Trim size 4.5 x 6.875 in.
Spread size 9 x 6.875 in.

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.

FCC Radiation Exposure Statement

This equipment complies with FCC radiation exposure limit set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20 cm between the radiator & your

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 dout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

⚠ **WARNING!**
CHOKING HAZARD - Small parts.
Not suitable for children under 3 years.

Conforms to safety requirements of ASTM, CPSIA and FCC.

V2
Made in China

PROTON™ MICRO DRONE
INDOOR / OUTDOOR WIRELESS QUADROCOPTER

INSTRUCTION BOOKLET

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

PACKAGE CONTAINS:

| PROTON™ | 2.4G Wireless Controller | Spare Parts | USB charging cord | Instruction Manual |

Colors and styles may slightly vary.

TABLE OF CONTENTS

Thank you for purchasing the PROTON™ Micro Drone. Please read this instruction booklet as it contains valuable information on how to properly fly and care for your PROTON™ Micro Drone.

FEATURES

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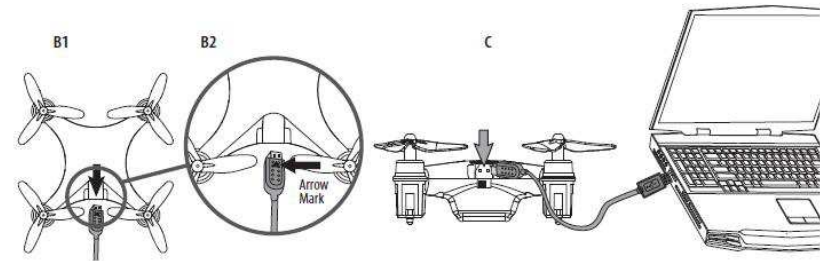
REMOTE CONTROL BATTERY INSTALLATION

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 A.
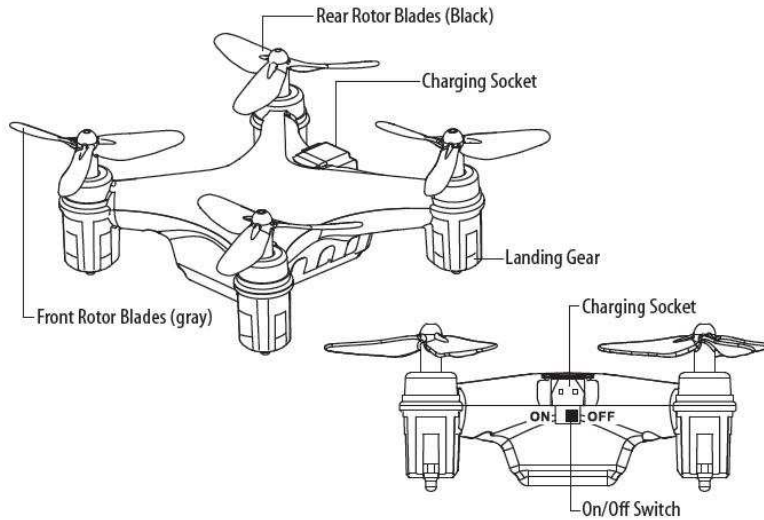3. Replace the battery cover and secure it.

A

Battery Cover

Battery Compartment
(2 "AAA" batteries not included)
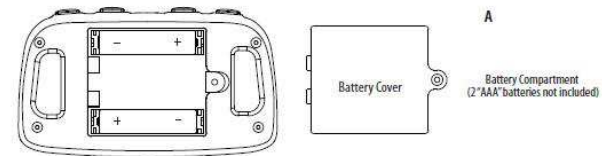
CHARGING YOUR PROTON™ BATTERY

1. Switch the quadrocopter Off. Connect the power cable to the unit making sure the arrow side of the connector is on top side facing the top of the PROTON™ (see diagrams B1 and B2).
   CAUTION: The USB plug fits the charging socket only in one way. Do not force it. Improper connection will damage the PROTON™.
2. Connect the USB end of the cable to your computers USB port (see diagram C).
3. The red LED on the USB plug lights up when charging is complete. Average charging time is 30 minutes.
   Note: If the red LED lights up, either the charging is complete or the USB plug is not properly connected.
   A full charge will allow for about 5 minutes of flight time depending on environment and user input.
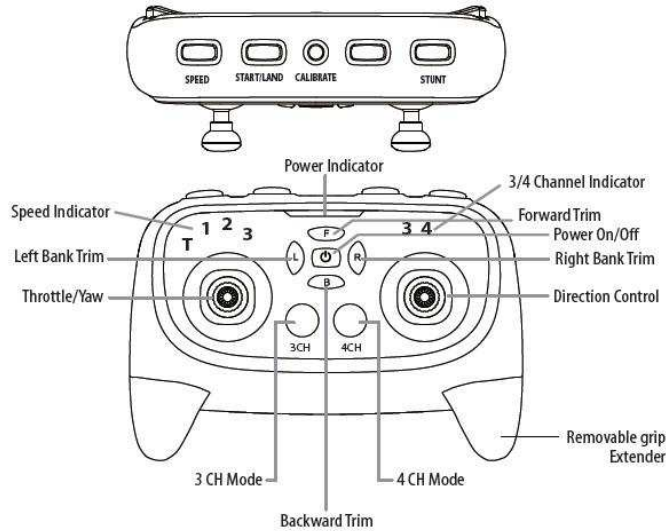

B1   B2   C

Arrow
Mark

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

PROTON™ DIAGRAM

Rear Rotor Blades (Black)
Charging Socket
Landing Gear
Front Rotor Blades (gray)
Charging Socket
On/Off Switch

REMOTE DIAGRAM

SPEED START/LAND CALIBRATE STUNT

Power Indicator
3/4 Channel Indicator
Speed Indicator
Forward Trim
Power On/Off
Left Bank Trim
Right Bank Trim
Throttle/Yaw
Direction Control
3CH 4CH
Removable grip Extender
3 CH Mode
4 CH Mode
Backward Trim

WARNING
DO NOT FLY YOUR PROTON™ IN FOUL WEATHER!

SYNCING YOUR PROTON™

Important! When syncing your PROTON™ quadrocopter with the controller always make sure that the quadrocopter is on a flat level surface and that your digital trim settings are in the center position. This ensures that the 6 Axis gyro is properly programmed to mimic your trim settings.

Your PROTON™ utilizes an automatic 2.4G channel selection system that allows up to 8 people to fly side by side in the same wireless range with no interference.

For One-Person Play:

1. Before starting, make sure that the power on both your controller and PROTON™ are in the OFF position. Make sure that there are no other 2.4G devices in the area as well.

2. Turn ON the PROTON™ and set it down on a flat surface. The LED indicator lights of the PROTON™ should begin to flash rapidly.

3. Turn ON the remote, you will hear two short beeps. The PROTON™'s LED lights should now flash slowly. Push the throttle on the left all the way forward (1 beep) and then pull the throttle all the way back. A 2nd beep will sound and the lights should turn to solid. This indicates your controller and the quadrocopter are successfully synced. If not, repeat above steps.

For Multi Person Play:

4. Before starting, make sure that the power on all PROTON™ drones and Controllers are in the OFF position. Make sure that there are no other 2.4G devices in the area.

5. Each person will have to sync their PROTON™ individually at a different time to avoid interference. Follow steps 1 to 3 above making sure that no one else is syncing at the same time.

6. After syncing a player's PROTON™, it should be left ON until all players have synced their PROTON™ quadrocopters.

7. Should there be a mistake or interference, all players must turn off their controllers and PROTON™ quadrocopters for up to 60 seconds and then begin the process again.

PREPARING FOR FLIGHT

- Verify that there are 2 "AAA" batteries inside the remote control unit and the PROTON™ has been fully charged.
- Make sure your PROTON™ and controller are both turned on.
- 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 water close by. Set your PROTON™ on a clean flat surface before take-off.

DO NOT ATTEMPT TO FLY YOUR PROTON™ IF THERE IS RAIN, SNOW, HEAVY WINDS, THUNDER OR LIGHTNING OUTDOORS. IT COULD DAMAGE YOUR PRODUCT AND POSSIBLY EVEN CAUSE BODILY HARM.

FLYING TIPS

- It is recommended that you operate the PROTON™ in a wide open 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 PROTON™ with others, make sure all spectators are behind you.
- For best performance, it is recommended that you operate the PROTON™ in zero wind conditions, as wind can greatly affect the performance of the aircraft.

RECOGNIZING THE FRONT AND BACK OF THE PROTON™

Even though the PROTON™ has four rotors there is still a front or "forward" facing direction and "back" or backwards facing direction. The Front and forward facing direction of the PROTON™ is the side with two gray blades. The rear and back of the PROTON™ is where the charing socket is. The PROTON™ when in flight will also help you keep aware of the orientation with lighted LED lights in the arms of the PROTON™.

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

FRONT

D

REAR
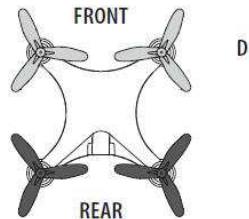
AUTOMATICALLY TAKE OFF / LAND

Make sure you have properly synced the PROTON™.

• Simply press the "start/land" button on the top of controller, your PROTON™ will automatically take off.

• To stop or land the PROTON™ just press the "START/LAND" button again and the PROTON™ will descend and land automatically.

Tips: You also can move the two control sticks simultaneously down and to the Inside corners and hold for one second and you will hear a "beep" then push the throttle slowly to start the rotors manually. In case of emergency : to stop the rotors instantly, simply press the calibrate button on the top of the cotroller, located in the center.

T (Training)MODE

Simply press and hold the Speed Setting Button you will hear a long beep and the speed indicator will change to "T", Now you are in the T mode. T mode allows you to learn how to operate your PROTON™ in a very slow speed. To exit T mode just press the speed setting button again.

SPEED SETTING BUTTON

The PROTON™ has 3 speed settings; 1 (SLOW) , 2 (MEDIUM) and 3(HIGH). The Default setting when you first turn on your PROTON™ 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 indicates high speed.

3/4 CHANNEL SELECT

PROTON™ allows you to control your Quadrocopter in 3 channel mode (beginner) or 4 channel mode (advanced flying). The PROTON™ 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" will light up on the controller indicating the PROTON™ is now 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" will light up on the controller indicating the PROTON™ is now set to 4CH mode.

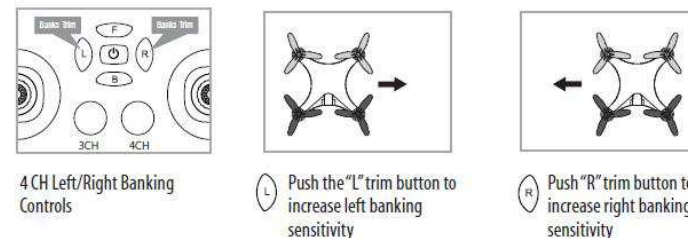## UNDERSTANDING TRIM ADJUSTMENTS

FORWARD/BACKWARD TRIM

• If your PROTON™ is moving forwards or backwards automatically, you may need to adjust the FORWARD/BACKWARD TRIM buttons.

• If your PROTON™ flies forward, push and release the B TRIM button repeatedly until the moving stops and proper flight is maintained.

• If your PROTON™ 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 PROTON™ 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
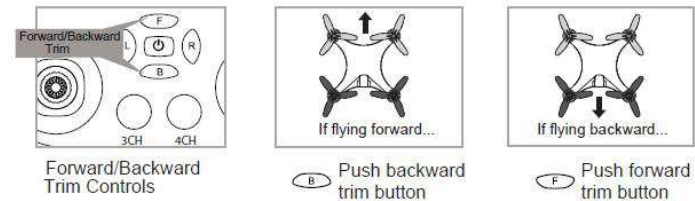
BANKING LEFT/RIGHT TRIM

• If your PROTON™ is not steadily hovering and is banking to the left or right automatically, you may need to adjust the BANKING TRIM buttons.

• If your PROTON™ banks to the left, push and release the R TRIM button repeatedly until the banking Stops and proper flight is maintained.

• If your PROTON™ 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 PROTON™ 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 "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 PROTON™. While learning to fly your PROTON™ it is best to start with a large space until you get used to the basic controls. As you master flying your PROTON™ 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 PROTON™ will rise up.
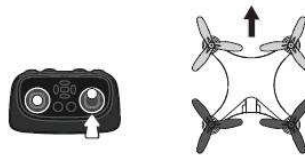
Move the Throttle down to decrease the speed of the motors and the PROTON™ will descend.

Move the Throttle stick left and the PROTON™ will rotate left.

Move the Throttle stick right and the PROTON™ will rotate right.

Move the Direction Control up and the PROTON™ will move forward.

Move the Direction Control down and the PROTON™ will move backward.

Move the Direction Control left and the PROTON™ will bank to the left.

Move the Direction Control right and the PROTON™ will bank to the right.

3 CHANNEL FLIGHT CONTROL

Below is a list of basic flight functions for your long-range remote control PROTON™. While learning to fly your PROTON™ it is best to start with a large space until you get used to the basic controls. As you master flying your PROTON™ 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.
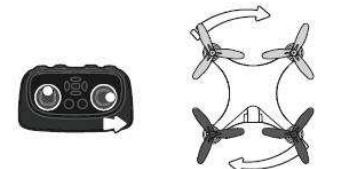
Move the Throttle up to increase the speed of the motors and the PROTON™ will rise up.
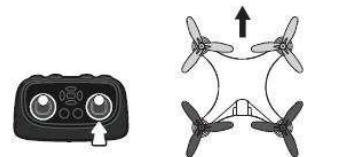
Move the Throttle down to decrease the speed of the motors and the PROTON™ will descend.
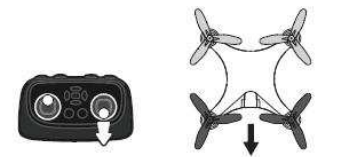
Move the Throttle stick left and the PROTON™ will rotate left.

Move the Throttle stick right and the PROTON™ will rotate right.

Move the Direction Control up and the PROTON™ will move forward.

Move the Direction Control down and the PROTON™ will move backward.

CALIBRATING THE PROTON™

If the PROTON™ becomes unstable during the course of flying, you may need to recalibrate the internal gyros. To do this place the PROTON™ on a flat level surface, press and hold the calibrate button for 3 seconds on the top of remote controller.

The LEDs on the PROTON™ will flash quickly and then remain solid, this indicates your drone has been recalibrated (see diagram E).

E

SPEED   START/LAND   CALIBRATE   STUNT
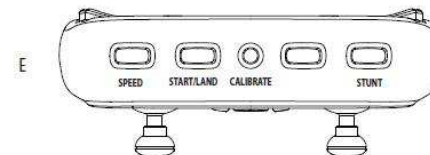
HOW TO DO 360º STUNT ROLLS

1. In order to make your PROTON™ do 360º rolls you must fully charge your battery.

   Note:The PROTON™ will not do 360º stunt rolls in T-Mode, Mode1 and under low battery indication (The LED lights on the drone will flash slowly).

2. Once you are ready to attempt a 360º roll, simply depress and let go of the "STUNT" button on the top right hand side of your controller (see Remote Diagram F), you will hear continous beeping sunds. 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 PROTON™ copter will instantly roll in the associated direction. (See diagram G). And the beeping sounds will stop.
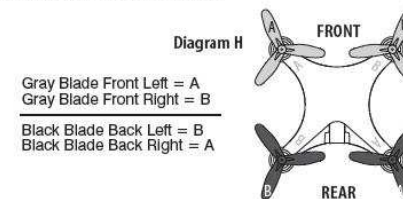
360˚ Stunt-Roll

F

G
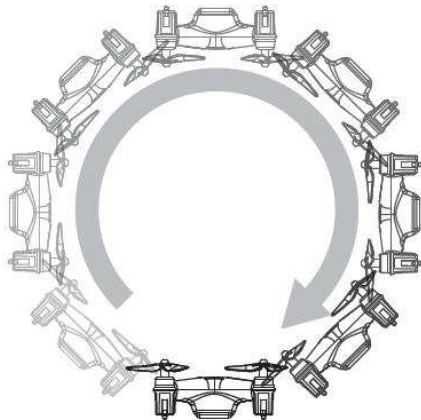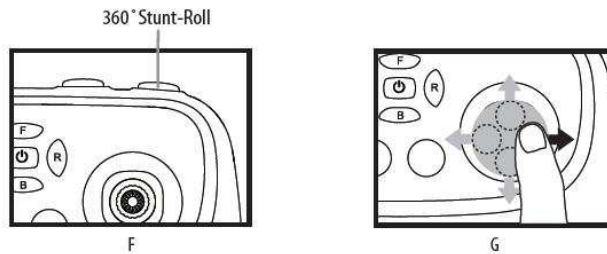
TROUBLESHOOTING YOUR PROTON™

PROBLEM	POSSIBLE REASON	SOLUTION
NO POWER	1. Power switched off 2. Polarity is reversed 3. Batteries may be dead	1. Switch the ON/OFF switch to ON 2. Make sure all batteries are installed correctly (see diagram B) 3. Batteries may be dead
REMOTE NOT RESPONDING	1. Remote is switched off 2. PROTON™ is switched off 3. Too windy 4. The Remote light is flashing	1. Switch the ON/OFF switch to ON 2. Switch the ON/OFF switch to ON 3. Windy conditions severly affect the operation of the PROTON™ 4. Replace batteries
DRONE WON'T LIFT OFF	1. Rotor speed too slow 2. Drone not fully charged	1. Push throttle lever forward 2. Recharge your PROTON™
DRONE DECSENDS TOO FAST	1. Moving the throttle too quickly	1. Control the throttle slower and smoother
DRONE NOT RESPONDING	1. Gyroscopes not functioning	1. Turn on the PROTON™ and Reset the Gyros (see page 8 diagram E)
LOSS OF PROTON™ CONTROL	1. Drone is out of range of remote	1. Keep the drone within a 100 feet radius of the remote

REPLACING THE PROPELLER BLADES

Your PROTON™ 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 PROTON™'s propellers.

1. PROTON™ have four blades, two gray propellers on the front, and two black propellers on the back Please note that the blades and the PROTON™ are labeled with an embossed A or B (see the diagram H).

2. When replacing the propeller blades, gently remove the blade from the rotor shaft. Make sure to match both the color of the blade and the indication letter on the blade with the letter on the aircraft.

3. Replace the damaged blade with the correct blade.

Diagram H

FRONT

Gray Blade Front Left = A
Gray Blade Front Right = B

Black Blade Back Left = B
Black Blade Back Right = A

REAR

PROTON™ WARNING:

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

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 PROTON™ power switches when not in use.
• The included charger is built specifically for the PROTON™ 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 PROTON™

BATTERY WARNINGS

RECHARGEABLE BATTERY:
This PROTON™ 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 2.4G remote control when it is not being used for an extended period of time.
• To clean, gently wipe the remote control and PROTON™ 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.