



Owner's Manual



Please read this manual before flying with the Genie Lite for the first time.

Gin Gliders Inc.

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Thank You...

Thank you for choosing the Genie Lite 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.

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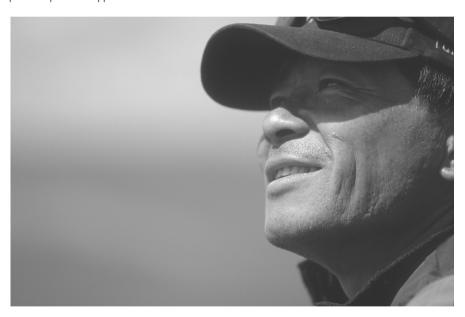


1. Gin Gliders

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 Genie Lite, 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 Genie Lite

The Genie Lite was developed by the R&D team of Gin Gliders to meet the highest standards of the most demanding pilots - the Genie Lite is the harness used by GIN test pilots during the development of high performance paragliders. The Genie Lite is suitable from the experienced pilot to the cross country or competition pilot.



The Genie Lite can be flown with all types of paragliders 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 Genie Lite is a sleek and easy harness, 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 Genie Lite is second to none.

Leg straps are integrated into the "Get-up system" and "Safe T Band" to prevent the pilot from falling out of the harness if he forgets to fasten the leg straps. The pilot has to fasten the leg straps first in order to fasten the leg cover (cocoon) strap, so it helps the pilot to remember to fasten the leg straps. Safety has also been improved by optimising the position of the back protection; the rear pocket extends upwards, offering protection for the pilot in case he accidentally falls on his back. In particular, this protector includes some coverage of the rescue part in order to protect the pilot in the case of a descent under the rescue parachute.

The Rescue container has a wide opening on the back of the harness to ensure easy and fast opening of the rescue.

The cocoon has an aerodynamic shape to reduce the drag during flight. You can adjust the angle of the cocoon to be optimized in relation to the wing's angle of attack using the 4 attached strings.

The back pocket was designed to reduce the drag of the body.

The speed system works through a ball bearing pulley (Harken®) that offers a big advantage when using the speed bar, it reduces the force required to maintain accelerated flight, reduces wear when used often and also reduces pilot fatigue during long flights. There is another point to connect for big pulley.

You will find extra storage space under the seat plate. This space gives you the possibility to store 3 litres of extra ballast or an emergency kit.

The main webbing used on the Genie Lite is made from Dyneema and Nylon-66 webbing that is both stronger and lighter than the conventional webbing used in most harnesses.



Components of the Genie Lite:





1	Shoulder strap adjustment
2	Elastic to hold drink system tube
3	Shoulder strap connection
4	Whistle
5	Suspension Point
6	Chest strap
7	ABS Strap
8	Leg Strap
9	Safe-T-Band
10	Buckle
11	Seat Board
12	Hole for speed system line
13	Hole for drink system tube
14	Lateral Strap adjustment
15	Back Pocket
16	Seat Strap
17	Velcro for Side protector (Inside)
18	Under seat pocket
19	Pulley for Speed Line
20	Ring for Speed Line
21	Speed bar
22	Loop for Foot Stirrup
23	Rescue handle
24	Rescue Outer Container
25	Rescue Bridle
26	Cocoon
27	Inflatable Cover of Foot plate
28	Foot Strap(Option)
29	Foot Plate
30	Leg string to control angle of







attack (Upper)
Leg string to control the angle of attack (Lower)
Zipper to attach/detach cocoon
Flight deck
Connection buckle for right side leg cover
Elastic string ball to connect cocoon
Inlet for foot plate
Front pocket on cocoon
Loop to connect cocoon on carabiner
Connection buckle for cocoon
Pulley for speed line
Loop for big pulley
Slider to control the length of leg string
Loop to close cocoon
Elastic string to hold speed bar
Connection loop for flight deck
Buckle for flight deck

Features of the Genie Lite

2 Carabiners, Protector (Ginsoft Lite), Flight Deck, Lycra Cocoon, Carbon Seat & Foot Plate, Speed bar, Pad for control volume of rescue container.

The Genie Lite is available in sizes XS, S, M and L.Weight: 4.6 kg (M size, complete without carabiners, flight deck and Pad for controlling the volume of rescue container).



Back protection

The Genie Lite is equipped with a new back protection (Ginsoft Lite) of 12cm thickness. A hard foam layer to protect the Genie Lite back protection against punctures is integrated into the Genie Lite harness. The back protector is divided into separate compartments, to prevent air being dissipated too rapidly in the event of a hard impact.

The Genie Lite back protection is designed to 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.



Speed bar

The Genie Lite is compatible with all common types of speed system. The Genie Lite is supplied with a 3 step speed bar that allows more accurate speed control for acceleration.

Flight Deck

The Genie Lite has Flight Deck which provide with harness that can contain 5L of ballast

Storage/Pockets

The Genie Lite contains several useful pockets for all your essential gear. There is a large back pocket, 1 smaller front pocket on the outer Lycra cover and 2 pockets are on each side of the lateral straps. There is also a radio compartment inside the back pocket and a hole to pass the cable through for a handheld speaker microphone or a Camel Back.

You can find an extra pocket under the seat plate that can store 3 litres of extra ballast or an







Carbon seat plate

The Genie Lite is supplied with a carbon seat plate, which comes in 4 sizes. When you order the Genie Lite, you should choose the correct seat plate size according to your build (rather than simply your height). If in doubt, choose a smaller seat plate. This will give you greater stability in the harness.

Specification of the carbon seat plate

Size	XS	5	М	L
Width(mm)	280	300	330	350
Length(mm)	340	360	380	400

Optional Extras

The following items are available as optional extras.

Rescue parachute

The Genie Lite is designed for use with GIN rescue parachutes, like the Yeti Rescue or ONE G. Other manufacturers' rescue systems may also be suitable. The maximum size of rescue container is 9L. 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 while hanging from a simulator and test deploy the rescue from the harness container. This check must also be done after each time the rescue has been repacked and reinstalled.



YFTI Rescue



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 Genie Lite 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

The Genie Lite is delivered with the back protection and speed bar already installed from the factory. But when it is necessary to assemble the harness by yourself, 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 Protection

If you receive the Genie Lite back protection folded, then please let it lay open for several hours before you install it into the harness. To install, open the zipper cover underneath the seat plate, open the zip and insert the Genie Lite back protection. It needs to slide into the space underneath the seat plate and sit behind the reserve container and the back support. Do not put it underneath the cross straps in the back of the harness.







Rescue Installation and Check of Compatibility

The Genie Lite is compatible with GIN rescue parachutes. Other manufacturer's rescues may be used as well.

Every first installation of a rescue system into the harness (that means every new combination of harness and rescue system) must be checked for compatibility by a qualified paragliding professional. 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 6 Months; so installing your rescue in a new harness may also provide a good opportunity for a repack.

A compatibility check always must be executed by the pilot itself who will fly with the harness. The pilot must seat in the harness which is hanging in a simulator and release the rescue from the rescue container to be sure this is possible in an emergency situation. A compatibility check (check if the rescue parachute can be released from the integrated container of a harness) must be executed after each repacking of the rescue parachute.

Check list when repacking the rescue parachute

Item	Check	Item	Check
Validation of date of rescue packing		Certification (LTF, EN)	
Correct size of deployment bag of the rescue?		Condition of rescue deployment bag?	
Rescue handle attachment at deployment bag correct?		Check strength of rescue handle attachment	
Original rescue handle of harness?		Check if the handle connected at the correct position of deployment bag	
When the rescue handle is pulled, is the pin released before the connection becomes tight?		The rubber band tension of rescue inner container must be less than 30N	
Is the rescue pin engaged?		Check attachment of rescue handle to the harness	
Force to open the rescue less than 70N?		Check the Velcro works	
Has the correct method been used to connect the rescue and bridle?		Check if there is any object interfering with the opening of the rescue	
Is the maillon connecting the rescue with harness bridle locked tightly?		Check if the bridle and rescue riser are secured to the maillons with a suitable material (e.g. tape, rubber bands etc.) to prevent friction	



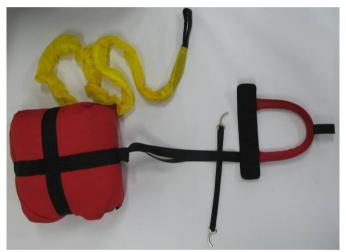
To attach the rescue bridle to the harness webbing

A Maillon Rapide type connector is recommended. The connector should be rated at least 9 times the maximum weight, for example, a correctly fitted 7mm Stainless Steel square maillon – 3125 Kg - provides a suitable connection.

After tightening, the maillon should be held in place with rubber bands, tape or plastic heat shrink tube. Webbing to webbing connections are not recommended, due to the potential danger of friction and melting of the webbing during a deployment, which would significantly weaken or even cut the connection.

Attaching the rescue parachute deployment bag to the harness deployment handle. The rescue container of the Genie Lite comes with its own deployment handle.

This handle and its strap must be connected to the deployment bag of the parachute. 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 it or adding a new loop in the correct position on the deployment bag.



In any case, a qualified professional must check the compatibility of the system i.e. harness and rescue parachute, when a rescue parachute is installed for the first time. After every repack of the rescue parachute you can do a compatibility check yourself. Please observe carefully how the professional installs the rescue system, so that you can remember the procedure if you have to do it yourself the next time.

This compatibility check requires that you test to make sure that the rescue parachute can be released from the rescue container in the harness — it 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 the case of an emergency.

Adjusting the volume of the rescue container

The volume of the outer container is able to be controlled by using the volume pad. The volume of rescue container is can be adjusted from 5L to 9L. If you install a smaller rescue, then you can put the volume pad into the upper part of the container and secure with velcro.

Rescue Installation quide



Installing the speed system:

Pull the speed line down through the hole on the side of your harness from above, and thread it through the pulley as shown in the illustration.

Pull the line through the exit ring at the front of your seat.

Tie the end of the line to your speed bar making sure that the line length is correct. Connect the elastic cords from side loops of speed bar to the side loops of your footplate with correct tension.





If the tension is too high it will be difficult to put your feet into the cocoon. Take care that the speed bar line lies free in your harness without any tangles.

To use a larger pulley, you can detach its own pulley and connect to the rear loop on the harness.



Adjustments

The Genie Lite 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 takeoff.

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 correctly before making adjustments.

Please follow the following steps to adjust your harness:

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 42 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 more stable or weak conditions.



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. To loosen the shoulder straps, pull the narrow webbing loop that protrudes backwards from the neoprene buckle cover on the shoulder strap.





Looser

Tighten

Lateral straps

The lateral straps adjust the angle between the thighs and the back. This angle can be set between 100° and 130°. Lengthening the straps increases the angle and viceversa. The easiest way to adjust them correctly is during a flight in calm air. Remember that flying in the "supine position", which means leaning back, reduces the stability of the harness and increases the risk of twisting after an asymmetric deflation.

Seat depth adjustment straps

The seat adjustment straps allow you to adjust the depth of the seat. You can control the angle of the seat and the seat position with the straps under the pulley. To get the optimum setting you can loosen these straps to the maximum in the sitting position and start pulling the straps until you get the comfort from the back support depending on the flying style of the pilot. Don't tighten these straps too much; otherwise you take the load from the main straps. In this case the strap can slip out or break out of the material during flight.



The seat adjustment straps allow you to adjust the angle of the front of the seat. You can control the angle of the seat and the seat position with the straps beside the seat. To get the optimum setting you can loosen these straps to the maximum in the sitting position and start pulling the straps until you get the comfort from the leg support depending on the flying style of the pilot. Don't tighten this strap too much; otherwise you





take the load from the main straps. In this case the strap can slip out or break out of the material during flight.

Side strings to control angle of the legs

These strings help you to adjust the angle of the knee support and give support for your legs on long flights. They also help you to feel more feedback from the glider by transmitting the gliders movements. You may need some assistance to save time to get the correct adjustment. For best results the 4 strings on each side of the harness should be adjusted to the same tension. Pull the upper strings to raise the angle of the legs and pull the lower strings to lower the angle of the legs, depending on the flying position of the pilot.



Speed bar

Hanging in the simulator, adjust the length of the speed bar according to your needs. 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.

Leg cover strings

After finishing all other adjustments, attach the flight deck. Then put the end ball of the leg cover strings through the loops on the end of the left side of the leg cover as shown in the picture. Before this, you must connect the ring of right side leg cover to the ring of left side using the Safe T Band system. Then control the tension of the cocoon cover by using the elastic strings which are connected to the upper leg string. Optimal length is when both sides of the cocoon are covered symmetrically. If over-tighten, the cocoon will not cover correctly and it will be difficult to get your legs in. If you set it up correctly, you won't need to make further adjustments after take-off.





Detaching the cocoon

Normally, The Genie Lite will be supplied completely assembled with all components. If you want to disassemble the cocoon then follow the procedure as follows.

- 1. Take out the loop of the cocoon from the carabiners.
- 2. Completely open the zipper on the side.
- 3. Open the Velcro tape bottom part of the harness.
- 4. Disconnect the leg string from the harness and release the elastic string of the speed bar









4. Flying with the Genie Lite

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.

Check the length of ballast loop and buckle is connected correctly.

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!

Take off with the Genie Lite

Check that the cocoon straps are loose enough so that you can put your legs inside the cocoon without any problem after takeoff. When you put your legs into your harness put your knees together to help qet your legs in easier!

Fasten the straps during flight in calm conditions.

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 case of 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 the handle firmly outwards and upwards 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.

Landing with the Genie Lite

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



5. Miscellaneous

Towing

The Genie Lite is also excellent for towing. The tow release can be connected to the main carabiners. The best position 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 Genie Lite is not recommended for tandem flying.

Flying over water

The Genie Lite is not recommended for the extreme manoeuvres. But in any case, for all other flights over water, the back protection should be removed, due to the increased possibility of drowning after a water landing.

Act responsibly and help preserve your flying sites

Please observe all local rules at the flying sites you use. It is important not to endanger the preservation of flying sites that are a vital necessity to the enjoyment of our beautiful sport.

6. Care, Maintenance and Repairs

The materials used in the Genie Lite 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

The Genie Lite harness has to be transported inside a paraglider rucksack, so that it is protected against damage.

Keep it away from sharp objects which could damage the harness.

During storage, make sure the harness is protected from animals such as rodents or insects.

Caution! Take extra care of the main webbing of your harness. Protect it from any source of heat or friction. They are made out of Dyneema, which has a low melting point.

Avoid dragging your harness over rough or rocky ground.

Unnecessary exposure to UV rays, heat, humidity and chemicals 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 GENIE LITE BACK PROTECTION (GINSOFT LITE) 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 Genie Lite should be inspected thoroughly on every rescue repack, normally every 6 months. Additional inspections should be performed after any crash, bad landing or take off, or if there are any signs of damage or undue wear.

Every 2 years or 200 hours your harness has to be inspected by your dealer or a professional repair shop.

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 or if they have suffered any damage no matter how slight. 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.

Environmentally friendly disposal of the harness

When this paragliding harness cannot be used any longer after an extended period of life time, then you must ensure that it will be disposed in an environmentally friendly way. Please observe the existing regulations and laws in your country.

7. Technical Data

Specification

Size	5	М	L
Pilot Height (Cm)	Below 175	170~185	Over 180
Height of main attachment points above seat plate (Cm)	41	43	45
Weight (without carabiners, flight deck and Pad for control volume of rescue container) Kg		4.6	
Carabiner Distance	36-54 cm		
Parachute Container	Integrated container on back of harness		
Volume of Parachute Container	5L – 9L		
Back protector	Gin soft Lite with 12cm foam bag		
EN, LTF certified max. load	120 Kg		

Certification

Geine Lite harness: EN 1651 & LTF 91/09, Nr. EAPR-GZ-7535/12

Description of material

Fabric:

Outside: Nylon 330D kodura, Aqua Lycra

Inside: 210D PU/OXFORD

Webbing: DYNEEMA 25/30mm, Nylon66 25mm

Buckle: Cobra Quick release BUCKLE

Thread: P/F 210 D/9 Bonded, P/F 210 D/4 & 210 D/6 Bonded POLYESTER

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 Genie Lite and other GIN products.

