



ADVANCEALPHA⁷

Content

Thank you for flying ADVANCE.	3	Tandem flying	22
Pioneering spirit and Swiss precision. Our story.	4	Paramotoring	24
ALPHA 7 – Come fly with me.	5	Acrobatics	24
Pilot requirements	6	Packing	25
General advice about paragliding	6	Maintenance and checks.	26
Getting started.	7	Maintenance	26
Delivery	7	Check	26
Basic settings	7	Repairs and disposal.	27
Speed system	8	Disposal.	28
Suitable harnesses.	9	Technical details.	29
Weight range	10	Materials used	30
Flight characteristics	12	Certification	31
Connecting the Risers	12	Service	32
Takeoff	12	ADVANCE Service Center.	32
Normal flight.	14	The ADVANCE website	32
Turning flight.	14	Registering your product	32
Accelerated flight	15	Warranty	33
Collapses	16	Wing parts	34
Rapid descents	17	Line plan	35
Stalling	20	Risers	36
Deep Stall	21	Bowline	37
Landing	21		
Flying with a wet paraglider (risk of deep stall).	22		
Winching	22		

Thank you for flying ADVANCE

Congratulations on your choice of an ALPHA 7 - a quality product from ADVANCE. We hope that you will spend many rewarding hours in the air with it.

This user manual is an important part of the glider. Here you will find instructions and important information about safety, care and maintenance, and that's why we recommend that you read this document carefully before your first flight

Register your ALPHA 7 online on www.advance.swiss/warranty; you will then receive product updates or safety-related bulletins about the ALPHA 7 direct from us. This information will also be available to download from our website at www.advance.swiss, as will the latest version of this manual and further updated information.

If you have any further questions or problems please contact your dealer or get in touch directly with ADVANCE.

Now we wish you a lot of enjoyment with your ALPHA 7, and always «happy landings».

Team ADVANCE

Pioneering spirit and Swiss precision. Our story.

Enable our ideas to fly, that's what we do. Since our beginnings over 30 years ago, ADVANCE have kept the needs, wishes and experiences of our pilots at the forefront. With Swiss precision we refine model after model. The highest quality and absolute reliability are part of the experience, in the air and in our customer service. So from pioneers we have become perfectionists, and a leading world-wide comprehensive service provider.

ALPHA 7 – Come fly with me

The ALPHA 7 is the perfect paraglider for first flights, building experience or occasional flying. As a beginner you can trust this wing 100%. The ALPHA model is the well-trying classic for first flights, and after basic training, offers many possibilities of exploring further afield. This 7th generation of the ALPHA series is modern in concept, founded on many years' experience, and promises reliability and durability.

Feeling good from the pull up

Nothing upsets the ALPHA 7: with pitch and directional stability it forges on through turbulent air. Steering demands are answered precisely, without delay. These features combined are responsible for its defining fun and feel-good factor in the air, and as life-long partners of passive safety they share the credit for a long-lasting and uninterrupted enjoyment of flight.

Straightforward in every respect

Starting with wing size choice, then to line sorting, clipping in, big ears to speedbar: the ALPHA 7 is intuitive and simple to manage. The new Automatic Dust Remove even sweeps the wing interior for you while you are flying!

Pilot requirements

Right from the start the ALPHA 7 gives the beginner or leisure pilot the safety they need when they lift off into the third dimension. A sense of achievement is guaranteed from the beginner's first flights, encouraged by the knowledge that you can always trust the ALPHA 7 completely. The ALPHA 7 is perfect for schools, but it also provides improving pilots with continued flying enjoyment, with maximum passive safety, long after they have finished their training.

General advice about paragliding

Flying a paraglider calls for appropriate training and a sound knowledge of the subject, as well as, of course, the necessary insurance cover and licence. A pilot must be able to correctly assess the weather conditions before taking off. His or her capabilities must be adequate for the paraglider used. The paraglider pilot is also required bear a sense of responsibility towards the natural world, especially regarding the preservation of wildlife and landscape.

Wearing an adequate helmet, suitable boots and clothing, and the carrying of an emergency parachute are essential. Before every flight all items of equipment should be checked for damage and airworthiness. A proper pre-takeoff check must also be carried out.

Every pilot bears sole responsibility for their participation in the sport of paragliding. Neither the manufacturer nor the seller of a paraglider can guarantee or be held responsible for the pilot's safety.

Getting started

The ALPHA 7 belongs to the “Light sport aircraft” category with an empty weight of less than 120 kg.

Delivery

Every ADVANCE paraglider has to be flown by the dealer before delivery to check for correct settings and trim. The dealer finally enters the date of the first flight on the type placard fastened on a rib at the centre of the wing. This entry confirms that defects in the product that can be attributed to manufacturing faults are covered by the ADVANCE warranty. Register your product for free on our website www.advance.swiss/warranty, within 10 days of purchase and receive an extended warranty of 12 months beyond the legal warranty period of your country! See under “Warranty” in the “Service” section.

Delivery of a ALPHA 7 includes a COMFORTPACK rucksack, a COMPRESSBAG, a repair kit, a mini-windsock and a «Getting Started» booklet.

Basic settings

At delivery the basic set up of the ALPHA 7 will be the original trim situation that the ADVANCE test team found to be best. Certification was also gained in this condition. Any alterations or changes to the paraglider, such as altering the line lengths or fitting different risers or quicklinks, will result in a loss of the glider’s certification. See section «Certification».

Adjusting the brake lines

The length of the brake lines has been set at the factory so that, with hands fully up, the trailing edge remains unbraked in accelerated flight – (no crease in the wing). Basically, this setting should be kept.

If the brake line length does have to be reset there should be 8 cm (depending on the glider size) of initial free brake line movement between the brakes fully released position in unaccelerated flight, and that point where the lines first affect the trailing edge. We recommend a bowline knot for attaching the handles. See illustration in the appendix.

Speed system

The ALPHA 7 has a speed system which can improve the glide performance, and increase wing stability at speeds above trim speed. In accelerated flight the system shortens the front risers, so reducing the wing's angle of attack. The ALPHA 7 speed system is designed to fully retain the wing profile during accelerated flight, keeping the wing's good qualities at high speed.

Adjust the speed system correctly before your first ALPHA 7 flight. Make sure that the speed lines run freely through all the pulleys in your harness. Connect the speed lines to the glider risers using Brummel hooks. Finally check that your settings allow you to use the full travel of the speed system. To do this it is best to hang the harness up, sit in it, connect the risers and have someone else hold them up as if in flight..



Caution: The speed system is correctly adjusted when you can use the full travel available on the wing. Make certain that the speed lines are not set too short, thus causing the wing to be pre-accelerated all the time.

Suitable harnesses

The ADVANCE ALPHA 7 is certified for harnesses in Group GH (without rigid cross-bracing - see section «Certification»). The suspension points of the chosen harness should ideally have a carabiner distance of approximately 45 cm (equivalent to your shoulder width) and a height of 40 to 48 cm.

The ALPHA 7 is neither suitable nor certified for use with harnesses in group GX (with effective cross-bracing). The use of such harnesses can have a bad effect on both handling and extreme flight characteristics.

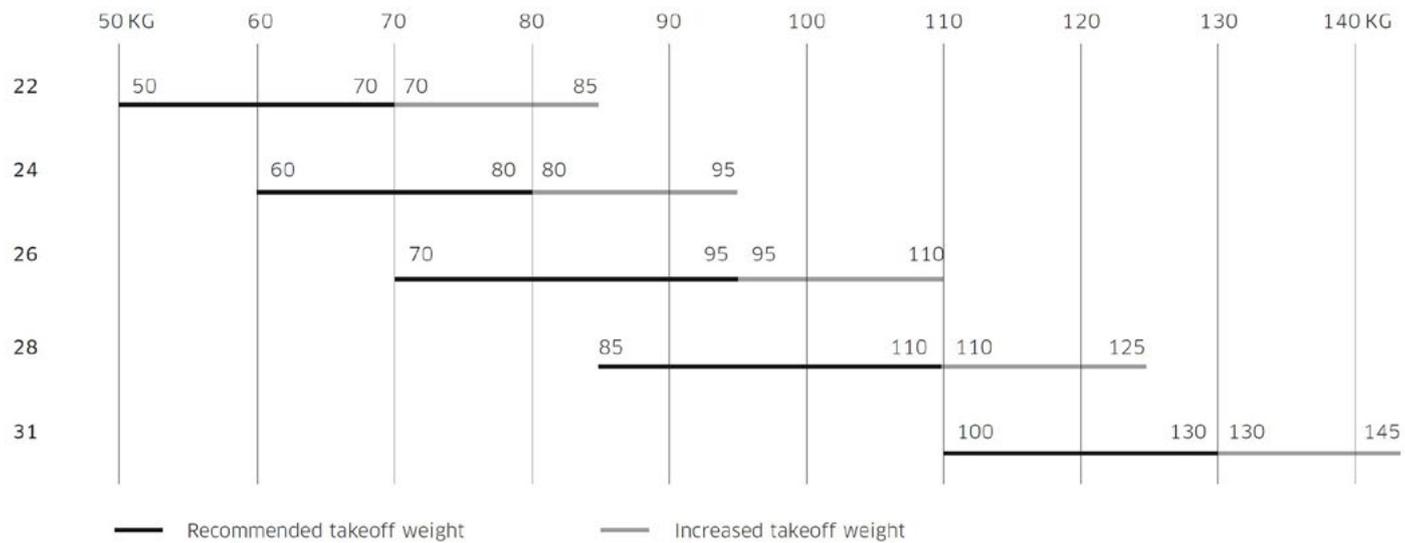
Weight range

The weight ranges of the different wing sizes are given in the section «Technical Data». The figures there represent total in-flight weights. This includes the pilot's body weight, plus clothes, as well as the weight of all the equipment (glider, reserve, harness, instruments etc.).

Flying at the lower or upper weight limits can have an effect on the paraglider's flying characteristics and handling, without affecting the pilot's safety. Glide performance remains the same over the whole weight range, but climbing performance will be altered – lighter means better climbing in easy conditions. When the ALPHA 7 is flown in its upper weight area, the higher wing loading produces a higher trim speed, and a more dynamic and agile flying character.



Info: The ALPHA 7 has a weight range that has been extended above the recommended region, but still keeps its EN/LTF A certification; the EN/LTF A approval includes a weight increase of around 15 kg above the recommended weight ranges for all sizes. When the ALPHA 7 is flown in its upper weight region, the higher wingloading produces a higher trim speed, and a more dynamic and agile flying character. The fact that the ALPHA 7 keeps its EN/LTF A rating at the higher wing loadings confirms its high degree of passive safety



Flight characteristics

We recommend that you make your first flights with your new glider in quiet conditions, in a familiar flying area. A few pull-ups at an easy site will give you confidence in the ALPHA 7's handling qualities, from the very beginning.

Connecting the Risers

The ALPHA 7 has an "Easy Connect System" on the risers, to simplify connecting the risers. Each riser has coloured sewing running up the back of the C-riser, red for left and blue for right, in the direction of flight.

The coloured sewing facing the pilot, and the riser running cleanly upward to the lines confirm that the riser has not been connected with an 180 degree twist. For additional assistance all ADVANCE harnesses will, in future, have the same marking on their suspension loops (red to red, blue to blue).

The "Easy Connect System" also enables you to clip in while facing the wing, This can be helpful for a reverse takeoff in windy weather.

Takeoff

Before every takeoff carry out the following pre-takeoff checks:

1. Harness and helmet done up, reserve OK?
2. Lines free?
3. Canopy open?
4. Wind direction and strength assessed?
5. Airspace and field-of-view clear?

The ALPHA 7 has split A-risers; the thin outer one is used for big ears. We recommend the use of both A-risers for takeoff (each side will be clipped together by its "Quick Snap" magnet). The wing will then fill reliably from the middle out, and will pull up straight with little effort. During takeoff the "Quick Snap" magnets will snap apart by themselves.



Tip: To get the wing in the right shape for takeoff do the following: pull the brake lines in while you are sorting the lines until the canopy arrives at the perfect banana shape

The ALPHA 7 takeoff behaviour is very smooth and easy for both forward and reverse takeoffs. The canopy inflates quickly and rises progressively, without hanging back.

The ALPHA 7 rises exceptionally easily, so it is very important that you match your pull up technique to the weather conditions and the steepness of the slope. This means:

- In a lot of wind and/or on steep ground the ALPHA 7 needs little or almost no initial tug (just lead it up).
- In zero wind and/or on flat ground a more reasonable impulse would be sensible.

Takeoff in light wind (forward takeoff)

The ALPHA 7 only needs a moderate pull-up impulse even in a light wind. It is not necessary to step back and 'run into the lines'. Guide the glider up with pronounced leaning forward, but without too much of a pull on the A-risers, until the canopy is overhead. During the pull-up phase any directional correcting should only be done by decisive going-under-the-wing, without using the brakes. After any necessary corrections and a satisfactory visual check a few determined steps with good leaning forward will achieve lift off, even in little wind. Careful braking can shorten the takeoff run.

Takeoff in stronger wind (reverse takeoff)

The reverse takeoff is mainly recommended for stronger winds. Like the forward takeoff we recommend that you use both ALPHA 7 risers. During the pull-up you should walk towards the ALPHA 7 as necessary to control its rising rate. Turning round and taking off with the ALPHA 7 will then prove to be easy.



Tip: Playing with the glider on flat ground in some wind gives a good feeling for the wing. You can get to know the ALPHA 7's characteristics very well, and try out takeoffs, stalling, shooting forward tendency and collapses – while remaining safely on the ground. The ADVANCE test team have a motto: one hour's ground training is worth 10 high flights. But bear in mind that ground practice puts use on the glider

Normal flight

In calm air the ALPHA 7 best glide is achieved with fully released brakes. Light braking brings the glider to its minimum sink condition. When flying into a headwind, through descending air, or when proceeding to the next thermal, glide performance will be distinctly improved by appropriate use of the speed system.

Despite the wing's high stability an active flying style is recommended - collapses can be almost completely avoided. This means keeping the lightly-braked glider directly above you; in other words, countering roll and pitch disturbances.

- When the angle of attack increases (e.g. wing swings back when entering a thermal) the brake lines should be briefly released fully, until the glider returns to its overhead position.
- When the angle of attack reduces (e.g. glider shoots forwards) the wing should briefly and strongly be braked.

Be careful not to get below minimum speed, and don't overreact with the brakes.

Turning flight

The ALPHA 7 has precise response to brake application. It reacts directly and progressively to increasing steering demands, once the brake line free travel has been taken up. Steering can be effectively assisted by active weight shift. Angle of bank can always be increased, steadied or reduced by appropriate adjustment of brake position.

When circling in a thermal choose the desired angle of bank and corresponding turn radius by using the inside brake line, and let the paraglider turn steadily like this. Stabilise the outside wing with outside brake as required, in particular to keep the rate of turn constant. Too much brake on the outside wing will slow the turn rate and airspeed down, allow the pilot to swing back under the wing, and lose the glider's ability to turn.

A harness that is matched to the ALPHA 7 flying qualities helps you enter and settle on a very steady turn. See also section «Suitable harnesses».



Caution: To keep good manoeuvrability make sure to fly your ALPHA 7 with enough airspeed while turning in thermals - not too much outside brake.

 **Tip:** If a brake line were to break you can steer your ALPHA 7 with the rear C-risers if necessary.

Accelerated flight

The ALPHA 7 canopy remains very stable even when accelerated. At their upper speed range however, paragliders fly at a lower angle of attack, and are generally considered to be less structurally stable at high speed. Because of the higher forces and energy, collapses at high speed are more dynamic. See also section “Collapses”.

When encountering strong turbulence while accelerated you should first release the speedbar completely before applying the brake necessary to stabilise the wing. The high stability of the ALPHA 7 does allow you to fly through turbulence while accelerated. When doing this, active speed system should be used, adjusting angle of attack and controlling pitch attitude by using speedbar instead of brakes. Pitch disturbances can then be reduced to a minimum, and better gliding performance attained. See also section “Adjusting the Speed system”.

- When the angle of attack increases (e.g. wing goes back meeting a thermal) the speedbar should be briefly but strongly pushed.
- If the angle of attack reduces (e.g. wing shoots forward) the speedbar should be released.

 **Caution:** Even though the ALPHA 7 is stable in accelerated flight you should only use as much speedbar as you feel happy with.

 **Tip:** Take care not to use speedbar and brake at the same time, otherwise you will get into the worst possible gliding situation, to no advantage.

 **Tip:** For best gliding always choose a speed that takes into account actual headwind, sink rate and expected quality of next climb.

Collapses

Asymmetric collapse of the wing

The ALPHA 7 has a very stiff and stable canopy. With an active flying technique collapses can be almost completely prevented in normal flying conditions.

If the glider does, however, suffer a side collapse at trim speed, it will respond to a collapse of more than 50% of the whole wing with moderate turning, allowing heading to be easily held with light counter-steering. Normally, the wing will reopen without pilot action.

Due to higher aerodynamic forces during accelerated flight the glider will respond to a side collapse with more energy. But the turning tendency in fully accelerated flight is unspectacular and slow.

If a collapse is slow to reopen, a deep, fast but brief pull on the folded side brake will help. Here it is important to completely release the brake again to let the glider keep its flying speed. Be careful with the brake on the open side, and only apply enough to keep straight – so as not to stall the wing. This side is providing the lift necessary to keep the glider flying under control.

Poorly flown wingovers can cause a wingtip to fold inwards from the side, causing it to catch in the lines and create a cravat. Due to the high drag they produce cravats can lead to strong turning (spiralling). Prevent this from developing by using just enough (but no more) outside brake. Then open the cravated wingtip by pulling the orange stabilo line. Clearing a cravat can be also done more quickly by 'pumping'. Apply 75% of brake on the affected side within a maximum of two seconds, then release immediately.

Symmetric collapse (frontstall)

After a spontaneous or a deliberate front collapse using all A-risers the airflow breaks away from the profile and the canopy will pitch back. The pilot will soon swing back underneath. Wait, without applying brake, until the wing is again above you and returns to normal flight. After a big collapse reopening may be delayed, but do not forceably encourage reopening by the use of excessive brake, because of the risk of a fullstall.

Rapid descents

For quick and efficient ways of getting down the ADVANCE test team recommend big ears (with or without speed bar) or the spiral dive – the choice depends on the situation.

 **Tip:** Fast descents should be practised now and then in quiet conditions – so they won't become emergencies when you need them.

Symmetrical collapsing of the wingtips (big ears)

The ALPHA 7 has split A-risers, which make applying big ears easy. The outer, narrower A-risers with a red covered line are separated specially for this. To do this manoeuvre pull both of these narrower, outer risers. This will fold the wingtips in, and you can hold them there easily.

To reopen release the risers; the ALPHA 7 wingtips then open themselves thanks to the high internal wing pressure.

Sink rate can be further increased by using the speedbar when the ears are folded. Depending on the situation the glider can be steered using weight shift.

 **Info:** Big ears is also possible using two lines (per side) with the ALPHA 7. Here it is important that the glider must then be accelerated as well, and the trailing edge must not be braked.

 **Caution:** Do not fly spirals or sharp changes of direction with big ears applied; the increased loading carried by fewer lines can damage the structure.

 **Tip:** If you want to lose height as quickly as possible and fly away from a problem area at the same time we recommend the following: apply big ears and use as much speedbar as conditions allow.

Spiral dive

For the most comfortable way of doing this we recommend a neutral sitting position without active weight shift, and a shoulder-width carabiner distance (approx 45 cm).

Enter the spiral by progressively pulling one brake. Your head and field of view should be directed in the turn direction. As the angle of bank increases so will the rate of turn, airspeed and centrifugal force, which makes the pilot feel heavier.

The behaviour of the spiralling paraglider can be separated into two phases: in the beginning the glider makes a normal turn which progressively tightens, with increasing angle of bank. In the second phase the paraglider engages its spiral mode. This means that the wing dives forward and assumes a more vertical flightpath. During this phase of the manoeuvre try to keep a neutral sitting position and give way to the centrifugal force – your body will be pulled to the outside of the turn.

To recover keep the neutral sitting position and progressively release the inside brake. Your body weight will be somewhat tipped to the outside. While coming out of a spiral dive of high vertical and rotational speeds some assistance with outside brake is essential. Careful releasing of the inside brake will prevent the wing from recovering too quickly, thus pitching back excessively before diving in front - if the turn stops with too much speed remaining. Make sure that you start the

recovery with plenty of height above the ground. Generally speaking you should allow the same amount of time to recover as it took to enter the manoeuvre, but remember that the vertical speed will be higher, and much more height will be used!

The ALPHA 7 comes out of a steep spiral dive by itself if a neutral sitting position is maintained. Active weight shift to the inside of the turn can lead to stronger acceleration and the glider may show less desire to recover by itself.

 **Caution:** The ALPHA 7 was tested in accordance with the latest certification requirements. In a neutral sitting position, and after releasing the inside brake, a spiral dive of up to 14 m/s sink rate recovers by itself. Spirals of higher sink rates can remain in a stable spiral if weight shift is applied to the inside of the turn. Weight shift to the outside or pulling outside brake is sufficient to recover from a high speed spiral.

 **Caution:** The ALPHA 7 is certified for harnesses in group GH (without rigid cross-bracing). Group GX harnesses (with cross-bracing) or those with very low hang points could drastically alter the flying behaviour in the spiral dive. See section «Suitable harnesses».

 **Caution:** Do not fly spiral dives or aggressive changes of direction with big ears applied: the raised wing loading carried by fewer lines can damage the glider.

B-Stall

The whole paraglider structure and its profile shape would be severely strained by a B-stall. We recommend that you do not carry out B-stalls on a regular basis. If you do fly a B-stall the recovery requires that the B-lines are completely released without hesitation, so that normal flight is resumed within 2 seconds. B-stall is difficult for light pilots because of the high force required.

Stalling

One-sided stall (spin)

When circling tightly in a thermal the ALPHA 7 indicates early and clearly, by strongly increasing brake load, the risk of a stall. However, if a wing reaches its stall point you will feel a marked reduction of brake load on the inside of the turn. If this happens you must immediately release the brake lines, so that the ALPHA 7 can return to normal flight by itself.

If one wing does stall the paraglider will go into a spin/negative rotation (negative means a wing going backwards). The ALPHA 7 will react dynamically, but will still be manageable by an untrained pilot. Even so – depending on the situation from which the paraglider is allowed to fly again – the reaction can be quite vigorous (shooting forward with a raised risk of collapse). This shooting forward can be restrained by well-judged braking. Normal flight can then be resumed without a further collapse.



Tip: Basically, in all out-of-control flight situations, but especially the onset of a spin, you should immediately release both brakes fully – hands up!

Fullstall

The ALPHA 7 quickly responds to a steering demand, but the available brake travel is very long, and the brake loading gets very high before the stall point. This gives the pilot a large safety margin.

Entry into a fullstall is achieved by progressively and symmetrically pulling down both brake lines. Forward speed reduces. Airflow and wind noise reduce. After reaching minimum speed the paraglider first goes into a brief phase of deep stall. Then further brake will cause complete airflow breakaway, and the wing will fall back in fullstall. The ALPHA 7 has a strong desire to fly again, but is easy to hold in the stall. A brake wrap makes sense when flying a fullstall.

To recover, the canopy has to be pre-inflated. To do this the brakes should, at first, be released slowly and symmetrically, and only fully released when pre-inflation is complete. The ALPHA 7 then flies away relatively gently, without shooting forward too much.

Deep Stall

It has not been possible to establish stable deep stall by using brakes or a slow recovery from B-Stall.

However, in rain or when the canopy is wet the ALPHA 7, like every other paraglider, becomes more prone to deep stall. If the wing does go into deep stall, recovery should be made by using the speed system, exclusively. See also section «Flying with a wet paraglider».

Landing

Always make a proper landing circuit with a clearly defined final approach. As the ground approaches progressively increase brake to level the flight-path, before applying full brake to completely arrest the forward speed.

 **Caution:** Steep turn reversals lead to strong swinging of the pilot, and should not be done near the ground.

 **Caution:** Braking will reduce your speed and increase your sink rate, but it will certainly seriously restrict your ability to manoeuvre.

 **Caution:** Getting below minimum speed leads to stalling: this should unquestionably be avoided when top landing, and on final approach.

 **Caution:** Never let your glider fall to the ground on its leading edge. The overpressure so caused inside the wing can rip the cell walls and damage the leading edge.

Flying with a wet paraglider (risk of deep stall)

Flying with a wet glider creates a risk of deep stall. Deep stall is often the result of a combination of factors. The weight of the wet canopy goes up, and this increased weight increases the angle of attack, which always puts the glider nearer the deep stall limit. Added to this, water drops on the top surface have a detrimental effect on the laminar flow of the boundary layer near the leading edge, which distinctly reduces the maximum lift coefficient. If the wet glider is also being flown at its lower weight limit there is a further small effect of increasing the angle of attack, as well as there being a lower airspeed because of the reduced wing loading.

In order to avoid the risk of deep stall with a wet glider, the wing should be braked as little as possible, and big ears not used at all. As a further preventative measure apply moderate (25-40%) speed bar. These actions have a small effect in reducing the angle of attack. If the wet glider does go into deep stall you should recover by using the speed bar only. See also section «Deep stall».

Winching

The ALPHA 7 is suitable for winch launching. When taking off in windless conditions, ensure that the paraglider is laid out in banana or even wedge shape to make sure the centre inflates before the wingtips (avoid risk of rosetting).

Winch launch is only permitted if:

- the pilot has completed a tow training course ((only Germany/DHV);
- the winch system is certified for use with paragliders;
- the winch operator has been fully trained in how to winch paragliders.

Tandem flying

The ALPHA 7 is not certified for tandem flying.

Paramotoring

The ALPHA 7 is certified for paramotoring. You can find the paramotoring appendix to the ALPHA 7 manual on www.advance.swiss, under Downloads.

Acrobatics

While developing the ALPHA 7 attention was concentrated on simple and safe use, and similarly-natured flying behaviour.

Assuming adequate pilot ability and correct technique, the ALPHA 7 lends itself well to flying such manoeuvres as wingovers, SAT, helicopter and asymmetric spiral. The wing was tested to the usual 8g load factor, but is not specially strengthened for industrial strength acro.

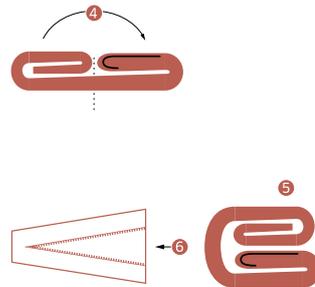
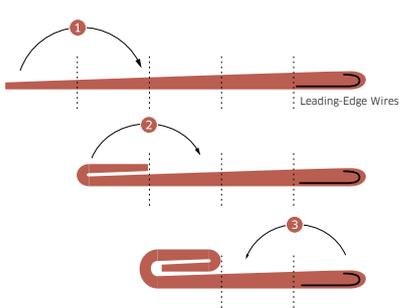
Be aware that dynamic manoeuvres put greater loading on the structure and can shorten the glider's life. This means that a regular check of the paraglider is essential for your safety. In addition there will be the special requirements of your country to be observed.

Packing

Packing

Gather the wing together from the middle, and fold it to the width of the compressbag. When folding, lay the wing profiles nose on nose, so that the plastic rods lie as flat as possible on each other, all at the same height. Change your folding centreline on a regular basis so that the centre panel (Logo) does not always contain the foldline.

Always store your wing in a dry and dark place.



Packing with the Tubebag

Packing in a sausage bag is good for the wing, and is easy to do. It avoids undesirable sliding over the ground. Also the shape-retaining storage in a Tubebag promotes long glider life.

Lay your wing, mushroomed as after landing, on the spread Tubebag. Next spread the centre chord out to Tubebag length. Arrange the lines and stow the risers on their tabs. Now gather the leading edge cells as described in "General" above, except that all cells make up one pile – no secondary folding into the centre. Then fasten the upper Tubebag strap over the collected leading edge foils so that it holds them neatly together. Follow the same basic process at the trailing edge. Pull the centre lane straight then flatten and collect the outlying cells as already described above. Do this gently: do not disturb your leading edge positions. Finally close and fold the Tubebag.

Maintenance and checks

Maintenance

Ultraviolet light, heat, humidity, sea water, aggressive cleaning agents, unsuitable storing and physical abuse (dragging across the ground) speed up the ageing process.

The life of a paraglider can be extended significantly by observing the following advice:

- Allow a wet or damp glider to dry by leaving it completely unpacked at room temperature, or outside in the shade.
- If the glider gets wet with salt (sea) water rinse it thoroughly with fresh water.
- Clean the glider only with fresh water, and a little neutral soap if necessary. Do not use solvents under any circumstances.
- If the glider has been subjected to increased stress (such as a tree landing) have it examined by an expert.
- Regularly remove sand, leaves, stones and snow from the cells. Openings with Velcro closures are provided at the wing tips for this purpose.
- Do not leave the glider out in the sun unnecessarily before and after flight (UV light).
- Do not subject the packed glider to excessive temperature

fluctuations, and do ensure adequate air circulation to prevent condensation forming.

- Do not drag the glider across the ground.
- When landing, make sure that the canopy does not fall on its leading edge.

Check

The ALPHA 7 must be checked every 24 months, 150 flying hours or 150 flights, whichever comes first. The check should be carried out by an authorised ADVANCE check centre, according to the recommended guidelines.

When a check is carried out the condition of all materials is assessed in accordance with strict guidelines, and tested with great care. Finally the overall condition of the glider is rated and recorded in a test report. You can find additional information about the check in this manual in the section “Service“, or at www.advance.swiss.

Repairs and disposal

Repairs

A paraglider is a lifting surface of complex construction. Seams and lines have been made with great precision. In general, therefore, an unauthorised individual should not carry out paraglider repairs. Only the manufacturer or an authorised Service Organisation should replace components with identical parts, or refit complete cells.

Small repairs become exceptions to this principle. Examples could be repairs to small tears or holes with self-adhesive Ripstop material, or replacing lines. In every case of repair or line change the paraglider must be pulled up on the ground before its next flight, and visually checked.

Your paraglider is delivered with a repair kit containing self-adhesive Ripstop. Other parts, such as lines, quicklinks, softlinks or risers can be obtained from your ADVANCE dealer, an ADVANCE Service Center or direct from ADVANCE. Addresses are on www.advance.swiss.

Canopy Repairs

Tears up to 3 cm in length, and very small holes that do not meet a seam, can be patched with the self-adhesive Ripstop from your repair kit. Make sure that the patch is cut out in a round or oval shape, and is big enough to generously overlap the damage. The similar piece of sticky Ripstop on the inside of the repair should be of a different size. Detailed instructions can be found on [Eine detaill www.advance.swiss](http://www.advance.swiss).

Line repairs

A damaged line must be changed, without exception. The easiest option is to go to an ADVANCE Service Centre or your ADVANCE dealer. Alternatively you can order the specific replacement line direct from ADVANCE or an ADVANCE dealer and fit it yourself. All the addresses are on: www.advance.swiss. Under "Service" on www.advance.swiss there are detailed instructions for identifying your line so that you can order it, and then fit it correctly on the wing.

What to do if the leading edge gets damaged?

If a leading edge wire breaks or its seam rips the glider must be taken to an ADVANCE checking facility where the wire can be replaced or sewn back in. To guarantee a long lifespan it is important that the wing is not allowed to fall on its leading edge after landing, otherwise the fabric can be damaged by abrasion. But mainly there is a risk, as in all paragliders, that the crossports could tear.

Disposal

Environmental protection plays an important role in the selection of materials and the manufacture of an ADVANCE product. We use only non-hazardous materials that are subjected to continuous quality and environmental impact assessments. When your paraglider reaches the end of its useful life in a number of years time, please remove all metal parts and dispose of the lines, canopy and risers in a waste incineration plant.

Technical details

ALPHA 7		22	24	26	28	30
Flat surface	m ²	22.1	24.0	26.1	28.5	31.9
Projected surface	m ²	19.2	20.8	22.4	24.4	27.4
Recommended takeoff weight*	kg	50-70	60-80	70-95	85-110	100-130
Increased takeoff weight	kg	70-85	80-95	95-110	110-125	130-145
Glider weight	kg	4.2	4.5	4.75	5.15	5.7
Flat span	m	10.4	10.8	11.3	11.8	12.5
Projected span	m	8.4	8.7	9.0	9.4	9.9
Aspect ratio		4.8	4.8	4.8	4.8	4.8
Projected aspect ratio		3.6	3.6	3.6	3.6	3.6
Certification (for both takeoff weight ranges)		EN/LTF A				
Number of cells		38	38	38	38	38
Number of risers		3+1	3+1	3+1	3+1	3+1
Maximum chord	m	2.66	2.77	2.89	3.02	3.19
Max lenght of the risers	cm	47.5	47.5	50.0	51.5	53.0
Accelerator tavel max.	cm	15	15	16	17	18
Max length of the lines with the risers	m	6.48	6.68	7.00	7.32	7.63
Trims		-	-	-	-	-
Max. sym. brake travel at max. weight	cm	65	67	70	73	76
Other adjustable / removable / variable devices		-	-	-	-	-

* Pilot, wing, equipment

Materials used

We routinely inspect and test our materials many times over. Like all ADVANCE products the ALPHA 7 is designed and produced as a result of the latest developments and contemporary knowledge.

We have chosen all the materials very carefully, under conditions of the strictest quality control.

Leading edge	Skytex 38 Universal, 9017 E25
Upper surface	Skytex 38 Universal, 9017 E25
Lower surface	Skytex Easyfly 9018 E65
Profiles	Skytex 40 hard finish 9017 E29
Unsupported profiles	Skytex 40 hard finish 9017 E29
Main lines	A-6843-370, -280, -230, -180, -140: covered
Gallery lines	A-6843-140, DSL 070: covered
Brake lines	DSL 070, DFL 115: covered
Steering lines	A-7850-240: covered
Risers	Polyester / Technora, 22 mm, 1200 daN
Quick links	MR Delta 3.5 mm / S22

Certification

The ALPHA 7 has EN and LTF certification. The test reports can be downloaded from www.advance.swiss.

Certification ratings can only provide limited information about a paraglider's flying behaviour in thermally active and turbulent air. The certification grading is based primarily on provoked extreme flight manoeuvres in calm air.

During the development of an ADVANCE paraglider, the emphasis is first and foremost on flying behaviour and handling, and not exclusively on the certification test. The result is a well-rounded product with the familiar ADVANCE handling. Nevertheless, the certification rating occupies a significant proportion of the specifications that have to be met.

Service

ADVANCE Service Center

ADVANCE operates two company-owned service centres that carry out checks and repairs of all types. The workshops based in Switzerland and France are official maintenance operations, which have many years' experience and in-depth product-specific expertise. The ADVANCE worldwide service network includes other authorised service centres that provide the same services. All service facilities use original ADVANCE materials exclusively. You can find all information on checks and repairs and the relevant addresses at www.advance.swiss.

The ADVANCE website

At www.advance.swiss you will find detailed information about ADVANCE and its products, as well as useful addresses which you can contact if you have any questions.

Among the things you will be able to do on the website are:

- complete the warranty card online up to 10 days after purchasing the glider, enabling you to enjoy the full benefits of the ADVANCE warranty.
- find out about new safety-related knowledge and advice concerning ADVANCE products.
- download an application form in PDF format which you can use

when sending your glider in for a check at ADVANCE.

- find an answer to a burning question among the FAQs (Frequently Asked Questions).
- subscribe to the ADVANCE Newsletter so that you will be regularly informed by e-mail about news and products.

It is well worth visiting the ADVANCE website regularly because the range of services offered is continuously being expanded.

Registering your product

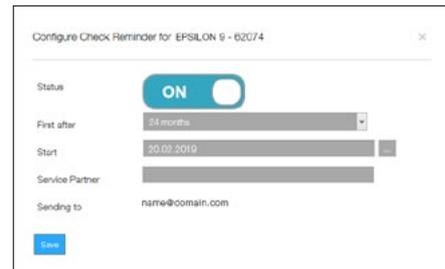
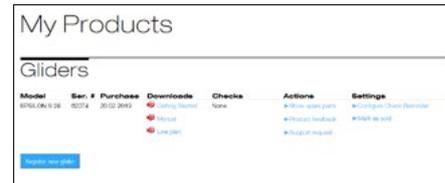
Set up a MyADVANCE-Account on www.advance.swiss/warranty and register your wing direct online after purchase and receive an extended warranty of 12 months beyond the legal warranty period of your country!

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 and ask ADVANCE support direct.

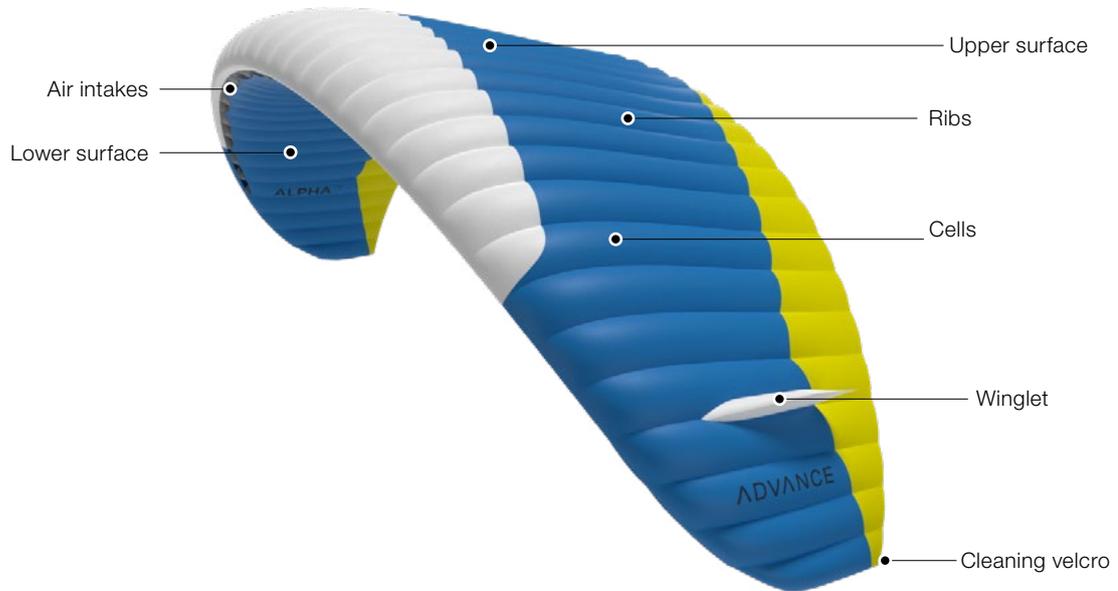
Warranty

As part of the ADVANCE warranty, we undertake to rectify any defects in our products that are attributable to manufacturing faults. In order for a warranty claim to be made, ADVANCE must be notified immediately on discovery of a defect, and the defective product sent in for inspection. The manufacturer will then decide how a possible manufacturing fault is to be rectified (repair, replacement of parts or replacement of the product). Basically, the legal warranty obligations of your country apply. If you register your product for free on our website within 10 days of purchase you receive an extended warranty of 12 months beyond the legal warranty period of your country!

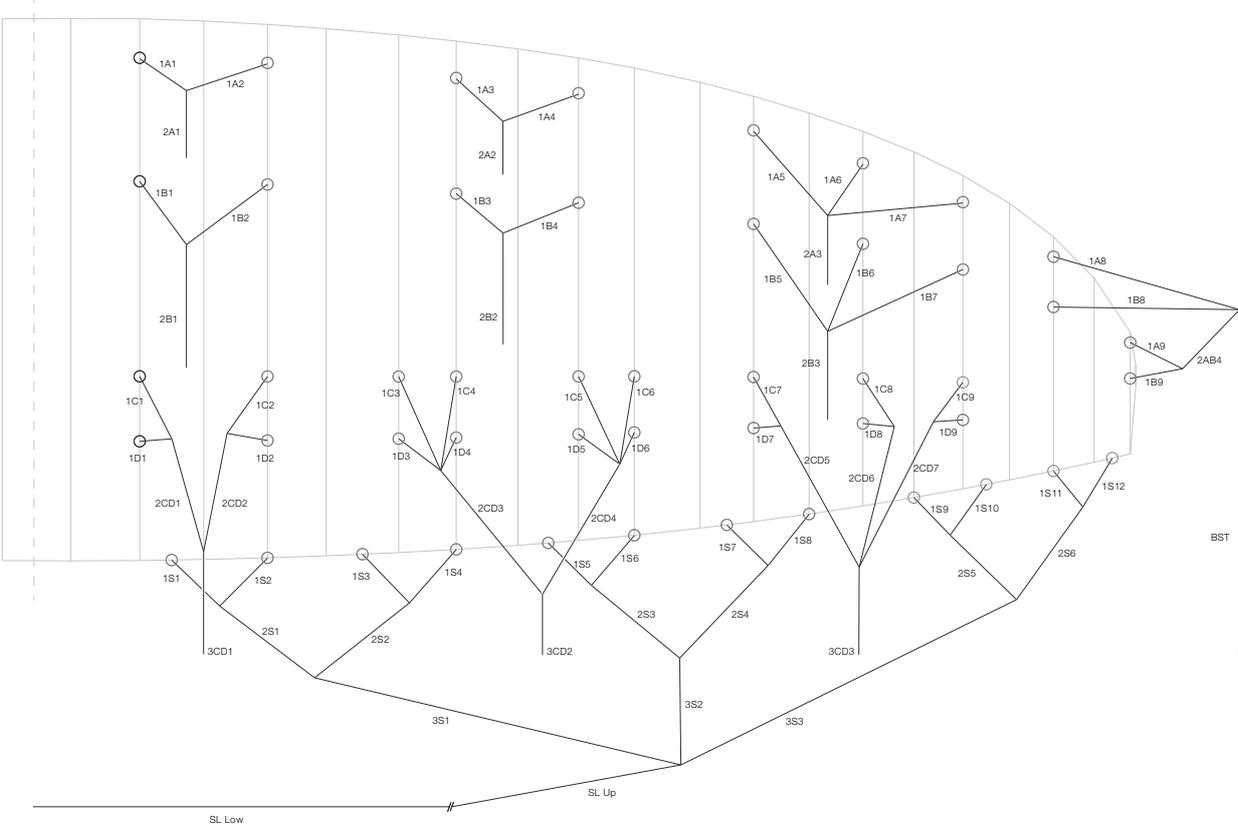
Warranty and Service Intervals begin from the date of the glider's first flight, recorded on the identification plate. If no date is evident the applicable date is that on which the glider was transferred from ADVANCE to the ADVANCE dealer. The ADVANCE warranty does not cover any other claim. Claims in respect of damage resulting from careless or incorrect use of the product (e.g. inadequate maintenance, unsuitable storage, overloading, exposure to extreme temperatures, etc.) are expressly excluded. The same applies to damage attributable to an accident or normal wear and tear.



Wing parts



Line plan



Risers

1. Big ears system with «Quick Snap»
2. Quicklinks and clips
3. Speed system pulleys
4. Brummel hooks
5. Brummel hooks
6. Magnet clips
7. Swivel
8. Suspension loop with «Easy Connect System» marks
9. Easy-running Brake Pulleys



Bowline

Step 1



Step 2



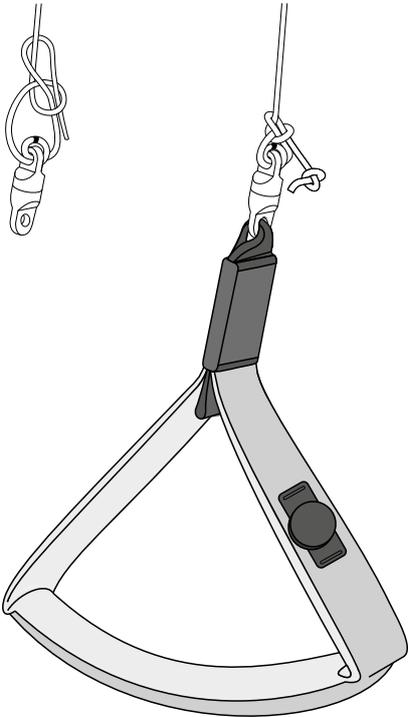
Step 3



Step 4



Step 5



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