



A I R V U I S A

SNOWFLAKE reserve manual

Ver 1.0/December 2017.

Dear customer,

Thank you for purchasing an AIR VUISA quality product.

We are a growing family of professionals with the aim of producing high quality products for a wide spectrum of pilots. Incorporating modern technologies and highest quality materials, our goal is to manufacture durable paragliding products, with excellent performances but with safety as our highest priority.

We strongly recommend that you carefully read this manual, for it contains vital information for proper and safe operation of our product, as well as maintenance and operating instructions.

This manual is an integral part of this rescue system, so please pass it on to the future owner if you wish to sell it one day.

We wish you all the best in your future flying adventures,

AIR VUISA team

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The SNOWFLAKE reserve series

The SNOWFLAKE reserves are the next generation state-of-the-art paragliding rescue systems. They represent a breakthrough in performance including momentary high stability, extremely low sink rates and fast opening time, with durability and lightness at the same time.

We have achieved this through numerous innovations, experience gained from many years of producing paragliding rescue systems, and comprehensive testing.

After two years of comprehensive testing and analysis of numerous solutions, we have finally come up with a breakthrough that fully uses

the current potential of square reserves and truly follows our design philosophy, safety without compromises – this includes:

- Use of new state-of-the-art light materials, never used before in the industry;
- Large flat area (m²);
- Very fast opening rates;
- Extreme pendulum stability;
- Very low sink rates.

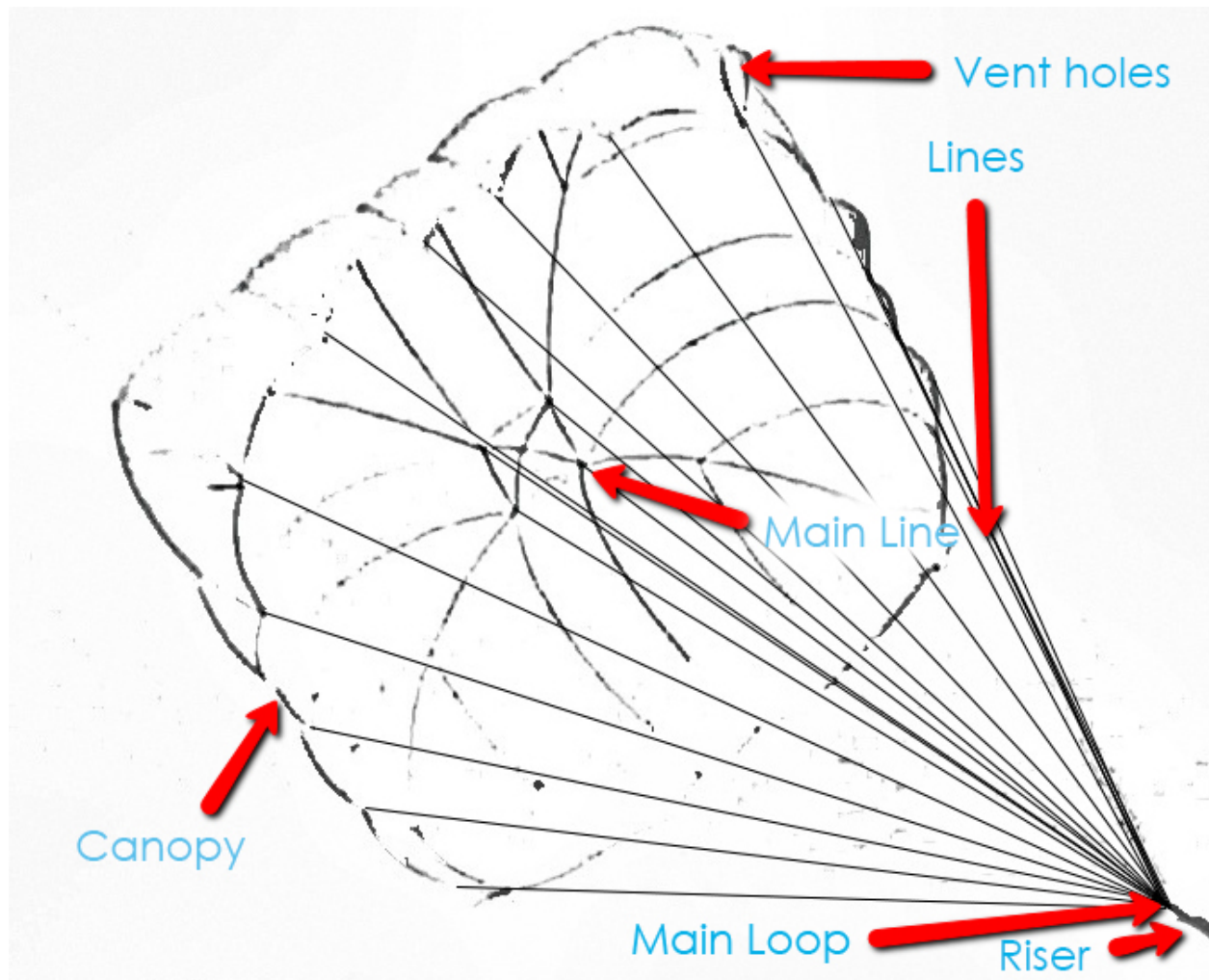
The main objective was not just to conform to the current EN Standard, but to go even beyond it, not just to “walk on the line” as most manufacturers do, and to provide a quality product for the pilot that will not have any compromises for the sake of cheaper production etc.

Technical specifications:

Snowflake	**SF-90	SF-105	SF-125	SF-150
Max. load	90 kg	105 kg	125 kg	150 kg
Min. load	70 kg	85 kg	105 kg	130 kg
Weight*	890 g	1.180 g	1.720 g	1.760 g
Area flat	27 m ²	32.64 m ²	40.6 m ²	46.4 m ²
Volume	/	4400 [cm ³]	5600 [cm ³]	6700 [cm ³]
Sink rate (max load)	/	5.2 m/s	5.4 m/s	5.2 m/s
Panels	16	20	24	24
Middle lines	1	1	1	1
EN/LTF test no.	/	/	/	/
Steerable	No	No	No	No

*including container

** not yet available



Safety information

- **WARNING** - The AIR VUISA SNOWFLAKE reserve parachutes are designed and tested exclusively for paragliding use. Under no circumstances should it be used for skydiving. - Not suitable for use at speeds in excess of - 32 m/s (115 km/h)
- 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!

- Every pilot bears sole responsibility for his/her personal safety when paragliding. Neither the manufacturer nor the seller can guarantee or be held responsible for the safety of the pilot. The use of this rescue system is entirely at your own risk.
- All parts of the equipment should be checked before every flight, including a thorough pre-flight check.
- It is of outmost importance to check the harness and reserve compatibility by a qualified person and to do a test deployment.
- Reserve parachute should be checked and repacked by a qualified person at least every 6 months to ensure proper operation.
- Operational life of a reserve is 10 years, with annual checks on regular basis.

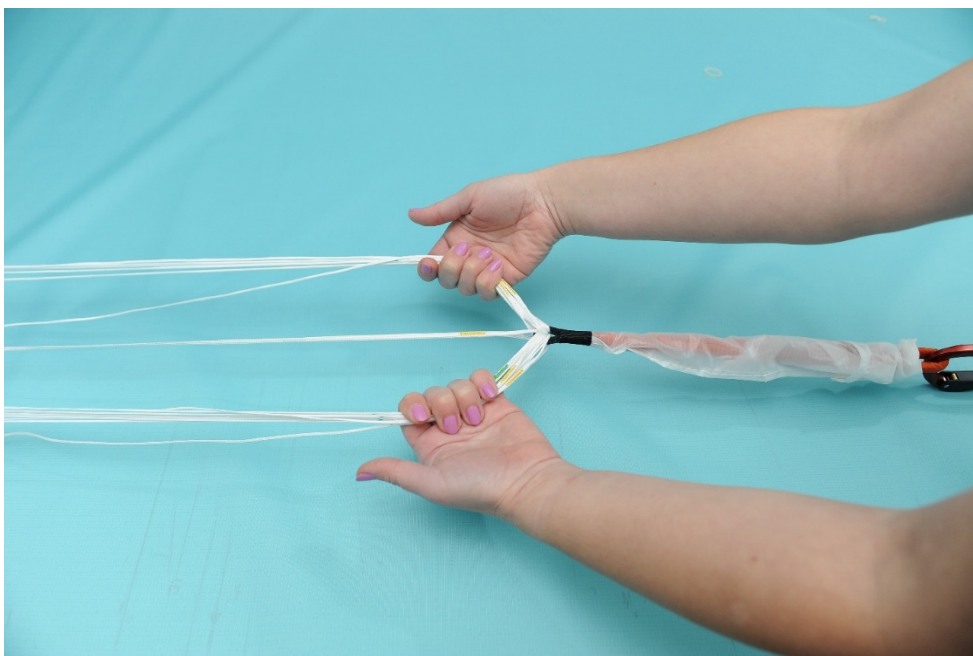
Setup and packing instructions

1. Lay out the parachute out to its full length on the packing surface. Find all of the loops at the top of the chute, one located on each panel. Take a spare piece of line (about 1.5m in length) and run it through the sewn in loops in order and then tie the line which runs through the loops to a solid object so that the reserve is secured, tightened on both ends and stretched to its full length.





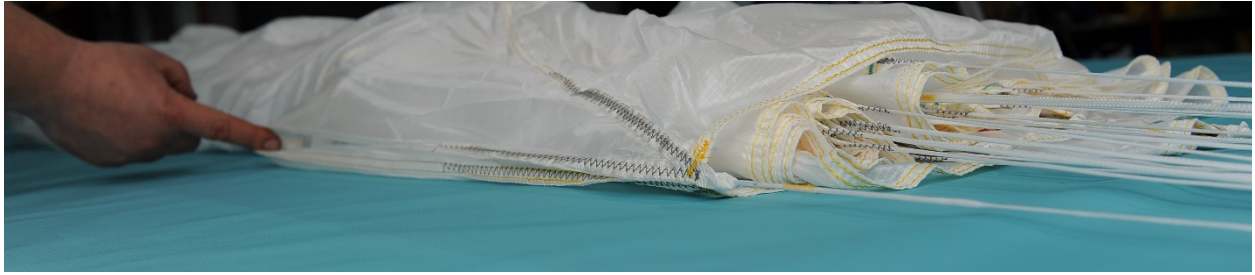
2. Find panel no.1, separate the panels and lines so that an equal amount lies on each side.





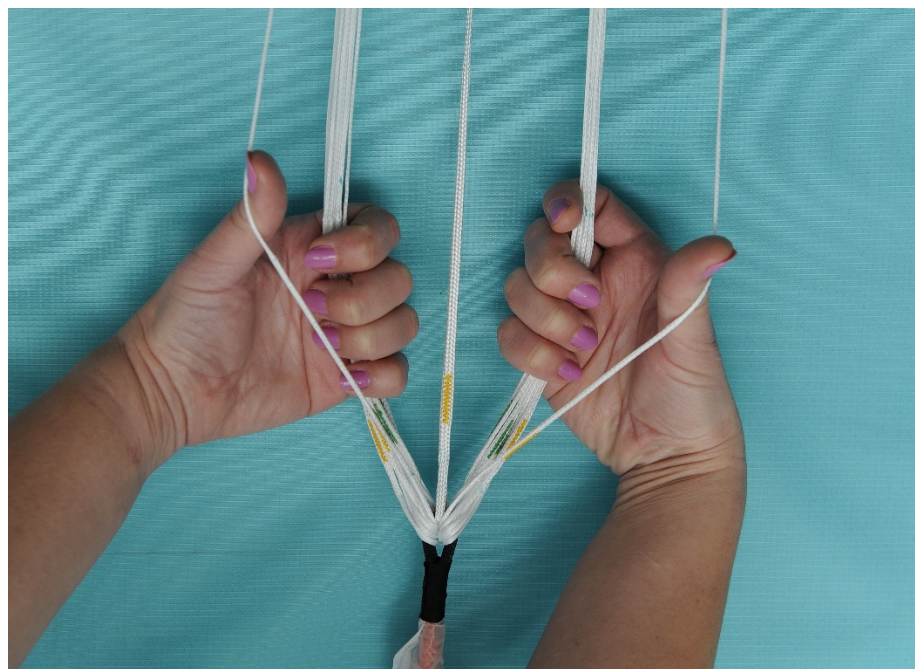
3. Start ordering the panels from the bottom up, first one and then the other side, use weights as an aid.





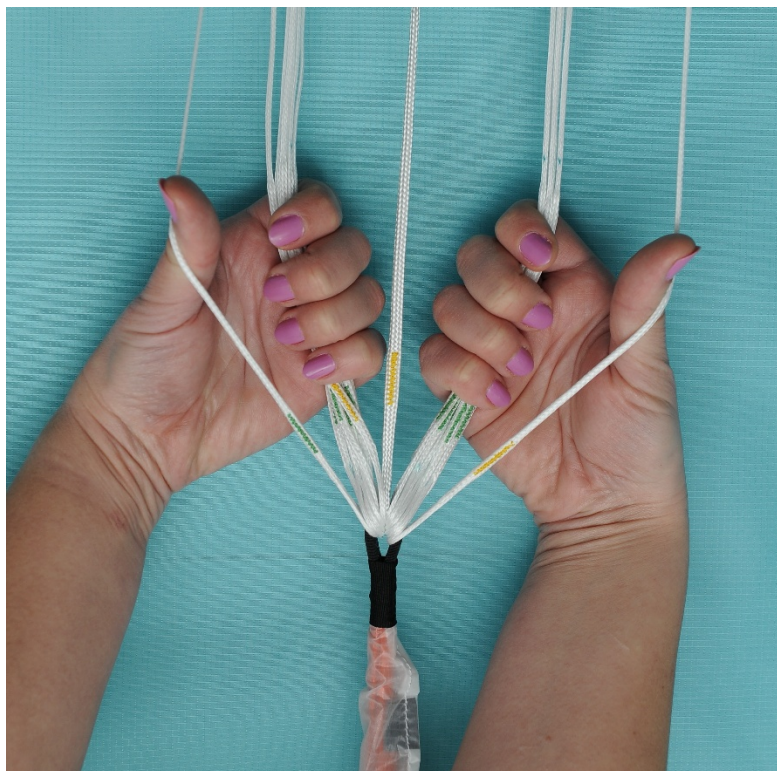


4. After you have arranged the panels neatly, arrange the lines. Start from the risers towards the canopy, take the first pair of lines next to the central line and work your way towards the chute, it should show field 1 and on the other side the last panel number.



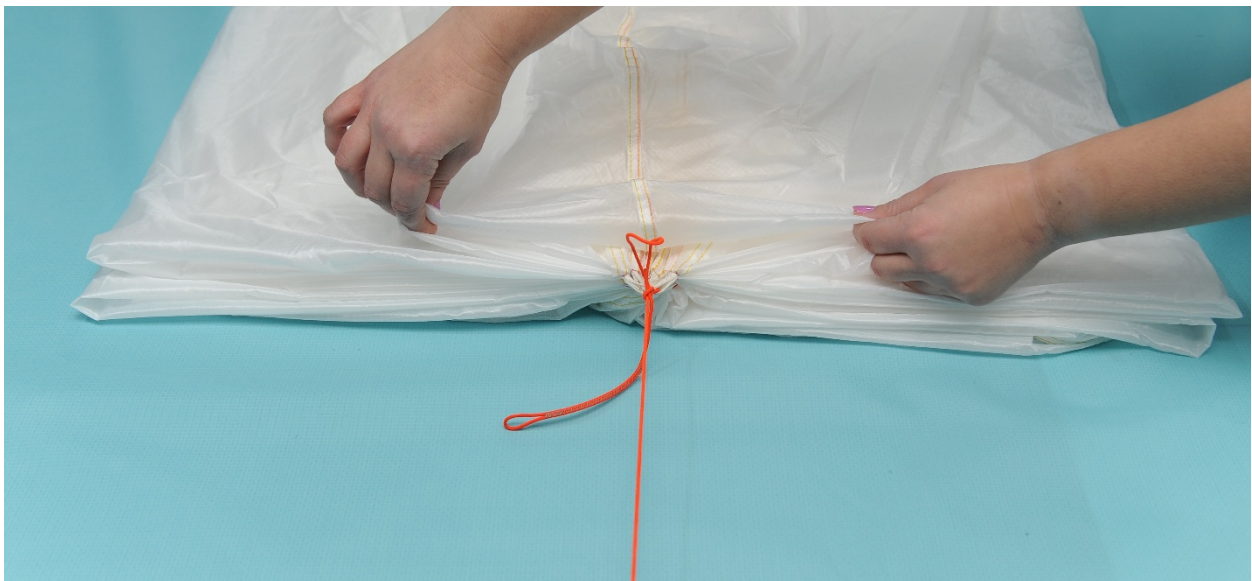


5. In the next step we check the outer ropes, go back to the risers and take the outer ropes at the end of both sides of the risers, and work your way to the mouth of the chute, the ropes held by us must now be at the bottom of the chute.





6. When we have checked the lines, we will fold the canopy into an “S” shape.





7. Untie the top of the canopy and then start folding the canopy into a form of a zig-zag pyramid, stacking the columns on top of each other for the width of the hand. **Don't forget to remove the spare line from the top of the canopy!**





8. The eighth step requires simply inserting the reserve laterally into the container, leaving the lines outside in order to be packed and then closing the lids of the container, guiding the rubber loop through the holes on the container lids.



- Use a pen like tool in order to keep the container from opening while packing the lines.



9. Finally, we come to the packing of the lines. We pack them manually or with the help of a special tool for line packing, as it is shown in our case. In any case it is important to match the width of the container on the side, where the pocket for inserting the folded lines is located, while stacking the lines.



10. Start folding the lines 20cm from the loop of the risers, folding them into an “S” pattern, securing each loop with a silicone rubber band.



Insert the folded lines into the container and close it as shown in the pictures:





Note – Always perform a main loop release test, the loop should release and the container should open easily by its own if the reserve is packed properly!



Now that we have properly packed our reserve parachute into the container, turn it on its back. On the back side you will see four attachment points with loops for connecting the rescue handle, which pulls the parachute from the rescue pocket of the harness.



For the connection with the harness, we recommend using a suitable screwed connector and connecting the reserve bridle with the harness as shown below:



Close the harness container following the harness manufacturer instructions – **IMPORTANT:** Always perform an extraction/security check procedure after installing the reserve into your harness!

WARNING — Use of this parachute with any alternative inner container: the speed of opening and opening shock test has been completed using the inner container supplied. Use of any other inner container may produce different results (including failure)!

Use and operation

In case of an emergency during flight, in order to activate the reserve, the pilot must grab hold of the reserve handle and firmly pull it in order to get the reserve container out of the harness and then in a swinging motion throw the whole reserve package away into free space, enabling the reserve lines to tighten and free the reserve from its inner container. Once the chute is out, it unfolds and inflates.

In order to be prepared for a reserve deployment in a case of an emergency, we recommend practicing reserve deployment on the ground or over water under professional supervision. Also, we recommend to periodically practice reaching the reserve handle during flight, so that you always know where it is.

Maintenance

In order to ensure a proper, safe and a long operational life of your reserve, please follow these advices:

- Store your reserve in a dry place at room temperature.
- Don't leave your equipment in the boot of the car, especially in the sun or freezing temperatures.
- If your reserve gets wet, dry it in a well ventilated place, out of the sun, in order to prevent mold formation.
- If your reserve gets dirty or you land in salt water, use only tap water to wash it.
- Keep the reserve away from acids, grease, oils and paint.
- If your reserve gets damaged, repairs must only be done by the manufacturer or other authorized persons or service centers.
- all repair and spart parts can be obtained from the manufacturer or your local AIR VUISA dealer.

Final notes

One of the most important aspects for us at AIR VUISA is customer care. If you have any questions about our products, feel free to contact us:

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Thank you for taking your time to read this manual, we wish you many happy and safe flights, being safe with your new SNOWFLAKE rescue system.

AIR VUISA team

Test reports