

SKYWALK



PEPPER CROSS LIGHT

Lightweight Square Rescue Chute

TABLE OF CONTENT

1	Introduction	25
2	Description	26
3	Technical Data	27
4	Materials	27
5	Operating limits	28
6	Construction	28
7	Connect the reserve chute to the harness	29
8	Compatibility Test	30
9	Releasing the Rescue System	30
10	Packing Instruction	31
11	Maintenance	40
12	Care	40
13	Repair	40
14	Disposal	41
15	Proof of Packing	41
16	Nature and Environmentally Compatible Behavior	42
17	Closing words	42



1 INTRODUCTION

Welcome to skywalk!

Congratulations on the purchase of your new PEPPER CROSS LIGHT rescue system and thank you for your trust in us and in our products. In this manual you will find packing instructions as well as a lot of information about the correct use of the reserve chute.

At skywalk we are enthusiastic about wind sports and innovative technologies. When we founded skywalk in 2001, our goal was to make paragliders and kites that offer new solutions to set new impulses, and to provide customers with a maximum of user friendliness. Today we are one of the most successful paraglider manufacturers in the world. For this we are thankful for our curiosity about everything that flies, sails and surfs, as well as our interest in a variety of outdoor sports. It's this "big picture" view that allows us to continuously set new accents in paragliding.

We are always open for questions, comments or critique and are happy to provide you at any time with further information!

Your skywalk Team
PURE PASSION FOR FLYING

Edition 2.1/07_2020

The latest version of the manual can be found on
www.skywalk.info

2 DESCRIPTION

The skywalk PEPPER CROSS LIGHT is characterized by high reliability and strength, fast opening time with low sink rate, high pendulum stability, low weight and small packing volume.

Its symmetrical design reduces drift to a minimum, directional flight is not specified. The PEPPER CROSS LIGHT reserve chutes are cross-cap centerline reserve chutes with retracted apex and divided panels. Optimized layout and differentiated air permeability due to special processing and material mix result in a reserve chute of the most modern design. Robust materials guarantee that the reserve chute stays in top-notch shape for many years.



THE PURCHASER OF THIS PRODUCT ASSUMES SOLE RESPONSIBILITY FOR ALL RISKS ASSOCIATED WITH PARAGLIDING, INCLUDING INJURY AND DEATH. IMPROPER USE OR ABUSE SIGNIFICANTLY INCREASES THIS RISK. THE PURCHASER IS AWARE THAT A PREREQUISITE FOR PARAGLIDING IS A COMPLETED TRAINING COURSE AS WELL AS THE LICENSE REQUIRED FOR THE RESPECTIVE COUNTRY. ANY UNAUTHORIZED MODIFICATION OF THIS RESERVE CHUTE WILL RESULT IN THE INVALIDATION OF THE TYPE APPROVAL.



3 TECHNICAL DATA

Size	90	110	135	180	225
Area (m²)	26,9	32,5	40,1	52,9	65,5
Number of panels	20	20	24	28	28
Line length (mm)	4100	4400	4900	6000	6600
Weight (g)	990	1140	1440	1920	2260
Sink Rate (m/s)	5,2	5,45	5,45	5,45	5,4
Maximum load (kg)	90	110	135	180	225
Minimum load (kg)	55	55	55	100	120
Nr. of EN-certification	EP147.2016	EP170.2017	EP171.2017	EP301.2020	EP302.2020
Packing volume (l)	3,8	4,2	5,6	6,0	6,9

4 MATERIALS

- Sail: NYLON 6.6 22D ripstop
- Lines: LIROS DC201, rescue line 1628/29
- Webbing: 9,5mm PA
- Rubber bands: Rubber ring on silicone base (Rainbow LOOM)
- Main suspension riser: Liros D-PRO 5mm



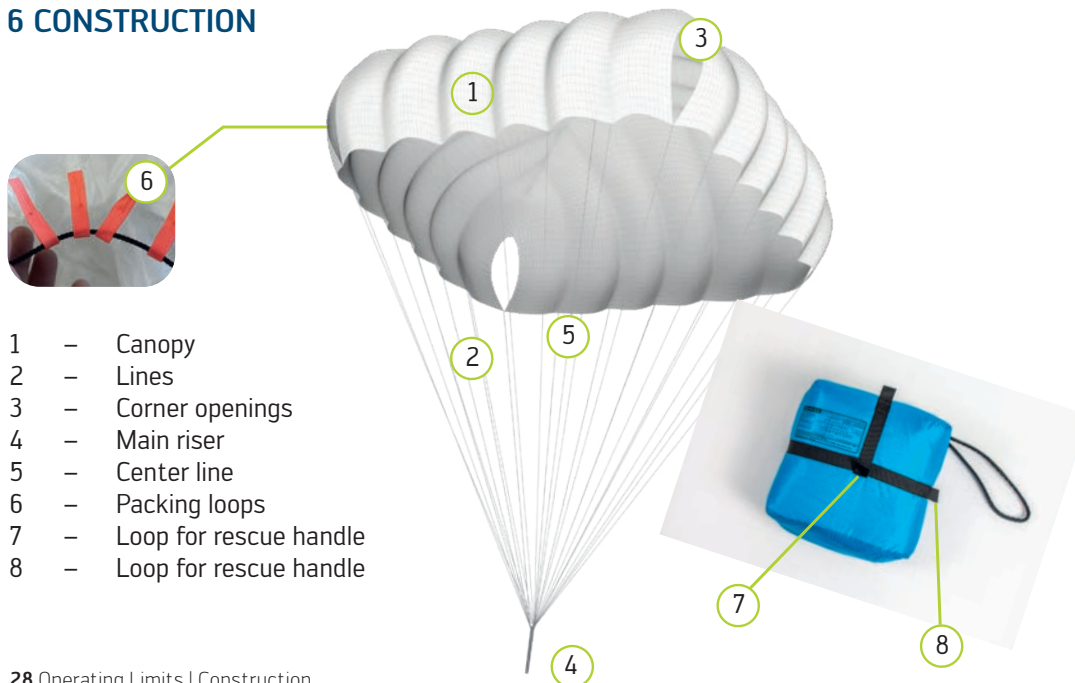
5 OPERATING LIMITS

- The PEPPER CROSS LIGHT has been specially developed for use as a reserve chute for paragliding. Any use for other flying sports such as parachuting, base-jumping etc. is prohibited.
- The PEPPER CROSS LIGHT 180 and 225 are suitable for tandem use, sizes 90, 110 and 135 must not be used for tandem use.
- The PEPPER CROSS LIGHT is not steerable.
- According to EN 12491, the reserve chute may only be used up to maximum speeds of 32 m/s or 115 km/h.
- The reserve chute must be aired out and repacked every 12 months.
- After a deployment, the reserve chute must be inspected and documented in the proof of packing by the manufacturer or authorized maintenance shop for rescue equipment.
- The reserve chute must be replaced after 10 years, even if it has never been used.



THIS PARACHUTE SYSTEM HAS BEEN TESTED AND FOUND COMPLIANT USING THE ORIGINAL MANUFACTURER'S INNER CONTAINER. USE OF ANY OTHER INNER CONTAINER MAY PRODUCE DIFFERENT RESULTS, INCLUDING FAILURES.

6 CONSTRUCTION



- 1 – Canopy
- 2 – Lines
- 3 – Corner openings
- 4 – Main riser
- 5 – Center line
- 6 – Packing loops
- 7 – Loop for rescue handle
- 8 – Loop for rescue handle

7 CONNECT THE RESERVE CHUTE TO THE HARNESS

To connect the reserve chute to the V-line, you must use an oval screw shackle with at least 2400 daN breaking load. The lines have to be secured on both sides of the screw shackle with rubber bands by means of Larks Head knot **(1)**, with fixing tape or a neoprene socket against fraying and abrasion.

As an alternative, you can directly connect the bridle and the V-line **(2)**.



It is important to ensure that the connection is centered, both connecting lines that lead to the shoulder are of the same length. If the harness does not have an integrated attachment possibility for the reserve chute on the shoulder straps, then the reserve chute connecting line can also be attached to both main carabiners. For removal proceed in reverse order.

8 COMPATIBILITY TEST

The PEPPER CROSS LIGHT rescue system is appropriate for integrated reserve chute containers. The first time installation of the reserve chute into the harness should be carried out only by an expert, a so-called compatibility-testing authority. This requirement is necessary to make sure that no unsuitable harnesses with integrated outer containers are used in combination with our reserve. Please contact your flight school or skywalk dealer to prepare for the initial installation. There you can find in most cases a certified compatibility tester.



AFTER EVERY REPACKING AND REINSTALLATION OF THE RESERVE CHUTE IN THE OUTER CONTAINER, THE CORRECT OPENING OF THE OUTER CONTAINER MUST BE CHECKED WITH THE PILOT SITTING IN FLIGHT POSITION, PULLING ON THE RESCUE HANDLE AND ENSURING THAT THE OUTER CONTAINER OPENS SMOOTHLY, THE RESERVE CHUTE IS HANGING ON THE RESCUE HANDLE, AND IS PROPERLY CONNECTED TO THE HARNESS. THE PULLING FORCE OF THE RELEASE HANDLE MUST BE BETWEEN 2 AND 7 daN.

9 RELEASING THE RESCUE SYSTEM

The PEPPER CROSS LIGHT is a reserve chute for paragliding and is only approved for this purpose. Use the reserve chute only in an emergency! To deploy the reserve chute, follow these steps:

- Pull the rescue handle firmly. The outer container opens up and the pilot is now holding the rescue system still packed in the inner container.
- Throw the container into free airspace with a hefty swing. The more powerful the throw, the faster the lines of the reserve chute will extend and accelerate the opening process.
- Immediately after the reserve chute opens, draw the paraglider in toward you to avoid the two canopies forming a V-position. This is best done via a B-line or C-line stall, by pulling down both brake lines until the glider stalls, or by pulling down one of the risers and/or several middle lines.
- Before you land, assume an upright position, put your legs together, bend your knees lightly and prepare to do a parachute landing fall.
- After landing in strong winds, pull the canopy toward you using the middle lines to keep the reserve chute from inflating again.

Tip:

Poorly maintained reserve chutes may open more slowly. If this is the case, pull firmly and sharply on the lines!



THE RESCUE SYSTEM MUST ALWAYS BE THROWN ON THE SIDE WHERE THE CONNECTING LINES OF THE HARNESS ARE LOCATED.

10 PACKING INSTRUCTION

All skywalk PEPPER CROSS LIGHT paraglider reserve chutes are inspected and packed in skywalk's manufacturing facility. It is recommended that the reserve chute will be repacked once again by a suitably qualified and experienced specialist before installing in the harness.

The effectiveness of the reserve chute and its ability to save lives depends on proper packing. If in doubt, or if you have any questions, please contact your flight instructor or skywalk dealer.

Tip:

You will find a detailed packing instruction on the product page:

https://skywalk.info/project/PEPPER_CROSS_LIGHT/

PREPARATION

- Before repacking, the reserve chute must be aired out, ideally for 12 hours in a cool, dry room.
- The packing area must be large enough, clean, level and dry.
- The reserve chute must be subjected to visual inspection and checked for damage to the canopy, the lines, the suspension points, the main riser and the screw shackle.



YOUR LIFE DEPENDS ON THE FUNCTIONALITY OF YOUR RESCUE IF YOU HAVE TO USE IT. IMPROPER HANDLING, INCORRECT INSTALLATION, IMPROPER STORAGE OR INCORRECT PACKING CAN HAVE FATAL CONSEQUENCES. IN CASE OF DOUBT, ALWAYS HAVE IT PACKED BY A SPECIALIST!

PACKING PROCESS

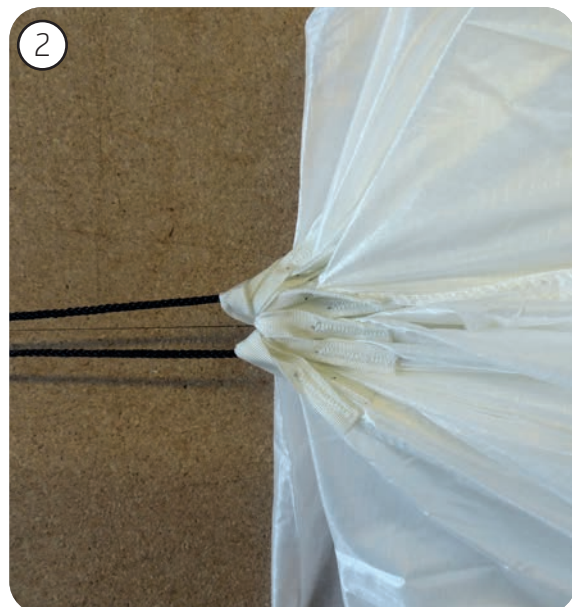
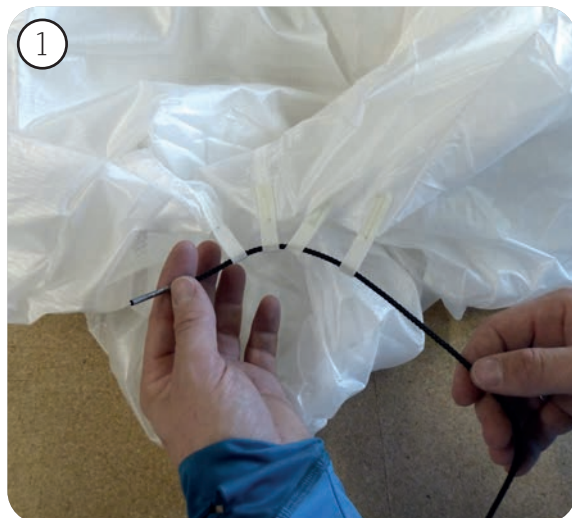
Follow the steps below to pack your rescue chute:

1. Use a piece of line to thread the packing loops together. Don't forget the four corner loops mounted slightly further back on the panels.

Depending on the size, the PEPPER CROSS LIGHT has a different amount of packing loops:

90 & 110: 20 loops
135: 24 loops
180 & 225: 28 loops

2. Secure the packing loops for now and pull on the main riser and the attached loops until it is tight.



3. The PEPPER CROSS LIGHT is a cruciform rescue parachute with four corner points, so lay out the canopy with one corner at the bottom, one on the left, one on the right and one on top. Start with the first corner at the bottom and smooth the material by running your hand along it on the table.



4. Pull the base from one line attachment point to the next along the seam to the side you are sorting and smooth the crossed panel. A line separator and a weight will help to secure the already sorted lines.

5. Now lay out the next panels in a rectangular fashion. They will be slightly easier to lay out.



6. Now comes the corner that points to one of the sides. This is also to be laid out in a crossed fashion, as in the picture.



7. Next, you will again encounter rectangular panels until you reach the next corner, which is now the uppermost and last one on this side. Make sure you leave an open channel through so you can see the table underneath. We will come to this later.



8. Now repeat steps 4 to 7 for the second side.

9. Now return to the channel and run your hands along the connecting points of the middle lines until they are free of the material.

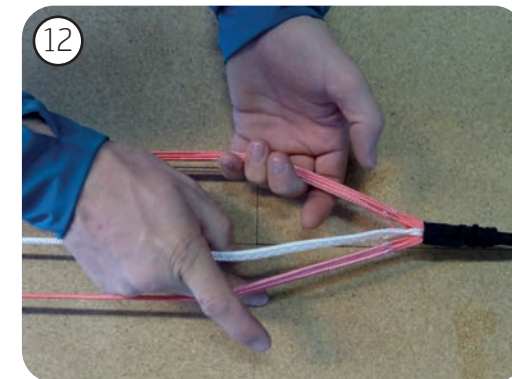


10. The extra material simply can be pushed up inside the channel as in the picture. The reason for this is to prevent the material from burning during a deployment.

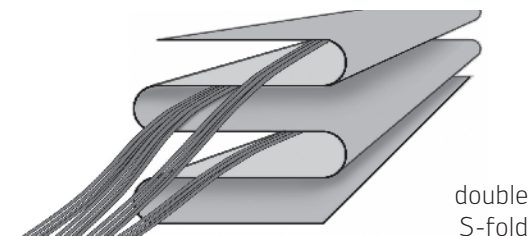
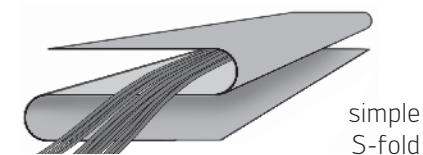


11. You are done with the sorting of the panels

12. So now you can inspect the middle line towards the main riser to see if the middle line is free.



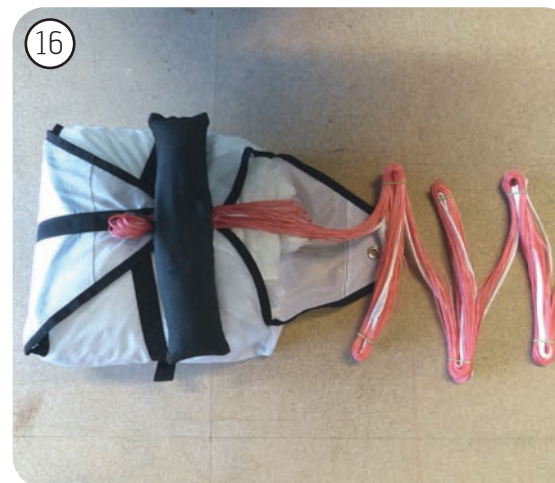
13. Now fold the reserve chute with a "double S-fold" or use the "simple S-fold" for sizes 180 & 225 and place the reserve container with the line pocket in the direction of the base/main riser.



- 14.** Now place the reserve chute like a snake in the container, take care to use the full length and width.



- 15.** Now close the first three rescue flaps and secure them with a small line loop. This method will avoid burns from a deployment later since the bundle of lines will be released first and will not come in contact with the material.



- 16.** Starting at the main riser, loop the line bundles in the shape of a figure-eight. Use silicone-based rubber rings to fix the line bundles. Make sure that there is no line knot in the line loop. Make sure to leave approx. 30 cm free to the first figure-eight. This length is needed for the final line loop.



- 17.** Now place the line bundles in the designated line pocket inside the reserve container.



- 18.** Secure the fourth and final rescue flap with the remaining line length from step 16.

The rescue system is now packed!

11 MAINTENANCE

The skywalk PEPPER CROSS LIGHT rescue should be repacked at least every 12 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.

The rescue parachute has to be checked after deployment by a professional. Always seek professional advice whenever in doubt.

The materials used in the 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.

12 CARE

- Avoid direct sunlight with the associated UV exposure, as well as heat and moisture.
- Store your harness and rescue equipment in your rucksack when you are not using it.
- Keep your paraglider equipment in a cool, dry place and not near solvents, greases, acids, oil and paints.
- Always dry your reserve chute if it gets wet in a well-ventilated, shady place.
- If the reserve chute comes in contact with salt water, rinse it several times with fresh water.
- A soiled reserve chute can be cleaned with lukewarm water. If necessary, mild neutral soap can be used, but do not rub the material too much.
- If the material has stains or mold, it must be sent to the manufacturer for inspection and possible repairs, or to an approved maintenance facility for rescue equipment as the strength may be impaired.
- If the reserve chute has to be stored for a long time, then it is best to store it open and loosely rolled up.

13 REPAIR

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.

14 DISPOSAL

When choosing materials, skywalk places high value on environmental compatibility and the highest quality control. Should your rescue someday no longer be flyable, remove all metal parts such as screw shackle. All remaining parts can be turned in at a recycling center. The metallic parts can be turned in at a metals recycling center. The best solution is to send your retired skywalk rescue directly to us. We will then take care of recycling it.

15

PROOF OF PACKING

Serial number

Pilot Name

Date: | |

Date of packing

by

Signature

16 NATURE AND ENVIRONMENTALLY COMPATIBLE BEHAVIOR

NOTES:

We have taken the first step towards ecological awareness with our nature-friendly sport. Especially with our mountain climbers who prefer to climb to the launch site. Nevertheless, we plan on continuing in the same vein. This means specifically: clean up your trash, stay on marked trails and don't cause unnecessary noise. Please help to maintain the balance of nature and to respect animals in their territory.

17 CLOSING WORDS

The skywalk PEPPER CROSS LIGHT is at the pinnacle of development in the market for square rescue systems. It cost us a lot of time to develop this rescue, but it was also a lot of fun. In this development we recognize the challenge of making the right product for every area and individual taste.

The PEPPER CROSS LIGHT will provide you with plenty of joy over many years if you treat it and care for it properly. Respect for the demands and dangers of our sport are essential for successful and beautiful flights. Always remember that flying sports are potentially risky and that you are responsible for your own safety. We advise you to fly carefully and to respect laws in the interest of our sport, because every pilot always flies at his or her own risk!

We wish you a lot of fun while flying, that you finally will never need your rescue chute and **ALWAYS HAPPY LANDINGS!**

Your skywalk Team

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