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Getting Started

ADVANCE EPSILON⁹

English

Welcome to ADVANCE

Our sincere thanks that you have decided on ADVANCE. As a worldwide leading paraglider manufacturer based in Switzerland we have been following our own ideas and concepts since 1988 – in both development and the production of paragliders, harnesses and accessories.

This guide gives a brief look at using the EPSILON 9, but it does not replace the manual. The latest version can be found on:

www.advance.ch/epsilon

We wish you a lot of fun with the EPSILON 9 and many great hours in the air!





You as Pilot

As an intermediate the EPSILON 9 is suitable for the recreational pilot who regularly flies in thermal conditions. This pilot will have a competent, well-practised active flying style. If this is the case the EPSILON 9 will make pure pleasure of extensive thermaling flights.

Delivery and Basic Settings

Every ADVANCE paraglider has to be flown by the dealer to check for correct initial setup. Any personal alteration of the paraglider results in the loss of its certification.

Brake line length should not be changed. It is set at the factory so that the trailing edge remains unbraked when fully accelerated with brake lines fully released.

The EPSILON 9 package contains:

- COMFORTPACK
- COMPRESSBAG
- Repair-Kit
- Mini-Windsock
- Getting Started Booklet



Risers

- 1 Quicklinks and Clips
- 2 Pulley Speed System
- 3 Speed Performance Indicator (SPI)
- 4 Red cursor for the SPI
- 5 Brummel Hook
- 6 Easy-running Brake Pulley
- 7 Swivel
- 8 Magnet Clip
- 9 Easy Connect System
- 10 Support Point



Speed system with SPI

The Speed Performance Indicator (SPI) uses the EPSILON 9 polar curve and the MacCready theory, and tells you the best speed to fly. The SPI gives you an indication of the speed increase to choose taking into account headwind, sinking air and the expected quality of the next thermal.

Take the time to set up your speed system.

- Make sure that the speed lines run freely through the harness pulleys.
- Pull the speedlines through the harness and connect them to the glider risers using the Brummel hooks.
- Adjust the length of the speed lines so that pushing the first and second speed bar steps reach SPI position 1 (30%) and position 2 (80%) respectively.



Easy Connect System

The EPSILON 9 has an 'Easy Connect System', common to ADVANCE harnesses and paragliders. It helps to ensure that you connect the wing to the harness correctly. The backs of the C-risers have coloured markings: red on the left, blue on the right in the direction of flight. When these markings appear correct from the pilot's point of view, and run correctly upward, this indicates that the risers are clipped in correctly.



Fast Descents

The EPSILON 9 has split A-Risers, which make **ear-folding** easier. To apply pull both outer red A-lines down briskly. Sink speed can be increased by use of speed-bar. To reopen release both A lines at the same time. Delayed opening can be speeded up by a light pull (pump) on the brake, one ear at a time.



Enter a **spiral** progressively. When in the spiral keep your weight neutral in the harness. Exit the spiral carefully by progressively releasing inside brake and leaning body weight lightly towards the outside of the turn. The EPSILON 9 will recover itself from the spiral if neutral weight disposition is maintained and brakes are released completely. However, ADVANCE recommend an active exit.

! **Caution:** if you deliberately shift your weight to the inside of a spiral strong acceleration will result. This can lead to stable rotation and even more acceleration. In this case – with vertical speed of more than 14 m/s – you must use active outside brake and outside weightshift to recover.

Correct Handling of Collapses

If you have a collapse keep flying straight ahead by careful use of opposite brake, then open the closed side, if necessary, by pumping its brake. Be careful with brake on the open side so as not to stall the wing. Open a cravat using the orange-marked stabilo line.

At the onset of a full frontal collapse, the glider will pitch back behind you. Do not use any brake until you've swung underneath and the wing is back above your head. Then, after the glider re-inflates, restrict forward surging with careful brake.

When fully accelerated the wing reacts quite aggressively to front and side collapses. The side collapse at full speed can turn it to the side somewhat dynamically, but this can be well controlled.

If you want to simulate an accelerated collapse in SIV training, start with trim speed then partly accelerated attempts first. To pull the A-lines down take hold of both A-risers (inner and outer).

More manoeuvres are extensively described in the manual on:

www.advance.ch/epsilon



Packing and Storage

- Lay the ribs nose on nose when packing, so that the plastic rods lie flat on each other and all at the same height.
 - Fold the wing to the width of the inner bag and pack it in.
 - Lie the inner bag in the back of the rucksack, then put the folded harness on top.
 - Kneel gently on the harness and wing to compress them, then pull the rucksack flap over them.
- Zip up the rucksack then pull in the side straps.

Residual dampness in warm storage conditions could damage the glider cloth (mildew)! Do not leave the wing compressed in its bag for longer than necessary. When possible open the wing out and leave it to air when not in use.



Flying with a wet Glider

If you fly a wet paraglider the risk of parachutal stall is heightened. Parachutal stall is often the result of a combination of factors. Water increases the weight of a wet canopy. More weight results in an increased angle of attack, which brings the glider closer to the parachutal stall boundary.

In addition, water drops on the fabric have a bad effect on the laminar flow over the leading edge, and this significantly reduces the maximum achievable lift coefficient.

To minimise the risk of parachutal stall a wet glider should be braked as little as possible, and big ears never used. But, if the wing still goes into parachutal stall, recovery should be achieved by accelerating using the speed system only.

Technical Data

EPSILON 9		22	24	26	28	30
Flat surface	m ²	22.1	23.9	25.9	27.8	29.8
Projected surface	m ²	18.5	20	21.7	23.3	25
Aspect ratio		5.2				
Ideal weight range * **	kg	65–75	75–85	85–97	97–110	110–125
Certified take off weight **	kg	60–77	70–88	80–100	92–114	105–128
Glider weight	kg	4.15	4.40	4.65	4.95	5.25
Certification		EN/LTF B				

* takeoff weight range in which the EPSILON 9 shows the best relationship between flying speed and climb.

** Pilot, wing, equipment

Service & Warranty

Set up a MyADVANCE-Account on www.advance.ch/garantie and register your wing direct online after purchase. You will then benefit from the extended ADVANCE Warranty. This is valid for 3 years and covers defects that can be attributed to manufacturing faults.

In the MyADVANCE-Account you can arrange for a Check Reminder by E-Mail. In addition you can find all the documentation for your wing as PDF, e. g. manual, line plan, check protocol and other information. You can also look at spare parts for your product, make orders and ask ADVANCE support direct.

Your EPSILON 9 has to be checked every 24 months, after 150 flights or 150 flying hours – whichever comes first. The current edition of the manual and more information is on www.advance.ch

The image shows two screenshots from the MyADVANCE web interface. The top screenshot is the 'My Products' page, which lists a product 'Gliders' with columns for Model, Ser. #, Purchase, Downloads, Checks, Actions, and Settings. The 'Checks' column shows a 'None' status. The 'Actions' column includes links for 'View spare parts', 'Product feedback', and 'Support request'. The 'Settings' column includes 'Configure Check Reminder' and 'Mail account'. A 'Reset wing plan' button is visible at the bottom left. The bottom screenshot is a 'Configure Check Reminder for EPSILON 9 - 62074' dialog box. It features a toggle switch for 'Status' set to 'ON', a 'First after' dropdown set to '24 months', a 'Start' date field set to '20.12.2019', a 'Service Partner' field, and a 'Sending to' field with the email 'name@domain.com'. A 'Save' button is at the bottom left.

MY ADVANCE