
LTF / EN
C
QUEEN
TRIPLE SEVEN

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QUEEN

High performance EN/LTF-C

USER MANUAL

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TRIPLE SEVEN

Introduction

Welcome

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

Manual

This document contains complete product information and instructions to familiarize you with the main characteristics of your new glider. It contains instructions on how to use and maintain the wing, however, its purpose is not to serve as learning material to pilot this kind of wing. As such, this is not a flying manual. Flying instructions can only be taught by flying schools and specially 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 maximize your full potential. If you borrow or give your glider to another pilot, please pass this manual on with it.

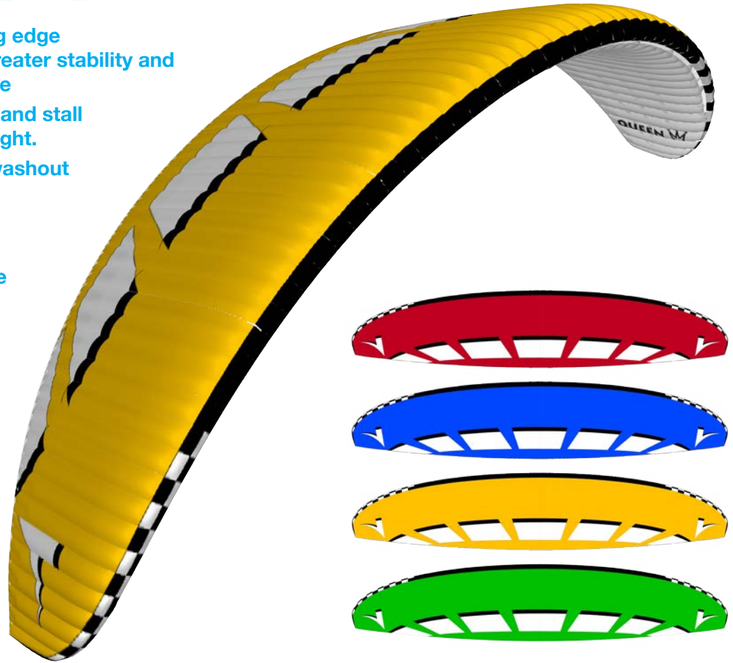
If any use of Triple Seven equipment remains unclear after having read this manual, please contact: your local paragliding instructor, your Triple Seven importer or Triple Seven. This product manual is subject to changes without prior notice. Please check www.777gliders.com for the latest information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

Summary

QUEEN

QUEEN

- Reinforced leading edge (RLE), Smooth trailing edge reinforcements (STE) together with (BPI) for greater stability and good gliding performance on 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.
- Three liner concept, with considerable line reduction (LR)
- 4 cells diagonals (RLE) reinforced leading edge
- Good pitch stability and ease of piloting
- Trim speed optimized for good climbing
- Clean canopy with refined sail tensions
- Direct handling with precise control
- Full span distributed panels orientation streamlined to airflow direction
- Improved 3d shaping (ballooning) at the leading edge
- High top speed
- Easy launch control
- Highend EN/LTF-C glider



Designer’s thoughts

My goals while developing this glider was to make high performance XC machine and competitions introductory glider with EN/LTF-C class ease of flight. While designing this wing for performance, we gave great emphasis to refined sail tension internal construction and line reduction. For this glider we designed completely new profile evolved from experimental two liner King glider. Queen is three liner with considerable total line length reduction. Together with current two liner technology we are using also new full span distributed panels orientation streamlined to airflow direction. I was quite impressed with the prototype performance while testing it in Mexico Valle de Bravo. Queen was flying fantastic compared to other gliders but for me the most important was stability and usability in strong conditions.

Aljaž Valič

Who is this glider for?

Queen is EN-C, LTF-C class glider, designed for intermediate and advance pilots. This glider is developed for maximum performance in its class and beyond. Our effort with this glider was to make XC machine to satisfy the high end intermediate and advanced pilots who wants maximum performance and comfort of EN/LTF-C class.

Certification

The QUEEN has passed the European EN-C certification for all commercially available sizes. The homologation results are enclosed at the end of this manual.

Before flight

Elements, components

The QUEEN is delivered together with a backpack, inner bag, glider strap, Triple Seven T-shirt and USB key with this manual.

Assembly

Before you rush to the first take-off we recommend 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. Every glider has to be checked by a Triple Seven dealer, however, as a pilot you want to do a proper pre-flight check yourself.

Firstly, prepare and spread out the glider like you would normally do. 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 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 QUEEN has passed EN-C certification testing using a GH - ABS type harness. This certification allows the QUEEN to be flown with most of the harnesses on the market, but keep in mind that the change of a 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 according to the harness size from 42cm to 50cm.

Check the settings used during testing under the certification specimen section.We recommend that your first flight with the QUEEN is not also with a new harness. Another rule of thumb is if you want to experience the feeling of new equipment, change only one part of equipment at a time.

Accelerator settings

The QUEEN 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 QUEEN 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.

Brakes 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 to adjust them. 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 brakes, 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 while the speed system is being used.

Weight range

Each size of the QUEEN 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 by 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 QUEEN, 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 for collapses relatively increases as 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 QUEEN 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 also gliding performance, especially when flying against the wind. If you normally fly in stronger conditions and you prefer relatively more dynamic flying characteristics, you should set the take-off weight in the higher weight range. Reactions after a collapse may be more dynamic in the upper half of the weight range.

Wing inflation

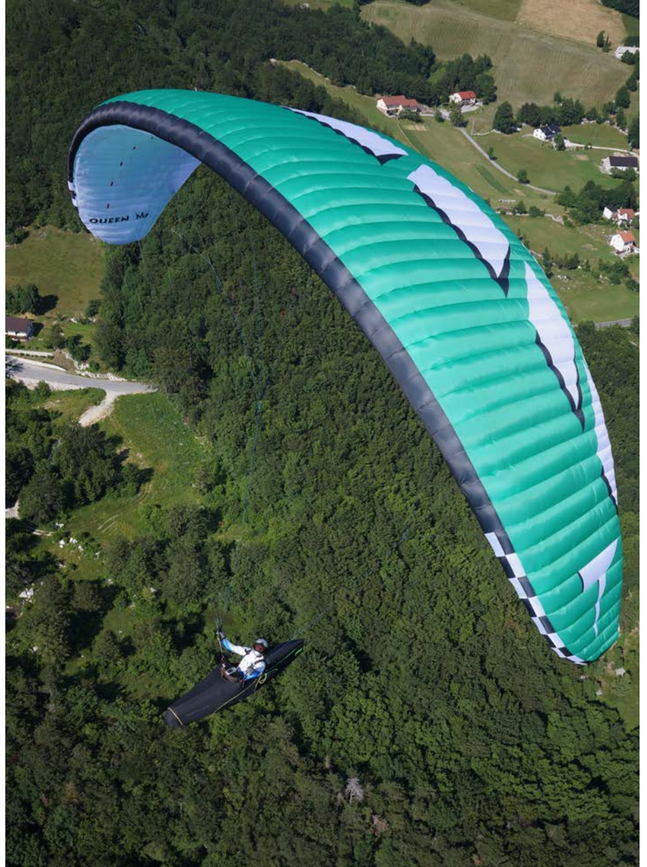
Still being on the training slope and having prepared and checked everything, inflate your wing and play with it to get a feel of your new glider while ground handling. By doing this you are making a final check of the canopy and lines, and that everything is in order. You will find that the QUEEN inflates 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, similarly to flying the wing outside the weight range.

Preflight safety

Before flying the QUEEN, 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 QUEEN

First Flight

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

Preflight check equipment

Before every flight you need to do a pre-flight check and the inspection of 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 a twist and that the carabiners are properly closed. Check if 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 if 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 cleared, together with the take-off area.

Inflation, control, take-off

The QUEEN 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 QUEEN, 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
QUEEN 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 radical in comparison to the one which occurs at trim speed.
We recommend that you avoid accelerated flight near the ground and to be very careful 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 his or her head at all times, compensating and correcting any unwanted movements of the wing.

Few examples:

- While entering a strong thermal, the wing will stay a little bit behind relative to the pilot. The pilot should let the brake 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 glider

to let it fly normally.

- 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, he should smoothly apply the 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 action let the glider fly normally again. To re-establish its required 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 enable you a quick progression when actively flying 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 QUEEN is designed and tested to recover without pilot's 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 QUEEN will easily re-inflate without the pilot's 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 stabilization, 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 radical 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's 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 QUEEN, but it may occur after a severe deflation or in a cascading situation, when the wing tip gets caught in the glider's lines. A pilot should be familiar with the procedure of handling this situation with any glider. Familiarize yourself with the stabilizer's main line ("stabilo" line (outsied line on B riser) already on the ground. 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 stabilizer's 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 also want to have a lot of relative height.
• 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, compensating 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 for 100% and hold them. The wing then performs a so called full stall. Releasing the brakes improperly may lead to 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 supervision.

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 QUEEN 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 can increase the possibility of the deep stall tendency. If you trained this manoeuvre on a SIV course you would realize that it is very hard to keep the QUEEN 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 decent techniques

Fast descent techniques should be well 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 also additionally increase vertical speed. Be careful not to pull the brakes while making the 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 for about 20 cm. To exit the manoeuvre, simultaneously release both risers quickly. On exit the QUEEN 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 at high 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 QUEEN has no tendency of a stable 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 sinking 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 QUEEN is easy to launch using a winch and has no special characteristics considering this kind 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 winching. We do not recommend using any special towing device which accelerates the glider during the winch launch.

Aerobatics

The QUEEN 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.

Landing

Similarly to the take-off, the QUEEN landing characteristics are easy. In turbulent conditions it is advisable to apply about 15% of the brakes, 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 proves to be useful for cross country, 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 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 lines material.
- Fold your glider like recommended under the section of 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 a harmonica, neatly aligning the profiles with the leading edge reinforcements side by side. The wing should then be folded in three parts 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. This technique 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 also 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 cloth, you can use the rip stop tape. Greater damages, including stitches and lines must be repaired by a specialized 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 the line was repaired, 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 QUEEN has to be periodically serviced and checked to guarantee that the glider continues to fulfil the EN certification results and to extend your glider's lifespan. We recommend a line check and trim inspection every 100 hours or 12 months depending what happens first. After that, the glider needs to be fully checked after 150 hours or 24 months of usage, whichever comes earlier. 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 QUEEN

1. FOLD THE GLIDER LIKE HARMONICA



2. ALIGN THE CELLS



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

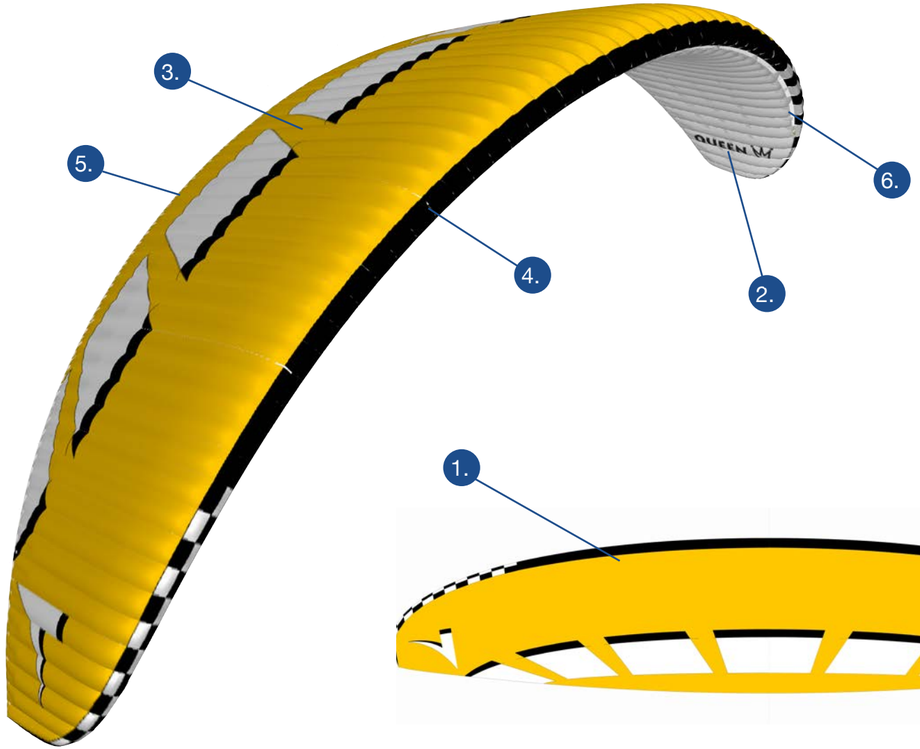



4. FOLD THE GLIDER IN THREE PARTS

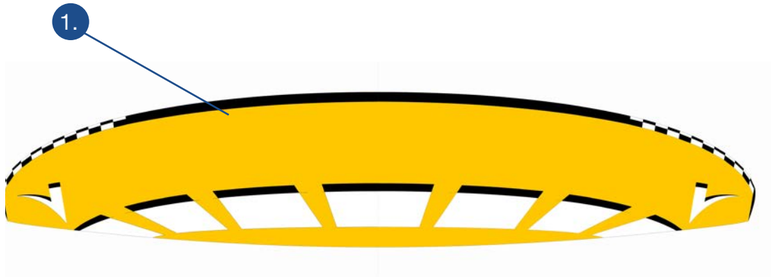



5. FINISHED

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

SIZE			QUEEN S	QUEEN M	QUEEN L
CELLS	NUMBER		62	62	62
FLAT	AREA	m^2	23.5	25.5	27.3
	SPAN	m	12	12.6	13
	ASPECT RATIO		6.2	6.2	6.2
PROJECTED	AREA	m^2	19.7	21.4	22.9
	SPAN		9.6	10	10.4
	ASPECT RATIO		4.64	4.64	4.64
ROOT CHORD		m	2.43	2.53	2.62

RISERS		1A	A2	B	C	
QUEEN S	LENGTHS (mm)	560		560	560	STANDARD
QUEEN S	LENGTHS (mm)	400	412	450	560	ACCELERATED
				S-Distance between pulleys: 160		
QUEEN M	LENGTHS (mm)	580	580	580	580	STANDARD
QUEEN M	LENGTHS (mm)	400	416	465	580	ACCELERATED
				M-Distance between pulleys: 180		
QUEEN L	LENGTHS (mm)	600		600	600	STANDARD
QUEEN L	LENGTHS (mm)	400	420	440	600	ACCELERATED
				L-Distance between pulleys: 200		

SIZE			QUEEN S	QUEEN M	QUEEN L
	TRIMS		NO	NO	NO
IN FLIGHT WEIGHT	MINIMUM	kg	70	80	100
	MAXIMUM	kg	90	104	120
GLIDER WEIGHT		kg	5	5.3	5.7
CERTIFICATION		EN/ LTF	C	C	C

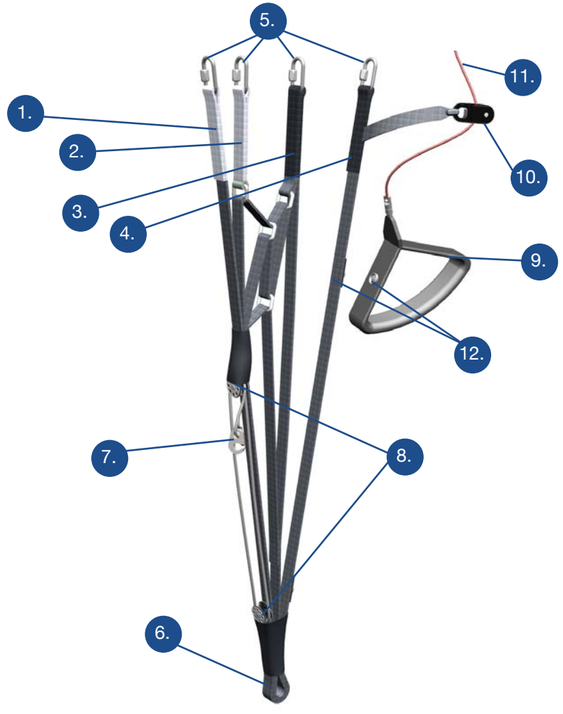
Materials description

CANOPY	FABRIC CODE
Upper surface	NCV Skytex 38 Universal
Bottom surface	NCV Skytex 38 Universal
Profiles	NCV 9017 - E29A
Diagonals	NCV 9017 - E29A
Loops	COUSIN 608 10mm
Reinforcement loops	NCV F06391 - E45A
Internal construction D-Ribs, H-Straps, Mini ribs	NCV 9017 - E29A
Thread	Serafil 40/2000, 60/2000

SUSPENSION LINES	FABRIC CODE
Upper cascades	A-8000-U-050, A-8000-U-070, A-8000-U-090
Middle cascades	A-8000-U-070, A-8000-U-130
Main	A-8000-U-200, A-8000-U-230, A-8000-U-130
Brake lines	DC-40, Dyneema 12110, Dyneema 12250
Main brake	Cousin 200/1.5mm (Blue)
Thread	Serafil Amann 60/0415

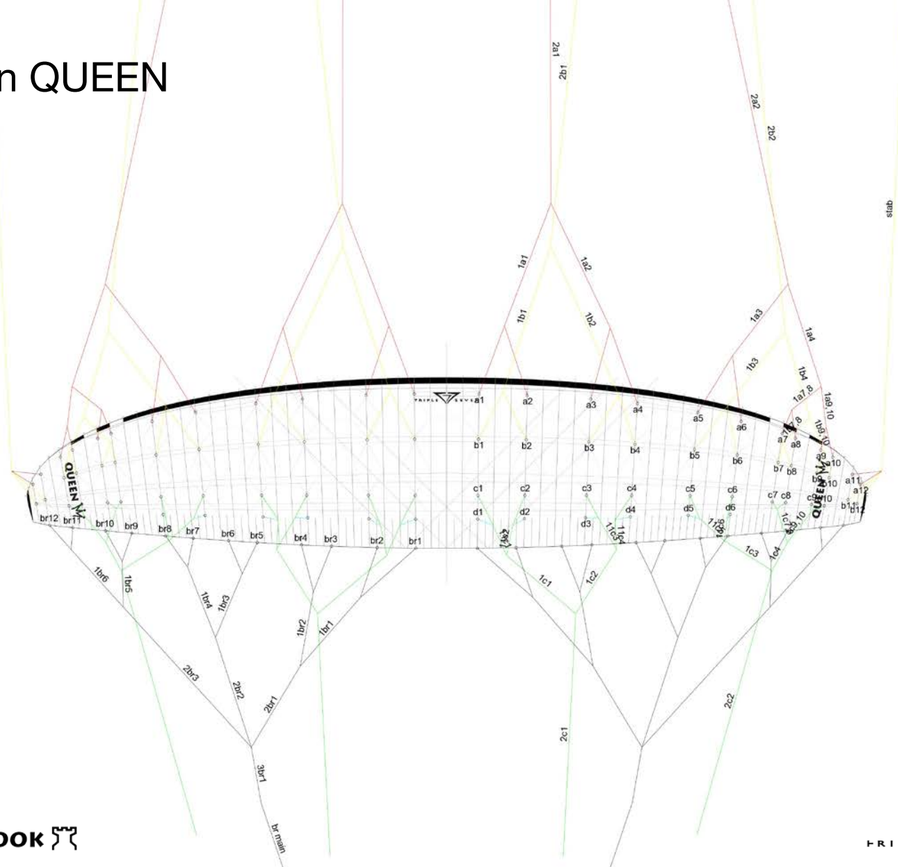
RISERS	FABRIC CODE
Material	webbing cousin 3455-12mm
Material	Güth & Wolf Black 70 404/12,5mm Dyneema
Color indicator	Cordura 200/200PU
Thread	Serafil Amann 20/4000, 20/1078
Brake Swivel	Fob ningbo - china 6mm
Maillons	Inox Peguet Oval 3mm
Pulleys	4 Harken Carbo T18 18mm ball bearing pulley

QUEEN risers arrangement



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 pulley
11. Main brake line
12. Clip for brake handle
13. QUEEN has no trimmers or any other adjustable or removable device

Line plan QUEEN



Line lengths QUEEN S

Triple Seven QUEEN L Lines Length (mm)

First gallery

Lines A	mm	Lines B	mm	Lines C	mm	Lines D	mm	BR lines	mm
a1	1302	b1	1246	c1	596	d1	695	br1	750
a2	1200	b2	1132	c2	586	d2	689	br2	432
a3	1202	b3	1132	c3	564	d3	660	br3	518
a4	1232	b4	1176	c4	552	d4	626	br4	522
a5	1305	b5	1266	c5	492	d5	542	br5	540
a6	1168	b6	1134	c6	452	d6	503	br6	416
a7	276	b7	266	c7	260			br7	468
a8	246	b8	240	c8	242			br8	546
a9	260	b9	250	c9	234			br9	532
a10	274	b10	268	c10	268			br10	446
a11	708	b11	683	11c1	614			br11	316
a12	653	b12	668	11c2	490			br12	454
				11c3	468				
				11c4	572				
				11c5	632				
				11c6	558				

Second gallery

Lines A	mm	Lines B	mm	Lines C	mm	Lines D	mm	BR lines	mm
1a1	2250	1b1	2012	1c1	1610			1br1	1192
1a2	2200	1b2	1968	1c2	1614			1br2	870
1a3	2028	1b3	1758	1c3	1610			1br3	848
1a4	1384	1b4	1260	1c4	1184			1br4	736
1a7,8	1412	1b7,8	1246	1c7,8	1028			1br5	648
1a9,10	1344	1b9,10	1192	1c9,10	1035			1br6	802

Main Lines

Lines A	mm	Lines B	mm	Lines C	mm	Lines D	mm	BR lines	mm
2a1	3010	2b1	3252	2c1	3805			2br1	2462
2a2	2948	2b2	3202	2c2	3569			2br2	2278
								2br3	2244
								3br1	1468
								br main	cut 1800, mark 1542

Stabilo Lines

STB	mm
stab	5016

LINE CHECK

a1	6562	c1	6625
a2	6460	c2	6491
a3	6412	c3	6451
a4	6442	c4	6543
a5	6281	c5	6291
a6	6144	c6	6177
a7	6020	c7	6029
a8	5990	c8	6011
a9	5936	c9	6010
a10	5950	c10	6044
a11	5714	d1	6724
a12	5659	d2	6594
b1	6510	d3	6547
b2	6396	d4	6618
b3	6352	d5	6341
b4	6396	d6	6228
b5	6226	br1	7343
b6	6094	br2	7025
b7	5974	br3	6789
b8	5948	br4	6793
b9	5904	br5	6605
b10	5922	br6	6481
b11	5689	br7	6421
b12	5674	br8	6499
		br9	6343
		br10	6257
		br11	6281
		br12	6419

Line lengths QUEEN M

Triple Seven QUEEN M Lines Length (mm)

First gallery

Lines A	mm	Lines B	mm	Lines C	mm	Lines D	mm	BR lines	mm
a1	1356	b1	1298	c1	620	d1	726	br1	784
a2	1248	b2	1180	c2	610	d2	718	br2	452
a3	1250	b3	1178	c3	588	d3	687	br3	540
a4	1282	b4	1226	c4	574	d4	653	br4	546
a5	1357	b5	1318	c5	512	d5	563	br5	564
a6	1218	b6	1182	c6	472	d6	523	br6	436
a7	288	b7	276	c7	270			br7	488
a8	256	b8	250	c8	252			br8	570
a9	272	b9	260	c9	242			br9	552
a10	286	b10	280	c10	278			br10	464
a11	743	b11	715	11c1	642			br11	326
a12	686	b12	700	11c2	514			br12	470
				11c3	490				
				11c4	600				
				11c5	660				
				11c6	582				

Second gallery

Lines A	mm	Lines B	mm	Lines C	mm	Lines D	mm	BR lines	mm
1a1	2338	1b1	2096	1c1	1680			1br1	1246
1a2	2290	1b2	2052	1c2	1686			1br2	912
1a3	2114	1b3	1832	1c3	1674			1br3	886
1a4	1444	1b4	1316	1c4	1236			1br4	770
1a7,8	1473	1b7,8	1296	1c7,8	1066			1br5	670
1a9,10	1403	1b9,10	1242	1c9,10	1078			1br6	832

Main Lines

Lines A	mm	Lines B	mm	Lines C	mm	Lines D	mm	BR lines	mm
2a1	3126	2b1	3372	2c1	3942			2br1	2566
2a2	3060	2b2	3324	2c2	3706			2br2	2377
								2br3	2351
								3br1	1572
								br main	cut 1800, mark 1540

Stabilo Lines

STB	mm
stab	5214

LINE CHECK

a1	6820	c1	6884
a2	6712	c2	6746
a3	6666	c3	6706
a4	6698	c4	6802
a5	6531	c5	6552
a6	6392	c6	6434
a7	6265	c7	6278
a8	6233	c8	6260
a9	6179	c9	6262
a10	6193	c10	6298
a11	5957	d1	6990
a12	5900	d2	6854
b1	6766	d3	6805
b2	6648	d4	6881
b3	6602	d5	6603
b4	6650	d6	6485
b5	6474	br1	7783
b6	6338	br2	7451
b7	6212	br3	7205
b8	6186	br4	7211
b9	6142	br5	7014
b10	6162	br6	6886
b11	5929	br7	6822
b12	5914	br8	6904
		br9	6740
		br10	6652
		br11	6676
		br12	6820

Line lengths QUEEN L

Triple Seven QUEEN L Lines Length (mm)

First gallery

Lines A	mm	Lines B	mm	Lines C	mm	Lines D	mm	BR lines	mm
a1	1404	b1	1344	c1	642	d1	751	br1	808
a2	1294	b2	1222	c2	630	d2	743	br2	466
a3	1294	b3	1218	c3	608	d3	712	br3	556
a4	1330	b4	1270	c4	594	d4	676	br4	562
a5	1405	b5	1364	c5	530	d5	582	br5	582
a6	1260	b6	1224	c6	488	d6	541	br6	450
a7	298	b7	286	c7	280			br7	504
a8	264	b8	260	c8	260			br8	588
a9	280	b9	270	c9	252			br9	574
a10	296	b10	290	c10	288			br10	482
a11	764	b11	737	11c1	660			br11	340
a12	707	b12	722	11c2	530			br12	490
				11c3	504				
				11c4	618				
				11c5	680				
				11c6	602				

Second gallery

Lines A	mm	Lines B	mm	Lines C	mm	Lines D	mm	BR lines	mm
1a1	2422	1b1	2166	1c1	1732			1br1	1284
1a2	2374	1b2	2124	1c2	1742			1br2	940
1a3	2186	1b3	1894	1c3	1734			1br3	914
1a4	1494	1b4	1360	1c4	1278			1br4	796
1a7,8	1522	1b7,8	1342	1c7,8	1106			1br5	696
1a9,10	1450	1b9,10	1286	1c9,10	1117			1br6	864

Main Lines

Lines A	mm	Lines B	mm	Lines C	mm	Lines D	mm	BR lines	mm
2a1	3260	2b1	3510	2c1	4090			2br1	2648
2a2	3200	2b2	3464	2c2	3842			2br2	2458
								2br3	2426
								3br1	1716
								br main	cut 1800, mark 1538

Stabilo Lines

STB	mm
stab	5422

LINE CHECK

a1	7090	c1	7124
a2	6980	c2	6982
a3	6932	c3	6944
a4	6968	c4	7044
a5	6791	c5	6786
a6	6646	c6	6666
a7	6514	c7	6506
a8	6480	c8	6486
a9	6424	c9	6489
a10	6440	c10	6525
a11	6186	d1	7233
a12	6129	d2	7095
b1	7020	d3	7048
b2	6898	d4	7126
b3	6852	d5	6838
b4	6904	d6	6719
b5	6722	br1	7962
b6	6582	br2	7620
b7	6452	br3	7366
b8	6426	br4	7372
b9	6380	br5	7176
b10	6400	br6	7044
b11	6159	br7	6980
b12	6144	br8	7064
		br9	6898
		br10	6806
		br11	6832
		br12	6982

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ISO 9001 BUREAU VERITAS Certification

TRIPLE SEVEN Vole Autrement

Class: D

In accordance with EN standards 926-2:2005 & 926-1:2006: **PG_0841.2014**

Date of issue (DMY): **10. 01. 2014**

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

Model: **Queen S**

Serial number:

Configuration during flight tests

Paraglider		Accessories	
Maximum weight in flight (kg)	90	Range of speed system (cm)	15
Minimum weight in flight (kg)	70	Speed range using brakes (km/h)	13
Glider's weight (kg)	4.8	Range of trimmers (cm)	0
Number of risers	3	Total speed range with accessories (km/h)	29
Projected area (m2)	19.7		

Harness used for testing (max weight)		Inspections (whichever happens first)
Harness type	ABS	every 24 months or every 150 flying hours
Harness brand	Niviuk Gliders	Warning! Before use refer to user's manual
Harness model	Hamak 2 M	Person or company having presented the glider for testing: **None**
Harness to risers distance (cm)	49	
Distance between risers (cm)	46	

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

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ISO 9001 BUREAU VERITAS Certification

TRIPLE SEVEN Vole Autrement

Class: C

In accordance with EN standards 926-2:2005 & 926-1:2006: **PG_0749.2013**

Date of issue (DMY): **24. 07. 2013**

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

Model: **Queen M**

Serial number:

Configuration during flight tests

Paraglider		Accessories	
Maximum weight in flight (kg)	104	Range of speed system (cm)	17
Minimum weight in flight (kg)	80	Speed range using brakes (km/h)	14
Glider's weight (kg)	5.4	Range of trimmers (cm)	0
Number of risers	3	Total speed range with accessories (km/h)	29
Projected area (m2)	21.4		

Harness used for testing (max weight)		Inspections (whichever happens first)
Harness type	ABS	every 24 months or every 150 flying hours
Harness brand	Sup'Air	Warning! Before use refer to user's manual
Harness model	Access M	Person or company having presented the glider for testing: **None**
Harness to risers distance (cm)	49	
Distance between risers (cm)	46	

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	A	C	A	A	A	A	B	C	B	A	B	C	A	A	A	A	A	A	B	A	A	0

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TRIPLE SEVEN Vole Autrement

Class: C

In accordance with EN standards 926-2:2005 & 926-1:2006: **PG_0754.2013**

Date of issue (DMY): **14. 11. 2013**

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

Model: **Queen L**

Serial number:

Configuration during flight tests

Paraglider		Accessories	
Maximum weight in flight (kg)	120	Range of speed system (cm)	19
Minimum weight in flight (kg)	100	Speed range using brakes (km/h)	13
Glider's weight (kg)	5.7	Range of trimmers (cm)	0
Number of risers	3	Total speed range with accessories (km/h)	29
Projected area (m2)	22.9		

Harness used for testing (max weight)		Inspections (whichever happens first)
Harness type	ABS	every 24 months or every 150 flying hours
Harness brand	Gin Gliders	Warning! Before use refer to user's manual
Harness model	Gingo 2 L	Person or company having presented the glider for testing: **None**
Harness to risers distance (cm)	49	
Distance between risers (cm)	46	

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

Safety and responsibility

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

The designer, manufacturer, distributor, wholesaler and retailer cannot and will not guarantee your safety when using this equipment or 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.

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

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

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Online resources

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

Official website:
www.777gliders.com

Facebook:
www.facebook.com/TripleSevenParagliders

Newsletter register:
www.777gliders.com/newsletter/subscriptions

Ask questions, make suggestions

General questions:

info@777gliders.com


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