



USER'S MANUAL FUNKY 2018

EDITION 2\_07/2019



# CONGRATULATIONS

Thank you for choosing the Funky harness. We have done our best to present you with the 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 Funky, thus maximizing comfort and fun of each flight. We wish you a lot of safe and enjoyable airtime!

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# 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 does not bear any responsibility for damages or injuries resulting from paragliding activities.**

# 2. Description

The Funky was designed for cross country pilots, looking for light and comfortable harness with a footrest. Main points on our wishlist were improvements in ergonomics and further weight reduction. Due to using light, carbon seat plate as well as other light materials the harness weighs just 3,29 kg in M size. Comfortable, ventilated backrest and a new, ergonomic seat with profiled board ensure maximum comfort in 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 clipped in. The harness is equipped with a 15 cm thick airfoam protector. Integrated rescue chute container is placed on the back, behind the protector. The release handle is fixed in easily accessible place on the right side of the harness. The cockpit has an additional, detachable instrument panel, equipped with easily accessible safety knife. Under the seat plate there is a container for a ballast bag, too. Of course it can be used for anything else when needed. The harness features easily replaceable, ball-bearing Duroll pulleys, improving the speedsystem operation.

### 3. Cockpit

The cockpit can house all your instruments (vario, GPS etc), equipped with Velcro-finished cases. The angle of the instrument panel is adjustable. The additional panel featuring safety knife (2) can be easily detached with all instruments still present. Under this shelf there is a pocket, accessible in flight to reach an energy bar or soft drink. Cockpit is fixed to the harness at two points (1).

- 1 – points fixing the cockpit to the harness
- 2 – safety knife



## 4. Footrest

This Funky harness was designed to incorporate a footrest. It enhances comfort in long flights, helps sitting into the harness after launch and positively influences steering. It is fixed to the harness in four points – to the carabiners and sides of the seat (5), and its length is adjustable (1). The lower part of the footrest is elastic, shrinking when not under load. Designed in this way the footrest does not disturb you during launch and is easier to find in flight.



- 1 – footrest length adjustment point
- 2 – footrest bar
- 3 – rubber bands connecting the speedbar
- 4 – speedbar
- 5 – footrest to seat sides attachments



After adjusting the footrest length and side attachment points close the side covers as shown below.





## 5. Speedbar

Speedbar lines must be led through respective eyelets on the sides of the front, as well as through the pulleys (under the seatplate and on the back support). Then put them through slits in the side covers and fix the speedsystem clips. Connect the speedbar to the footrest with a rubber band. 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 hanged by the paraglider's risers. At full speedbar the pulleys on the risers should touch. 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 – rubber straps connecting the speedbar to the footrest





## 6. Rescue chute installation

Connect the release handle to the point in the middle of the bag.



Connect the V-riser to the riser of the rescue chute with a C6 quicklink. The V-riser should be fixed with an o-ring (see picture on the right) and the nut tightened with a wrench.



If necessary, put in the container an insert reducing its capacity.



Put the rescue chute into the container.



Lead the assist lines through the loops.

Lead the assist line through the loop of the container flap (the one closer to release handle) and gently move the zipper upwards.



Close the right part of the container by moving the zipper

Lead the assist line through the loop in the zip cover.



Put the shorter pin of the release handle through the loop.



Fix the release handle to the Velcro strap.



Gently remove the assist line.

Lead the assist line through the left loop of the container flap and gently move the zipper upwards.



Close the left part of the container by moving the zipper down.





Lead the assist line through the strap loop.



Put the longer pin of the release handle through the loop.



Put the remainder of the pin in the slit of the Velcro strap.



Gently remove the assist line.

Close the V-riser tunnel (if opened earlier).



Close the pin cover and fix the upper part of the handle (a magnet).





The 6th paragraph „Rescue chute installation” features Picture of the Soul harness, since both the installation process and the container design are common in these harnesses.



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 Funky harness will best accommodate light rescue chutes Globe Light 90, Globe Light 110 or Globe Light 135, manufactured by Dudek Paragliders. It is possible to use rescue parachutes by other manufacturers too, as long as their dimensions when packed do not exceed those of the container.

Container capacity:

With a capacity-reducing insert

Max	6250 cm <sup>3</sup>
Min	5200 cm <sup>3</sup>

Max	5400 cm <sup>3</sup>
Min	4500 cm <sup>3</sup>





After each installation of a rescue chute please run a compatibility test. In order to do that, hang your harness as ready for flight. Sit down and assume your piloting position. Grab the release handle and pull it sidewise with a resolute movement, so that the chute slides completely out of the container. Do not throw the rescue chute away, so that the bag is not opened. If everything went smoothly, put the chute back into the container.

However, if the chute is not properly released, the most probable reasons are:

- too big a chute in relation to the container (after repacking the rescue chute is usually bigger than a brand-new one)
- you pull the the handle not strong enough or in wrong direction (ie. to the front, back, or up)



Leaving the sliders in the upper position (as in the pictures below) will make it impossible to open the container and use the rescue parachute! Before the flight, make sure that the container is properly closed.



## 7. Harness straps adjustment



Before adjusting the straps please install 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 applied afterwards. Do not adjust the harness while in the air.

- 1 - Shoulder straps
- 2 – Side straps
- 3 – Leg straps
- 4 - Chest strap
- 5 – Lines of the seat inclination
- 6 – Lines of the lumbar part





## 7.1 Shoulder straps

Thanks to adjustable shoulder straps (1) the harness 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 comfortable seating after launch difficult, and can limit your movement in flight. A clip on the shoulder traps makes sure they stay in place during launch and flight. Additionally, there is an alarm whistle fixed to the clip. You can use it to summon help in danger.

## 7.2 Side straps

They determine the seat/backrest angle. Initial adjustment should be done before the first flight, with the harness hanged from a ceiling. In order to increase comfort, the Funky features an additional adjustment in the lumbar part (6). You can increase the support of the lumbar spine by shortening the adjustment line, moving the red ball up until enough. All settings are to be verified during 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 twisted in case of a big deflation.

## 7.3 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 without using your hands impossible. In the Funky harness both leg straps (3) are joined with the chest strap, thus significantly reducing risk of launching without leg straps closed.

In the Funky strap system the leg straps double as lateral stabilizers of the harness. Shortening of those straps limits the side swings of the harness.

## 7.4 Chest strap

Chest strap (4) governs 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 the strap in to feel more comfortable, but always remember that it is more probable to get a twist in emergency then.



**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. Failure to close the straps is extremely dangerous and is a known reason of fatal accidents !**

## 7.5 Seat-plate lines

By adjusting the length of those lines the inclination of the seat plate is changed. It can be adjusted to match personal preferences, as long as symmetry is observed. In order to change the seat plate inclination first you have to loosen the lines, then seat comfortably in the harness with your feet on the footrest, and finally pick up the slack by moving the ball towards the carabiners.



**While adjusting any of the shoulder, side and leg straps, as well as seat plate and lumbar lines please observe the symmetry. Left and right sides must be adjusted identically.**

## 8. Pockets

The Funky has a spacious back pocket (ca. 25 litres volume) and two little side pockets on the pod. The back pocket can easily hold a paraglider's backpack, camelback and much more. In the upper part, on both sides there are two entries for a Camelbak hose or a radio antenna. Additionally, there is a pocket under the instrument panel of the cockpit. Both side and cockpit pockets are easily accessed in flight. Under the front part of the seat plate there is a small ballast pouch (ca. 3l). Of course it can be used for anything else when needed.



## 9. Protector

The harness is equipped with a 15 cm thick airfoam protector. Fixing the protector is demonstrated below.



The protector does not need special attention, as long as no hard or water landing occurred. If any of these happens, please follow paragraphs 17 “Cleaning and storage” & 18 “Operation and repairs”



## 10. Harness/paraglider connection

The Funky harness is equipped with aluminium Dudek carabiners of 20 kN strength. Use them to connect the harness to the paraglider's risers. Another thing to connect before launch are the speedsystem lines of the harness and 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.**

## 11. Harness/tow connection

The only safe way of attaching the tow line is a dedicated tow release. The harness is not equipped with additional tow release fix points, therefore the tow release 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 its locks facing back, so that the tow release is placed on the smooth part of the carabiner.**

By far the better method of attaching the tow release is to clip it directly into the riser of the paraglider, using a pair of C5 quicklinks.

## 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 malformed in transport, so it's important to check if it's not flattened or hard to grab)
- 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

The rescue chute should be used in case of emergency, when it's not possible to recover the paraglider from a hazardous 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 a 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 protector there is high risk of spine injury. Land always on your feet, with a few steps to bleed off the speed if necessary. Protector 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 the 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. As the protector does not sink and will always float, it will force your head under water, rendering breathing very hard or impossible. There is very high risk of getting tangled in lines and drowning.**

## 16. Tandem flying

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



## 17. Cleaning and storage

All materials for the harness were carefully selected, keeping their quality and durability in mind. With help of your care they will keep your 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 neither detergents nor solvents. If there is a lot of mud, first use a brush 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 protector must be taken out of the harness and dried with its zip opened. If this will not be enough, remove the airfoam and dry it separately.

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

You can store the harness in the backpack or best keep it loose, in a well ventilated room, away from the sun. For longer periods of inactivity we recommend storing the harness out of the backpack. Unfortunately some discoloration of individual 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 remove the stiffener from the upper area of the back pocket. Open the cockpit and put the instrument panel inside.



## 18. 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, as the seams or zip quite often get ripped on absorbing impact. and damaged protector will be ineffective. If you notice any 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 authorised workshop for closer inspection.



The Funky harness has an airworthiness certificate for 10 years since the date of production.

The AF-15/2018 protector used in the harness is airworthy for 10 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 don't harm the nature wherever we can stay. Keep to marked paths, do not behave loudly, do not litter, respect the delicate balance of nature,

### Recycling of used gear

A harness is made out of synthetic materials, which need to be properly utilised when worn out. If you are unable to take care of right disposal, 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.

## 19. Technical data

Size	Height suspension (cm)	Width seat (cm)	Depth seat (cm)	Height back support (cm)	Max. pilot weight (kg)	Harness weight ** (kg)
S	43	24 / 31	43	60	100	-
m	44	26 / 33	45	63	100	3,29
L	45	27 / 34	47	66	100	-
XL	46	27 / 35	50	69	100	-

\* Seat plate width front/back in cm.

\*\* Weight (kg) including the protector, carabiners, speedbar, footrest and cockpit.

### A set includes:

- |                     |                                                |
|---------------------|------------------------------------------------|
| 1 Harness           | 1 Release handle of the rescue chute container |
| 1 Footrest          | 1 Two-part V-strap                             |
| 1 Carbon seat plate | 2 Dudek 20 kN carabiners                       |
| 1 Cockpit           | 1 Two-step speedbar with clips                 |



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



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