# KARE

## Square Rescue Parachute

**USER MANUAL • PACKING • CARE**

**KARE 90 | KARE 105 | KARE 125 | KARE 180 | KARE BI**

Revision 1.0 | September 2026

# Read before use

WARNING
KARE is designed solely as an emergency rescue system for paragliding. Never use it for free-fall parachuting, BASE jumping, or with any other type of aircraft. Modification of any component may invalidate approval and can lead to malfunction.

Every pilot is responsible for correct selection, installation, inspection and maintenance of their equipment. Packing and installation must be performed by a suitably trained and qualified person, following both this manual and the harness or outer-container manual.

- Use only the original KARE inner container unless a documented compatibility approval states otherwise.
- The suspended load includes pilot, clothing, accessories, paraglider, harness and rescue system.
- Confirm model, serial number, maximum load and certification marking on the product label before use.

## Document control

This reissued manual uses technical values from the supplied reference document. Before commercial release, iFLY Gliders must verify all values, certification references, component specifications and service contacts against the final KARE production configuration.

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# 1. Product overview

KARE is a manually deployed, non-steerable, square rescue parachute for paraglider pilots. The system comprises the canopy, suspension lines, apex line, riser and an inner container connected to the deployment handle.

## Performance data

- Suspended weight range: 75-210 kg, depending on size
- Rate of descent: 5.0 ± 0.2 m/s
- Stability: ±3° angle of oscillation
- Opening time: 3.5-4.5 seconds

| Model | KARE 90 | KARE 105 | KARE 125 | KARE 180 | KARE BI |
|---|---|---|---|---|---|
| **Shape** | Square | Square | Square | Square | Square |
| **Canopy area** | 26.8 m² | 31.3 m² | 37.1 m² | 52.6 m² | 61.5 m² |
| **Riser length** | 22 cm | 22 cm | 22 cm | 22 cm | 22 cm |
| **Weight** | 1.1 kg | 1.3 kg | 1.5 kg | 2.4 kg | 2.6 kg |
| **Suspended load** | 75-90 kg | 90-105 kg | 105-125 kg | 140-180 kg | 170-210 kg |
| **Diameter** | 5.33 m | 5.76 m | 6.28 m | 7.02 m | 8.07 m |
| **Container volume** | 3,500 cm³ | 3,900 cm³ | 4,500 cm³ | 7,400 cm³ | 8,200 cm³ |

Selection: Never exceed the maximum suspended load shown on the product label. If the manual and product label differ, stop using the system and contact an authorised iFLY Gliders service point.

# 2. Intended use and operation

KARE is intended only for paragliding emergencies and must not be deployed at airspeeds above 32 m/s (115 km/h). It is explicitly prohibited for free-fall use.

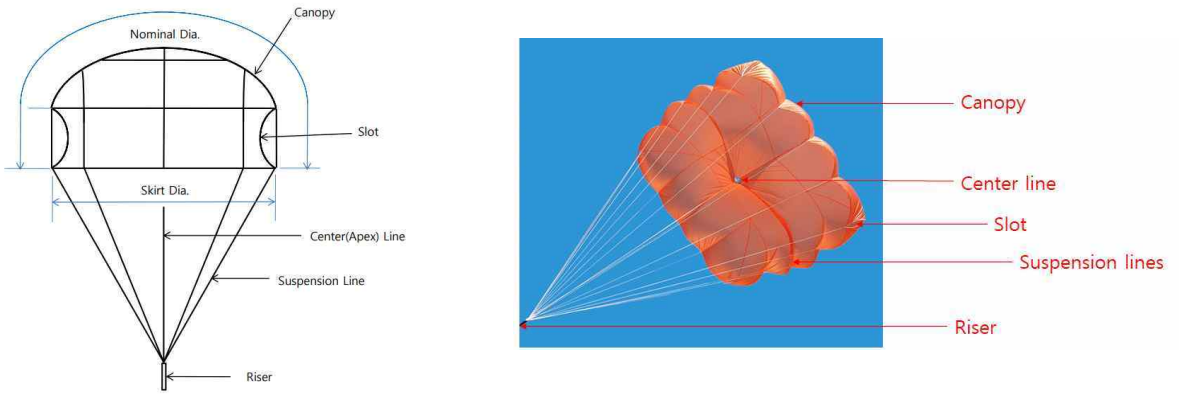
## Emergency deployment

- Locate and pull the deployment handle firmly.
- Extract the inner container from the harness or outer container.
- Throw the complete package, including the handle, forcefully into clear airflow.
- Once the rescue has opened, manage the main wing according to your training and the situation.

The inner container is designed to open in multiple directions. The handle is reinforced for secure use with gloves, and its safety pin retains the system in the harness or outer container.

## Towing and front containers

For winch towing, also follow the instructions for the paraglider, harness and towing release. With a front container, confirm before every flight that the rescue can be extracted without obstruction in every expected body position.




KARE inner-container and canopy component reference.

# 3. Components, storage and materials

## Storage

- Protect the rescue from weather, UV exposure, dust, oil, grease, fuel, solvents and acids.
- Store unpacked equipment in a dry, cool and well-ventilated location.
- If the system becomes wet, open it fully, allow it to dry naturally in the shade, inspect it and repack it before flight.

## Material specification

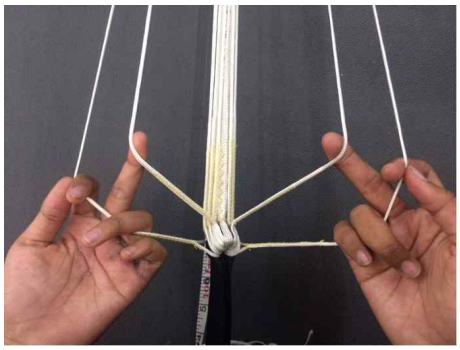
| Component | Specification |
|---|---|
| **Canopy** | Coated nylon ripstop, 28 g/m² |
| **Reinforcement** | 12 mm nylon tape |
| **Suspension lines** | 2.0 mm Dyneema (UHMWPE); 2.5 mm for BI |
| **Apex line** | 7 mm nylon cord |
| **Riser** | 20 mm Dyneema or 25 mm nylon tubular webbing |

Only materials and repairs matching the approved production specification may be used. Structural repair must be carried out by iFLY Gliders or an authorised facility.

# 4. Inspection and four-line check

Open the system completely on a clean, dry surface. Check canopy fabric, seams, suspension lines, apex line, riser, inner container, handle and elastic loops for cuts, abrasion, heat damage, chemical contamination or deformation.

1. Apply light tension
Stretch the rescue to full length. Use a suitable connector-link tensioning device or a clean elastic restraint.



2. Separate the four line groups
Check that the suspension lines form four clean groups from the riser, as illustrated. The first and last lines on both sides define the groups.



3. Trace every line
Run each line from riser to canopy. Remove tangles and twists. Stop if a line is damaged, uneven or incorrectly routed.



Do not pack a system with uncertain damage. Quarantine it and obtain an assessment from an authorised service facility.

# 5. Packing - panel layout

1. Move panels to one side
Fold every panel, one at a time, to the right of the suspension lines. Inspect the fabric and internal seams as you work.



2. Return panels evenly
Move each panel back to the left, one by one. Lay every panel flat and without creases.



3. Align the skirt
Confirm that all skirt edges are even and all loops face the same direction. Fold both outer skirt ends as shown.



Keep the suspension lines lightly tensioned throughout the layout. Do not pull hard enough to distort seams or line attachment points.

# 5. Packing - long fold

4. Form three equal sections
Divide the canopy width into three equal parts.



5. Fold the first side inward
Maintain straight edges and keep the centre line undisturbed.



6. Complete the long fold
Bring the opposite side over to form a compact, even strip.



Recheck that no suspension line is trapped across a panel or routed around the canopy.

# 5. Packing - S-fold and lines

7. S-fold the canopy
Fold the canopy into an S shape. Position the skirt as shown and size the bundle to match the original KARE inner container.



8. Match container dimensions
Compress gently and evenly. Do not force an oversized or irregular pack into the container.



9. Stow suspension lines
Arrange the remaining lines in equal bights and retain them with approved packing elastics.



Replace aged, cracked, sticky or permanently stretched elastics. Use only the specified size and material.

# 5. Packing - close the inner container

10. Place the canopy
Place the S-folded canopy centrally on the original inner container.



11. Close the first flaps
Close the first two flaps and secure them with a suspension-line loop through the elastic closure.



12. Complete closure
Close the final two flaps and secure them in the same way. Leave the last 40-50 cm of line free.



Final pack check: verify that all tools, weights and temporary packing aids have been removed; the handle is correctly attached; the line stows release cleanly; and the pack has an even shape.

# 6. Installation and compatibility

Installation must be completed by a trained and qualified person. Always follow the harness or front-container manual in addition to this manual.

## Connection to the harness

- Use a connector with an ultimate strength of at least 2,400 daN.
- Secure the connector against rotation on both sides using the approved method: O-rings, lark's-head rubber retainers, fixing tape or a protective neoprene sleeve.
- Keep the connection centred. Both bridles leading to the shoulder attachment points must be equal in length.
- A direct riser-to-bridle soft connection is not recommended unless specifically approved for the configuration.

## Compatibility check

After installation or any change to the harness, protector, handle, container or bridle routing, perform a simulated deployment in a secure static suspension. Confirm that the handle is reachable, all closures release, and the packed rescue extracts smoothly without excessive force or snagging.

Use of an alternative inner container can change opening time and opening shock, and may cause failure. Use only the original KARE inner container unless iFLY Gliders has approved the exact combination in writing.

# 7. Care, maintenance and service life

## Pre-flight check

- Confirm the outer container is fully closed and all pins or loops are correctly seated.
- Confirm the deployment handle is correctly positioned, attached and unobstructed.
- If a removable bridle or front container is used, verify its attachment before every flight.

## Repacking and inspection

- Open, air, inspect and repack the rescue every 6 months.
- A full inspection is required after every actual deployment, contamination event, hard opening or suspected damage.
- Record the date, serial number and packer or inspector details after each intervention.

## Repairs

Repairs must reproduce the approved material, thread and stitch pattern. Straight stitching is specified at 6-8 stitches per inch. Zigzag repairs must overlap sound stitching by at least 12.7 mm at each end. Structural repair is restricted to authorised personnel.

## Service life

Maximum service life is 10 years, subject to a full inspection at least every 2 years and compliance with all service instructions. At the end of the service-life limit, permanently withdraw the system from use.

# 8. Environmental responsibility

A retired rescue parachute contains specialist textile and line materials and must not be returned to flight use. Mark it clearly as unairworthy, prevent accidental reuse and send it to iFLY Gliders or an appropriate professional waste or recycling facility.

- Respect launch and landing areas.
- Leave no litter or permanent tracks.
- Avoid unnecessary noise and protect sensitive habitats.

**KARE**

Square Rescue Parachute

**iFLY GLIDERS**
**Product support and authorised service information:**
**iflygliders.com**

Release note: certification numbers, final specifications, manufacturer address and service contacts must be inserted and verified before public distribution.