

Nanga²

Owner's Manual And Service Booklet

Serial-N°: _____



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Important

The following symbols are used to draw attention to particular sections:



WARNING!

Failing to comply with instructions given here may lead to injury or death!



BEWARE!

Failing to comply with instructions given here may cause undue wear to, or even damage, your new equipment.



NOTICE

This pictogram indicates a tip or some helpful extra knowledge.

Welcome in our team

Congratulations on the purchase of your new UP Nanga² harness. You have chosen a harness that represents the maximum in safety, functionality and quality in our sport.

In order to ensure that you get the maximum passive safety out of your new harness we recommend that you take a little time to read this manual and thus become familiar with the functioning, the maintenance and adjusting of your new harness.

Please take a little time to complete and send the reply card (product registration) found in the back of this manual, or by doing the same Online via:

www.up-paragliders.com > service > product registration

Your completed product registration is also needed should any warranty issues arise. After a successful product registration we can keep you informed of all new products and developments at UP, as well as any technical information about the UP Nanga².

We would also be delighted to hear any feedback you have concerning the harness. It is only through your feedback that we can continue to develop world-class paragliding equipment that appeal to the majority of pilots.

If you have any questions regarding your harness or auxiliary equipment please ask your local dealer or feel free to contact us here at UP directly.

Your UP International Team

Safety instructions



BEWARE! Paragliding is an extremely demanding sport requiring the highest levels of attention, judgment, maturity, and self-discipline. Due to the inherent risks in flying, no warranty of any kind can be made against accidents, injury, equipment failure, and/or death. Do not use it unless you are personally willing to assume all risks inherent in the sport of paragliding and all responsibility for any property damage, injury, or death, which may result from use of this paraglider harness.

Please read this owner's manual thoroughly before your first flight with the UP Nanga² so that you are fully acquainted with your new harness. This manual gives you information on the entire specific and general characteristics of the UP Nanga². It is important to note the following points:

- At the time of delivery, this harness conforms the testing criteria of the LTF 35/03 and the EN 1651. Read more about the testing regime in the technical data.
- Any changes being made outside the permitted range of adjustment invalidate any and all claims under the warranty
- Using this harness is exclusively at the risk of the user; the manufacturer or distributor assumes no responsibility for accidents occurring while using it.
- The pilot assumes total responsibility for the use of the harness. Before each flight the pilot must perform a

mandatory check of the condition of the harness.

- It is assumed that the pilot is in possession of the necessary qualifications and that provisions of any relevant laws are observed.
- When reselling the harness please make sure you also give this manual to the new owner. The manual is an integrated part of the harness and is required for it to keep its certification.

Development at UP

Admitted; we're proud of our history. No other company in the free flying world can look back on such an expansive history as we can. The UP story started back in 1970 when Pete Brock graduated from the Art Center, a world famous school for design and engineering in Pasadena, California, and promptly created some of the most legendary race cars ever – the Daytona Coupe from General Motors was one – and then went on to become fascinated by the emerging sport of hang gliding – at that time probably the maddest pastime of them all. After founding Ultralite Products he introduces his first wing, the Dragonfly, and soon the new company becomes known under the UP acronym.

Pete Brocks spirit survives to this day in everything we do at UP International – we still have our very own way of seeing things and designing things. All because the name UP carries with it a great responsibility; towards our customers, and to our heritage.

Technical description

General

The UP Nanga² paragliding harness is designed using all the latest knowledge accumulated in the world of paragliding.

Highlights of the UP Nanga² are:

- Light automatic buckles and SafeTbar
- Anti Balance System
- Bottom reserve container
- Mesh Softfoam back upholstery for increased comfort.
- Adjusting of the shoulder straps via 30mm alu lightweight buckles
- Quick adjust of the reclining angle
- Adjustable seat length.
- Efficient airbag protector system with twin chamber construction.
- Storage bags on side and back
- Pocket for radio/cell phone
- "Camelback" compatible pocket.
- Leg rest compatible
- Twistlock Alu Karabiners.

Technical Data UP Nanga²

Size	S	M	L
Weight without karabiners [kg]	4,0	4,2	4,5
Maximum load [kg]	120	120	120
Certification	LTF / EN	LTF / EN	LTF / EN
Height of Connection	40cm	42cm	42cm
Karabiner Distance	35 to 49 cm		
Karabiners	Twistlock Alu Karabiners		
Buckles	Automatic 30mm Alu-Light		
Integrated Airbag-Protector	Twin-chamber airbag		
Protektor Value	23,6 g		
Location of reserve	beneath the seat, lateral deployment handle		
Rescue Container Volume	3500 – 10000cm ³		

As of 'February 1st 2012

Overview Drawings



Harness design

Description

The UP Nanga 2 is a completely new design. Best described as a seated harness for ambitious hobby pilots, it sports a highly efficient airbag back protection system with twin chambers protecting the whole spinal region in case of hard impacts, and which attained very impressive test values in the LTF tests. In terms of passive safety it doesn't get any better than this.

Due to the impact pressure airbag system the Nanga² may be packed much smaller than conventional harnesses, just as it weighs far less. The back rest has been designed with ergonomics in mind and offers improved lumbar and neck support, so that even extended XC flights are turned into pure comfortable bliss.

Materials

When selecting materials for the UP Nanga² we put particular emphasis on the applied loads and the longevity of everything being used. Our goal was to ensure a long and trouble-free service life of the harness, regardless of the conditions. We use only tried and tested materials which have already proven themselves in the industry.

Pockets

The UP Nanga² has a large storage pocket on the back, and a smaller lateral one for storing items which must be reachable in flight.

In order to access the large back compartment the zip must be opened. Inside you will find an additional smaller zipped compartment for smalls as well as a pocket for the Camelbak hydration system. The rest of the large compartment may be used for storing the backpack or

anything else that must come on your flight. The twin chamber airbag system is independent of the rear compartment, meaning there is no need to take special care when loading kit in here.



BEWARE! At the bottom of the large storage compartment you will find a small zip. This should always remain closed in order to ensure correct airbag functioning, as it is only intended as an access way to the twin chamber valve.

When installing a hydration system (Camelbak), simply thread the hose through the indicated slit in the back support (you may also thread a headset cable through here, if you prefer to store the radio in the rear compartment) and secure it on the right shoulder using the dedicated bungee.

Range of use

The UP Nanga² was developed for use in conjunction with modern paragliders. It is equally suited for school hill use as for long, demanding XC flights. The abundant adjustment possibilities allow anything from completely upright to quite reclined and as such aerodynamically more efficient.

WARNING! Using the UP Nanga² in conjunction with uncertified wings, or using it for any purpose other than the intended, is not allowed and may be dangerous.



Before the first flight

The UP Nanga² is delivered with Twistlook Alu Karabiners and this manual. The manual may also be downloaded from the UP website.

Every Nanga² delivered has been minutely checked at the factory, and corresponds exactly to the certified sample.



BEWARE! Before the first flight with the UP Nanga², please check the following: Is the airbag assembled correctly with the lateral protection plate? Are the karabiners properly closed? Is the reserve mounted correctly?. An approved UP dealer should carry out the first flight before the harness is handed over to the end customer.

Adjustment possibilities

The adjustment system of the UP Nanga² can be individually set to fit most body sizes.

Adjustment possibilities exist at the shoulder straps, the chest strap, the lateral chest straps, the seat board length and the leg loops. The adjusting criteria depend on the respective body size, the preferred seating position and the individual attitude of the pilot.

Individual adjustments

The individual setting of this harness is best accomplished in a simulator for the first time. Suspend the harness from a suitable horizontal hang point (a girder or a children's swing) or ask

your dealer to use his simulator. Take some time to try the different settings for yourself. Be aware that the position might change with a packed backpack, ballast bags and emergency equipment. When adjusting in the simulator you should make yourself familiar with your harness and its parts and get used to many of the functions before the first flight. All the different adjustment possibilities are for you to adjust the harness for your optimal comfort.

Verify that the reserve deployment handle is easy to reach and see, and train your brain for the use of it by simulating several deployments whilst hanging from the simulator. In order to become accustomed to the correct deployment technique UP International recommends participating in reserve deployment clinics on a regular basis – most clubs organize these for their members every winter. Experience has shown that training the body to find and deploy the reserve handle whilst being thrown violently about by your club mates is an excellent training for the real thing, and we believe that pilots who have trained this are more likely to get the reserve out in an emergency. We also recommend visiting approved SIV trainings and at least once to try to deploy the reserve for real.

Make it a habit to reach out and grab the reserve handle during every flight – this will teach your body how to find it in case you need it fast one day. Remember that there's no guarantee that you'll be sitting normally upright in your seat when you suddenly need to get to the handle for real, so the more instinctive the movement is the better the chances of success are.

Adjustment of the shoulder straps

The shoulder straps should be adjusted to the pilot's size and desired flight position by the two adjustment buckles. In order to make the leaning back and getting into the harness after launching easier we recommend flying with the shoulder straps only slightly snug. If you can still stand comfortably without being hindered by the harness it is probably just right.

In the correct position, the shoulder straps should have a light pressure on the shoulders. The shoulder straps on the UP Nanga² run through the chest strap in a floating arrangement, designed to improve pilot movement both on the ground and in the air.

Adjustment of the chest strap/ABS-System

The position of the chest strap should be controlled and adjusted every time the harness is put on. The chest strap should be adjusted according to the pilots' preferences. A somewhat firmer adjustment is recommended, until one is used to the very effective weight control of the UP Nanga².

The tighter you pull the chest strap the more effective the cross bracing of the harness becomes. This means that you'll be getting a smoother ride even in turbulent conditions, and any collapses that are completely unchecked by the pilot will also feel more benign.

Finally, adjust the length of the loops by pulling or releasing the straps until you're happy with all settings.

Please note that UP recommends flying slow-turning gliders with a wide chest strap setting whereas more agile

wings can be flown with a tighter setting.



BEWARE! A very tight chest strap also increases the danger of pivoting (Twist.). Therefore we recommend that you always fly with the chest strap as wide as you feel comfortable with.

Safe-T-Bar System



The Nanga² is equipped with a safety system. A T-buckle is connected with a (red) strap, which is fastened together with the left leg

strap. This system is developed to minimise the risk of slipping out of the harness should the pilot forget to fasten their leg straps.



WARNING! The chest strap is closed by clicking all three parts of the Safe-T bar buckle together. When closing the buckles, there is an audible "click" of the metal latches inside the T-fitting. The buckles cannot be opened under tension. Notice that the Safe-T bar buckles only effectively increase the safety of the harness when routed between the legs of the pilot!

Adjustment of the side strap

Adjusting the side strap changes the pilot's body position. The preferred position of the body is very individual. An open strap gives a somewhat lying position (supine), and a tightened side strap an upright position of the pilot.

In order to change this adjustment in flight we recommend that the pilot first sits up a bit in the harness, to take the load off the adjustment buckles, then pulls or releases webbing through the adjustment buckle.



BEWARE! A reclined pilot position increases the danger of pivoting (twist).

Adjustment of the leg straps

Adjusting the leg straps should be done every time the harness is put on.



WARNING! The leg straps are closed by clicking the two parts of the buckle together. When closing the buckles, there is an audible "click" of the metal latches in the buckle.

Subsequently, the individual adjustment of the loop lengths is made by adjusting the loose webbing. The leg straps should fit fairly tight on the thighs.

Adjusting the seat depth

You may adjust the seat depth by means of the plastic buckle located beneath the right main attachment

point. Pull more to reduce depth, release to increase.

Speed System

The UP Nanga 2 comes ready for the installing a conventional paraglider speed system. The speedbar lines travel through two cloth loops and a pulley on either side. TIP: Only adjust the speedbar once you have completed all other adjustments!



Start by threading the speedbar lines through the cloth loops on either side of the seat board. Then through the pulley and up to the brummel hooks on the risers.

Stirrup

The UP Nanga 2 may be fitted with a special stirrup if needed.



Use the lateral loops on either side of the seat board (see illustrations) and adjust by pulling or releasing the plastic buckles.



The elastic band is fastened to the plastic ring.

Pre-flight check

A thorough pre-flight inspection should be carried out prior to each flight. A careful pre-flight check is a must for any and all airplanes – also the UP Nanga². Please apply the same care and attention before EVERY flight!

Before every launch you should carry out the standard checking procedure.

It is a good idea to do the checks following the same sequence every time to minimize the risk of omitting something.

- All pockets and zippers must be entirely closed.
- The reserve container pin must be in place, and the reserve deployment handle secured to the side of the harness.
- In case you're using a front-mounted reserve make sure the connection bridle is routed in a way that doesn't conflict with the speed bar line – even in case of deployment. The bridle must go around the speed bar line on the outside.
- In case of snow and ice on launch make sure all connections and buckles are thoroughly cleansed before buckling up.
- Visually inspect the main karabiners and make sure they are closed correctly.
- Make sure the speed bar is stored in a way that doesn't hinder the launch in any way. All connections to the risers must be in place and not entwined.

Putting the harness on

Getting all the adjustments right before the first flight is important for getting into the harness after launch. We recommend adhering to the following procedure every time:

1. Stick your arms through the shoulder straps, much like donning a vest.
2. Close the leg straps first, then the chest strap.

3. Move the leg straps down the thighs as far as possible and pull them snug. Having the leg straps closer to the knees makes getting into the harness after launch easier.
4. If the shoulder straps are too long or too short adjust them by pulling/releasing them. They should be long enough to allow standing up straight in full comfort, whilst snug enough to not slip off when you're sitting in the harness.
5. Check that the lateral adjustments regarding back and seat angle are correct.
6. Verify that the length of the chest strap is set to your liking, bearing in mind its effect on glider behavior.
7. Once again go over all buckles to ensure that they are correctly closed – now you're ready to launch!

Start

Provided the UP Nanga² is adjusted correctly it should normally be easy to slip into the seat after launch without having to use the hands. In case you still need to use the hands, please make sure you have sufficient altitude/ground clearing before you release the brake handles to get into the harness.

Landing

We recommend assuming an upright position right from the beginning of the landing approach. Having the landing gear ready like this can avoid many spinal injuries in case of an unexpectedly hard landing.

Installing the emergency parachute

The UP Nanga² allows the installation of most usual emergency parachutes available on the market. Not all emergency parachutes are however suitable!



WARNING! An incorrectly installed emergency parachute can malfunction and cause severe complications! For this reason we recommend always letting a trained professional do the

first reserve installation on your new harness. The shop or school where you purchased the harness is likely to be the best bet – they will know the equipment and can advise you about any incompatible systems.

If you have questions or doubts concerning the use and mounting of the emergency parachutes with the UP Nanga², please contact an UP dealer or directly to UP International.

Connecting the emergency parachute to the harness

The bridle that connects the emergency parachute with the UP Nanga² is located on both shoulder straps. We suggest you use a larks head (round-and-through) knot for the connection between the harness bridle and the emergency parachute bridle or a suitable maillon rapid link.

If your reserve parachute is equipped with a double bridle please thread both through the harness connection bridle.

However, if the reserve bridles are long enough you may also decide to bypass the included connection bridle completely and connect the reserve bridles directly to the shoulder loops on the UP Nanga². For the connection here we recommend using Maillon Rapide trapezoidal stainless steel screw gates with at least 5mm diameter.

The handle of the emergency parachute is also connected with the inner container of the emergency parachute with a larks head knot.



WARNING! Use only the original emergency parachute deployment handle delivered with the UP

Nanga². Other emergency handles should not be used since they do not ensure a faultless function!

Installing the emergency parachute

The emergency parachute container is located under the seat board and is of ample size for most any common reserve parachute in the market.

The reserve compartment comprises a Velcro adjustable divider allowing the rigger to adjust the size of the compartment to the packing volume of the reserve parachute. Please ensure that all Velcro is fully covered by its own counterpart (the divider Velcro is red to make it easily visible if something is not covered) before installing the reserve, as especially the hook side of Velcro may be abrasive to parachute lines. If you are not using the divider (large reserve volume) the same applies – all red Velcro must be covered!

Installing:

Thread the deployment handle through a lateral loop on the reserve inner container.

The harness/reserve connection bridles are placed in S-shaped loops along the side of the inner container before sliding the latter into the compartment.



Close the container flaps in the sequence indicated by the numbers 1 to 6.



The foremost flaps (1-3) are closed first, using a small piece of cord. Close these with the yellow closure wire taking note of the flight direction indicated on the deployment handle.



Now gather the flaps 3-6 and close with the other end of the closure wire.



Pull the lower container flap upwards and slide it into the pocket beneath the deployment handle.



Then stick the top container flap through the deployment handle and secure it with the Velcro.

Warning: You must pay attention to the following points.

- When packing the emergency parachute into the container, it is important to be certain that the connection between the emergency handle and release pin is shorter than the connection between emergency handle and inner container.
- Make sure the release pin heads are pointing the same way as the handle strap, and that the heads are not threaded through the closure loop on the clover leaf container – this would render the reserve unusable
- If the container is difficult to close we recommend using a piece of paraglider line to thread the loop through all the grommets on the leaves of the container. Make sure you do not damage the loop when you pull out the line (do it slow).
- Connect the handle only to the intended Velcro patches. It is important that the bridle connecting the handle to the inner container is not under tension in normal use to avoid pulling out the pins from the closing loops.
- When using inner containers with pilot parachutes (for example the UP Profile parachute), the parachute of the container should be packed on the back side of the reserve parachute, facing away from the flight direction.
- After each packing you must do a trial release to check the regular functioning of the emergency system!

A wrongly installed reserve parachute could cause dangerous situations in case of emergency. If you have questions or doubts concerning the

use and mounting of the emergency parachutes in the UP Nanga², please contact an UP dealer or UP International directly.

Using a front container

You may also choose to have the reserve mounted in front of you.

The front container is usually fixed “permanently” to the right side of the harness, since most front mounted reserves have the bridle sticking out on the right. The left side then opens to allow getting in and out.



BEWARE: Always deploy the reserve in the same direction as the bridle is routed, i.e. normally to the right. The speed bar line must be routed between the harness and the reserve.

Deployment

When pulling the deployment handle the locking pin is pulled out and the outer container opens. The deployment handle is attached to the inner container through the connection strap and allows the pilot to forcefully throw the reserve in the desired direction, away from the main canopy.

When installing the reserve system, make sure that the deployment sequence is as described here. Any other sequence means danger!

Compatibility

The rigger is responsible for installing the parachute in such a way that the correct function of all elements is ensured.

The installation of the integrated reserve container and the installation of a reserve parachute therein should be approved by the manufacturer of the harness or reserve parachute. This to ensure that the configuration works properly and that all installations have been carried out correctly.

The rigger should always enter the details about the compatibility verification into the packing certificate of the equipment.



BEWARE! After each packing a test release should be carried out in order to guarantee the normal function of the emergency parachute. The

deployment of the emergency parachute must be feasible from each possible flight position.

Be sure to fully deploy the inner container so that you can verify that it comes out all right.

Using the reserve parachute

Only ever deploy the reserve parachute in real emergencies or under SIV supervision.

Should you need to deploy the parachute in flight, first pull off the handle from the Velcro with a firm tug. This will also open the outer container and let the reserve parachute fall free of the harness. Then you should throw the parachute forcefully away from yourself, preferably against any turning direction and to the same side as the connection bridle is attached (front container). Avoid throwing the reserve into the paraglider canopy as this will delay the opening.

Once the parachute is open the paraglider canopy must be neutralised, in order to avoid the two canopies pulling against each other, or oscillations. On most paragliders this is best achieved by b-stalling the canopy.

While descending under the reserve we recommend assuming an upright position. This is facilitated through the placement of the reserve bridle connectors, located on the shoulder straps of the UP Nanga². The actual landing should be done in PLF (Parachutal Landing Fall) position and a proper PLF executed.

Instructions of use

Ram-Air airbag

The Ram-Air airbag is an integrated part of the UP Nanga². It forms an air cushion around the seat and waist of the pilot. The highly effective double-compartment airbag has proven its worth in the testing procedure, where it reached the impressive result value of 23,6g. This makes the airbag considerably more efficient than the certification body prescribes (limit is 50g).

The airbag is designed to already partly inflate on launch so that it offers adequate protection right from the very first moments of flight. A valve keeps the air trapped inside.

The functioning of the airbag is very similar to the way a foam filled airbag works. Instead of the foam keeping the airbag inflated, the UP Nanga² uses the Ram-Air principle to keep the airbag inflated. The advantage of the system is that there is no foam to take up space in the system when it is packed away, thus minimizing the packing volume of the equipment.



BEWARE! Do not use the air-filled chambers as stowage space. This will reduce the impact-reduction effect of the airbag (see the “Pockets” section for more on this subject). When packing the harness take care that you don't bent the lateral protection plate (bending below a radius from 20 mm could brake the plate). If necessary roll the lateral protection plate to pack it.

Advise for tandem use

The UP Nanga² is not intended or certified as a tandem pilot harness, but it is very suitable as a tandem passenger harness.

Winch towing

The UP Nanga² is suitable for single-seat towing operations.

Attaching the towline release system

The optimal attachment point for the towline release is always in the systems' centre of gravity. On a paraglider that means the connection point between the risers and the harness, preferably right onto the lower end of the risers. UP International has developed special tow-release connectors for UP gliders to ensure the optimal connection between the pilot and the towline. For safety reasons we suggest that you always use these connectors when towing.

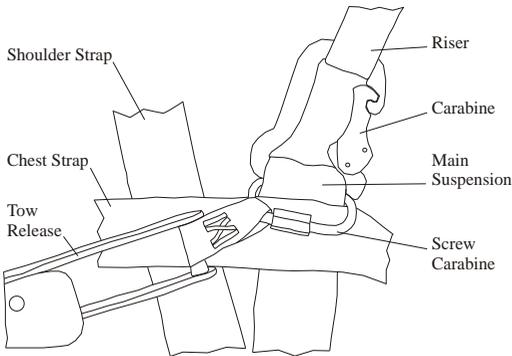
When using towline release systems incorporating distance-tubes between the risers it is important to ensure that the risers are not pulled together by the system (use webbing loops designed for climbing to increase the length of your release system). It is also very important to fit a bungee to the system that will keep it from hitting you in the face in the event of a towline failure.



BEWARE! If you are using a front-mounted reserve system it is very important to verify the unhindered deployment before every flight.

In case of doubt please only tow using a textile release system.

The following illustration shows another safe connection, using screw Karabiners, of the tow release and the main suspension.



Please pay also attention to the manufacturer's instructions regarding the mounting and usage of the tow release.



WARNING! A wrong adjustment of the tow release could cause dangerous situations in case of emergency!

Compatibility with other paragliders

The UP Nanga² harness was classified under the class of the so-called chest harnesses. The Nanga² has no restrictions and can be used with all paragliders which are certified to use chest harnesses.

Further tips

The changing of any aspect of the UP Nanga² invalidates any and all warranty claims.

SIV training and flying over water

Any water landing should be treated with great respect, as the air bag under the seat increases the risk of the pilot floating in a head-down position. For SIV's we recommend wearing a proper floatation vest with a head support holding the wearer's head above the surface even when unconscious.

Checking the harness after a hard landing

Always go over the harness carefully following a hard landing where the airbag has been in use. Look for ripped sewing, tears in the material and other defects. Any defects will reduce the impact protection capabilities of the harness. If no damage is found the impact protection will normally remain unchanged after a hard landing, but if you're in doubt we recommend always sending in the harness for a thorough check.

Salt water

If you do most of your flying near the sea, where the air is humid and salty, the harness may age faster. In this case we suggest you have it checked more often than prescribed in this manual.

Insects

Also make sure that no insects are caught inside the harness when packing it – many insects contain quite strong acids that could damage the fabric and webbings!

Transport

Avoid subjecting your UP Nanga² to extreme temperatures, for example by leaving it in a closed car boot on a hot summer day. Also protect your harness from solvents, sharp objects etc. When packing the harness away in the glider bag, make sure the buckles cannot damage the glider or helmet, and that you don't accidentally loosen the reserve deployment handle.

Storage

The UP Nanga² should be stored in a dark, dry place and out of reach of chemicals. The temperature should be between 10 and 25 degrees Celsius, and the relative humidity between 50 and 75%.

Disposal

Once the harness has reached the end of its service life it should be disposed of in an environmentally responsible manner. If you wish you may return the harness to UP and we'll happily make sure that this is taken care of.

Using the harness in an environmentally responsible manner

A few final words about the relationship between our sport and the environment we enjoy it in.

Most paragliding launches are located in environmentally sensitive areas.

This requires extra care and attention on the part of the pilots, as we want to leave the lightest possible imprint on our environment. Always endeavor to use only marked paths to takeoff, make no unnecessary noise and leave no litter behind. Don't fly over sensitive areas like nesting grounds, feeding grounds etc. and always respect the fragile natural balance in nature.

Maintenance and cleaning

Taking care of your harness

The UP Nanga² was developed for long-lasting intensive use. Only the best and most long-lived materials have been used, materials that have proven their worth over years of use in the production of quality harnesses.

However the actual service life that you will get out of your new harness depends to a high degree on the way you treat it! Always beware that the condition of your harness is closely linked to your own personal safety. Check it frequently for signs of wear and have damaged components replaced immediately by UP authorized repair facilities.

Take special care to check all structural stitching. Any damaged stitching must be repaired immediately by a UP authorized repair facility.

Furthermore you are always welcome to send your harness to UP International for checks and repairs!

To avoid unnecessary weakening of the UP Nanga² we recommend the following precautions:

- The closure loops of the reserve container should be inspected regularly. If they show proof of wear they must be replaced. Check these whenever you're installing the reserve parachute into the harness – their breaking load should be no less than 30 kgs
- If the harness is subjected to mechanical forces exceeding those than can be expected in

normal everyday use you should send it to UP for inspection and possibly repair. Examples could be if a vehicle has accidentally driven over the harness, after a tree landing or if the harness has been damaged by pointed objects. Whenever you're in doubt please don't hesitate to have the harness checked by UP, or a UP approved checking facility

- Do not expose the harness to fire or sharp objects
- Avoid unnecessary UV exposure (sunlight). UV radiation affects the molecular structure of the materials used for the rescue system and will weaken it if exposed for longer periods
- Avoid exposure to salt water or acids. Should the harness become exposed to salt water it must be rinsed with fresh water and dried in the shade, or even better in a dark, dry room
- All buckles must be clean and free of dirt and debris. If needed you may lubricate the buckles lightly with a sewing-machine lubricant
- Zippers can be lubricated occasionally with standard silicone spray

Cleaning

If you deem it necessary to clean your UP Nanga² at any time then use lots of lukewarm water and a soft sponge. More stubborn stains can be cleaned with a weak soap solution, and rinsed thoroughly. Then leave it to dry in a shady but well-ventilated area.



BEWARE! Never use chemical cleaning agents, brushes or hard sponges on the material, as these destroy the coating and affect the strength of the cloth.

The fabric will become porous and will lose structural strength. Never attempt to clean your harness in a washing machine. Even without using detergents the simple mechanical abrasion will quickly wear out the fabrics and render the harness useless. Also avoid dipping the harness in a swimming pool; the chlorine will damage the materials. If you must rinse the harness, for example following a sea water landing, do so with a gentle spray of fresh water. Frequent spraying will accelerate the ageing process.

Checks and repairs



Paragliding is a wonderful sport; flying as free as a bird in the air, enjoying the peace and tranquility. But the air is an alien environment that commands respect and a responsible attitude from the pilot. At UP we don't just put our knowledge and experience into the development of paragliders, but also into their maintenance, service and repairs to ensure that you can fly safely at all times.

Repairs or inspections must only be carried out by UP International or a UP approved repair/checking facility.

Maintenance



BEWARE! All care and maintenance must be carried out in accordance with UP recommendations. To ensure that this happens we strongly advise you to only let UP recognized service centers touch your harness – this is also a prerequisite for the UP Warranty to be valid. So there's a lot speaking for letting UP, or a UP affiliate, look after your UP Nanga²!

Airworthiness Check

The UP Nanga² is in principle a maintenance-free product not subjected to any official checking intervals. However we recommend adhering to the following rough checking guidelines:

- 2 years after purchase
- Every two years after that, or sooner if prescribed by the UP checking facility during the last check

We will happily service the glider more often, if you feel that it is necessary (instructions see page 30).

UP Craftsmanship

In order to ensure that your UP Nanga² maintains its very high inherent performance and safety we highly recommend that you employ UP, or a UP affiliate, with any repairs or maintenance. Our service staff is trained and skilled, and knows the UP products better than anyone.

Original spare parts and accessories

Your UP harness is comprised of a large number of quality components each with a long service life. If you need to replace anything on your harness we strongly recommend using only original spares – not only for your own safety but also to stay within the harness certification.

Part list Nanga 2:

- Harness
- Wooden seat board
- Reserve deployment handle
- Lateral protection plate
- 2 Reserve connection bridles
- 2 Twistlook Alu Karabiners
- Owners' manual

Product check procedure

Before the UP Nanga² leaves the manufacturing facility the entire harness goes through a comprehensive check. And again when the harness leaves UP International to be shipped to the distributor it is subjected to a product

check. This is our way of ensuring that it meets the criteria we set for our products.

UP Warranty

Conditions and extent of the UP International Warranty can be found in the following pages. For further information please ask UP International directly, or you local representative. The UP importer in your country is always delighted to clear any questions with you.

National warranty conditions

In some countries the local laws stipulate different warranty rules than those outlined here. Please note that these local rules only apply in the country where you have purchased your UP Product. Information about local rules and conditions are available from your local dealer.

International UP warranty Warranty conditions:

The international UP warranty covers material- and workmanship faults and is valid for 24 months from the delivery date.

The UP warranty covers the cost of materials and workmanship on products accepted by UP to fall under the warranty. The UP warranty does not cover damage caused by accidents, or by changes made to the product. Likewise, parts that are damaged due to normal wear and tear are exempt from warranty coverage. Fabric color changes that do not influence the behavior or safety of the wing are not covered by the warranty, and neither are faults caused by the

exposure to solvents or salt water, or plain incorrect handling of the product.

For any warranty claim to be accepted the following conditions must be adhered to:

- The product was used under normal circumstances and was maintained according to the instructions given by UP International. Note that these include instruction for the correct packing, storing and cleaning
- The product was only used in accordance with its DHV certification
- Only original UP spares have been used, and only UP, or a UP affiliate service centre, has performed repairs or service jobs on the product
- A complete, correct registration card has been filled in and sent to UP within 14 days of the purchase. Note that you may also register your product via the UP homepage www.up-paragliders.com>service>UP Product registration

UP reserves the right to refuse any claims not honoring one or several of these conditions. However, in some cases an “ex gratia” settlement may be offered.

Sending the UP Nanga² and other UP products

The best way to send your paraglider, rescue parachute, harness etc. to our service team is in a stable box via post or UPS. Enclose a note of what requires doing (2 Year Check, repair, repack etc.) and also your daytime

contact details. We will return your equipment either by post or UPS. Please indicate preferred method of payment (either bank cheque or COD). Should you require any further information about the services we offer, please contact us at the address and phone number given below. We are also able to give you information about your nearest authorized Service Centre, as well as other manufacturers who are authorized to check and repair UP gliders and equipment.

UP International GmbH
-Abteilung Service-
Kreuzeckbahnstrasse 7
D-82467 Garmisch-Partenkirchen

Email: service@up-paragliders.com
Service Phone: +49 (0) 88 21-73099-0
Fax: +49 (0) 88 21-73099-16

UP Homepage

The UP Homepage gives you information about the latest news and products from UP. You will find any technical information and accessories for your UP Product, as well as many useful things that are necessary for flying.

Beside paragliders, harnesses and flying equipment you will also find the latest flying garments and the "News" section, which will keep you updated with all activities around UP.

www.up-paragliders.com

Attachments

Certification Document UP Nanga ²	29
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Certification Document



Musterprüfbescheinigung gem. LTF 91/09

Type Certificate conf. LTF 91/09

Für Luftsportgerätekomponente Nr.:
for aerial sports equipment component No.:

EAPR-GZ-7608/12

Auftraggeber
Applicant

UP International
Kreuzeckbahnstraße 7
82462 Garmisch-Partenkirchen
Deutschland

Die nachstehend bezeichnete Luftsportgerätekomponente ist als Muster geprüft worden. Dieser Musterprüfschein ist auf Grund der betreffenden Richtlinien der Musterprüfstelle in der am Tag der Ausstellung gültigen Ausgabe erteilt.

This aerial sports equipment component has been certified in accordance with the German Certification Regulations as of today. A Type Certificate has been issued.

Die Musterprüfung gilt gemäß zugehöriger Erklärung über Bauausführung und Leistung (EBL).
The Type Certificate is only valid in conjunction with the limitations and restrictions as set forth in the Declaration of Design and Performance (DOP) submitted with the application

rev. 14.06.2012

Bezeichnung der Luftsportgerätekomponente
designation

Nanga 2

Geräteart
type of component

Gleitschirm-Gurtzeug für eine Person

Paraglider-Harness for one person

Die Musterprüfbescheinigung kann in denen von der Musterprüfstelle vorgesehenen Fällen, die in den Richtlinien zur Musterprüfung beschrieben sind, widerrufen werden.

The Type Certificate may be revoked by the issuing agency in cases listed in the German Certification Regulations

Bad Grönenbach, 14.06.2012

Datum der Ausstellung
issued on

Unterschrift
Signature

Re-examination instructions

The following points must be examined and documented during a re-examination:

Straps

Check for damage and wear as well as aging, and verify all seams on:

- Main suspension points
- Exterior chest strap
- Interior chest strap
- Lateral chest strap
- Leg straps
- Shoulder straps
- Reserve bridle and attachment

Hardware/buckles:

Check for function and ease of use, as well as dirt and corrosion:

- Exterior chest strap buckle
- T-buckle interior chest strap
- Leg strap buckles
- Kamet buckles on shoulder straps
- Kamet buckle lateral chest strap

Harness exterior

- Visual check of the material for tears, holes, seams coming undone, structural weakening of the cloth (UV damage)
- Check zippers for function
- Check the speed stirrup

Airbag

- Visual check of the envelope for airtightness (holes, tears)
- Visual check of all seams

Reserve compartment (incl. bridles etc.)

- Visual check of the reserve bridles
- Inspection of the deployment handle and pins
- Inspection of suspension points
- Checking loops for damage
- Test deployment

Service booklet

Harness and pilot data

Model:	Nanga²
Size:	<input type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> L
Serial number:	_____
Color:	_____
Date of purchase:	_____
First flight date:	_____
<div style="border: 1px solid black; padding: 10px; width: fit-content; margin: 10px auto;">Dealer stamp and signature</div>	

Pilot (1. owner)
Name: _____
Family name: _____
Street: _____
Town: _____
Postal code: _____
Country: _____
Telephone: _____
Fax: _____
Email: _____

Pilot (2. owner)

Name: _____

Family name: _____

Street: _____

Town: _____

Postal code: _____

Country: _____

Telephone: _____

Fax: _____

Email: _____

Pilot (3. owner)

Name: _____

Family name: _____

Street: _____

Town: _____

Postal code: _____

Country: _____

Telephone: _____

Fax: _____

Email: _____

Service verification stamp

Please verify that your UP Service Centre has correctly filled in the form!

1st Service

Performed date: _____

Service jobs undertaken:

Assignment Nr.
Stamp

2nd Service

Performed date: _____

Service jobs undertaken:

Assignment Nr.
Stamp

3rd Service

Performed date: _____

Service jobs undertaken:

Assignment Nr.
Stamp

Please verify that your UP Service Centre has correctly filled in the form!

4st Service

Performed date: _____

Assignment Nr.
Stamp

Service jobs undertaken:

5nd Service

Performed date: _____

Assignment Nr.
Stamp

Service jobs undertaken:

6nd Service

Performed date: _____

Assignment Nr.
Stamp

Service jobs undertaken:

Product registration card

Model: Nanga²

Size: S M L

Serial number: _____

Date of purchase: _____

First flight date: _____

Preflowed by: _____

Owner

Name: _____

Family name: _____

Address: _____

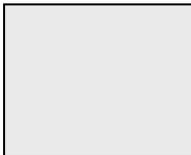
Telephone: _____

Fax: _____

Email: _____

Dealer stamp and signature

Cut out this card and mail it to **UP** within **14 days of purchase**, or register your new **UP Profile light** via www.up-paragliders.com>Service>UP>Product Registration



Ultralite Products
International GmbH
Kreuzeckbahnstrasse 7
82467 Garmisch-Partenkirchen
GERMANY



UP International GmbH

Kreuzeckbahnstrasse 7
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www.up-paragliders.com
