

FALCON 2 PRO

Quadcopter Drone with Video Camera



User's Guide for Model DRC377 v1884-01

Warnings & Precautions

Important Safety Instructions

- Read and follow all instructions.
- Keep these instructions for future reference.
- Heed all Warnings.
- Intended for children ages 14 and higher. Adult supervision is required.
- Only use attachments/accessories specified by the manufacturer.
- Before flying, always check the body, rotors, and battery for any damage or obstructions.
- Battery should be free from cracks or swelling.
- Keep the rotors clear of any obstructions and body parts to avoid potential damage and injury.
- Manufacturer and dealer assume no liability for accidental damages from improper use or installation of parts, or from damage incurred from worn or broken parts.
- Pilots are responsible for their actions and any damage caused from improper use.
- Pilots should keep the craft in sight at all times during flight. If you lose sight of the craft at any time, power down and cease flight immediately.
- Only fly in large, open areas that are free from obstacles or potential hazards, such as trees, power lines, ceiling fans, and the like.
- Flying over bodies of water is not recommended.
- Flying at night is not recommended.
- Never try to retrieve the craft from areas you cannot safely reach, such as rooftops or trees.
- Never launch the craft from your hand.
- Never leave the craft unattended while it is powered on or while the battery is charging.

FCC Warnings

Warning: Changes or modifications to this unit 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 an experienced radio/TV technician for help.

Additional Warnings & Precautions

- **WARNING:** To reduce the risk of fire or electric shock, do not expose this apparatus to rain, moisture, dripping, or splashing.
 - **CAUTION:** Use of controls or adjustments or performance of procedures other than those specified may result in personal injury.
 - **WARNING:** Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
 - **CAUTION:** Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type.
 - Lithium batteries, like all rechargeable batteries, are recyclable and should be recycled or disposed of according to state and local guidelines. They should never be disposed of in normal household waste, and they should never be incinerated, as they might explode. Contact your local government for disposal or recycling practices in your area.
 - **WARNING:** Shock hazard - Do Not Open.
 - Battery shall not be exposed to excessive heat such as sunshine, fire, or the like.
- Keep new and used batteries away from children. If the battery compartment does not close securely, stop using the product and keep it away from children.
- If you think batteries might have been swallowed or placed inside any part of the body, seek immediate medical attention.
 - Do not mix old and new batteries.
 - Completely replace all old batteries with new ones.
 - Do not mix alkaline, standard (carbon-zinc), or rechargeable (ni-cad, ni-mh, etc) batteries.
 - Batteries should be recycled or disposed of as per state and local guidelines.
 - **WARNING:** This product may contain chemicals known to the State of California to cause birth defects, or other reproductive harm (California Prop 65). Wash hands after handling.
 - This product meets and complies with all Federal regulations.

Table of Contents

Falcon 2 Pro Quadcopter Drone – 5	Flying Tips & Features – 16
Features	Tips for Safe Operation
Includes	Speed Setting
Overview – 6	Headless Mode
Craft Layout & Features	Flips
Assembly – 7	Camera & Memory Card – 18
Landing Struts	SD Card Install & Removal
Rotor Guards	View Photos & Video on a Computer
Remote Control – 8	Camera Angle Adjustment
Functions	Parts & Repair – 20
Battery Installation	Parts Replacement
Charging the Battery – 10	Rotor Replacement
Flying – 12	Troubleshooting – 21
Craft/Remote Link	
When You're Done Flying	Customer Support – 22
Trim Adjustment – 14	
Setting Trim & Counteracting Drift	Contact Information
Gyroscope Recalibration	International Support
Remote Trim Reset	Warranty

Falcon 2 Pro Quadcopter Drone

Features

- 360° flips & tricks
- 3 speed settings
- 6-axis gyroscope
- .3 MP Camera (photo & video) with SD card slot
- 480 x 640 resolution
- Control distance: up to 150 feet
- Headless Mode
- LED navigation lights
- Operating time: 6-8 minutes
- Charge time: 40-50 minutes

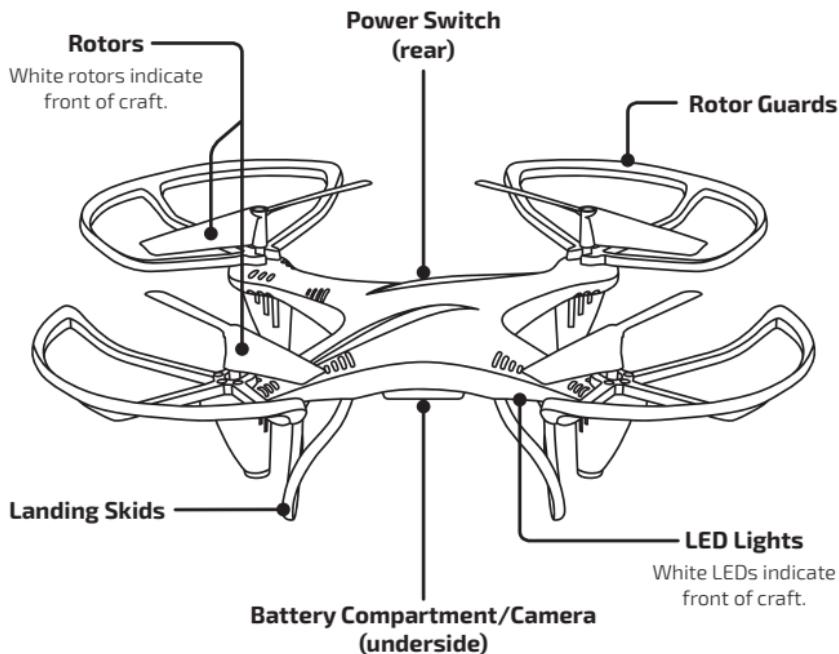
Includes

- 2.4 GHz remote control: requires 3 AA batteries (not included)
- Rechargeable lithium polymer battery
- USB cable for battery recharge
- 4GB SD card
- Screwdriver
- 4 replacement rotors
- User's guide & warranty



Overview

Craft Layout & Features



Assembly

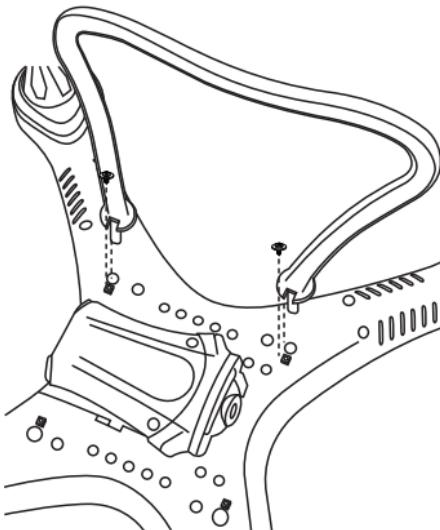
Landing Struts



4x Wide-head Screws

Insert pegs into the holes on the underside of the body as shown. Insert two **wide head screws per strut** and tighten with the included screwdriver.

Do not over tighten or damage may occur.



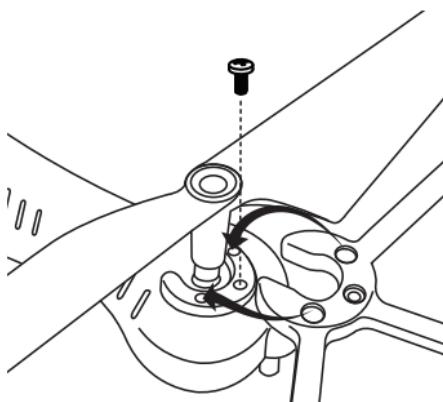
Rotor Guards



4x Standard Screws

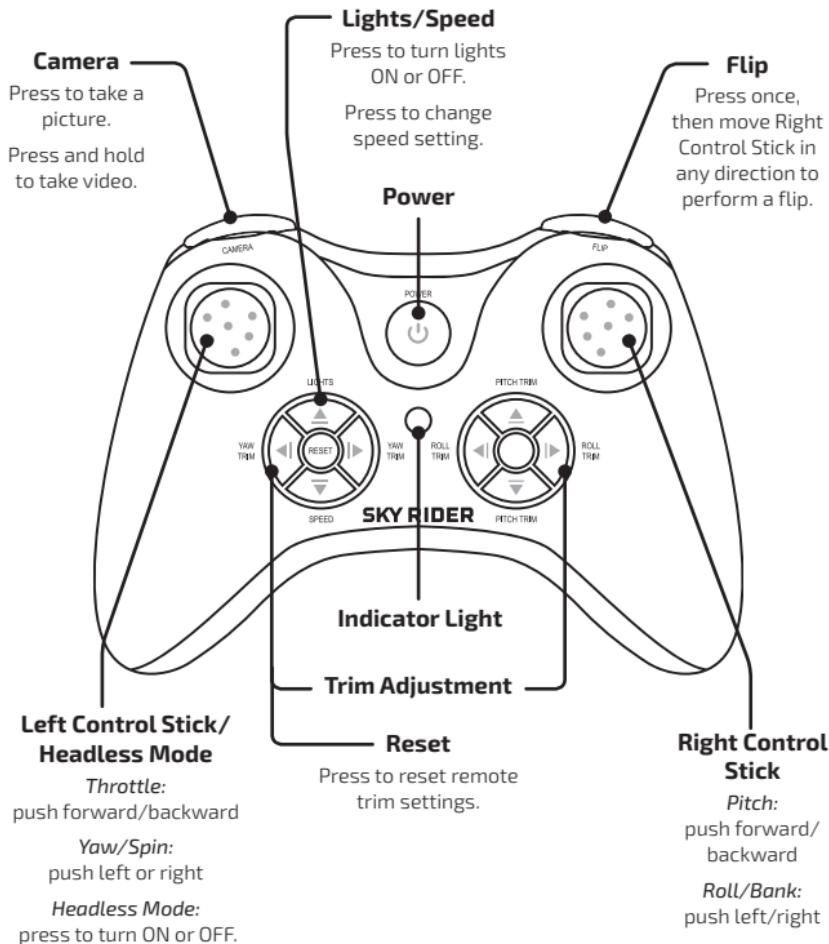
Insert rotor guards into the holes under the rotors as shown. Insert **one standard screw in the center position** and tighten with the included screwdriver.

Do not over tighten or damage may occur.

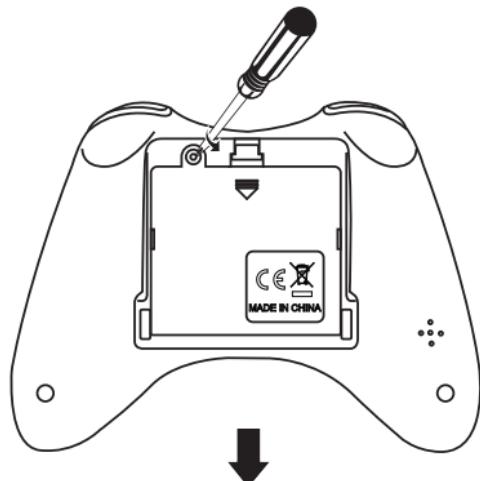


Remote Control

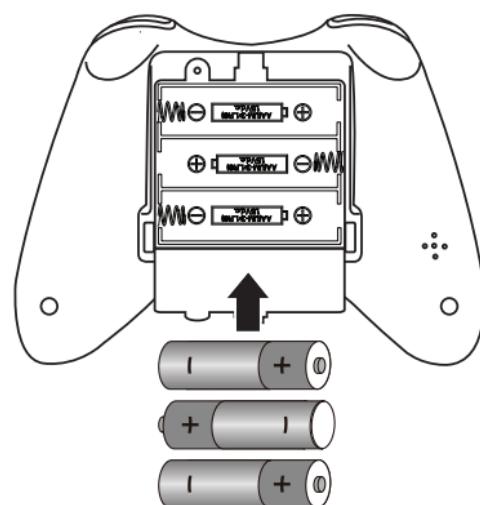
Functions



Battery Installation



Use included
screwdriver to remove
battery cover.



Insert 3x AA Batteries
(not included).

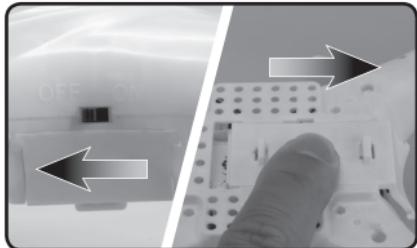
Charging the Battery

Before charging, be sure the craft and remote control are powered OFF. Failure to do so may result in injury.

REMINDER: Do not charge batteries overnight. Do not leave the batteries unattended while charging.

Step 1

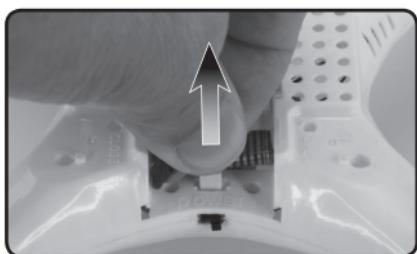
Make sure the craft is powered OFF, then remove the battery cover.



Step 2

Disconnect the power plug connecting the battery to the craft.

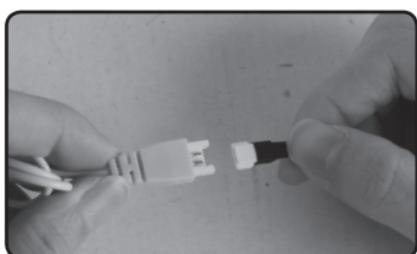
It is strongly recommended to remove the battery when charging. This will reduce the chance of damage or injury.



Step 3

Attach the plug on the battery to the plug on the charging cable.

Be sure to match the plugs correctly or damage may occur.



Step 4

Plug the USB charging cable in to the USB port of a powered ON computer or USB power adapter (not included).

While charging, the cable will display a red light.

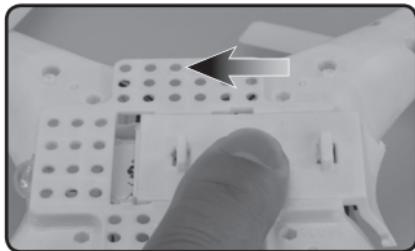
When charging is complete, the light will turn OFF.



Step 5

When charging is complete, reinstall the battery in its compartment, reconnect the power plug from the battery to the craft, and close the battery cover.

Be sure to match the plugs correctly and securely close the battery cover or damage may occur.



Flying

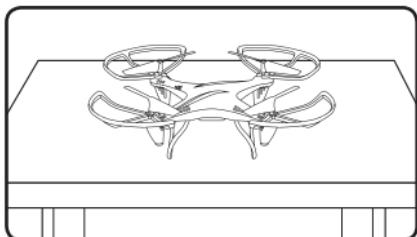
Craft/Remote Link

Before flying, the craft and the remote must be linked together and the gyroscopes on the craft must be allowed to calibrate.

Begin with the battery installed and the craft and remote powered OFF.

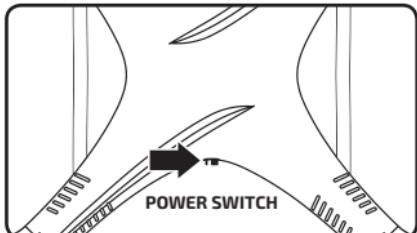
Step 1

Place the craft on a flat, level surface. **This is necessary for the craft's gyroscopes to properly align.**



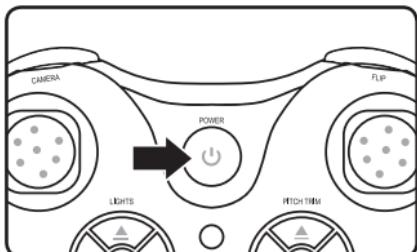
Step 2

Power the craft ON. The LED formation lights will blink in unison as the craft searches for a signal from the remote.



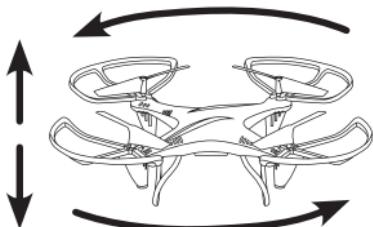
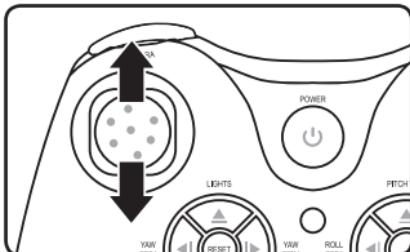
Step 3

Power ON the remote. The light on the remote will blink as it searches for the signal from the craft. An audible chime will sound when the remote and the craft have linked with each other.

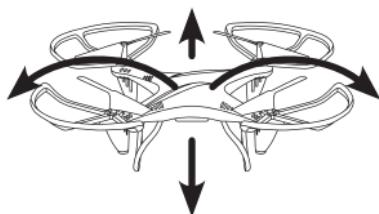


Step 4

Push the **Left Control Stick (throttle)** fully forward, wait for a chime to sound, then pull the stick fully rearward, and wait for a second chime. **When this last chime has sounded the craft is ready to fly.**



Use the Left Control Stick to take off and control the throttle and Yaw (spin) movement of the craft.



Use the Right Control Stick to control the Pitch (forward/backward) and Roll (left/right) movement of the craft.

When You're Done Flying

After landing, pull the Left Control Stick (throttle) fully rearward to power down and wait for the rotors to stop spinning. **Power OFF the remote BEFORE powering OFF the craft.** This will ensure that no signals are accidentally sent by the remote, reducing the chance of injury. After this is done, it is safe to pick up and power OFF the craft.

Trim Adjustment

Setting Trim & Counteracting Drift

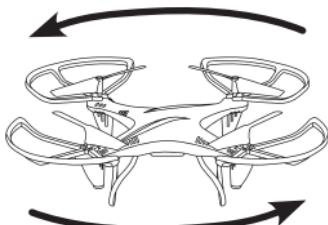
Even after the craft is calibrated, it may show a tendency to drift while airborne. Adjusting the trim will help counter this effect and allow for better control the craft.

- To avoid potential damage, adjust the trim while attempting a stable hover.
- Try to avoid making any exaggerated movements with the flight controls.
- Adjust one trim setting at a time to avoid confusion.

Remember, the white rotors and LED lights indicate the front of the craft.

Adjusting the trim will help with drift but it will not entirely eliminate it. Turbulence and other factors may still influence the craft's flight characteristics.

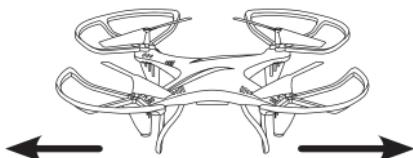
Craft **yaws/spins** in place.



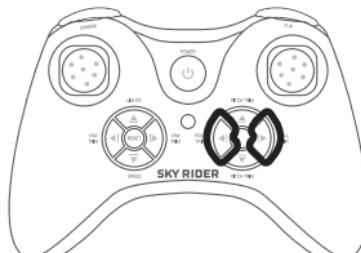
Adjust **Yaw Trim**.



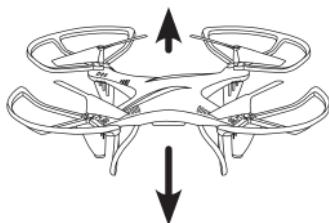
Craft **banks/rolls** left or right.



Adjust **Roll Trim**.



Craft pitches/angles forward or backward.



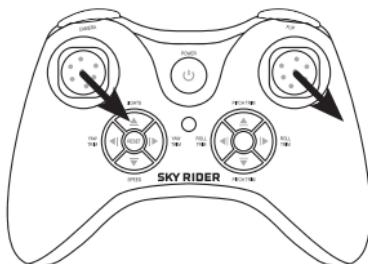
Adjust **Pitch Trim**.



Gyroscope Recalibration

If the craft is experiencing difficulty flying or is behaving erratically, its gyroscopes may need to be recalibrated. Do not attempt to do this while flying, safely land the craft first and place it on a flat surface. The craft and the remote should already be linked.

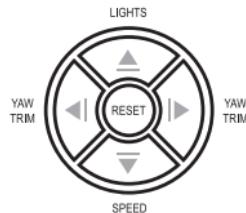
Pull down and to the right on both controls sticks for 2-3 seconds. When the LED lights have stopped blinking and turn solid the recalibration is complete and the craft is ready to fly.



Remote Trim Reset

If you are still having difficulty flying, it may help to reset the trim controls on the remote. Do not attempt to do this while flying, safely land the craft first.

Press the **Reset** button on the remote. The remote will chime once to indicate that the trim has been reset to default.



Flying Tips & Features

Tips for Safe Operation

- It is recommended to only fly in large, open spaces that are free of obstacles like power lines, trees, ceiling fans, etc.
- When flying indoors, avoid walls and ceilings, as the craft will be drawn towards them if closer than 2-3 feet.
- Stand behind the craft when first taking off, so that you and the craft are facing the same "forward" direction. This will help with orientation when the craft is airborne.
- Novice pilots should move the controls slowly and deliberately to get used to the craft's flying characteristics. Try using one control at a time.
- Practice basic flight operations like take off, hovering, and landing.
- If you crash, power down the engines IMMEDIATELY to reduce the chance of damage or injury.
- If anything obstructs the propellers for any reason, throttle down IMMEDIATELY and safely clear the obstruction. Check for possible damage before flying again.

Speed Setting

Press the **Speed button** once to set the craft's speed.

- **Low:** Provides smooth and predictable control of the craft. The remote will chime once to indicate the low speed setting.
- **Medium:** The craft will move and respond faster to all control inputs. The remote will chime twice to indicate the medium speed setting.
- **High:** Highest setting for maximum performance. The remote will chime three times to indicate the high speed setting.

Headless Mode

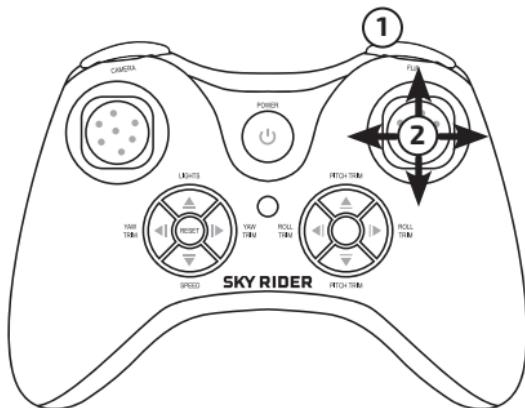
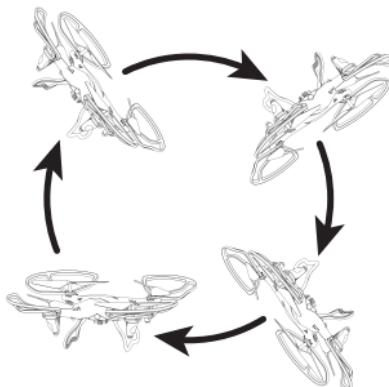
While Headless Mode is active the craft will fly in whatever direction the **Right Control Stick** is pushed, regardless of where the front of the craft is pointing. For example, if the front of the craft was pointed straight ahead but is now pointed right 90°, when you push forward on the stick the craft will fly forwards as if it was still pointed straight ahead. This can be useful if you become disoriented while flying and cannot visually determine which direction the craft is facing.

- To activate Headless Mode, press down on the **Left Control Stick**. The LED lights will slowly flash while Headless Mode is active.
- Press the **Left Control Stick** again to deactivate Headless Mode.

Flips

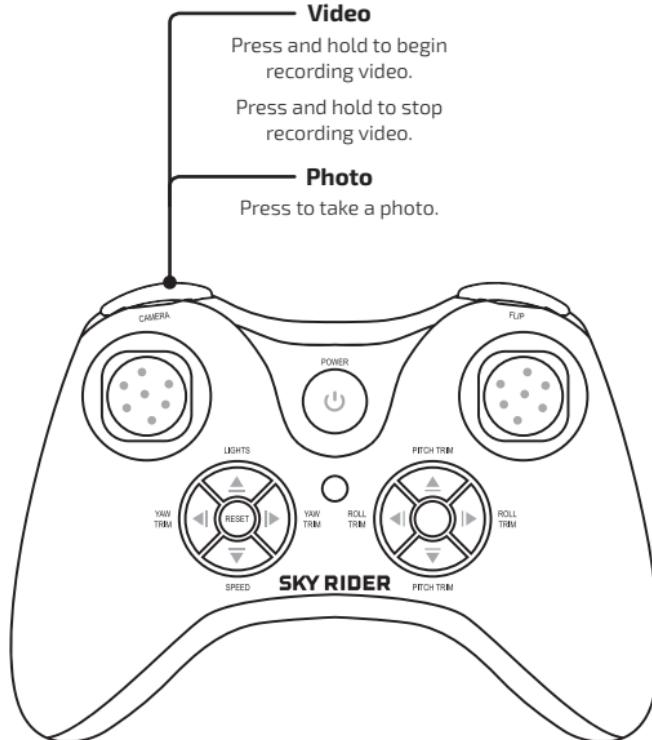
Before attempting a flip, be sure that there is ample clear space around the craft, ideally 9-10 ft. in all directions. It is not recommended to attempt to flip around or through any obstacles, as this may result in unintended damage.

Press the **Flip button** to activate Flip Mode, then move the Right Control Stick in any direction and the craft will perform a flip in the same direction. Press the **Flip button** again to deactivate without performing a flip.

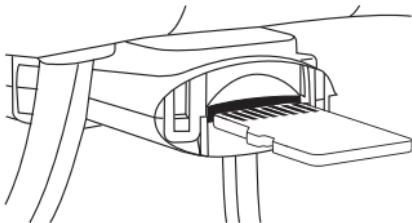


Camera & Memory Card

Make sure the remote and the craft have been successfully paired and the Micro SD card is installed in the camera before attempting to use.

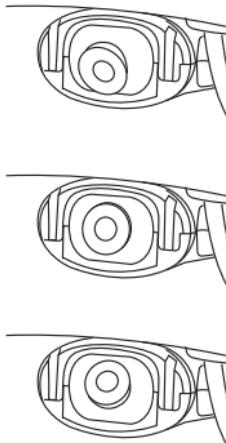


SD Card Install & Removal



Gently push against the Micro SD card until it clicks into or out of the card slot. **Be sure to insert correctly or damage may occur.**

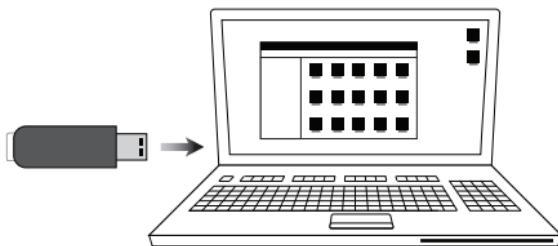
Camera Angle Adjustment



View Photos & Video on a Computer



Remove Micro SD card from camera and connect to included USB adapter. Be sure to insert correctly or damage may occur.



Connect to a USB port of a computer. Use the computer's file browser to access photos and videos.

Parts & Repair

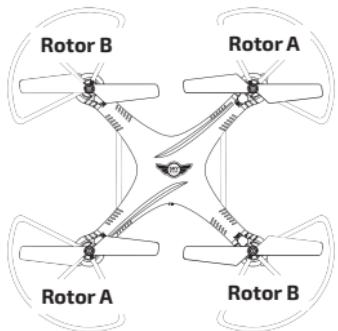
REMINDER: Pilots are responsible for any damage caused by improper use.

Parts Replacement

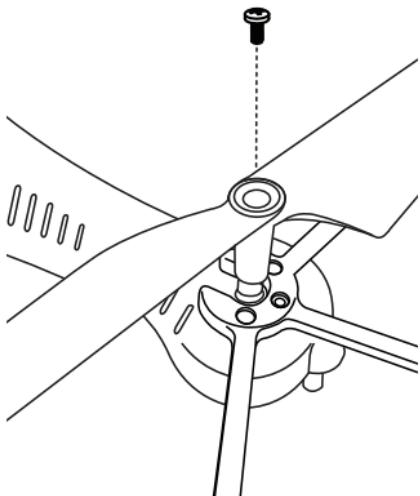
Standard parts such as extra batteries and remotes are available online for purchase when in stock. However, any non-standard parts such as cameras, screws, bodies, SD cards etc. can be ordered by placing an inquiry with our parts department at: partsinfo@dpiinc.com.

Rotor Replacement

The craft comes with replacement rotors if the originals are broken or badly damaged. Use the included screwdriver to loosen and tighten the screw connecting the rotor to the motor shaft. **It is extremely important to use the correct rotor (A or B) for replacement.** The marking can be found on the rotor. Using the incorrect rotor will make the craft impossible to control.



Matching rotors should be diagonally opposed.



Troubleshooting

If you are experiencing problems using or flying the craft, consult this table.

PROBLEM	POSSIBLE CAUSES	SOLUTION
Craft does not respond to controls.	<ul style="list-style-type: none">No power to remote or craft.Poor contact between power plugs.Craft is out of range.	<ul style="list-style-type: none">Check remote batteries, replace if needed.Check craft battery, be sure it is fully charged.Be sure the power plugs are firmly connected.Be sure the remote has an unobstructed line of sight to the craft.Remain within the remote's 300 ft. range.
Craft is difficult to control or flies erratically.	<ul style="list-style-type: none">Gyroscopes may be misaligned.	<ul style="list-style-type: none">Recalibrate gyroscopes (see pg. 15).Power OFF remote and craft and reconnect (see pg. 12).
Craft drifts while in flight.	<ul style="list-style-type: none">Trim not set or needs adjustment.	<ul style="list-style-type: none">Adjust trim settings (see pg. 14).Reset trim settings (see pg. 15).
Craft suffers from mechanical trouble.	<ul style="list-style-type: none">Damage to body, rotors or other major components.	<ul style="list-style-type: none">Repair or replace parts as needed.
LED lights ON but craft does not respond to controls.	<ul style="list-style-type: none">Low battery power.	<ul style="list-style-type: none">Recharge the battery.

Customer Support

Contact Information

Website: www.gpx.com

Email Support: prodinfo@dpiinc.com

Email Parts: partsinfo@dpiinc.com

Phone Support: **1-888-999-4215**

Warranty

See included 30 Day Warranty for warranty information. Warranty and the most up-to-date version of this User's Guide can also be found at: www.gpx.com

International Support

To download this User's Guide in English, Spanish, and French, or to get answers to frequently asked questions, visit the support section at: www.gpx.com

Para descargar este Manual del Usuario en inglés, español y francés, o para obtener respuestas a preguntas frecuentes, visite la sección de apoyo en: www.gpx.com

Pour télécharger ce guide de l'utilisateur en anglais, espagnol ou français, ou pour obtenir des réponses à des questions fréquemment posées, consultez la rubrique d'assistance sur: www.gpx.com



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Sustain for Tomorrow*

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