

AIRWOLF - LTF2 -



- Handbook - English Rev. 1.7

Please read the manual before you fly your new U-Turn AIRWOLF

Stand: as of September 2012

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All technical details in this manual have been carefully checked by U-Turn. However we like to mention that we don't take any liability for possible mistakes, neither in legal responsibility, nor in liability cases that derive from mistakable details. We preserve the right to change this manual in any way to achieve technical improvements.

You've got the stuff to fly!

The U-Turn team would like to congratulate you on the purchase of your new U-Turn paraglider. You have made an excellent choice. We wish you long and enjoyable flights and many happy landings with your U-Turn AIRWOLF.

The research and Development team at U-Turn can proudly look back at many successful years in the flight sport industry. Our own concepts not only meet but exceed industry standards. The combination between the latest computer based technology and the know-how of experienced test pilots and professional competition pilots provides an excellent basis for quality. We certainly keep our customers' needs in mind, and always appreciate your input and constructive criticism. Should any questions occur, please don't hesitate to ask your U-Turn dealer or the U-Turn team.

In order to provide you with the latest information on technical development and innovations at U-Turn, we ask you to complete the questionnaire attached. Please mail it to the following address:



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Please read the entire handbook carefully before using your U-Turn AIRWOLF for the first time. We composed this handbook, in order to make the handling of your new U-Turn AIRWOLF as safe and easy for you as possible.



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NAME:.....

FIRST NAME.....

STREET:.....

ZIP CODE / CITY:.....

TELEPHONE:.....

E-MAIL:.....

PARAGLIDER TYPE:.....

SERIAL NUMBER:.....

Date of purchase:.....

Dealership:.....

Tested by:.....

Flying hours:.....

Paraglider since:.....

Miscellaneous:.....



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Introduction

U-Turn paragliders are in a class of their own. U-Turn doesn't compromise on safety, and uses the best quality components and hallmark flight characteristics. Be happy you are flying a U-Turn glider, as it is the brand for those who appreciate the difference.

The laws of physics are well defined. We aspire to achieve the possible within the framework of its laws. We admit this is ambitious but you will always find U-Turn at the cutting edge of technology.

As Oscar Wilde once said in this very British understatement: "His taste is very basic; only always the best is good enough." The U-Turn team embodies the attitude; "We always want to deliver the best possible glider." Nothing more and most certainly nothing less.

U-Turn staff takes notice of its customer wishes, so we appreciate any comments or feedback! Please feel free to contact your competence center or U-Turn directly for any advice or direction.

General Description AIRWOLF

With the AIRWOLF, U-Turn has successfully implemented the appreciated best seller concept also in the DHV/LTF2 wing class: maximum performance and high level security standard. A completely new designed profile combined with the PPNplus system provides secure flying fun – features that are much valued by the U-Turn pilots.

The U-Turn AIRWOLF is a performance focused cross country wing, providing high resistance against folding despite the immense snatching of 6.0 and the extreme performance. From the very first moment the pilot feels: this wing holds excellent performance reserves and I can rely on it! The performance more or less results from the genes, because the AIRWOLF is a direct descendant of the top performer AIR FORCE II. The security feature is ensured by the PPNplus technology of U-Turn: Instead of the nose Mylar, synthetic rods reinforce the profile nose not only along the sewings of the cell membranes, but also directly above the openings. Thus, the inner pressure is retained for a longer time also in extreme conditions; the profile and the air stream are maintained.

Even if not apparent at first sight, the real intrinsic values of the wing are the optimized cross ports. They are required to ensure the quick and smooth re-inflation of the canopy, but too many of them might also be a disadvantage during the flight. With other words: the less cross ports are required to ensure the optimum refilling of the canopy, and the smaller the required cross ports can be dimensioned, the more stable is the canopy during the flight. The final success story of the AIRWOLF is, that it has been possible to reduce the cross ports substantially thanks to the interaction of the profile and the PPNplus system.

Altogether, the AIRWOLF considerably rises above the standard. The overall construction shows its magnitude for example during thermals in/out: the usual pitching of the wing is definitely lower; the pilot is not brought into pendulum position. The result is that in thermal active conditions the gliding performance literally beats up by a mile the other gliders in this category. While other gliders are still oscillating around, the AIRWOLF gains some meters. Thanks to the new profile, the AIRWOLF is an excellent thermal riser. Specially in weak thermals he hardly can be caught up and can be inclined gently. Its layout provides lots of fun. In very thermal or very turbulent air, the AIRWOLF is gliding consistently.

Especially in rough conditions the AIRWOLF demonstrates its class. The stability of the glider is backed by the proven and tested Improved Stability Technology (IST) with V-rips and elaborate profile guidance. Thus the high performance is not achieved through a particularly distinctive feature of the glider, but is based on plenitude of design features and characteristics, which make the AIRWOLF a highly balanced glider – a real racehorse but with no hectic pace and with no air and graces.

The PPNplus system provides further benefits: As the material is not sensitive to bending, the profile nose might retain its form for a glider lifetime, if carefully handled. In many years' time, the AIRWOLF will still have excellent take-off qualities. If ever a synthetic rod is bent or defective, it can be easily replaced. Without the former Mylar reinforcements, the weight of the canopy has been noticeably reduced, a fact which provides advantages for handling and feedback.

Fine-tuning was made amongst others by the test pilots Patrick Berod and Vincent Sprüngli. Therefore, U-Turn customers can feel confident to purchase an absolutely perfected and well-engineered wing. The AIRWOLF is made of high quality NCV cloth, Liros lines and is available in attractive colour combinations. The AIRWOLF is available in five sizes ranging from XS to XL (Certified for sizes S, M + L).

Attention! Security notes



Never fly in close distance to high voltage transmission lines, airports and motorways, over humans or with thunderstorm! - Mortal danger - Otherwise you endanger the life and the body third and/or your own and act at the same time roughly negligently! The minimum distance to these objects is 50m. To airports rises distance to 5 km.

Risk assumption



The use of the U-Turn AIRWOLF accommodates certain dangers of body injury or killing of the user of this product or third. With the AIRWOLF use you agree, all well-known and unknown, to take and accept probable and improbable injury risks on itself

The dangers connected with practice of this kind of sport can be reduced by the attention of the warning references of the manual, as well as the care ordered in individual cases. This sports inherent risks can be reduced to a large part, if one adheres both to the maintenance guidelines, which are listed in this operating instruction, and by the healthy human understanding.

Liability claim and exclusion renouncement

By the sales contract over a U-Turn AIRWOLF you explain yourselves in agreement with the following points within the legal defaults:



THE RENOUNCEMENT OF ALL HOWEVER CONSTITUTED REQUIREMENTS,

from the use of the U-Turn AIRWOLF and either its components now or in the future against the U-Turn GmbH and all other contracting parties involved.



Relieving the U-Turn GmbH and all other contracting parties of each requirements concerning loss, damage, injury or expenditures, which used you, your relatives and/or every other user of the U-Turn AIRWOLF resulting from the use of U-Turn AIRWOLF, including the liability of the U-Turn GmbH and all other contracting parties resulting in law or contract in the case of production and processing U-Turn AIRWOLF and every of its components.



With the entrance of death or the disability, all regulations stated here coming into force and include also your legal heirs, relatives, executors and fiduciaries, legal successors and legal representatives. The U-Turn GmbH and all other contracting parties did not deliver other verbal or written statement and denials explicit that this was done, with exception that it is specified in and in the manual U-turn AIR WOLF here.



Security notes

- Execute manouvers with the U-Turn AIRWOLF only over water.
- Pay attention to the high sink rates in "dynamic flying".
- be aware of the high G-force occurring in dynamic flight (5 G and more).
- Fly the U-Turn AIRWOLF never without a rescue paracutte. Preferable 2 rescues!
- The observance in the respective country valid air law laws and regulations is to be considered.
- The required education, training, knowledge and is mandatory for using the U-Turn AIRWOLF.
- The use of suitable, examined and accessories certified in the respective country (Helmet, harness, rescue paracutte) is mandatory for the AIRWOLF usage.
- Weather conditions got serious influence to flight security.
- The flysite got direct infuence to flight security.
- Inspect the glider before each start carefuly (canopy, in particular the lines, carabiners, belt buckles, cloth, speed system etc..
- Make sure the glider is in propper condition and all inspections are done.
- Be aware that a pilot must be physically and mentally able to do the flight

Weather dangers

Inform in the weather forecast and/or locally over upcoming weather conditions. Use the U-Turn AIRWOLF only with winds you are able to keep the glider fully under control. Do not use the U-Turn AIRWOLF, if wind conditions vary strongly. Never use the U-Turn AIRWOLF with approaching thunderstorm. Descend fast and land immediately with thunderstorm approaching on horizon!



**Ignoring one or several security rules
can turn a fun flight into a lethal flight!**



Lines and risers

We use DC 60, DC 100, LTC 0080, LTC 0120, LTC 160 TGL200 Liros lines as well as TSL 190, TSL 220, TSL 280 (TSL = Aramid Kern) with a special weaved Dyneema core. They have a high tear strength and are unlikely to bend. This stretch resistance denies changes in flight characteristics caused by different stretching after a short time of usage. An optimum of safety and strength in relation to drag is achieved by the use of different line diameters.

The whole line system consists of single elements that are sewed and looped on both ends. All suspension and brake lines are forked in the upper part. The different colour of the lines guarantee easy handling and control. All suspension lines are looped separately in rapidlinks and connected to the risers. The rapidlinks have collectorclips built in to prevent slipping of the lines.

After the interval or after 100 flight hours must be checked the lines.

Brake line settings

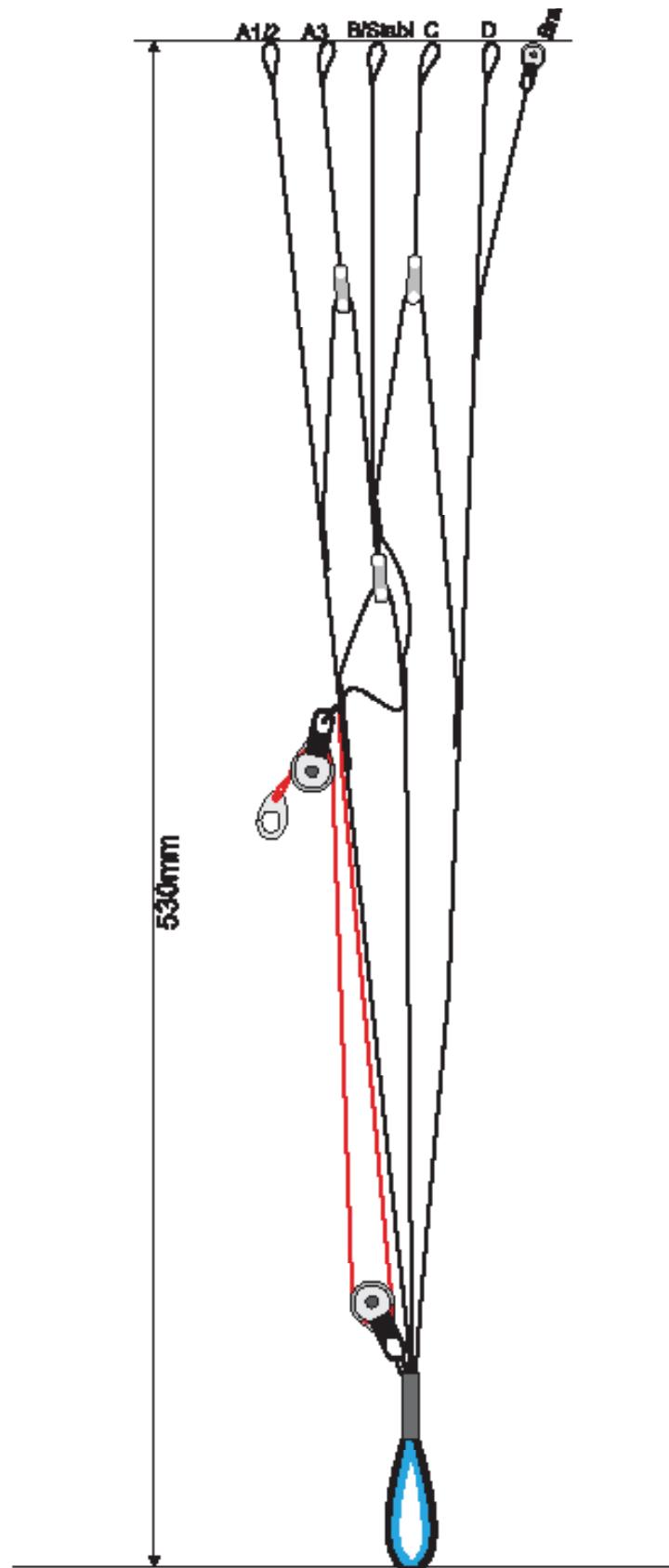
The main brakeline is looped through a reel at the D-riser with a colourmarking where a brakegrip has to be tied on. The manufacturer setting is 0 travel plus 5 cm. Shortening more than 5 cm is not allowed and results in a "brake" condition in flight which is extremely dangerous for takeoff, flight and landing. The basic setting provides sufficient braking action at landing and in extreme flight conditions besides a comfortable arm position in trimmed flight.

Please note that with the height of the harness mounting also the relative brake distance changes. When adjusting the setting, both sides have to be symmetrically and a permanent knot has to be used. Optimum solution is the so called "Spierenstich" knot with its high slide resistance and its little effect on the lines.

Risers

A and B risers are coloured different, to ensure when starting or speed descent b-stall a clear identification.

The risers of the U-Turn AIRWOLF consist of firm and stretch-poor 12mm Keflar-polyester belts, in order to secure a long-term sturdy trim.



Speed System

The U-Turn AIRWOLF is equipped with a very effective leg-actuated speedsystem that increases the speed ca. 18 km/h depending on model and pilots weight area load respectively. During extreme manoeuvres the speedsystem should not be activated, when entering an extreme manoeuvre it should be immediately deactivated. All extreme manoeuvres (i.e. stalls...) get more dynamically at higher speed. Because the maximal adjustment of the accelerator is related to the safety characteristics of the canopy it may happen, that - using certain harnesses - the broad accelerator adjustment is not available.

Suitable Harness

All officially approved harness systems with mounting about the breast height are suitable for the U-Turn AIRWOLF (they have to be DHV rated GH). The lower the mounting, the better is the steering by shifting of the bodyweight. U-Turn recommends the new IQ4 harness for its highest level of safety and convenience.

The positioning of the mounting also changes the relative brakedistance. If you have any questions about the usage of your harness with the U-Turn AIRWOLF; ask your U-Turn dealer or directly contact U-Turn. We assist you in any possible way.



Suitable Rescue System

It is required by law and absolutely necessary for safe operation of your paraglider that you always carry a rescue system with you. When choosing a rescue system, watch out that it is approved and suitable for the intended takeoff weight. With the innovative rescue systems of the PROTECT-series by UTurn light-weighted, convenient and safe reserves are available. The PROTECT rescues offer extremely short opening times and low sink-rates.



Winching

Because of its excellent starting characteristics, the U-Turn AIRWOLF is well suitable for winching operations. Take the following points into account:

- maximum linetension for winching is 100kp.
- if not operating at your usual winch, get acquainted with the local procedures and get a good briefing by a local pilot.
- bodyposition and pulling up the canopy does not differ from a normal takeoff. The canopy has to be completely over the pilot at takeoff. No early steering inputs to avoid fallilng back of the canopy or being pulled off with a non flyable glider. Never give the takeoff - command before you have total control over your glider. Don't turn too much during the takeoff - phase and before reaching the minimum safe altitude.
- never winch the U-Turn AIRWOLF with loads outside the allowable weight range.
- all involved persons, machines and accessories have to have the appropriate licenses, approvals, certifications for winching.

Operation

This instruction manual only pays attention to those points of flying technique which are important for the U-Turn AIRWOLF. It is not meant to substitute a basic flying education in an approved flying school! If a flying education and the appropriate experience is missing, paragliding is dangerous to life.

Field of Operation

The U-Turn AIRWOLF has been developed and tested for ordinary takeoffs, winching, and is also well suitable for motorized operations. An unauthorized or unapproved use of the U-Turn Airwolf, or operation out of its operational limits is improper and dangerous.

Aerobatics

Aerobatics are illegal and dangerous. There is a danger of unpredictable flight conditions that could result in overstressing both material and pilot.

Preflight Check

A careful Preflight Check is absolutely mandatory. Double-check everthing when you don't fly yourself and make sure the person flying your U-Turn AIRWOLF does the same. Also ensure that the pilot flying your U-Turn AIRWOLF, knows its operational limits and has the required license. All lines, risers and the canopy have to be carefully checked for damage before every takeoff. Even in case of minor damages takeoff is not an option.

After the glider is unpacked and layed on the ground in a halfcircle-shape, check following items:

- Lay down the canopy to draw on the middle line before the outer lines, when pulling up the glider with the A-risers, to get an easy and stable takeoff.
- Set yourself up into the wind to get a symmetrical load on both sides when pulling up the canopy.
- The risers may not be twisted to enable smooth looping of the brakelines.
- Make sure no lines are under the canopy to avoid a dangerous situation on takeoff.
- Preflight all other equipment after the check of the glider carefully.

Take off

The U-Turn AIRWOLF has a very easy take off.

It is important to evenly lay out the canopy with care. The middle of the glider is determined by the U-Turn AIRWOLF logo at the leading edge. It is sufficient to only hold the A-main harnesses. Being that the U-Turn AIRWOLF shows no tendencies to shooting forward it only needs to be slowed down minimally in the take-off phase. Necessary correction in direction using the brakes should only be performed once the canopy is above the pilot, otherwise the glider might fall back due to excessive braking.

The remaining harness should not be held during take off. The canopy will fill up with evenly distributed pull but altogether very light startimpulse. Unlike other gliders it is not necessary to fill the U-Turn AIRWOLF with strong inflation motion or even several fast steps. This is also true for very little wind and even zero wind. The easiest and safest way to start the U-Turn AIRWOLF is moderate inflate. Once the pilot ensures that the canopy is fully opened above him, the final decision for take off can be made. After several forceful steps they take off.

Turning

The U-Turn AIRWOLF has a normal agility and reacts directly and instantly to steering inputs. You can fly flat turns with little altitude loss by shifting of bodyweight. A combination of appropriate pull on the inner brakeline and shift of bodyweight is the best way for a coordinated turn. The turn radius depends on the amount of pull on the brakeline.

At about 75% of brakeline travel, the U-Turn AIRWOLF increases bank significantly and performs a fast steep turn that can be continued to a diving spiral. The diving spiral has to be initiated and terminated slowly. The bank angle is controlled by increasing and decreasing the pull on the inner brakeline.

WARNING: A rapid pull on the brakeline may cause a spin.

Active Flying

The U-Turn AIRWOLF should be flown with light braking on both sides when there is turbulent air. An increase in angle of attack provides better stability. When entering heavy thermals or strong turbulences watch out that the canopy does not get behind the pilot. To avoid that, release the brakes a bit to get an increase in speed when entering the updraft.

If the canopy gets in front of the pilot when leaving an updraft or entering a downdraft the brakes have to be applied to counter that. Accelerated flight however is advisable when flying thru a downdraft zone. The U-Turn AIRWOLF is very stable overall, nevertheless active flying is a big flight safety factor. Collapsing and deforming of the canopy can be avoided by active flying (as above mentioned) in turbulent air.

Landing

Start your landing preparation at sufficient altitude. Due to its excellent flaring characteristics, the U-Turn AIRWOLF is very easy to land. Glide in fairly normal to a straight-in final against the wind and get up in the harness early enough. According to the wind, the brakes have to be pulled firmly and dynamically, about one meter above ground, beyond the stalling point. If there is a strong headwind, be careful with the amount of braking. Don't perform landings out of steep turns and big directional changes short prior landing, to avoid PIO's.

During a strong wind takeoff attempt, ground handling and landing the leading edge can hit the ground with high speed. Avoid this! Otherwise the ribs, the sewings or the fabric can be damaged.



Advanced Handling

Even with its high stability and good flight characteristics it is possible that the U-Turn AIRWOLF gets into an extreme flight condition due to pilot mistakes or turbulent air. To be prepared for such situations and able to handle them in a calm and superior manner it is best to take part in a flight safety course. Advanced manoeuvres may only be flown at sufficient altitude, in calm air and with professional supervision (i.e. during a safety course). Once again we mention that a rescue system is required by the law.

The following extreme manoeuvres can be either caused intentionally, by pilots mistakes or by bad weather conditions. Every pilot can get in such a situation! All mentioned extreme manoeuvres are dangerous if they are performed without the appropriate knowledge or enough altitude or the necessary introduction. A wrong execution of these manoeuvres may have fatal consequences!

Wingover

The pilot has to perform right and left turns with increasing bank until the desired angle is reached. Soft braking during up or down swing will prevent the wing ends from closing. Collapsing is only a factor when the bank angle is very high.

Frontstall

A negative AoA caused by turbulences or the simultaneous pulldown of the A-risers by the pilot, results in a frontal collapse of the leading edge. The U-Turn AIRWOLF normally comes out of a frontstall by itself very quickly. Smooth and symmetric applying of the brakes assists the opening of the canopy positively.

Stall

The U-Turn AIRWOLF is not stall sensitive. If in a stall, caused by overpulling on the brakes, the rear risers or a delayed B-stall exit, the release of the brakes or the rear risers, recovers the stall. Should the stall be caused by an extreme flight condition or configuration (i.e. takeoff weight too low), a symmetric forward push on the A-risers or step the speed system recovers the stall.

Warnung:

Practicing stalls should be done with enough safe altitude. Never apply asymmetric brakes during a stall, it could cause a spin.

Fullstall

To enter a fullstall pull both brakes full travel (ensure no twisted or wrapped lines). The canopy has to be stabilized before recovering the fullstall. Relax both brakes slowly and symmetrically to recover. If done right, the canopy overshoots a little forward without collapsing. Avoid an asymmetric recovery at all means. The dynamic forces drive the canopy to overreact and a collapse could occur.

Caution:

Never release the brakes at the beginning of the recovery when the canopy tilts forward, the canopy may accelerate forward in a way that makes contact or even falling into the canopy possible.

The fullstall is a dangerous manoeuvre and should not be performed intentionally except during a flight safety course.

Emergency Piloting

In any situation where normal steering with the brakelines is not possible, the U-Turn AIRWOLF can be steered with the back risers easily.

Negativ Turn

To enter a spin the pilot has to fully and quickly pull one of the brakelines when he is near the stallpoint. The glider rotates fast around its center while the inner wingtip flies backwards. For recovery just release the applied brake to let the glider accelerate.

WARNING:

The spin is a dangerous manoeuvre and should not be performed intentionally except during a flight safety course.

Collapses

Even with its high stability and very good reaction in turbulences, strong turbulences can cause the U-Turn AIR-WOLF to collapses. That situation is not really dangerous and clears itself automatically and not impulsively. To support the recovery, firmly apply brakes on the according side and simultaneously steer opposite on the open side. When a large part of the canopy is collapsed be careful and smooth when applying opposite steering to avoid a complete departure of airflow and entering a fullstall.

How to avoid collapses

Single side collapses close to the ground are the number one reason for accidents with paragliders. To avoid them, or how to handle the situation when it happened, some tips and tricks from U-Turn test- and competition pilot Ernst Strobl:

The best way to avoid collapses upfront is the right choice of the paraglider. A lot of pilots fly a glider that is a little too hot to handle for them. So why don't you get a glider with a lower rating but in the end fly better and higher in the updrafts and have a lot more fun and by the way be safer, too. To optimize the feeling for your glider on the ground, try the following:

Practise on the ground with the right wind at a suitable location. Slowly pull up the canopy and try to hold it up as long as possible without looking towards it. That is a good way to improve the feeling for your glider and is a prerequisite for „active flying“ (the key to avoid collapses). Very important is also a close look at the terrain. Watch for obstacles that could cause turbulences (buildings, trees, ...). On certain days, for example a freshly mowed meadow as landing field, could cause a lot of thermal activity. Fly very alert on a thermal active day. Watch your canopy, collapses most of the time, announce themselves. Light braking in turbulences mostly avoids a collapse. You should have already practised that on the ground. Should a collapse occur close to the ground don't always try to prevent a turn away. There is a danger when the braking on the open side is too strong, to lose the airflow on this side and stall the glider. Rather use the turn away motion to try to open the collapsed side.

Apply smooth braking on the open side, depending on the size of the collapse, and maybe a little pumping action. Some canopies open a lot better when the brakes are fully applied once on the according side, but that depends on the brakeline adjustment and your armlength. Wrapped lines are cleared by braking the opposite side at enough altitude and pumping the affected side a couple of times. Watch out for a possible stall. If that does not clear the situation, try to pull down the outer line as much as possible. If you are too low for that, stabilize the canopy on the opposite side to avoid turning away, and leave the lines like they are. Instead of any -risky manoeuvre rather concentrate on the landing. In the end one more advice in order to have all kinds of situations under control.

Visit a safety-training above water. There is no better way to practice the right behavior than simulating a dangerous situation. Don't get caught off guard by your first collapse. In addition, during safety-training you can familiarize yourself with the particulars of your equipment and you gain confidence in your glider as well as your own abilities.

Thus far the expert advise concerning collapses,

by Ernst Strobl

Rapid Descent

In any situation where you have to get down ASAP for different reasons (weather, extreme updraft, or other dangers), there are a couple of techniques that are described in this chapter.

Caution: Die beschriebenen Manöver zum Schnellabstieg belasten Ihren Gleitschirm über das normale Maß hinaus und sollten deshalb nur zum Training oder in Notsituationen angewandt werden.

Spiral Dive

Like a normal turn, it is very easy to get the U-Turn AIRWOLF into a spiral dive. The spiral dive gets you a descent rate up to 20 m/s. To be settled for the real thing, practise it in optimum conditions. The diving spiral gets the pilot down faster than other techniques and is therefore best suited for an emergency descent. They move down vertically within the airmass. Don't forget the G-forces when diving down, and take that into consideration before initiating a rapid descent.



Caution: If initiation is too fast there is a danger of a spin, in this case release the brake and try a smoother initiation.

Warning: Never fly a spiral dive while "big earring" the glider. It is illegal aerobatics and may over stress the both pilot and material. It is illegal aerobatics and may overstress the pilot and the material.

"Big Ears"

Pull down on the outer A-risers one after the other (grab the line shackles) about 15-20cm to fold the wingtips. Hold the brakegrips together with the A-risers. The glider stays fully steerable and descents with 4-7m/s straight forward. If you release the A-risers, the folded cells open automatically. Should there be any problem with the reopening, apply easy braking. „Big earring“ is due to the high wingload a very stable flight condition and well suited for turbulent air. Be aware that you reduce the trimspeed, but that can be compensated by accelerating with your legs.



Warning:

Don't fly extreme manoeuvres in this configuration, it is dangerous due to the danger of overstressing your glider. Fullstalls and spins are dangerous for a rapid descent because a wrong termination could have fatal consequences no matter what glidertype you are flying.

B-Stall

Another very efficient method is the B-Stall. It allows for a rate of descent of 6 to over 9 meters per second. Check the airspace under and behind you prior to initiating a B-Stall. To imitate it you hold the two B-risers above the lines carabiner. While you hold the brakes in your hands at all times, pull them down progressively and symmetrically. Now you stay in this position. Your sail will stop, partially empty, and stabilize itself above your head. End the move by returning the risers symmetrically into their original position.

We recommend not to simply let the risers snap shut as this puts a lot of pressure on the material. In the paragraph titled "advanced handling" you can read what to do if you get caught unexpectedly in a stall.



ALL KINDS OF RAPID DESCENTS SHOULD BE PRACTISED IN SMOOTH AIR AND WITH ENOUGH ALTITUDE TO BE PREPARED FOR EXTREME SITUATIONS WHEN YOU NEED THEM



Motorised Paragliding



The U-Turn AIRWOLF is well suitable for motorized operation due to its outstanding takeoff performance, its wide weight range and its easy handling. Please note that a separate approval is necessary for the glider / motor-combination. If you intend to operate the AIRWOLF motorized, please contact the motor manufacturer, U-Turn and the DULV (Deutscher Ultraleichtflug Verband) for official approval. Use only approved motor / glider combinations and adhere to the aeronautical regulations as well as the training requirements.

Maintenance and Care

Because U-Turn only uses high quality materials, your AIRWOLF will be airworthy for many years if you take good care. The aging of your AIRWOLF depends on the total flying time, the conditions you fly in, the amount of UV radiation it is exposed to and the intensity and quality of care.

A couple of tips for maintenance and care:

Long lasting exposure to UV radiation and normal use stress the material.

- Don't expose your glider to the sun when there is no need to.
- Consider the choice of terrain where you lay out the glider for takeoff.
- Assymetrical and changing folding patterns prolong the lifetime of the material especially in the middle section.

Please take following points into consideration:

- regular checks for damage
- no unnecessary bending
- after an overstress (treelanding, waterlanding and extreme situations), a line-inspection is mandatory, in many cases a replacement of the lines will be appropriate
- in case of changing inflight handling characteristics, the lines have to be checked for their correct length
- don't tie the brakelines on the grips if not needed, it weakens the lines

To clean the canopy use warm water and a soft sponge.

If you use a detergent for hard stains, make sure that you rinse intensively afterwards. Never apply any chemicals for cleaning, they weaken the material and damage the coating. Store your glider at a dry and dark location away from any chemicals. After two years or 300 flight hours, whichever occurs first, your U-Turn AIRWOLF has to be inspected by the manufacturer, in case of extreme use we are glad to do that earlier. Only you know about the condition of your glider. Should there be a need for any repairs they are to be done by the manufacturer.

Disclaimer of liability, renouncement of requirements

Herewith you confirm to read carefully the complete manual before using the U-Turn AIRWOLF, inclusive every single hint and warning written in this manual and to understand it completely.

Furthermore you are responsible for that before you let anybody else use your U-Turn AIRWOLF (temporary or in future) the one has read the complete manual and understood it completely inclusive every single hint and warning written in this manual.



U-Turn cannot be hold responsible for any 2-year inspection and
any repairs not performed by U-Turn or an U-Turn authorized dealer.
Any checking or repairing performed by people not authorized by
U-Turn will cause denial of any warranty!



U-TURN

Safety Advices and Liability

This glider complies with DHV, AFNOR (SHV and ACPUL) regulations, for the tested type, at time of delivery (see appendix).

The operation of the glider is at your own risk. The manufacturer and the dealer don't take any liability for accidents and follow on damages. Please consider all safety notes, cautions and warnings for safe flying. Further, we assume that the pilot has the necessary certifications and that the legal limitations are being

followed. Use of the equipment is at your own risk. Follow the safety instructions for a safe flight. Special emphasis on following points:

- stick to the rules and regs of the country your fly in
- required licenses and actual experience
- use only suitable, approved and certified accessories (helmet, harness, safety systems...)
- appropriate weather condition
- suitable terrain
- alle required checks done and airworthiness of the glider
- personal shape of the pilot
- know your manual and stay within the published limits



Nature and environment friendly behaviour

We ask you to perform our sport in a manner, that impacts nature and environment with minimum intensity. Please do not walk beside marked paths, don't leave any waste, please be not noisy and respect the sensitive biological equilibrium in the mountains. Especially at starting areas maximum care for nature is necessary.

Removal

The synthetic materials your U-Turn glider is build must be depolluted appropiately. Please send your U-Turn glider atthe end of its life-cycle back to U-Turn. We will take care for recycling and removal.

Technical Data / Table of area loading U-Turn AIRWOLF



your airline...



	XS	S	M	L	XL
Take off weight	50 - 80 kg	65 - 90 kg	80 - 110 kg	95 - 125 kg	115 - 145 kg
Wing area flat	25 m ²	26,5 m ²	28,0 m ²	29,5 m ²	31 m ²
Wing area project	20,75 m ²	21,9 m ²	23,2 m ²	24,48 m ²	25,73 m ²
Wing span flat	12,24 m	12,61 m	12,96 m	13,30 m	13,63 m
Wing span project	9,24 m	9,51 m	9,78 m	10,04 m	10,29 m
Aspect ratio flat	6,0	6,0	6,0	6,0	6,0
Aspect ratio project	4,1	4,1	4,1	4,1	4,1
Number of chambers	56	56	56	56	56
V-Trimm	39 Km/h				
V-Min	21 Km/h	21 Km/h	20 Km/h	20 Km/h	20-22 Km/h
V-Max	57 Km/h				
Features	IST, Tension Stripes PPN plus, Split A-Riser	IST, Tension Stripes PPN, PPN plus, Split A-Riser			
Number of risers	6	6	6	6	6
Number of lines storeys	2	2	2	2	2
Accelerator / Trimmer	Accelerator	Accelerator	Accelerator	Accelerator	Accelerator
Certification	*	LTF C	LTF C	LTF C	*

mistakes, misprints and changes reserved.
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Table of area loading



	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140	145
AIRWOLF XS	2,2	2,4	2,6	2,8	3,0	3,2	3,4												
AIRWOLF S		2,5	2,6	2,8	3,0	3,2	3,4	3,6											
AIRWOLF M			2,9	3,0	3,2	3,4	3,6	3,8	3,9										
AIRWOLF L					3,2	3,4	3,6	3,7	3,9	4,1	4,2	4,4							
AIRWOLF XL						3,5	3,7	3,9	4,0	4,2	4,4	4,5	4,7						



Material list U-Turn AIRWOLF

U-TURN
your airline...

Material or component	Material / structure name	Weight / strength	Producer
Attachment loops	Nylon	7.2 g/m / breaking strength 110kg / 13mm spreads	Hekon Industrial Co. Korea
Flexibleroller lines	Nylon	Ø 4.0mm = breaking strength 350 daN	Gin Gildars Korea
Flexibleroller - bands	Gin Rete		Gin Gildars Korea
Flexibleroller lock	Bummedhook		Gin Gildars Korea
Brooks attachment rings	Nylon	7.2 g/m / breaking strength 110kg / 13mm spreads	Hekon Industrial Co. Korea
Ends household	High Tenacity Polyester Yarn 22mm	25 g/m / 1000 kg breaking strength	Techia Songje, France
Ends household attachment	High Tenacity Polyester Yarn 22mm	25 g/m / 1000 kg breaking strength	Techia Songje, France
Ends household fixation	Magnet		Gin Gildars Korea
Stretch main lines Ø 2.0mm Ø	Dynemo Lines	2.3mm = 250daN	Gin Teijin Korea
Lines:			
Main lines:			
TSL 280	2.55g/m - 1.8mm - 280kg	LROS, Rosenthaler Touwsehs	
TSL 290	2.18g/m - 1.65mm - 290kg	LROS, Rosenthaler Touwsehs	
TSL 190	1.76g/m - 1.55mm - 190kg	LROS, Rosenthaler Touwsehs	
LTC 0160	1.13g/m - 1.2mm - 160kg	LROS, Rosenthaler Touwsehs	
LTC 0180	0.88g/m - 1.1mm - 180kg	LROS, Rosenthaler Touwsehs	
LTC 0280	0.67g/m - 0.7mm - 80kg	LROS, Rosenthaler Touwsehs	
belt restriction	8g / Ø 3.8mm / breaking strength 800kg	Pneung Precision CO. Korea	
fixes lock	12g / Ø 4.3mm / breaking strength 1000kg	Pneung Precision CO. Korea	
Top soil - A - B - C	90117 E7A - 90117 E7B - Shutter 36	Porcher Marine, NCV, France	
V-Tops	Shutter 36	36g/m ² (FH 0.6 HT)	Porcher Marine, NCV, France
Notes reinforcement	PPN		Porcher Marine, NCV, France
Fig. Profil	90117 E8PA	40 g/m ² (FH 0.6 HT)	Porcher Marine, NCV, France
Faser	High Tenacity Polyester Yarn 12mm	17 g/m / 850 kg breaking strength	Porcher Marine, NCV, France
Under soil - A - B - C	Shutter 36	36 g/m ² (FH 0.6 HT)	Porcher Marine, NCV, France
Reinforcement point B/C/D	UJ 420	180 g/m ²	Porcher Marine, NCV, France
securing thread company	High Tenacity Polyester Yarn 150D2E	0.05 g/m ² / 2.9 kg breaking strength	Fmann & Schulte GmbH, Germany
securing thread lines	High Tenacity Polyester Yarn 150D2G	0.083 g/m ² / 3.2 kg breaking strength	Fmann & Schulte GmbH, Germany

Line order sheet and instruction leaflet for repairs and 2 annual Check



U-Turn GmbH
Im Neumetz 1
7860 Ditzingen
Germany

Tel: +49 [0]7464/90991280
Fax +49 [0]7464/9099128-28

Instruction leaflet for repair's and 2 annual/Check

Name			
Address			
Land	Telephone Number:		
E-Mail	Parateller type and Color:		
Comments/Notes:			

- 2 annual Check
 - Air permeability check
 - Line Check incl strength test
 - Repair of the marked damage



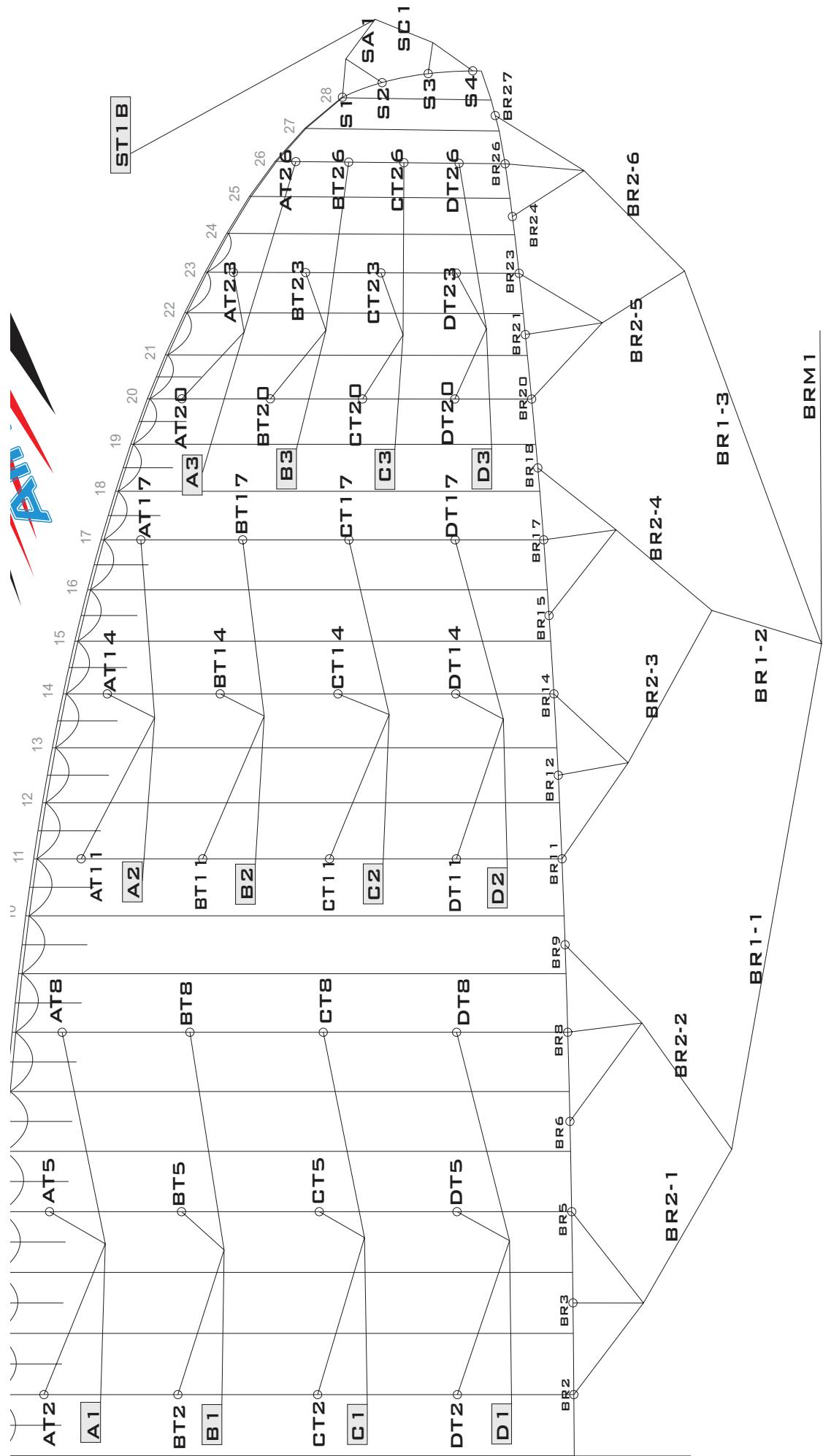
Please, extend the repair deadline in the upper seal / or under seal.

LINE ORDER SHEET / BESTELLFORMULAR FÜR LEINEN

Name	
Adress / Adresse	
E-mail	
Telephone Number / Telefon Nummer	
Paragliding name / Gleitschirm Name	
Size / Größe	
Other / Sonstiges	

Serial Number / Serien Nummer: - - -

Line code U-Turn AIRWOLF



U-Turn AIRWOLF Line code

AIRWOLF Line plan		rev1 liros	
A-Lines			
Rib - 2	LTC-0160	TSL 280	
Rib - 5	LTC-0160		
Rib - 8	LTC-0160		
Rib - 11	LTC-0120	TSL 280	
Rib - 14	LTC-0120		
Rib - 17	LTC-0120		
Rib - 20	LTC-0120	TSL 220	
Rib - 23	LTC-0120		
Rib - 26	LTC-0120		
Stabilo	LTC-0080		
B-Lines			
Rib - 2	LTC-0160	TSL 280	
Rib - 5	LTC-0160		
Rib - 8	LTC-0160		
Rib - 11	LTC-0120	TSL 280	
Rib - 14	LTC-0120		
Rib - 17	LTC-0120		
Rib - 20	LTC-0120	TSL 220	
Rib - 23	LTC-0120		
Rib - 26	LTC-0120		
Stabilo	LTC-0080	LTC-0080	TSL 190
C-Lines			
Rib - 2	LTC-0160	TSL 280	
Rib - 5	LTC-0160		
Rib - 8	LTC-0160		
Rib - 11	LTC-0120	TSL 220	
Rib - 14	LTC-0120		
Rib - 17	LTC-0120		
Rib - 20	LTC-0080	TSL 190	
Rib - 23	LTC-0080		
Rib - 26	LTC-0080		
Stabilo	LTC-0080	LTC-0080	
D-Lines			
Rib - 2	LTC-0120	TSL 220	
Rib - 5	LTC-0120		
Rib - 8	LTC-0120		
Rib - 11	LTC-0080	TSL 220	
Rib - 14	LTC-0080		
Rib - 17	LTC-0080		
Rib - 20	LTC-0080	TSL 190	
Rib - 23	LTC-0080		
Rib - 26	LTC-0080		
Stabilo	LTC-0080		
Brake-Lines			
Rib - 2	DC 60	DC 100	TSL 190
Panel - 3	DC 60		
Rib - 5	DC 60		
Panel - 6	DC 60	DC 100	
Rib - 8	DC 60		
Panel - 9	DC 60		
Rib - 11	DC 60	DC 100	TSL 190
Panel - 12	DC 60		
Rib - 14	DC 60		
Panel - 15	DC 60	DC 100	
Rib - 17	DC 60		
Panel - 18	DC 60		
Rib - 20	DC 60	DC 100	TSL 190
Panel - 21	DC 60		
Rib - 23	DC 60		
Panel - 24	DC 60	DC 100	
Rib - 26	DC 60		
Panel - 27	DC 60		

U-Turn AIRWOLF Lineplan XS

AIRWOLF XS		rev1		DHV	
A-Lines					
Rib - 2	2595	4415		7010	
Rib - 5	2475			6890	
Rib - 8	2510			6925	
Rib - 11	2300	4540		6840	
Rib - 14	2165			6705	
Rib - 17	2145			6685	
Rib - 20	1837	4637		6474	
Rib - 23	1610			6247	
Rib - 26	1486			6123	
Stabilo	385			5915	
B-Lines					
Rib - 2	2595	4365		6960	
Rib - 5	2475			6840	
Rib - 8	2510			6875	
Rib - 11	2290	4502		6792	
Rib - 14	2165			6667	
Rib - 17	2150			6652	
Rib - 20	1825	4625		6450	
Rib - 23	1610			6235	
Rib - 26	1480			6105	
Stabilo	310	400	5130	5840	
C-Lines					
Rib - 2	2595	4410		7005	
Rib - 5	2475			6885	
Rib - 8	2510			6920	
Rib - 11	2290	4552		6842	
Rib - 14	2165			6717	
Rib - 17	2153			6705	
Rib - 20	1830	4660		6490	
Rib - 23	1610			6270	
Rib - 26	1460			6120	
Stabilo	303	400		5833	
D-Lines					
Rib - 2	2595	4513		7108	
Rib - 5	2475			6988	
Rib - 8	2510			7023	
Rib - 11	2295	4643		6938	
Rib - 14	2165			6808	
Rib - 17	2147			6790	
Rib - 20	1845	4715		6560	
Rib - 23	1610			6325	
Rib - 26	1440			6155	
Stabilo	364			5894	
Brake-Lines					
Rib - 2	1471	1600	2400	2400	7871
Panel - 3	1274			.+300	7674
Rib - 5	1173				7573
Panel - 6	1248	1400			7448
Rib - 8	1145				7345
Panel - 9	1148				7348
Rib - 11	1110	1300	2400		7210
Panel - 12	954				7054
Rib - 14	907				7007
Panel - 15	840	1300			6940
Rib - 17	786				6886
Panel - 18	832				6932
Rib - 20	772	1200	2400		6772
Panel - 21	654				6654
Rib - 23	612				6612
Panel - 24	616	1100			6516
Rib - 26	538				6438
Panel - 27	516				6416

U-Turn AIRWOLF Lineplan S

AIRWOLF S		rev 1a	12.01.2009		
A-Lines					
Rib - 2	2675	4550		7225	
Rib - 5	2554			7104	
Rib - 8	2590			7140	
Rib - 11	2375	4690		7065	
Rib - 14	2235			6925	
Rib - 17	2214			6904	
Rib - 20	1896	4792		6688	
Rib - 23	1663			6455	
Rib - 26	1534			6326	
Stabilo	389			6089	
B-Lines					
Rib - 2	2675	4494		7169	
Rib - 5	2554			7048	
Rib - 8	2590			7084	
Rib - 11	2364	4648		7012	
Rib - 14	2235			6883	
Rib - 17	2220			6868	
Rib - 20	1885	4777		6662	
Rib - 23	1663			6440	
Rib - 26	1528			6305	
Stabilo	335	400	5300	6035	
C-Lines					
Rib - 2	2675	4552		7227	
Rib - 5	2554			7106	
Rib - 8	2590			7142	
Rib - 11	2364	4700		7064	
Rib - 14	2235			6935	
Rib - 17	2220			6920	
Rib - 20	1889	4808		6697	
Rib - 23	1663			6471	
Rib - 26	1510			6318	
Stabilo	326	400		6026	
D-Lines					
Rib - 2	2675	4656		7331	
Rib - 5	2554			7210	
Rib - 8	2590			7246	
Rib - 11	2370	4790		7160	
Rib - 14	2235			7025	
Rib - 17	2220			7010	
Rib - 20	1903	4855		6758	
Rib - 23	1663			6518	
Rib - 26	1489			6344	
Stabilo	386			6086	
Brake-Lines					
Rib - 2	1622	1600	2400	2550	8172
Panel - 3	1421			+300	7971
Rib - 5	1312				7862
Panel - 6	1384	1400			7734
Rib - 8	1280				7630
Panel - 9	1274				7624
Rib - 11	1236	1300	2400		7486
Panel - 12	1082				7332
Rib - 14	1026				7276
Panel - 15	959	1300			7209
Rib - 17	906				7156
Panel - 18	944				7194
Rib - 20	889	1200	2400		7039
Panel - 21	773				6923
Rib - 23	723				6873
Panel - 24	729	1100			6779
Rib - 26	651				6701
Panel - 27	618				6668

U-Turn AIRWOLF Lineplan M

AIRWOLF M			rev2		
A-Lines				Top-leinen	Stammleinen
Rib - 2	135	139		2114	798
Rib - 5	135				
Rib - 8	135				
Rib - 11	96	139			
Rib - 14	96				
Rib - 17	96				
Rib - 20	96	121			
Rib - 23	96				
Rib - 26	96				
Stabilo	76				
B-Lines				Top-leinen	Stammleinen
Rib - 2	135	139		2114	1018
Rib - 5	135				
Rib - 8	135				
Rib - 11	96	139			
Rib - 14	96				A+B Stamm
Rib - 17	96				1538
Rib - 20	96	121			
Rib - 23	96				
Rib - 26	96				
Stabilo	76	76	110		
C-Lines				Top-leinen	Stammleinen
Rib - 2	135	139		1994	740
Rib - 5	135				
Rib - 8	135				
Rib - 11	96	121			
Rib - 14	96				C+D Stamm
Rib - 17	96				1444
Rib - 20	76	110			
Rib - 23	76				
Rib - 26	76				
Stabilo	76	76			
D-Lines				Top-leinen	Stammleinen
Rib - 2	96	121		1640	704
Rib - 5	96				
Rib - 8	96				
Rib - 11	76	121			
Rib - 14	76				
Rib - 17	76				
Rib - 20	76	110			
Rib - 23	76				
Rib - 26	76				
Stabilo	76				

U-Turn AIRWOLF Lineplan L

AIRWOLF L		rev 0			
A-Lines					
Rib - 2	2853	4876		7729	
Rib - 5	2725			7601	
Rib - 8	2766			7642	
Rib - 11	2533	5019		7553	
Rib - 14	2386			7406	
Rib - 17	2366			7385	
Rib - 20	2022	5112		7134	
Rib - 23	1776			6887	
Rib - 26	1637			6749	
Stabilo	431			6497	
B-Lines					
Rib - 2	2853	4804		7657	
Rib - 5	2725			7529	
Rib - 8	2766			7570	
Rib - 11	2525	4963		7488	
Rib - 14	2386			7349	
Rib - 17	2371			7334	
Rib - 20	2012	5101		7113	
Rib - 23	1776			6877	
Rib - 26	1632			6733	
Stabilo	375	411	5656	6441	
C-Lines					
Rib - 2	2853	4855		7709	
Rib - 5	2725			7580	
Rib - 8	2766			7621	
Rib - 11	2525	5014		7539	
Rib - 14	2386			7401	
Rib - 17	2371			7385	
Rib - 20	2017	5129		7146	
Rib - 23	1776			6905	
Rib - 26	1612			6741	
Stabilo	364	411		6431	
D-Lines					
Rib - 2	2853	4963		7816	
Rib - 5	2725			7688	
Rib - 8	2766			7729	
Rib - 11	2525	5112		7637	
Rib - 14	2386			7498	
Rib - 17	2366			7478	
Rib - 20	2032	5176		7209	
Rib - 23	1776			6952	
Rib - 26	1591			6767	
Stabilo	426			6492	
Brake-Lines					
Rib - 2	1564	1848	2566	2669	8647
Panel - 3	1364			.+300	8447
Rib - 5	1274				8356
Panel - 6	1357	1642			8234
Rib - 8	1255				8132
Panel - 9	1270				8147
Rib - 11	1236	1540	2566		8010
Panel - 12	1080				7854
Rib - 14	1039				7813
Panel - 15	971	1540			7745
Rib - 17	914				7688
Panel - 18	956				7730
Rib - 20	894	1437	2566		7566
Panel - 21	768				7440
Rib - 23	719				7390
Panel - 24	714	1334			7284
Rib - 26	623				7192
Panel - 27	589				7158

U-Turn AIRWOLF Lineplan XL

AIRWOLF XL		rev1			
A-Lines					
Rib - 2	2930	5005		7935	
Rib - 5	2800			7805	
Rib - 8	2840			7845	
Rib - 11	2610	5145		7755	
Rib - 14	2460			7605	
Rib - 17	2440			7585	
Rib - 20	2085	5265		7350	
Rib - 23	1830			7095	
Rib - 26	1687			6952	
Stabilo	488			6718	
B-Lines					
Rib - 2	2930	4950		7880	
Rib - 5	2800			7750	
Rib - 8	2840			7790	
Rib - 11	2600	5107		7707	
Rib - 14	2460			7567	
Rib - 17	2445			7552	
Rib - 20	2070	5255		7325	
Rib - 23	1830			7085	
Rib - 26	1680			6935	
Stabilo	406	400	5830	6636	
C-Lines					
Rib - 2	2930	5000		7930	
Rib - 5	2800			7800	
Rib - 8	2845			7845	
Rib - 11	2600	5163		7763	
Rib - 14	2460			7623	
Rib - 17	2445			7608	
Rib - 20	2077	5295		7372	
Rib - 23	1830			7125	
Rib - 26	1660			6955	
Stabilo	395	400		6625	
D-Lines					
Rib - 2	2930	5113		8043	
Rib - 5	2800			7913	
Rib - 8	2845			7958	
Rib - 11	2605	5263		7868	
Rib - 14	2460			7723	
Rib - 17	2440			7703	
Rib - 20	2090	5355		7445	
Rib - 23	1830			7185	
Rib - 26	1638			6993	
Stabilo	460			6690	
Brake-Lines					
Rib - 2	1821	1600	2400	3100	8921
Panel - 3	1600			+300	8700
Rib - 5	1472				8572
Panel - 6	1532	1400			8432
Rib - 8	1417				8317
Panel - 9	1408				8308
Rib - 11	1359	1300	2400		8159
Panel - 12	1192				7992
Rib - 14	1132				7932
Panel - 15	1061	1300			7861
Rib - 17	1008				7808
Panel - 18	1049				7849
Rib - 20	982	1200	2400		7682
Panel - 21	857				7557
Rib - 23	803				7503
Panel - 24	806	1100			7406
Rib - 26	727				7327
Panel - 27	695				7295

Deutscher Hängegleiterverband e. V. im DAeC
DHV-Technikreferat

LBA-anerkannte Prüfstelle für Hängegleiter und Gleitsegel



MUSTERPRÜFBESCHEINIGUNG

Gleitschirm

Musterprüfnummer **DHV GS-01-1909-10**

Bezeichnung des Gerätemusters

U-Turn Airwolf S

Das nachstehend bezeichnete Luftsportgerät ist als Muster geprüft im Auftrag von:

U-Turn GmbH, Esslingerstr. 23, 78054 Villingen-Schwenningen, Deutschland

Diese Musterprüfbescheinigung ist erteilt auf Grund der die Musterprüfung betreffenden Bestimmungen des Luftverkehrsgesetzes, der Luftverkehrs-Zulassungs-Ordnung, der Verordnung zur Prüfung von Luftfahrtgerät und der Lufttüchtigkeitsforderungen in der heute geltenden Fassung sowie zu den Bedingungen der Vereinbarung über Musterprüfung und des Schreibens vom 16.07.2010.

Die Musterprüfung gilt gemäß zugehörigem Gerät-Kennblatt Nr.: DHV GS-01-1909-10

16.07.2010

Datum der Ausstellung

Unterschrift

in A. Klemm Oberholz
Deutscher Hängegleiterverband e.V.
Mesbacher Straße 2, 83700 Gründ

Deutscher Hängegleiterverband e. V. im DAeC
DHV-Technikreferat

LBA-anerkannte Prüfstelle für Hängegleiter und Gleitsegel



MUSTERPRÜFBESCHEINIGUNG

Gleitschirm

Musterprüfnummer DHV GS-01-1908-10

Bezeichnung des Gerätemusters

U-Turn Airwolf M

Das nachstehend bezeichnete Luftsportgerät ist als Muster geprüft im Auftrag von:

U-Turn GmbH, Esslingerstr. 23, 78054 Villingen-Schwenningen, Deutschland

Diese Musterprüfbescheinigung ist erteilt auf Grund der die Musterprüfung betreffenden Beslimmungen des Luftverkehrsgesetzes, der Luftverkehrs-Zulassungs-Ordnung, der Verordnung zur Prüfung von Luftfahrtgerät und der Lufttüchtigkeitsforderungen in der heute geltenden Fassung sowie zu den Bedingungen der Vereinbarung über Musterprüfung und des Schreibens vom 16.07.2010.

Die Musterprüfung gilt gemäß zugehörigem Geräte-Kennblatt Nr.: ***DHV GS-01-1908-10***

16.07.2010

Datum der Ausstellung

Unterschrift

W. W. Koenig
Deutscher Hängegleiterverband e.V.
Miesbacher Straße 2, 83703 Gmund

**Deutscher Hängegleiterverband e. V. im DAeC
DHV-Technikreferat**

LBA-anerkannte Prüfstelle für Hängegleiter und Gleitsegel



MUSTERPRÜFBESCHEINIGUNG

Gleitschirm

Musterprüfnummer **DHV GS-01-1910-10**

Bezeichnung des Gerätemusters

U-Turn Airwolf L

Das nachstehend bezeichnete Luftsportgerät ist als Muster geprüft im Auftrag von:

U-Turn GmbH, Esslingerstr. 23, 78054 Villingen-Schwenningen, Deutschland

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Die Musterprüfung gilt gemäß zugehörigem Gerät-Kennblatt Nr.: **DHV GS-01-1910-10**

19.07.2010

Datum der Ausstellung

Unterschrift

WIA - Karsten Oberholz
Deutscher Hängegleiterverband e.V.
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