

## 90-DAY LIMITED WARRANTY

### 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 third-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 by an issued RMA form and number so make sure to contact our warranty 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, contact our warranty center for charged service. 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) 866-458-5151  
 customerservice@rooftopbrands.com

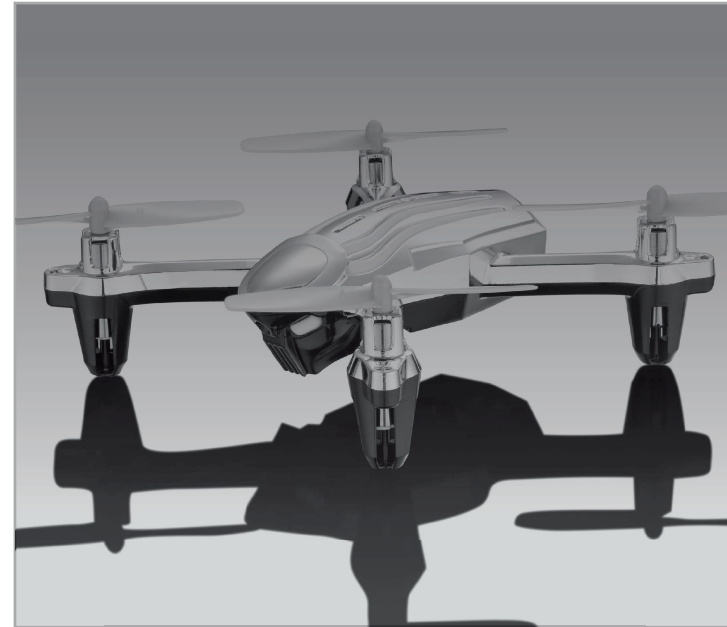
Conforms to safety requirements of ASTM, CPSIA and FCC.  
 8619 Wall street, Suite 400, Austin, TX 78754  
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 Tel: 1-866-458-5151 • www.propelrc.com



Made in China

## SPYDER X™

2.4Ghz Indoor/Outdoor High Performance Drone



### INSTRUCTION BOOKLET

**WARNING:** Never leave product charging unattended for extended periods of time. Always disconnect Spyder X™ from charger immediately after the Spyder X™ is fully charged. Please refer to enclosed safety instructions.

### PACKAGE CONTAINS:



Spyder X™



2.4G Wireless Controller



USB Charging Cord



Spare Parts



Instruction Booklet

Colors and styles may slightly vary.



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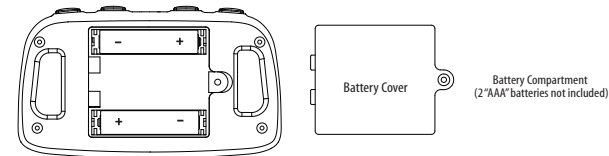
Thank you for purchasing the 2.4 G Indoor /Outdoor Spyder X™. Please read this instruction booklet as it contains valuable information on how to properly fly and care for your Spyder X™.

## FEATURES

- Built in 6 axis gyroscopic chip keeps the Spyder X™ extremely stable in all conditions.
- New T (training ) mode helps beginner pilots learn how to fly.
- Automatically start and lands with the push of a button
- Unique switch blade technology allows for 3ch and 4ch flight modes.
- 3 different speed settings for slow to high speed flying.
- LED directional lights makes the Spyder X™ easy to follow.
- 2.4G radio allows for a 200 foot operational range.
- The Spyder X™ is engineered for incredible maneuverability including 360° aerial stunts!

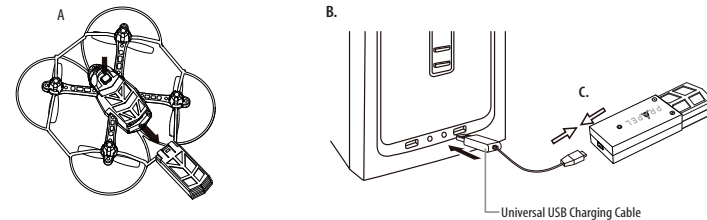
## REMOTE CONTROL BATTERY INSTALLATION

1. Unscrew the battery cover from the back of the remote control.
2. Install 2"AAA" alkaline batteries into the battery pack as shown in the diagram.
3. Replace the battery cover and secure it.



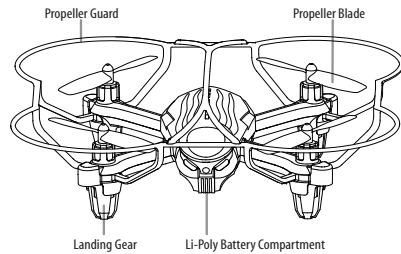
## CHARGING YOUR SPYDER X™ BATTERY

1. Turn the Spyder X™ over and carefully remove the battery (see diagram A).
2. Connect the battery to the female connector end of the USB cable (see diagram C). Connect the universal end of the USB cable to your computer's USB port (see diagram B).  
CAUTION: improper connection may damage the Spyder X™.
3. Average charging time is 70 minutes, RED LED indicator goes off when charging and will turn RED when battery is fully charged.  
A full charge will allow for about 5-6 minutes of flight time depending on environment and user input.



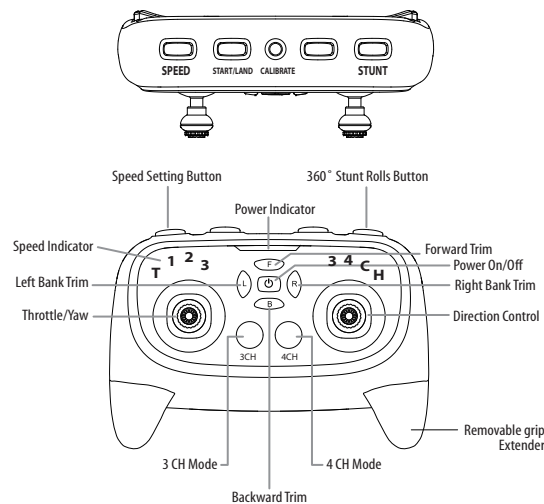
**IMPORTANT: ALWAYS REMEMBER TO UNPLUG YOUR CHARGING CORD WHEN NOT IN USE!**

## SPYDER X™ QUADROCOPTER DIAGRAM



The safety guard is easy to clip on and off. Simply pull the clips away from each motor mount and remove the SPYDER X™ from below.  
 Note: Always have the safety guard attached when flying in T-Mode and Mode 1.

## REMOTE DIAGRAM



## REMOVABLE CONTROLLER GRIPS

Easily slides off and on. (see remote diagram)

## WARNING

DO NOT FLY YOUR SPYDER X™ IN FOUL WEATHER!



## PREPARING FOR FLIGHT

- Verify that there are 2"AAA" batteries inside the remote control unit and the SPYDER X™ has been fully charged.
  - Make sure to be in a large space with an open radius of at least 50 feet.
  - Make sure the empty space has no obstacles and river. Set your SPYDER X™ on a clean flat surface before take-off.
- DO NOT ATTEMPT TO FLY YOUR SPYDER X™ IF THERE IS RAIN, SNOW, HEAVY WINDS, THUNDER OR LIGHTNING OUTDOORS. IT COULD DAMAGE YOUR PRODUCT AND POSSIBLY EVEN CAUSE BODILY HARM.**

## SYNCING YOUR SPYDER X™

**Important!** When syncing your SPYDER X™ copter with the controller always make sure that the copter is on a flat level surface. This insures that the 6 Axis gyro is properly programmed to mimic your trim settings.

Your SPYDER X™ utilizes an automatic 2.4G channel selection system that allows up to 8 people to fly side by side in the same wireless range.

### For One Person Play:

1. Before starting, make sure that the power on your controller is in the OFF position and SPYDER X™ battery disconnect. Make sure that there are no other 2.4G devices in the area as well.
2. Turn ON the SPYDER X™ and set it down on a flat surface. The white and red LED indicators of the SPYDER X™ should flash.
3. ON the remote, pull the throttle all the way down, then turn ON your remote and You will hear 2 short beeps, the white and red LED lights start flashing faster, Push the throttle all the way up and pull it down, your SPYDER X™ and remote should have successfully synced. Should this not happen, repeat all steps again.

### For Multi Person Play:

4. Before starting, make sure that the power on all SPYDER X and Controllers are in the OFF position. Make sure that there are no other 2.4G devices in the area as well.
5. Each person will have to sync their SPYDER X™ individually at a different time to avoid interference. Follow steps 1 to 3 above making sure to keep away from other people while also making sure that no one else is syncing at the same time.
6. After syncing a players SPYDER X™ it should be left ON until all players have synced their SPYDER X™.
7. Should there be a mistake/interference, all players must turn off their controllers and SPYDER X™ and start the process all over again.

## FLYING TIPS

- It is recommended that you operate the SPYDER X™ in a wide space. The ideal space should have a 200 foot radius.
- Parental guidance or adult supervision is suggested at all times.
- If you are flying the SPYDER X™ with others, make sure all spectators are behind you.
- For best performance, it is recommended that you operate the SPYDER X™ in zero wind conditions. Wind can greatly affect the performance of the SPYDER X™.

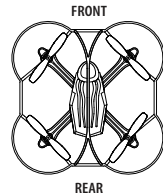
## NOW YOU ARE READY TO FLY!

If you have successfully synced your Spyder X to your controller as explained on page 4 you are now ready to fly. Before beginning to fly your drone you should familiarize yourself with how to start and stop the rotors, how to use your auto land feature and how the controls work so please carefully read and familiarize yourself with various control features explain in the next two pages. Once again as a beginner pilot you should learn how to control your drone in a large open field or park on a day with zero or very light wind. Do not try to fly your Spyder X too high until you become a more experience pilot.

### RECOGNIZING THE FRONT AND BACK OF THE SPYDER X™

Even though the SPYDER X™ has four rotors there is still a front or "forward" facing direction and "back" or backwards facing direction. The forward Front and forward facing direction of the SPYDER X™ is the side with two eye holes. The rear and back of the SPYDER X™ is where the battery charging socket and the power ON/OFF is. The SPYDER X™ when in flight will also help you keep aware of the orientation with lighted LED lights in the arms of the SPYDER X™.

**NOTE:** The front of the copter displays WHITE LED lights and the back of the copter displays RED LED lights.



### HOW TO START ROTORS

Make sure you have properly synced the Spyder X and the power is on.

- To start the rotors simply press and release the "START/LAND" button on the top of controller, the Spyder X should begin to take off automatically.
- To stop or land the Spyder X just press and release the "START/LAND" button again, the Spyder X rotors will decend and land automatically.

### SPEED SETTING BUTTON

The SPYDER X™ has 3 speed settings; **1 (SLOW)**, **2 (MEDIUM)** and **3 (HIGH)**. The Default setting when you first turn on your SPYDER X™ is the **1 (SLOW)** speed mode. To increase the speed simply press the speed setting button (see remote diagram on page 3) You will hear a beep and the speed indicator will display the current speed setting with the Number. Number **1** indicates slow speed, **2** indicates medium speed and **3** indicate high speed.

### T MODE (Training Mode)

Simply press and hold down the Speed Setting Button for 3 seconds, you will hear a long beep and a "T" will appear on the front panel of the controller, Now you are in the T mode. T mode allows you learn how to operate your SPYDER X™ in a very slow speed. To exit T mode just press the speed setting button again.

### 3/4 CHANNEL SELECT

SPYDER X allows you to control your Quadcopter in 3 channel mode (beginner) or 4 channel mode (advanced flying). The SPYDER X default setting is 4 Channel mode.

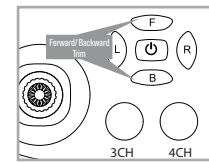
To change to 3 Channel mode: PRESS the 3CH button (see remote diagram on pg 3), you will hear 3 short beeps and the "3 CH" will light up on the controller indicating the SPYDER X™ now is set to 3CH mode.

To change back to 4 Channel mode: PRESS the 4CH button (see remote diagram on pg 3), you will hear 4 short beeps and the "4 CH" will light up on the controller indicating the SPYDER X™ is now set to 4CH mode.

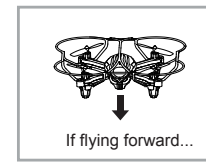
## UNDERSTANDING TRIM ADJUSTMENTS

### Forward/Backward Trim

- If your SPYDER X™ is moving forwards or backwards automatically, you may need to adjust the FORWARD/BACKWARD TRIM buttons.
- If your SPYDER X™ flies forward, push and release the B TRIM button repeatedly until the moving stops and proper flight is maintained.
- If your SPYDER X™ flies backwards, push and release the F TRIM button in the same manner until the problem is resolved.
- From time to time you may have to adjust the FORWARD/BACKWARD TRIM to ensure the SPYDER X™ will hover in mid-air and respond accurately to your commands.

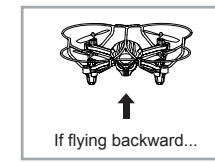


Forward/Backward Trim Controls



If flying forward...

**B** Push backward trim button

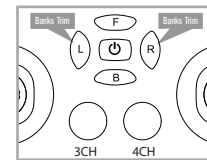


If flying backward...

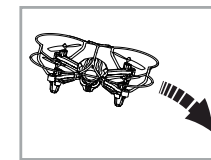
**F** Push forward trim button

### Banking Left/Right Trim

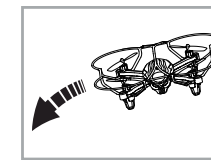
- If your SPYDER X™ is not steadily hovering and is banking to the left or right automatically, you may need to adjust the BANKING TRIM buttons.
- If your SPYDER X™ banks to the left, push and release the R TRIM button repeatedly until the banking stops and proper flight is maintained.
- If your SPYDER X™ banks to the right, push and release the L TRIM button in the same manner until the problem is resolved.
- From time to time you may have to adjust the BANKING TRIM to ensure the SPYDER X™ will steadily hover in mid-air and respond accurately to your commands.



4 CH Left/Right Banking Controls



**L** Push the "L" trim button to increase left banking sensitivity

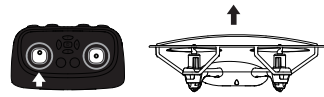


**R** Push the "R" trim button to increase right banking sensitivity

**NOTE:** The use of the Trim buttons are accompanied with a Beep tone. 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.

### 4 CHANNEL FLIGHT CONTROL

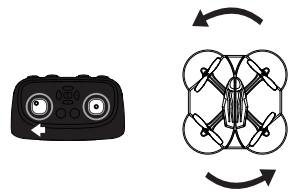
Below is a list of basic flight functions for your long-range remote control SPYDER X™. While learning to fly your SPYDER X™ it is best to start with a large space until you get used to the basic controls. As you master flying your SPYDER X™ you can move to more advanced maneuvering techniques. Practice makes perfect! When you have these basic steps down you can move to the next level.



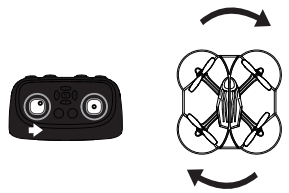
Move the Throttle up to increase the speed of the motors and the SPYDER X™ will rise up.



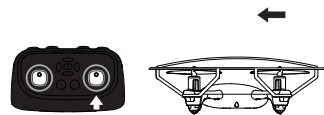
Move the Throttle down to decrease the speed of the motors and the SPYDER X™ will descend.



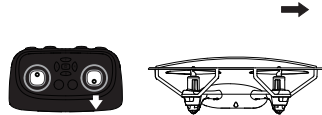
Move the Throttle stick left and the SPYDER X™ will rotate left.



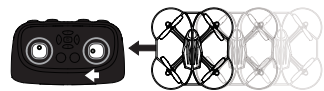
Move the Throttle stick right and the SPYDER X™ will rotate right.



Move the Direction Control up and the SPYDER X™ will move forward.



Move the Direction Control down and the SPYDER X™ will move backward.



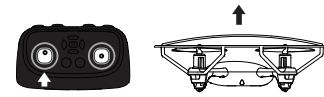
Move the Direction Control left and the SPYDER X™ will bank to the left.



Move the Direction Control right and the SPYDER X™ will bank to the right.

### 3 CHANNEL FLIGHT CONTROL

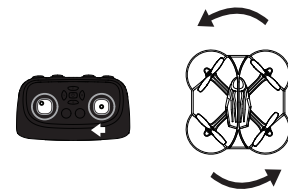
Below is a list of basic flight functions for your long-range remote control SPYDER X™. While learning to fly your SPYDER X™ it is best to start with a large space until you get used to the basic controls. As you master flying your SPYDER X™ you can move to more advanced maneuvering techniques. Practice makes perfect! When you have these basic steps down you can move to the next level.



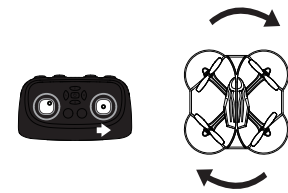
Move the Throttle up to increase the speed of the motors and the SPYDER X™ will rise up.



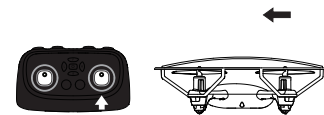
Move the Throttle down to decrease the speed of the motors and the SPYDER X™ will descend.



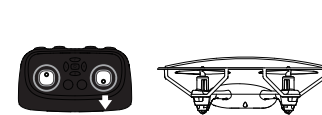
Move the Throttle stick left and the SPYDER X™ will rotate left.



Move the Throttle stick right and the SPYDER X™ will rotate right.



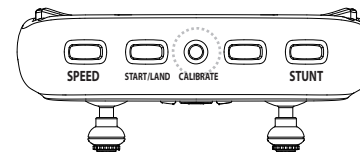
Move the Direction Control up and the SPYDER X™ will move forward.



Move the Direction Control down and the SPYDER X™ will move backward.

### CALIBRATING THE SPYDER X™

If the SPYDER X™ becomes unstable during the course of flying, you may need to recalibrate the internal gyros. To do this place the SPYDER X™ on a level surface, press and release the CALIBRATE button on the top of remote controller. The LEDs on the SPYDER X™ will flash quickly and then remain solid, this indicates your drone has been recalibrated (see diagram below).



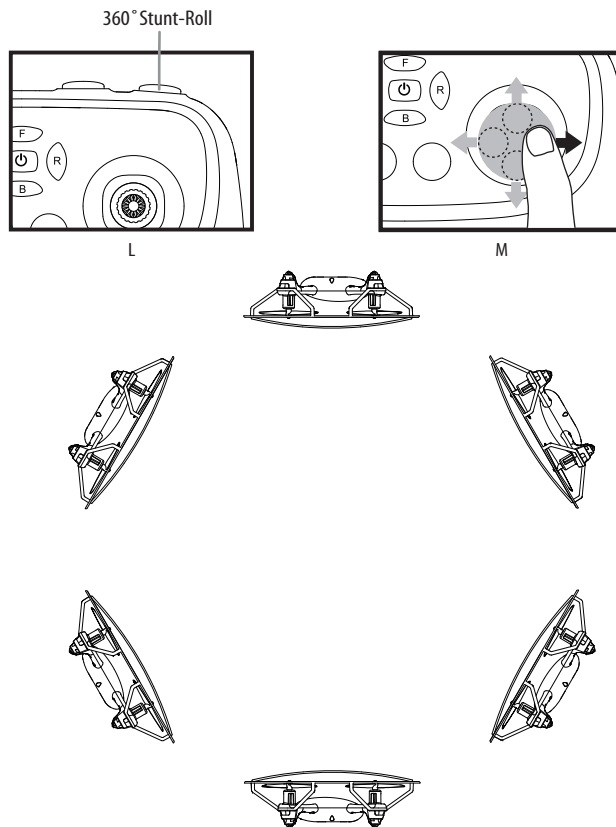
## HOW TO DO 360° STUNT ROLLS

1. In order to make your SPYDER X™ do 360° rolls you must fully charge your battery.

Note: The SPYDER X™ will not do 360° stunt rolls in T-Mode, Mode 1 and under low battery indication (The LED lights on the drone will be flashing).

2. Once you are ready to attempt a 360° roll, simply depress and let go of the "STUNT" button on the top right hand side of your controller (see Remote Diagram on page 3), you will hear a sound. This means you are now in "STUNT MODE"

3. Now quickly move your right control stick in any of 4 directions; up, down, left or right and your SPYDER X™ copter will instantly roll in the associated direction. See diagram below.



## SPYDER X™ WARNING:

The SPYDER X™ is designed for INDOOR and OUTDOOR use. The SPYDER X™ blades revolve at high speeds and can cause damage to the user, spectators and animals. Stand away from the SPYDER X™ to reduce the risk of getting into the flight path. Warn spectators that you will be flying your SPYDER X™ 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 X™.

### 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 X™ power switches when not in use.
- The included charger is built specifically for the SPYDER X™ 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 X™.

## BATTERY WARNINGS

### RECHARGEABLE BATTERY:

This SPYDER X™ 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 2 "AAA" 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.

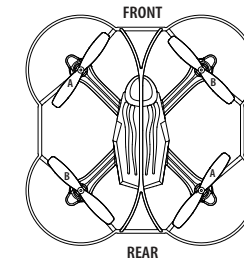
## CARE AND MAINTENANCE

- Always remove the batteries from the wireless infrared remote control when it is not being used for an extended period of time.
- To clean, gently wipe the remote control and SPYDER X™ 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.

## REPLACING THE PROPELLER BLADE

Your SPYDER X™ propeller system is a precision instrument that may need repair or replacement from time to time for optimal flight function. Crash landing from high-speed aerial flights may cause damage to your SPYDER X™ propellers.

1. The SPYDER X™ has four blades, two A & B blades on front, and two B & A blades on back (see the diagram below).
2. Pick up a blade from the included spare parts and match the marking to the diagram below.
3. Replacing the correct blade to the broken blade.



### FCC Part 15 C Notice

CAUTION: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions :

- (1) This device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

### **INDUSTRY CANADA NOTICE: CANADA ONLY.**

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions:

- (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.