



GIN



Yeti Cross

user manual

v1.0 10/2014





*Optimized for
stable decent*



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Thank you...

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

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 rescue.

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

Happy flying and safe landings,
GIN team

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 paragliding equipment 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.

About Gin Gliders

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 dedicated to fulfilling this dream.

Touch

We're a "hands-on" company that puts continuous innovation and development at the center 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.

Believe

We believe that the product should speak for itself. Only by flying can the pilots understand their equipment 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!

Introducing the Yeti Cross

The new design of the Yeti Cross allows for the most stable decent after parachute deployment. The square shape parachute has been developed and used for military uses for years. The Yeti Cross has improved on those designs and modified the parachute features to meet the needs of paragliders in todays market.

No pendulum motion

Because of the square shape and placement of the air dispersement vents, the Yeti Cross very quickly dissipates the pendulum motion typically seen with ordinary circular chutes. Shortly after the initial deployment of the reserve the pilot will reach a steady, pendulum free decent.

Slower decent

The unique design of the canopy maximizes the fabric area and efficiency. The larger surface area and better air channeling decreases the decent rate to well below the certification requirements of 5.5m/s. Improvements to the canopy profile and rescue packing procedure have also decreased the canopy opening time.

Pilot safety

With a faster opening time, slower decent rate and decreased pendulum motion, pilots who are faced with an emergency deployment will have a larger margin of safety. We believe that confidence in your equipment leads to happier and safer pilots.

Technical specification

The Yeti Cross has EN certification
EP 107.2013

Size	#26	#31	#38
Area (M²)	26.07	31.62	38.08
Line length (M)	5.62	5.79	6.35
Center line (M)	5.34	5.88	6.45
Weight (kg)	1.3	1.5	1.7
Sink Rate (M/sec.)	5.03	4.87	4.8
Max load (kg)	86	104	126

Before you fly

Gin Gliders GIN rescue parachutes are inspected and packed at the factory. It is recommended that the reserve is repacked by a suitably qualified and experienced paragliding professional or parachute rigger prior to installation into your harness. The efficacy of the rescue, and your life, depend on the correct packing procedure. If in any doubt whatsoever, please seek professional advice from your instructor, GIN dealer or importer.

Airing

Before packing, the canopy should be aired. Ideally, the canopy should be hung by its apex from the ceiling for between 6 and 24 hours in a cool, dry room.

Preparation

The packing area must be spacious, clean, smooth and dry.

Preliminary Materials

Before starting the packing procedure, make sure you have the following materials:

- 2 solid weights or sandbags, which should be smooth and clean (2-2.5kg)

- Elastic bands

Layout

Check the serial number that is written on the top center panel and on the re-packing card first (re-packing card is attached at the end of this manual). Fix the risers to a solid point using carabiners.

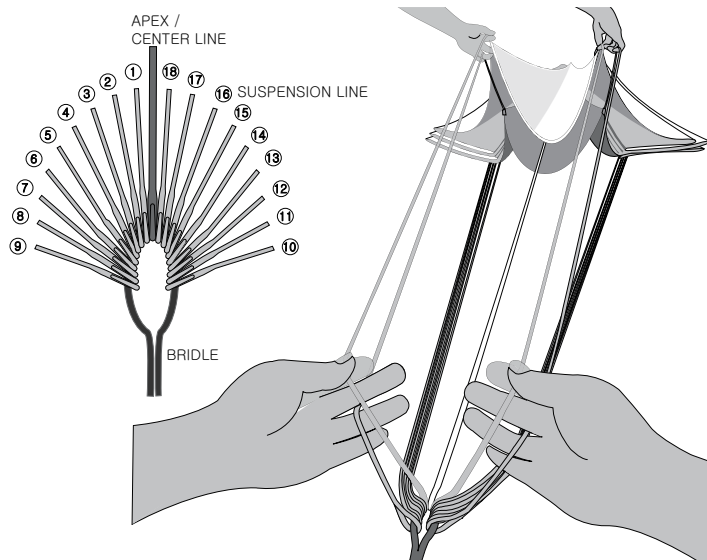
NOTE: Carabiners are useful, but not necessary, to attach the APEX and lines to an attachment point.

Packing instructions

Line check

Stretch the rescue out to its full length. Check the suspension lines for damage and tangles by the "4 lines check" method.

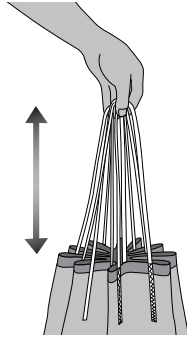
All lines should be located inside the 4 lines – first and last lines at both sides from the bridles as illustrated below.



NOTE: Be sure all lines are free of damage and tangles.

Folding the panels

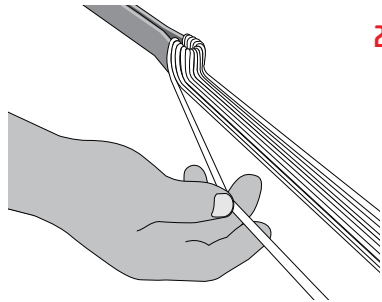
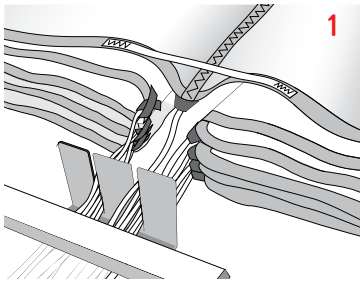
Gather up the lines and begin to arrange the parachute on the folding surface.



IMPORTANT: The line placement is very important and must be done according to the manual.

Put the suspension lines on the line separator such that half of them are on the left, and half are on the right. Put a weight on the skirt to fix the canopy. [1]

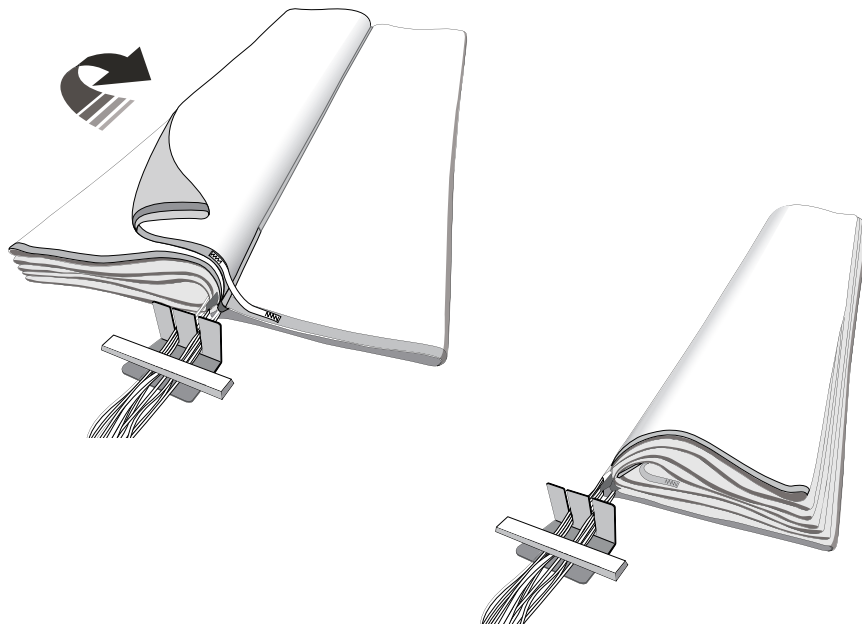
And follow the outer suspension line to find the center panels to start folding with. [2]



Dividing the panels

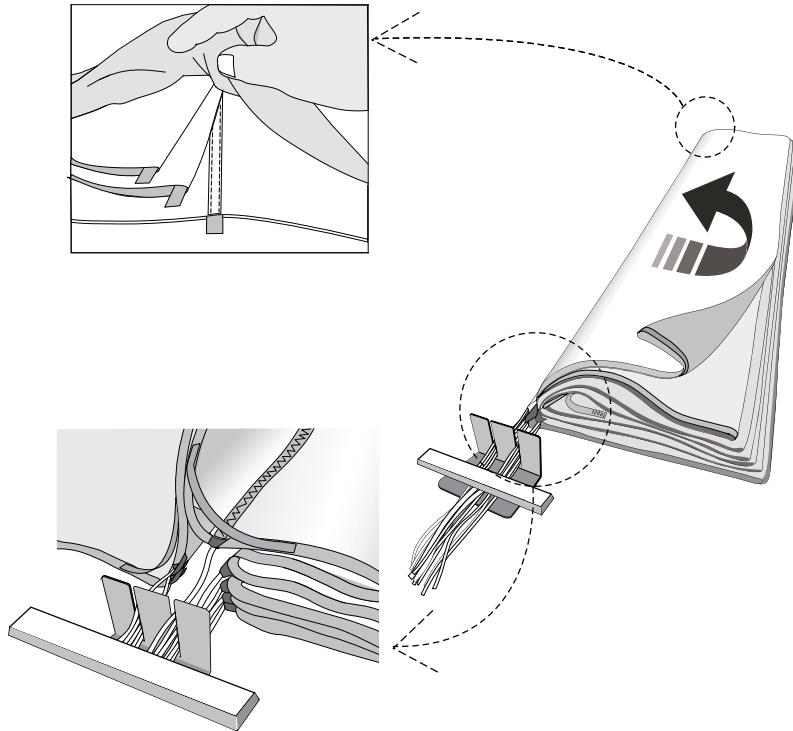
First fold all the panels one by one to the right side of the suspension lines, to prepare for the careful folding. While doing this, check for any signs of damage or deterioration of the canopy fabric.

IMPORTANT: Take care to make all folds clean and even.

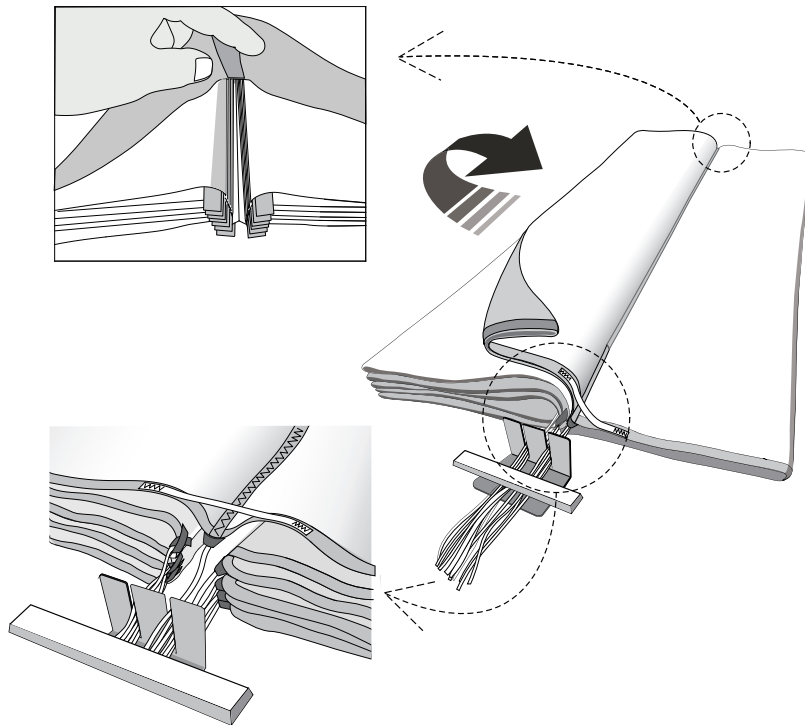


By folding each panel to the left side of the suspension lines again one by one, check carefully that each panel is laid evenly and without creases. Check the center seams and inside the panels, too.

IMPORTANT: Make sure that all the skirts are even and all the loops lie in the same direction.



After you finish the left half, do the same for the right half of the canopy. Move the rest of the right half to the left, and fold each panel one by one to the right side of the suspension lines. Check the same carefully that each panel is laid evenly and without creases. Check the center seams and inside the panels, too.



IMPORTANT: After folding all the panels, check again that the center seams and the inside of the panels are even and lie in the same direction.

NOTE: Use the numbers printed on the panels as a guide. Arrange the panels and lines so that #11 is on bottom and #1 is on top.





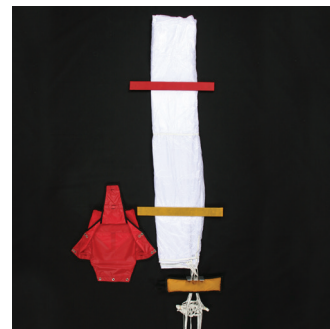
With your panels now evenly folded continue by folding the outer edges into the mid-line



Start by folding the right edge in to the mid-line



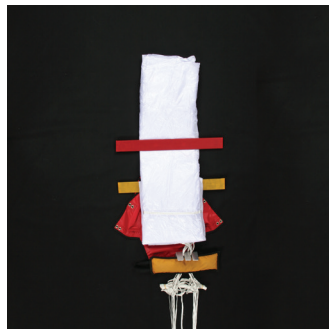
Then fold the left edge to the mid-line



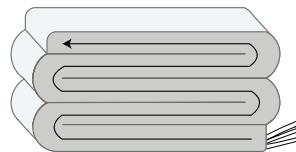
Now fold the rescue in half along the mid-line



Place the rescue bag under the chute



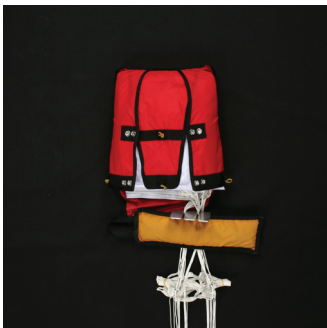
Carefully fold the rescue onto itself in a zig-zag pattern



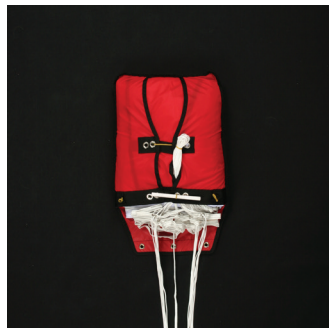
Fold the rescue in a zig-zag (S-shaped) pattern



Make sure all folds are even and symmetrical and match the size of the bag



Be sure the rescue fits neatly inside the bag



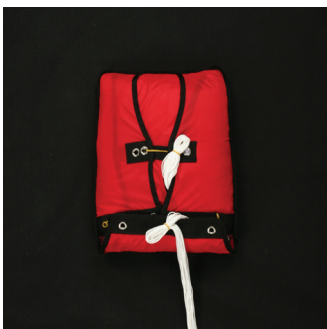
Place a 3cm loop of suspension line through the elastic band in the center, neatly pack the slider



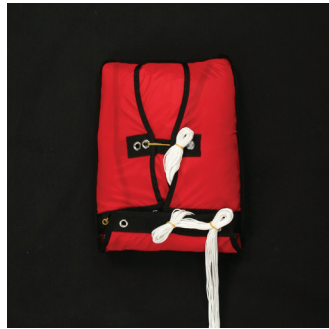
Fold the para-cord into symmetrical bundles the approximate width of the bag



Use elastic bands to hold the loops and neatly stack the bundles at the bottom of the bag



Close the bottom flap in the order shown
(1) Center



(2) Right



(3) Left



Check that all of the lines are even and free of tangles

Installing in the harness

The Yeti Cross is compatible with GIN harnesses. It may also be compatible with most other manufacturer's harnesses, but there is no guarantee of this and you should check with your instructor or dealer.

Outer container attachment

The Yeti Cross can be attached to harnesses which do not have a built-in rescue container, like the speed glider harnesses. Use of a rescue on these harnesses requires an outer container bag. You must follow the harness and outer container bag instructions for proper attachment. If in doubt, consult with a professional.

Attaching the rescue bridle to the harness webbing

The Yeti Cross can be used with the new Soft Shackle rescue bridle attachment. This helps to reduce the weight of the harness while maintaining the strength and reliability of the rescue attachment. You may choose to use a Maillon Rapid type 7mm Stainless Steel carre (square). But in any case, the connector should be rated at least 9 times the maximum weight. Our recommended 7mm connector for example has a minimum breaking load of 3125kg and an EN certificate of conformity.

Be sure to inspect the your connector during normal maintenance and safety checks. Replace after any signs of wear and check with a professional after any use. We recommend that you cover the connection using the Maillon rapid cover to prevent excess friction, tape and/or rubber-bands should also be used to secure the attachment and prevent excess friction.

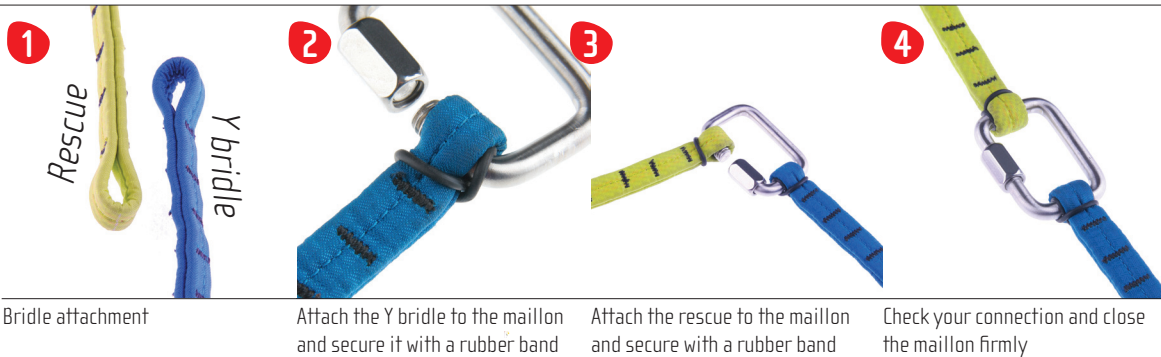


Soft shackle connection



WARNING: Soft shackles must be installed correctly or they may fail. Follow the soft shackle user manual.

Maillon connection



Webbing to webbing



Bridle attachment

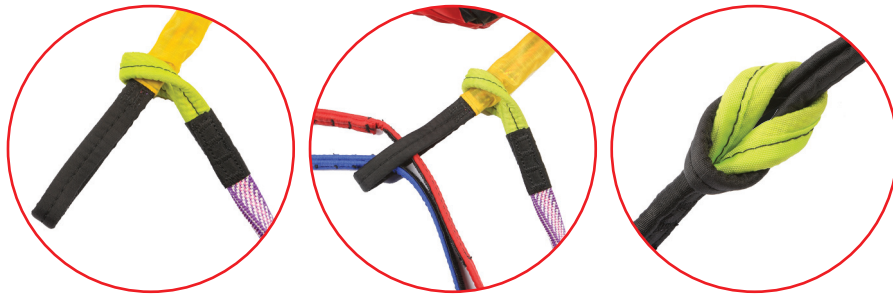
Pass the Y bridle through the rescue attachment

Pass the ends of the Y bridle through the base

Pull to make a clean and VERY tight knot, secure in place (tape)

CAUTION: The webbing knot must be kept tight using tape. If the knot becomes loose then the webbing may burn when put under load, causing catastrophic failure.

WARNING: If the knot is incorrectly connected then the fabric may burn and cut upon rescue deployment.



Attaching the deployment handle

Most harnesses come with their own deployment handle. This handle and its strap must be connected to the inner deployment bag of the parachute. If your harness does not have the proper handle, please contact your harness dealer.

The GIN rescue has a choice of 2 loops by which to attach the harness deployment handle. The choice of one or the other depends on the position of the rescue container in your harness. Front or back mounted rescue systems or when you use the outer container rescue are generally attached by the center loop, whereas side mounted systems are attached by the loop at the top. Under seat mounted systems are attached by the loop at the side. **THE CORRECT ATTACHMENT POINT DEPENDS ON THE HARNESS!!** If in doubt, consult with a professional.

Preflight checks

For maximum safety, use a complete and consistent system of preflight checks of your equipment and repeat the same mental sequence at every flight.

Specifically for the rescue, check that:

- There is no visible damage that could affect its airworthiness.
- The rescue parachute container is closed correctly with the pin(s) in place.
- The deployment handle is secured correctly and all parts are in good condition. If any part of the harness/reserve/handle system include Velcro, then this must be separated and re-attached regularly to prevent Velcro 'bedding in' over time which can make rescue deployment much more difficult.

Deployment procedure

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. On that basis, an instantaneous decision to deploy the rescue or not must be taken. 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.

Procedure

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 firmly upwards/side wards on the handle. This action undoes the Velcro or handles closure and allows the release pins to be pulled out of the release loops, so that the inner container can be released from the harness' rescue compartment.
 - Look for a clear area, and in a continuous motion, throw [and RELEASE!] the rescue as quickly and forcefully as possible away from yourself and the glider. Throwing the rescue in the direction of the air stream will speed opening, and throwing it against the direction of spin will help prevent tangling with the glider.
 - 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
 - Once on the ground, deflate the canopy by pulling one of the rescue lines to avoid the possibility of being dragged.

IMPORTANT: Always maintain an upright position before landing and perform a PLF landing to help minimize injury.

Care and maintenance

The Gin rescue parachute should be repacked at least every 6 months, as detailed in the packing instructions. We always recommend that this rescue parachute is inspected and repacked by a trained professional repacker. Additional inspections should be performed if there is any suspicion of damage or undue wear.

After a deployment, the rescue should be checked by the distributor or manufacturer. Always seek professional advice whenever in doubt.

The materials used in the GIN rescue have been carefully selected for maximum durability. Nevertheless, maintaining your rescue following the guidelines below will extend its lifetime.

It is recommended that a rescue is replaced after 10 years, even if it has never been used.

Care and maintenance

Unnecessary exposure to UV rays, heat and humidity should always be avoided. Keep your harness and rescue in your rucksack when not in use.

Store all your paragliding equipment in a cool, dry place, and away from solvents such as grease, acid, oil and paint.

Never put your rescue away while damp or wet.

If your rescue parachute does ever get wet (i.e. water landings or snow) you must remove it from the harness, dry it naturally in the air, and repack it before putting it back into the container.

A dirty rescue canopy or container can be cleaned with lukewarm water. Mild, neutral soap may be used if necessary, but do not rub the fabric. Rinse the canopy thoroughly and allow it to dry naturally. If the canopy shows signs of mildew or mold, it must be sent to the distributor or manufacturer for repairs, as the strength could be compromised.

If the rescue is to be stored for an extended period, the canopy should be opened and loosely rolled.

IMPORTANT: Any repairs should only be carried out by the manufacturer or by an approved agent. This will ensure that the correct materials and repair techniques are used.

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.

Care of the environment

We are privileged to fly in areas of outstanding natural beauty. Respect and preserve nature by minimizing your impact on the environment. When visiting an area, contact the local club for details of environmentally sensitive areas and local restrictions.

When your paraglider eventually reaches the end of its useful life, dispose of it with consideration and follow any local regulations.

Final words...

Most of us today live in a dependent society where we are regulated and protected. There are few opportunities for individuals 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



GIN

www.gingliders.com

Dream. Touch. Believe