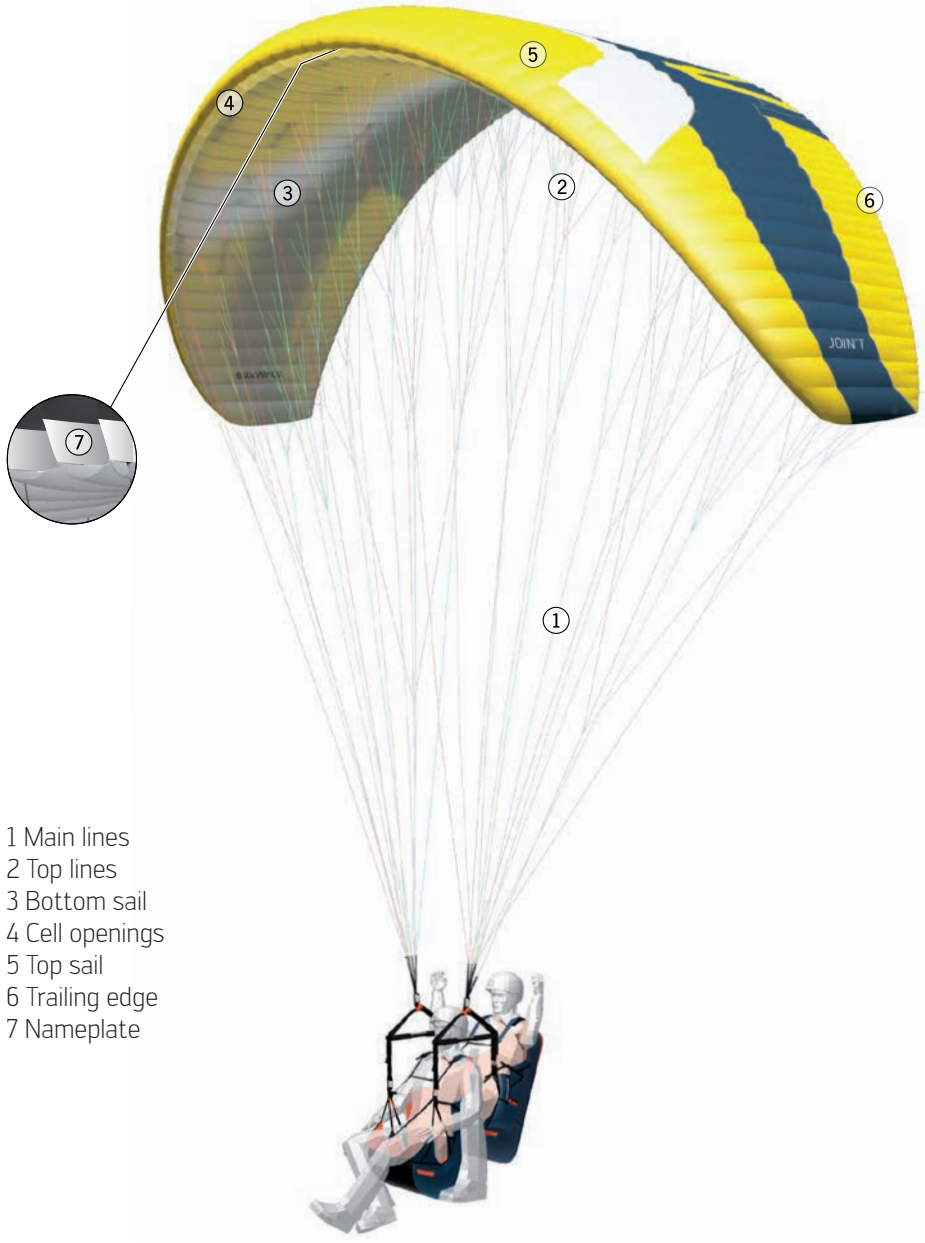
The difference between the measured riser lengths and the original riser lengths should not exceed ± 5mm.

JOIN'T5 - 200, 220 and 240:



Trim speed Accelerated flight

15 OVERVIEW GLIDER



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

16 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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