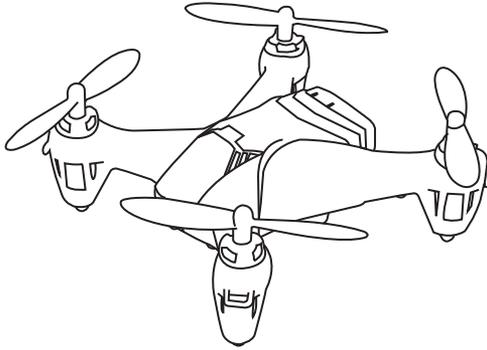


Item: 61351



Ages: 14+



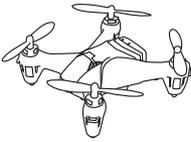
Robin PRO

5.8G FPV STREAMING DRONE

Instruction Guide

Keep the Instruction Guide for future reference. Do not discard.

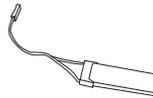
CONTENT LIST



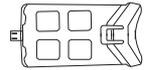
1x Robin



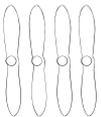
1x Controller



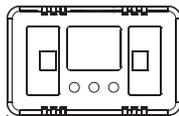
1x Battery
(for Controller)



2x Battery
(for Robin)



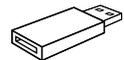
2x Blade(A)
2x Blade(B)



1x USB 3-Port Charger



1x 8GB Micro SD Card



1x USB Card Reader

For questions or difficulties operating your TDR devices, please contact:
service@tenergy.com

DISCLAIMER

Read this disclaimer and instructions thoroughly before operating this device. THE USE OF THIS PRODUCT IS A SIGN OF YOUR COMPLIANCE WITH THIS DISCLAIMER. You are responsible for your own actions, behavior, and conduct while using this device. You agree to use this product in such a way that you will comply with all local and federal regulations, including, but not limited to, personal privacy laws. Tenergy Corporation will not be held liable for any damages or legal responsibilities resulting from the use of this product. This product is NOT suitable for anyone under the age of 14. For more information and guidance, please visit www.TDRWorld.com

Safety guidelines for sUAS recreational users

- Follow community-based safety guidelines, as developed by organizations such as the Academy of Model Aeronautics (AMA).
- Fly no higher than 400 feet and remain below any surrounding obstacles when possible.
- Keep your sUAS in eyesight at all times, and use an observer to assist if needed.
- Remain well clear of and do not interfere with manned aircraft operations, and you must see and avoid other aircraft and obstacles at all times.
- Do not intentionally fly over unprotected persons or moving vehicles, and remain at least 25 feet away from individuals and vulnerable property.
- Contact the airport and control tower before flying within five miles of an airport or heliport.
- Do not fly in adverse weather conditions such as in high winds or reduced visibility.
- Do not fly under the influence of alcohol or drugs.
- Ensure the operating environment is safe and that the operator is competent and proficient in the operation of the sUAS.
- Do not fly near or over sensitive infrastructure or property such as power stations, water treatment facilities, correctional facilities, heavily traveled roadways, government facilities, etc.
- Check and follow all local laws and ordinances before flying over private property.
- Do not conduct surveillance or photograph persons in areas where there is an expectation of privacy without the individual's permission (see AMA's privacy policy).
- Before each flight, check and ensure the drone and controller are not damaged, and that all components are working in accordance with the user instruction .
- If you want to use unmanned aircraft systems for a commercial purpose: you can apply for an exemption from the FAA to operate commercially. For more information about how to apply for an exemption, visit the FAA's "Section 333".

FLY RESPONSIBLY

The Federal Aviation Administration requires registration of many drones flown in the US, for hobby or commercial purposes. To learn more about drone registration requirements, visit "Know Before You Fly" at: www.knowbeforeyoufly.org



The crossed-out dust bin symbol indicates that batteries (primary, rechargeable, button cells, packs, etc) must not be put in household waste. These items may be composed of hazardous materials. Please help protect the environment from health risks by disposing of the batteries properly, and taking them to a local collecting facility for safe recycling.



Waste Electrical and Electronic Equipment (WEEE)

When this appliance is out of use, please remove all batteries and dispose of them separately. Bring electrical appliances to the local collecting points for waste electrical and electronic equipment. Other components can be disposed of in domestic refuse.



This product is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

FCC Statements

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.
2. This device must accept any interference received, including interference that may cause undesired operation.

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 an experienced radio/television technician for help.

ADULT SUPERVISION REQUIRED

An adult should check the unit and LiPo battery for damages prior to each use. Drones have rotating blades that move at high speeds, posing a danger of damage and injury. Pilots are responsible for any action that results in damages or injury from improper operation of the drone. Adequate flying space is required. Avoid flying near interior fans and/or vents as they may affect your ability to control the drone. Keep a safe distance from streets, public thoroughfares, and power lines. Never attempt to retrieve the drone from any location higher than your reach (rooftops, trees, etc) or any location that poses a safety hazard. Never fly the drone at night. Keep drone in sight at all times during operation. Discontinue operation immediately if the drone flies out of your field of view. Do not fly near spectators. Keep away from pets, as they may become excited over R/C vehicles. Keep spinning rotors away from fingers, hair, eyes, and other body parts. Always launch from a flat surface. Never leave Drone unattended while it is turned on. Read all enclosed information before operating.

LITHIUM BATTERY CAUTIONS

LiPo batteries pose a serious hazard when used improperly and may result in overheating, fire, or explosions. Read all precautions and instructions regarding the care and use of LiPo batteries prior to use. The enclosed LiPo battery is to be used only with the vehicle and charger included in this package.

- Keep away from flammable materials
- Do not expose to direct sunlight
- Do not expose to extreme heat
- Do not drop or make subject to strong impact
- Keep dry and away from moisture
- Remove exhausted batteries as soon as possible and discard properly
- Remove all batteries when toy is inactive for long periods
- The supply terminals are not to be short circuited

LiPo Battery Disposal: LiPo batteries must be recycled and disposed of properly. LiPo batteries should not be disposed of with household waste. **Check your local laws and regulations for information on proper battery disposal. If you are unable to identify the applicable rules in your area, please reference the instructions of the battery manufacturer.**

WARNING: Batteries are harmful if swallowed. Please keep away from children.

Product Features

Advance Auto-hovering Technology



Wrap-around Shot With Orbit Video



6-axis Flight Control System



5.8GHz Real-time Video Streaming



2MP / 720p HD Camera



Advance Headless Flight Mode



4-way 360° Stunt Rolls (Left, Right, Forward, Backward)



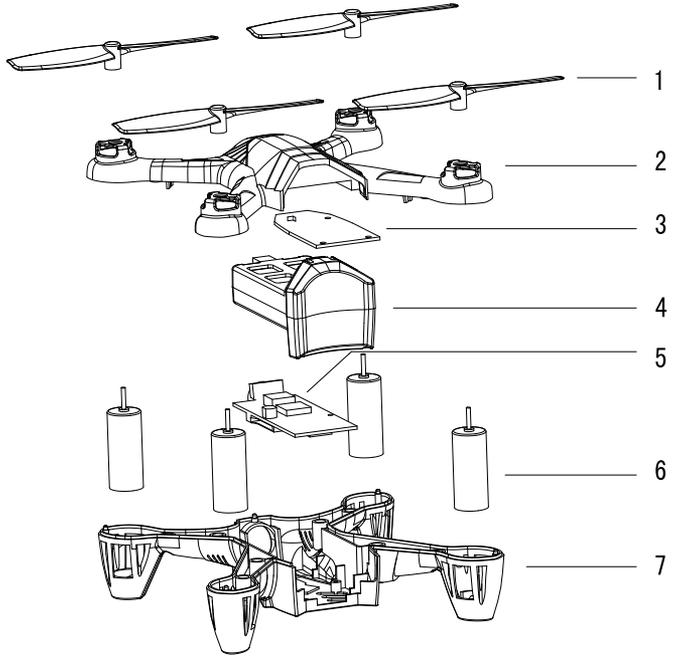
Capable Of Outdoor Flight



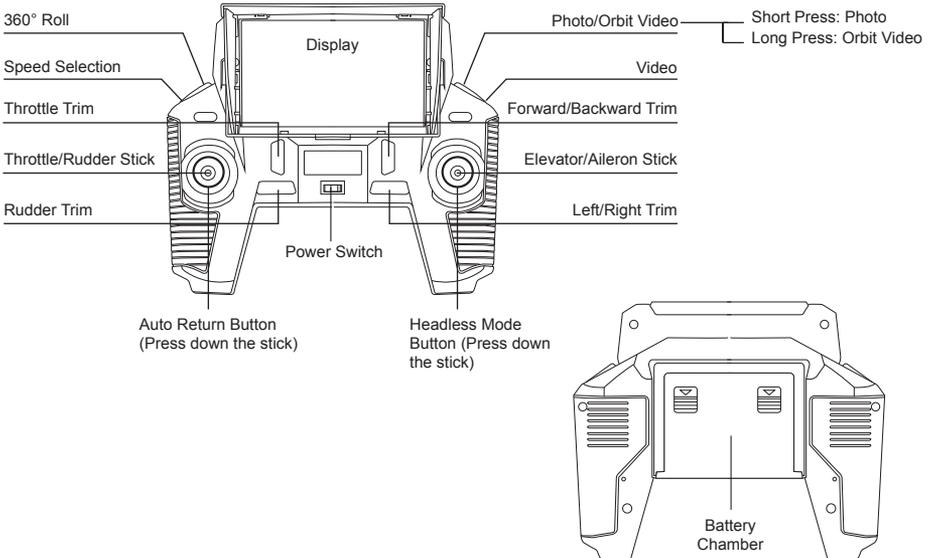
Modular Battery Design

Diagrams

1. Blades
2. Canopy
3. Receiver Board
4. Battery
5. 5.8G Camera Board
6. Motors
7. Main Frame



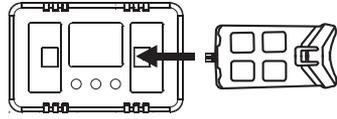
Controller



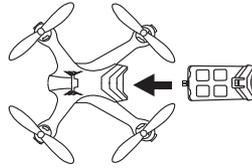
Charging and installing battery for the drone

1. Connect the USB cable to the battery charger.
2. Connect the USB cable to USB power source.
3. Connect the battery to the charger.
4. The LED light will be on while charging, and off once charging completed.
5. Insert the battery in to the drone after battery is fully charged.

Charge the battery for the drone



Insert the battery into the drone



LED Charging Status Indicators

On - Charging the battery

Off - Charging complete

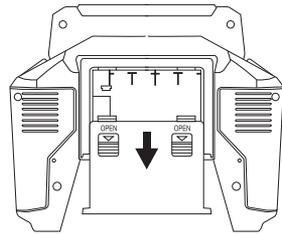
Charging Time: approx 60min

Fly Time: approx 5min per charge

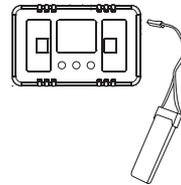
Charging and installing battery for the controller

1. Remove the battery from the battery chamber of the controller.
2. Connect the USB cable to the battery charger.
3. Connect the USB cable to USB power source.
4. Connect the battery to the charger.
5. The LED light will be on while charging, and off once charging completed.
6. Insert the battery in to the controller.
5. Ensure the battery chamber cover is closed

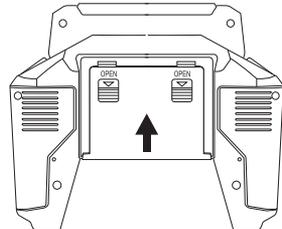
Remove the battery from controller



Charge the battery



Insert the battery



LED Charging Status Indicators

On - Charging the battery

Off - Charging complete

Charging Time: approx 60min

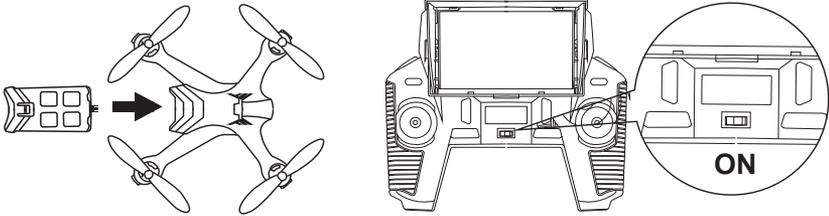
Run Time: approx 60min per charge

Cautions:

Always unplug/remove LiPo battery when not in use.
Cool down battery after use to room temperature before charging.
Charge battery in an isolated area.
Never leave battery unattended while charging.
If battery swells, unplug it immediately. Do not use it again.
Do not modify, heat up or get the battery wet.
Charge the battery with the provided charger only.

Binding drone to the controller

1. Fully insert battery into drone unit and place on level surface



2. When 2 red LEDs flash rapidly, the drone is ready to bind
3. To turn on the controller and begin binding, switch the power switch to "ON"
4. LED on the drone will stop flashing after binding has been successful
5. When binding is complete, live video should be available on the LCD display of the controller

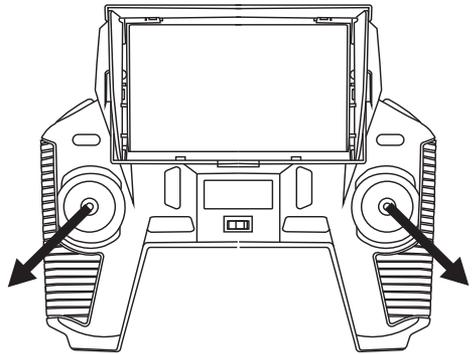
Start / Stop the motors

Start the motors:

Pull the left stick to bottom-left and the right stick to bottom-right at the same time, then release.

Stop the motors:

Pull the left stick to bottom-left and the right stick to bottom-right at the same time, then release.



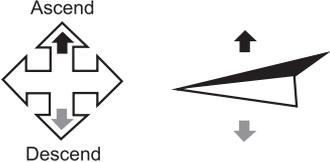
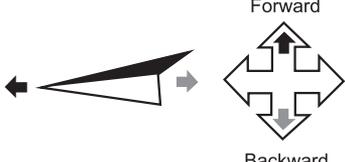
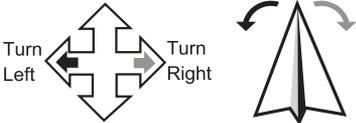
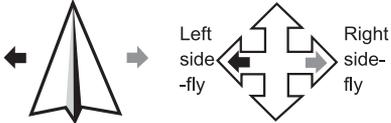
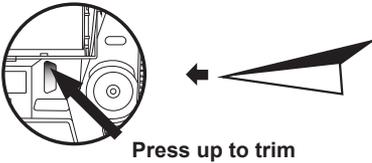
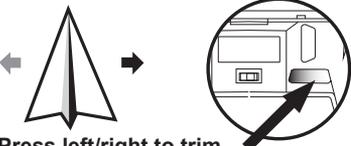
Pull both sticks in the direction shown above will turn the motors on and off.

Basic operation controls

Basic operation:

Left stick controls altitude and direction.

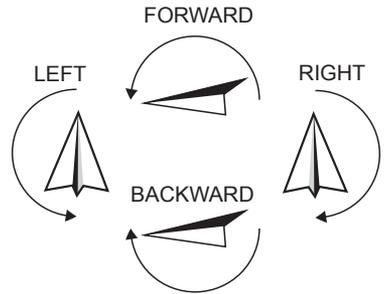
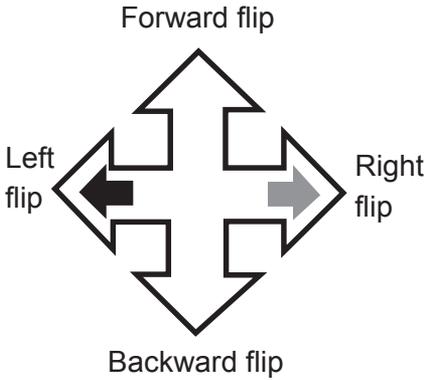
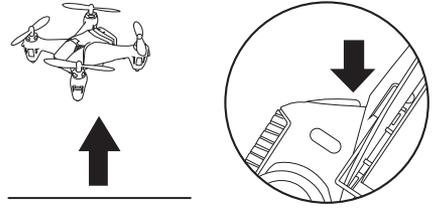
Right stick controls the rotation forward, backward, left or right movement.

Left Stick	Right Stick
<p>Ascend</p>  <p>Descend</p>	<p>Forward</p>  <p>Backward</p>
<p>Turn Left</p>  <p>Turn Right</p>	<p>Left side-fly</p>  <p>Right side-fly</p>
Backward Trimmer	Forward Trimmer
 <p>Press down to trim</p>	 <p>Press up to trim</p>
Left/Right Turning Trimmer	Left/Right Side-Fly Trimmer
 <p>Press left/right to trim</p>	 <p>Press left/right to trim</p>
Photo Taking	Video Shooting
 <p>Short press the button to take a photo</p>	 <p>Short press the button to shoot a video.</p>

Special operation controls

360° Roll

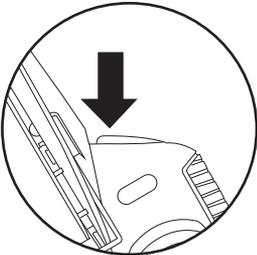
1. Bring the drone to a mid-air hover, without flying towards any direction. Remove finger from the direction (Elevator/Aileron) stick once in hover.
2. While hovering, press the 360° Roll button. The remote will start beeping rapidly as the drone will enter rolling-ready mode.
3. While the rolling-ready move, tap the direction stick in the direction you want the drone to flip/roll.



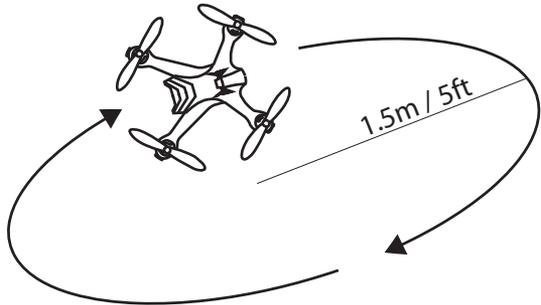
Note:
The 360° Roll function cannot be performed when battery power is low.

Orbit Video

Press and hold the Photo Button for 1 second to start Orbit Video shooting. Press the Photo or Video Button to stop.



Press and hold the button for 1 second to start Orbit Video.

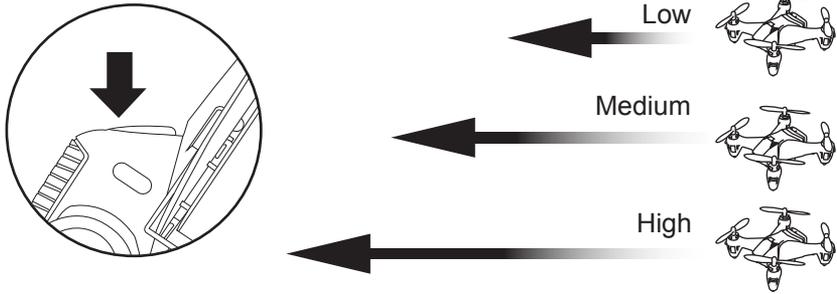


Note:

The orbit radius is approximately 1.5m (5ft) please ensure there is enough space before using the Orbit Video feature. It is recommended to have a 9ft radius of clearance when using this feature. For best results, avoid using Orbit Video when it is windy.

Speed/Sensitivity Selection

The drone's flying speed and sensitivity can be adjusted by pressing the Speed Selection button. Pressing the button will switch the speed in the following speed settings: Low > Medium > High > Low



Tip: It is best to start flying in default low speed setting until you are comfortable to the flying speed. Flying speed/sensitivity setting can be adjusted before or during flight. Each time the drone starts, the flying speed will be reset to default (low speed) setting.

Headless Mode

In headless mode, drone flies from your viewpoint no matter which direction the drone is flying. E.g.: if you push the controller to left the drone will fly to left, from your viewpoint - regardless of what direction the drone is facing/pointing. Which allows you to give up worrying about orientation of the drone altogether.

To enter headless mode:

- 1) Before taking off, position the drone in such a way that "its front is your front".
- 2) Press down the Headless Mode button (the Elevator/Aileron stick) to enter headless mode.
- 3) Press the button again to get out of headless mode.

Note:

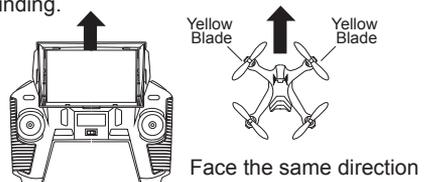
- The controller will keep on beeping continuously when the drone is in headless mode.
- The rear LED on the drone will flash continuously during headless mode.

Auto return

Pressing the auto return button (the Throttle/Rudder stick) during the flight will force the drone to find the shortest route back to its original take off location. For best results, align the body of the drone in the same direction as the controller before binding.

Cautions:

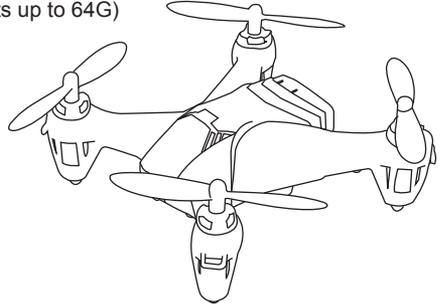
Use this feature with caution, ensure there are no obstacle in its way.



Specifications

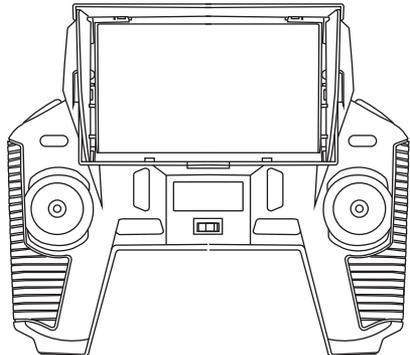
Drone

LWH	13.2x13.2x6cm / 5.2x5.2x2.4inch
Weight	55g / 1.94oz
Operating Temperature	0°C to 40°C
Control Distance	70m / 230ft
Memory Card	Micro SD card (Supports up to 64G)
Video Format	2MP/720P/30FPS
Camera Viewing Angle	120°
Battery Capacity	380mAh
Flight Time	approx. 5~6 minutes



Controller

LWH	18x16x7cm / 6.6x6.2x2.7inch
Weight	284g / 10oz
Screen	4.3inch
Operating Temperature	0°C to 40°C
Control Distance	70m / 230ft
Battery Capacity	500mAh
Run Time	approx. 60 minutes



Blade installation

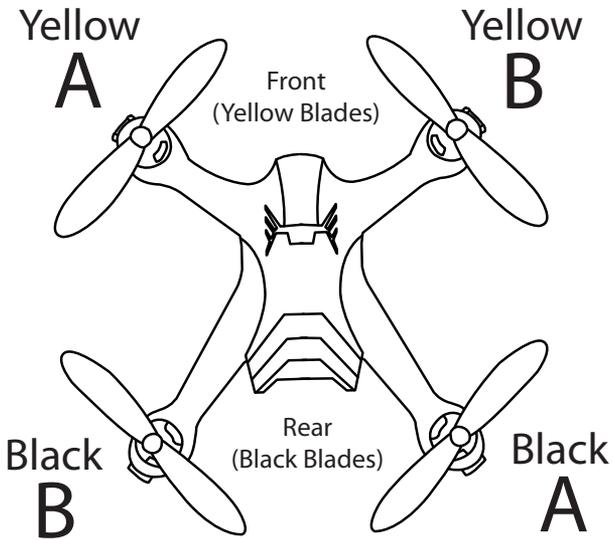
To disassemble the blade:
Remove the blade by pulling
upward.



To install the blade:
Match blade with the blade socket
and press down.



Blades must be installed as shown:
Front: use Yellow Blade A and Yellow Blade B
Rear: use Black Blade A and Black Blade B



Note:
The letters A and B are printed on reverse side of blades.

Transfer photos and videos to your computer

Turn off the drone by disconnecting the battery.

Locate the Micro SD Card on the side of the drone. Press in and release. The Micro SD Card will pop out. Remove the Micro SD Card.

Insert the Micro SD Card into the USB Card Reader. Insert the USB Card Reader into the USB port on your computer.

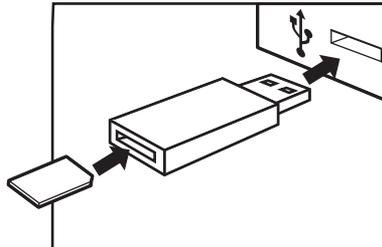
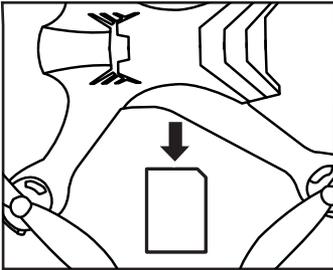
The computer will recognize the Micro SD Card as an external/removable storage.

Use the computer's operating system or preferred photo transferring program to transfer the photos and videos.

CAUTION: Never remove the USB Card Reader from the computer during file transfer.

After the photos and videos have been transferred, delete photos and videos from Micro SD Card to free up space.

Eject the USB Card Reader from the USB Port, remove the Micro SD Card and insert it back in the drone.



Tips:

If computer cannot recognize the Micro SD Card, or the external/removable storage does not show up:

- Ensure the USB Card Reader is fully plugged into the computer.
- Consult your computer's user guide for downloading data from external/removable storage.

Flying Tips

When launching the drone, face the same direction as the drone. The yellow blades should be in front.

Practice launching, hovering, and landing before attempt to learn other moves.

Flying 2 to 3 feet above the ground will reduce ground turbulence and make flying easier.

When first attempting to fly in a different direction, start by tapping the Direction Stick until you get the hang of it. Always move controls slowly until you become comfortable operating the drone.

Once you've mastered flying in different directions, practice rotational controls. Keeping the drone facing the same direction as you makes flying easier and more intuitive.

Stay 2 to 3 feet away from walls and ceilings, as the drone will be drawn towards them if you fly too close.

If the propeller blades come in contact with another object, or you crash, throttle down immediately to prevent further damage.

If anything prevents the drone's blades from spinning, or they become jammed, **THROTTLE DOWN IMMEDIATELY**. Do not attempt to fly until obstruction has been removed and damage fixed.

If the drone flies too far away (beyond the range of control for the remote) the drone will **AUTO-LAND** to prevent the drone from flying away or out of control.

Maintenance

Over time, debris such as loose hair or carpet fibers may get wound in the blades and motors. The debris should be regularly removed and cleaned to prevent buildup, and to avoid poor flying performance.

Troubleshooting

	Problem/Issue	Cause	Solution
1	Cannot bind drone to controller	a) Battery b) Electromagnetic interference c) Out of range	a) Make sure the batteries in both drone and controller are fully charged b) Clear out objects between drone and controller c) Put drone and controller closer to each other
2	Drone does not turn on	a) Battery too low b) Battery not fully plugged in	a) Charge battery b) Battery fully plugged in the correct direction
3	Controller does not turn on	a) Switch didn't turn on b) Battery didn't install correctly c) Battery power too low	a) Ensure switch is turned on b) Ensure battery fully plugged in correctly and securely c) Charge the battery
4	Blades do not spin or drone has difficulty taking off the ground, LEDs are flashing	Battery power level is too low	Fully recharge the battery
5	Unstable drone flying / strong vibration	Damaged blade(s)	Replace the blade(s)
6	All blades spin but drone does not take off the ground or not flying properly	Blades are not installed correctly	Reinstall the blades following the "Blade Installation" section on page 12
7	Drone crashes immediately	Blades are not installed correctly	Reinstall the blades following the "Blade Installation" section on page 12
8	Drone crashes during 360° Roll	Not enough space to perform the rolling function	Ensure the drone is at least 9ft from ground and 9ft away from all other objects in all direction
9	Drone can not perform 360° Roll and LEDs are flashing	Battery power level is too low	Fully recharge the battery
10	Cannot take photo or video	Micro SD Card not installed correctly or damaged	a) Ensure Micro SD Card is fully inserted b) Replace Micro SD Card

Thank You
Happy Flying