



ADVANCE ALPHA⁷ MOTOR

User manual supplement

V 1.0 / 9_2020

M01

THE ALPHA 7 Paramotor

In this supplement to the ADVANCE ALPHA 7 manual you will find everything you need to know for flying this glider with a motor.


Range of use

Because of its good takeoff qualities, high stability, damped behaviour and compactness the ALPHA 7 is ideally suitable for paramotoring. Hybrid-Risers, which can also be used for flight without the motor, are recommended.

Hybrid-Risers

The Hybrid-Risers are fitted with trimmers. These can be used for both counteracting the turning effect of the motor and adjusting the flying speed. For flight without a motor the trimmers must be disabled by hooking them into the main carabiners. The wing then keep its paraglider certification.

The Hybrid-Risers have a speed system for use when flying without the motor. Illustrations of the Hybrid-Risers can be found on pages 5 and 6.

 **Caution:** You are advised not to use the trimmers and speed system at the same time.


Flight characteristics

This section is added to “Flight characteristics” in the ALPHA 7 manual, which also basically applies to paramotoring.

The flight characteristics of the ALPHA 7 are virtually identical when flying with or without a motor, especially at the same wing loading. In the expanded weight ranges for paramotoring (see table) manoeuvring will be slightly more dynamic because of the higher wing loading.

Similarly with trims open manoeuvres will be a little more dynamic because of the lower angle of attack. Even though the ALPHA 7 is very stable and compact the trimmers should stay closed when flying through turbulent air.

Thanks to the ALPHA 7’s good takeoff behaviour the trims don’t have to be opened when taking off with light wind. The wing pulls up more easily in other wind situations if the trimmers are opened adapted to it, but you should then expect a longer takeoff run.

 **Caution:** If you fly the ALPHA 7 as a paramotor in its expanded weight range the trim speed will be higher. Lift off and landing speeds will also be higher, and this is clearly noticeable in light wind.

Compatible motors

The certification test flights are carried out with a commercially available motor. Provided that maximum engine performance figures are not exceeded (see DGAC table), other motor models can be expected to produce similar handling behaviour.

Certification

Provided that it is equipped with the Hybrid-Risers appropriate to the ALPHA 7 has EN / LTF certification as a paraglider. Sizes 22, 24, 26, 28 and 31 have DGAC certification for motor flying. Relevant certified weight ranges are shown in the adjoining table.



Info: ALPHA 7 EN / LTF certification for flight without motor but with the Hybrid-Risers is only valid when the trimmers are stowed i.e. hung up.

The certification requirements can be seen on www.advance.swiss

Technical Data

ALPHA 7 with Hybrid-Risers		22	24	26	28	31
Takeoff weight paramotor ¹	kg	50-120	60-135	70-155	85-180	100-210
Length of risers	cm	46	46	48	50	51
Trimmer travel	cm	8.0	8.0	9.0	10.0	11.0

¹ Pilot, wing, equipment with engine

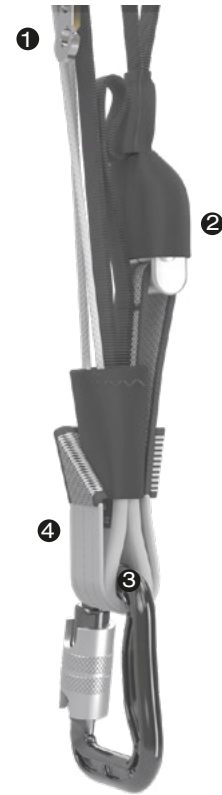
Hybrid-Tragegurten Hybrid-Risers Elévateurs hybrides

1. Fussbeschleuniger
Speed system
Accélérateur à pieds
2. Trimmer
Trimmer
Trim
3. Einhängepunkt
Hang point
Point d'ancrage
4. Trimmer-Schleife zur Fixierung
Stowable trimmer loops
Boucle de réglage et de verrouillage





Trimmer offen
Trimmers in use
Trim déverrouillé



Trimmer fixiert
Trimmers stowed
Trim verrouillé

ADVANCE

advance thun ag
uttigengstrasse 87
ch 3600 thun

fon +41 33 225 70 10
fax +41 33 225 70 11

www.advance.ch
info@advance.ch