

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.

CAN ICES-3 (B)/NMB-3(B)

This product meets the applicable Innovation, Science and Economic Development Canada technical specifications. Ce produit répond aux spécifications techniques pertinentes d'Innovation, Science et Développement économique applicables.

IC Radiation Exposure Statement:

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

Déclaration d'exposition aux radiations:

Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps.



Conforms to safety requirements of FCC, RSS210 and RSS247.
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X18 + WiFi

2.4GHz Outdoor Drone With Streaming Video



INSTRUCTION BOOKLET

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

PACKAGE CONTAINS:



Colors and styles may vary slightly .



ARTWORK NO.	DESCRIPTION	MDSER	DESIGNER	DATE
C60 X18+ WiFi IM	114x174mm	Vicky	Jerry	2018/7/30

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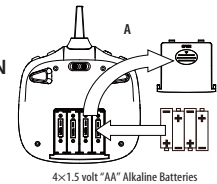
Thank you for purchasing the X18 2.4 Ghz Quadcopter. Please read this instruction booklet as it contains valuable information on how to properly fly and care for your X18.

FEATURES

- Wide angle lens provides great aerial photography
- Air pressure sensor locks flight altitude
- Stream live video directly to your mobile device
- 480P standard definition camera records high quality video and still pictures
- Vibration dampened motors provides quieter flight and improves image quality
- 3 different speed settings for slow to high speed flying
- LED directional lights makes the X18+WiFi easy to follow
- Push button 360° aerial stunts
- 2.4g radio allows for a 300 feet operational range

REMOTE CONTROL BATTERY INSTALLATION

1. Slide off the battery cover from the back of the controller.
2. Install 4 fresh "AA" alkaline batteries into the controller as shown in diagram A. Replace the battery cover.
3. Turn over the controller and turn the on/off switch to the on position. If the power indicator turns on you have installed your batteries properly.

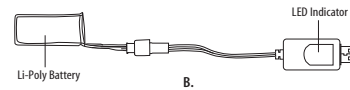


4x1.5 volt "AA" Alkaline Batteries

CHARGING THE X18 LI-POLY BATTERY

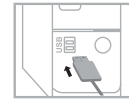
1. Connect your USB charging cord to your computer USB port.
2. Connect your battery to the USB charging cord;
3. The red charging indicator light will turn on. After the battery is charged fully, the indicator light will turn off.
4. Average charging time is approximately 120 minutes. A fully charged drone can fly for approximately 5-7 minutes depending on environment and user input.

NOTE: You may purchase additional batteries and chargers at www.propelrc.com



Li-Poly Battery

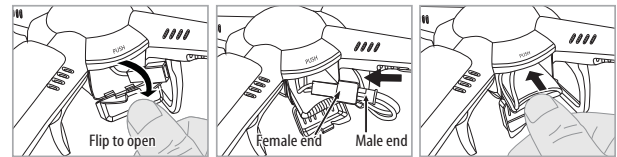
B.



IMPORTANT: ALWAYS REMEMBER TO DISCONNECT YOUR BATTERY CHARGER WHEN NOT IN USE!

X18 BATTERY INSTALLATION

1. Connect the battery to the female end of the wire inside the battery compartment. You will see the lights on the drone start flashing rapidly.
2. Slide the battery into the lower part of the battery compartment. Make sure the wire side out.
3. Push all wire into the compartment then close the battery compartment door.

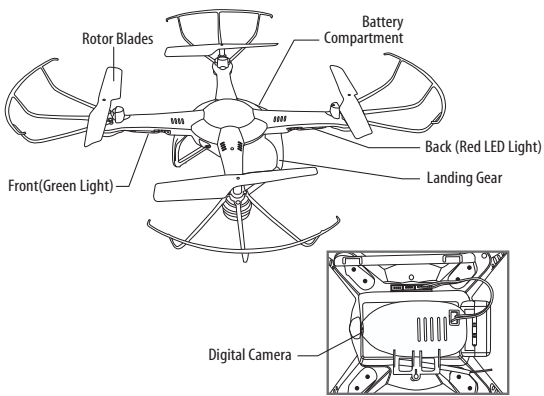


C.

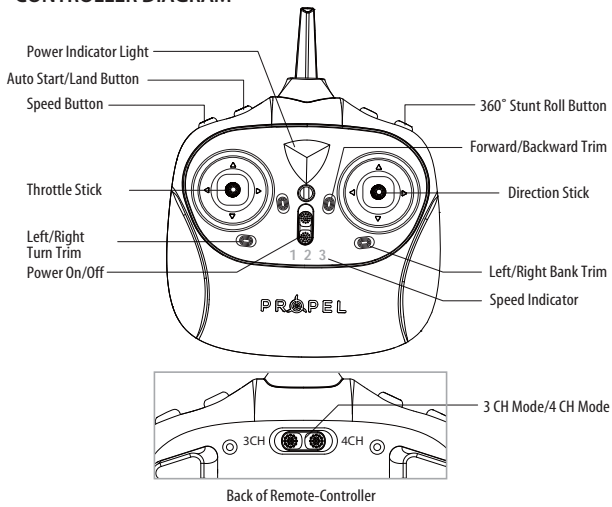
D.

E.

X18 DIAGRAM



CONTROLLER DIAGRAM



WARNING

DO NOT FLY YOUR X18 IN FOUL WEATHER!



FLIGHT PREPARATION

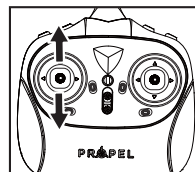
- Verify that there are 4 "AA" batteries inside the remote control unit and the X18 has been fully charged.
- Make sure to be in a large open space preferably a field or a park with an open radius of at least 200 feet.
- Make sure to start your drone on a clean flat level surface before take-off.
- **IMPORTANT! Until you have experience in flying your X18, it is not advised to use in any rate of wind. Pick a day with zero wind day or extremely light wind condition when learning how to fly.**

SYNCING YOUR X18

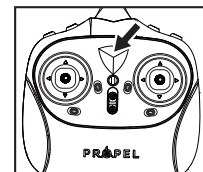
Important! When syncing your X18 with the controller always make sure that the drone is on a flat level surface and that your digital trim settings are in the center position. This insures that the 6 Axis gyro is properly programmed to respond to your trim settings. Your X18 utilizes an automatic 2.4G channel selection system that allows up to 8 people to fly side by side in the same wireless range with no interference.

1. Before starting, make sure that the power switch on your controller is off and the battery is removed from the X18. Make sure that there are no other 2.4G devices in the area.
2. Insert the battery into the X18 and set it down on a flat level surface. The red and green LED lights on the drone should begin to flash rapidly.
3. Quickly turn ON the remote and you will notice that the top red LED light on the face of the controller should also be flashing.
4. Push the throttle stick all the way up until it stops and then pull it back all the way down to the bottom (see diagram below). When pushing the stick up or pulling the stick down you should hear a high-pitched beep both ways and the indicating lights on the drone and controller will stop flash and stay solid on. You have successfully synced your X18 and are ready to fly. If this doesn't happen repeat steps 1-4 again.

- **TIP 1: Try not to leave too much time between putting your battery into the drone and turning on the controller or your syncing window will time-out.**
- **TIP 2: Syncing your drone indoors or in the shade will make it easier to see the LED light indicators on both the controller and the drone.**



Move the control stick all the way up and all the way down, you should hear two beeps.



The flashing red LED light will become solid when you are synced.

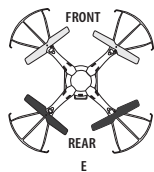
NOW YOU ARE READY TO FLY!

If you have successfully synced your X18 to your controller as explained on page 4 then 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 explained in the next few 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 X18 too high until you become a more experience pilot.

RECOGNIZING THE FRONT & REAR OF THE X18

Even though the X18 has four rotors there is still a front or "forward" facing direction and "rear" or backwards facing direction. The front and forward facing direction of the X18 is the side with grey propellers (see diagram E). The rear and backward facing direction of the Quadrocopter is the side with black propellers (see diagram E).

NOTE: The front of the Quadrocopter also displays running Green LED light and the back of the Quadrocopter displays running RED LED lights.



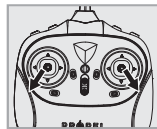
STARTING/STOPPING THE ROTORS

Note: You can start/stop your X18 manually or automatically.

Please follow one of the steps below to operate accordingly. Make sure you have properly synced the X18 and the power stays on.

MANUAL START/STOP

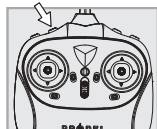
- To start the rotors simply move the two control sticks both down and out (see diagram), hold until the rotors start spinning. Now release both sticks to the neutral position and push the throttle up to take off.
- To stop the rotors, after starting them you can simply wait about 10 seconds, and they will stop automatically. Or move both sticks down and out again to stop immediately. After take off, you can simply pull the throttle all the way down and land.



AUTO START/LAND

The X18 has an auto start/land feature which allows you to start/land automatically. Simply press the **AUTO START / LAND** button on the top of the controller and your X18 will begin taking off/landing (see diagram below).

NOTE: You can still control the direction while auto starting/landing to avoid obstacles.



UNDERSTANDING THE ALTITUDE LOCK SENSOR

The X18 has a unique Altitude Lock function, air pressure sensor that allows for easier flight control and stability. A beginner's friend, it allows the user to ease into piloting the copter. The sensor locks in the altitude of the copter while allowing the user to adjust the directional controls without having to hold the throttle.

After starting the copter, fly it upwards to a safe height. Once at a safe height, release the throttle to the neutral position. Now your X18 should be locked in the altitude and you can focus on getting used to the directional controls of the X18. The copter will always tend to self correct and go back to the last locked height after moved up or down by outside forces.

Note: The altitude sensor does have some tolerance based on atmospheric conditions and could have a slight variation in altitude.

SPEED SELECT BUTTON

The X18 has 3 speed settings; 1 (SLOW), 2 (MEDIUM) and 3 (HIGH). The Default setting when you first turn on your X18 is the 1 (SLOW) speed mode. To increase the speed simply trigger the speed setting button (see remote diagram on pg 3) you will hear a beep and the speed setting indicator on the face of the controller will show you what speed setting you are on. Speed settings can be set before flight or during the flight.

3 CHANNEL VS 4 CHANNEL FLYING

Propels unique "switch-blade" technology allows you to choose between 3ch or 4ch flight control modes. Most people with no experience in flying multi copters may find 3ch easier to learn at first as controls are set up to simply move forward, back, turn left and turn right. 4channel flying gives the operator ultimate control by adding two more dimensions of flight, banking left and banking right.

To change to 3 Channel mode:

Switch the 3/4 CH button to left side on the back of controller (see remote diagram on pg 3), you will hear 3 "beeps" indicating the X18 now is set to 3 CH mode.

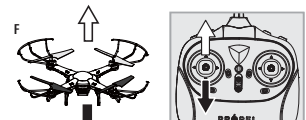
To change to 4 Channel mode:

Switch the 3/4 CH button to right side on the back of controller (see remote diagram on pg 3), you will hear 4 "beeps" indicating the X18 now is set to 4 CH mode.

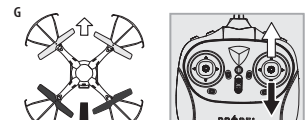
3 CHANNEL FLIGHT CONTROL

Below is a list of basic flight functions for your long-range remote to control the X18. While learning to fly your X18 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 X18 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.

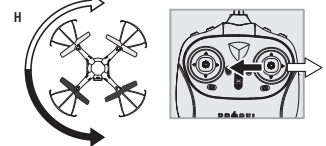
Move the left Throttle stick up to increase the propeller speed and the X18 will accelerate and ascend.
Move the left Throttle stick down to decrease the propeller speed and the X18 will decelerate and descend (see diagram F).



While in the air, move the right Direction Stick up and the X18 will move forward.
Move the right Direction Control down and the X18 will move backward (see diagram G).



While in the air, move the right Direction Control left and the X18 will spin to the left.
Move the right Direction Control right and the X18 will spin to the right (see diagram H).



4 CHANNEL FLIGHT CONTROL

Below is a list of basic flight functions for your long-range remote to control the X18. While learning to fly your X18 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 X18 you can move to more advanced maneuvering techniques. Practice makes perfect!

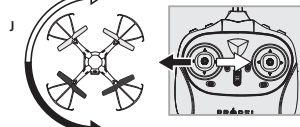
Move the left Throttle stick up to increase the propeller speed and the X18 will accelerate and ascend.

Move the left Throttle stick down to decrease the propeller speed and the X18 will decelerate and descend (see diagram I).



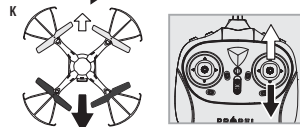
While in the air, move the left Throttle stick left and the X18 will rotate left.

Move the left Throttle stick right and the X18 will rotate right (see diagram J).



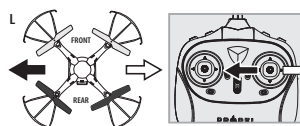
While in the air, move the right Direction Stick up and the X18 will move forward.

Move the right Direction Control down and the X18 will move backward (see diagram K).



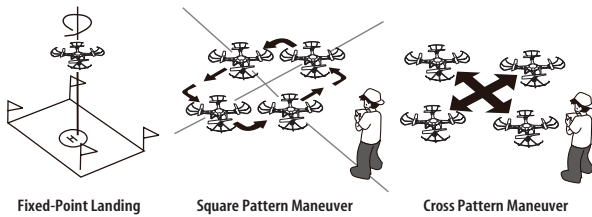
While in the air, move the right Direction Control left and the X18 will bank to the left.

Move the right Direction Control right and the X18 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

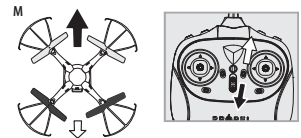
Cross Pattern Maneuver

ADJUSTING THE TRIM

NOTE: The X18 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 X18 to be more balanced.

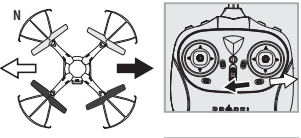
Forward/Backward Trim

- If your X18 drifts forward while in the air, push and release the FORWARD/BACKWARD TRIM button backward repeatedly until the motion stops and proper flight is maintained (see diagram M).
- If your X18 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 X18 drifts / banks left while in the air, push and release the BANKS TRIM button to the rightside repeatedly until the motion stops and proper flight is maintained (see diagram N).
- If your X18 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 X18 spins left while in the air, push and release the LEFT/RIGHT TURN TRIM button to the rightside repeatedly until the motion stops and proper flight is maintained (see diagram O).



Spin Right Trim

- If your X18 spins right while in the air, push and release the LEFT/RIGHT TURN TRIM button to the 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. Long beeping when press the trim button indicates the product is trimmed to the maximum on a particular side.

CALIBRATING THE X18

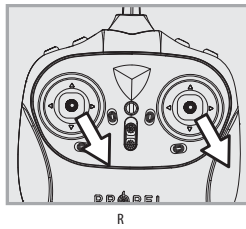
NOTE: Your X18 comes pre-calibrated out of the box so you are ready to fly.

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

This most likely means that you need to recalibrate your X18. Please follow the simple instructions below.

1. Place the X18 on a flat level surface
2. Make sure the X18 is on and that the controller is synced (refer to syncing pg 4). Do not start the blades! Move both the throttle and control stick down to the right corners (see diagram R). You will hear a long beep and see the lights on the drone rapidly flash for a few seconds then stop. Once the lights stop flashing you have completed your calibration and are ready to fly!

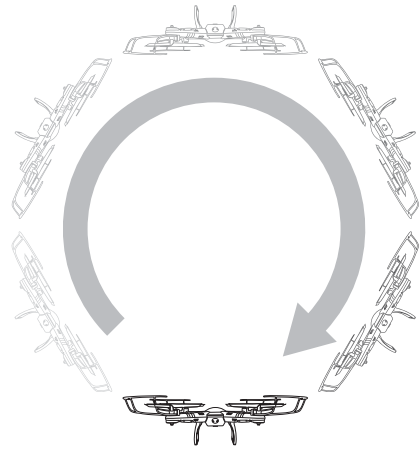
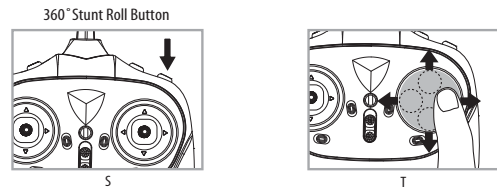
TROUBLE SHOOTING: If you do not see the lights flash, first remove the battery from the drone then turn off your controller and start again. Always make sure to put your battery in first, then turn on your controller. Push the left throttle stick up all the way and then pull back down again. When you hear the beep the X18 is synced to the controller and you are ready to calibrate.



HOW TO PERFORM 360° STUNT ROLLS

Performing 360° stunt rolls with the X18 is as easy as 1-2-3:

1. Hover the X18 in still position making sure that you have at least 5 feet of clearance above and below the quadcopter, then 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 rapid beeping (see diagram S) sounds.
3. Determine which direction you want it to flip and quickly push the right control stick in the direction you want to flip your X18 (see diagram T).
You have 4 choices a) Forward roll, b) Backwards roll, c) Right side roll, d) Left side roll.



NOTE: To exit the stunt roll mode without flip, you can press the button again. The beeping sound will stop.

USING YOUR ON-BOARD CAMERA AND VIDEO RECORDER

Your X18 comes equipped with an onboard digital camera that takes both video and still photographs. You can have hours of fun creating aerial photography and videos for family and friends.

PROPEL X18 WiFi APP INSTALLATION

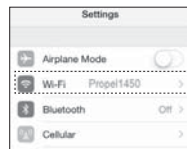
1. Make sure you are using a compatible Android™ or Apple® iOS device.
2. Make sure your device has access to the Internet.
3. For Apple® iOS devices, within the App Store, search and select "Propel1450". Hit the Install button and the "Propel1450" App should download and install automatically.
4. For Android™ OS devices, visit the Google Play store and search for "Propel1450". Selecting the "Propel1450" App will download the App and automatically install it on your device.
5. After the "Propel1450" App is installed, it should create an icon on your screen. Click the "Propel1450" icon to run the App to make sure that it has installed correctly on your device. If not, please delete and repeat the process again.

PAIRING X18 TO YOUR COMPATIBLE DEVICE

1. After completely charging your X18 battery, install the battery to your X18 (refer to the user manual).
2. In the Settings menu of your device, locate the Wi-Fi option.
3. Turn ON the Wi-Fi option.
4. Select "Propel1450" from the Wi-Fi list. Wait for your X18 to be connected. Return to the Main Menu.



Settings



Propel1450

Note: Apple® devices require the use of iOS 7.0 or higher.
 ANDROID™ devices require the use of OS 4.2.2 or higher.

QUICK START

1. After you install the App correctly and have paired to the drone successfully, you can open the "Propel1450" App icon. Tap "START" on the bottom right hand side of the screen. You should see the real-time video streaming from your X18's camera.
2. This App also allows you to control your X18 by your mobile device. To activate the control sticks, tap the "ON" button at the top right hand side of the screen. This will switch the control from your traditional controller to your compatible device. Now click "ON" to start the motors. The control sticks will show up in the screen for your fly control and you can now use your device as a traditional controller. Or you can click "ON" to auto launch your X18 in the air and then use your device as a traditional controller. Click this button again, your X18 will automatically land on the floor. Click "ON" to take photos and click "ON" to record videos.

Note: In order for you to control the flight of X18 via APP by your mobile device, you will need to connect your X18 with your mobile device only or turn off the controller before tap the "ON" button on the APP control panel.

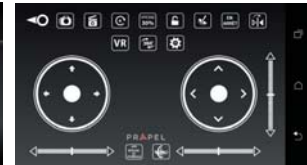
DETAILED APP OVERVIEW

3. Please see images below for a detailed App overview. This overview is also available under the "HELP" icon in the home screen of the App.

HOME PAGE



CONTROL STICKS



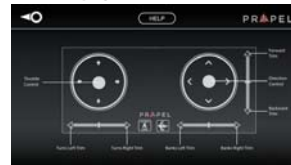
HELP PAGE 1



HELP PAGE 2



HELP PAGE 3



CAMERA SETTINGS



TROUBLESHOOTING YOUR X18

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. Replace remote batteries 3. Re-sync the remote 4. Do not fly beyond 300 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 X18 3. Check rotors for hair or other obstructions
Aircraft Descends Too Fast	1. Moving the throttle down too quickly 2. Flying in high wind or bad weather	1. Control the throttle slower/use auto land feature 2. Do not fly in bad weather

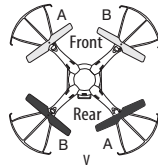
REPLACING THE PROPELLER BLADES

Your X18'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 X18's propellers.

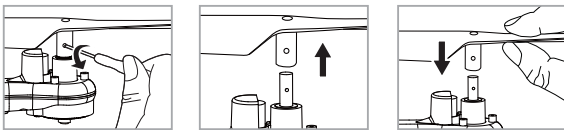
- The X18 has four blades, two blades with indication letter A & B on front, and two blades with indication number B & A on back (see the diagram V).
- When replacing the propeller blades, make sure to match the indication letter on the blade.
- Replace the damaged blade with the correct blade.

Blade Front Left = A
Blade Front Right = B

Blade Back Left = B
Blade Back Right = A



NOTE: The "A" and "B" marks are embossed on the bottom side of the propellers.



- The X18 has four blades, each marked with an indication letter (on the underside).
- When replacing the propeller blades, make sure to match with diagram V.
- Unscrew from the side, then pull out the damaged one from the top.
- Install the correct one, make sure to line up the hole on the propeller to the one on the motor shaft. Then put the screw back to secure the blade on the motor shaft.

NOTE: When install the new propeller, make sure to push it down all the way.

X18 WARNING:

The X18 is designed for OUTDOOR use. The X18's blades revolve at high speeds and can cause damage to the user, spectators and animals. Stand away from the X18 to reduce the risk of getting into the flight path. Warn spectators that you will be flying your X18 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 X18.

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 X18 power switches when not in use.
- The included charger is built specifically for the X18 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 X18.

BATTERY WARNINGS

RECHARGEABLE BATTERY:

This X18 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 X18 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.