



# QUEEN 2

High performance EN/LTF-C





TRIPLE

SEVEN

# USER MANUAL

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# Introduction

## Welcome

Welcome to the Triple Seven Team! We are excited that you have chosen to fly our Queen2. The Queen2 is developed for maximum performance while maintaining the ease of flight of an EN/LTF-C class glider. This glider is designed to be your next step in XC and competition flying. We wish you lots of exciting flying adventures!

## Triple Seven Mission

Our company's goal is to produce high-quality products and technologically innovative gliders of all types and classes. We are striving to develop state-of-the-art paragliders, with the optimum compromise between safety and performance. Your success is our inspiration; our goal is your success.

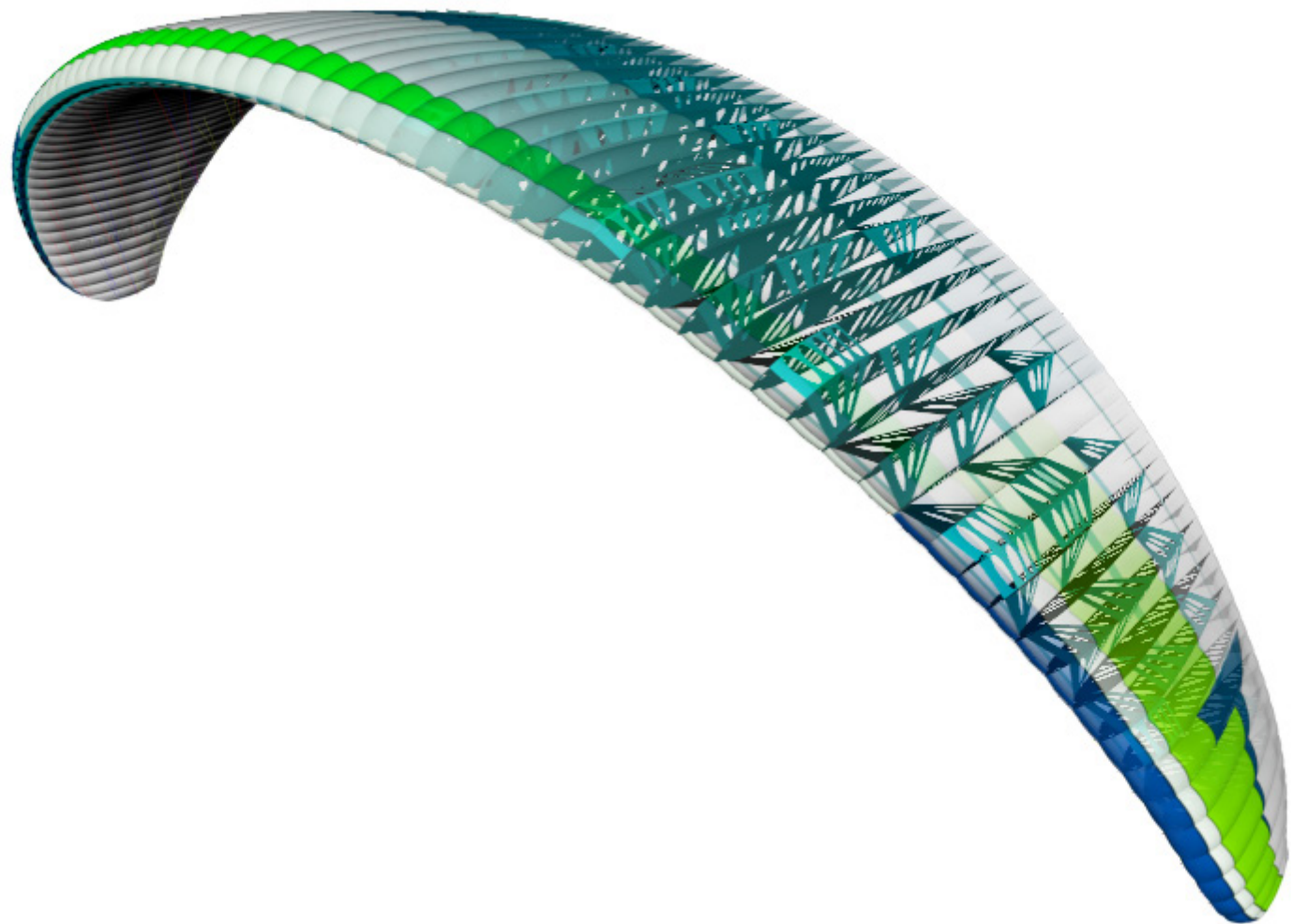
This document contains complete product information and instructions to familiarise you with the main characteristics of your new glider. It contains instructions on how to use and maintain the wing. It is not written to serve as learning material for piloting this kind of wing. This is not a flying manual! Flying can only be taught by flying schools and certified instructors.

It is important that you take time to read this manual carefully before the first flight, as thorough knowledge of your equipment enables you to fly safely and to develop your full potential. If you sell, lend or give your glider to another pilot, please pass this manual on with it.

If any use of Triple Seven equipment remains unclear after having read this manual, please contact: Your local paragliding instructor, your Triple Seven importer or Triple Seven directly. This product manual is subject to changes without prior notice. Please check [www.777gliders.com](http://www.777gliders.com) for the latest information regarding our products.



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- » Reinforced leading edge (RLE), Smooth trailing edge reinforcements (STE) together with (BPI), for greater stability and good gliding performance across the wide speed range
- » BPI - back position intake technology, for spin and stall resistance and good stability at accelerated flight.
- » Low induced-drag wing tip (LDW), optimized washout with two additional floating cells.
- » 4 cells diagonals (RLE) reinforced leading edge
- » Nice pitch stability and ease of piloting
- » Trim speed optimised for climbing
- » Clean canopy with refined sail tension
- » Direct handling with precise control
- » Full-span distributed panels orientation, streamlined to airflow direction
- » Improved 3d shaping (ballooning) at the leading edge
- » High-end EN/LTF-C glider





## Designer's thoughts

The Queen2 was designed to provide a new wing for the C class pilots. The goal was to combine the knowledge that we gained while designing the rest of the Triple Seven wings, into something, that will surpass the existing C class with its performance and ease of use.

The Queen2 is a wing, placed firmly in the C class category with refined profile and extensively complexed internal structure.

All in all to provide best package for the XC pilot, reaching new goals with an ease of flight.





Paraglider is not recommended for less experienced pilots than the C class.

The Queen2 has passed the European EN-LTF C certification for all commercially available sizes. The homologation results may be found at the end of this manual.





# Before flight

## Elements, components

The Queen2 comes with a backpack, inner bag, glider strap, Triple Seven T-shirt and USB key with this manual.

## Visual inspection

Before you rush to the first take-off we recommend that you take your time to unpack and test your equipment on a training slope. In this way you will have time and will not be distracted or rushed to prepare your equipment, and you will be able to do your first pre-flight check properly.

The place should be flat, free of obstacles, and with light wind. This will enable you to nicely inflate the wing and also familiarize yourself with it while ground handling. Your new glider will have been checked already by your Triple Seven dealer, however, as a pilot you want to do a proper pre-flight check yourself.

Prepare and spread out the glider like you normally would. While you are spreading out and walking along the glider, observe the fabric material for any abnormalities. When you are done with the inspection of the canopy, grab the risers and spread the lines, check if the risers and line maillons (carabiners) are properly closed. Identify and disentangle the A1, A2, B, C risers and the lines, including the brake lines. Connect the risers' main attachment points correctly to the harness, watch for any twists and make



sure that the main carabiners are properly closed.

## Harness

The Queen2 has passed EN-C certification testing using a GH - ABS type harness. This certification allows the Queen2 to be flown with most harnesses on the market, but keep in mind that changing the harness greatly influences the feeling of the glider, depending on the effectiveness of the harness weight shift. Check with the harness manufacturer or with your instructor whether your harness is of the proper type.

The length of the harness chest strap affects the distance between the main carabiners and the wing's handling as well as your stability in the harness. Tightening the chest strap increases your stability, but greatly increases the risk of twisting after a collapse. A tight setting also increases the tendency to maintain a deep spiral. As a rule of thumb, a more opened chest strap gives you more feedback from the glider, which is good for your climbing efficiency and increases safety in a flying incident. But we strongly recommend adjusting the length of the harness chest strap according to the lengths used during certification. This setting varies from 42cm to 50cm depending on the harness size.

Check the settings used during testing under the certification specimen section. We recommend making your first flight with the Queen2 using a familiar harness. As a rule of thumb, if you want to experience the feeling of new equipment, change only one component at a time.

## Accelerator settings

The Queen2 speed system increases the speed of the glider by 20km/h with the accelerator at full travel, from trim speed at 40km/h to full speed at 60km/h.

Before attaching the accelerator system to the Queen2 risers, check that the speed system inside your harness is correctly routed and that all pulleys are set correctly. Make sure there are no knots or other obstacles that might make the accelerator get stuck during usage.

The length of the speed bar lines should be adjusted on the ground so that your legs are fully extended at the point of full accelerator travel. While setting the speed line lengths make sure they are long enough, so that the speed system does not accelerate the glider by itself. If in doubt how to properly set the accelerator system, please consult your instructor or Triple Seven dealer.

## Brake line adjustments

The length of the brake lines has already been adjusted by the manufacturer and is the same as used during the certification test flights. The length is set and fine-tuned during the development of the glider, therefore generally there should be no need for adjustment. We recommend flying this setting for a while, and you can still change it afterwards if you wish to do so. If you change the length of the brake lines, do it in a step by step process of 2 cm at a time. Bear in mind that if you make the brake lines too short, they might be applied unintentionally when the speed system is engaged. The brake travel is greater than, up to 80 kg - 55 cm, from 80 kg to 100kg - 60 cm and over 100 kg - 65 cm.

# Weight range

Each size of the Queen2 is certified for its own weight range. The above mentioned weight includes the weight of the pilot and complete paragliding equipment, together with the glider, harness, all accessories and optional ballast. Every glider changes its characteristics when changing the take-off weight. We recommend that you always fly your glider in the specified weight range. To measure your take-off weight, step on a scale with all your equipment packed in the rucksack.

## **Lower half of the weight range**

Flying the Queen2, as any other glider, in the lower part of the weight range, causes the agility of the glider to decrease, and when flying through turbulence its tendency to collapse increases slightly compared to flying it in the upper wing loading range. However, reactions after a collapse are less dynamic and sink rate improves. Therefore, if you mainly fly in weak conditions, you might prefer this weight range.

## **Upper half of the weight range**

Again, as with any other glider, flying the Queen2 in the upper part of the weight range increases the stability and agility of the glider. Consequently, there is a slight increase in the glider's speed and even gliding performance, especially when flying into wind. If you normally fly in stronger conditions and you prefer relatively more dynamic flying characteristics, you should aim to load up for the higher weight range. Reactions after a collapse may be more dynamic in the upper half of the weight range.

# Wing inflation

Still being on the training slope and having prepared and checked everything, inflate your wing and play with it to get a feel of your new glider while ground handling. By doing this you are making a final check of the canopy and lines, and that everything is in order. You will find that the Queen2 inflates very easily and smoothly without excessive energy and with minimum pressure while moving forwards. For inflation and lifting the glider you may use only the A1 risers. Do not pull on the risers just with your hands, instead use your whole harness. Your hands should only accompany the rising movement of the wing. When the wing is above you, apply correct pressure on the brake lines and the glider will stay above you.

# Modifications on the glider

Any modifications of the lines or risers' speed system cause the loss of the certification, as does flying the wing outside the weight range.

# Preflight safety

Before flying the Queen2, you should obtain all practical and theoretical training and the certification for flying this kind of wing. Pilots should be physically and mentally fit, using complete paragliding equipment and flying only in conditions suitable for their level of flying expertise.



# Flying the Queen2

## First Flight

Now that you have already familiarised yourself with your new glider while ground handling on a training slope, you are ready for your first flight. For the first flight we recommend that you choose a familiar flying area and that you fly your new glider in calm conditions.

## Preflight equipment check

Before every flight you need to do a pre-flight check and to inspect any other equipment. Learn to do this, as it takes no extra time. This procedure may vary, depending on the instructor, pilot or equipment settings. Some pilots have their wing always connected to the harness. However you should have a consistent method of checking and preparing your equipment and doing the final pre-flight check.

1. After the arrival on take-off, assess the suitability of flying conditions.
2. While walking around the canopy preparing and spreading out the wing, you should at the same time inspect the canopy.



3. After you check the lines and connect the risers to the harness, grab the lines and slide them through your fingers as you walk towards the canopy. In this way you double check that the lines are not tangled, stuck or damaged. If meanwhile the canopy moves, walk around and correct it again.
4. Inspect the harness, reserve, speed system and all connections.

## Final preflight check

1. Strap into the harness. The leg straps should be the first to be connected on the take-off and the last ones to be released after the flight. Make sure you are strapped in correctly and wearing a helmet.
2. Check the risers for twists, and that the carabiners are properly closed. Check that the speed system is not affecting your risers – accelerating unintentionally.
3. Check the lines. The A riser lines should be on top, and all lines untangled. Check that none of the lines are lying over or below the canopy.
4. Check the canopy. The glider should be spread out in the shape of an arch and all cells open.
5. Check the wind, take-off and airspace. The wind should be favourable for take-off and the pilot's level of expertise. Airspace should be clear, together with the take-off area.

## Inflation, control, take-off

The Queen2 has easy take-off behavior and does not require any additional advice regarding the forward or reverse launch. Try to divide and practice the take-off procedure in three steps.

1. Inflating and raising the glider
2. Controlling the wing and wing check
3. Accelerating and take-off

It is always advisable to practice and improve proper launching techniques as this reduces unnecessary additional stress before the take-off.

Wind speeds up to 25 to 30km/h are considered strong and extra care is required for the flight. If you are launching in strong winds we recommend the reverse launch technique, with your brakes in the right hands at all times. Launch the glider with a gentle pull and then walk towards it if necessary to reduce the relative wind force. When the glider is above you, gently control the wing and take off.

## Line knots or tangles

If you fail to observe a line knot or you find yourself flying with a knot before being able to prevent the unintentional, uncontrolled take-off, try to stay away from the ground or other pilots by flying away from the mountain, before taking any corrective action on the wing. This means that you weight shift and/or counter brake the opposite side of the wing and control the flying direction with the least amount of force needed for the wing to fly straight away from the mountain. Be careful not to apply too much brake or to fly too slowly to avoid a stall or spin. When you are at a safe distance away from the mountain and you have gained relative height by flying away, you may want to gently and briefly pull the lines that are tangled with the knot. If the knot is on the brake lines you might want to gently and briefly “pump” the appropriate brake line. Please note that by pulling the lines, the knot may get stuck

in a worse position and the situation may escalate also to a stall or spin. Therefore, if you estimate that you can control the wing relatively safely and that the knot is not released by gently and briefly pulling the tangled lines, immediately fly to the landing zone and land safely.

## Normal flight, best glide

Without any brakes applied and without using the accelerator, the wing flies at the so-called “trim speed”. In calm air this is theoretically the best glide speed. The best speed glide depends on the glider’s polar and air mass, vertical and horizontal speed. We recommend reading more about the theory of the best glide and McCready theory.

## Minimum sink

If you apply brakes on both sides for about 10 -15 cm you will slow the glider to the theoretical minimum sink speed. But we do not recommend using this speed even for thermalling, as you achieve much better climbing and control by letting the glider fly with its “trim speed” and natural energy. With a proper take-off weight you will find that the glider has great climb, reactions and agility.

## Accelerated flight

After you get comfortable flying the Queen2, you can start practicing using the speed system, which will provide better performance while gliding against the wind and through a sinking air mass. The Queen2 was designed to be stable through its entire

speed range, but this requires the use of active flying techniques. Note that any glider becomes less stable while flying accelerated and that the risk of a collapse is higher in accelerated flight. Additionally, the reaction of the glider to a collapse in accelerated flight is more dynamic in comparison with the one which occurs at trim speed. We recommend that you avoid accelerated flight near the ground, and that you are very careful when using the accelerator in turbulent conditions. Use a soft speed bar, which enables you to accelerate the glider by using only one leg. To control the direction use weight shift. To control the pitch change the amount of the speed bar. Do not use or pull the brakes while using the speed bar. Use the speed bar progressively when accelerating and instantly release when you feel a slight loss of tension, pressure or even a collapse. If you encounter a collapse while using the accelerator, release the speed bar immediately before taking any other corrective action. Always keep more distance from the ground when using the speed bar.

## Active flying

This is a basic flying technique for any pilot. It implies permanent control and the correction of pitch and roll movements together with the prevention of any deflations or collapses. In a nutshell this means flying straight through active or turbulent air, so that the pilot keeps the glider above their head at all times, compensating and correcting any unwanted movements of the wing.

### **A few examples:**

- While entering a strong thermal, the wing will stay a little bit behind relative to the pilot. The pilot should let the brakes up, allowing the wing to fly faster and to catch up.

- If the wing surges in front of the pilot, the pilot should counter brake until the surge is controlled and then release the brakes to let the glider fly normally again.
- If the pilot feels a loss of tension on the wing or a loss of pressure on the brakes on one side of the wing, they should smoothly apply brake on the side with loss of pressure and/or weight shift to the opposite side until the pressure returns. After that, again release the brake and/or weight shift to the neutral position and let the glider fly normally.

The key in all cases is to avoid an over-correction and not to maintain any correction longer than necessary. After each input, let the glider fly normally again, to re-establish its flying speed. You can train or get a feeling for most of these movements safely on the ground while ground handling your glider. Good coordination of your movements and coordination with the wing on the ground will allow you a quick progression when flying actively in the air. The next step is to attend SIV courses where you should also get a better understanding of the full brake range and the glider's speeds.

## Flying in turbulence

Wing deflations can occur in a strong turbulence. The Queen2 is designed and tested to recover without pilot input in almost all situations, by simply releasing the brakes and letting the glider fly. To train and understand all the manoeuvres described, attend SIV courses.

### **Cascade of events**

Many reserve deployments are the result of a cascade of

over-corrections by the pilot. Over-corrections are usually not problematic because of the input itself or its intensity; but due to the length of time the pilot continues to over-handle. After every input you have to allow the wing to re-establish its normal flying speed. Note that over-corrections are often worse than no input at all.

### **Asymmetric deflations**

Strong turbulence may cause the wing to collapse asymmetrically. Before this occurs the brake lines and the feeling of the harness will transmit a loss of pressure to the pilot. This feedback is used in active piloting to prevent a collapse. If the collapse does occur, the Queen2 will easily re-inflate without pilot reaction, but the wing will turn towards the collapsed side. To prevent this from happening, turn and actively recover the asymmetric collapse by weight shifting and applying appropriate brake input on the side that is still flying. Be careful not to over-brake your wing's flying side. This is enough to maintain your course and give the glider enough time to recover the collapsed side by itself. To actively reopen the collapsed side after course stabilisation, pull the brake line on the collapsed side firmly and release it. You can do this several times with a smooth pumping motion. After the recovery, release the brake lines for your glider to regain its trim speed. You must be aware of the fact that asymmetric collapses are much more dynamic when flying accelerated. This is due to the difference in weight and the inertia of the canopy and the pilot hanging below.

### **Symmetric deflations**

Symmetric or frontal deflations normally reopen immediately by themselves without pilot input. The glider will then regain its airspeed accompanied by a small surge forwards. To actively



control this event, apply both brakes slightly when the collapse occurs and then instantly release the brakes to let the glider fly. Be prepared to compensate for the glider's slight surge forward while returning to normal flying.

### **Wing tangle, cravat**

A cravat is very unlikely to happen with the Queen2, but it may occur after a severe deflation or in a cascading situation, when a wing tip may get caught in the glider's lines. A pilot should be familiar with the procedure of handling this situation with any glider. Familiarise yourself with the stabiliser main line ("stabilo" line, outside B-line on B riser) before launching. If a cravat occurs, the first thing to do is to try to keep the glider flying on a straight course. Do this by weight shifting and counter braking the untangled side. After that, grab the stabilo main line on the tangled side and pull it down until it becomes tight again. At this point the cravat normally releases itself.

Possible solutions of the cravat situations (consult your SIV instructor):

- Pulling the wing tip "stabilo" line
- Using a full stall, but it is essential to be very familiar with this manoeuvre. You will also want to have a lot of relative altitude.
- If you are in a situation where you have a cravat and you are low in rotation or even with twisted risers, then the only solution is the reserve parachute.

### **Negative spin**

In normal flight you are far from negative spin. But, certain circumstances may lead to it. Should this occur, just release the brake lines progressively and let the wing regain its flying speed.

Be prepared for the glider to surge forward, and to stop the surge with brake input if necessary.

### **Full stall**

A full stall does not occur unintentionally on its own – it happens if you pull both brakes down 100% and hold them. The wing then performs a so-called full stall. Releasing the brakes improperly may lead to a massive surge of the glider with danger of falling into the canopy. This is a complex manoeuvre and as such outside the scope of this manual. You should practice and learn this manoeuvre only on a SIV course under professional tuition.

### **Deep stall**

Generally when in deep stall, the wing has no forward motion and at the same time high sink speed. When in deep stall the wing is almost fully inflated. With the Queen2 it is very unlikely to get into this situation unintentionally. This could possibly happen if you are flying at a very low speed in turbulent conditions. Also the porosity of the material and line stretch on a very old glider may increase the likelihood of a deep stall. If you trained this manoeuvre during a SIV course you will know that it is very hard to keep the Queen2 in deep stall. If you apply the brakes a little bit too much you enter the full stall. If you release the brakes just a little bit too much the wing returns to normal flight. If you want to practice the deep stall on SIV courses, you need to master the full stall first.

# Fast descent techniques

Fast descent techniques should be familiar to any pilot, as they are important resources to be used in certain situations. These manoeuvres should be learned at your flying school as a part of paragliding pilot training. Nevertheless, we recommend practicing these manoeuvres on SIV courses under professional supervision.

## Big ears

This is a safe method to moderately loose altitude while still maintaining forward speed. To do big ears, release any brake line loops around your wrist, set your leg on the speed bar, but do not push it. Now pull the outer A lines (the A2 risers in the drawing) on both sides. As long as you keep the A2 risers pulled, the wing tips stay folded and the sink speed increases. To regain normal flight, release the A2 risers, and if necessary apply the brakes with short impulse movements. Release big ears at least 100 meters above the ground. While using big ears, the wing speed decreases, which is why we also recommend using the accelerator half way in combination with big ears to maintain enough horizontal speed, and to additionally increase vertical speed. Be careful not to pull the brakes while flying with big ears! Steering is done by weight shift only. Always do the big ears first and then accelerate; not the other way around as you will risk getting a frontal collapse.

## B line stall

While in the B-stall the glider has no horizontal speed and the sink rate increases to about -10m/s. To enter the B-stall reach for the B risers just above the maillons and pull both B line risers symmetrically down for about 20 cm. To exit the manoeuvre, simultaneously release both risers quickly. On exit the Queen2

gently dives without deep stall tendencies.

## Spiral dive

The spiral dive is the most demanding of all three manoeuvres (Big ears, B-stall, Spiral) and should only be trained gradually and always with plenty of altitude. The spiral dive should be practiced and learned on a SIV course under professional supervision. To enter the spiral, weight shift to the desired side and gradually apply the brake on the same side. Then let the wing accelerate for two turns and you will enter the spiral dive.

While in the spiral, you can control your descent rate and bank angle by applying more or less inner brake. Depending on how steep the spiral is you may need to use also outer brake. To exit the spiral dive we recommend that the pilot is in the neutral weight shift position. If you release the inner brake, the wing exits the spiral dive by itself.

The Queen2 has no tendency to become stable in the spiral until -14m/s descent, but you should be aware of the procedure for exiting a stable spiral.

To exit a stable spiral dive, weight shift to the opposite side of the turn and apply the outer brake until feeling the deceleration of the wing rotation. Then release the outer brake and let the glider decelerate for the next couple of turns. To avoid a big pendulum movement after exiting the spiral, apply a short brake input on the inner side before the glider exits the spiral.

Warnings (Spiral dive):

- There is a possibility of losing consciousness while in the

spiral dive. Never make a spiral with more than 16-18m/s descent speed.

- In fast spirals it may be necessary to apply the outer brake to begin exiting the spiral dive.
- If practicing the spiral dive low, a pilot may not have enough altitude or time to safely exit this manoeuvre.

## Winch launch

The Queen2 is easy to tow-launch using a winch and has no special characteristics to consider during this form of launching. To practice this launching technique special training is needed and you have to

be aware of the procedures and dangers, which are specific for towing. We do not recommend using any special towing device which accelerates the glider during the winch launch.

## Aerobatics

The Queen2 was not designed for aerobatics, therefore, these may not be performed on this glider. In addition to this, any extreme manoeuvres place unnecessary stress on the glider and shorten its lifespan.

## Primary controls failure

If for any reason you cannot use the brake lines, you have to pilot the wing to the landing place by using weight shift. Weight shift should be enough to safely land the glider. You can also use the C risers to control and steer the wing. Be careful not to over-handle the glider by using the C riser technique when steering. By pulling the C risers too strong you can cause a stall or a negative spin. Land your glider at trim speed without using the

C risers, to avoid over-handling the glider low above ground. We recommend using weight shift.

## Flying in rain

If you are accidentally caught-out in a rain shower, it is best to land immediately. If your wing becomes wet in the air it is advised to maintain accelerated flight using the speed bar and/or releasing the trimmers, even during the final approach. DO NOT use big ears as a descent technique, big ears increases drag, and with a wet wing this will further increase the chances of a parachutal stall occurring. Instead, lose height with gentle 360's and maintain your air speed at all times. If your wing enters parachutal stall when wet, immediately release the trimmers and accelerate the wing to regain airspeed.

## Landing

Similarly to the take-off, the Queen2 landing characteristics are easy. In turbulent conditions it is advisable to apply about 15% of brake input, to increase stability and the feeling of the glider. Before landing, adopt the standing position as this is the most effective and the safest way to compensate the touch down with your legs. Again we recommend training the landing manoeuvre, as it might be useful to be able to land in small places, especially in an unknown cross country terrain. Learn to evaluate the wind direction by observing the signs on the ground and also your drift while making turns. This is useful for cross country flying, when landing outside of your usual landing field. Another advice we suggest taking into account in stronger winds is to go higher for the landing fields and thus assuring that you reach them. Likewise, always look for possible alternatives downwind.

# Maintenance

## General advice

Careful maintenance of your glider and the following simple guidelines will ensure a much longer airworthiness and performance of your wing:

- Pack your glider after you land and do not unnecessarily expose it to UV radiation by leaving it on the landing site unpacked. The sun UV radiation degrades the cloth and line materials.
- Fold your glider like recommended under "packing instructions".
- If the glider is damp or wet when you pack it, partially unfold it at home to allow it to dry. Do not dry it in direct sunlight.
- Avoid exposing the glider to violent shocks, such as the leading edge hitting the ground.
- Avoid dragging the glider on the ground or through rocky terrain as you might damage the lines or canopy.
- Avoid stepping on the lines or canopy, especially when they are lying on a hard surface.
- Avoid exposing the glider to salt water, as it damages the lines and the canopy material (wash with fresh water).
- Avoid bending your lines, especially in a small radius.
- Avoid opening your glider in strong winds without first untangling the lines.
- In general, avoid exposing your glider to very hot or humid environments, UV radiation or chemicals.



# Packing instructions

It is important to correctly pack your glider as this prolongs its lifespan. We recommend that you fold the glider like an accordion, neatly aligning each cell profile with the next one and laying the leading edge reinforcements side by side. The wing should then be folded in three or two folds. The wing should be packed as loosely as possible. While packing be careful not to trap any grasshoppers inside your canopy as they will tear the canopy cloth. Adhering to these simple rules will make your glider last longer and ensure its best performance.

## Storage

Correctly packed, store your glider in a dry place at room temperature. The glider should not be stored damp, wet, sandy, salty or with objects inside the cells of the glider. Keep your equipment away from any chemicals.

## Cleaning

If necessary always clean your glider with fresh water and a cloth only, without using any cleaning chemicals. This includes the lines and canopy. More importantly, always remove any stones or sand from the canopy as they will gradually damage the material and reduce the glider's lifespan.

## Repair

To repair small damages (less than 5cm) on the canopy, you can use the rip stop tape. Greater damages, including stitches and

lines, must be repaired by a qualified repair shop. Damaged lines should be replaced by a Triple Seven dealer. When replacing a line it should always be compared with the counterpart for adjusting the appropriate length. After replacing a line, the wing should be inflated before flying, to ensure that everything was done correctly. Major repairs, such as replacing panels, should only be carried out by a Triple Seven distributor or Triple Seven. If you are unsure about the damage or in any doubt please contact Triple Seven.

## Checks and control

To ensure the wing's airworthiness the Queen2 should be periodically serviced and checked to guarantee that it continues to fulfil the EN certification results, and to extend your glider's life span. We recommend a line check and trim inspection every 100 hours or 12 months, depending on what happens first. After that, the glider needs to be fully checked after 150 hours or 24 months of usage, whichever comes first. This inspection includes checking the suspension lines, line geometry, riser geometry and the permeability of the canopy material. A certified inspector can then define the check interval depending on the glider's condition. Please note that the condition of the glider can vary considerably depending on the type of usage and environment. Salty coastal air or dunes will considerably affect your wing's material. For more information please visit our website.

# Packing the Queen2

## 1. FOLD THE GLIDER LIKE HARMONICA



## 2. ALIGN THE CELLS



### 3. FOLD LEADING EDGE BACK TOWARD TRAILING EDGE AND ALIGN THE CELS



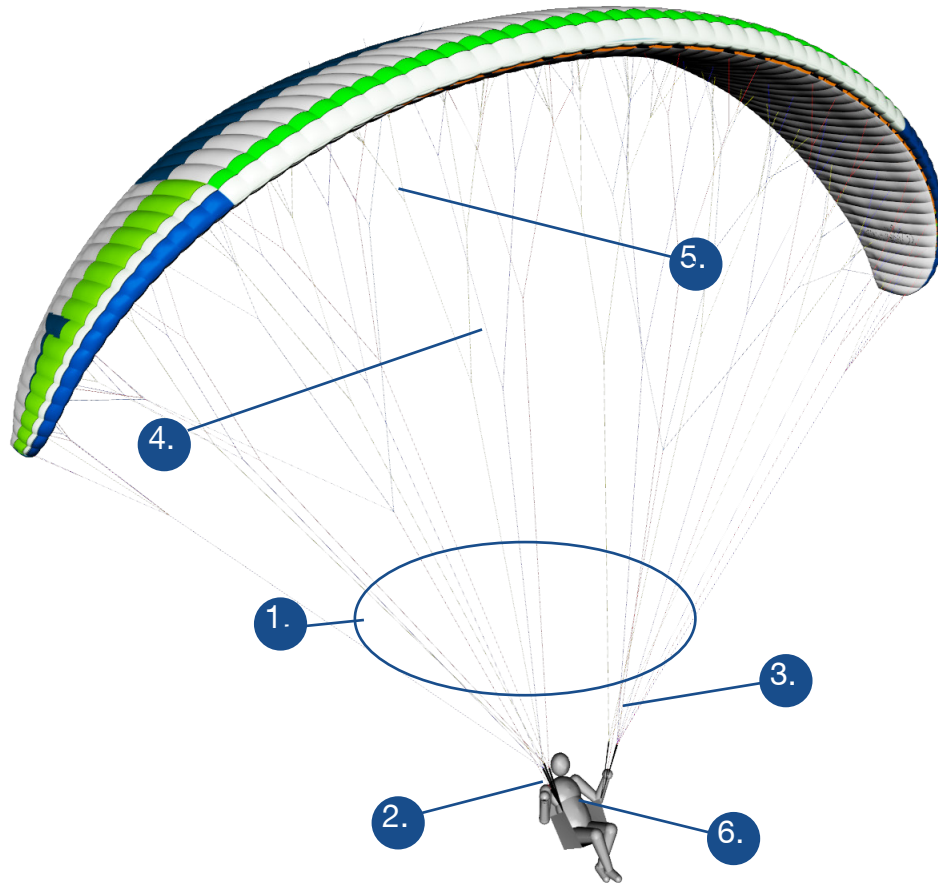
### 4. FOLD THE GLIDER IN THREE PARTS



### 5. FINISHED

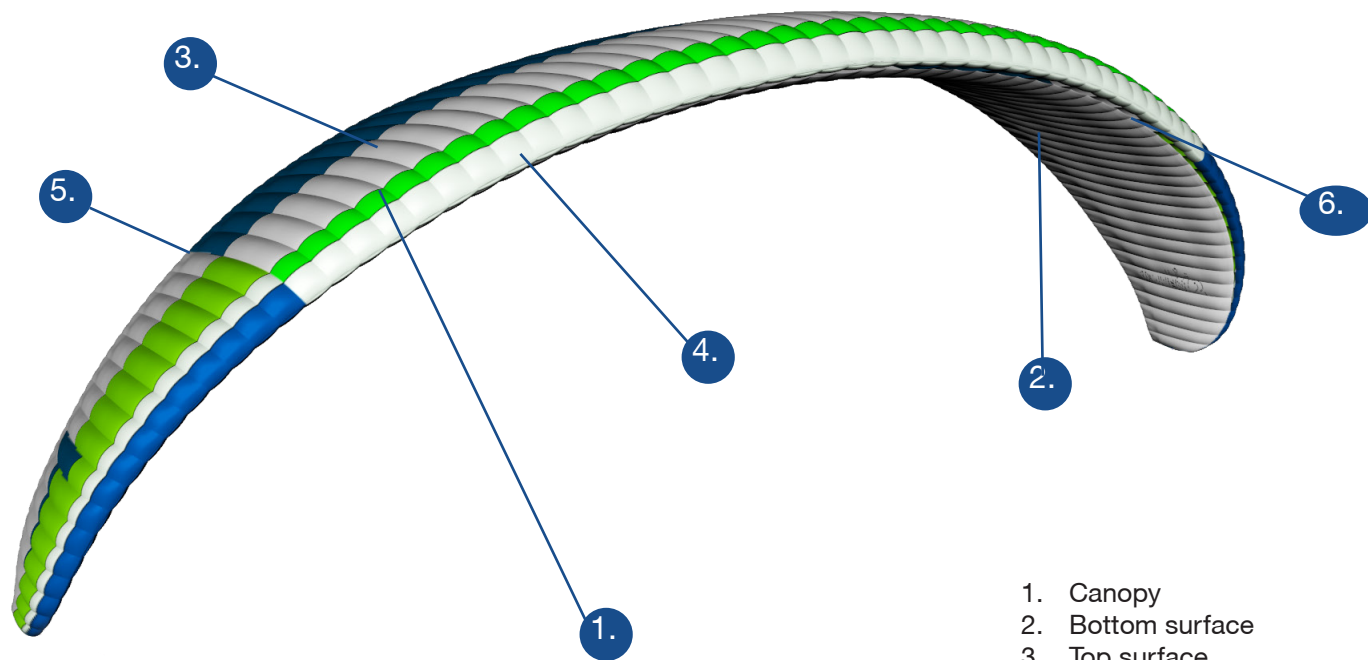


# Technical data



1. Suspension lines
2. Risers
3. Main lines
4. Middle cascades
5. Upper cascades
6. Brake lines





- 1. Canopy
- 2. Bottom surface
- 3. Top surface
- 4. Leading edge
- 5. Trailing edge
- 6. Intake cell openings

# Technical data

<b>SIZE</b>		<b>Queen2 S</b>	<b>Queen2 MS</b>	<b>Queen2 ML</b>	<b>Queen2 L</b>
CELLS	NUMBER		73		
FLAT	AREA	m <sup>2</sup>	25.3		
	SPAN	m	12.6		
	ASPECT RATIO		6.3		
PROJECTED	AREA	m <sup>2</sup>	21.4		
	SPAN		9.9		
	ASPECT RATIO		4.6		
<b>RISERS</b>		<b>A</b>	<b>B</b>	<b>C</b>	
Queen2 S	LENGTHS (mm)				STANDARD
Queen2 S	LENGTHS (mm)				ACCELERATED
S-Distance between pulleys:					
Queen2 MS	LENGTHS (mm)	530	530	530	STANDARD
Queen2 MS	LENGTHS (mm)	380	430	530	ACCELERATED
MS-Distance between pulleys: 149					
Queen2 ML	LENGTHS (mm)				STANDARD
Queen2 ML	LENGTHS (mm)				ACCELERATED
ML-Distance between pulleys:					
Queen2 L	LENGTHS (mm)				STANDARD
Queen2 L	LENGTHS (mm)				ACCELERATED
L-Distance between pulleys:					
Glider weight	(kg)		5.2		
TRIMERS		NO	NO	NO	NO
IN FLIGHT WEIGHT MINIMUM	kg		79		
MAXIMUM	kg		99		

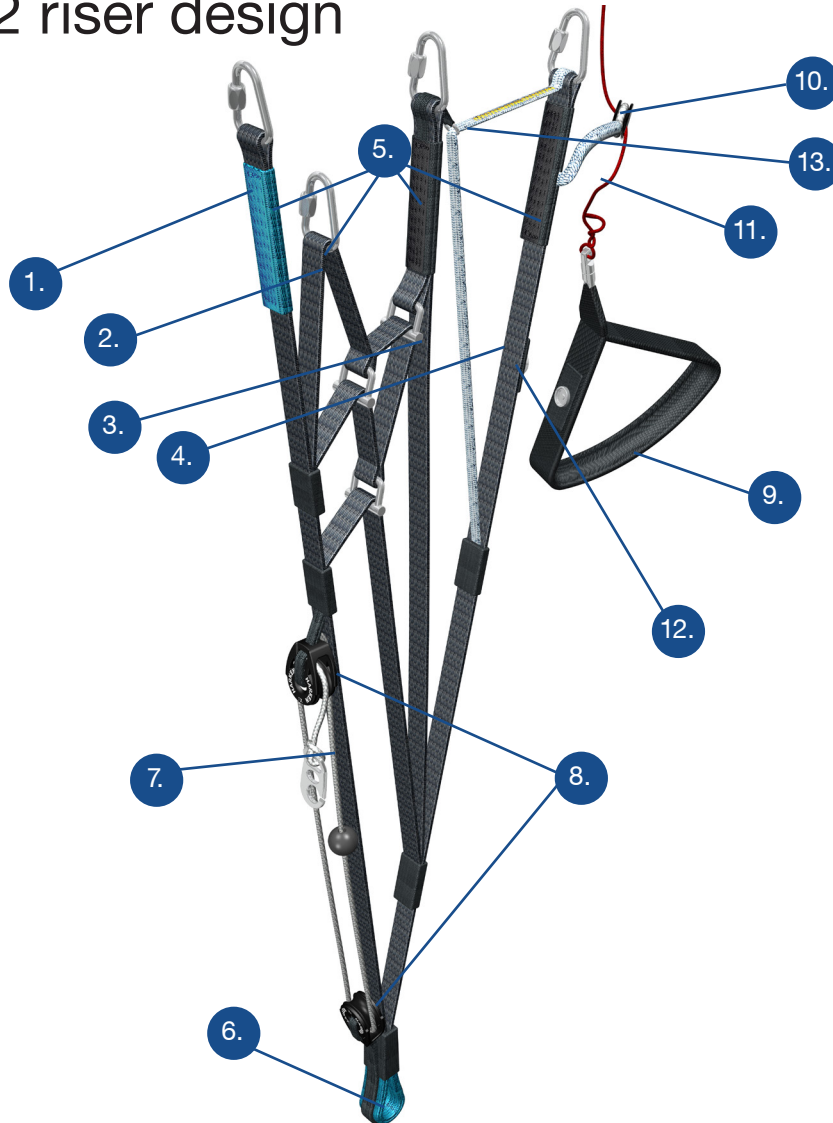
# Materials list

<b>CANOPY</b>	<b>FABRIC CODE</b>
Leading edge	Dominico 30D MF
Upper surface	Dominico 20D MF
Bottom surface	Dominico 20D MF
Profiles	Porcher Skytex 40 Hard 9017 E29
Diagonals	Porcher Skytex 40 Hard 9017 E29
Internal construction D-Ribs, H-Straps, Mini ribs	Porcher Skytex 40 Hard 9017 E29
<b>SUSPENSION LINES</b>	<b>FABRIC CODE</b>
Upper cascades	Edelrid A8000U
Middle	Edelrid A8000U
Main	Liros PPSLS, Edelrid A8000U
Brake lines	Edelrid A8000U
Main brake	Liros PPSL 191
<b>RISERS</b>	<b>FABRIC CODE</b>
Material	Webbing Liros 13mm kevlar
Brake ring	Tylaska 4 (original)
Pulleys	4x Harken P18

There is no other adjustable device on the Queen2 wing.

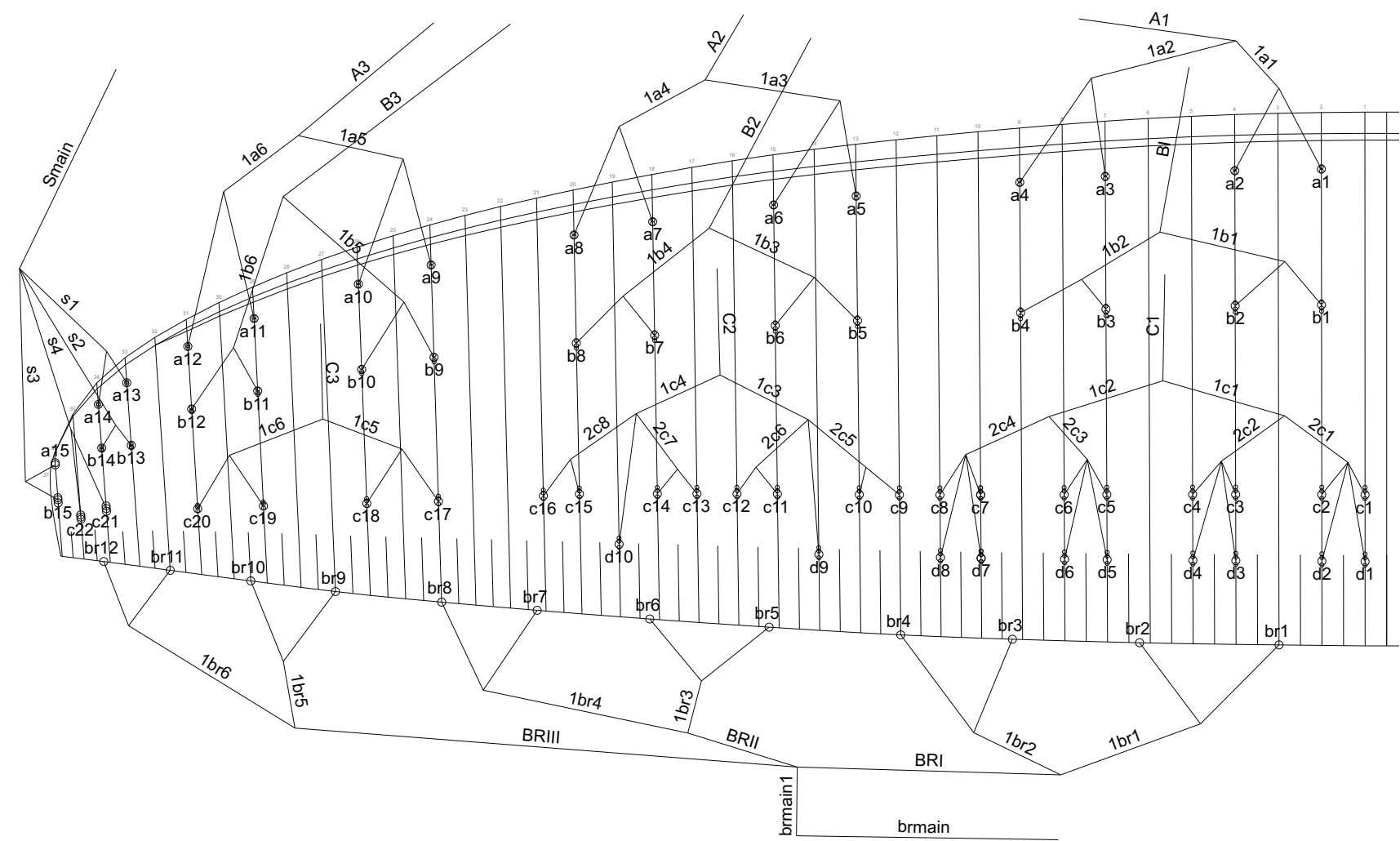
The spare parts can be obtained by Triple Seven dealers and representatives which can be found at [www.777gliders.com](http://www.777gliders.com)

# Queen2 riser design



1. A1 riser
2. A2 riser, (Ears)
3. B riser, (B-Stall)
4. C riser
5. Maillons
6. Main attachment point
7. Speed bar attachment point
8. Speed bar pulleys
9. Brake handle
10. Brake line Tylaska ring
11. Main brake line
12. Clip for brake handle
13. BC system
14. Queen2 has no trimmers or any other adjustable or removable device

# Line plan Queen2







# Line lengths Queen2 S

Line lengths shall be specified when measured under a tension of 50 N, this tension being slowly and gradually applied before taking the measurement.

Line lengths shall be specified when measured under a tension of 50 N, this tension being slowly and gradually applied before taking the measurement.

# Line lengths Queen2 MS

Line lengths shall be specified when measured under a tension of 50 N, this tension being slowly and gradually applied before taking the measurement.

### Triple Seven Queen2 MS Lines Length (mm)

## First gallery

Lines A	mm	Lines B	mm	Lines C	mm	Lines D	mm	BR lines	mm
a1	676	b1	724	c1	478	d1	592	br1	961
a2	585	b2	642	c2	403	d2	531	br2	668
a3	619	b3	639	c3	414	d3	543	br3	595
a4	653	b4	659	c4	411	d4	539	br4	630
a5	637	b5	687	c5	419	d5	536	br5	710
a6	568	b6	630	c6	392	d6	513	br6	576
a7	568	b7	650	c7	392	d7	497	br7	523
a8	596	b8	653	c8	445	d8	538	br8	550
a9	657	b9	616	c9	398	d9	1005	br9	504
a10	572	b10	531	c10	319	d10	941	br10	421
a11	654	b11	549	c11	252			br11	335
a12	646	b12	531	c12	280			br12	411
a13	237	b13	216	c13	281				
a14	188	b14	175	c14	220				
a15	469	b15	491	c15	330				
				c16	367				
				c17	592				
				c18	505				
				c19	490				
				c20	462				
				c21	190				
				c22	182				



# Line lengths Queen2 MS

Triple Seven Queen2 MS Lines Length (mm)								TOTAL LINE LENGHTS					
Second gallery								a1	7514	c1	7575	d1	7688
Lines A	mm	Lines B	mm	Lines C	mm	BR lines	mm	a2	7423	c2	7499	d2	7629
1a1	1438	1b1	1670	2c1	1070	1br1	1073	a3	7390	c3	7426	d3	7554
1a2	1370	1b2	1642	2c2	984	1br2	1006	a4	7425	c4	7422	d4	7550
1a3	1362	1b3	1608	2c3	793	1br3	1125	a5	7365	c5	7410	d5	7530
1a4	1322	1b4	1547	2c4	825	1br4	1131	a6	7286	c6	7383	d6	7507
1a5	1278	1b5	1312	2c5	656	1br5	629	a7	7243	c7	7415	d7	7522
1a6	1087	1b6	1181	2c6	662	1br6	685	a8	7268	c8	7460	d8	7564
s1	1318	s2	1312	2c7	683			a9	7123	c9	7429	d9	7394
s3	934			2c8	561			a10	7035	c10	7354	d10	7294
				1c5	1322			a11	6923	c11	7297	br1	7777
				1c6	1235			a12	6918	c12	7325	br2	7487
				s4	1327			a13	6699	c13	7313	br3	7347
								a14	6641	c14	7252	br4	7378
								a15	6557	c15	7239	br5	7159
Third gallery								b1	7432	c16	7276	br6	7024
				Lines C	mm	BR lines	mm	b2	7354	c17	7132	br7	6978
				1c1	1461	BRI	2648	b3	7323	c18	7047	br8	7005
				1c2	1634	BRII	2227	b4	7343	c19	6942	br9	6868
				1c2	1630	BRIII	2642	b5	7291	c20	6916	br10	6786
				1c3	1596			b6	7231	c21	6663	br11	6759
				1c4	4699			b7	7192	c22	6655	br12	6841
								b8	7193				
								b9	7078				
								b10	6988				
								b11	6871				
Main Lines								b12	6853				
Lines A	mm	Lines B	mm	Lines C	mm	BR lines	mm	b13	6680				
A1	4874	B1	4510	C1	4056	br main1	1758	b14	6680				
A2	4835	B2	4467	C2	4242	br main	cut 1300	b15	6638				
A3	4703	B3	4633	C3	4699								
		Stab main	4626										

# Line lengths Queen2 ML

Line lengths shall be specified when measured under a tension of 50 N, this tension being slowly and gradually applied before taking the measurement.



# Line lengths Queen2 L

Line lengths shall be specified when measured under a tension of 50 N, this tension being slowly and gradually applied before taking the measurement.





# Certification specimens

AIR TURQUOISE SA | PARA-TEST.COM  
Route du Pré-au-Comte 8 • CH-1844 Villeneuve • +41 (0)21 965 65 65  
Test laboratory for paragliders, paraglider harnesses  
and paraglider reserve parachutes



Class: **C**

In accordance with standards  
EN 926-2:2013, EN 926-1:2015 & LTF 91/09:  
Date of issue (DMY):

PG\_1240.2017  
18. 01. 2018

Manufacturer: 777 jadrlna padala d.o.o.  
Model: Queen 2 MS  
Serial number: QU-MS-0004

## Configuration during flight tests

Paraglider		Accessories	
Maximum weight in flight (kg)	99	Range of speed system (cm)	15
Minimum weight in flight (kg)	79	Speed range using brakes (km/h)	14
Glider's weight (kg)	5	Range of trimmers (cm)	0
Number of risers	3	Total speed range with accessories (km/h)	31
Projected area (m2)	21.4		
Harness used for testing (max weight)		Inspections (whichever happens first)	
Harness type	ABS	every 24 months or every 100 flying hours	
Harness brand	Woody Valley	Warning! Before use refer to user's manual	
Harness model	Wani M	Person or company having presented the glider for testing: <b>None</b>	
Harness to risers distance (cm)	44		
Distance between risers (cm)	44		

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24  
C A B A A A A A A A B A C B C A A A A A B B A 0



# Safety and responsibility

Paragliding is a dangerous, high risk activity, where safety depends on the person practicing it. By purchasing this equipment you implicitly declare to be a certified paragliding pilot, and you accept all risks involved in paragliding activities, including the risk of serious injury or death. Improper use or misuse of paragliding equipment further increases these risks.

The designer, manufacturer, distributor, wholesaler and retailer cannot and will not guarantee your safety when using this equipment, nor accept responsibility for any damage, injury or death as a result of the use of this equipment. This equipment should only be used by qualified and competent pilots or by pilots under supervision of qualified paragliding instructors. You must not use this equipment if you are not trained.

You alone as a qualified and competent pilot must take full responsibility to ensure that you understand the correct and safe use and maintenance of this paragliding equipment and to use it only for the purpose that it was designed for and to practice all proper safety procedures before and during its use.



# Guarantee

## Triple Seven WARRANTY:

All Triple Seven products are fully warranted for 12 months, against material defects that are not the result of normal wear or accidental damage.

### **Warranty online reference:**

[www.777gliders.com/warranty](http://www.777gliders.com/warranty)

### Maintainance

Periodic inspection is advised after every 100h or 2 years of flying.

### Disposal of the wing

Please dispose the wing by sending it back to your closest dealer or directly to us.

# Registration information

To fully use all Triple Seven maintenance and warranty services you need to register your glider on our website. Wanting to provide good product support, we invite you to do so, even if you bought your glider second-hand.

## **Triple Seven Warranty & Product registration:**

<http://www.777gliders.com/tripleseven/support>

Disposal of the wing

Please contact your local dealer, or directly Triple Seven gliders in order to provide the right disposal of the wing when it is not used anymore.

# Get involved

As a new Triple Seven pilot we invite you to contact us in case of any technical or practical issues regarding equipment or techniques. We also invite you to send us your flying photos, videos or even postcards. We would like to hear from you and your exciting adventures with your new glider! Finally, join our Facebook community and share the passion. Have fun!

# Contact

## Triple Seven Gliders

**Company:** 777 jadralna padala d.o.o.

**Address:** Ulica IV prekomorske 61

**Postal Code / City:** 5270 Ajdovščina

**Country:** Slovenia

**Tel.:** +386 40 777 313

**Email:** [info@777gliders.com](mailto:info@777gliders.com)

## Online resources

**For complete help, the latest news, product information and support go to:**

**Official website:**

[www.777gliders.com](http://www.777gliders.com)

**Facebook:**

[www.facebook.com/TripleSevenParagliders](http://www.facebook.com/TripleSevenParagliders)

**Newsletter register:**

[www.777gliders.com/newsletter/subscriptions](http://www.777gliders.com/newsletter/subscriptions)

## Ask questions, make suggestions

**General questions:**

[info@777gliders.com](mailto:info@777gliders.com)

**Technical questions:**

[technical@777gliders.com](mailto:technical@777gliders.com)

