

G-chute

User manual

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GIN

WARNING:

Like any extreme sport, paragliding involves unpredictable risks which may lead to injury or death. By choosing to fly, you assume the sole responsibility for those risks. You can minimize the risks by having the appropriate attitude, training and experience and by properly understanding, using and maintaining your equipment. Always seek to expand your knowledge and to develop self-reliance. If there is anything you do not understand, consult with your local dealer as a first point of contact, with the GIN importer in your country or with Gin Gliders directly.

Because it is impossible to anticipate every situation or condition that can occur while paragliding, this manual makes no representation about the safe use of the wing under all conditions. Neither GIN Gliders nor the seller of GIN equipment can guarantee, or be held responsible for, the safety of yourself or anyone else.

Many countries have specific regulations or laws regarding paragliding activity. It's your responsibility to know and observe the regulations of the region where you fly.

This equipment must never be used for parachuting or BASE jumping.

You must wear a helmet as well as all other standard safety equipment required for paragliding. This equipment is strongly recommended to be used by an experienced paraglider pilot only.

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The information in this manual is provided for guidance only and is subject to change without notice. This manual is not intended as a comprehensive assembly, use, service, repair or maintenance manual. Please see your dealer for all assembly, service, repairs or maintenance. Your dealer may also be able to refer you to classes, clinics or articles on paraglider use, service, repair or maintenance.

Thank you...

..for choosing GIN Gliders. We are confident you'll enjoy many rewarding experiences in the air with your GIN G-chute..

This manual contains important safety, performance and maintenance information. Read it before your first flight, keep it for reference, and please pass it on to the new owner if you ever re-sell your equipment.

Any updates to this manual, or relevant safety information, will be published on our website: www.gingliders.com. You can also register for email updates via our website.

Happy flying and safe landings,
GIN Team

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Dream

In forming Gin Gliders, designer and competition pilot Gin Seok Song had one simple dream: to make the best possible paragliding equipment that pilots all over the world would love to fly—whatever their ambitions.

At Gin Gliders, we bring together consultant aerodynamicists, world cup pilots, engineers and paragliding school instructors, all with one goal: creating better paragliders.

Touch

We're a "hands-on" company that puts continuous innovation and development at the centre of everything we do.

At our purpose-built R&D workshop at head office in Korea, we are able to design, manufacture, test-fly and modify prototypes all in a matter of hours. Our international R&D team is on hand both in Korea and at locations worldwide. This guarantees that your equipment has been thoroughly tested to cope with the toughest flying conditions.

Our own production facilities in East Asia ensure the quality of the finished product and also the well-being of our production staff. Our facilities are independently certified to AS9100C (Aerospace standard) and also to ISO 9001:2008.

Believe

We believe that the product should speak for itself. Only by flying can the pilot understand the wing and develop trust and confidence in it. From this feeling comes safety, comfort, performance and fun. The grin when you land should say it all!

Manual

We recommend that you familiarise yourself with your new G-chute by reading this Manual before your first use. This will allow you to acquaint yourself with its functions, to learn the best way to use it in various situations, and explain how to get the best out of your gear. This manual contains details on design of the G-chute, technical data and illustrations however the information is subject to change. We reserve the right to make changes without prior notification.

This Manual was current at the time of going to print. The latest version can be downloaded from GIN's website.

GIN Gliders Homepage

GIN Gliders has a comprehensive website, which provides additional information about the G-chute, any updates to the manual and many other issues related to paragliding. GIN's website is the first port of call for GIN's worldwide following:

www.gingliders.com

On GIN Gliders website, you will find an extensive range of accessories for your paraglider, useful products for pilots, as well as additional information and accessories.

You will also find links there to other services and websites:

- GIN Gliders Shops
- Facebook, Twitter & youtube

These websites and their content are provided for your use. The content of GIN Gliders websites has been made available for your use on an "as is" and "as available" basis. GIN Gliders reserves the right to alter the websites at any time or to block access to them.

GIN Gliders and the environment

Protection of the environment, safety and quality are the three basic values of GIN Gliders and these have implications on everything we do. We also believe that our customers share our environmental awareness.

Respect for nature and the environment

You can easily play a part in the protection of the environment by practising our sport in such a way that there is no damage to nature and the areas in which we fly. Keep to marked trails, take your rubbish away with you, refrain from making unnecessary noise and respect the sensitive biological equilibrium of nature. Consideration for nature is required even at the launch site!

Paragliding is, of course, an outdoor sport – protect and preserve our planet's resources.

Environmentally-friendly recycling

GIN Gliders gives consideration to the entire lifecycle of its paragliders, the last stage of which is recycling in an environmentally-friendly manner. The synthetic materials used in a paraglider must be disposed of properly. If you are not able to arrange appropriate disposal, GIN Gliders will be happy to recycle the paraglider for you. Send the glider with a short note to this effect to the address given in the appendix.

Safety

WARNING: the safety advice and instructions contained in this Manual must be followed in all circumstances. Failure to do so shall render invalid any certification and/or result in loss of insurance cover, and could lead to serious injuries or even death.

Safety advice

Paragliding demands a high level of individual responsibility. Prudence and risk-awareness are basic requirements for the safe practice of the sport, for the very reason that it is so easy to learn and practically anyone can do so. Carelessness and overestimating one's own abilities can quickly lead to critical situations. A reliable assessment of conditions for flying is particularly important. Paragliders are not designed to be flown in turbulent weather. Most serious accidents with paragliders are caused by pilots misjudging the weather for flying.

Paragliders are subject to the guidelines for air sports equipment and must not under any circumstances be flown without a valid certification. Independent experimentation is strictly prohibited. This Manual does not replace the need to attend training at a paragliding school.

Observe the other specific safety advice in the various sections of this Manual.

Safety notices

Safety notices are issued when defects arise during use of paragliding products which could possibly also affect other products of the same model. The notices contain instructions on how the affected gliders can be inspected for possible faults and the steps required to rectify them.

GIN Gliders publishes on its website any technical safety notices and airworthiness instructions which are issued in respect of GIN products. The product owner is responsible for carrying out the action required by the safety notice.

Safety notices are issued by the certification agencies and also published on the relevant websites. You should therefore regularly check the safety pages of the certification agencies and keep up-to-date with new safety notices which cover any products relating to paragliding.

Liability, warranty exclusion and operating limitations

Use of the G-chute is at the pilot's own risk! Any current paraglider or harness was tested according to EN or CCC. However, the use of any drag chute will negate its certification. The manufacturer cannot be held liable for any personal injury or material damage which arises in connection with GIN GLIDERS's products.

Pilots are responsible for their own safety and must ensure that the airworthiness of the glider and G-chute is checked prior to every flight. The pilot should launch only if the paraglider is airworthy. In addition, pilots must observe the relevant regulations in each country.

The glider may only be used if the pilot has a licence which is valid for the area or is flying under the supervision of an approved flying instructor. There shall be no liability on the part of third parties, in particular the manufacturer and the dealer.

WARNING: The use of the G-chute will negate EN certification.

WARNING: The G-chute should be seen as an aid for stress-free descent. It does not replace a proactive flying style and need to avoid dangerous conditions.

WARNING: The G-chute is made for paragliding use only.

Liability and warranty exclusion

In terms of the warranty and guarantee conditions, the G-chute may not be flown if any of the following situations exists:

- the pilot has incorrect or inadequate equipment (reserve, protection, helmet etc)
- the pilot has insufficient experience or training

Operating limitations

The G-chute must be operated only within the operating limits. These are exceeded, if one or more of the following points apply:

- the glider is flown in rain or drizzle, cloud, fog and / or snow
- the canopy is wet
- there are turbulent weather conditions or wind speeds on launch higher than 2/3 the maximum flyable airspeed of the glider (varies according to the total take-off weight)
- air temperature below -10°C and above 50°C

Introduction of the G-chute

The G-chute is a small drag parachute that reduces the high G forces which may occur during the descent in a spiral dive. This enables the pilot to achieve a higher rate of descent with fewer turns and less G-force. It is installed on the riser and only deployed during a spiral dive. After the spiral, the G-chute can be killed by pulling on the middle line and stored for reuse.

Depending on glider and sinkrate, a G-chute will reduce the G-force up to 30%.

The G-chute is particularly effective with high aspect ratio wings and is recommended for pilots who fly with the Genie Race series harness and a competition glider.



Installing the G-chute

The G-chute can be used on any harness and with any glider. However, high aspect ratio gliders profit the most from the reduced G-forces while descending in a spiral. The G-chute can either be installed in a especially designated pocket of the harness (called G-chute or Anti-G pocket), or can be installed on one of the main carabiners of your harness. Some harnesses like the Genie Race series have a special G-chute pocket and you will also find a small maillon to connect your G-chute. In case your harness does not provide a similar pocket, you can store your G-chute in any pocket of your harness and connect the G-chute to one of the main carabiners of your harness.



Genie Race 4 G-chute pocket. The G-chute can be connected directly with the dedicated maillon.

Maybe you find that no pocket of your harness is suitable to store your G-chute. In that case you can connect it with the available G-chute pocket to the main carabiners.



G-chute in a G-chute pocket, connected to the main carabiners of the harness.

The riser of the G-chute can be connected to either the left or the right main carabiner, in case your harness does not have a drag chute pocket.

Flying with the G-chute

Preparation for use

Check the condition of your G-chute and other flying equipment before every flight.

Prepare for launch by checking the following:

- Is the G-chute fabric free from tears or other damage?
- Are the lines and net free from knots, tangles or other damage?
- Are the maillons connecting the lines and risers closed and secured?
- Is your G-chute correctly installed in your harness or in the G-chute pocket?
- Will you be able to reach the G-chute handle in flight to kill the chute?
- Make sure the G-chute does not interfere with your rescue at any time

WARNING: G-chute may under no circumstances interfere with your rescue or rescue handle.

Inflight check

Check the following before use in the air:

- Are you high enough to safely use the G-chute?
- Are there any other aircraft near you that might get too close to you while you descend?
- Only use the G-chute if you are in good physical and mental condition.

Deployment of the G-chute

- Make sure you are flying straight at trim speed.
- Take the G-chute out of the G-chute pocket and release it on the side of the harness that it is connected to.
- Release the G-chute handle so that the chute opens and causes drag.
- Start your spiral dive on the same side of the G-chute riser attachment. If your G-chute is connected to the left main carabiner, make sure you make the spiral dive to the left and vice-versa.
- Get yourself used to the G-chute. Start with a moderate spiral and adjust it to your needs with the outside brake.
- To exit the spiral, check your weight is centred (or slightly towards the outside) and progressively release the inside brake. As the glider starts to exit the spiral, make sure you control pendulum moment.
- Once you are back in normal flight, kill the G-chute by pulling on the G-chute handle that is connected to the center line. You can now put the G-chute back in the pocket for reuse taking care not to allow the G-chute to re-inflate when stowing.

WARNING: The spiral dive has to be done to the same side on which the G-chute bridle is attached.

TIP: Bent legs and a loose cocoon enhance the drag effect.

Packing of the G-chute

The G-chute has a straightforward design and does not need any special folding technique.

However, a decent packing will make a deployment easier.

The following packing instruction proved to be the most reliable:



Put the G-chute flat on the ground.



Fold the G-chute and the net to the center.



Start to fold the net into a S-shape on top.



Now the G-chute and the net should be in a square shape.



In case your harness does not have a G-chute pocket, fold your G-chute into the available GIN G-chute pocket.



Make sure that there is only a little of the riser visible, while the rest is stored in the red pocket. Close it with the rope.



Wrap the red pocket and secure it with the two velcros.



Close the clip and attach the G-chute pocket to your harness.

Be aware

- Never deploy the G-chute if your glider is wet or if there is another risk that your glider might go into deep stall.
- Never make the spiral dive to the opposite side of the G-chute riser attachment.
- Don't deploy your G-chute in any other flight state other than trim speed in straight and level flight.
- Don't use the G-chute on the final approach or landing.

Material stress

Even if the G-chute is designed to reduce the G-force, strong spiral dives can cause a lot of stress to your gear.

GIN quality and service

We take pride in the quality of our products and are committed to putting right any problems affecting the safety or function of your equipment and which are attributable to manufacturing faults. Your GIN dealer is your first point of contact if you have any problems with your equipment. If you are unable to contact your dealer or GIN importer, contact Gin Gliders directly via our website.

Final words...

Most of us today live in a dependent society where we are regulated and protected. Individuals rarely are afforded opportunities to develop the self-responsibility that is the foundation of safety in extreme sports such as paragliding.

Most accidents are caused by getting into situations that are too demanding for your level of experience. This happens if you lack fundamental understanding, are incapable of assessing the risk or simply do not pay sufficient attention to your surroundings or your own state of mind.

To stay safe, the best you can do is to increase your understanding, skill and experience at a rate you can manage safely. There is no substitute for self-responsibility and good judgement.

In the end, paragliding offers a unique opportunity to learn to take control of your own destiny. Memento mori, carpe diem!

Fly safely, and...E N J O Y!

GIN Team

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