



G I N

## Genie XO Owner's Manual



Please read this manual before flying with the Genie XO for the first time.  
Page 4

## Thank You...

Thank you for choosing the Genie XO 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 your full potential.

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

Thank You.....	2
<b>1. Gin Gliders .....</b>	<b>4</b>
<b>2. Introducing the Genie XO .....</b>	<b>5</b>
Back protection.....	6
Foot bar .....	6
Optional Extras.....	6
Lateral protection .....	6
Rescue parachute .....	6
Speed bar .....	7
Flight Deck .....	7
Other Accessories .....	7
<b>3. Before you fly .....</b>	<b>8</b>
Assembly .....	8
Speed system.....	8
Back and Lateral Protection .....	8
Rescue Installation .....	9
Foot bar.....	11
Adjustments.....	12
Shoulder straps.....	12
Lateral straps .....	12
Leg straps .....	12
Chest strap.....	12
Speed bar .....	12
Foot bar.....	13
<b>4. Flying with the Genie XO.....</b>	<b>14</b>
Pre-flight checks.....	14
In-flight Adjustment .....	14
Rescue Deployment.....	14
Storage/Pockets.....	16
Landing.....	16
<b>5. Miscellaneous.....</b>	<b>17</b>
Towing .....	17
Tandem flying .....	17
Flying over water.....	17
<b>6. Care, Maintenance and Repairs.....</b>	<b>18</b>
Care and Maintenance .....	18
Inspection checklist .....	18
Repairs.....	18
<b>7. Technical Data.....</b>	<b>19</b>
Description of Materials.....	19
Certification.....	19
Genie XO harness .....	19
Woody Valley back protection.....	오류! 책갈피가 정의되어 있지 않습니다.

## 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 gliders that he, and any other pilot, loves to fly. This philosophy applies equally for a harness such as the Genie X0, as for the world-beating competition glider, the Boomerang. No product is released to the market without Gin's complete satisfaction.

Gin has over 15 years' experience of designing and manufacturing paragliders, and is backed 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 every year from 1998 to 2002 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 Genie XO

The Genie XO has been developed by the R&D team of Gin Gliders and the Italian harness specialists Woody Valley with a clear goal in mind: to produce the ultimate harness for cross country and competition.

Increased comfort, control, safety and performance have been achieved by the introduction of several innovative features.

The new Body Control System fits snugly around the torso and completely connects the pilot to the harness. This system, combined with the precisely positioned centre of gravity, enables the pilot to feel the feedback from the glider more sensitively, whilst still retaining a secure feeling in flight. It also increases the precision of turns while thermaling and aids active flying. On long flights, the comfort of the Genie XO is second to none.

The Genie XO has many trimming options, detailed in section 3, to suit all pilots' flying styles.

Leg and chest straps are integrated to prevent the pilot becoming airborne in the case of forgetting to fasten the leg straps. Safety has also been improved by the positioning of the back protection; the rear pocket has been moved upwards, offering protection if the pilot accidentally falls backwards.



The Genie XO includes:

- back protection, carabiners and foot bar
- bottom mounted rescue parachute container
- large dorsal storage pocket and numerous small pockets for long flights

The Genie XO is DHV certified and available in M, L and XL sizes.

Weight: 5.0 kg (L size without back and optional lateral protection).

### **Back protection**

The Genie XO is supplied with a DHV certified Woody Valley protection of 18cm in Styrofoam with a puncture resistant Polycarbonate plate.

Weight: 0.9 Kg

### **Foot bar**

The foot bar offers increased comfort and control. By pushing the foot on one side of the bar, the pilot can weight-shift more effectively to the opposite side. On a long glide, the pilot can make small, efficient corrections without touching the brakes and stronger thermals can be cored more easily. The foot bar can also help the pilot to get seated comfortably in the harness just after take-off and maintain an aerodynamic position in flight.

The foot bar may be detached if the pilot prefers to fly without it.

### **Optional Extras**

The following items are available as optional extras.

#### *Lateral protection*

The Genie XO may be fitted with veolene and mousse lateral protection for greater protection against side impacts.



#### *Rescue parachute*

The Genie XO is designed for use with GIN rescue parachute models. Other manufacturers' rescue systems may be used, but the integrity of the combined system is not guaranteed and the harness/rescue combination should be checked by a suitably qualified paragliding professional.



### *Speed bar*

The Genie XO is compatible with all common types of speed system. We recommend the GIN rigid speed bar.

### *Flight Deck*

The Genie XO 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](http://www.gingliders.com) or contact your local GIN dealer or the distributor in your country.

### 3. Before you fly

The Genie XO must be assembled by a suitably qualified paragliding professional. In particular, great care and attention must be paid to the fitting of the rescue parachute in the harness. The harness should then be adjusted by the pilot.

#### Assembly

Gin Gliders recommend that assembly is 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.

#### *Speed system*

The speed bar is assembled from top to bottom. Pass the cord of the speed bar through the eyelet near the side pocket and route it through the pulley and out through the eyelet and ring near the front corners at each side of the seat.

#### *Back and Lateral Protection*

Place the polycarbonate anti-perforation layer in the harness, slide in the Styrofoam back protection and secure it with the Velcro strap. If lateral protection is supplied, put it in the side pockets.







### *Rescue Installation*

The Genie XO is compatible with GIN rescue parachute models. It may also be compatible with most other manufacturer's rescues, but there is no guarantee of this and you should check with your instructor or dealer. You should also ensure that you have the necessary materials to install the parachute, for example, maillons and thread.

The container on the Genie XO comes with its own handle; it may only be used with the one supplied with the harness. This handle and its strap must be connected to the inner container of the parachute.

The container supplied with the harness, which is located underneath the seat, is large enough for all types of parachutes. The container also comes with 2 layers in Cordura, which will protect your parachute against dust and humidity.

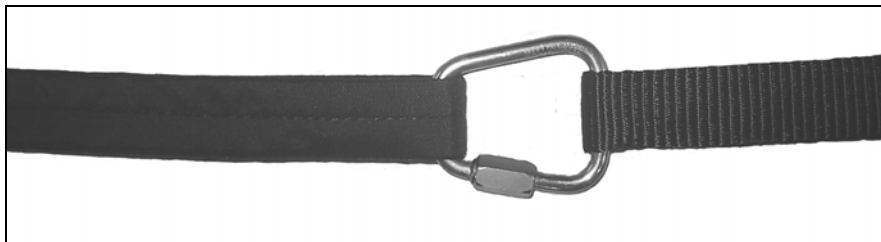
Rescue parachutes should be repacked at least every 6 months, so installing your rescue in a new harness may also provide a good opportunity to repack the rescue. Check your rescue manual for further details.

### **Attaching the rescue bridle to the harness webbing**

A Maillon Rapide type carabiner is recommended, for example a 6mm stainless CEN certified – 2785 KG, but min 9 times total weight

The maillon should be held in place with rubber bands, tape or plastic heat sealed tube.

Webbing to webbing connections are not recommended, due to the danger of getting the knot the wrong way round, which significantly weakens it.



### Attaching rescue deployment bag to the harness deployment handle

The rescue container on the Genie comes with its own deployment handle. This handle and its strap must be connected to the inner deployment bag of the parachute. If your parachute's inner container does not have the proper loop, please contact your parachute dealer.

Take special care that the attachment point on the inner rescue deployment bag is at the side, and not in the centre, of the rescue.





## Installing the rescue in the harness rescue container



### *Foot bar*

Use the foot bar only when you feel comfortable with other aspects of the harness. Attachment is made by connecting the foot bar to the buckles at the front corners at each side of the seat.

## Adjustments

The Genie XO should be adjusted to suit your physique and flying style. Be prepared to spend some time finding the best trimming – many complaints about a glider and/or harness can be attributed to unsuitable trimming of the harness.

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 and back protection have been installed before making adjustments.

### *Shoulder straps*

The optimal 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.

### *Lateral straps*

The lateral straps adjust the angle between the thighs and the back. This angle can be set between 80° and 100°. Lengthening the straps increases the angle and vice-versa.

### *Leg straps*

The correct adjustment of the leg straps allows the pilot to easily reach the sitting position after take-off without using the 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 to do it symmetrically. It is not normally necessary to make large adjustments from the default setting.

### *Chest strap*

The adjustment of the chest strap controls the distance between carabiners and affects the handling and stability of the glider. Widening the distance between carabiners increases feedback from the wing. We advise pilots of GIN paragliders to fly with a distance between the carabiners of approximately 44cm.

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

### *Speed bar*

Hanging in the simulator, adjust the length of the rope so that the bar hangs at least 15cm below the front of the harness. Making the rope 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.



### *Foot bar*

Adjust the foot bar once you have found your ideal sitting position. The foot bar should be adjusted so that the legs rest on the bar at full stretch while comfortably seated in the harness.

## 4. Flying with the Genie XO

### 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.

- The deployment handle is completely inserted into the elastic pockets and secured with Velcro.

- 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. 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 glider.

- All pockets are closed properly and any loose items are tied down safely.

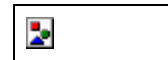
### In-flight Adjustment

The 2 to 1 reduction of the chest strap allows easy adjustment in flight via the cam buckle at the front.

### 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 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 upwards on the handle to release it 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, be sure to do a PLF (Parachute Landing Fall) to minimize the risk of injury

### **Storage/Pockets**

The Genie XO contains a large back pocket and smaller side pockets, for all those things you carry on long flights. They are positioned to prevent contents from falling out during flight if the pocket is opened.

### **Landing**

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, which is only a passive safety system. Standing up before landing is an active safety system, and is much more effective.





## 5. Miscellaneous

### Towing

The Genie XO is also excellent for towing. The release system connects to the same carabiners as the paraglider risers. For further details, refer to the documentation provided with your tow release, or ask a qualified tow instructor at your tow site.

### Tandem flying

The Genie II is not recommended for tandem flying.

### Flying over water

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

## 6. Care, Maintenance and Repairs

The materials used in the Genie XO 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 parachute ever gets wet (i.e. water landings) you must remove it from the harness, dry it and re-pack it again before putting it back in the container.

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 Genie XO should be inspected thoroughly on every rescue repack, normally every 6 months. Additional inspections should be performed after any crash, bad landing or takeoff, or if there are any signs of damage or undue wear. Always seek professional advice whenever in doubt. The following 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 aluminum carabiners must be replaced *at least* every two years. Impacts may create undetectable cracks that could result in structural failure under continuous load.

### Repairs

Any repair that involves critical parts of the harness should be carried out by the manufacturer or an approved agent. This will ensure that the correct materials and repair techniques are used.



## 7. Technical Data

### Description of Materials

Description	Paragliding harness
Max. Load	100 kg
Height of Center of Gravity	36 cm
Carabiner Distance	38 - 50 cm
Weight (without parachute)	5.0 Kg
Back Protection	Woody Valley protection in Styrofoam with a Polycarbonate plate against punctual loads
Parachute Container	Integrated container under the seat board with a lateral handle

### Certification

#### *Genie XO harness and back protection*

The Genie XO harness and back protection is DHV certified.

DHV-Gütesiegel Nr.: GS-03-0283-03

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 [www.gingliders.com](http://www.gingliders.com) for the latest information regarding the Genie XO and other GIN products.