



Soul

Light harness with a pod

User Manual



Please read this manual carefully before your first flight.

DUDEK
paragliders

Congratulations!

Thank you for choosing the Soul harness. We have done our best to present you with highest quality product, fulfilling all safety requirements and offering maximum functionality. Please read this manual carefully before using the harness for the first time. This will help you utilize all features of the Soul, thus maximizing comfort and fun factor of each flight. We wish you a lot of safe and enjoyable airtime!

Contents

1. Safety	2
2. Description	2
3. Cockpit	3
4. Pod	3
5. Speedbar	4
6. Rescue chute installation	5
7. Harness/paraglider connection	11
8. Harness/tow connection	11
9. Straps adjustment	11
10. Pockets	13
11. Impact pad	13
12. Before flight	14
13. Using rescue chute	14
14. Landing	14
15. Water landing	14
16. Tandem flying	14
17. Cleaning and storage	14
18. Operation and repairs	14
19. Technical data	15

1. Safety

Paragliding is a potentially hazardous sport. When flying a paraglider you have to accept risks of injury and/or even death. Incompetent or improper use of the harness may increase those risks. In case of any doubts please ask your dealer or manufacturer.

Dudek Paragliders do not bear any responsibility for damages or injuries resulting from paragliding activities.

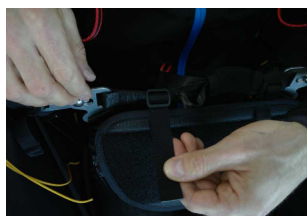
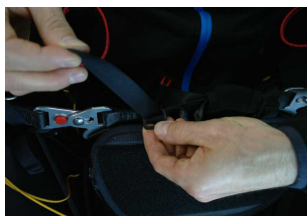
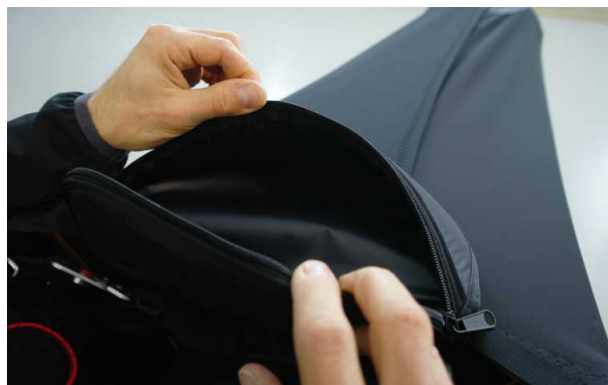
2. Description

Soul is a lightweight pod harness. Due to light and durable materials of best quality the Soul weighs just 3,7 kg in M size. It is an ideal proposition for pilots who enjoy long XC flights and vol-biv adventures. Small weight and dimensions make easier long treks on foot. Reduced, elastic seat plate used in Soul harness is an intermediate solution between "hammock" and traditional, rigid seat plate harnesses. Stiffened back support and new, ergonomic seating present you with maximum snugness during long flight hours. Four sizes and large adjustment range make sure every single pilot will be able to find his optimum. Redesigned strap scheme brings great stability and significantly reduces danger of launching with unclipped leg straps. Airfoam impact pad 15 cm thick offers very good protection of the pilot's spine. Integrated rescue chute container is located on the back, behind the impact pad. Release handle is fixed in easily accessible area on the right side of the harness. The pod shields the pilot against cold and improves aerodynamic qualities. Four-point adjustment of its length allows for steeples adjustment of the footrest too. Locking scheme of the pod 'reminds' the pilot to clip in the chest strap as well. There is a container under seat plate to keep a ballast bag. The Soul features easily replaceable Smart Pulleys with ball-bearings in order to improve the speedsystem operation.



3. The Cockpit

The cockpit has a shelf ready to keep the instruments (vario, GPS) provided with Velcro-finished cases. Under this shelf there is a pocket, accessible in flight to reach an energy bar or soft drink. The cockpit is fixed on the chest strap only and has no additional locks.



4. The Pod

The pod obviously shields the pilot against cold and improves aerodynamic qualities of the unit. There is an adjusted footrest (distance/inclination) and a speedbar inside. The pod is integrated with the harness (it is not detachable).

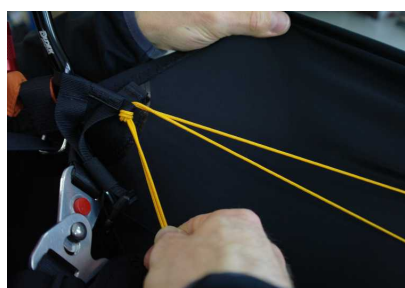


The nose of the pod automatically fills up once in the air, then after landing you can easily squeeze that air out for packing.

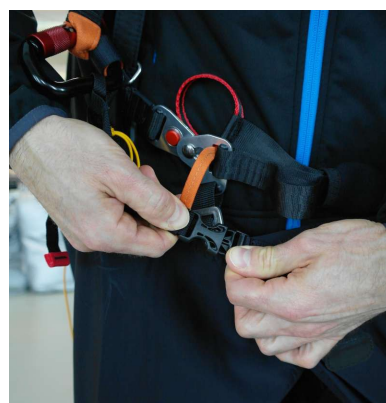
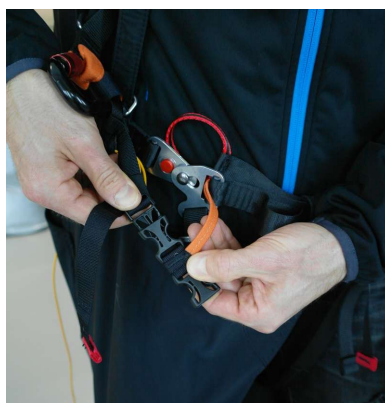
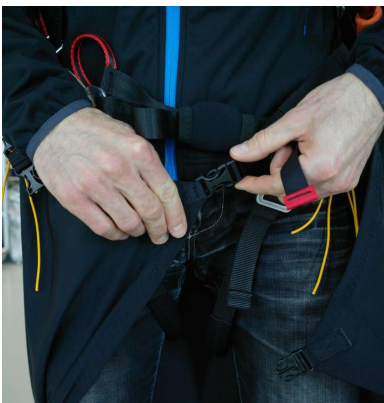


It is not advised to adjust the pod straps right after launch – you have to reach safe altitude first.

The adjustment of the pod length and footrest inclination is demonstrated on the pictures below.



The pod is closed in two points. Both of the are adjusted, so that you can choose how taut and overlapping they are to be. Too much overlap can make stepping in and out of the harness difficult. If stepping in the harness proves too complicated, you can slightly release the pod straps before launch and tighten them once in the air.

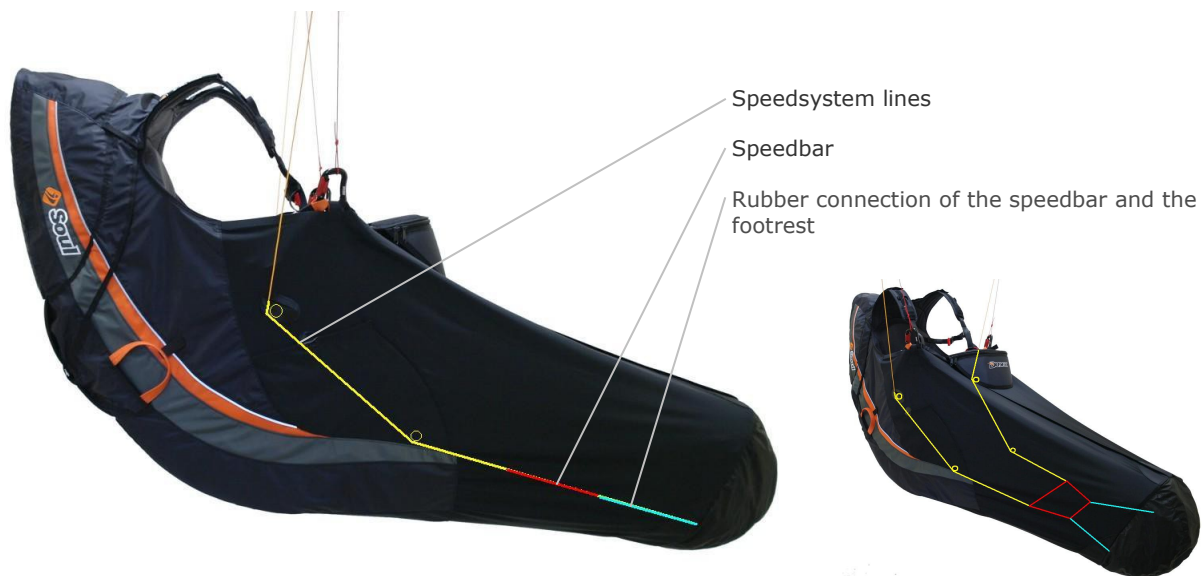


5. Speedbar

Lines of the speedbar must be led through respective pulleys (under the seat and on the back support). Then put it through metal loops in the pod and fix a stoper, accompanied by speedsystem clip. Connect the speedbar with a rubber band with the pod's footrest. Find the best length of the rubber so that speedbar will be easily accessible in flight. In order to adjust the whole system you have to sit in the harness when hanged by the paraglider's risers. At full speedbar the pulleys on the risers should touch. When necessary, adjust the lines later according to your experience in flight.



Do not adjust the speedsystem lines while in flight.



6. Rescue chute installation

Soul has an integrated container for the rescue chute, located on the back behind the impact pad. Release handle is fixed in easily accessible area on the right side of the harness. It is possible to install a steered rescue chute as well in the Soul.



Pictures below show the attachment of a steered reserve chute. You need two rectangular links like **Maillon Rapide C6**. Tighten them with a wrench so that they will stay closed firm.



1



Attach the release handle to the rescue chute bag.



The handle must be attached to the middle loop as shown on the picture. Do not fix it to the loop on the side of the bag.

2



Connect the rescue chute riser to the V-strap of the harness with locked quicklink Maillon Rapide C6 or C7. Tighten it with a wrench so that it can't open on its own.

3



After locking the quicklink safeguard the straps by applying neoprene cover to keep them in place.

4



Put the rescue chute in the container with suspension lines facing downward. Both the lines and riser of the canopy must be stowed in the rear part of the container. The container is a bit deeper there.

5



Lead the assist lines through the loops of the #1 flaps.

6



Flap #1 is divided in two. Put the riser attaching handle to the bag between both parts of the flap. Lead the assist line through the fragment equipped with a metal loop.



7



Lead the assist lines through the loops of the #2 flap. In order to facilitate closing it may be a good idea to use temporary pins beside assist lines.

8



Lead the assist lines through the loops of the #3 flap, with optional use of temporary pins.

9



Close the container with regular pins and remove assist lines. Put them under the pins first, so that container loops are not damaged by friction as shown below.



10



Close the lid covering the pins.

11



See that #1 flaps inside the container are not folded and properly guard the rescue chute.

12



Place the release handle on the Velcro. Close the V-strap channel, hiding the excess under #3 flap.





If you are installing the rescue chute for the first time, it is necessary to run a test opening in order to make sure the container was correctly closed and to get familiar with release force required. In order to do that hang the harness, sit in it, grab the release handle and pull it vigorously away from the harness, perpendicular to the flight direction. When running this exercise it is not recommended to throw the rescue away, as it will result in opening the canopy bag. Pack the chute into the container again.



To avoid accidental opening of the rescue system, pins closing the container must be checked before each flight!

Rescue chute must be periodically aired and repacked according to its manual. Proven equipment for the Soul is the Globe 120 rescue chute, manufactured by Dudek Paragliders. Installation of many other parachutes (including steered reserves) is possible, as long as they fit in the container.

7. Harness/paraglider connection

Soul harness is equipped with aluminium Dudek carabiners of 20 kN strength. Use them to connect the risers to the harness. Another thing to connect before launch is the speedsystem lines of the harness with the speedsystem of the risers. It is recommended to replace main carabiners with new ones after 300 hrs airtime.



Before launch check if the carabiners are locked and guarded against accidental opening.

8. Harness/tow connection

The only safe way of attaching tow line is a dedicated tow release. The Soul does not feature additional points to fix the tow release, therefore it is to be mounted directly on the harness' carabiners or the canopy risers.

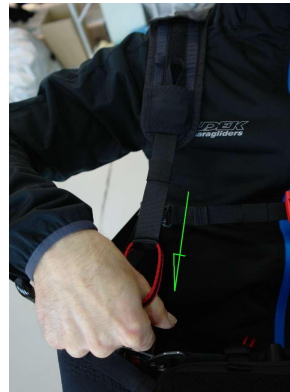
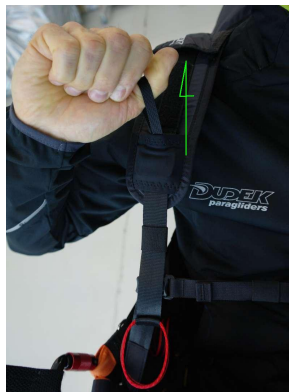
9. Straps adjustment



Before adjusting the straps please install rescue chute and fill the back pocket as for normal flight. Watch out for the symmetry – left and right side should be adjusted the same. First, test flight should be done in easy weather conditions, with necessary corrections applied afterwards. Do not adjust the harness while flying.

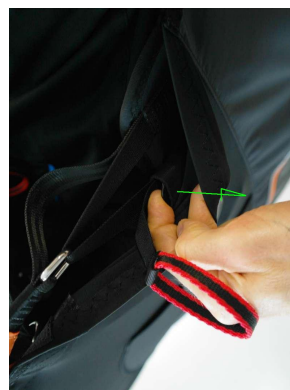
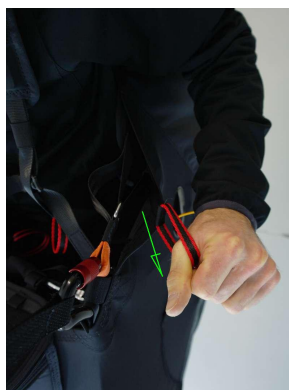
9.1 Shoulder straps

Thanks to adjustable shoulder straps the Soul can accommodate pilots of almost any height. They should stay on your shoulders rather tight, with just a little play. Too short straps will make difficult comfortable seating after launch and can limit your movement in flight. A clip on the shoulder traps will make sure they stay in place during launch and flight. Additionally, there is an alarm whistle fixed to the clip.



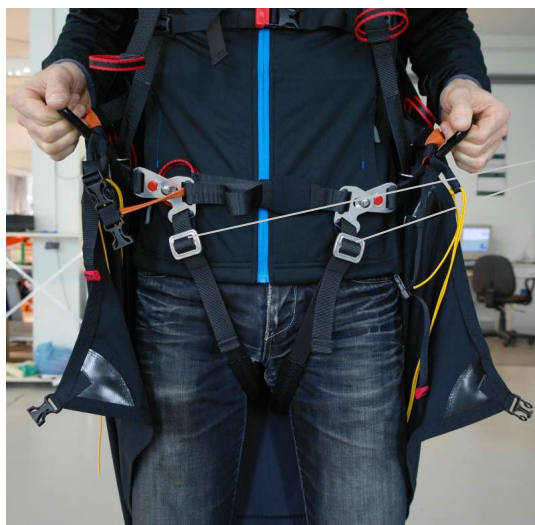
9.2 Side straps

They determine the seat/backrest angle. Initial adjustment should be done before the first flight, with the harness hung from a ceiling. All settings are to be verified in first flight and can be further modified at any time. Bear in mind that when the backrest is too much reclined, there is increased risk of getting a twist in case of big deflation.



9.3 Leg straps

The leg straps are the most important safeguard against falling out of the harness. Their adjustment must allow for easy launching and proper seating in the air. Too short straps can make you uncomfortable and restrain your starting run. Too long straps can make seating into harness impossible without using your hands. In Soul harness both leg straps are joined with the chest strap, significantly reducing risk of launching without leg straps closed. Their length affects stability of the harness in flight too. For increased comfort both leg straps are covered with soft neoprene.



Length adjustment buckles



In order to avoid falling out of the harness it is imperative to check before each launch if the chest and legs straps are closed. **Not closing the straps is extremely dangerous and is a known reason of fatal accidents !**

9.4 Chest strap

Chest strap controls the distance between carabiners. Increasing that distance makes the harness less stable, improving effectiveness of the weightshifting and relaying more information from the canopy. Reducing it will stabilize everything and make the paraglider less receptive to weight steering. Too narrow carabiner base can make recovery from extreme situations very hard or even impossible (in case of a spiral). If the manufacturer of the paraglider does not give any special instructions, recommended width is 42-48 cm. In turbulent air you can pull in the strap to feel more comfortable, but always remember that it is more probable to get a twist in emergency then.



10. Pockets

The Soul has a spacious back pocket (ca. 26 litres volume) and two little side pockets. The back pocket can easily hold the paraglider's backpack, camelback and much more. There are openings in upper part of the pocket (on both sides) to lead the drink pipe, antennas etc. Additionally, there is a pocket under the instrument panel of the cockpit. Both side and cockpit pockets are easy to access in flight. Under the seat plate you can find a waterballast pocket. It can be used for other purposes as well.



Water ballast pocket under seat



11. Impact pad

The Soul is equipped with a 15 cm thick airfoam impact pad. Fixing the impact pad is demonstrated below.



12. Before flight

Before each flight a thorough check of the harness is required. For your own safety make sure that:

- the harness is not damaged in any way
- rescue chute container is correctly closed and locked with pins
- rescue chute release handle is correctly set up and has the right shape (quite often it happens to be deformed in transport, so it's important to check if it's not flattened and easy to grab)
- all leg and chest straps are closed
- shoulder and side straps remain correctly adjusted
- all pockets are closed with their zips covered
- main carabiners are closed and locked, without any damage
- the speedbar is clipped to the paraglider.

13. Using rescue chute

Rescue chute should be used in case of emergency, when you can't recover the paraglider from abnormal flight state in any other way. Throwing the chute while in a fast spin is risky. If there is still some altitude to spare, first you should try to slow down or stop the spin altogether.

To use the chute grab the release handle, with fast and resolute move rip it from its velcro and throw it together with the canopy bag as far as possible, to the outside of the spiral (if present). After opening deflate your paraglider with its rear risers. Prepare for landing in parachute style, keeping your legs together with slightly bent knees

14. Landing

While on final approach, get your legs out of the pod and assume upright position. Touchdown when still sitting is unacceptable and very dangerous, as even despite the impact pad there is high risk of spine injury. Land always on your feet, with a few steps to bleed off the speed if necessary. Impact pad is not a landing aid and was not designed as such.

15. Water landing

Water landing is potentially very dangerous, with imminent risk of drowning. If it is unavoidable, prepare yourself by releasing all buckles and straps beforehand. In the last moment get out of the harness to avoid getting tangled in suspension lines or other gear. The harness does not sink, so you can later grab it and use as a lifebuoy.



Water landing while still in harness is extremely dangerous. Impact pad does not sink and will always float, forcing your head under water and rendering breathing very hard or impossible. There is very high risk of getting tangled in lines and drowning.

16. Tandem flying

Soul harness was not designed - and remains unsuitable - for tandem operations.

17. Cleaning and storage

All materials for the harness were carefully selected according to their quality and durability. With help of your care they will keep the harness in good condition for a long time. The harness is best cleaned with a wet sponge, possibly a bit of soap. Do not use detergents or solvents. If there is a lot of mud, use the brush first before wet cleaning. In case of completely soaked harness (e.g. after water landing) dry it in a well aired place, away from direct sun operation.

Soaked back impact pad must be taken out of the harness and dried with opened zip. If this will be not enough, remove the airfoam and dry it separately.

Soaked rescue chute always has to be completely removed from the harness, dried and packed again by a licensed person.

In case of a long-time storage keep the harness either in the backpack or loose, in a well ventilated room, away from sun rays. Unfortunately some discoloration of the harness parts is unavoidable over time and this is yet another reason for not exposing it to the sun more than necessary.

18. Operation and repairs

Periodic control of the harness will keep it in safe operation for a long time. After each hard landing check the back impact pad too, as the seams or zip quite often get ripped on absorbing impact and damaged impact pad will be ineffective. If you notice damage to its cover, send it back to the producer for a repair or buy a new one.

Correspondingly, after each use of rescue chute thoroughly check entire harness for damages, paying particular attention to straps and seams.

Aluminium carabiners should be replaced after each 5 years or 300 hours airtime. Scratched or damaged carabiners are not serviceable anymore and have to be replaced at once.



Using damaged harness is out of the question. In case of any doubts please contact your dealer or manufacturer and/or send it to an authorised workshop for closer inspection.

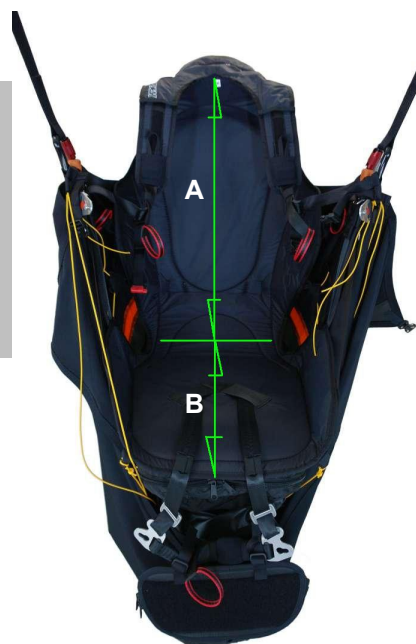
19. Technical data

Size	Suspension height (cm)	Seat width * (cm)	Max. pilot weight (kg)	Harness weight ** (kg)
S	39	25/31	100	3,5
M	40	27/33	100	3,65
L	41	28/34	100	3,8
XL	42	29/35	100	3,95

* Seat width front/back

** Weight incl. Impact pad, carabiners and speedbar

Size	Back support height A (cm)	Seat width B (cm)
S	64	46
M	67	48
L	70	49
XL	74	51



Impact pad	Airfoam 15 cm
Carabiners	Dudek 20 kN
Buckles	Finsterwalder, AustriAlpin
Cloth	5012 Cordura Ripstop 160 g/m2
	Delinova 100 200 g/m2
	Delinova 75 130g/m2
	Dominico 41 g/m2
	Lycra 210 g/m2
Straps	Poliester 1780 daN
	Poliamid 1200 daN

Since Dudek Paragliders products are subject to constant improvements, some minor differences are possible between manual and actual product. Dudek Paragliders withhold rights to introduce such changes without individual notice.



Dudek Paragliders
ul. Centralna 2 U
86-031 Osielsko
Poland
tel. +48 52 324 17 40
fax. +48 52 381 33 58
export@dudek.eu
www.dudek.eu