



ADVANCE BIPRO<sup>3</sup>



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# Thank you for flying ADVANCE

Congratulations on your choice of a BIPRO 3 – a quality product from ADVANCE. We hope that you will spend many rewarding hours in the air with it.

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

Register your BIPRO 3 online on [www.advance.ch/warranty](http://www.advance.ch/warranty); you will then receive product updates or safety-related bulletins about the BIPRO 3 direct from us. This information will also be available to download from our website at [www.advance.ch](http://www.advance.ch), as will the latest version of this manual and further updated information.

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

Now we wish you a lot of enjoyment with your BIPRO 3, and always «happy landings».

Team ADVANCE

# About ADVANCE

ADVANCE, based in Switzerland, is one of the world's leading paraglider manufacturers. Since it was founded in 1988, the company has consistently pursued its own directions and concepts, both in development and production. The results are quality products with distinctive characteristics.

Behind the ADVANCE brand name is a team of specialists who share the passion and trust in the company's products. At home in the air themselves, they contribute their valuable personal experience and dedication to the working processes.

Total control of the production process and supervision of the working practices at the ADVANCE factory in Vietnam ensure a high standard of workmanship. Long term relationships with fabric and line manufacturers means that ADVANCE knowledge and expertise also finds its way directly into the development of new materials.

ADVANCE attaches great importance to after-sales customer support, and has built up a worldwide service network for this purpose. An on-going interaction with its customers brings in a steady flow of new knowledge that finds its way into ADVANCE products, thus completing the «Circle of Service».

# BIPRO 3 – Daily Ease

## **Thought out – to the smallest detail**

The BIPRO 3 is our vision of the perfect tandem harness. This starts with weight. Including the EN/LTF certified foam protector the BIPRO 3 weighs only 2.6 kg for the M size. Padded V-Legpads provide a comfortable sitting and leg position behind the passenger. Good, adjustable support under the seat further enhances pilot comfort. For quick, straightforward, minimum size packing, the harness has the innovative Easy Fold feature, a hinge function behind the protector.

## **Outstanding Features**

### **Light and Compact**

Light weight and small packed volume makes the BIPRO 3 specially attractive for daily professional tandem use. The 500 gm protector can be removed. For packing, the protector can be pushed forward and the back section folded over. This makes the folded BIPRO 3 very compact.

### **Comfortable**

The possibility to adjust the seating angle and good support under the seat makes the BIPRO 3 very comfortable in flight. Comfort begins on the ground. This tandem harness is simple to adjust and quickly put on. The two Edelrid Triple Lock buckles of the Get-Up System fasten with a clear “Klack” sound.

### **Equipped for everyday use**

This harness was specifically planned to be robust enough for everyday repetitive use. BIPRO 3 details, like the extremely reliable back pocket zip, were especially taken in mind. The orange inner surface of this compartment makes it easy to see what’s inside, and the seams inside resist fallout.

### **Optional, weight-optimised tandem spreaders**

Three spreader versions - Hard Hybrid, Soft and Soft Trim – are designed to go perfectly with the BIPRO 3. A notable feature of all three is the cleanly running covered reserve connection line permanently fixed to the spreader. This saves an extra reserve carabiner, and also the check of it before takeoff.

## Features at a glance

### Side view

- 1 Velcro (e.g. for holding a mini vario)
- 2 Reserve connection channel with zip
- 3 Tube-pocket for tidy reserve connection line stowage
- 4 Back stowage with inside document pocket
- 5 Outer container with Labyrinth closure
- 6 Easy Fold Feature for simple folding and packing
- 7 Side pocket with zip (right), open side pocket (left)



### Front view

- 8 Removable Selfie-Stick holder with Neoprene scabbard (right or left)
- 9 Blue loop to secure the Selfie-Stick
- 10 Popular Get-Up closure system with effective Edelrid Triple Lock buckles
- 11 Comfortable V-Legpads
- 12 Comfortable seat geometry thanks to 3D development
- 13 Mini chest strap
- 14 Robust 10 mm YKK zip fastener





# Safety information

Like all commercially available reserve parachutes, paraglider harnesses are never suitable for free fall parachuting because their design and construction details do not allow such a thing. Neither the reserve parachute nor its attachments to the harness can withstand the loadings involved in an abrupt opening.

All harness adjustments should be made before the harness is flown. Correct adjustment of the BIPRO 3 greatly contributes to safety, correct function and comfort in flight.

No protector can offer complete protection against injury. The BIPRO 3 foam protector dampens impacts and minimises injury that might be caused by a crash from a low height, or problem takeoffs or landings.

When carrying out safety training over water, thought should be given to the fact that the air in a foam protector makes it float, and turn the pilot head down. Then there's the risk that foam parts will eventually fill with water and sink, with the pilot.

BIPRO 3 certification is restricted exclusively to paraglider sport.

## **General recommendations about paragliding**

Taking part in paragliding sport requires appropriate training and a comprehensive knowledge of the equipment, as well as the necessary insurance and licences. A pilot must be able to correctly assess the weather conditions at the chosen site before taking off. His abilities must be sufficient for the demands of the selected paraglider.

The wearing of an adequate helmet, suitable footwear and clothing, and the carriage of a reserve parachute are all essential. Before every flight all items of equipment must be checked for damage and airworthiness. A pre-takeoff check must always be carried out.

While engaged in paragliding every pilot bears sole responsibility for all risks, including those resulting in injury and death. Neither the manufacturer nor the seller of a paraglider can guarantee the safety of a pilot, or be held responsible for it

# Preparing the product

## Delivery

Before delivery every ADVANCE product has to be checked by the dealer for delivery package contents and correct initial settings. A completed warranty form makes sure that deficiencies of the product, attributable to the manufacturer, are covered by the ADVANCE warranty (see under “Warranty” in the section “Service”).

We ask you to complete this form on the ADVANCE website under “Warranty”, within 10 days of purchase.

## Delivery package

The delivery package contains:

- BIPRO 3
- EN/LTF certified multi-chamber foam protector (LTF 91/09)
- Reserve handle with attached four flap inner container
- Removable Selfie-Stick holder
- Getting started booklet

## Available as Options

- Three spreader versions to go perfectly with the BIPRO 3: Hard Hybrid (with removable carbon rod), Soft, and Soft Trim. All include the quicklink (Maillon Rapide 5 mm) that must be used to connect the spreaders to the BIPRO 3.
- Reserve connection kit for use with other spreaders
- FASTPACK BI fast packing pack
- Actual COMFORTPACK, 130 I, 145 I

## Closing the harness

The BIPRO 3 has the well-known ADVANCE Get-Up closure system, now for the first time featuring two Edelrid Triple-Lock buckles. This very effective buckle replaces the previous problematic Click-Lock buckles. They close under load. Three deliberate consecutive actions are necessary (hence triple lock) to open it. This makes an unintended opening impossible. ADVANCE is the first manufacturer to include the Edelrid Triple-Lock buckles in its harnesses.

To close the buckle, put the open end **1**, at a 90 degree angle, over the hook with the yellow safety catch **2**. Then pull the harness ends outwards. A clear “Klack” sound shows that the buckle is securely closed.

To open, press the yellow knob **3**, push the open buckle end towards the knob, tip it through 90 degrees and lift it free.

In addition, you can close the mini chest strap by its clip buckle. It has no supporting function, but can prevent loose shoulder straps from slipping off the shoulders,



## Adjusting the harness

The BIPRO 3 is very easy to set up. Put the harness on, close the Getup System and hang the BIPRO 3 in a harness stand.

**!** **Caution:** Always check correct clip in for the Edelrid Triple Lock buckles.

**i** **Tip:** The passenger harness can have a significant effect on the pilot's sitting position. We recommend that adjustment is made with a passenger harness available and both harnesses hung up with spreaders.

The shoulder, side and seat angle buckles have neoprene covers. The adjustment straps can be set to any position, so that the sitting attitude can be set quickly and easily in flight.

The development team have defined standard basic settings, and these are indicated on the shoulder and back straps by a grey mark. The basic setting for the seat angle is fully opened straps. Pictures in this manual show the various adjustment possibilities.

ADVANCE recommends that you become fully familiar with these adjustments before the first flight with the harness. In addition, this flight should always be made in quiet weather conditions.





**Info:** Info: To achieve satisfactory settings the back compartment should be packed with the things you will take when flying. For a realistic flying position the reserve should also be installed.

### 1 Upper body recline angle

Upper body angle is varied using the back straps. **1** Pull them in until you are sitting reasonably upright and feel comfortable. These straps lie relatively high at the sides, and this not only gives good back support but also takes unnecessary pressure from the shoulders.

Fully pulled in back straps result in an upright position. Completely released back straps allow for an almost lying down situation. ADVANCE recommends the basic setting.

### 2 Shoulder strap adjustment

The BIPRO 3 shoulder straps **2** are set according to pilot height and chosen position. The Neoprene-covered adjusters are at hip level, and can be set at any position. Pull the straps in until they lie comfortably on the shoulders to provide light support, but do not put any pressure on the shoulders.

### 3 Seat angle setting

The BIPRO 3 seat angle can be altered using the buckles at the sides. **3** This additional seat support contributes to a high level of comfort during flight. These straps should be adjusted symmetrically.

## Back stowage

The BIPRO 3 back pocket is lined with bright, orange-red material which provides best visibility inside. The seams on the sides prevent the contents from falling out, even if the compartment were not to be completely closed.

An additional inner pocket has room for documents and the leash can be used to secure valuables. The 10 mm YKK-zip fastener is exceptionally robust, and intended for long service.

First put the packsack in the bottom of back compartment, and then the other things that you do not need during flight on top. Close with the substantial 10 mm YKK zip fastener. If you need extra storage volume you can take out the protector (see below) and use this space for packing.

## Selfie-Stick Holder

The BIPRO 3 has a useful, broadly adjustable Selfie-Stick **1** holder with Neoprene scabbard **2**. Two velcros on the harness mean that it can be fastened on left or right side. It is premounted on the left side.

To move it to the other side, first release the Bullet Toggle **6** on the bottom of the scabbard from the BIPRO 3. Similarly the two Velcro pieces that fix Selfie-Stick holder to the back strap and main harness strap.

Finally lead the single Velcro on the right hand side of the BIPRO 3 through its loop on the back strap **4** and fasten it to the Selfie-Stick holder. Then the small sewn-on Velcro strips on the main strap are fixed on the main strap under the carabiner loops **5**, and the Neoprene scabbard Bullet Toggle fastened below on the BIPRO 3.

Your Selfie-Stick or camera can be secured by a line to the blue safety loop **3**.



## Removing and replacing the protector

The BIPRO 3 is delivered with its Multi-Chamber Foam Protector fitted in the seat assembly, under the V-Legpads. The protector goes in its own pocket and can be removed and replaced (for instance for Hike & Fly – to save weight and/or provide 17.5 ltrs extra storage).

To remove, open the protector compartment zip, under the front of the seat, and pull the protector carefully out. To replace, push the protector, closed side first, back into its compartment and close the zip.

## Packing the harness

The Easy Fold feature **1** is an obvious folding line next to the protector, and this makes the BIPRO 3 easy to fold and compact when packed.

Step 1: Lay all straps and paddings inside.

Step 2: Fold the back section over on to the Legpads and push these in front for a more compact result. Then stow the harness in the packsack.



## Fitting the optional Spreaders

Three optional spreader versions are available to go with the BIPRO 3: Hard Trim, Soft and Soft Trim. Hard Trim and Soft Trim versions can be used with Quickout paraglider carabiners.

**!** **Caution:** The two Maillon Rapide 5 mm carabiners (650 kg load capacity and /3.250 kg breaking strain) are exclusively for use for connecting spreaders to the BIPRO 3 harness!

### Hard Hybrid Spreaders (295 g\*)

The Hard Hybrid spreaders have a central main paraglider support point **1** and a supplied Maillon Rapide 5 mm quicklink (incl. Neoprene cover **4**) to be used for connecting the pilot's end **3**. One end of each reserve connection line is permanently connected at the spreader main support point **2**. The other end **5** goes on the outside of the carabiner through the magnet-closed loop on the Neoprene cover **4** to the BIPRO 3 shoulder straps, then into the tube pocket, **6** and finally connects to the reserve.

**i** **Info:** The Hard Hybrid Spreader can be easily converted to Soft by simply removing the carbon bracing rod **7**.

\* incl. connection line, BIPRO 3 quicklink and Neoprene cover





### Soft Spreaders (175 g\*)

Soft-Spreaders have three different main support points for the tandem glider. **1**

The supplied Maillon Rapide quicklinks (incl. Neoprene covers **4**) are each used to connect a pilot's spreader end **3** to the BIPRO 3. Reserve connection lines are fixed to a spreader below the main attachment point **2**. The other ends of the connection lines **5** go on the outside of the carabiner through the magnet-closed loop on the Neoprene covers **4** to the BIPRO 3 shoulder straps and the excess length neatly stowed in the Tube-Pockets there **6**. The ends then connect to the reserve.

**!** **Caution:** When fitting the paraglider carabiners make sure that the numbers for the hangpoints are on top. The reserve connection lines must run along the underside of the spreaders. If this is not the case you have the spreaders upside down.

\* incl. reserve connection line, Maillon Rapide and Neoprene cover



### Soft Trim Spreaders (237 g\*)

The Soft Trim spreaders have a single support point for the tandem glider **1**. The pilot's height position can be adjusted during flight by means of trimmers **2**, to compensate for the passenger's weight and meet the pilot's requirements.

The carabiner-replacement quicklinks (incl. Neoprene covers **5**) supplied with the spreaders go through the pilot's loops **3** and connect to the BIPRO 3 main supports. One end of each reserve connection is fixed to the spreader main support point **4**. The other end **6** runs on the outside of the carabiner through the magnet-closed loop on the Neoprene covers **5** to the BIPRO 3 shoulder strap, and excess length is stowed in the Tube-Pocket there **7**. The remaining end attaches to the reserve.



\* incl. reserve connection line, Maillon Rapide and Neoprene cover

## BIPRO 3 use with other spreaders

The harness can be used with other spreaders, and an optional reserve connection kit is available. The kit consists of two reserve connection lines, two 5 mm Maillon Rapide quicklinks and two Neoprene covers for the quicklinks.

Fasten the quicklinks and their Neoprene covers to the spreaders' pilot support loops, and connect to the harness. Connect one end of the reserve connection lines to the reserve hangpoints on your spreaders, and the other to your reserve..


**!** **Caution:** Only the two supplied Maillon Rapide 5 mm carabiners (650 kg load capacity and 3.250 kg breaking strain) quicklinks may be used to connect spreaders to the BIPRO 3t!



## Installing the reserve

### General advice


The reserve compartment is in the BIPRO 3 lower back region.


 **Caution:** Installing the reserve must be done by a suitably skilled person. Your safety depends on it!


Bear in mind that every reserve/harness combination has its own peculiarities. To ensure a reliable function it is essential that pilot and packer are familiar with the system before the reserve is installed. We strongly recommend that the reserve is installed by a qualified person or your ADVANCE dealer.

### Suitable reserves/reserve compartment volume

Older type, relatively bulky reserves, are more difficult to deploy from modern and more compact harnesses, especially under high g loadings. Certified reserve volume limits for the BI PRO are 5 to 9 litres.

 **Info:** For a general approximation of a reserve volume, its weight in kilos x 2.7 gives a volume in litres. But, depending on packing style and skill, it can still be that a reserve that conforms to the maximum certified volume for a container, using the weight formula above, cannot be released without problem.

 **Caution:** When installation is complete only a test release/compatibility check can confirm that the actual reserve/BIPRO 3 combination will work.

 **Caution:** A reserve parachute volume can expand by up to 30 % when it has been newly folded. ADVANCE therefore strongly recommend that a new compatibility test is carried out after every repack.

### Steerable Reserves

The BIPRO 3 is not suitable for steerable reserves.

### **In general**

The reserve handle and the four-flap inner container are fixed together and this combination is designed so that the pull of the handle acts equally over the whole width of the inner container. This minimises the risk of the container jamming in the reserve compartment, or the reserve lines getting caught up. The reserve handle together with the four-flap inner container are essential parts of the harness, and this arrangement conforms to the latest LTF certification requirements. Only the original reserve handle with its four-flap inner container is allowed to be used.

### **Packing the reserve in the inner container**

Always fold your reserve to the shape and dimensions of the inner container supplied with the BIPRO 3. At the final packing stage put the line bundles opposite the reserve handle. When the lines have been stored in the inner container there should be 90 cm of reserve line remaining outside, between the inner container and bridle/steerable risers.



Close the container flap in the order indicated (1-3). Secure the final container flap (3) with a 5 to 6 cm line loop (ca. 3 finger widths). Now check the tension of the bungee loop and adjust if necessary. --> lift the package by the lines - the weight of the reserve should release the line loop.



### **Closing the inner container**

Now close the outer container flap (red border) with two similar line loops (5 to 6 cm). These two line loops are secured in the two attached rubber bands through their eyelets on the outer flap.



### Connecting the reserve to the harness

Connect both spreader reserve connection lines to your reserve bridle with a quicklink of 2400 daN minimum working load (Pic. 1). These two lines must be stabilised at the maillon, for example by using a rubber O ring, to prevent the webbings slipping round and cross-loading the maillon during a reserve deployment.

Connecting these looped ends by looping them through each other is only permissible if it is done by the manufacturer, or someone trained and authorised by him. If this were not to be done correctly there is a risk that the loops will slide on each other when the reserve opens, causing heating, melting and failure of the connection.

 **Caution:** Don't use sticky tape instead of an O ring for locating the loops on the maillon.



### Putting the inner container in the reserve compartment

First lay the harness V-connection in the compartement, then put the inner container on top. It is essential that the inner container closure flaps face the bottom (when in flight) of the harness. Follow the directions indicated on the inner container and the inside of the reserve compartement. The silver points must lie one on the other. The reserve handle connection must not be twisted.

**!** **Caution:** If a repacked reserve does not fit the shape of the inner container it must be refolded to the correct shape.





### Closing the reserve container

The outer container flaps are closed by loops and cable. Outer container design supplies the necessary tensions and pressures on the closure loops and cable.

First thread two short packing assist lines through the left hand outer container flap white closure loops. Then thread the right hand pack line through the metal eyelet of the right hand outer container flap and close it. The right hand flap goes between the tongues of the left flap (Labyrinth closure). The Labyrinth closes itself with a small magnet.

Now carefully run the right hand zip glider from right to left to its start, then close it from left to right, finally stowing it in its «zipper garage».

Next the left hand zip, which closes the V-connection channel, is opened and closed as follows. Carefully run the zipper all the way from top to bottom, to the end of the left side of the outer container. This is the actual start of the zip. Then pull the zip slider up again and close the channel. The slider must be pulled all the way up to the end of the track, and finally stowed in its own «zipper garage». Finally close the Velcro cover. This Velcro also safeguards the zip fastener.

**!** **Caution:** Make sure that both zip sliders are stowed in their garages, and regularly check these correct positions. This is essential to guarantee a trouble-free reserve release.



## Stowing the reserve handle

Fold the top container flap (with the Neoprene pocket for the handle) down. Then push the reserve handle into the open side of this pocket, leading the two yellow cables out through the slots at the bottom. Run the packing lines through the metal eyelets at either side of the flap, pull the white closure loops through and secure them with the yellow cables. Then stow the ends of the cables in their «buttonholes».

Remove the packing lines carefully. Lead an end under its yellow cable, then pull it out slowly so as to avoid friction damage.

**!** **Caution:** To guarantee a correct release always make sure that the yellow cables run freely.

**i** **Info:** The zip fasteners will always open easily and reliably when required – even after long intervals between openings.

**!** **Caution:** Never connect the reserve directly to the inner container!

## Compatibility check

Correct installation of a reserve must always be tested by a test release. To do this sit in the harness, straps fastened with packed back pocket, hanging by its carabiners from a harness hanger. Then pull the reserve out by its handle. It is not sufficient to pull the reserve out



when not sitting in the harness as for flight. The release procedure must take place in the flying position, without hindrance, and in accordance with the requirements of this manual. The force required to release the reserve must not be less than 4 daN and not more than 7 daN. If in doubt you should contact a qualified person or your ADVANCE dealer.

The correct throwing technique has to be used – a pull to the side. Anything else can make deployment more difficult.

The following factors can make successful reserve opening more difficult, or prevent it – especially if any apply together:

- Reserve too big – too much volume for the compartment or inner container.
- Reserve not folded to the shape of the inner container.
- Incorrect throwing technique. A pull to the side is required (Caution: don't pull the reserve handle straight upwards).
- The reserve volume was suitable for the harness when first fitted in the new harness, but after a repack it is too big.
- Pilot arm length is a factor: short pilots with short arms can sometimes not pull out the reserve.
- Deployment under high g (more than 3g, for example in a spiral dive).



**Info:** A successful compatibility test can reinforce the tester's confidence in the reserve system.



**Caution:** Before every flight check that the reserve handle is in its correct position, and that the yellow cables are correctly sited.



**Tip:** We recommend a brief check of the reserve handle during every flight. This helps to memorise its position. We also advise you to mentally rehearse the sideways pulling and throwing action.

# Use in practice

## Flying in general

The BIPRO 3 is flown in an upright attitude which gives the pilot the best view.

This tandem harness has many trump cards to play. When it has been correctly adjusted, relevant information from the wing is transmitted directly to the pilot seat. Pilot weight is evenly distributed from thigh to shoulder blade. This avoids uncomfortable pressure points; ideal blood circulation is maintained throughout the upper body, and mental focus will be sustained even during long flights.

## Ground handling

Light weight and the ability to stand upright without restriction make the BIPRO 3 well suited to ground handling.

## Pre-takeoff preparation and Check

Do the following Takeoff Check before every takeoff:

- 1 Harness and Helmet (Pilot and Passenger) buckled up, Reserve connection lines and Reserve OK?
- 2 Lines free?
- 3 Canopy open?
- 4 Wind direction and strength assessed?

- 5 Airspace and field of view clear?

## Solo flying

The BIPRO 3 design makes it suitable for solo flying.

## Winching

ADVANCE harnesses are suitable for winch launching. For tandem flying the tow link must be attached to the passenger harness. If in doubt, you should consult the winch driver or someone authorised by the manufacturer.

## Acro

The BIPRO 3 is certified as a tandem harness for up to 120 kg, and as such is suitable for tandem acro flying.

## **Other brand paraglider models**

The harness can be flown with any paraglider. There is no restriction. When using other spreaders attention should be paid to the correct routing of the connection lines.

## **Landing in water**

When there is the possibility of a water landing (e.g. during SIV training) take note that – like any harness with foam protector – the protector will try to float. This means that the pilot will be turned face and head down in the water. Wearing a lifejacket is essential for safety training.

When carrying out a SIV water landing it is recommended that the harness is unbuckled while in the water, and the BIPRO 3 taken off before its occupant gets in the boat. A water-logged harness is very heavy and it can be very difficult to bring a pilot aboard with the harness.

The protector could be removed before this training, to reduce the floating effect.

For a water landing outside the SIV environment, and without a lifejacket, buckles must be opened immediately if drowning is to be avoided.


## **Care and maintenance after landing in water**

After contact with water all the BIPRO 3 protectors should be taken out. Then harness, protectors and reserve inner container should be carefully laid out in the shade outside to dry, or, even better, the empty harness itself could be hung up by its carabiners and gently wafted to and fro. The reserve should be removed and dried separately. It must then be repacked and reinstalled in the BIPRO 3.

# Maintenance, repairs and care

## Maintenance in general

The BIPRO 3 was designed for high loading and extreme demands. The requirements for the choice of materials were accordingly set especially high. But the life of the harness depends, to a great extent, on the way it's looked after by its users, and we recommend that the harness is routinely inspected for signs of wear, damaged seams and webbing, and that damaged parts are replaced. It is especially important to note that any suspected damage should be immediately taken to an authorised workshop for repair.

 **Caution:** Do not modify your harness, and never fly with a harness that has any kind of damage to its webbing.

It is recommended that the harness is completely checked at least once a year: this must include the condition of the seams and webbing parts, and the operation of the buckles. Don't forget the regular airing and repacking of your reserve parachute. If your reserve has been thrown in an emergency your harness should also be checked by the manufacturer or an authorised service centre.

Ultraviolet light, temperatures below -20°C and above +60°C, humidity, salt water, aggressive cleaning agents, unsuitable storage as well as physical abuse (dragging over the ground) speed up the ageing process.

The life of your harness can be greatly extended if you observe the following points:

- Allow a wet or damp harness to dry completely at room temperature, or outside in the shade. Always repack your reserve.
- If your harness gets wet with sea water rinse it thoroughly in fresh water. Always repack your reserve.
- Only clean your harness with fresh water, and a little neutral soap if necessary. Never use solvents.
- Check the harness connection and reserve bridle after every reserve deployment.
- A qualified person must check the harness after any very high loading (e.g. heavy crash).
- Regularly inspect the harness for damaged seams and webbing. In particular check the harness/reserve connection and the seams near the main carabiners.
- Don't subject the harness to extremes of temperature and make sure it gets adequate ventilation, to prevent condensation forming.
- Do not leave the harness in the sun (UV radiation) before and after flying.

Most reserve parachute manufacturers recommend an inspection and repacking every six months, so as to guarantee a fast and routine opening every time. If the reserve gets wet, damp or overheated it must definitely be repacked. We strongly recommend that you let a qualified person pack your reserve. In addition, ADVANCE also strongly recommend that you regularly check the front container to see that the yellow cables run through their loops properly. Then you can be sure they will easily release the reserve when required.

## **Check**

The complete set of equipment has to have a check at an official ADVANCE checking organisation after every 24 months. At a check all components are evaluated according to strict guidelines and with great care. Finally the overall condition of the paraglider is assessed and recorded on the test record.

You can find more information about the check in this manual in section «Service», or on [www.advance.ch](http://www.advance.ch).

## **Repairs**

As a general rule you should not attempt to repair a harness yourself. The various seams are made with great precision, and, for this reason, only the manufacturer or an authorised service centre may make repairs using original materials.

## **Disposal**

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

# Technical Data

## Data

### BIPRO 3

		<b>M</b>	<b>L</b>
Pilot height	cm	155–185	175–202
Harness weight	kg	2.05	2.2
Protector weight	g	522	522
Reserve container weight	g	25	25
Selfie-Stick holder weight	g	130	130
Back pocket volume	l	26	34
Main support height	cm	40	42
Certification		EN 1651 / LTF 91/09, 120 kg	



## Material description

<b>Description</b>	<b>Name &amp; Dimension</b>	<b>Manufacturer</b>	<b>Breaking load</b>
Leg strap	80005 - 25 mm - Polyester	Güth & Wolf	800 kg
Back strap	62694 - 15 mm - Polyamid	Techni Sangle	1'320 kg
Shoulder strap	62694 - 15 mm - Polyamid	Techni Sangle	1'320 kg
Two buckle closure system	Triple Lock Schnallen	Edelrid	1'800 kg
Cloth seat	Nylon Oxford 210D, PU3	Seunghee	
Cloth back	Nylon Ripstop Oxford 210D, PU3 Stripes: Nylon Robic 100D, PU2	Seunghee	
V-line emergency	D-Pro 5mm - Dyneema	Liros	2'600 kg
Hard Hybrid Spreader	59036 - 25mm - Polyester	Güth & Wolf	2'000 kg
Soft Spreader (inkl. Trim)	363180 - 25mm - Polyester	Techni Sangle	1'400 kg

# Service

## ADVANCE Service Centres

ADVANCE operates two company-owned Service Centres that carry out checks and repairs of all types. The workshops based in Switzerland and France are official maintenance operations, certified by the German Hanggliding and Paragliding Federation (DHV), which has many years' experience and in-depth product-specific expertise. The ADVANCE worldwide service network includes other authorised service centres which provide the same services. All service facilities use original ADVANCE materials exclusively. You can find all the information about checks and repairs, and the relevant addresses at [www.advance.ch](http://www.advance.ch).

## The ADVANCE website

At [www.advance.ch](http://www.advance.ch) you will find detailed information about ADVANCE and its products, as well as useful addresses which you can contact if you have any questions.

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

- complete the warranty card online up to 10 days after purchasing the glider, enabling you to enjoy the full benefits of the ADVANCE warranty.

- find out about new safety-related knowledge and advice concerning ADVANCE products
- download an application form in PDF format which you can use when sending your glider in for a check at ADVANCE.
- find an answer to a burning question among the FAQs (Frequently Asked Questions)
- subscribe to the ADVANCE Newsletter so that you will be regularly informed by e-mail about news and products.

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

## Warranty

In order to enjoy the full benefits of the ADVANCE warranty, you are requested to complete the relevant form on the website in the «Warranty» section within 10 days of purchase.

As part of the ADVANCE warranty, we undertake to rectify any defects in our products that are attributable to manufacturing faults. In order for a warranty claim to be made, ADVANCE must be notified immediately on discovery of a defect, and the defective product sent in for inspection. The manufacturer will then decide how a possible manufacturing fault is to be rectified (repair, replacement of parts or

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



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