

# Wanilight

Edition 1 / 02.2015

#### **THANK YOU!**

We would like to thank you for having chosen one of our products, and we invite you to read this important document, the User Manual for the harness. Please pay special attention to the two most important paragraphs, regarding:

#### Insertion of the reserve parachute.

The reserve parachute is a piece of equipment that may save your life. It must be inserted so that it works correctly when it is required, whether this happens in two days time, or two years from now.

#### Adjusting the harness.

The harness forms the connection between the pilot and the paraglider, and it is an essential component in optimizing performance and the pleasure of flying. A bad harness that is well adjusted may enable you to fly well, but a good harness that is badly adjusted may put you off flying altogether.

We are confident that this harness will give you great comfort, control, performance and enjoyment in flight. We are conscious of the fact that reading an instruction manual is not an exciting experience. However, please remember that this product is not a citrus juicer or a mobile phone, and that correct use of the harness helps reduce the risk of flying accidents. This manual contains all the information necessary to assemble, adjust, fly and store your harness. Thorough knowledge of your equipment will improve your personal safety and your level of flying.

Team Woody Valley

#### **SAFETY NOTE**

By the purchase of Woody Valley equipment, you are responsible for being a certified paraglider pilot and you accept all risks inherent with paragliding activities including injury and death. Improper use or misuse of equipment greatly increases these risks. In no case shall Woody Valley or Woody Valley equipment resellers be held liable for personal or third party injuries or damages under any circumstances. If any aspect of the use of our equipment remains unclear, please contact your local reseller or Woody Valley directly.

# **INDICE**

1- GENERAL INFORMATION	1
1.1-Concept	
1.2- Protection and safety	
1.3- S.O.S. LABEL	
2- BEFORE USING	3
2.1- EMERGENCY PARACHUTE	3
2.1.1- Refolding the emergency parachute in the inner bag	
2.1.2- Connecting the reserve parachute to the harness	4
2.1.3- Inserting the reserve parachute	8
2.1.4- Suitable reserves	10
2.1.5- Extracting the reserve parachute	10
2.2- HARNESS ADJUSTMENTS	11
2.2.1- Back adjustment	13
2.2.2- Shoulderpad adjustment	14
2.2.3- Chest-strap adjustment	
3- FLYING WITH WANÌ LIGHT	16
3.1- Preflight checks	16
3.2- Pockets	17
3.3- CAMEL-BAK	19

8- TECHNICAL DATA	27
7- WARRANTY	26
6- MAINTENANCE AND REPAIR	
5.4 – QUICK-OUT SNAP-HOOKS	
5.3 – Leg - cover	
5.2 – RELAX - BAR	24
5.1-INSTALLATION AND ADJUSTMENT OF THE SPEED SYSTEM	
5- CHARACTERISTICS AND INSTALLATION OF OPTIONAL EQUIPMENT	23
4- FOLDING THE HARNESS, INSERTING THE PARAGLIDER AND USING THE RUCKSACK	21
3.9- REGULATIONS FOR BEHAVIOUR IN NATURAL ENVIRONMENTS	21
3.8- DISPOSING OF THE HARNESS	20
3.7- LANDING WITH WANI LIGHT	20
3.6- Assisted take-off hook	20
3.5- FLYING OVER WATER	20
3.4- TANDEM FLYING	20

#### 1- GENERAL INFORMATION

This equipment must contain:

- ✓ Harness
- ✓ Polypropylene seat with front flexible part
- ✓ Snap-hook
- ✓ Dedicated emergency container with attached handle
- ✓ 2 reserve elastic loops for closing the reserve parachute

The main options available are:

- ✓ Speed bar
- ✓ Relax bar
- ✓ Leg-Cover
- ✓ Quick-out Snap-hooks

# 1.1- Concept

WANÌ LIGHT is designed to be a complete quality product in the Hike & Fly category. In just 2.6 Kg we have successfully created a full body harness with high performance thanks to the use of new construction materials and systems.

The geometry of the strap system, although with less adjustments in order to keep the weight down, was inherited from its big brother Wani which proved to be a good balance between easy handling and stability.

The reversibility system is the same as the Wani, with a rucksack independent from the airbag enclosed in the rear containment pocket. This system significantly improves the user experience and the aesthetics of the two parts because each one was designed for its specific function.

Painstakingly designed in every detail, WANÌ LIGHT provides the functionality of a conventional harness contained in just 2.6 Kg.



## 1.2- Protection and safety

For weight reasons WANÌ LIGHT does not use the excellent spring system that Haska and Wanì use, but has a completely redesigned airbag system which provides greater passive safety than previous generation airbags.

Thanks to the use of Nitinol (highly resistant and non-deformable metallic wire) inserted in the lower edge of the airbag, we were able to obtain 60% of the protective capacity before complete inflation which takes place in flight. When fully inflated it is fully comparable to Wanì and Haska.

The inflation valve has also been completely redesigned to guarantee airflow in the airbag notwithstanding the position of the legs. The thin shape of the valve reduces volume variations during impact and significantly increases aesthetics.

The WANÌ LIGHT harness is available only with Get-Up straps which is the lightest forget-proof safety system for closing a harnesses.



Inspection Report	Prüfnummer b		
Article	Wani light	Weight	51,0 kg
Customer	Woody Valley	Height of Fall	1,65 cm
Testlocation - Date	18.12.2014	Protection	Airbag
Temp. C°	20,5	MPM	001, 0021, 032, 038, 053
MU K2 - 95%	1,25 %	Stand	Rev. 1.0.1 - 08.11.2013
Chart start at [g]	1,00 g	V <sub>max - m/sec</sub>	-5,36
Limit value [g]	50,0 g	Friction a <sub>rt</sub> /1g	1,90 %
Frequency	1000,00 Hz	Freefall Start at t <sub>0</sub>	2,623
rating unit (InpFile)	1,000000 g	Freefall End at t <sub>1</sub>	3,161
Offset [g]	0,000000 g	Acc-Offset	-0,0128
Measuring sensor	100 g - ME AS 28 -	flow velocity m/sec	<7,0 (Airbag-Protection only)

Results	raw	incl. MU
Maximum Acceleration g (raw data)	19,36 g	19,60 g
Intervaltime a>50g		ms
Intervaltime a <sub>&gt;38g</sub>	0,00	ms
Intervaltime a <sub>&gt;20g</sub>	0,00	ms
Freefall Time t <sub>Drop</sub>	0,538	s

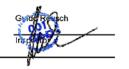


Bad Grönenbach, 18.12.2014

Location, date

EAPR GmbH

Inspektionsstelle für Gleitschirmsysteme und Motorschirme





#### 1.3- S.O.S. label

This red with white lettering label is clearly visible in a pocket on the right shoulder padding. On the back of this label, you can write information that you think should be given to rescue workers in case of accident.



## 2- BEFORE USING

## 2.1- Emergency parachute

The emergency parachute housing was designed with a maximum volume of 3.8 litres suitable for containing the most lightweight, latest generation emergency chutes.

The container is situated under the seat and the insertion system has been completely revamped, simpler and lighter. With this new system you must definitely use its specific inner bag with the deployment handle that came with the harness. No other type of inner bag and/or deployment handle can be used.

#### 2.1.1- Refolding the emergency parachute in the inner bag

WANÌ LIGHT comes with a special inner bag with a deployment handle attached. Fold the emergency parachute to fit the dimensions of the inner bag. Refold the emergency parachute cords on the side opposite the deployment handle. Close the inner bag flaps.



#### **ATTENTION:**

Ask a flight instructor or a qualified person for help refolding the emergency parachute in the inner bag.

#### 2.1.2- Connecting the reserve parachute to the harness

There are three different methods of attaching the reserve parachute bridle to the harness bridle.

#### First system:

Use a screw-lock karabiner with a breaking strength of at least 2,400 kg. In this case, the bridles should be held in position within the karabiner using elastic bands, to prevent the karabiner from rotating and taking the strain laterally instead of vertically. The karabiner's screw-lock

should be tightly screwed shut to avoid any possibility of it opening accidentally. This type of connection can absorb a higher opening shock than the second system, and for this reason this is without doubt the recommended system.



#### Second system:

The harness bridle should pass through the emergency parachute bridle loop. Next, the emergency parachute should be passed through the large loop of the harness bridle. The result is a connection that should be tightened as much as possible so as to prevent dangerous friction between the two cables during emergency opening shock. To prevent the union of the two cables from loosening over time, remember to lock the knot with the special Velcro strip, which has already been placed on the harness bridle.



#### Third system:

If you are using a reserve parachute with directional control and dual bridle, or if your reserve parachute has a double-riser bridle, it can be connected to the harness using the two loops positioned at the base of the harness bridle, near the padded shoulder straps. In this case, the harness's reserve parachute bridle will not be used, and so it should be folded, fastened using two elastic bands, and positioned under the cover behind the pilot's neck.



The two connections should be made using screw-lock karabiners with a breaking strength of at least 1,400 kg. It is important to verify that the length of the bridle is sufficient to position the reserve parachute inside the harness pocket, and that there is sufficient play to enable the parachute to be taken out of the pocket without causing the reserve parachute deployment bag itself to open during extraction.



#### **ATTENTION:**

To prevent abnormal side loads, the cable is hooked to both loops on their respective shoulder-straps. Not only to one of the two. Do not put any objects inside the bridle container.



#### 2.1.3- Inserting the reserve parachute

Insert the parachute in the harness container with the handle visible toward the outside and with the ropes facing downward.

Position the handle in its specific lodging and ensure that the Velcro sewn on the handle attaches to the Velcro on the harness.

Introduce a thin rope (paragliding line or plastic strimmer cord type) into each elastic loop which you will use to help close the container. Introduce the elastic loops into the smallest of the eyelets under the handle.

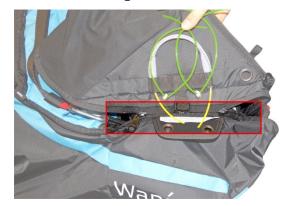




Take the bridle cover zip and the second zip that closes the other end of the container to their start point under the emergency parachute handle. Close the zip on both sides about 20 cm.

Close the external part of the container as shown in the photo, taking care during this phase that none of the zips open. Insert the two plastic yellow pins into the elastic loops and then under the cover arranged between the two.







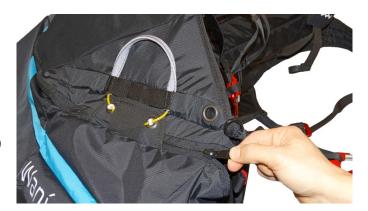
After having closed all container parts, it is advisable to check that the two zips under the opening system have been closed correctly.

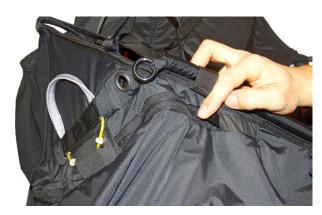
The cord must be removed at the end of this phase, and must be extracted slowly in order to avoid damaging the elastic loops due to excessive friction between the parts.

Finally, ensure the two zips are completely closed, with the tab of each zip inserted under the cover at the end of each zip.











#### **ATTENTION:**

Each new combination of reserve parachute and harness that is assembled for the first time must be inspected by an official reseller of the harness or the reserve chute or a flight instructor to verify that it can be effectively deployed. Checks should be carried out by hanging in a flight simulator. Deployment of the emergency chute must be possible from the normal flying position.

The paraglider harness and the emergency parachute opening system are not suitable for use in free fall and in strong shocks. Its bearing structure has been designed, tested and certified to withstand emergency parachute opening shock in accordance with the standard requirements for paragliding.

This does not mean that the other parts of the harness will not become damaged due to emergency parachute opening shock. This is true whether it occurs due to actual need in the event of an accident or if it occurs voluntarily, for example during a safety course.

#### 2.1.4- Suitable reserves

The emergency parachute volume is a maximum of 3.8 litres for all three sizes.

#### 2.1.5- Extracting the reserve parachute

It is vital to feel periodically for the position of the reserve parachute deployment handle during normal flight, so that the action of reaching for the reserve parachute handle becomes instinctive in an emergency.

In emergency situations, the deployment procedure is as follows:

Look for the reserve parachute handle and grasp it firmly with one hand. Pull the handle outwards in order to extract the reserve parachute from the harness container. Look for a clear area, and, in a continuous motion, throw the reserve parachute away from yourself and the paraglider. On landing, adopt an upright body position, and ensure that you perform a PLF (Parachute Landing Fall) to minimize the risk of injury.

## 2.2- Harness adjustments

WANÌ LIGHT offers the possibility of adjusting the back inclination, the chest width and the shoulder height in order to guarantee optimum position for the pilot. A little time has to be invested in finding the optimum position, but this effort will be rewarded by exceptional comfort in flight.

WANì LIGHT is supplied already adjusted to a standard ergonomic setting, apart from adjustments required for pilot height. Therefore, for the first flight we recommend adjusting the harness for height alone, leaving the other settings unchanged, because they have proved to be satisfactory for the vast majority of pilots. If you wish to change the other settings, remember that you can always return to the factory settings by making reference to the red marks on all adjustment straps.



Before making any adjustments, the emergency parachute must be inserted.

To adjust the harness to the optimum position, we recommend simulating flight position by hanging the harness from a suitable fixed point, with all the items that you normally carry in flight inserted into the back pocket.



Back position adjustment Paragraph 2.2.1

Shoulderpad adjustment Paragraph 2.2.2

Chest-strap adjustment Paragraph 2.2.3

# 2.2.1- Back adjustment

This adjustment allows you to select the inclination of the torso with respect to the vertical flight axis.







#### 2.2.2- Shoulderpad adjustment

Shoulder-strap adjustment enables the harness to be adjusted to the pilot's height. The adjustment buckle is situated low down, near the rear edge of the seat. The shoulder-straps also support part of the torso weight to improve comfort. After you have determined the correct position for the seat and back, adjust the shoulder straps so that they are in contact with your shoulders, neither too loose nor too tight.





#### 2.2.3- Chest-strap adjustment

The chest strap which controls the distance between the two karabiners can be adjusted from 41 to 53 cm. For the first flight with WANì LIGHT, we suggest setting the chest strap to the minimum length, then locating the preferred length in flight by means of gradual adjustment. When the chest strap is shorter and tighter, stability is greater. An excessive distance between karabiners does not improve

glider performance, and tightening the chest strap excessively may exacerbate the "twist" effect that may follow an asymmetric collapse of the sail.

There is also a small elastic clip at the extremity of the padded shoulder-straps. This prevents the shoulders from slipping out of the straps during the launch run. The plastic clip also includes a useful whistle that can be used in emergency situations.





#### **ATTENTION:**

Every adjustment must be made symmetrically on both sides.



## 3- FLYING WITH WAN' LIGHT

## 3.1- Preflight checks

For maximum safety, use a complete and consistent system of pre-flight checks and repeat the same mental sequence every flight.

Check that:

- > the reserve parachute handle is fastened in its correct position, and the pins are firmly inserted.
- > pockets and zips are closed;
- > all buckles are fastened;
- > the paraglider is connected correctly to the harness, and that both karabiners are locked closed by means of their locking system;
- > the speed bar is attached correctly to the glider.

### 3.2- Pockets

In flight configuration, WANÌ LIGHT has a spacious rear pocket, in which a backpack for transport can be stowed. You can place clothing and a camel-bak in the remaining space. On the sides of the harness there are two elastic mesh pockets with safety loops where you can secure your items.



**Woody** Valley 17 In the rucksack configuration you will find an elastic Lycra pocket on the right hand side which is useful for carrying telescopic poles, that stay in place thanks to the elastic strap on the upper part. On the left hand side there is a convenient bottle holder that can be reached even with the rucksack on your shoulders.

On the top part of the rucksack there is a very useful and versatile elastic rope where you can secure clothing or other items externally.



#### 3.3- Camel-bak

WANÌ LIGHT is designed for camel-bak or similar water hydration system installation both in backpack and in harness configuration. Before take-off, position the camel-bak in its special compartment inside the rear pocket. Pass the hose through the plastic hole which is already set at the top of the harness and run it under the two elastic straps of the left shoulder-pad as shown in the photo. During transport, leave the camel-bak inside the backpack and have the hose exit from the special hole set in between the shoulder-pads.







## 3.4- Tandem flying

The WANì LIGHT can be used for a tandem passenger.

## 3.5- Flying over water

There are no specific problems connected to flying above water using a WANì LIGHT harness, but in any case, landing in water is always dangerous.

Woody Valley recommends using a suitable lifejacket when flying above water.

## 3.6- Assisted take-off hook

WANì LIGHT harness can be used for towed launches. The tow bridle release should be hooked directly to the main karabiners, ensuring that the karabiners are positioned with the opening bar facing the rear. For further details, refer to the documentation provided with your tow release, or ask a qualified towing instructor at your flying site.

## 3.7- Landing with WANì LIGHT

Before landing, slide your legs out and off the seat surface, so that you take up a standing position. Never land in the seated position; it is very dangerous for your back even if you have foam dorsal protection, which provides exclusively passive protection.

Standing up before landing is an active safety precaution, and it is much more effective than passive forms of protection.

# 3.8- Disposing of the harness

The materials used in a paragliding harness require correct disposal. Please give your harness back to us instead of throwing it away, we'll take care of its correct disposal.

## 3.9- Regulations for behaviour in natural environments

Please respect the nature and landscapes that surround us when practising sport. Do not leave marked trails, do not dispose of waste, do not make loud noises and please respect the delicate balance that exists in the mountains.

## 4- FOLDING THE HARNESS, INSERTING THE PARAGLIDER AND USING THE RUCKSACK

To change from harness to backpack configuration, completely open the back pocket and enlarge the backpack inside. Turn the entire structure upside down and fold the seat against the harness back, leaving the whole set of belts and buckles inside the sandwich that is created between the back and seat. Put the previously folded paraglider above the harness airbag.





Place the paraglider above the rear pocket and, finally, close the backpack. For easier zipper closing, crush the backpack so as to remove remaining air inside the paraglider and the airbag.



You will have enough space in the top part to stow a helmet, instruments and some clothing accessories.

When preparing for flight, perform operations in reverse order and, finally, fold the part of the backpack in the rear harness pocket.

# 5- CHARACTERISTICS AND INSTALLATION OF OPTIONAL EQUIPMENT

## 5.1- Installation and adjustment of the speed system

After having adjusted the sitting position to the optimum configuration, the accelerator must be adjusted. This harness is compatible with all normal types of speed-system accelerators.

The elastic in front of the board that retains the speed-bar keeps the handle of your reserve parachute from becoming tangled in the event it is deployed. The speed bar cords should be passed first through the rings fixed to the elastic in front of the board, then in the harness through the eyelets near the front corners of the seat, then through the pulleys located near the rear corners of the seat. To adjust the system correctly, the pilot has to adopt a flying position in the harness, suspended from a flight simulator, and hook into the risers of the paraglider. Another person then helps by supporting the risers, so the pilot can adjust the length of the speed-system cords. When no pressure is exerted on the speed bar, the bar must be at a distance no greater than 10 cm below the front of the harness. If the speed-bar cord is too short, it could cause a constant force on the bar during flight, so that the accelerator is unintentionally engaged at all times in flight. It is safest to take off with the speed-bar a little too long, progressively shortening it during the next flights.

To retain the speed-bar during the take-off run use the straps located in front of the seat that close with magnets. This system also allows you to use the speed-bar straps with adjustment of the central ropes.

Remember that all adjustments have to be performed symmetrically, on both sides.



#### 5.2 – Relax - bar

A relax-bar can be fitted to all our harnesses, except for those already incorporating this accessory. The relax-bar is used to keep the legs stretched out and the feet resting on a support. Some pilots consider this flying position more comfortable than the classic seated position with legs hanging.

To attach the relax bar to the harness, follow the instructions provided in the relax-bar instruction manual.

## 5.3 – Leg - cover

Leg Cover is a product that has been developed uniquely by Woody Valley in order to ensure unequalled comfort. The special cover in waterproof, vapour-permeable fabric ensures protection from the cold and provides an improved aerodynamic profile. To fit the leg cover to the harness, follow the instructions provided in the Leg Cover instruction manual.

## 5.4 – Quick-out snap-hooks

WAN) LIGHT provides the possibility of using "quick-out" snap-hooks. For correct installation see the use booklet provided with the snap-hooks themselves.



#### 6- MAINTENANCE AND REPAIR

Check the harness after every impact, bad landing or launch, or in the case that there are signs of damage or excessive wear.

We recommend having your harness checked by your retailer every two years, and replacing the main karabiners every two years.

To prevent unnecessary wear and deterioration of the harness, it is important to avoid scraping it against the ground, rocks or abrasive surfaces. Do not expose the harness unnecessarily to UV radiation (sunlight) outside normal flying activities. Wherever possible, protect the harness from humidity and heat.

Store all your paragliding equipment in a cool, dry place, and never put it away while damp or wet.

Keep your harness as clean as possible by regularly cleaning off dirt with a plastic bristle brush and/or a damp cloth. If the harness gets exceptionally dirty, wash it with water and a mild soap. Allow the harness to dry naturally in a well-ventilated area away from direct sunlight.

If your reserve parachute ever gets wet (e.g. in a water landing) you must remove it from the harness, dry it and repack it before putting it

back in the container.

Repairs and replacement of harness components cannot be performed by the user, but exclusively by the manufacturer or staff authorized by the manufacturer. The manufacturer and authorized service staff alone can use materials and techniques ensuring correct product functionality and its complete conformity to product certification.

The harness can be washed using a tepid solution of water and mild soap.

Zip fasteners should be kept clean and lubricated with silicone spray.

In the case of making any request to an official retailer or Woody Valley for maintenance operations, please quote the complete identification number shown on the silver label in the rear pocket.

In order to create a high-performance, lightweight harness, the materials used are of excellent quality, but have a lower weight per square meter with respect to standard harnesses. Therefore, pilots should take the utmost care when using and packing the WANì LIGHT harness.

Correct use will extend harness life.

We hope that you enjoy great flights and happy landings with WANì LIGHT!

#### 7- WARRANTY

The warranty period, which is 2 years as provided for by law, commits us to correct any construction defects on our products that are attributable to manufacturing defects.

We advise you to validate the warranty period by filling out the form available on our website in the "Support" section within 10 days from the date of purchase. Enter the ID code of the harness shown on the silver label positioned in the rear pocket.

To initiate a warranty claim, promptly inform WOODY VALLEY of the discovery of the alleged manufacturing defect by sending the harness ID code and a detailed description of the detected problem.

To restore the defective product, you will need to send it to WOODY VALLEY or parties authorised by them.

WOODY VALLEY reserves the right to decide the best method for restoring the harness (repair, replacement of parts or of the product).

The warranty does not cover damage caused by careless or incorrect use of the product (for example inadequate maintenance, unsuitable storage, overloading, exposure to extreme temperatures, etc.). The same holds true for damage attributable to accidents, emergency parachute opening shock or normal wear.

## **8- TECHNICAL DATA**

Distance between karabiner and seat	Size M cm 43; L cm 45; XL cm 47
Distance between karabiners (min - max)	Size M cm 39,5–49,5; L cm 41-53; XL cm 41-56
Size of polypropylene seat, size M	Width rear 33 cm; Width front 30; depth 34 cm
Size of polypropylene seat, size L	Width rear 35 cm; Width front 32; depth 36,5 cm
Size of polypropylene seat, size XL	Width rear 37 cm; Width front 34; depth 39 cm
Total weight, complete with reserve parachute handle, karabiners and protection	M = 2,5 Kg; L = 2,6 Kg; XL = 2,9 Kg
Type of protection	Airbag
Type of straps	Get-Up
Reserve parachute housing	Built-in container under the seat, with lateral handle
Limit of use	120 daN

Every effort has been made to ensure that the information contained in this manual is correct, but please remember that it has been produced for guidance only. This owner's manual is subject to change without prior notice. Please check at www.woodyvalley.com for the latest information regarding the WANì LIGHT harness.

Latest update: FEBRUARY 2015