





# Index

Introduction	3	How to adjust the speed system?	13	Rapid descent techniques	22
About manual	3	Pre-flight check	15	Big Ears	22
Paraglider description and purpose	4	Start	16	B-Stall	22
What have you bought	5	Turns	16	Spiral dive	22
Technical data	6	Flying with speed-system	17	Paraglider care	23
Materials	6	Speed modes	18	Packing and storage	20
Paraglider design	7	Landing	19		
Canopy and lines	7	Other flying modes	20	Cleaning	23
Risers	8	Winching	20	Deterioration - a few tips	24
Brake handles	9	Motoparagliding	20	Repairs	25
Available systems and technologies	10	Tandem flights	20	Inspections	25
3-to-1	11	Aerobatics	20	Warranty and Aerocasco	27
Speed system	12	Special procedures and other configurations	20	Guarantees	27
C-risers steering bar	12	Extreme manoeuvres	21	AeroCasco	28
Fixing canopy to the ground	12	One sided collapse	21	Environmental care	30
NFC chip	12	Frontal collapse	21	Environment care	30
Other systems	12	Full stall and negative spin	21	Recycling of used gear	30
Before first use	13	Deep stall	21	Join our community	3.
What harness?	13	Line over and cravatte	21	Manufacturer's data	32
Weight range	13	Emergency steering	21		

### Introduction

We are pleased to welcome you among the growing number of DUDEK PARAGLIDERS pilots. You've become a proud owner of a sport paraglider, designed according to recent trends among paramotor canopies.

#### **About manual**

Please read this manual carefully and note following details:

- The purpose of this manual is to offer guidelines to the pilot using the paraglider. By no means it is intended to be used as a training manual for this or any other paraglider.
- You may only fly a paraglider when qualified to do so or when undergoing training at an accredited school.
- Pilots are personally responsible for their own safety and their paraglider's airworthiness.
- The use of this paraglider is solely at the user's own risk! Neither the manufacturer nor dealer do accept any liabilities involved.

- This paraglider on delivery meets all the requirements of the EN 926-1 and 926-2 regulations or has an airworthiness certificate issued by the manufacturer. Any alterations to the paraglider will render its certification invalid.
- Other documents concerning this paraglider can be found on attached pendrive or on our website www.dudek.eu.

We wish you many enjoyable and safe flying hours.

Note: Dudek Paragliders warns that due to the constant process of development the actual paraglider may differ slightly from the one described in the manual. However, those differences cannot affect the basic design parameters: technical data, flight characteristics or strength. In case of any doubts contact us please.





# Paraglider description and purpose

Hike&Cruise is a very light paraglider designed for intermediate pilots, intended for Hike&Fly and bivouac flights, as well as for enjoying its exceptional flight characteristics during "everyday" flying.

Our dreams of creating the lightest, available to most pilots, double-skin paraglider in the world, resulted in a wing of exceptional construction and functional properties.

Thanks to the use of the latest "3-to-1" technology, an unprecedented compromise was achieved between the performance of the paraglider, necessary pilot skills and the weight and volume of the package.

To learn more about the paraglider, visit our website: dudek.eu

# What have you bought

- transport bag (with your canopy inside).
- the paraglider itself (canopy, lines and risers).
- compression strap to keep the canopy together.
- speedbar (Easy Catch optionally).
- · wingshell (optionally).
- four Catch Pins, making it easier to launch in a difficult terrain.
- wind indicator (windsock or a strap)
- pocket with paper work and repair wallet including:
  - piece of self-adhesive fabric (10 cm x 37.5 cm) for small repairs. Note that even small tears located in the vicinity of stitches are to be repaired by an authorised service only.
  - looped and stitched suspension line (the longest of all lines in the paraglider) to be used as a temporary replacement. Do not cut it if you have to temporarily replace a shorter one, just tie it at the length needed.

- paraglider passport with entered date of purchase and valid technical inspection (please check the serial number with the sticker on wing tip).
- USB drive with this manual
- · small gifts





# Technical data

Hike&Cruise	19	22	25	
Certification	EN B	EN B	EN A	
	LTF B	LTF B	LTF A	
Number of cells	65	65	65	
Surface area (flat) [m²]	19,00	22,00	25,00	
Surface area (projected) [m²]	15,87	18,34	20,89	
Span (flat) [m]	10,23	11,01	11,73	
Span (projected) [m]	8,03	8,64	9,21	
Aspect Ratio (flat)	5,60			
Aspect Ratio (projected)	4,06			
Speed [km/h]	Trim = 37; max = 48 + - 2km/h			
Max. chord [mm]	2267,00	2440,00	2601,00	
Min. chord [mm]	555,00	597,00	637,00	
Distance pilot to wing [m]	6,19	6,66	7,10	
Total line lenght [m]	238,22	257,03	274,59	
Total take-off weight [kg]	50-75	65-90	85-105	
Maximum symmetric control travel at maximum weight in flight [cm]	55,00	60,00	60,00	
Distance betwen risers [cm]	40,00	44,00	46,00	
Weight [kg]	2,37	2,62	2,73	

# Materials

#### Hike&Cruise

111104014100		
Lines	Technora: 050/070/090/130/190/230/280	
Fabric	Porcher 27 & 29 g/m2	
	Pocher Hard 26 & 40 g/m2	
	Porcher adhesive	
Risers	Cousin Technora 7mm	

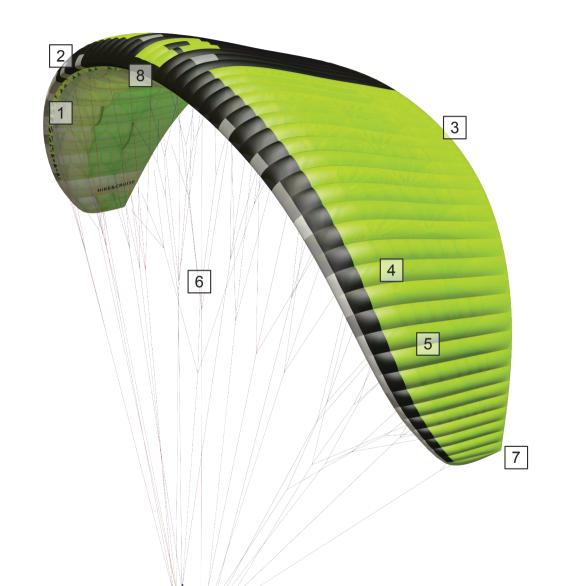
<sup>\*</sup> Detailed list of materials used for the manufacture can be found in service documents file on the page of a wing, available on our website www.dudek.eu

# Paraglider design

### **Canopy and lines**

The Hike&Criuse paraglider is produced in new technology, utilizing capabilities of precise laser cutter. All stages of the production process take place as our Polish plant under closes upervision of the designer himself thus ensuring highest European quality.

- 1. Inlets
- 2. Leading edge
- 3. Trailing edge
- 4. Cell
- 5. Ribs
- 6. Suspension lines
- 7. Cleaning slit
- 8. Wing sticker with NFC chip



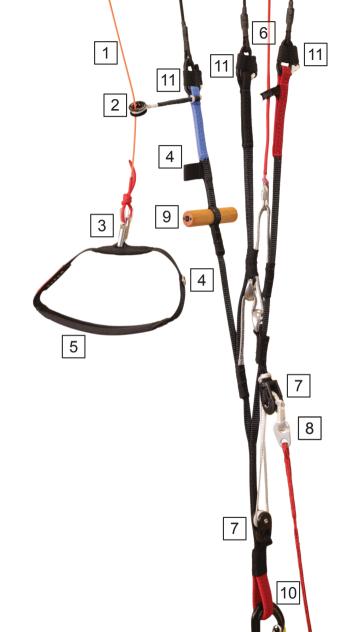
#### Risers

For the Hike&Cruise we have chosen three-way risers.

For quick and easy recognition in emergency, some of the risers are distinguished with coloured covers as follows:

- A red (used for launching),
- B black (used for B-stall),
- C blue (needed to keep the glider down in strong wind – aborted launch)).
- 1. Steering line
- 2. Pulley
- 3. Swivel
- 4. Press stud fastening the steering handle
- 5. Brake handle
- 6. Big Ears line
- 7. Speed system pulley
- 8. Speed system hooks

- 9. C-risers steering bar
- 10. Carabiner
- 11. Softlinks



#### **Brake handles**

Brake handles are attached to the steering lines at an optimal point, guaranteeing safe and effective action. This point is marked on the line with a black dot and this setting should not be altered.

Attaching the handles above factory markings will cause constant braking of the paraglider, possibly cause of an accident. Overly loose setting of the brake lines is not advised too, since the much lower load on the trailing edge lines can sometimes be dangerous too.



3-to-1
3-to-1 technology

**CP**Catch Pins

Flexi Edge Technology

NFC chip on board

ACS

Auto Cleaing Slots

**CSG**Canopy Shape Guard

LR r Technology

Laser Technology

Naps

Speed System

Mini Ribs

APC

Auto Pitch Control

Easy Launch Riser

Available systems and technologies

The latest technologies, systems and own ideas were used to design Hike&Cruise.

In this manual, we have only covered the most important ones. You can learn more about the others in the Technologies section of our website.





#### 3-to-1

This new concept intends to improve the airflow on the canopy surface, especially in areas that are most crucial for generating lift, while maintaining a low wing weight. For this purpose, the number of cells on the upper surface of the wing was increased, with simultaneous reduction on the lower surface.

In order to connect the two surfaces of the canopy with a different number of cells, a special system of internal reinforcements has been designed, based on diagonal supports and a reduced number of ribs (as compared to the classic double-skin paraglider).

During development and testing years, it was found that in addition to achieving the original design goals, the specific stress distribution for a canopy built in the 3-to-1 system has a significant impact on the creation of the paraglider's unique flight characteristics and its increased safety.

3-to-1
3-to-1 technology

**CSG**Canopy Shape Guard

**Auto Cleaing Slots** 

ACS

**ELR**Easy Launch Riser

Auto Pitch Control

APC

**CP**Catch Pins

FET

LR

Laser Technology

MR Mini Ribs

NFC chip on board

Flexi Edge Technology

Naps

**SS**Speed System

#### Speed system

Hike&Cruise is as standard equipped with a speed system. It consists of a cord sewn into the A riser, leading through two pulleys and finished with a loop and a hook. His is where you attach the speedbar cord.

The speed system affects A (including A') and B risers. Pressing the speedbar shortens first the A risers, before first use then gradually the A' i B. C riser retains its original length.

#### C-risers steering bar

These bars allow for effective corrections of the flight direction and easier deflation of the canopy in strong winds at take-off or after landing. They can also be used as a support for the hands during long transitions.

#### Fixing canopy to the ground

Four loops sewn to the upper surface of the canopy on the leading edge allow it to be attached to the ground using the pins supplied in the kit, in order to fix the canopy before taking off on steep slopes or snow.

#### NFC chip

The paraglider has a chip installed under the data plate, thanks to which you will get immediate access to our system using an NFC-enabled phone. You will find there data of your paraglider model, warranty conditions, current documentation and user manuals, service notes, and you will also be able to use the function of notifying about the loss, theft or finding of equipment of another owner.

#### Other systems

This paraglider has no other systems which can be adjusted, exchanged or removed.

### Before first use

#### What harness?

You can use any certified harness which has its hangpoints at 40-45 centimeters from the seatplate. The width between carabiners should be somewhere between 40 cm and 45 cm.

#### Weight range

Each size of the canopy is certified for specific weight range, meaning total take-off weight including the pilot, harness, equipment and the canopy itself.

Exceeding maximum take-off weight described in technical data of the paraglider ("Pilot's weight incl. equipment") increases risk of an accident in case of pilot's error. The smaller canopy area as compared to take-off weight, the greater the risk.

Paragliders considerably change their character due to increased load and each experienced pilot should perfectly understand that. The biggest danger induced by overloading the canopy is its hyperreactivity.

Caution: Check your real take-off weight! Some pilots calculate their take-off weight by just summing up catalogue numbers, e.g.: Harness 5kg +

canopy 6 kg + pilot 87 kg = ca. 100 kg. In fact your actual take-off weight can be umpteen kilograms bigger. Most often we forget the clothing, electronics, backpacks, sometimes even such basic things like fuel or rescue chute weight are omitted!

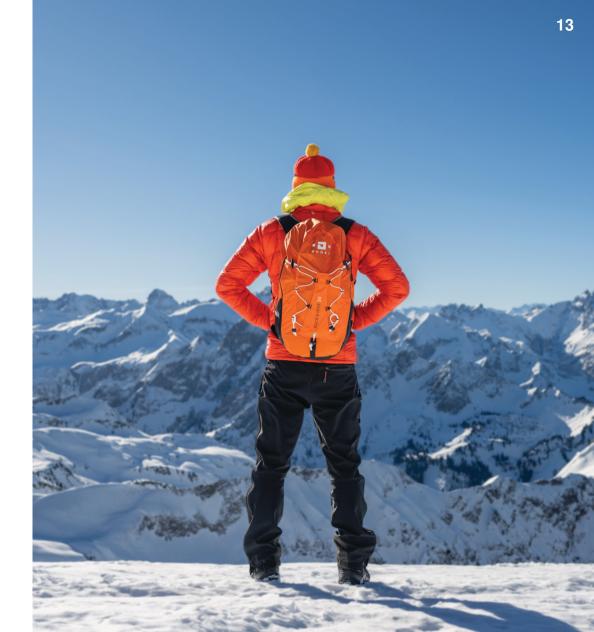
#### How to adjust the speed system?

Most of modern harnesses are equipped with speed system pulleys and sometimes even its own integrated speedbar. The speed bar cord must be firmly attached to it.

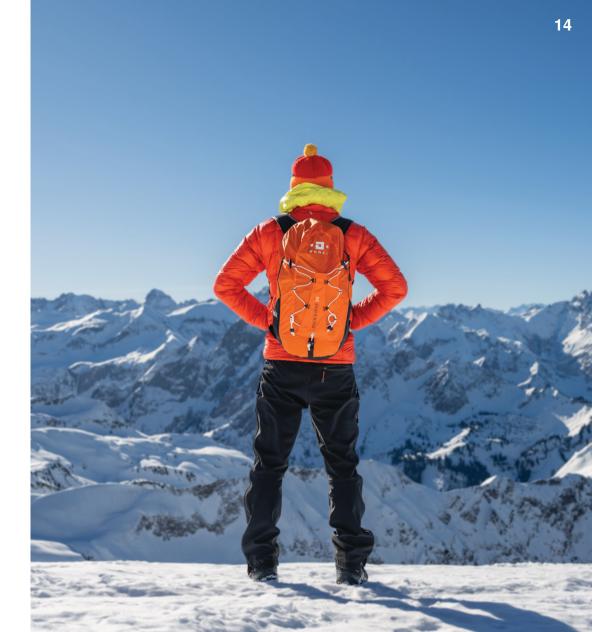
The other end of the cord must be ran upward through the harness pulleys and attached to the hooks. With well adjusted speed system you should see the pulleys on the risers touch each other at max speedbar, meaning you are using the full range of speed system.

Before take-off attach paraglider risers to the harness with the main carabiners. Then connect the hooks of the speed system cords with hooks at the A-risers.

Caution: Before launching make sure that the speed system is not tangled and runs freely.



Caution: Make sure that both cords on the speed bar are equal, as even slight difference can result in constant, inadvertent turning of the paraglider. Caution: Ill-adjusted speed system renders the certification invalid!







# Pre-flight check

Having chosen a place to launch accordingly to the terrain as well as wind speed and direction clear it of any obstacles that could damage your canopy or tangle in the lines.

After laying out your paraglider in a horseshoe directed against the wind following checks must be made:

- canopy, lines and risers condition.
   Do not launch if the slightest damage is noticed.
- the paraglider should be arranged so that the centre section A-lines will strain earlier that the outer ones. This ensures easy and symmetrical launch,
- the leading edge should stay taut and even,
- all lines and risers should be separated. Make sure they are not tangled, and checked against catching anything. It is equally important to check the brake lines. They must be firmly attached to the brake handles and run freely through the pulleys to the trailing edge,
- · make sure the risers are not twisted.

- it is very important to check that no lines are looped around the canopy.
   The so-called "line-over" may have disastrous consequences during take off.
- always put on and fasten your helmet before clipping in to the harness,
- make sure that all quick links (maillons) of the risers are tight,
- check main carabiners. They must be properly mounted, closed and locked.

### Start

Launches on Hike&Cruise are executed using standard techniques, as with classic design paragliders.

It is recommended to use only the main A risers (red) for the start.

Important! Hike&Cruise, due to its very light construction, inflates and shoots up rather quickly. It is important to properly adjust pulling the canopy up to the wind force as well as the steepness of the slope.

Important! Use C-risers, not brakes, to deflate the wing. Do it with the alternative steering bars, attached to the risers.

### Turns

Hike&Cruise is an agile wing, with smooth reactions to all pilot's actions. Handling is actually easy and forces grow proportionally to position of the brakes. Adding some weight shift will make the paraglider turn really quick and tight.

The combined technique (weight shifting and brake input) is by far the most efficient method of turning. Turn radius is then determined by the amount of inside brake used and weight shift. Additional application a little outside brake after initiating the turn with maximum weight shift increases turn efficiency and the outboard wing's resistance to collapse (in turbulence, the edge of a thermal etc).

Corrections of the flight direction can be made by pulling down the bars on the C risers.

Caution: when entering a turbulent area you should brake a little to put up the tension. It will allow you to react instantly in case of a problem. Too hard or too quick pulling of one brake can cause the wing to enter a spin.

### Flying with speed-system

When flying into head wind, through sink, or during long transitions between thermals it is advisable (for the sake of best glide angle) to increase speed, as long as conditions are not too turbulent.

In order to accelerate your flight you have to put your feet on the speedbar and push it forward. If you happen to feel tension drop when pushing the speedbar, it can be a sign of imminent frontal collapse. In this case release the bar immediately.

Caution: Watch out for such things - fast reaction can spare you most of the frontstalls, always possible when using the speedsystem.

#### Remember:

 Speed system operation diminishes your paraglider's angle of attack, so that its airspeed is increased, but simultaneously the canopy becomes less stable. The airflow becomes more dynamic, too. Therefore you should avoid using speedsystem in turbulent conditions, close to the ground or near other airspace users!

- Do not use speed system during extreme manoeuvres! If the canopy does collapse when accelerated, release the speed bar immediately and correct the situation as usual
- When speed system is engaged, do not use the brakes as it can make your paraglider more susceptibleIn such a situation, control the direction with the bars on the C-risers (marked blue).

Caution: Accordingly to increase in speed the angle of attack diminishes, so the canopy is more susceptible to front collapses than in normal flight. The faster is your flight, the more dynamic are possible collapses and stalls.



# Speed modes

### A. Neutral risers position

- · Slowest speed,
- Minimum sink.
- · Launch configuration.

### B. Full speed

- · Increased speed,
- · Increased sink.

### Risers length\*:

A: 520 A: 400 B: 520

C: 520 \* lengths of the risers incl.

maillons, length tolerance +/-5mm and softlinks

### Risers length\*:

A: 420 A': 315

B: 455

C: 520

maillons, length tolerance +/-

\* lengths of the risers incl. 5mm and softlinks



# Landing

Just make sure that last turn into the wind is done with sufficient altitude. At about 1 meter over ground flare out by gently braking both sides. The glider may climb again for a while gaining some height, if too much brake is used.

The final glide of the landing approach should be straight and smooth. Steep or alternating turns can result in a dangerous pendulum effect near the ground.

Caution: Strong wind landings hardly require braking, if at all! Use C-risers to deflate the canopy after landing. Using the brakes will probably result in pilot being lifted again and dragged backwards.



# Other flying modes

#### Winching

Our paraglider has been successfully tested for foot launching by winch.

First phase of the winch take-off is analogous to classic launch.

After rising the canopy you will be taken off the ground, as the winch line gets loaded. Avoid large heading corrections in first stage of flight up to altitude of 50 meters.

During this stage do not sit deep in the harness in order to be ready for emergency landing in case of e.g. winch line break.

Make sure that your brakes are fully

released, so that angle of attack does not increase above safe level.

During all winch it is recommended to control the direction by weightshifting only. Steering lines should be used only for considerable heading corrections, but even then do not pull them too much in order to avoid danger of stalling your wing.

Adjust your heading regularly when winched, so no large corrections are necessary. Remember there are several conditions to be met when winching:

pilot should be properly trained for winching,

- the winch with all gear should be in good condition and specialized for paraglider winching,
- the winch operator must be properly trained in winching and servicing the gear,
- The wing must not be winched with forces exceeding 90 daN, and under any circumstances must not be towed by any vehicle not equipped properly or controlled by unskilled operator.

#### Motoparagliding

Hike&Cruise is not certified for powered flying.

#### **Tandem flights**

Hike&Cruise is not certified for tandem flying.

#### **Aerobatics**

Hike&Cruise was not designed to do any aerobatics.

# Special procedures and other configurations

Flying on Hike&Cruise does not require knowledge of different procedures and configurations than those described in this manual.

### Extreme manoeuvres

Caution: Extreme flying manoeuvres should only be carried out during safety training courses (instability training) under proper guidance!

#### One sided collapse

Can happen in strong turbulence. Standard counter-steering is enough to keep the paraglider on course. Under normal conditions the canopy will reinflate instantly and spontaneously.

#### Frontal collapse

Can happen in strong turbulence. Active piloting will usually prevent its occurrence.

Hike&Cruise is a modern paraglider with significantly stiffened leading edge. Tests have shown that most often canopy reinflates spontaneously, however in specific turbulent conditions it is possible that airflow will keep the leading edge collapsed. That's why an

instant pilot's reaction is advised – a measured braking at the right moment will greatly speed up the recovery.

#### Full stall and negative spin

Practically do not occur, may happen only as a result of serious neglect or intentional action of the pilot. You have to be careful when flying at very low speeds until fully familiar with brake operation.

The canopy recovers spontaneously in initial phase of stall, otherwise use standard procedures.

#### Deep stall

Under normal conditions does not occur. If you want to prevent it at all, simply stick to a couple of rules:

 after B-stall, release the risers quickly and evenly. Don't be afraid – the canopy does not jump forward excessively.  after big ears execution, engage the speed system. This will increase both the sink rate and safety margin, as big ears constitute an effective aerodynamic brake with significant loss of speed.

Nevertheless, if such a parachutal stall happens e.g due to strong turbulence, simply apply some pressure on speed bar and/or push the A risers forward.

#### Line over and cravatte

It is a modern wing which, in order to decrease drag has fewer suspension lines with greater distances between them, as well as stiff leading edge.

That's why it's always possible that after a tuck one of the stabilisers may tangle in the lines. Usually a couple of pulls with a brake settles the matter. If it's not enough, try to untangle it with big ears or a stronger pull on the risers.

Important: In case of any doubts you should seriously consider throwing the rescue chute.

#### **Emergency steering**

If steering with the brakes has become impossible for some reason, use the bars on the C risers (blue) or wingtip lines to steer the paraglider and land safely.

# Rapid descent techniques

#### **Big Ears**

Collapsing the paraglider's outer cells on both sides can be done by simultaneously pulling down the A' risers lines (in the red sheath, passing through the grommet attached to the main A risers) by about 20-50 cm.

Important: In the case of the Hike&Cruise paraglider, due to the specific structure of the canopy based on the "3-to-1" technology of combined cells, the lines should be grabbed as high as possible and pulled down towards the center.

While inducing big ears you should never let the brakes out of your hands. After tucking the tips in, the wing will continue to fly straight with increased sink rate (up to 5 m/s). You can steer the wing pretty efficiently by weightshifting.

After releasing lines, the paraglider will usually open up on its own or you can assist it with a long stroke of the brakes,

until the tips unfold. For the sake of safety (the possibility of a parachutal stall)it is reasonable to engage speed system after pulling big ears in order to lessen the angle of attack of the wing centre.

#### **B-Stall**

To enter a B-stall, simultaneously pull down both B-risers (yellow cover) by ca. 10-15 cm. The canopy will collapse across the entire span along its B-row, the airflow over top surface will break and projected canopy surface will be decreased. Forward movement will be almost completely stopped.

Further pulling B-risers is not advised, as testes have shown it to increase wing instability. If the canopy forms a horseshoe, gently pull both brakes to recover.

To exit a B-stall, the risers should be released in a smooth and decisive manner.

On quick and symmetrical releasing Blines the airflow will be reinstated and the wing will surge forward, returning to normal flight. The surge forward is minimal due to stability of thre reflex profile, so braking is not necessary.

#### Spiral dive

Hike&Cruise is an agile paraglider, so entering spiral dive happens quickly and can be surprising for the less experienced pilots.

A spiral is characterised by reaching the highest sink rates possible.

Significant G-forces, however, make it difficult to sustain a spiral dive for a long time, as it can place high loads on both pilot and glider, to degree of losing consciousness by the pilot. Never do this manoeuvre in turbulence or at too high bank angles.

Control the dive and do not exceed 16 m/s sink. If the dive is not stopping after releasing the brake, assist the glider with the outer one.

Caution: Never do spirals or wingovers with big ears pulled. That's another example of concentrating whole load on reduced wing area, which combined with high G manoeuvres shifts the peak loads unnecessarily close to their maximum values.

#### Wing over

You make a wingover by performing a series of consecutive, alternating turns with increasing bank angle. Too aggressive banking with unsufficient control can result with a massive collapse.

Caution: All rapid descent techniques should be practiced in smooth air and only with sufficient altitude margin! Full stalls and spins are to be avoided as they are not recommended techniques clearing dangerous situations. Irrespective of paraglider type they lead to dangerous consecuences.

# Paraglider care

#### Packing and storage

 Hike&Cruise design incorporates modern technologies, including nylon lines in the leading edge. That's why the paraglider should be carefully packed, with proper conditions ensured for transport and s t o r a g e

Basic rules to be followed when folding the canopy:

- Fold it accordion-wise rib to rib (cell by cell). Do not fold it by halves, placing the stabilizers at the centerline.
- When a compact package is created on the longest chord do not roll it, but fold three to four times (depending on the chord length) from trailing edge towards the leading one.
- The leading edge remains on top of folded canopy.
- · Never pack you paraglider too tightly.
- Optionally pack the wing into a dedicated WingShell.
- If you have completely prepared your gear but have to wait for launch, a good idea is to use a guickpack, to

- protect your wing against moisture and UV rays.
- Never pack or store the glider when wet, as it significantly shortens life of the fabric.Remember that the wing becomes damp even while lying on green grass in direct sunlight, as the grass transpires.

Caution: Locking a wet paraglider in a car exposed to sun is absolutely unacceptable! Hot car interior acts like an oven and tests have shown that color bleeding/transfer can happen even at 50 Celsius degree. The warranty does not cover such damages!

- While drying, never expose your paraglider to direct sunlight operation.
- Store the paraglider in a dry place, away from chemicals and UV exposure. Ideal storage temperature for the paragliders is 5 to 25 Celsius.

#### Cleaning

Clean the paraglider with water and a soft sponge. Do not use any chemicals or alcohol, as these can permanently damage the fabric.





#### **Deterioration - a few tips**

- The paraglider is made mainly of Nylon - a fabric which, like any other synthetic material, deteriorates through excessive exposure to UV rays that come with the sunlight.
- Hence it is recommended to reduce UV exposure to a minimum by keeping the paraglider packed away when not in use. Even when packed in a bag, it should not remain in the sun for long.
- Suspension lines in this paraglider consist of Technora inner core and polyester sheath.
- Submitting them to excessive bending and loading in flight should be avoided, as it can cause irreversible damage.
- Please note that with frequent kiting on a field or a small hill your paraglider will deteriorate more quickly due to its repeated rising, falling and being dragged around.
- Uncontrolled strong wind takeoffs or landings can result in the leading edge of the canopy hitting the ground hard, which may seriously

- damage the ribs, sewing and surface cloth (including coating damage).
- Keep the paraglider clean, since getting dust in the lines and fabric will reduce their durability.
- Be careful to keep snow, sand or stones from entering the cell openings: their weight can slow or even stall the glider, while sharp edges can damage the cloth.
- Prevent lines from catching anything, as they can overstretch or tear. Never step on the lines.
- Knots can chafe suspension and/or brake lines.
- Check the length of your lines after tree or water landing, as they can stretch or shrink. The lines can be measured at the manufacturer or an authorised workshop.
- After landing in water you should check the wing fabric as well, since the wave forces can cause the fabric to distort in some areas.
- When taking the wing out of the water, always do this by trailing edge.
   After a sea landing, rinse the paraglider with fresh water.





- Since salt crystals can weaken the suspension lines even after rinsing in fresh water, you should replace the lines with new ones immediately after contact with salt water.
- Frequent flying near oceans and seas accelerates deterioration of the paraglider, as salt present in the sea breeze can make the lines stiffen and even break.

#### Repairs

Repairs should only be carried out by the manufacturer, authorised distributor or an authorised workshop. It is acceptable to fix minor cloth damage with self-adhesive patches included in the package.

#### Inspections

Full Inspection is recommended every 24 months or every 150 hours whatever comes first, if not advised otherwise by the inspecting person due to paraglider's condition.

In case of paragliders used commercially (e.g. in schools or tandem flying) a Full Inspection is recommended every 12 months after first 24 months from purchase date or every 100 hours airtime (whatever

comes first).

A paraglider can be officially inspected only by the manufacturer or a dealer (authorised to do so).

The paraglider model and serial number are to be found on wing sticker, placed inside the wing chamber around the center. The sticker must be filled out completely and clearly. In case of legibility problems, the numbers can be confirmed in our database.

You can find out more about the wing by entering its number in our search engine.

With Hike&Cruise it's even easier, as it has an NFC chip sewn under the wing sticker. Close your NFC-enabled phone to the sticker for instant access to our database where you can learn more about your canopy, download the user manual and more.





# Lining scheme

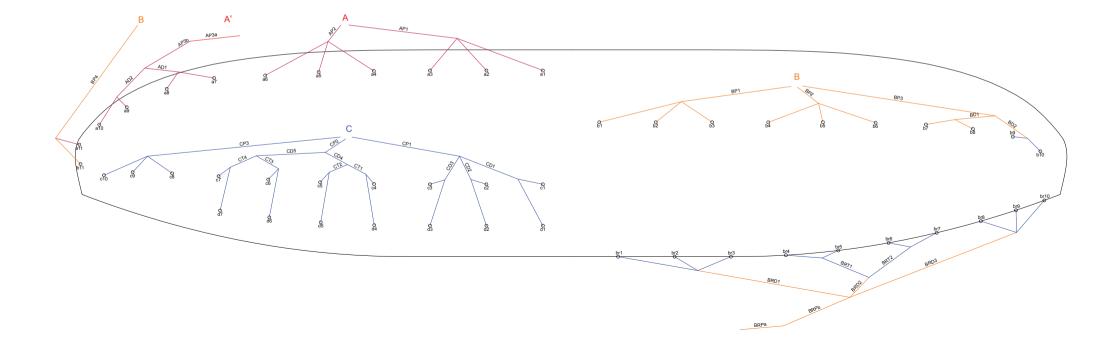
The rigging scheme itself is published on the next page, while tables of line lengths you will find in attachments to this manual.

Lengths are measured with a specialised, computer-operated device. All the lines before measurement are stretched with a steady 5 kg load.

Thanks to abovementioned device and proper procedures, final tolerance of line lengths does not exceed +/- 10mm.

Note: Distances given below are to be understood as distances between connection points. When cutting a line for repair, 20 cm extra must be added, as at each end a 10 cm stitch is required to fix the loop. The only exception is the main steering line (BRP), which is looped only at the upper end, with at least 150 mm margin for fastening brake handle (this means for this line extra 25 cm than in the table is needed).

Note: Accordance of all suspension and steering lines as well as risers with dimensions given in this manual has been confirmed by testing center after completing the test flights.



36

36 Months Warranty

24

24 Months Warranty

18

18 Months Warranty

**12AC** 

12 Months Auto Casco

# Warranty and Aerocasco

We are aware that purchase of a new paraglider is a big expense for every pilot. That's why we guarantee quality of our products, as well as optionally we are offering a security system that will allow you to insure your paraglider against possible damage and repair costs with an AeroCasco insurance.

#### Guarantees

Dudek Paragliders guarantees free of charge repairs in case of damages caused by the material or production:

- For the free-flying paragliders warranty covers 36 months (3 years) or 300 flight hours, whatever comes first. If the free-flying paraglider is used for powered flights, every hour flown is counted double (not concerning PPG paragliders).
- For the paramotor canopies (PPG) warranty covers 24 months (2 years) or 200 flight hours (whatever comes first).
- For the mountain wings (MPG), speedflying, schools or professional users warranty covers 18 months 1,5 year) or 150 flight hours (whatever comes first).

Warranty does not cover any of the following:

- canopy colour fading as well as bleeding caused by improper storage/transport,
- damage caused by chemicals or salt water,
- · damage caused by improper use,
- damage caused in emergency situations,
- damage resulting from accidents (airborne or otherwise),
- · consumables (e.g. trimmer tape).

Warranty is only valid if:

- flight hours can be identified basing on properly kept logbook of the owner (and his possible predecessors) with marked PPG hours.
- the paraglider is used in accordance with the operating manual,
- the owner did not make any repairs by him/herself (excl. minor repairs with self-adhesive patches),
- the owner did not make any modifications,

36

36 Months Warranty

24

24 Months Warranty

18

18 Months Warranty

**12AC** 

12 Months Auto Casco

- the paraglider can be unmistakably identified by data sheet/sticker,
- the paraglider has been properly inspected at all times.

Caution: In case of damages caused by the material or production flaws please contact the dealer that sold you the gear. The dealer will determine further actions.

Caution: If you have bought the paraglider second-hand, ask previous owner for a copy of his logbook (covering entire entire use of ther paraglider from the day of original purchase).

#### **AeroCasco**

Standard warranty does not cover repair costs of damages caused by the user or a third party. Since costs of such repairs can be considerable, Dudek Paragliding offers an AeroCasco insurance. It offers a one time repair of any mechanical damage, no matter how big and who caused them.

The only expenses you will be facing are shipping costs and the share-of-cost amount.

AeroCasco can be purchased for a brand new paragliders only (at the purchase).

AeroCasco covers only damages occuring while taking-off, flying or landing. Obviously, all faults in the material and manufacturing flaws are covered by normal warranty.

When handing the paraglider for the repair you have to present a card confirming its AeroCasco status. After the repair you will have to cover only the share-of-cost . AeroCasco is valid for one repair only during covered time.

There is a possibility of extending AeroCasco for one further year. To do this you have to send your paraglider for inspection to the manufacturer not later than a year after the date of purchase. Remember to include the AeroCasco confirmation when you send the paraglider for inspection.

AeroCasco does not cover any of the following:

- theft
- · canopy discoloration,
- damages caused by incorrect storage damage of transport,

36 Months Warranty

24

24 Months Warranty

18

18 Months Warranty

12AC

- · damages caused by chemicals,
- · salt water or force majeure.

Caution: The additional inspection does not extend the validity of the full inspection.

Caution: AeroCasco is not available for all paragliders (check before purchase). It can be purchased only for privately used paragliders.

### Environmental care

#### **Environment 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 in places where we can fly. Keep to marked paths, do not make excessive noise, do not leave any garbage and respect fragile balance of the nature.

#### Recycling of used gear

A paraglider is made out of synthetic materials, which need to be properly disposed of when worn out.

If you are not able to dispose of the paraglider properly, DUDEK Paragliders will do that for you.Just send your paraglider to the address given at the end of the manual, accompanied by a short note.















# Join our community

By purchasing our gear you've become an important part of Dudek Paragliders family!

Share your experiences with the entire community and stay current with new offers by joining our fanpages

If you have interesting photos and films of your flying by all means send them to us, and we will share them with our entire community

media@dudek.eu

Do not forget to label everything you publish in social media with #dudekparagliders!



