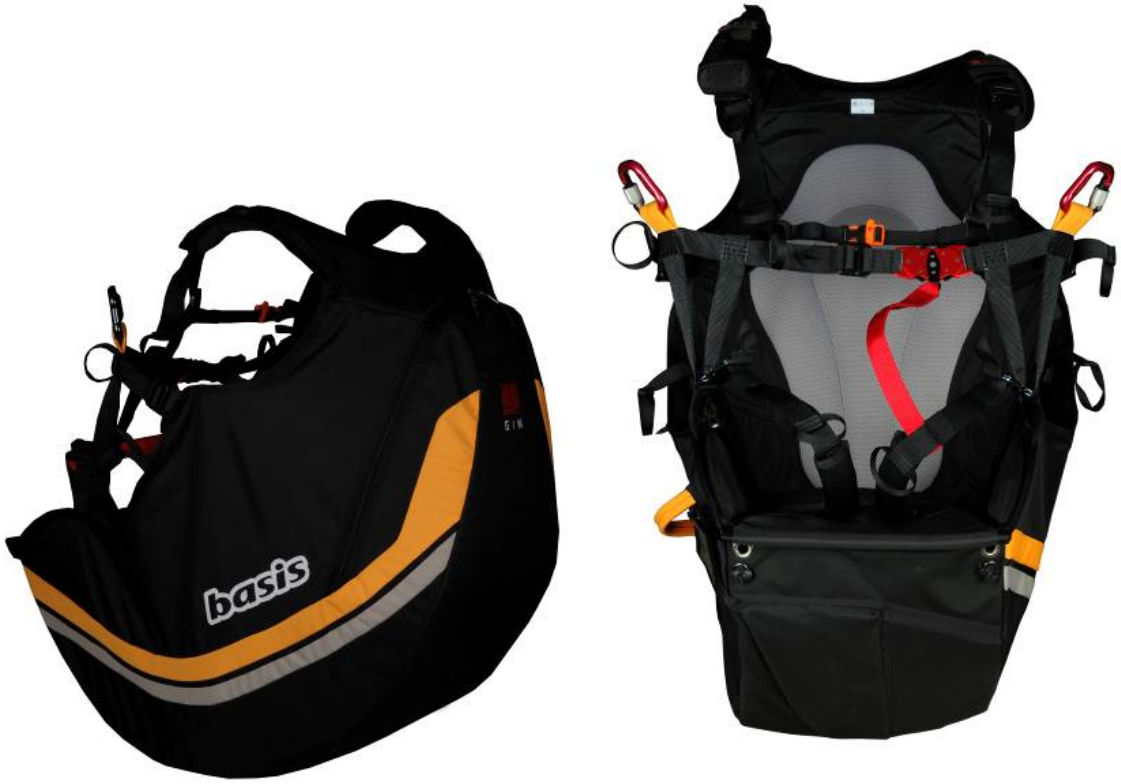
Basis, Basis RC Owner's Manual



Please read this manual before flying with the Basis or Basis RC for the first time.

Thank You…

Thank you for choosing the Basis or Basis RC harness. We are confident that this harness will provide you with enhanced comfort, control, performance and fun in flight. This manual contains all the information you need to set up, trim, fly and maintain your harness. A thorough knowledge of your equipment will keep you safe and enable you to maximize the full potential of your harness.

Please pass on this manual to the new owner if you do resell your harness.

Happy Flights and Safe Landings,

The GIN Team

Safety Notice

By the purchase of our 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 GIN equipment greatly increases these risks. Neither Gin Gliders Inc nor the seller of GIN equipment shall 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 GIN reseller or importer in your country.

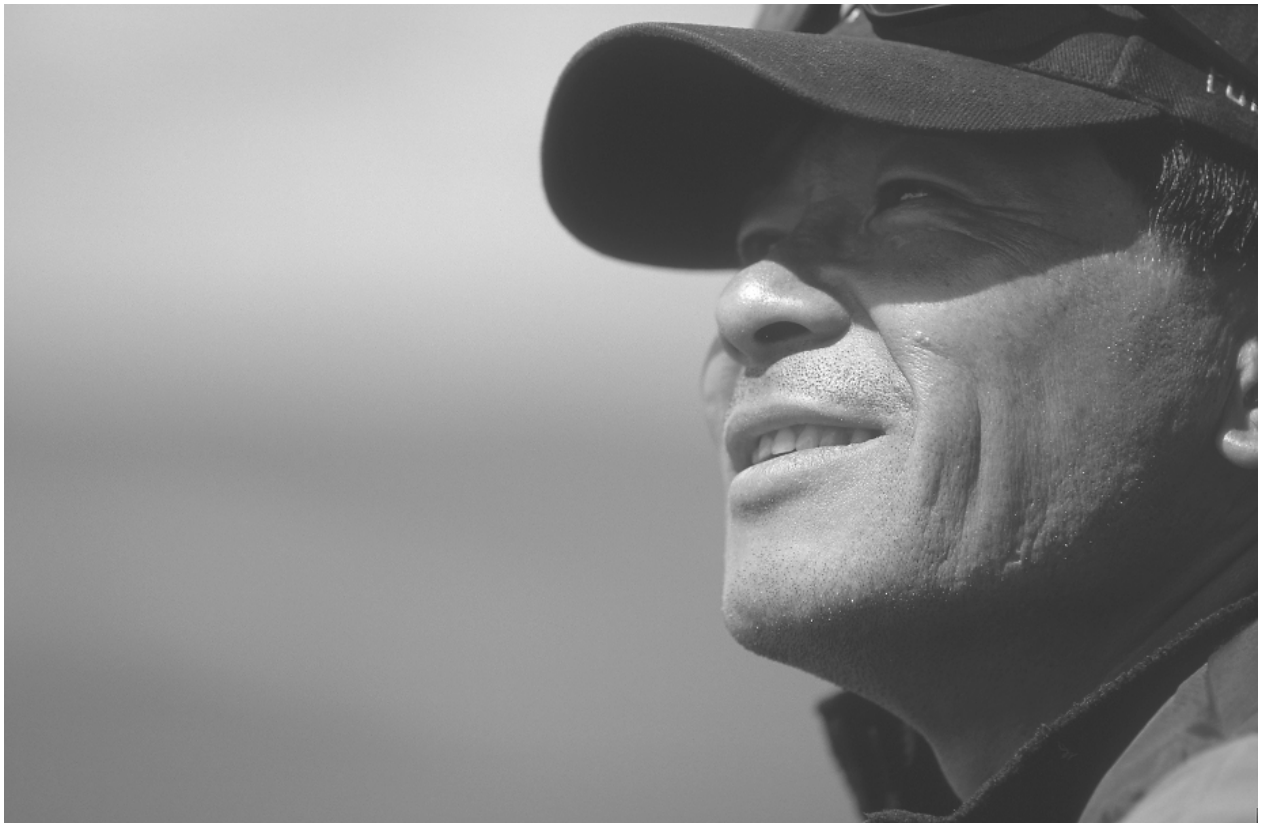
Contents

1. Gin Gliders

Gin Gliders was formed in 1998 by paraglider designer and competition pilot Gin Seok Song and his team of engineers and test pilots.

Gin's philosophy is simple: to design paragliding equipment that he and any other pilot love to fly. This philosophy applies equally for a harness such as the Basis and Basis RC, as for the world-beating competition glider, the Boomerang. No product is released to the market without Gin's complete satisfaction. Gin Gliders produce a complete range of accessories and can provide you with many useful items for flying which are all manufactured in Gin Gliders' own production facility to guarantee highest quality standards.

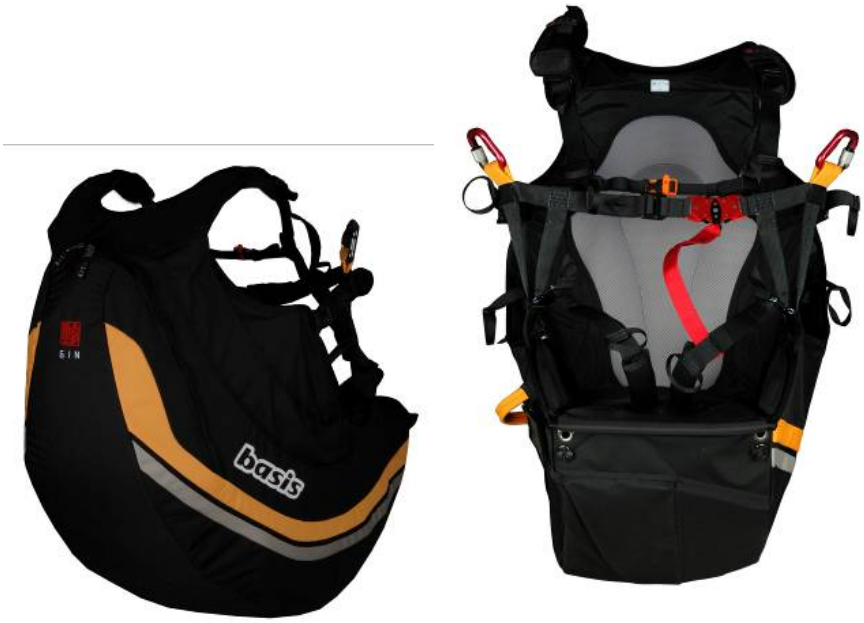
Gin has over 20 years' experience of designing and manufacturing paragliders and is backed up by an equally experienced team, both within the company in Korea and throughout a worldwide network of distributors and dealers. The "GIN Team" has won the Paragliding World Cup overall several times and has had countless other competition successes in World Cups, World and National Championships. This high level of expertise provided by dedicated professionals ensures that you get the best possible product support and after sales service.



2. Introducing the Basis and Basis RC

The Basis is available in 2 versions, the Basis (without reserve container) and the Basis RC (with integrated under-seat reserve container).

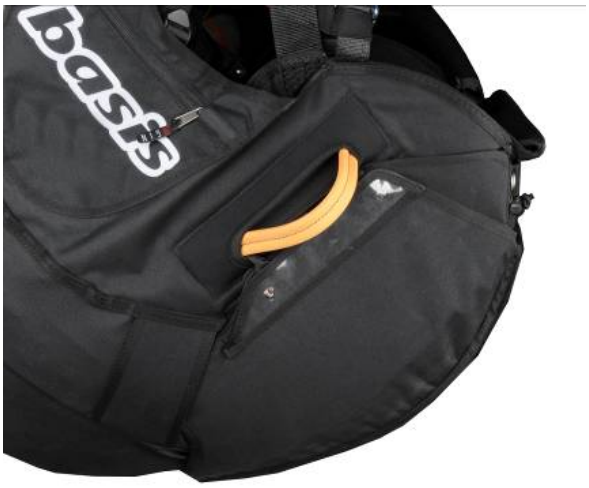
The Basis and Basis RC were developed by the R&D team of Gin Gliders to meet the highest standards of the most demanding pilots - the Basis/Basis RC harness is one of the harnesses used by GIN test pilots during the development of new paragliders. The Basis and Basis RC are suitable for a wide range of pilots, from the beginner who is learning, to the experienced cross country pilot.



The Basis and Basis RC can be flown with all types of paraglider unless the manufacturer of your paraglider requires a specific harness to be used with his paraglider. Please refer to the manual of your paraglider to find out if this might be the case. The Basis and Basis RC are compact, sleek and easy harnesses, designed for maximum comfort and ease of use. The elegant design focuses on simplicity, eliminating the need for complicated adjustments.

The overall geometry of the harness enables the pilot to feel the feedback from the glider sensitively, whilst retaining a secure feeling in flight. This increases the precision of turns while thermalling and aids active flying. On long flights, the comfort of the Basis and Basis RC are second to none.

Leg and chest straps are integrated into the “T-bar system” to prevent the pilot from falling out of the harness if he forgets to fasten the leg straps.



The safety has also been improved by optimising the position of the back protection; the rear pocket has been moved upwards, offering protection for the pilot in case he accidentally falls on his back.

The under-seat rescue container of the Basis RC is designed to enable a fast and easy deployment of the parachute with a large opening container. This under-seat position is ideal; the weight of the rescue is close to the centre of gravity and therefore provides you with the most balanced comfort and feels in flight.

The new elastic speed bar retainer prevents the bridle of your rescue becoming entangled in case of a rescue deployment.

Features of the Basis and/or Basis RC:

- Rescue attachment bridle
- Carabiners
- Lateral straps
- Optional back protection
- Large dorsal storage pocket and small side pockets(RC)
- Detachable radio case

The Basis and Basis RC will be presented for EN & LTF certification, and are available in sizes S, M and L.

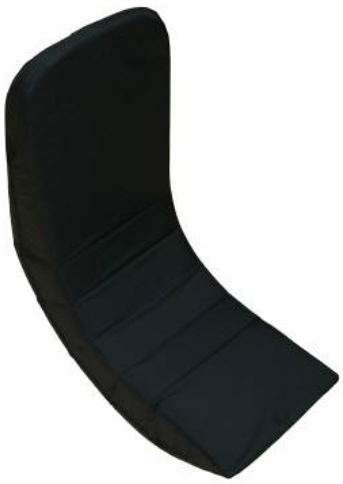
Weight: 3.7 Kg (Basis M size without back protection).

Weight of back protection GINSOFT III: 0,9 Kg. (LTF Certification will be with the GINSOFT III).

Back protection

The Basis and Basis RC can be equipped with the optional new GINSOFT III soft back protector with 17 cm thickness. A hard foam layer to protect the GINSOFT III against punctures is integrated into the Basis and Basis RC harnesses. The back protector is divided into separate compartments, to prevent air being dissipated too rapidly in the event of a hard impact.

The GINSOFT III is designed to help protect the pilot in case of an impact and to reduce the energy of the impact as much as possible, but it cannot completely eliminate the risk of injury. The GINSOFT III is freely compatible, which means that it can be used with any harness with a container large enough for the back protection.



Lateral protection

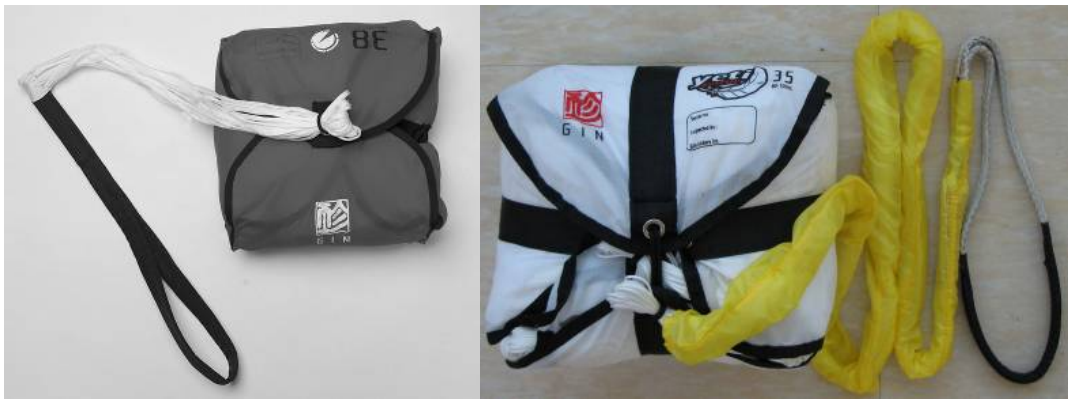
You can add lateral protection to the Basis RC, as well as back protection, by fitting a pair of Gin side impact plates.

Optional Extras

The following items are available as optional extras.

Rescue parachute

The Basis and Basis RC are designed for use with GIN rescue parachutes, like the ONE G and Yeti rescue (the Basis requires a suitable external reserve container to be added). Other manufacturers' rescue systems may also be used. Every first installation of a rescue system into the harness (that means every new combination of harness and rescue system) must be checked by a qualified paragliding professional. This is called a "compatibility check". In this compatibility check the pilot himself, who will be flying with this harness, must always sit in the harness hanging from a simulator and deploy the rescue from the harness container. This check must also be done each time after the rescue has been repacked and re-installed.



Speed bar

The Basis and Basis RC are compatible with all common types of speed system. We recommend the GIN aluminium speed bar.

Flight Deck

The Basis and Basis RC may be fitted with a flight deck, allowing easier viewing of instruments and/or carrying of ballast.

Other Accessories

For up-to-date information on additional accessories, visit www.gingliders.com or contact your local GIN dealer or the distributor in your country.

3. Before you fly

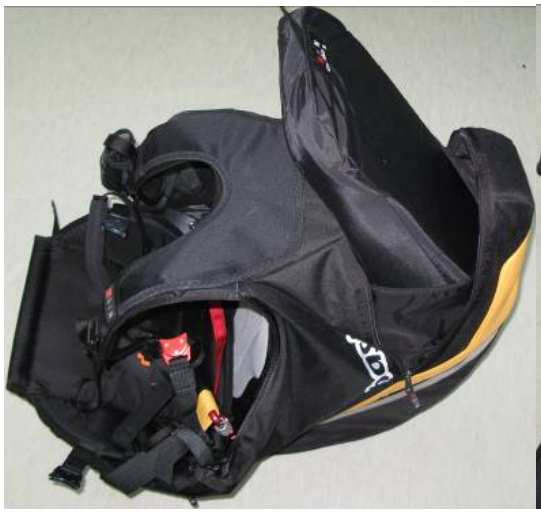
The Basis and Basis RC must be assembled by a suitably qualified paragliding professional, for example your instructor. In particular great care and attention must be paid to the fitting of the rescue parachute into the harness. The pilot should then adjust the harness for comfort.

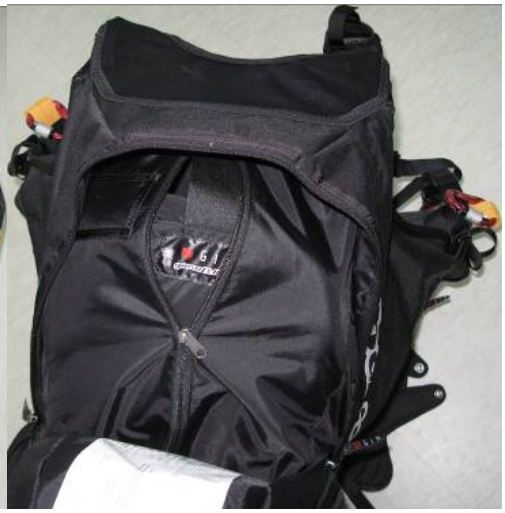
Assembly

Gin Gliders recommend that assembly be carried out in the order below. If there is any doubt whatsoever about this procedure, please seek professional advice from your instructor, GIN dealer or importer.

Back and Lateral Protection

When you receive the GINSOFT III it may be folded in two. Please let it lay open for several hours before you install it in the harness. To install it, open the zipper in the back pocket and slide the GINSOFT III back protection inside. It needs to slide into the space underneath the seat plate and behind the back support. Do not put it underneath the cross straps in the back of the harness. Attach the Velcro tape found inside the Basis or Basis RC to the back of the GINSOFT III so that the back protection cannot move. The protection should be not compressed in normal use and should not hamper the space of the rescue or move out of its correct position.





You can add lateral protection to the Basis RC by fitting a pair of GIN side impact plates into the side pockets on the harness, either side of the back protection.

Speed system

The speed system is assembled from top to bottom. Pass the cord of the speed bar down through the two pulleys on each side of the seat plate and route it out through the eyelet under

the front corner of the seat. **Attach the elastic cord to the speed bar to prevent tangling in case of a parachute deployment.**

Rescue Installation

The Basis (when combined with a suitable outer reserve container, like the GIN Reserve outer container or the GIN Yeti outer reserve container) and the Basis RC are compatible with any GIN rescue parachute such as ONE G and Yeti rescue. Other manufacturer's rescues may be also be used, but as already mentioned earlier in this manual:

Every first installation of any rescue system into the harness (that means every new combination of harness and rescue system) must be checked by a qualified paragliding professional for compatibility and to make sure that it functions correctly. Prior to the installation, you should also ensure that you have the necessary materials to complete the procedure, for example, suitable maillons and thread.

Rescue parachutes should be repacked at least every 150 days; so installing your rescue in a new harness may also provide a good opportunity for a repack. Check your rescue manual for further details.

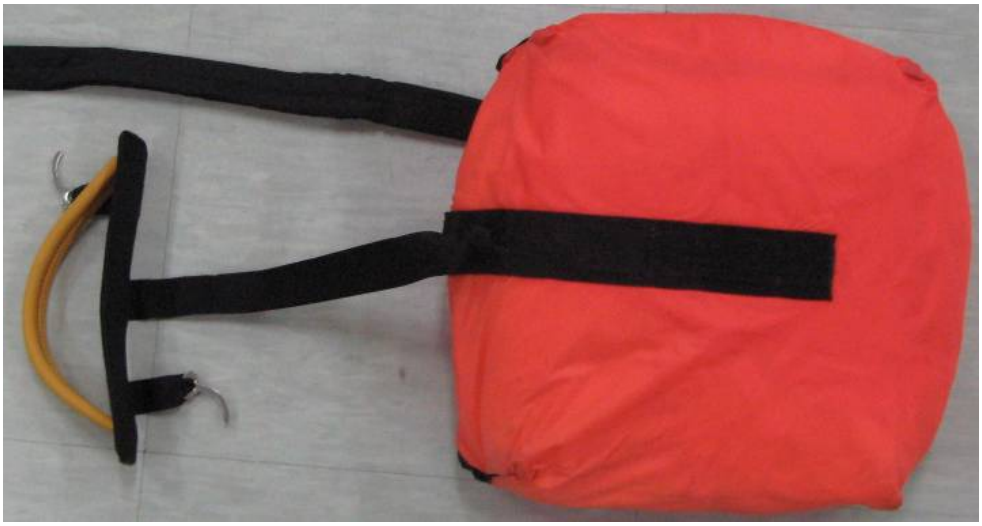
To attach the rescue bridle to the harness webbing

A Mailion Rapide type connector is recommended. The breaking strength of the connector should be rated at least 9 times the maximum weight, for example, a 6mm stainless connector – 2730 Kg.

The Maillon should be held in place with a GIN neoprene reserve maillon cover, rubber bands, tape or plastic heat shrink tube may also be suitable. Webbing to webbing connections are not recommended, due to the danger melting, or of getting the knot the wrong way round, which significantly weakens the connection and is also difficult to disconnect the rescue parachute if you land in the trees or other inaccessible situation.

Attaching rescue deployment bag to the harness deployment handle

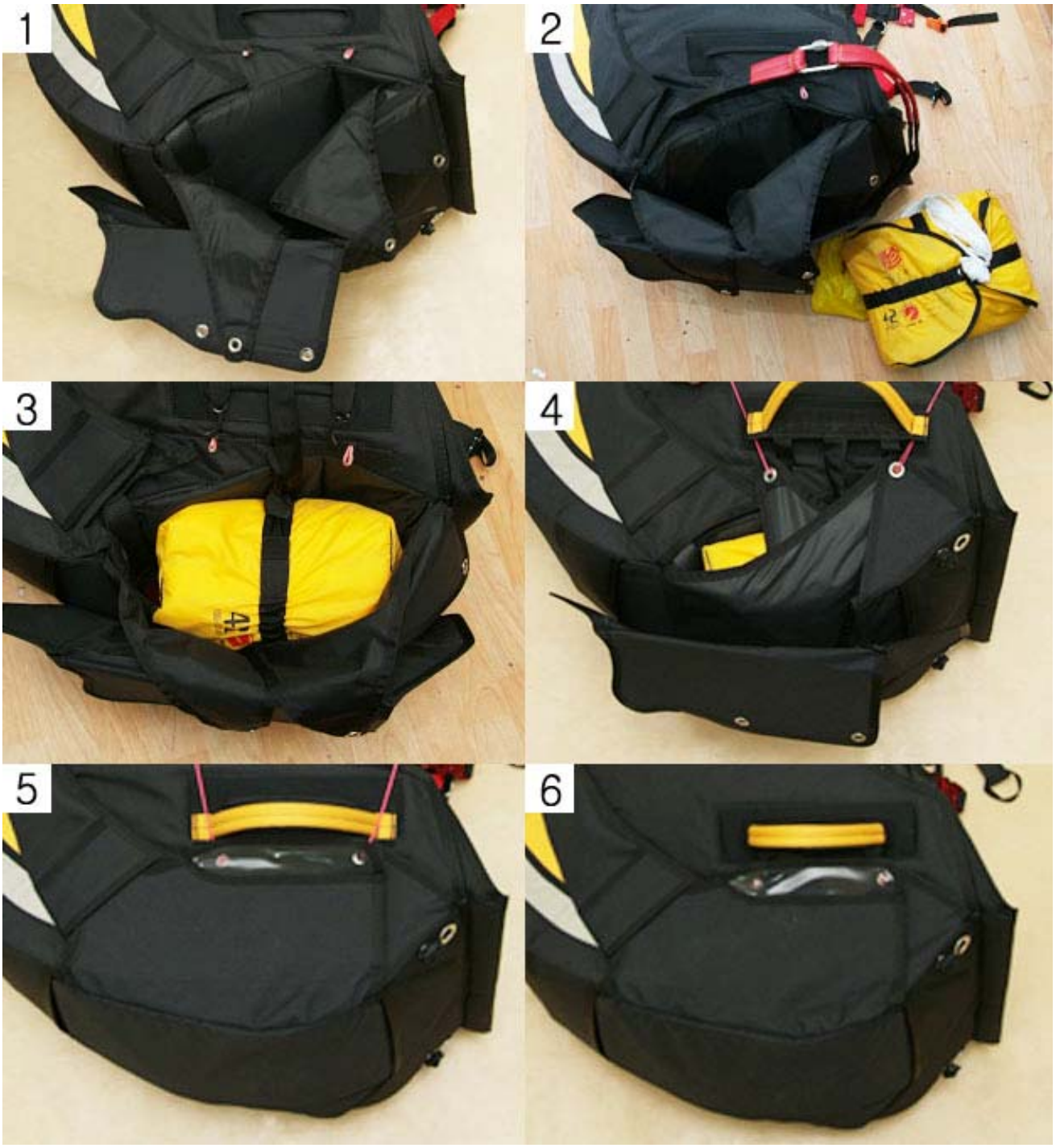
The rescue container of the Basis RC comes with its own deployment handle. This handle and its strap must be connected to the deployment bag of the parachute. Connect it with the loop at the side of the deployment bag when installing it into the Basis RC. If your parachute's deployment bag does not have the proper loop, please contact your parachute dealer or a qualified professional to attach the deployment handle by sewing or to add a new loop in the correct position on the deployment bag.



In any case a qualified professional must check the compatibility of the system; harness and rescue parachute, when a rescue parachute is installed for the first time. After every repack of the rescue parachute you can do this compatibility check yourself. Please observe carefully how the professional installs the rescue system, so that you can remember the procedure when you have to do it yourself the next time. This compatibility check - that means to test if the rescue can be released from the rescue container in the harness - must be done by the pilot himself, sitting in the harness hanging from a simulator. It must be done after every repack of the rescue parachute to be sure that the rescue can be released without problems in case of an emergency.

Rescue installation guide

Take special care: The deployment handle must be attached to the side loop on the deployment bag, not to the centre loop. The position of loop should be on entire side of rescue container and upward (close to seat plate).



Adjustments

The Basis and Basis RC should be adjusted to suit your physique and flying style. It is important to adjust it correctly to ensure you can easily slide into the sitting position after take off.

Adjustments should ideally be tested by hanging in a simulator prior to the first flight. Additional fine-tuning can be done during your first few flights.

Ensure that the rescue system, back and side protection have been installed before making adjustments.

Shoulder straps

The optimum setting for the shoulder straps depends on the height of the pilot. Stand upright with the chest/leg straps closed and symmetrically adjust the shoulder straps until they are just tight. During flight, these straps should be a little slack. You will find the adjustable buckles either side of the seat.

Lateral straps

The lateral straps adjust the angle between the thighs and the back. This angle can be set between 100° and 120°. Lengthening the straps increases the angle and vice-versa. The easiest way to adjust them correctly is during a flight in calm air. Remember that flying in the "supine position" that means leaning back, reduces the stability of the harness and increases the risk of twisting after an asymmetric deflation.

Leg straps

The correct adjustment of the leg straps allows the pilot to easily reach the sitting position after take-off without using his hands. In the standing position, use the buckles under the chest strap to adjust the leg straps so that they fit comfortably without being tight; make sure you do it symmetrically. If it is necessary to lengthen the leg straps, first check that the shoulder straps are not too tight. It is not normally necessary to make large adjustments from the default leg strap setting.

Chest strap

The adjustment of the chest strap controls the distance between the carabiners and affects the handling and stability of the glider. Widening the distance between the carabiners increases feedback from the wing and allows for easier weight shifting. Closing the strap gives you a more stable feeling in turbulence but increases the risk of stable spiral and also the risk of twisting!

We advise pilots of GIN paragliders to fly with a distance between the carabiners of approximately 44 to 48 cm.

The chest strap may also be adjusted in flight according to the conditions; for example, it may be tightened in turbulent air and flown at a looser setting in weak conditions.

Seat Straps

The seat straps adjust the depth of the seat. This depth can be set to be comfortable depending on your seating position. Lengthening the straps helps you to slide easily to the back of the seat and shortening the straps helps you to be in the standing position for the landing. In the sitting position, lengthen the straps to the maximum at first and use the plastic buckles to shorten the strap to find a comfortable position where the harness supports your back properly.

Speed bar

Hanging in the simulator, adjust the length of the speed bar cord so that the bar hangs at least 15cm below the front of the harness. Making the cord too short could result in the speed system being constantly and unintentionally engaged during flight. It is safer to start with the speed bar a little long and shorten it following your first flights. Test the speed bar in flight only after you are comfortable with your new harness, and always do so in calm conditions with ample clearance above the ground.

4. Flying with the Basis, Basis RC

Pre-flight checks

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

Check that:

There is no visible damage to the harness or carabiners that could affect its airworthiness.
The rescue parachute container is closed correctly and the pins are in the right position.
The deployment handle is completely inserted into the elastic pockets.
All buckles, belts, zips are securely fastened. Buckles should click into place as you close them, and a gentle pull on the fastened buckle verifies this. Secure any zips *after* fastening the buckles. Take extra care in snowy or sandy environments.
The paraglider is connected correctly to the harness and both carabiners are secured by their locking mechanisms.
The speed bar is attached correctly to the glider.
All pockets are closed properly and any loose items are tied down safely.
Check again that you have closed your leg and chest straps before you take off!

Rescue Deployment

It is vital to periodically feel the position of the rescue handle in normal flight, so that the action of reaching for the rescue handle is instinctive in an emergency.

In the event of an emergency, the pilot must quickly evaluate his or her height and the seriousness of the incident. Deploying the rescue when the glider is recoverable may increase the danger of injury. If you have sufficient height and the glider is in a flat spin, it is preferable to first try to stop the spin (e.g. full stall), due to the risk of entanglement. On the other hand, a second's hesitation in deploying the reserve could prove costly if there is insufficient height.

If the rescue is to be deployed, the procedure is as follows:

Look for the rescue handle and grasp it firmly with one hand

Pull sidewards / upwards on the handle to release the deployment bag from the harness container

Look for a clear area, and in a continuous motion, throw (and RELEASE!) the rescue away from yourself and the glider, preferably into the air stream and against the direction of spin

After deployment, avoid entanglement and pendulum motions by pulling in the glider as symmetrically as possible with the B, C, D or brake lines

On landing take an upright body position and be sure to do a PLF (Parachute Landing Fall) to minimize the risk of injury

Storage/Pockets

The Basis and Basis RC both contain a large back pocket while the Basis RC also has smaller side pockets. They are positioned to prevent contents from falling out during flight if the pocket is opened. In the Basis and Basis RC's back pocket, there is a hole to pass a cable and/or a tube through for a handheld speaker-microphone or a Camel Bag.

Landing with the Basis or Basis RC

Before landing, slide your legs forward in the harness so that you adopt the standing position. NEVER land in the seated position; it is very dangerous for your back even if you have back protection. Standing up before landing is an active safety system, and is much more effective than the passive system of back protection.

5. Miscellaneous

Towing

The Basis and Basis RC are also excellent for towing (use a suitable tow adaptor like the GIN tow release system). The tow release can be connected to the main carabiners. The best way to attach a tow release is to use a towing adapter, which slides over the lower ends of the risers of the paraglider. For further details refer to the documentation provided with your tow release or towing adaptor or ask a qualified towing instructor at your tow site.

Tandem flying

The Basis and Basis RC are not recommended as a tandem pilot's harness, although the Basis makes an ideal choice for the passenger's harness.

Flying over water

The back protection should be removed during extreme manoeuvres training and all other flights over water, due to the increased possibility of drowning after a water landing.

6. Care, Maintenance and Repairs

The materials used in the Basis and Basis RC have been carefully selected for maximum durability. Nevertheless, keeping your harness clean and airworthy will ensure a long period of continuous safe operation.

Care and Maintenance

- Avoid dragging your harness over rough or rocky ground.
- Unnecessary exposure to UV rays, heat and humidity should be always avoided.
- Keep the harness in your rucksack when not in use.
- 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 bristled brush and/or a damp cloth. If the harness gets exceptionally dirty, wash it with water and a mild soap. Make sure you first remove all the sub-components: seat board, back plate, back protection, rescue parachute etc. Allow the harness to dry naturally in a well ventilated area away from direct sunlight.
- If your rescue 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.
- After a hard landing you must check your back protection for damage. A tear in the GINSOFT III could significantly reduce the efficiency of the protection it provides.
- The zips and buckles may be occasionally lubricated with silicone spray, no more than once a year.

Inspection checklist

In addition to regular pre-flight checks, the Basis or Basis RC should be inspected thoroughly on every rescue repack, normally every 150 days. Additional inspections should be performed after any crash, bad landing or take off, or if there are any signs of damage or undue wear. Always seek professional advice whenever in doubt. The following checks should be carried out:

- Check all webbing, straps and buckles for wear and damage, especially the areas that are not easily seen, such as the inside of the carabiner hook-in points.
- All sewing must be intact and any anomalies attended to immediately to avoid exacerbation of the problem.
- Special attention should be paid to the rescue installation, particularly the elastic and Velcro parts.
- The seat and back plates must be free from cracks.
- **The main aluminium carabiners must be replaced *at least* every 5 years or after 500 hours,** whatever comes first. Impacts may create undetectable cracks that could result in structural failure under continuous load.

Repairs

The manufacturer or an approved specialist should carry out any repair that involves critical parts of the harness. This will ensure that the correct materials and repair techniques are used.

7. Technical Data

Specification

Description	Paragliding harness					
Model	Basis			Basis RC		
DHV-certified max. load	100 Kg			100 Kg		
Size	S	M	L	S	M	L
Height of main attachment points above seat plate	42 cm	44 cm	46 cm	42 cm	44 cm	46 cm
Carabiner Distance	38-53 cm	38-53 cm	38-53 cm	38-53 cm	38-53 cm	38-53 cm
Weight (without parachute)	3.5 kg	3.7 Kg	3.9 kg	4.2	4.4	4.7
Parachute Container	optional			Integrated container underneath the seat plate		
Protector	Back protection: GINSOFT III			Back protection : GINSOFT III		
Options	Flight deck			Flight deck, lateral protection		

Certification

Basis harness

EAPR-GZ-7144/08- without rescue container

Basis RC harness

EAPR-GZ-7123/08- with rescue container

GINSOFT III back protection

DHV-Gütesiegel Nr. GSP 0022-05 certified 17,5G

DESCRIPTION

FABRIC OF HARNESS

1-1). OUTSIDE

FABRIC CODE		600D KODRA PU 60”	Oxford 210D PU 60"
SUPPLIER	NAME	Dong Jin international Corp.	
	ADDRESS	950-11 Daechi-Dong, Kangnam-Gu, Seoul-City, Korea	
MATERIAL		100% NYLON F.YARN WOVEN FABRIC (OXFORD SHUTTLELESS LOOM)	
FINISHED		P/D & W/R & W/P	
YARN W’T		320GR/YD	130GR/YD
TOTAL W’T		350GR/YD	170GR/YD

1-2). INSIDE

FABRIC CODE		420D HD N/OXFORD PU 60”	Oxford 210D Ripstop PU 60"
SUPPLIER	NAME	Dong Jin international Corp.	
	ADDRESS	950-11 Daechi-Dong, Kangnam-Gu, Seoul-City, Korea	
MATERIAL		100% NYLON F.YARN WOVEN FABRIC (OXFORD SHUTTLELESS LOOM)	
FINISHED		P/D & W/R & W/P	
YARN W’T		290GR/YD	110GR/YD
TOTAL W’T		320GR/YD	140GR/YD

WEBBING

2-1). HARNESS WEBBING

MATERIAL		POLYESTER	
SUPPLIER	NAME	SIN KWANG CO	
	ADDRESS	752-1 Dogok-Ri, Wabu-Ub, Namyangju-City, Kyunggi-Do, Korea	
WIDTH(mm)		43	30
BREAKING STRENGTH (KS K 0411)		1613 KG	1409.6 KG
ELONGATION (KS K 0411)		23.3 %	22.4 %

BUCKLES/RING

Name		T-LOCK SAFETY BUCKLE
SUPPLIER	NAME	SUP'AIR
	ADDRESS	SUP'AIR France Z.L. de Voray 14, avenue des Vieux Moulins 74000 Annecy
WEIGHT(g/pc)		54
BREAKING STRENGTH		1300kg

THREAD

MATERIAL		100% NYLON
SUPPLIER	NAME	YOUNG CHANG T&C LTD.
	ADDRESS	Young Chang B/D(4F), 267-23 Kangseo-ku, Seoul, Korea
DENIER		(bond)M13 NKZF/013(N/F 210D/9) (bond)S9AC V92(210D/4)
BREAKING STRENGTH (KSK 0409)		14.8 kg
ELONGATION (KSK 0409)		26.5%

Every effort has been made to ensure that the information in this manual is correct, but please remember that it has been produced for guidance only.
This owner's manual is subject to changes without prior notice. Please check with www.gingliders.com for the latest information regarding the Basis, Basis RC and other GIN products.