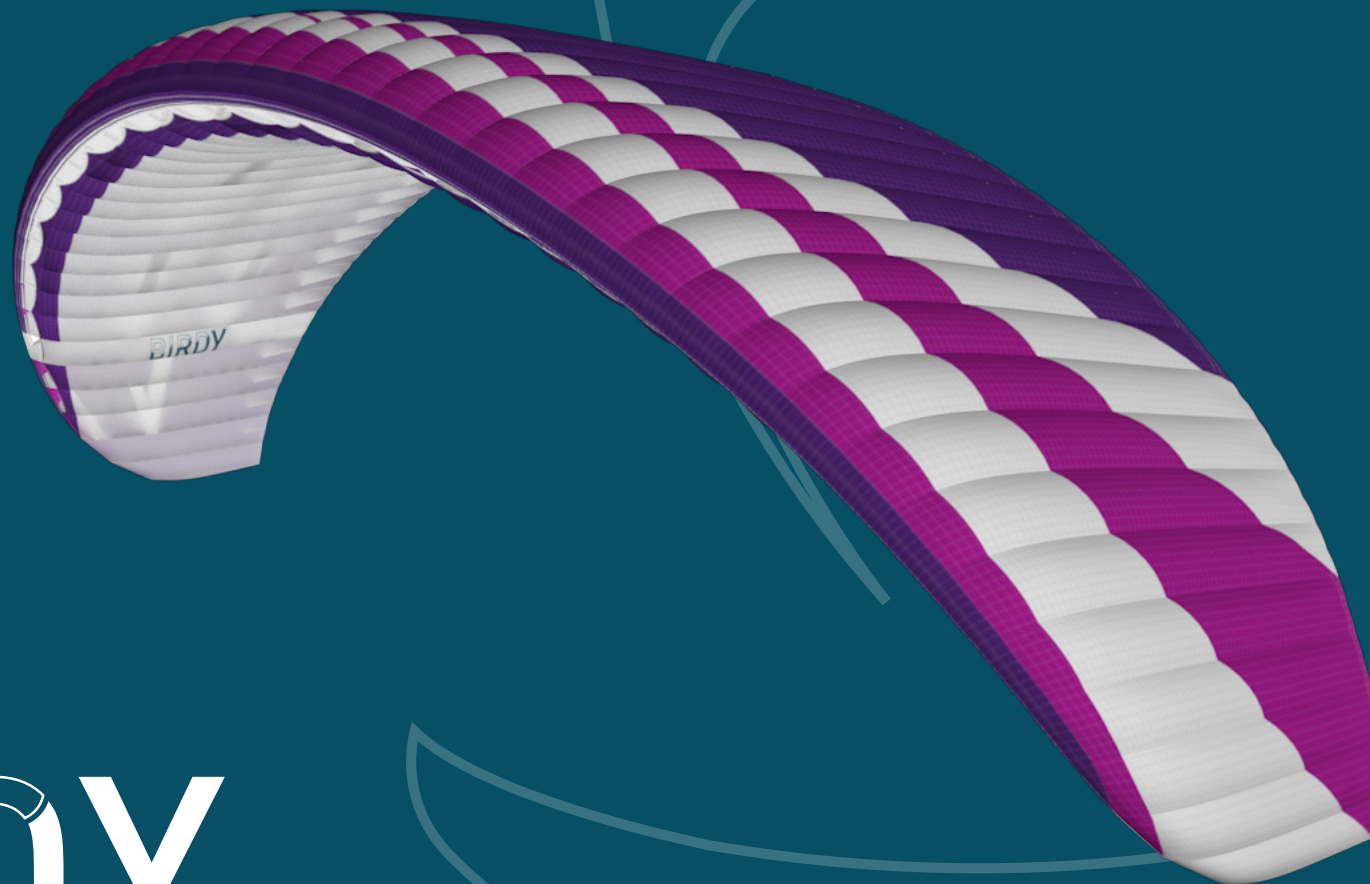


 SUPAIR

English



BIRDY

User's manual

SUPAIR SAS
PARC ALTAÏS
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RCS 387956790

Revision Index : V1 21/01/2021



Thank you for choosing to fly our BIRDY to paraglide with. We are delighted to have you on-board to share our passion for paragliding.

SUPAIR has been designing producing and selling accessories for free flying activities since 1984. By choosing a SUPAIR product you benefit from almost thirty years of expertise, innovation and customer care. We pride ourselves for our work ethics and customer care.

We hope you will find this user's manual comprehensive, explicit and hopefully enjoyable as well. We advise you to read it carefully.

You will find the latest information and updates on this product on our website : www.supair.com. If however you have any further questions, do not hesitate to ask one of our dealers.

Naturally the entire SUPAIR team remains at your disposal at info@supair.com
We wish you many safe and enjoyable flying hours and happy landings.

Team SUPAIR

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Welcome to the world of free flying : a shared world of passion

The BIRDY is a newcomer to the SUPAIR range of wings. It is inserted between the EONA 3 and the LEAF 2. It is an ideal first wing, at the same time efficient, light, durable and benefiting from a very high passive safety. It will also delight occasional pilots who want to prioritize the safety and weight of their wing.

With the BIRDY, we have pushed the limit of EN-A certification as far as possible by maximizing performance and flight pleasure.

The well thought out design and choice of materials were guided by the same quality and longevity objectives.

The BIRDY glider as described in this user manual is EN EN 926 -1 : 2015 & 926 - 2 : 2013 Classe A. Certified.

Meaning that this paragliding wing has a maximal passive safety margin built-in in addition to being forgiving and collapse resistant in turbulent aerology.

It is naturally adapted to all flying levels including beginner pilots.

It can be used with most harnesses found on the market today. For better inflight comfort and sensations we will advise you to choose the SUPAIR progression harness models.

After reading this manual we advise you to inflate & check your wing on a training hill first.

N.B. : The following three icons will help you to read this manual.



Conseil



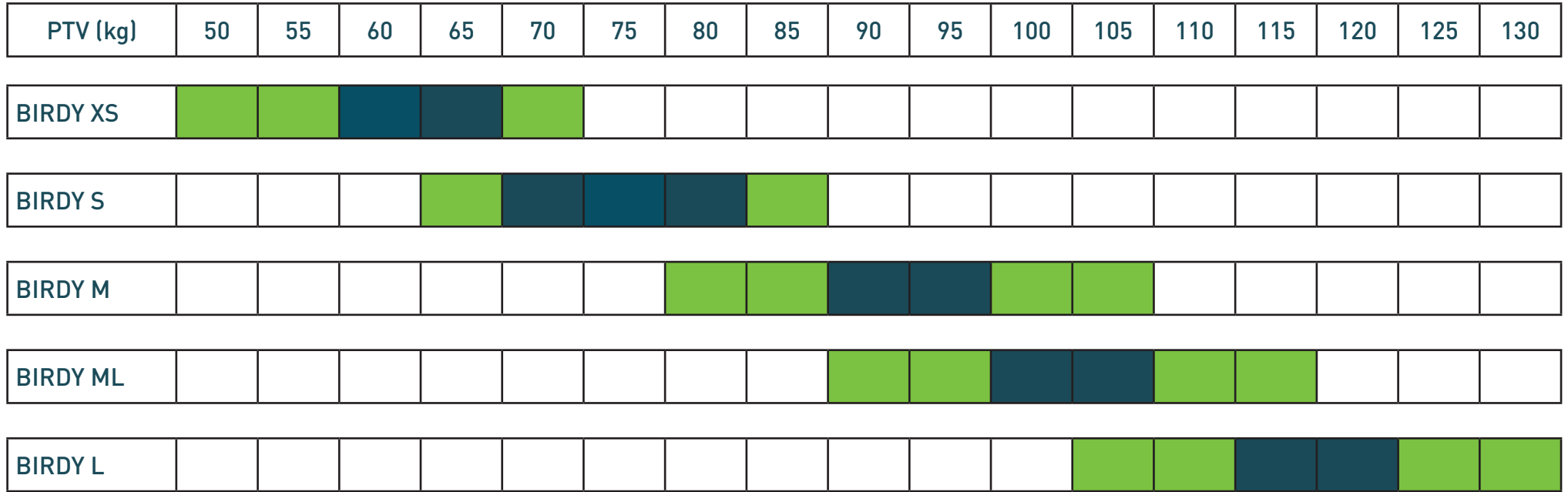
Attention !





Danger !

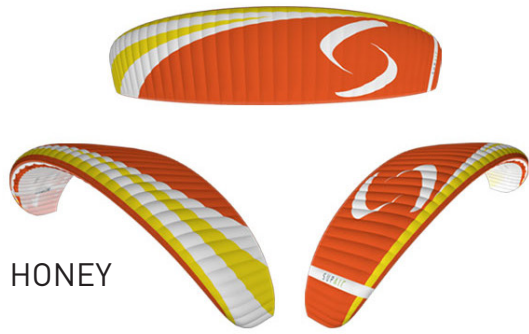
BIRDY	XS	S	M	ML	L
Number of cells	44	44	44	44	44
Flat surface area (m ²)	21,25	23,6	26,5	28,3	30,5
Span (m)	10,25	10,81	11,45	11,83	12,28
Chord (m)	2,54	2,68	2,84	2,93	3,05
Flat Aspect Ratio	4,95	4,95	4,95	4,95	4,95
Projected surface (m ²)	18,03	20,2	22,48	24,01	25,88
Projected span (m ²)	8,11	8,55	9,06	9,36	9,72
Projected aspect ratio	3,68	3,68	3,68	3,68	3,68
Glider weight (kg)	3,3	3,84	4,2	4,4	4,6
In-flight weight range (kg)	50-70	65-85	80-105	90-115	105-130
Certification	"Classe A, EN : 926-2 : 2013 & 926-1 : 2015, LTF NFL II-91/09"				
Acrobatic flying	Non				
Number of risers	3+1				
Speed bar	Yes, course: 140mm	Yes, course: 150mm	Yes, course: 150mm	Yes, course: 160mm	Yes, course: 160mm
Trim	Non				
Other variable device	Non				
Break travel at maximal weight (cm)	65	69	72	75	77
Harness dimensions used for certification	* Lenght between attachment points : 40 ±2 cm * Height of main suspension points : 40 ±1 cm"	* Lenght between attachment points: 42 ±2 cm * Height of main suspension points : 42 ±1 cm"	* Lenght between attachment points: 44 ±2 cm * Height of main suspension points: 42 ±1 cm"	* Lenght between attachment points: 46 ±2 cm * Height of main suspension points: 44 ±1 cm"	* Lenght between attachment points: 48 ±2 cm * Height of main suspension points: 44 ±1 cm"

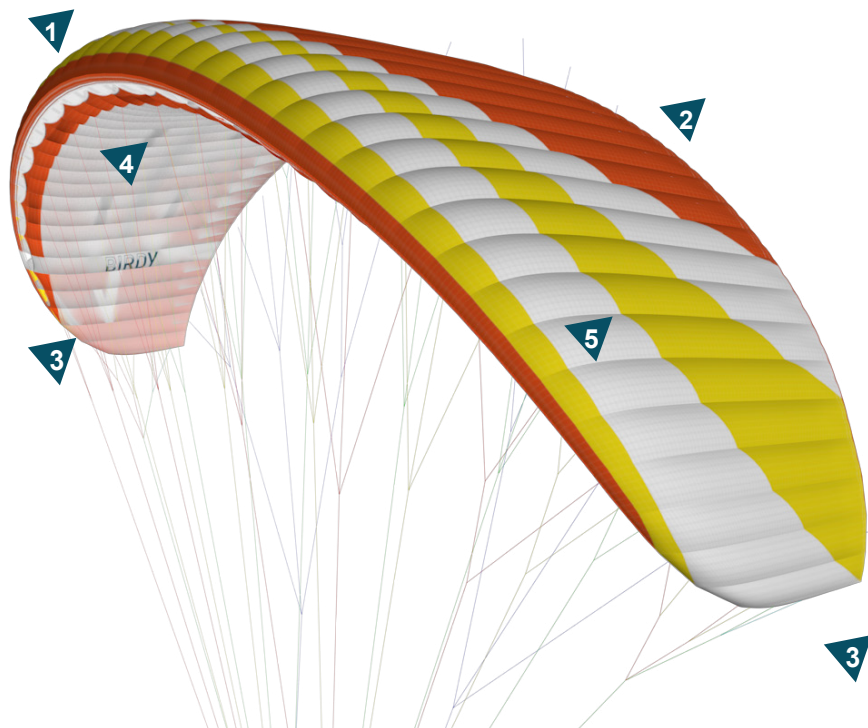
In-flight weight range



 In-flight weight range (kg)

 Perfect In-flight weight range (kg) to optimize flight performances





- 1 Leading edge
- 2 Trailing edge
- 3 Stab
- 4 Inner Surface
- 5 Outer surface
- 6 A riser
- 7 A' riser (for big ears)
- 8 B riser
- 9 C riser
- 10 Brake line
- 11 Brake retaining strap
- 12 Brake handle
- 13 Riser hook-up loop
- 14 TREK 110 L backpack
- 15 Speedbar
- 16 Speedbar Split-hook
- 17 Speedbar bar
- 18 Compact Case
- 19 Pocket with repair kit

Connecting the glider

Opening the wing

Choose a flat or lightly angled training hill without obstacles or wind. Open your wing and arrange it in a crescent shape. Check the fabric and the lines for any sign of wear or damage.

Check for the links connecting the lines to the risers to be fully closed.

Identify, separate and arrange the A,B,C, risers as well as the brake lines neatly. Knots or tangles can not be present.

Choosing an adapted harness

The BIRDY glider was certified EN B with a EN1651 & LTF certified harness and hence can be flown with most harnesses models found on the market today. Meaning that it can be flown with most harnesses models found on the market today. We wil advise you to choose a EN1651 and or LTF certified harness with a built-in dorsal protection system.

Connecting the wing to the harness

Without twisting the risers, connect them to the harness connection loops using the self-locking carabiners. Check for the risers to be properly positioned and untwisted. The "A" risers must be located at the front and facing the flight direction(see schematic). Lastly, check for the main self-locking carabiners to be fully closed and locked in place.

Harness chest strap spacing

It is advised to adjust the harness's chest strap width based on your wing size :

- 40 cm for a BIRDY size XS
- 42 cm for a BIRDY size S
- 44 cm for a BIRDY size M
- 46 cm for a BIRDY size ML
- 48 cm for a BIRDY size L

Installing the speedbar

Install the accelerator according to your harness manufacturer's recommendations. Connect it to the wing using the split hooks. Once the accelerator/speedbar is connected, adjust its length according to your measurements. For correct use, there must not be any tension at the split-hook level when the accelerator/speedbar line is relaxed.



CONNECTING THE GLIDER

Brake line length

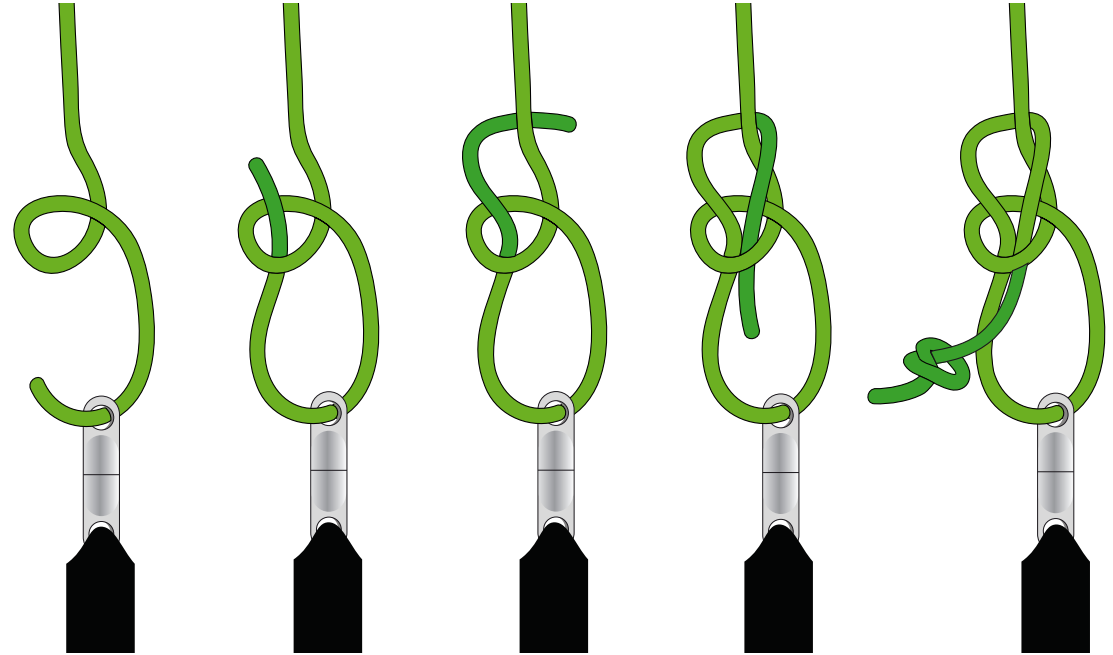
Brake line lengths are set at the factory to allow optimal glider control. However, if they do not suit you they can be adjusted to your liking.

We will advise using a fisherman's knot and to keep your length changes to a minimum (approx 5cm maximum).

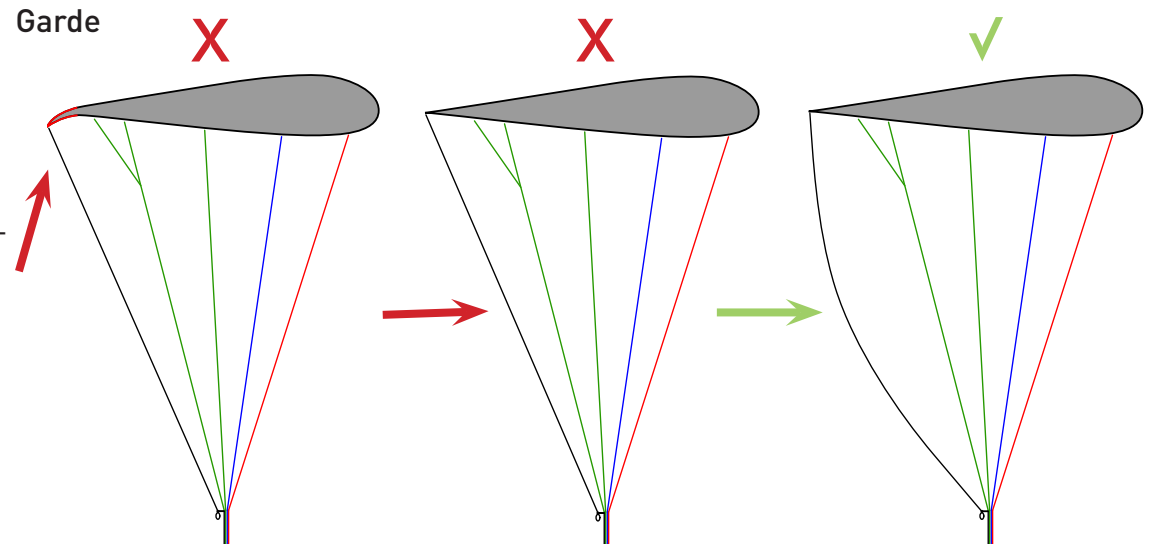


If you modify the original default setting, have it inspected and approved by a professional before flying.

fisherman's knot



Be certain to adjust and leave a small amount of line slack to keep steering toggle play, prevent wing profile deformation and hinder the accelerator functionality. During acceleration, the glider's trailing edge must not be deformed.



Pre-flight preparation

The BIRDY glider was designed to help new pilots with their progression. To discover your new wing, we will advise you to conduct your first small flights in calm conditions on a school training hill or a familiar site you are used to flying with your own harness.

Unfold the glider and place it on its upper surface in an arc.

Separate the A,B,C risers and the brakes, be certain for the risers and lines not to have any twists or knots or be hooked to a branch, stone etc...

Caution !



It is crucial to carry out a thorough pre-flight check and in particular to ensure that the passenger and pilot are correctly fastened in their harnesses and that the harnesses are correctly connected to the spreaders.

Before every take-off, check the following :

- that harnesses and karabiners are in good working order
- that the reserve parachute container is correctly closed and that the handle is in the correct position
- that your personal settings have not been changed
- that the glider is correctly connected to the karabiners and that they are safely locked

The design team has strived to produce optimum characteristics for easy inflation in all conditions, whether in light or high winds you will enjoy the progressive behaviour while launching. However before the first flight, practice ground-handling in order to become familiar with your new glider. It is possible to inflate with the front- or reverse-launch methods.

Forward launch

To inflate the glider grab the upper ends of the "A" risers with your hands and progressively move forward guiding the glider upward. Once the wing is flying overhead, apply brakes as necessary, look up and perform a visual check before accelerating to take off.

Reverse launch

If the wind speed is sustained and permits it, we will advise you to use a reversed inflation method more adapted to conduct a better visual check. Face the wing and grab the "A" risers. With a light pull and adapted rearward walking motion, inflate your wing. Once the glider is stable overhead, turn around, look up once more to check that all is ok. before running down the slope and takeoff.
Note: it is not necessary to use the "A" risers to inflate the wing.



Caution !

Before take-off, ensure for the airspace to be clear in front, around and above you with weather conditions matching your flying skill level.

Here are a few tips to take advantage of your BIRDY wing's performance in flight: :

« Hands up » speed or trim speed

Flying « hands up » will provide the best glide ratio in nil wind.

Turning

To produce a turn, once you have checked that the airspace is clear, lean into the harness inside the turn – you may also ask the passenger to do likewise – and progressively pull down the brake on the side where you wish to turn until you have achieved the desired angle of bank. You can then modulate the speed and radius of the turn by using the external brake. If you are flying at low speed, initiate the turn by releasing the outside brake first. This will avoid the risk of spinning.

Using the accelerator/speedbar.

According to the EN A norm, the BIRDY glider was designed to be stable throughout its speed range.

Accelerated, the wing becomes more sensitive to turbulence. If you sense a glider internal pressure decrease while pushing on the accelerator; lessen the speedbar tension to bring it back to its neutral default setting while slightly applying a small amount of brake by pulling the hand toggles and prevent a possible leading edge frontal collapse.

The accelerator/speedbar length travel is :

- 14 cm for a BIRDY size XS
- 15 cm for a BIRDY size S
- 15 cm for a BIRDY size M
- 16 cm for a BIRDY size ML
- 16 cm for a BIRDY size L

Piloting without the toggles/brakes

If for whatever reason, the toggles/brakes are no longer available, you will need to pilot your wing using the harness and "C" risers instead.

Beware not to overcontrol the glider to limit the risk of experiencing a possible stall.

To land, let your wing glide for as long as possible before applying a full braking motion. Braking using the "C" risers is not as efficient as using the toggles and could bring a more energetic landing than normal.

Landing

Be certain to always have enough altitude for a safe landing before approaching the chosen Landing Zone (PTU, PTS, etc...). Never make aggressive maneuvers close to the ground. Always land into the wind (upwind), standing up and ready to run to a stop if necessary. Make your landing approach with maximum air speed if possible depending on the weather conditions of the moment, then progressively brake to slow the glider to a final touchdown. Beware not to brake too much, too soon and too rapidly to prevent a possible stall and hard landing.

In case of a landing in sustained higher wind speeds, you will need to quickly turnaround, face the wing, move forward while braking down symmetrically. You can equally pull the "C" risers down to deflate the glider and bring it to the ground.

Folding

Fold each side of your wing in an accordion-like shape. Stack-up the leading edge reinforcements on top of one another.

Bring one side of the glider over the other while keeping the leading edge reinforcements flat. Roll the wing on itself, starting from the leading edge toward the trailing edge. During the entire packing procedure, do not bend the leading edge's reinforcements.

The COMPACT CASE delivered with the BIRDY enables you to fold your glider in a concertina style and carry the lot in a small and neat pack.

Specific usage

Towing

The BIRDY wing can be towed up. Fly only with certified gear operated by qualified personal and only after taking a towing clinic. The towing force must correspond to the weight of the equipment, and the pulling sequence can only start when the wing is fully inflated and stable over the pilot's head.

Aerobatics

Your wing was not designed for aerobatic maneuvers.

Repeated practice of said exercise exceeding 4xG (or 2xG if they are asymmetrical) will cause premature aging of your glider and is to be avoided. "SAT" maneuvers are the most damaging to your equipment.

Tandem



The BIRDY wing was not designed for tandem flying

The following techniques should only be used in emergencies and require prior training. Appropriate analysis and anticipation of the conditions will often prevent the need to use fast descent techniques. We advise you to practice in still air and preferably above water.

Big Ears

Pulling big ears increases the glider's sink rate. We do not recommend the use of big ears close to the ground. In order to pull in big ears, grab the specific riser (outer A riser) while keeping the brakes in hand and lower it until the wintip collapses. It is preferable to collapse one side after the other and not simultaneously in order to prevent a frontal collapse. To reopen big ears, release both risers symmetrically. You may apply brake on one side and then the other to facilitate reopening.

It is possible to combine big ears with the use of trimmers in order to further increase the sink rate and speed. Once you have induced big ears as described above, release trimmers fully.

To reopen the "Ears", bring the accelerator/speedbar back to its neutral default setting, then let go the risers symmetrically. You can pump the brake/toggles on either side of the wing to facilitate its reopening sequence.



B-line stall

This technique is usually physically demanding and will provoke a parachutal wing configuration and hence wing control will be diminished. Loosing altitude using the "B" risers is done by grabbing the risers at the metal links level and applying a symmetrical downward vertical pull until the wing's profile is deformed. This maneuver can be maintained to increase the wing's sink rate. To regain a normal flying configuration, bring your hands up progressively to the "A" risers red markers, then let go the "B" risers altogether. The wing will experience a moderate surge forward which will need to be instantly neutralized and controlled.

360° spiral dives

To begin a spiral dive make sure the air space is clear around and below you, then lean toward the chosen side while gradually applying brake/toggle pressure on that side. The wing will gradually accelerate before entering a full spiral dive. You may use the outer/upper toggle to manage your sink rate.

In order to exit the rotation, get back to a neutral (centered) position in the harness and gradually release the inside brake. You need to keep the glider in a turn as it decelerates in order to limit the surge while exiting the spiral. If your exit is too radical the glider will surge aggressively and experience a substantial dive to be immediately controlled.. Gradually slowing down the rotation with the outside and upper brake will allow you to exit the spiral in a controlled manner.



To prevent stressing we do not recommend combining spiral dives with "Ears".



Conforming to the EN A, the BIRDY glider does not show any tendency to stay in a locked spiral configuration and will return by itself to a normal flying angle in less than two full rotations when the toggles/brakes are brought back up.



DANGER : This manœuvre places a lot of stress on the glider. The high speed and "G" force might be disorientating and, in extreme cases, cause you a temporary loss of consciousness. Practice this maneuver gradually with ample space around and below you.

Stall

This technique is not recommended as it requires intense physical impute. It is not a safe descent technique.

Asymmetric collapses

Any paraglider may occasionally collapse due to turbulence or a piloting error. In the event of an asymmetric collapse your priority must be to stay clear of the terrain and regain level flight.

In the event of an asymmetrical collapse induced by turbulence or purposely by the pilot, we want to remind you that the best course of action to take is:

- Shift all your weight on the open side of the wing.
- If necessary, slightly brake on the open side of the wing to prevent it from rotating.
- Once the wing is balanced and stabilized, (straight flight), if the folded side does not spontaneously reopen, give ample up and down pumping motions until the collapsed glider side is fully reopened.
- Repeat if necessary until full reinflation is successful. In the event of a "cravat" (where the wing tip is snagged between the lines) you may use the "ears" technique described above by pulling on the tangled line to release the wingtip.

Front collapses

During a front collapse according to the certification standard the glider is designed to reopen on its own.

In the event of a frontal collapse induced by turbulence or purposely by the pilot, we want to remind you that the best course of action to take is :

- Brakes must be fully released during the collapse, we recommend that brake handles be clipped back on the stoppers when you are producing the collapse
- Wait for the wing to reopen and come back overhead – do not keep the brake pressure on, if the glider falls behind you – risk of stalling.
- Dampen the surge by using the brakes/toggles proportionally and symmetrically once the wing has overshot you

Parachutal stall

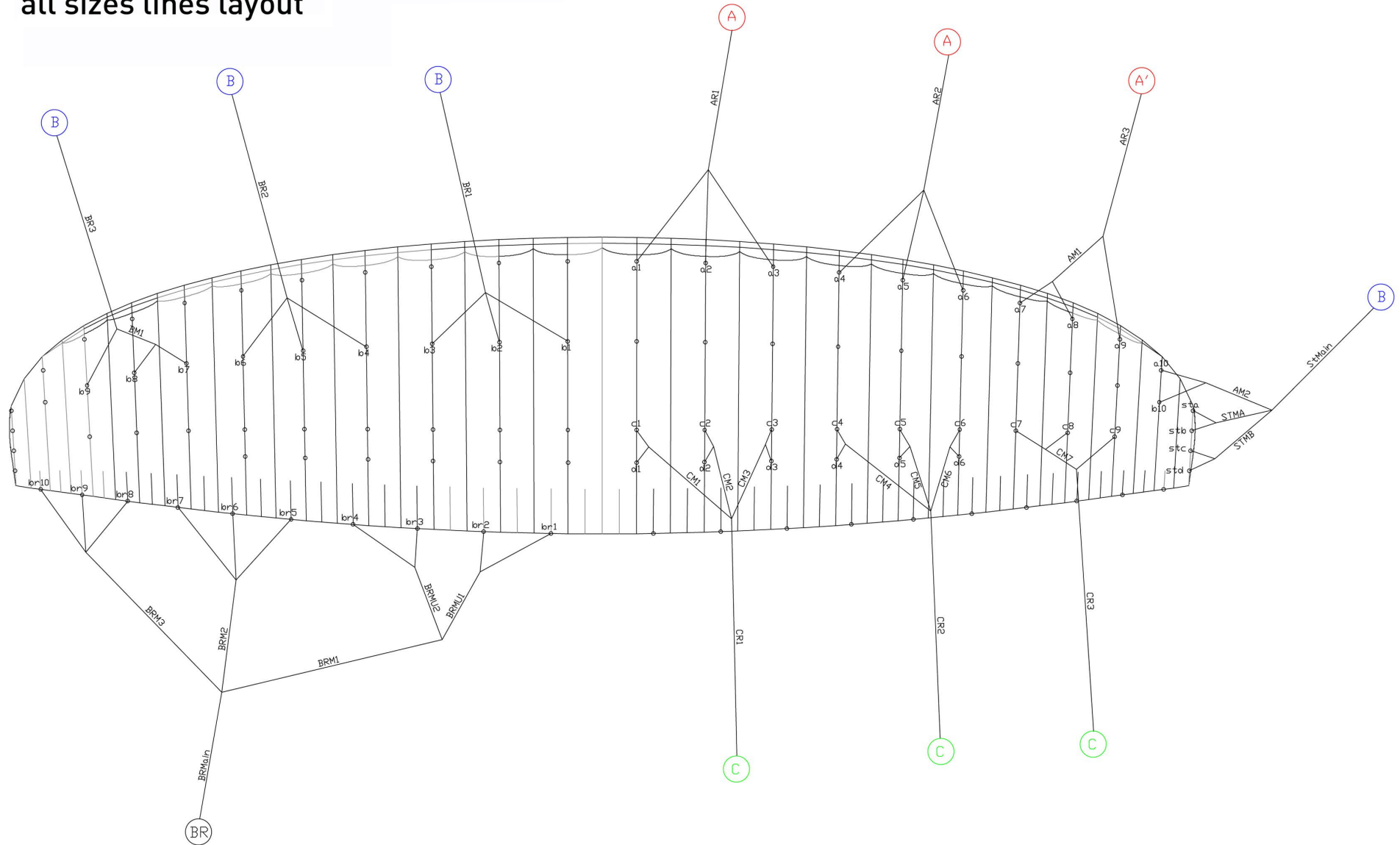
Even though this configuration only rarely occurs, you may find yourself in a situation called "parachutal stall " where the glider descends vertically with no forward motion. If it happens, release the brakes/toggles fully and trims symmetrically and push the speed bar. You might also need to push forward on the "A" risers. Make sure you regained a normal flight configuration before proceeding with brake/toggle usage again.

Spin / asymmetric stall

A spin will only occur because of a piloting error. If so, release the brake fully on the stalled side and be certain to keep the glider in check during the ensuing dive and reopening sequence.

BIRDY

all sizes lines layout



Fabrics	Producer	Reference
Outer surface - Leading edge	Dominico Tex	Dominico D30 soft
Outer surface - Trailing edge	Dominico Tex	Dominico D20 soft
Inner Surface	Porcher Sport	70000E71 - Skytex 27 gr soft
Supported ribs	MJTec	32gr Hard finish
Compression straps and D ribs	MJTec	32gr Hard finish
Unsupported ribs	Porcher Sport	70000E91 - Skytex 27 gr Hard
Rib reinforcements	Porcher Sport	Ripstop autocollant 50 mm

Main lines	Producer	Reference
Top cascade	Edelrid	8000U serie 130/090/070/050
Middle cascade	Edelrid	8000U-090
Low cascade	Edelrid	7343-230/190

Stabilo lines	Producer	Reference
Top cascade	Liros	PPSL 120
Middle cascade	Edelrid	8000U-070
Low cascade	Edelrid	8000U-050

Brake lines	Producer	Reference
Top cascade	Edelrid	8000U-050
Upper middle cascade	Edelrid	8000U-090
Lower middle cascade	Edelrid	8000U-130 / 090
Lower cascade	Edelrid	7850X-240-041

Connexion lines / risers
Softlink SUPAIR

Glider BIRDY Size XS

Line Check Maintenance Sheet

Measurements made from the base of the lines to the base of the wing, WITH risers and Maillons Rapides, were under 5 kg

	A			B			C			D			BRAKE		
	Manual	Tested sample	Diff	Manual	Tested sample	Diff	Manual	Tested sample	Diff	Manual	Tested sample	Diff	Manual	Tested sample	Diff
1	6285	6283	-2	6179	6179	0	6308	6311	3	6366	6368	2	6582	6582	0
2	6200	6197	-3	6090	6090	0	6213	6218	5	6271	6272	1	6318	6318	0
3	6236	6232	-4	6122	6124	2	6241	6243	2	6293	6294	1	6133	6135	2
4	6211	6211	0	6090	6091	1	6193	6193	0	6243	6242	-1	6086	6090	4
5	6149	6148	-1	6032	6034	2	6129	6127	-2	6174	6169	-5	5928	5929	1
6	6192	6190	-2	6076	6074	-2	6163	6162	-1	6200	6197	-3	5857	5862	5
7	6138	6142	4	6055	6058	3	6097	6092	-5	5785			5917	5919	2
8	6058	6062	4	5994	5996	2	6033	6034	1				5903	5908	5
9	5995	5996	1	5947	5952	5	5981	5979	-2				5880	5883	3
													5911	5916	5
10	5809	5806	-3	5764	5764	0									
11	5620	5615	-5	5639	5637	-2	5700	5699	-1	5786		-5786			

Tolérance +/- 10mm

Riser length (mm)

Risers length, Measured with carabiner.

	Trim			Accelerated		
	Manual	Tested sample	Diff	Manual	Tested sample	Diff
A	500	499	-1	365	366	1
A'	500	499	-1	365	366	1
B	500	500	0	410	411	1
C	500	502	2	500	502	2

Tolérance +/- 5mm

Glider BIRDY Size XS

Lines individual lengths														
A LINES			B LINES			C LINES			D LINES			BRAKE LINES		
NAME	CUT	SEWN	NAME	CUT	SEWN	NAME	CUT	SEWN	NAME	CUT	SEWN	NAME	CUT	SEWN
AR1	4121	3861	BR1	4047	3795	CR1	4166	3906	d1	751	531	BRmain	2634	2334
AR2	4211	3951	BR2	4129	3871	CR2	4215	3955	d2	728	508	BRM1	1943	1723
AR3	4472	4212	BR3	4421	4162	CR3	4456	4196	d3	731	511	BRM2	2296	2076
AM1	874	654	BM1	866	646	CM1	1681	1461	d4	704	484	BRM3	2648	2428
AM2	793	573	b1	2126	1906	CM2	1609	1389	d5	682	462	BRMU1	1392	1172
a1	2158	1938	b2	2037	1817	CM3	1628	1408	d6	687	467	BRMU2	1202	982
a2	2073	1853	b3	2069	1849	CM4	1556	1336				br1	1520	1300
a3	2109	1889	b4	1956	1736	CM5	1509	1289	STABILO LINES			br2	1256	1036
a4	1995	1775	b5	1898	1678	CM6	1530	1310	NAME	CUT	SEWN	br3	1261	1041
a5	1933	1713	b6	1942	1722	CM7	881	661	STMain	4374	4154	br4	1214	994
a6	1976	1756	b7	989	769	c1	697	477	STMA	718	498	br5	1675	1455
a7	1013	793	b8	928	708	c2	674	454	STMB	777	557	br6	1604	1384
a8	933	713	b9	1518	1298	c3	683	463	sta	698	478	br7	1664	1444
a9	1515	1295	b10	768	548	c4	658	438	stb	717	497	br8	1254	1034
a10	813	593				c5	641	421	stc	719	499	br9	1231	1011
						c6	654	434	std	805	585	br10	1262	1042
						c7	993	773						
						c8	929	709						
						c9	1527	1307						

Lines lengths under 5 kg of tension:

*the cut value may differ according to the type of stitching/machine and the thread used

**the sewn value is the final length of the line, from one loop end to the other

Tolérance +/- 10mm

Glider BIRDY Size S

Line Check Maintenance Sheet

Measurements made from the base of the lines to the base of the wing, WITH risers and Maillons Rapides, were under 5 kg

	A			B			C			D			BRAKE		
	Manual	Tested sample	Diff	Manual	Tested sample	Diff	Manual	Tested sample	Diff	Manual	Tested sample	Diff	Manual	Tested sample	Diff
1	6632	6633	1	6512	6516	4	6640	6643	3	6701	6702	1	6937	6935	-2
2	6545	6551	6	6419	6423	4	6541	6547	6	6602	6603	1	6661	6663	2
3	6583	6588	5	6455	6460	5	6572	6574	2	6627	6630	3	6467	6470	3
4	6549	6552	3	6421	6424	3	6530	6533	3	6582	6582	0	6420	6418	-2
5	6485	6488	3	6361	6369	8	6464	6468	4	6512	6515	3	6254	6251	-3
6	6531	6532	1	6408	6408	0	6500	6505	5	6539	6542	3	6180	6177	-3
7	6474	6476	2	6386	6390	4	6432	6433	1				6244	6239	-5
8	6391	6393	2	6322	6321	-1	6365	6368	3				6226	6227	1
9	6322	6322	0	6271	6274	3	6310	6309	-1				6202	6204	2
													6235	6234	-1
10	6128	6130	2	6081	6083	2									
11	5930	5931	1	5950	5954	4	6013	6010	-3	6104	6104	0			

Tolérance +/- 10mm

Riser length (mm)

Risers length, Measured with carabiner.

	Trim			Accelerated		
	Manual	Tested sample	Diff	Manual	Tested sample	Diff
A	522	-1	375	374	-1	-1
A'	520	-3	375	373	-2	-2
B	521	-2	427	423	-4	-4
C	521	-2	523	521	-2	-2

Tolérance +/- 5mm

Glider BIRDY Size S

Lines individual lengths														
A LINES			B LINES			C LINES			D LINES			BRAKE LINES		
NAME	CUT	SEWN	NAME	CUT	SEWN	NAME	CUT	SEWN	NAME	CUT	SEWN	NAME	CUT	SEWN
AR1	4343	4083	BR1	4256	3996	CR1	4373	4113	d1	780	560	BRmain	2774	2474
AR2	4431	4171	BR2	4344	4084	CR2	4435	4175	d2	756	536	BRM1	2027	1807
AR3	4708	4448	BR3	4654	4394	CR3	4691	4431	d3	760	540	BRM2	2402	2182
AM1	910	690	BM1	901	681	CM1	1760	1540	d4	730	510	BRM3	2773	2553
AM2	824	604	b1	2230	2010	CM2	1685	1465	d5	708	488	BRMU1	1454	1234
a1	2263	2043	b2	2137	1917	CM3	1706	1486	d6	713	493	BRMU2	1256	1036
a2	2176	1956	b3	2173	1953	CM4	1629	1409				br1	1589	1369
a3	2214	1994	b4	2052	1832	CM5	1581	1361	STABILO LINES			br2	1313	1093
a4	2093	1873	b5	1992	1772	CM6	1603	1383	NAME	CUT	SEWN	br3	1317	1097
a5	2029	1809	b6	2039	1819	CM7	918	698	STMain	4609	4389	br4	1270	1050
a6	2075	1855	b7	1032	812	c1	723	503	STMA	746	526	br5	1755	1535
a7	1057	837	b8	968	748	c2	699	479	STMB	807	587	br6	1681	1461
a8	974	754	b9	1589	1369	c3	709	489	sta	725	505	br7	1745	1525
a9	1586	1366	b10	799	579	c4	682	462	stb	745	525	br8	1312	1092
a10	846	626				c5	664	444	stc	747	527	br9	1288	1068
						c6	678	458	std	838	618	br10	1321	1101
						c7	1036	816						
						c8	969	749						
						c9	1601	1381						

Lines lengths under 5 kg of tension:

*the cut value may differ according to the type of stitching/machine and the thread used

**the sewn value is the final length of the line, from one loop end to the other

Tolérance +/- 10mm

Glider BIRDY Size M

Line Check Maintenance Sheet

Measurements made from the base of the lines to the base of the wing, WITH risers and Maillons Rapides, were under 5 kg

	A			B			C			D			BRAKE		
	Manual	Tested sample	Diff	Manual	Tested sample	Diff	Manual	Tested sample	Diff	Manual	Tested sample	Diff	Manual	Tested sample	Diff
1	7028	7028	0	6900	6907	7	7035	7036	1	7100	7104	4	7372	7369	-3
2	6937	6941	4	6804	6811	7	6933	6937	4	6996	6999	3	7081	7074	-7
3	6978	6983	5	6842	6847	5	6966	6969	3	7024	7029	5	6878	6871	-7
4	6943	6945	2	6809	6811	2	6923	6925	2	6978	6981	3	6829	6822	-7
5	6875	6880	5	6746	6751	5	6855	6858	3	6905	6906	1	6655	6645	-10
6	6924	6929	5	6796	6799	3	6892	6895	3	6933	6934	1	6579	6574	-5
7	6866	6871	5	6773	6776	3	6821	6820	-1				6646	6641	-5
8	6778	6786	8	6706	6710	4	6750	6753	3				6627	6622	-5
9	6705	6709	4	6651	6654	3	6692	6696	4				6602	6597	-5
													6637	6630	-7
10	6499	6504	5	6449	6451	2									
11	6289	6291	2	6310	6315	5	6376	6384	8	6472	6475	3			

Tolérance +/- 10mm

Riser length (mm)

Risers length, Measured with carabiner.

	Trim			Accelerated		
	Manual	Tested sample	Diff	Manual	Tested sample	Diff
A	523	526	3	375	373	-2
A'	523	524	1	375	371	-4
B	523	526	3	427	425	-2
C	523	522	-1	523	522	-1

Tolérance +/- 5mm

Glider BIRDY Size M

Lines individual lengths														
A LINES			B LINES			C LINES			D LINES			BRAKE LINES		
NAME	CUT	SEWN	NAME	CUT	SEWN	NAME	CUT	SEWN	NAME	CUT	SEWN	NAME	CUT	SEWN
AR1	4608	4348	BR1	4516	4256	CR1	4639	4379	d1	816	596	BRmain	2935	2635
AR2	4703	4443	BR2	4613	4353	CR2	4708	4448	d2	790	570	BRM1	2141	1921
AR3	5001	4741	BR3	4944	4684	CR3	4982	4722	d3	795	575	BRM2	2544	2324
AM1	955	735	BM1	946	726	CM1	1857	1637	d4	763	543	BRM3	2942	2722
AM2	863	643	b1	2358	2138	CM2	1779	1559	d5	740	520	BRMU1	1530	1310
a1	2394	2174	b2	2262	2042	CM3	1802	1582	d6	745	525	BRMU2	1322	1102
a2	2303	2083	b3	2300	2080	CM4	1719	1499				br1	1673	1453
a3	2344	2124	b4	2171	1951	CM5	1669	1449	STABILO LINES			br2	1382	1162
a4	2215	1995	b5	2108	1888	CM6	1692	1472	NAME	CUT	SEWN	br3	1387	1167
a5	2147	1927	b6	2158	1938	CM7	963	743	STMain	4900	4680	br4	1338	1118
a6	2196	1976	b7	1084	864	c1	755	535	STMA	780	560	br5	1853	1633
a7	1111	891	b8	1017	797	c2	731	511	STMB	844	624	br6	1777	1557
a8	1023	803	b9	1679	1459	c3	741	521	sta	759	539	br7	1844	1624
a9	1676	1456	b10	837	617	c4	712	492	stb	780	560	br8	1383	1163
a10	887	667				c5	694	474	stc	782	562	br9	1358	1138
						c6	708	488	std	878	658	br10	1393	1173
						c7	1089	869						
						c8	1018	798						
						c9	1692	1472						

Lines lengths under 5 kg of tension:

*the cut value may differ according to the type of stitching/machine and the thread used

**the sewn value is the final length of the line, from one loop end to the other

Tolérance +/- 10mm

Glider BIRDY Size ML

Line Check Maintenance Sheet

Measurements made from the base of the lines to the base of the wing, WITH risers and Maillons Rapides, were under 5 kg

	A			B			C			D			BRAKE		
	Manual	Tested sample	Diff	Manual	Tested sample	Diff	Manual	Tested sample	Diff	Manual	Tested sample	Diff	Manual	Tested sample	Diff
1	7272	7269	-3	7140	7135	-5	7280	7280	0	7348	7344	-4	7620	7619	-1
2	7179	7179	0	7041	7041	0	7174	7171	-3	7241	7238	-3	7320	7320	0
3	7222	7220	-2	7082	7079	-3	7210	7206	-4	7270	7264	-6	7112	7109	-3
4	7188	7184	-4	7047	7048	1	7167	7168	1	7225	7226	1	7062	7059	-3
5	7119	7118	-1	6983	6986	3	7096	7097	1	7149	7148	-1	6883	6880	-3
6	7170	7168	-2	7036	7038	2	7137	7142	5	7179	7181	2	6805	6801	-4
7	7107	7102	-5	7010	7011	1	7059	7053	-6				6876	6871	-5
8	7017	7013	-4	6941	6944	3	6986	6980	-6				6857	6857	0
9	6944	6941	-3	6887	6887	0	6926	6919	-7				6832	6828	-4
													6868	6869	1
10	6725	6724	-1	6673	6673	0									
11	6508	6506	-2	6530	6529	-1	6599	6601	2	6698	6699	1			

Tolérance +/- 10mm

Riser length (mm)

Risers length, Measured with carabiner.

	Trim			Accelerated		
	Manual	Tested sample	Diff	Manual	Tested sample	Diff
A	540	540	0	385	384	-1
A'	540	539	-1	385	383	-2
B	540	541	1	437	435	-2
C	540	544	4	540	544	4

Tolérance +/- 5mm

Glider BIRDY Size ML

Lines individual lengths														
A LINES			B LINES			C LINES			D LINES			BRAKE LINES		
NAME	CUT	SEWN	NAME	CUT	SEWN	NAME	CUT	SEWN	NAME	CUT	SEWN	NAME	CUT	SEWN
AR1	4761	4501	BR1	4666	4406	CR1	4793	4533	d1	836	616	BRmain	3024	2724
AR2	4862	4602	BR2	4767	4507	CR2	4866	4606	d2	810	590	BRM1	2211	1991
AR3	5168	4908	BR3	5108	4848	CR3	5147	4887	d3	814	594	BRM2	2629	2409
AM1	979	759	BM1	970	750	CM1	1911	1691	d4	782	562	BRM3	3044	2824
AM2	884	664	b1	2428	2208	CM2	1830	1610	d5	758	538	BRMU1	1572	1352
a1	2465	2245	b2	2329	2109	CM3	1855	1635	d6	763	543	BRMU2	1358	1138
a2	2372	2152	b3	2370	2150	CM4	1769	1549				br1	1720	1500
a3	2415	2195	b4	2235	2015	CM5	1717	1497	STABILO LINES			br2	1420	1200
a4	2281	2061	b5	2171	1951	CM6	1742	1522	NAME	CUT	SEWN	br3	1426	1206
a5	2212	1992	b6	2224	2004	CM7	987	767	STMain	5063	4843	br4	1376	1156
a6	2263	2043	b7	1113	893	c1	772	552	STMA	798	578	br5	1907	1687
a7	1141	921	b8	1044	824	c2	747	527	STMB	865	645	br6	1829	1609
a8	1051	831	b9	1731	1511	c3	758	538	sta	777	557	br7	1900	1680
a9	1728	1508	b10	857	637	c4	728	508	stb	799	579	br8	1422	1202
a10	909	689				c5	709	489	stc	801	581	br9	1397	1177
						c6	725	505	std	900	680	br10	1433	1213
						c7	1118	898						
						c8	1045	825						
						c9	1741	1521						

Lines lengths under 5 kg of tension:

*the cut value may differ according to the type of stitching/machine and the thread used

**the sewn value is the final length of the line, from one loop end to the other

Tolérance +/- 10mm

Glider BIRDY Size L

Line Check Maintenance Sheet

Measurements made from the base of the lines to the base of the wing, WITH risers and Maillons Rapides, were under 5 kg

	A			B			C			D			BRAKE		
	Manual	Tested sample	Diff	Manual	Tested sample	Diff	Manual	Tested sample	Diff	Manual	Tested sample	Diff	Manual	Tested sample	Diff
1	7550	7553	3	7410	7410	0	7554	7556	2	7624	7626	2	7911	7912	1
2	7454	7459	5	7308	7307	-1	7445	7445	0	7514	7509	-5	7602	7603	1
3	7499	7502	3	7351	7350	-1	7483	7483	0	7545	7542	-3	7386	7387	1
4	7458	7462	4	7311	7313	2	7432	7430	-2	7492	7489	-3	7336	7338	2
5	7387	7390	3	7245	7251	6	7360	7358	-2	7414	7408	-6	7151	7151	0
6	7440	7442	2	7299	7298	-1	7401	7401	0	7445	7443	-2	7071	7072	1
7	7379	7380	1	7277	7278	1	7327	7325	-2				7144	7145	1
8	7285	7288	3	7205	7206	1	7251	7251	0				7125	7127	2
9	7209	7207	-2	7149	7149	0	7189	7187	-2				7099	7104	5
													7136	7141	5
10	6980	6983	3	6927	6931	4									
11	6755	6757	2	6777	6780	3	6849	6851	2	6951	6952	1			

Tolérance +/- 10mm

Riser length (mm)

Risers length, Measured with carabiner.

	Trim			Accelerated		
	Manual	Tested sample	Diff	Manual	Tested sample	Diff
A	540	544	4	385	384	-1
A'	540	541	1	385	381	-4
B	540	544	4	437	439	2
C	540	541	1	540	541	1

Tolérance +/- 5mm

Glider BIRDY Size L

Lines individual lengths														
A LINES			B LINES			C LINES			D LINES			BRAKE LINES		
NAME	CUT	SEWN	NAME	CUT	SEWN	NAME	CUT	SEWN	NAME	CUT	SEWN	NAME	CUT	SEWN
AR1	4947	4687	BR1	4846	4586	CR1	4976	4716	d1	861	641	BRmain	3124	2824
AR2	5047	4787	BR2	4947	4687	CR2	5047	4787	d2	834	614	BRM1	2291	2071
AR3	5370	5110	BR3	5307	5047	CR3	5346	5086	d3	839	619	BRM2	2728	2508
AM1	1011	791	BM1	1001	781	CM1	1979	1759	d4	805	585	BRM3	3162	2942
AM2	911	691	b1	2518	2298	CM2	1896	1676	d5	780	560	BRMU1	1625	1405
a1	2557	2337	b2	2416	2196	CM3	1922	1702	d6	786	566	BRMU2	1404	1184
a2	2461	2241	b3	2459	2239	CM4	1832	1612				br1	1778	1558
a3	2506	2286	b4	2319	2099	CM5	1779	1559	STABILO LINES			br2	1469	1249
a4	2366	2146	b5	2253	2033	CM6	1804	1584	NAME	CUT	SEWN	br3	1474	1254
a5	2295	2075	b6	2307	2087	CM7	1019	799	STMain	5262	5042	br4	1424	1204
a6	2348	2128	b7	1150	930	c1	795	575	STMA	822	602	br5	1976	1756
a7	1179	959	b8	1078	858	c2	769	549	STMB	891	671	br6	1896	1676
a8	1085	865	b9	1794	1574	c3	781	561	sta	801	581	br7	1969	1749
a9	1791	1571	b10	885	665	c4	749	529	stb	823	603	br8	1472	1252
a10	938	718				c5	730	510	stc	826	606	br9	1446	1226
						c6	746	526	std	928	708	br10	1483	1263
						c7	1155	935						
						c8	1079	859						
						c9	1805	1585						

Lines lengths under 5 kg of tension:

*the cut value may differ according to the type of stitching/machine and the thread used

**the sewn value is the final length of the line, from one loop end to the other

Tolérance +/- 10mm

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BIRDY XS
EN 926 -1 : 2015 & 926 - 2 : 2013 Class A.
N° PG-1858.2021
LTF 91/09

Certification

Classification: **A**

In accordance with standards EN 926-1:2015, EN 926-2:2013 and NF L 2-565-20:

PG_1858.2021

Date of issue (DMY):

20.10.2021

Manufacturer:

Supair s.a.s.

Model:

Birdy XS

Serial number:

SA-BIR-XS-2010-001P

Configuration during flight tests

Paraglider		Accessories	
Maximum weight in flight (kg)	70	Range of speed system (cm)	13
Minimum weight in flight (kg)	50	Speed range using brakes (km/h)	14
Glider's weight (kg)	3.5	Total speed range with accessories (km/h)	22
Number of risers	3	Range of trimmers (cm)	0
Projected area (m2)	18.03		
Harness used for testing (max weight)		Inspections (whichever happens first)	
Harness type	ABS	Every 2 years or every 100 flight hours, whichever comes first.	
Harness brand	Advance	Warning! Before use refer to user's manual	
Harness model	Success 4 M	Person or company having presented the glider for testing: None	
Harness to risers distance (cm)	44		
Distance between risers (cm)	40		

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23
A A

BIRDY S
 EN 926 -1 : 2015 & 926 - 2 : 2013 Class A.
 N° PG-1859.2021
 LTF 91/09

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Test laboratory for paragliders, paraglider harnesses
 and paraglider reserve parachutes



Classification: **A**

In accordance with standards EN 926-1:2015, EN 926-2:2013 and NfL 2-565-20:

PG_1859.2021

Date of issue (DMY):

20.10.2021

Manufacturer:

Supair s.a.s.

Model:

Birdy S

Serial number:

SA-BIR-S-2010-002P

Configuration during flight tests

Paraglider		Accessories	
Maximum weight in flight (kg)	85	Range of speed system (cm)	15
Minimum weight in flight (kg)	65	Speed range using brakes (km/h)	14
Glider's weight (kg)	3.8	Total speed range with accessories (km/h)	22
Number of risers	3	Range of trimmers (cm)	0
Projected area (m2)	20.2		
Harness used for testing (max weight)		Inspections (whichever happens first)	
Harness type	ABS	Every 2 years or every 100 flight hours, whichever comes first.	
Harness brand	Supair	Warning! Before use refer to user's manual	
Harness model	Evo XC 3 M	Person or company having presented the glider for testing: None	
Harness to risers distance (cm)	44		
Distance between risers (cm)	44		

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23
A 0

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BIRDY M
EN 926 -1 : 2015 & 926 - 2 : 2013 Class A.
N° PG-1860.2021
LTF 91/09



Classification: **A**

In accordance with standards EN 926-1:2015, EN 926-2:2013 and NfL 2-565-20:

PG_1860.2021

Date of issue (DMY):

20.10.2021

Manufacturer:

Supair s.a.s.

Model:

Birdy M

Serial number:

SA-AP4-M-021820

Configuration during flight tests

Paraglider

Maximum weight in flight (kg)	105
Minimum weight in flight (kg)	80
Glider's weight (kg)	4.2
Number of risers	3
Projected area (m2)	22.48

Accessories

Range of speed system (cm)	15
Speed range using brakes (km/h)	14
Total speed range with accessories (km/h)	22
Range of trimmers (cm)	0

Harness used for testing (max weight)

Harness type	ABS
Harness brand	Supair
Harness model	Evo XC 3 L
Harness to risers distance (cm)	44
Distance between risers (cm)	46

Inspections (whichever happens first)

Every 2 years or every 100 flight hours, whichever comes first.
Warning! Before use refer to user's manual
Person or company having presented the glider for testing: **None**

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23
A 0

BIRDY ML
 EN 926 -1 : 2015 & 926 - 2 : 2013 Class A.
 N° PG-1861.2021
 LTF 91/09

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Test laboratory for paragliders, paraglider harnesses
 and paraglider reserve parachutes



Classification: **A**

In accordance with standards EN 926-1:2015, EN 926-2:2013 and NfL 2-565-20:

PG_1861.2021

Date of issue (DMY):

20.10.2021

Manufacturer:

Supair s.a.s.

Model:

Birdy ML

Serial number:

SA-BIR-ML-2010-003P

Configuration during flight tests

Paraglider		Accessories	
Maximum weight in flight (kg)	115	Range of speed system (cm)	16
Minimum weight in flight (kg)	90	Speed range using brakes (km/h)	14
Glider's weight (kg)	4.4	Total speed range with accessories (km/h)	22
Number of risers	3	Range of trimmers (cm)	0
Projected area (m2)	24.01		
Harness used for testing (max weight)		Inspections (whichever happens first)	
Harness type	ABS	Every 2 years or every 100 flight hours, whichever comes first.	
Harness brand	Supair	Warning! Before use refer to user's manual	
Harness model	Evo XC 3 L	Person or company having presented the glider for testing: None	
Harness to risers distance (cm)	44		
Distance between risers (cm)	48		

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23
A 0

BIRDY L
EN 926 -1 : 2015 & 926 - 2 : 2013 Class A.
N° PG-1862.2021
LTF 91/09

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Test laboratory for paragliders, paraglider harnesses
 and paraglider reserve parachutes



Classification: **A**

In accordance with standards EN 926-1:2015, EN 926-2:2013 and NfL 2-565-20:

PG_1862.2021

Date of issue (DMY):

20.10.2021

Manufacturer:

Supair s.a.s.

Model:

Birdy L

Serial number:

SA-BIR-L-2010-004P

Configuration during flight tests

Paraglider

Maximum weight in flight (kg) **130**
 Minimum weight in flight (kg) **105**
 Glider's weight (kg) **4.7**
 Number of risers **3**
 Projected area (m2) **25.88**

Accessories

Range of speed system (cm) **16**
 Speed range using brakes (km/h) **14**
 Total speed range with accessories (km/h) **22**
 Range of trimmers (cm) **0**

Harness used for testing (max weight)

Harness type **ABS**
 Harness brand **Supair**
 Harness model **Evo XC 3 L**
 Harness to risers distance (cm) **44**
 Distance between risers (cm) **48**

Inspections (whichever happens first)

Every 2 years or every 100 flight hours, whichever comes first.
 Warning! Before use refer to user's manual
 Person or company having presented the glider for testing: **None**

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23
A 0

Washing and glider maintenance

It is a good idea to wash your glider from time to time. We recommend using a soft solvent (such as soap) use a brush and rinse thoroughly.

Storage and transport

When not using your glider, store it inside your paragliding rucksack in a dry cool and clean place protected from UV exposure. If your harness is wet please dry thoroughly before storing. If your glider is wet or humid make sure you dry it out properly

Product longevity and mandatory controls

Irrespective of pre-flight checks, you must have the glider serviced regularly. We recommend that the wing should be checked every 2 years or every 100 flight hours, whichever comes first, and in particular :



- Lines (no excessive wear, no breakages or folds), maillons, attachment points and carabiners
- Materials selected for the BIRDY ensure the best compromise for lightness and longevity. However in certain conditions, for example excessive exposure to UV or abrasion or exposure to chemical products, the glider must be submitted to a full check in a qualified facility. Your safety is at stake.



- Carabiners must be replaced by new ones every five (5) years by identical models or models recommended by the manufacturer (SUPAIR).

Repair



Even if we have used the best quality materials, your glider may be subject to wear and tear. In this case you must have it checked by a qualified workshop.

Please contact us either by telephone or by E-mail sav@supair.com for more information.

Spare parts

In case of premature wear or tear of your gear, you may order the following parts:

- * Suspension and brake lines, through a specialized workshop
- * Connects, through SUPAIR directly
- * Whole risers, through SUPAIR directly
- * Brake handles, through SUPAIR directly

Recycling

All our materials are selected for their technical and environmentally friendly characteristics. None of the components found in our products will harm the environment. Most of them are recyclable.

If your SORA2 has reached the end of its life, you can separate all metallic and plastic parts from the cloth and sort out refuse according to your country's practices. We advise you to contact appropriate organisations for the recycling of textile parts.

Eco-responsibility

Paragliding is an outdoor activity. You are responsible for the environment in which you play. So please mind:

- * respecting the local flora and fauna
- * not throwing your trash out in nature
- * keeping your noise level low.

By doing so you participate in securing a future for the planet and for the sport.

Warranty

SUPAIR takes the greatest care in the design and production of its product line hence offers a 3 years limited warranty from the purchase date against any manufacturing defect or design issues occurring during normal use. Any damage or degradation resulting from incorrect or abusive use abnormal exposure to aggressive factors including but not limited to; high temperature intense sun exposure high humidity etc. will invalidate this warranty.

Disclaimer



Paragliding is an activity requiring, skills, specific knowledge and sound judgement. Be safe by learning in certified schools, subscribe and obtain an adequate insurance policy as well as a flying license while always making sure your flying skills are up to the task in various weather flying conditions. SUPAIR cannot be held responsible for your paragliding decisions or activities.



This SUPAIR product has been designed exclusively for paragliding. Any other activity such as skydiving or BASE jumping is absolutely forbidden.

Pilot's gear

This is essential that you passenger and you carry a helmet suitable boots and clothing. Carrying a reserve parachute suitable for your weight and correctly connected to your harness is also very important.



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■ ■ DESIGNED
■ ■ IN ANNECY

 100% MADE
IN EUROPE