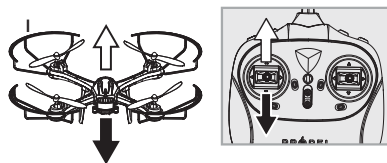


4 CHANNEL FLIGHT CONTROL

Below is a list of basic flight functions for your long-range remote to control the Spyder XL™. While learning to fly your Spyder XL™ it is best to start in a large space with the drone facing away from you until you get used to the basic controls. As you master flying your Spyder XL™ you can move to more advanced maneuvering techniques. Practice makes perfect!

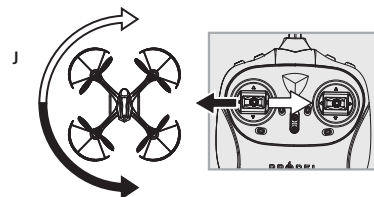
Move the left Throttle stick up to increase the propeller speed and the Spyder XL™ will accelerate and ascend.

Move the left Throttle stick down to decrease the propeller speed and the Spyder XL™ will decelerate and descend (see diagram I).



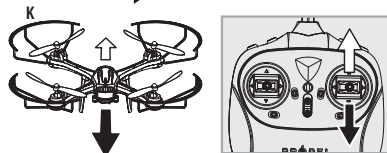
While in the air, move the left Throttle stick left and the Spyder XL™ will rotate left.

Move the left Throttle stick right and the Spyder XL™ will rotate right (see diagram J).



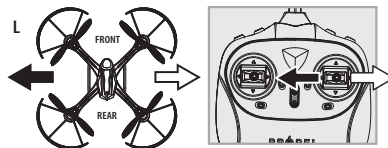
While in the air, move the right Direction Stick up and the Spyder XL™ will move forward.

Move the right Direction Control down and the Spyder XL™ will move backward (see diagram K).



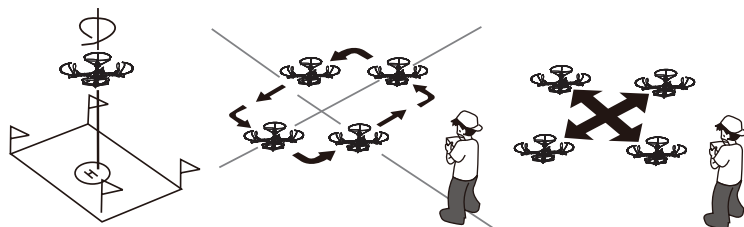
While in the air, move the right Direction Control left and the Spyder XL™ will bank to the left.

Move the right Direction Control right and the Spyder XL™ will bank to the right (see diagram L).



FLIGHT PRACTICE

To master flying your aircraft try practicing the exercises shown below. Start with simple vertical takeoffs, landings, and left/right turning and rotating. Once those are mastered move on to square and cross maneuvers. Good luck and have fun!



Fixed-point landing

Square Pattern Maneuver

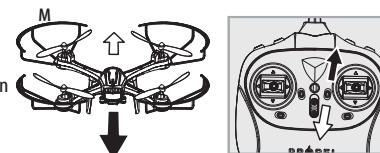
Cross Pattern Maneuver

ADJUSTING THE TRIM

NOTE: The Spyder XL™ is already properly trimmed and calibrated right out of the box and should not require any trim adjustments before flying. Some more experienced pilots may want to adjust trim settings for their style of flying. After several crashes you may need to adjust trim settings for the Spyder XL™ to be more balanced.

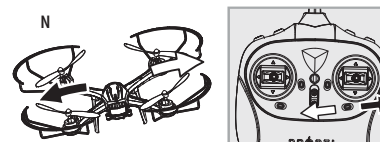
Forward/Backward Trim

- If your Spyder XL™ drifts forward while in the air, push and release the FORWARD/BACKWARD TRIM button repeatedly until the motion stops and proper flight is maintained (see diagram M).
- If your Spyder XL™ drifts backwards, push and release the FORWARD/BACKWARD TRIM button forward in the same manner until the problem is resolved.



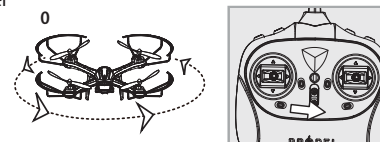
Bank Right/Left Trim

- If your Spyder XL™ drifts banks left while in the air, push and release the BANKS TRIM button to rightside repeatedly until the motion stops and proper flight is maintained (see diagram N).
- If your Spyder XL™ drifts right, push and release the BANKS TRIM button to leftside in the same manner until the problem is resolved.



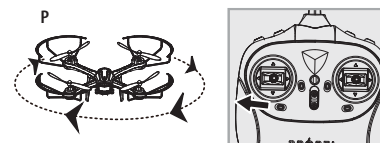
Spin Left Trim

- If your Spyder XL™ spins left while in the air, push and release the LEFT/RIGHT TURN TRIM button to rightside repeatedly until the motion stops and proper flight is maintained (see diagram O).



Spin Right Trim

- If your Spyder XL™ spins right while in the air, push and release the LEFT/RIGHT TURN TRIM button to leftside until the problem is resolved (see diagram P).



NOTE: The use of the Trim buttons utilizes sounds. A single long Beep indicates the product is center trimmed. Continuous long Beeps indicate the product is trimmed to the maximum on a particular side.

CALIBRATING THE SPYDER XL™

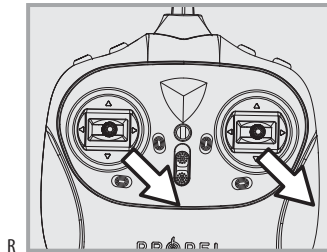
NOTE: Your Spyder XL™ comes pre-calibrated out of the box so you are ready to fly.

After several crashes and shock to your gyro sensors, you may notice that your drone is drifting and not holding its center position as well as it used to.

This most likely means that you need to recalibrate the 6 axis gyro. Please follow the simple instructions below.

1. Place the SPYDER XL™ on a level surface
2. Make sure the Spyder XL™ is on and that the controller is synced (refer to syncing pg 4.). Do not start the blades. Instead move both the throttle and control stick down and to the right corner and hold them there for 5 seconds (See Diagram R). You will see the lights on the drone rapidly flash and stop. Once the lights stop flashing you have completed your calibration and are ready to fly!

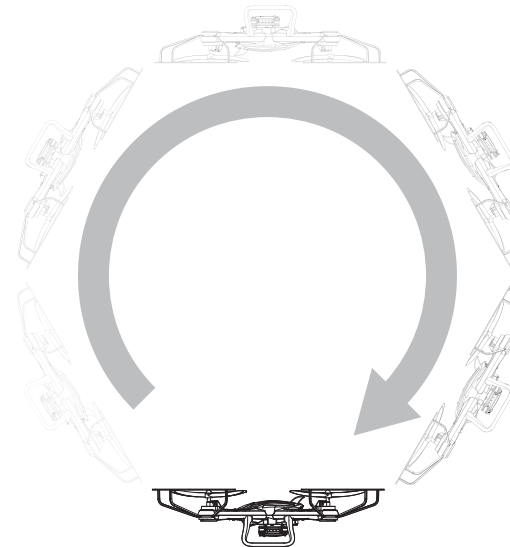
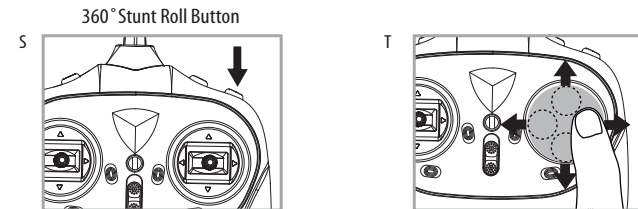
TROUBLE SHOOTING: If you do not see the lights flash, first remove the battery from the drone then turn off your controller and start again. Always make sure to put your battery in first, then turn on your controller. Push the left throttle stick up all the way and then pull back down again. When you hear the beep the SPYDER XL™ is synced to the controller and you are ready to calibrate.



HOW TO PERFORM 360° STUNT ROLLS

Performing 360° stunt rolls with the Spyder XL™ is as easy as 1-2-3:

1. Hover the Spyder XL™ in still position making sure that you have at least 5 feet of clearance above and below the quadcopter, Set the speed settings to mode 2 or 3.
 2. Press the 360 stunt button down and you will enter the stunt roll mode which is indicated by a rapid beeping (see diagram S).
 3. Determine which direction you want it to flip and quickly push the right control stick in the direction you want to flip your Spyder XL™ (see diagram T).
- You have 4 choices a) Forward Roll, b) Backwards roll, c) Right side roll, d) Left side roll.



USING YOUR ON-BOARD CAMERA AND VIDEO RECORDER

Your Spyder XL™ comes equipped with an onboard digital camera (1280x720 pixel, 30 frames per second) that takes both video and still photographs. Now you can have hours of fun creating aerial photography and videos for family and friends.

WHAT YOU WILL NEED TO GET STARTED USING YOUR CAMERA

1. One Micro SD card (not included)
2. One Micro SD card reader (included)
3. A Computer with a USB port and Windows Media Player or other Media player that can play AVI files(not included).

FORMATTING YOUR MICRO SD CARD

Before you can begin to take videos or digital photographs you must first format your Micro SD card. To format your Micro SD card simply place the Micro SD card into the included USB SD card reader and plug it into your computers USB port (See diagram U1 and U2 below). After a few moments an icon will appear on your Desktop. Right click on the icon and follow instructions to format your Micro SD card.

INSTALLING THE MICRO SD CARD IN YOUR SPYDER XL™

- Place the formatted Micro SD card into the back of the Spyder XL™s digital camera port (see diagram U3 below). Push gently until you hear and feel the micro SD card "click" into the digital camera slot.
- Turn the Spyder XL™ on and make sure that it is both fully charged and properly synced to the Controller (see HOW TO SYNC YOUR QUADROPTER on page 4).
- When you have successfully installed your Micro SD card and your Spyder XL™s battery, you will see a solid red LED light on the camera unit underside (see camera indicator light diagram U4 below).

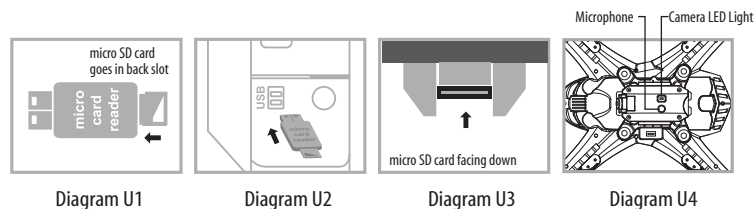
NOTE: If you see red LED light flashing this means you have not installed your Micro SD card correctly or there is a problem with your SD card. If this happens please reformat and try again. If you continue to encounter problems call our customers service line at (949) 566-9573 Ext 1 for assistance.

TAKING DIGITAL PHOTOS

To take photographs quickly press and release the CAMERA button on the top right side of the controller (refer to CONTROLLER DIAGRAM on pg. 3), when you push the button you will hear a "beep" and the green led light on the camera will flash 3 times indicating that a picture has been taken.

RECORDING VIDEOS

To begin recording a video depress and hold down CAMERA button for 2 seconds. You will hear two "beeps" and the green LED light on the camera start flashing to indicate that you are in video mode and the camera is recording. To stop the video recording, press and hold the CAMERA button a second time, you will hear two "beep" to indicating that the video recording has stopped and the Camera is in ready mode again.



IMPORTANT NOTICE: You can not take photos and videos at the same time. When you are in video mode your camera/ photo button is disabled. If you want to take photos you must first turn off video mode.

TESTING /TROUBLE SHOOTING THE CAMERA BEFORE FLIGHT

It's a good idea to test that your camera is working before beginning flight.

Start by making sure that you Spyder XL™ is properly synced to the controller (see How to Sync pg 4). Note: there is no need to start the rotors as the camera function is a separate system. You only need to be synced.

1. Turn the drone upside down (it is recommended to just hold in your hand) and insert a micro SD card. The micro SD card can only fit in one way so do not force it. When the SD card is installed all the way you will hear a "Click" sound and a flashing Red LED light should stay solid on the belly of the camera (see Camera Diagram W4). The solid red light indicates that you have properly installed the Micro SD card and are ready for taking pictures and videos. If you don't see the solid red LED indicator light then start again. Remember to make sure that the drone and controller are properly synced and that the Micro SD card is inserted until you hear a "click"

2. **Testing the Still Photo Feature:** Keeping the drone upside down, quickly depress and release the CAMERA button on the top right hand side of the controller. A green LED should appear and flash 3x. Congratulations you just took a picture and tested your camera. If you did not see 3 green lights flash then you must start again from the beginning.

3. **Testing the Video Recording Feature:** Keeping the drone upside down, depress and hold down the CAMERA button for 2 seconds. A green LED light on the camera belly will appear and begin to flash continuously. This means that you are recording video. To stop recording video simply press and release the Camera button one more time and the Green LED light should off, indicating that the camera is once again in ready mode.

REMOVING YOUR MICRO SD CARD

To remove your Micro SD Card push gently on the back of the SD card with your thumb or forefinger until you hear and feel a "clicking sound". The Micro SD card will "pop-out" slightly and is ready for removal. Simply grab and pull gently away from the Spyder XL™s camera port to remove the card. Always store your Micro SD card in a clean, safe and cool environment.

DOWNLOADING AND CLEARING SPACE ON YOUR MICRO SD CARD

Plug your Micro SD card into the Micro SD card reader and connect to your computer. It is best to always download all your videos and pictures on to your computer and not store this data on your Micro SD card. After downloading your photos and videos, follow your computers instructions to "delete" files on your Micro SD card.

IMPORTANT NOTICE: When your Micro SD card is full the indicator light on the bottom of your helicopter will not flash when you press the photo or video record buttons. This indicates that its time put a new SD card in your Spyder XL™ or download files and clear space for future photos and videos.

TROUBLESHOOTING YOUR SPYDER XL™

PROBLEM	POSSIBLE CAUSE	POSSIBLE SOLUTION
No Power	1. Power switched off 2. Polarity is reversed 3. Batteries may be low or in need of charging	1. Switch the ON/OFF switch to ON 2. Make sure all batteries are installed correctly (see diagram A) 3. Replace batteries
Aircraft Not Responding	1. Remote is switched off 2. battery power in remote is too weak 3. The remote is not properly synced 4. Out of control range	1. Switch the ON/OFF switch to ON 2. Connect the battery to Spyder XL™ 3. Re-sync the remote 4. Do not fly beyond 500 feet
Aircraft Won't lift off	1. Rotor speed too slow 2. Aircraft not fully charged 3. Obstruction of rotors	1. Push throttle lever forward 2. Recharge your Spyder XL™ 3. Check rotors for hair or other obstructions
Aircraft Descends Too Fast	Moving the throttle down too quickly flying in high wind or bad weather	Control the throttle slower, use auto land feature, Do not fly in bad weather

If you continue to encounter problems call our customers service line at (949) 566-9573 Ext 1 for assistance.

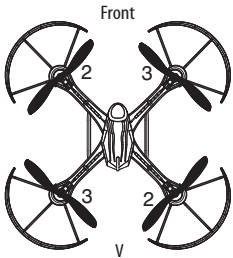
REPLACING THE PROPELLER BLADES

Your Spyder XL™'s propeller system is a precision instrument that may need repair or replacement from time to time for optimal flight function. Crash landing at high-speed may cause damage to your Spyder XL™'s propellers.

1. The Spyder XL™ has four blades, two blades with indication number 2 & 3 on front, and two blades with indication number 3 & 2 on back (see the diagram V).
2. When replacing the propeller blades, make sure to match the indication number on the blade.
3. Replace the damaged blade with the correct blade.

Blade Front Left = 2
Blade Front Right = 3

Blade Back Left = 3
Blade Back Right = 2



SPYDER XL™ WARNING:

The Spyder XL™ is designed for OUTDOOR use. The Spyder XL™'s blades revolve at high speeds and can cause damage to the user, spectators and animals. Stand away from the Spyder XL™ to reduce the risk of getting into the flight path. Warn spectators that you will be flying your Spyder XL™ so that they are aware of its position. Before flight, inspect the rotor blades to make certain that the blades are securely fastened to the Spyder XL™.

WARNING!

- Choking/Cutting Hazard. Small Parts/Sharp Rotor Blades.
- Keep hands, hair and loose clothing away from the propeller when the power switch is turned to the ON position.
- Turn off the transmitter and Spyder XL™ power switches when not in use.
- The included charger is built specifically for the Spyder XL™ Li-Poly battery. Do not use it to charge any other battery.
- New alkaline batteries are recommended for maximum performance.
- Parental supervision recommended when flying Spyder XL™.

BATTERY WARNINGS

RECHARGEABLE BATTERY:

This Spyder XL™ uses a Li-Poly rechargeable battery. If battery no longer stays charged, dispose of battery properly according to local disposal requirements.

CONTROLLER BATTERIES:

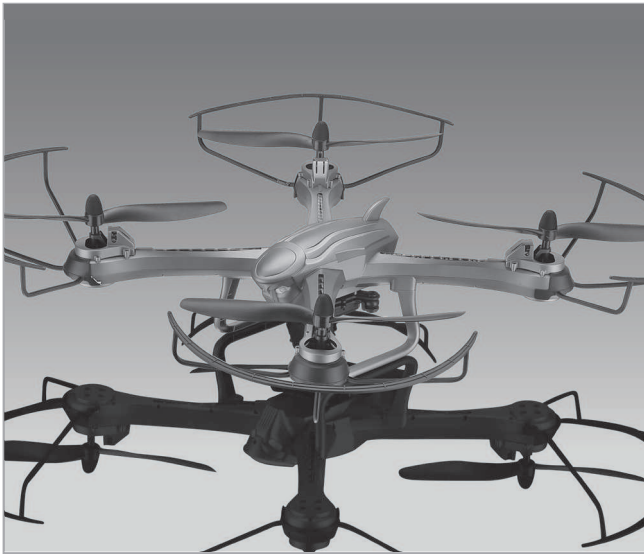
- Remote control requires 4"AA" batteries (not included). Please read the important battery safety warning below.
- Do not mix alkaline, standard (carbon-zinc) and rechargeable batteries (Nickel Metal Hydride).
 - Do not mix old and new batteries.
 - Non-rechargeable batteries are not to be recharged.
 - Rechargeable batteries are to be removed from the item before being charged (if removable).
 - Rechargeable batteries are only to be charged under adult supervision.
 - Exhausted batteries should be removed immediately and must be recycled or disposed of properly according to state or local government ordinances and regulations.
 - The supply terminals are not to be short-circuited.
 - Only batteries of the same or equivalent type as recommended are to be used.
 - Batteries are to be inserted with the correct polarity (see inside booklet for diagram).
 - Do not dispose batteries in a fire - batteries may leak or explode.

CARE AND MAINTENANCE

- Always remove the batteries from the wireless remote control when it is not being used for an extended period of time.
- To clean, gently wipe the remote control and Spyder XL™ with a clean damp cloth.
- Keep the toy away from direct heat or sunlight.
- Do not submerge the toy into water. This can damage the unit beyond repair.
- Parental guidance recommended when installing or replacing the batteries.

SPYDER XL™

Hybrid Stunt Drone with HD camera and
Altitude Stabilization Technology



90-DAY LIMITED WARRANTY
SEE REVERSE FOR DETAILS

Limited 90-Day Warranty

NORTH AMERICA

ROOFTOP BRANDS™ warrants to the original consumer that this product is free from any electrical or mechanical defects for a period of 90-DAYS from the date of purchase. If any such defect is discovered within the warranty period, ROOFTOP BRANDS™ will repair or replace the unit free of charge upon receipt of the unit, shipped postage prepaid and insured to our warranty center. The warranty covers normal consumer use and does not cover damage that occurs in shipment or failure that results from alterations, accident, misuse, abuse, neglect, wear and tear, inadequate maintenance, commercial use or unreasonable use of the unit. Removal of any parts/components voids all warranties. This warranty does not cover cost of repairs made or attempted outside by 3rd party individuals or companies. Any applicable implied warranties, including warranties of merchantability and fitness, are hereby limited to 90-DAYS from the date of purchase. Consequential or incidental damages resulting from a breach of any applicable express or implied warranties are hereby excluded. Some states do not allow limitations on the duration of implied warranties and do not allow exclusion of incidental or consequential damages, so the above limitations and exclusions in these instances may not apply.

REPAIR/REPLACE PRODUCT

If your product begins to malfunction or stop working, immediately call or email our warranty center at the phone/email listed below. If it is determined that a return is necessary, our warranty department will issue you an RMA number/form and an address to the nearest return center for shipping the product to. **IMPORTANT NOTICE:** We will reject all returns that are not accompanied with an issued RMA form and number so make sure to contact our warranty replacement center before attempting to return your product!

PREPARATION FOR SHIPPING YOUR PRODUCT

Please repack your product in a durable box, preferably in the original carton, and send it prepaid, and adequately insured. Include the RMA form that was issued by our warranty department along with your daytime telephone number and email address (if available) inside the shipping carton. If your warranty has expired and you want an estimated fee for service you may do so by simply emailing our warranty department and specifying the model and the problem. For further information please send all inquiries to customerservice@rooftopbrands.com

IMPORTANT NOTICE!

**DO NOT ATTEMPT TO SHIP YOUR PRODUCT BACK WITHOUT
FIRST CONTACTING OUR WARRANTY DEPARTMENT AT:**

ROOFTOP BRANDS™
WARRANTY REPLACEMENT DEPARTMENT
TEL: + (1) 949-566-9573
customerservice@rooftopbrands.com