



USER'S MANUAL SOUL 2021

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Congratulations!

Thank you for choosing the Soul 2021 harness. We have done our best to present you with a highest quality product, fulfilling all safety requirements. Please read this manual carefully before using the harness for the first time. This will help you utilize all features of the Soul 2021, maximizing comfort and fun you get out of each flight. We wish you a lot of safe and enjoyable airtime!



1. Safety

Paragliding is a potentially hazardous sport. When flying a paraglider you have to accept the risks of injury and even death. Improper and/or incompetent use of the harness may increase those risks. Thus the proper training, familiarity with your gear and a valid insurance are mandatory. The pilot has to be able to independently assess the weather conditions, too. All flights are to be absolved with your helmet on and the rescue chute installed. Before each flight a gear check is required as for possible damages and overall airworthiness.

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.

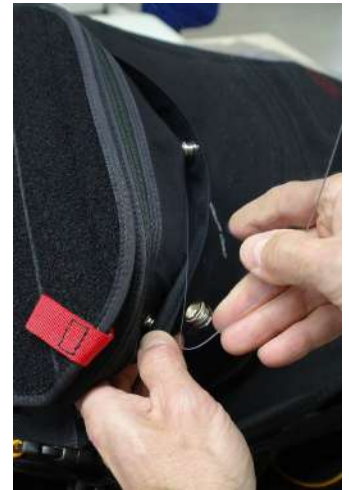
2. Description

Soul 2021 is a light harness designed for XC flights. The basic goal of this design was improving the pilot's comfort in long flights, while keeping its small weight. Due to light materials the harness weighs just 3,5 kg in M size.

Ventilated backrest and a new, ergonomic seat with profiled seatplate ensure maximum comfort during the flight. Large adjustment range makes sure that every single pilot will be able to find his/her optimum. Redesigned strap scheme brings great stability and significantly reduces danger of launching with leg/chest straps not locked properly. The harness is equipped with a 15 cm thick, certified airfoam. Integrated rescue chute container is located on the back, behind the protector. Release handle is fixed in easily accessible area on the right side of the harness. The pod improves aerodynamics of the harness and protects the pilot against cold. Its four-point length adjustment allows for any footrest inclination as well. Complete with integrated cockpit equipped with a detachable windscreen it is closed in two points only. The cockpit has an additional, detachable instrument panel, equipped with easily accessible safety knife. Locking scheme of the pod 'reminds' the pilot to clip in the chest strap, too. There is a ballast pocket under the seat plate. The harness has the Ronstan 20 pulleys installed, improving the speedsystem operation. The automatically inflating fairing in the rear part of the harness has greatly improved its aerodynamics.

3. Cockpit

The cockpit has an instrument panel (vario, GPS etc), ready to accept Velcro-finished cases. Additionally, the panel is equipped with a safety knife and can be easily detached with the instruments still fixed to it. Under the panel there is a pocket, accessible in flight. The cockpit windscreen is detachable. The cockpit itself is integrated with the pod and does not have any additional fasteners.



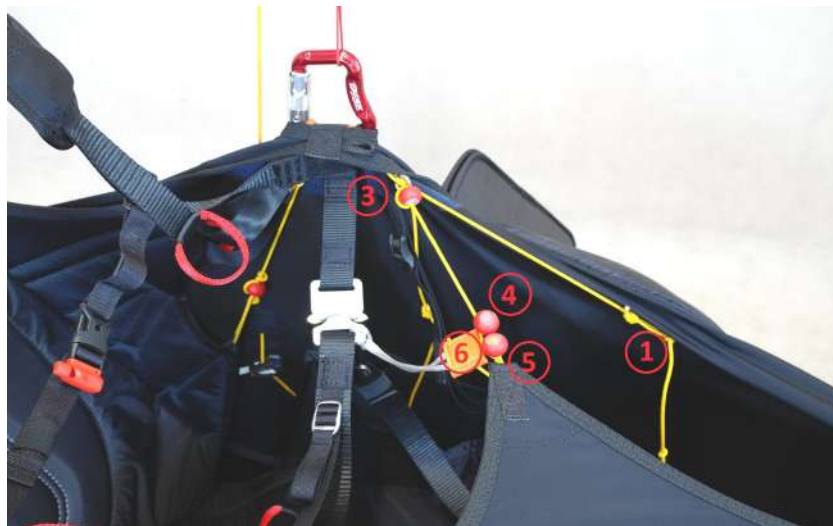
4. The pod

The pod improves aerodynamics of the harness and protects the pilot against cold. There is an adjustable (length/angle) footrest and a two-step speedbar within the pod. The pod is permanently attached to the harness and integrated with a cockpit. It is closed in two places only. The front of the pod automatically inflates after launch, then after landing you can easily squeeze that air out e.g. for packing. The length and inclination of the footrest is adjusted in points #1 and #2.



Length of the left upper line can be adjusted after earlier tensioning of the pods right side. It can be done by moving red ball #3 until desired effect is reached. The right side of the pod is closed by inserting ball #4 and #5 in the loops of the safety strap #6. The left side is closed and adjusted by the #7 buckle. This part of the pod is integrated with the cockpit.

i If the carabiners width has been changed, a re-adjustment of the right-side tension may be necessary in points #3 and #1.



5. Speed system

The harness is delivered with speed bar installed. In case of renewed installation, lines of the speedbar must first be led through metal loops on the sides of the seatplate. Then lead the lines through respective pulleys (in the back of the seatplate and Ronstan 20 on the back support). The ends of the lines should be put outside of the pod through side slits and finished with metal speed system clips. Connect the speedbar with a rubber band to the pod's footrest. Find the best length of the rubber so that the speedbar is easily accessible in flight. In order to adjust the whole system you have to sit in the harness while it is hung by the paraglider's risers. At full speedbar the pulleys on the risers should touch each other. When necessary, adjust the lines according to your later experiences in flight.



Do not adjust the speedsystem lines while flying.



- 1 – speedsystem line
- 2 – two-step speedbar
- 3 – rubbers connecting speedbar to the footrest.

6. Rescue chute installation

Connect the release handle to the point on the side of the bag.



Connect both ends of the V-riser with the riser of the rescue chute with a Maillon Rapide C6 quicklink.

! Position of the risers on the metal connector must be fixed with elastic o-rings. The loops cannot move freely and must closely adhere to the quicklink.



If necessary, put a dedicated filling (included) in the container. Fix it with to the inner wall if the container with a velcro.



Put the rescue chute in the container, so that the release handle remains on top.



Place the end of the release handle in a dedicated pouch and fix it to the side of the harness with a velcro.



Put the assist lines through the yellow loops.



Lead the assist line through the metal eyelet of the #1 flap and secure yellow loop with the longer pin. Put the end of the pin into its pouch. Gently remove the assist line.



Lead the assist line through the metal eyelet of the #2 flap.



Lead the assist lines through the metal loops of the #3 flap.



Secure it with the shorter pin. Put the pin through the holes of the #2 flap as pictured beside. Gently remove the assisting line.



Place the V-strap in its tunnel and move the zipper in the marked direction as far as it goes.



Close the V-strap tunnel by moving the zipper in the marked direction as far as it goes.



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

The rescue chute must be periodically aired and repacked according to its manual. The Soul 2021 harness will best accommodate light rescue chutes: Globe Light 90, Globe Light 110 or Globe Light 135 manufactured by Dudek Paragliders. However, use of rescue parachutes by other manufacturers is possible too, as long as their dimensions when packed do not exceed those of the container.

Container's volume:

Min 3900 cm³

Max 4550 cm³

Container's volume with the filler installed:

Min 3300 cm³

Max 3850 cm³

! After each installation of rescue chute in a container, a compatibility test is necessary. In order to do that, hang the harness, equipped ready for flight. Seat down in the harness and assume your usual position in flight.. Grab the container release handle and pull it to the side in a resolute effort, so that the parachute is completely out of the container. Still, do not throw it away, so that the bag remains closed. If the trial was successful, put the rescue back into the container.

If, however, the parachute could not be released properly, possible reasons may include:

- Too big rescue chute compared to the container's dimensions (after airing and repacking the parachute is usually slightly bigger than a new one)
- Pulling the release handle not strong enough or in wrong direction (to the front, back or up instead of to the side)
- The length of pilot's arm can be a factor in this case. Especially small pilots can find it difficult to throw the chute away properly.
- Be aware that a cumulation of unfavorable circumstances, aggravated with G-forces in possible spiral may render opening the rescue chute difficult or outrightly impossible.

7. Harness straps adjustment

! Before adjusting the straps please install your rescue chute and fill the back pocket as for normal flight. Watch out for symmetry – left and right side should be adjusted the same. The first, test flight should be done in easy weather conditions, with necessary corrections to be applied afterwards. When in the air, you can only adjust the chest and shoulder straps due to their accessibility.

- 1 – shoulder straps
- 2 – side straps
- 3 – leg straps
- 4 – chest strap
- 5 – seat inclination strap
- 6 – lumbar part adjustment



7.1 Shoulder straps

Thanks to adjustable shoulder straps (1) the harness can accommodate pilots of almost any height. The straps 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 movements in flight. A clip on the shoulder straps will make sure they stay in place during launch and flight. Additionally, there is an alarm whistle fixed to the clip. You can use it whenever help is needed.

7.2 Side straps

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

7.3 Leg straps

The leg straps are the most important safeguard against falling out of the harness. Their adjustment must allow both easy launch 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 the Soul 2021 harness both leg straps (3) are connected to the chest strap, thus significantly reducing risk of launching without leg straps locked.

7.4 Chest strap


Chest strap (4) controls distance between the carabiners. Increasing that distance makes the harness less stable, improving effectiveness of 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, the recommended width is 42-48 cm. In turbulent air you can shorten the chest strap a bit to improve stability, bearing in mind that it is more probable to get a twist in emergency then.

7.5 Seat inclination

This adjustment (5) alters the seat inclination angle. It can be adjusted to match personal preferences, as long as symmetry is observed. In order to change the seat inclination first you have to loosen the straps, then sit comfortably in the harness with your feet on the footrest, and pick up the slack.

7.6 Lumbar part

In order to further increase seating comfort, the Soul 2021 has additional adjustment of the lumbar part (6).

 While adjusting any of the shoulder, side and leg straps, as well as seat plate angle and lumbar straps you need to observe the symmetry. Left and right sides must be adjusted identically.

8. Pockets

Soul 2021 has a spacious back pocket (ca. 19 l volume) and two smaller ones on both sides of the pod. The back pocket can easily hold the paraglider's backpack, camelback and much more. On the left side of the upper part there is an opening for camelbak pipe and radio antenna. Additional pockets are located under the instrument panel as well as under the cockpit itself. Both side and pod pockets are easily accessible in flight.



! The rear part of the harness including the back pocket fills with the air during flight. That's why the opening is closed with a velcro. Close it carefully at all times, so that the spillout for the back pocket is minimized.



Under the front part of the seat plate there is a small ballast pouch (ca. 4l). Of course it can be used for anything else, too.



9. Protector

The Soul 2021 is equipped with a certified, 15 cm thick airfoam protector. Fixing the protector in place is shown below.

! The protector does not require special attention, as long as no hard or water landing occurred. If any of these happens, please follow paragraphs 15 “Cleaning and storage” & 16 “Operation and repairs”.



The airfoam pad fills the space between pilot's back and the rescue chute container. It improves the seating comfort while offering additional protection.

! No protector can guarantee total safety for the pilot neither exclude injuries (e.g. to the spine) in case of an accident.

! A protector offers some guard against hits only for those body parts it was designed to protect.

! Any modifications to the protector can drastically reduce its effectivity.

! In case of replaceable protector – it will obviously protect you only when present in the harness.

Protector is certified by:

ALIENOR CERTIFICATION n ° 2754 21 rue Albert Eintsien 86100
CHATELLERAULT France,
according to EU 2016/425 directive and the CRITT SPORT
LOISIRS SP002 protocol.

The CE declaration is available on our website www.dudek.eu



10. Harness/paraglider connection

The Soul 2021 harness is equipped with 20 kN Dudek aluminium carabiners. Use them to connect the harness to the risers. Another thing to connect before launch is the speedsystem of the harness and the speedsystem of the risers. It is recommended to replace the main carabiners with new ones after 300 hrs airtime.

! Check before launch if the carabiners are closed and locked against accidental opening.

By far the better method of attaching the tow release is to clip it directly into the risers of the paraglider with a pair of Maillon Rapide C5 quicklinks.

11. Harness/tow connection

The only safe way of attaching the tow line is with a dedicated tow release. The Soul 2021 does not feature any additional points to fix the tow release, therefore it is to be mounted directly on the harness' carabiners or the canopy risers.

! If the tow release is fixed to the carabiners, it must be observed that they are mounted with their locks facing back, so that the tow release is placed on the smooth part of a carabiner.

12. Preparing harness for flight

- Attach the windscreen.
- Close velcro on the lower edge of air intake to the rear part of the harness.

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
- the 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 malformed in transport, so it's important to check if it's not flattened and easy to grab)
- shoulder and side straps remain correctly adjusted
- all pockets are closed and their zips covered
- the main carabiners are closed, locked and free of any damage
- the speedbar is hooked to the paraglider.



Closing the harness:

- Close the chest strap with two Cobra buckles (1).
- Close the right side of the pod by moving red balls through the loop of the security strap (2).
- Close the left side of the pod with the cockpit (3).
- Close the strap keeping the shoulder straps (4).

! Always close the chest strap first, and the pod second. Before each start check that the chest strap is firmly closed, especially when it's a subsequent launch. Not properly locked chest strap may lead to falling out of the harness with POSSIBLY FATAL CONSEQUENCES !!!



13. Harness use in practice

Paraglider compatibility

Soul 2021 can be used with any paraglider.

Training

Soul 2021 is not suitable for training flights.

Tandem flying


Soul 2021 is not suitable for tandem flight neither as a pilot, nor as a passenger.

Acro

Soul 2021 was designed for the XC flights. It is not suitable for advanced aerobatic manoeuvres.

Flying with or without seat plate

Soul 2021 is per standard equipped with a carbon seat plate. However, you can fly without it too.

 After removing the seat plate, the leg straps are to be considerably shortened.

Windscreen

Installation of the windscreen limits the cold experienced by the pilot's upper body as well as wind noise.

Please detach the windscreen after flight, when packing the harness. Put it in its cover to safeguard against scratches and store flat. For transport in the paragliding bag it will be best to put it among the harness' parts.

The pod

Putting your legs in the pod requires some skill. Helping yourself with your hands is not advised.

Here are some hints:

- Stay inclined after launch
- Put your right heel in the slit and stretch the pod.
- Then put your left foot in the pod, and leave both your feet on the footrest. The pod will close on its own..

The pod is quite efficient at keeping warmth. You can vent it with fresh air by bending one leg. The halves of the pod will move apart letting the wind in.

Speed system operation

Soul 2021 is equipped with ball bearing Ronstan 20 pulleys, improving speed system operation. Two-step speedbar in the pod stays always extended with two elastics, so it is easy to find in flight.

Both steps of the bar are stiffened with a tape.

In order to use the first step of the bar, catch it with one heel and press it, leaving the other foot on the footrest. In order to engage the second step, use the other leg.

Try not to press your leg down the pod to avoid damaging it.

! Make sure that speed system stays hooked to the paraglider, even if you are not going to use it.

Speedbar installation and its adjustment is described in paragraph 5, page 9.

Flying with ballast

Under the front part of the seat plate there is a small ballast pouch with capacity of max. 4 litres. When in need of ballast, use water container or bags with lead pellets.

Landing

While on the final approach, assume upright position and get your legs ready for landing. Touchdown when still sitting is unacceptable, as there is high risk of spine injury. Land always on your feet, with a few steps to bleed the speed off if necessary. The protector is NOT a landing aid and was not designed as such.

Waterlanding

Water landing is potentially very dangerous, with imminent risk of drowning. If you can't avoid the waterlanding, release both the legs and chest straps when ca. 10m over the surface. 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 it is advisable to grab it and use as a lifebuoy.

! Waterlanding while still seated in the harness is extremely dangerous. The protector does not sink and will always float, forcing your head under water and rendering breathing very hard or impossible. Additionally, there is very high risk of getting tangled in lines and drowning.

14. Cleaning and storage

All materials for the harness have been carefully selected, with their quality and durability in mind. Your care and maintenance of the harness will keep in good condition for a long time. The harness is best cleaned with a wet sponge, possibly a bit of soap. Do not use neither detergents nor solvents. If there is a lot of mud, use the brush first before wet cleaning.

In case of completely soaked harness (e.g. after waterlanding) dry it in a well aired place, away from direct sun operation. Soaked back protector must be taken out of the harness and dried with its zip opened. 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.

The harness can be kept in the backpack, or best loose in a well ventilated room, away from the sun. In case of a long-time storage we recommend taking it out of the backpack. 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.

Before packing the harness detach the windscreen from the cockpit and remove the stiffener from the back air intake. Open the cockpit and put the instrument panel inside.



15. Operation and repairs

Periodic control of the harness condition will keep it in safe operation for a long time. After each hard landing check the back protector too, as the seams or zip quite often get ripped when absorbing impact and damaged protector 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 the straps and seams.

Aluminium carabiners should be replaced 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 authorized workshop for closer inspection.

i The Soul 2021 harness is per standard airworthy for 10 years since the date of production.

The AF-15/2018 protector used in the harness is airworthy for 4 years from the date of production.

Environmental care

Paragliding is an outdoor sport. We believe that our clients share our environmental awareness. Exercising paragliding you can easily contribute to environment preservation by following some simple rules. Make sure you are not harming nature wherever you fly. Keep to marked paths, do not make excessive noise, do not leave any garbage and respect fragile balance of the environment.

Recycling of used gear

The harness is made out of synthetic materials, which need to be properly disposed of when worn out. If you are not able to dispose of your gear properly, DUDEK Paragliders will do that for you. Just send your harness to the address given at the end of the manual, accompanied by a short note.

16. Technical data

Soul 2021		S	M	L	XL
Pilot height	cm	157-170	165-182	178-190	185-200
Seat width *	cm	24/31	26/33	27/34	27/35
Suspension height	cm	44	45	46	47
Weight of the harness **	kg	-	3,5	-	-
Load test (100 kg)		EN 1651/LTF91/09	EN 1651/LTF91/09	EN 1651/LTF91/09	EN 1651/LTF91/09
Certificate		EN/LTF	EN/LTF	EN/LTF	EN/LTF

* Seat width front/back

** Weight of the fully equipped harness

Materials

Risers	Polyester, 25 mm, 1700 daN
Leg straps	Polyester, 25 mm, 1000 daN
Buckles	AustiAlpin Cobra

Complete set includes:

- 1 x Harness with integrated pod
- 1 x Protector (15 cm)
- 1 x Airfoam pad between backrest and the container
- 1 x Carbon seat plate and the footrest
- 1 x Two-step speedbar with hooks
- 2 x Ronstan 20 pulleys
- 1 x Cockpit integrated with pod
- 1 x Cockpit windscreen with cover
- 1 x Additional instrument panel with safety knife
- 1 x Container release handle
- 1 x Filler insert for the container
- 1 x V-strap (two parts)
- 2 x Dudek 20 kN carabiners

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



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