

# **SPARROW** PRO

Foldable Smart Drone with Wi-Fi Camera



User's Guide for Model DRW477 v1904-01

# 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.

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# Sparrow Pro Wi-Fi Drone

## Features

- Smartphone control
- Free app for Wi-Fi flight
- 6-axis gyroscope
- 3 speeds
- Control distance: 160-230 ft. (Wi-Fi)
- LED navigation lights
- Operating time: 6-8 minutes
- Charge time: 40-50 minutes

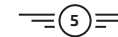
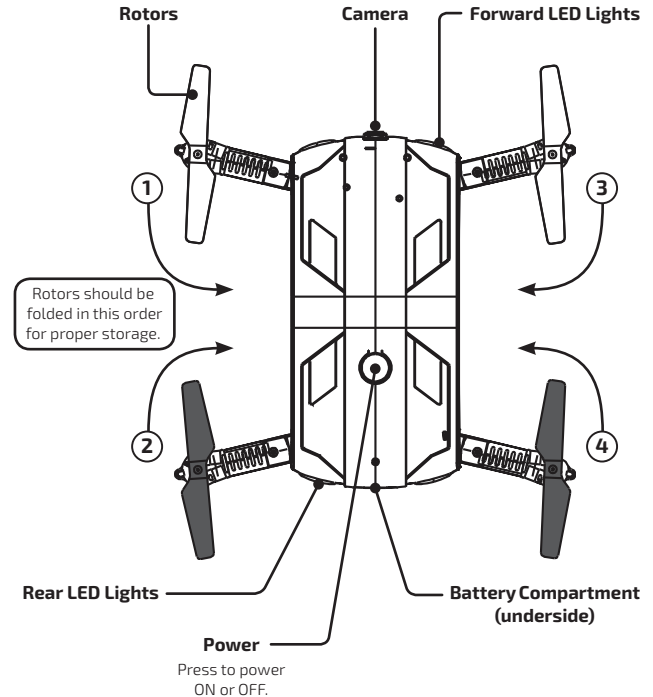
## Includes

- Rechargeable lithium polymer battery
- 4 replacement rotors
- User's Guide



# Overview

## Craft Layout & Features



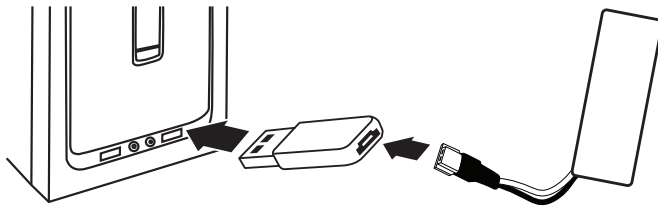
# Charging the Battery

The craft's battery must be charged before it can be flown. **Before charging, be sure the craft is powered OFF** to avoid risk of injury or damage. It is recommended to remove the battery to charge. Charging time is approximately 40-50 minutes. Charge fully for maximum performance and flight time.

Connect the USB charger (included) to the USB port of a powered ON computer or USB power adapter (not included), then connect the battery to the charger.

**While charging**, the charger will display a red light.

**When charging is complete**, the light will turn OFF.



Be sure to correctly match the plug to the charging port or damage may occur.

**REMINDER: Do not charge overnight. Do not leave unattended while charging.**

# Flying

## Sky Rider App Download

To download the free Wi-Fi app to your phone, search **Sky Rider Breeze** in the Apple App Store or Google Play Store.

**NOTE:** Wi-Fi control may be interrupted by interference from other nearby Wi-Fi equipment.

## Connect Wi-Fi & Open App

Before beginning, make sure your phone's Wi-Fi is ON.

- Insert and connect the battery, then power ON the craft and place it on a flat surface.
- From your smartphone, open the Wi-Fi settings menu, then search for and select **Sky Rider Breeze** to connect to the craft. Once connected, open the app.
- The **Home Screen** (below) will appear. Click **Play** to begin flying, the image from the craft's camera will appear on the Flight Screen.

## Home Screen



### 1. Help

Press for more detailed information on the app.

### 2. Settings

Customize control settings for the app.

### 3. Play

Press to begin using the app and fly the craft.

# Flying

## Setup Screen



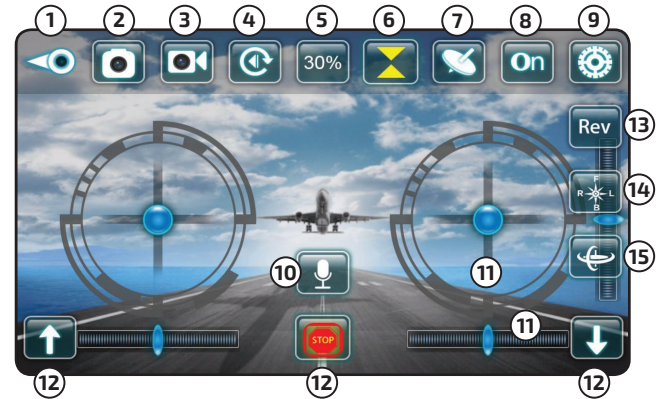
### Right Hand Mode

Reverses the locations of the Left and Right flight controls on the screen.

### Audio Effect

Turn audio effects for the app ON or OFF.

## Flight Screen & Controls



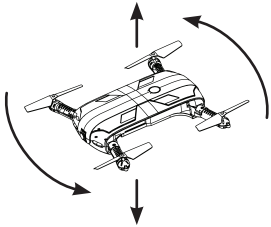
- |                          |                                       |                           |
|--------------------------|---------------------------------------|---------------------------|
| 1. Return to Home Screen | 7. Intuitive Mode                     | 12. Auto-Hover Controls   |
| 2. Photo                 | 8. Flight Controls ON/OFF             | 13. Flip Camera           |
| 3. Video                 | 9. Additional Settings<br>(see 13-15) | 14. Headless Mode         |
| 4. Photo/Video Gallery   | 10. Voice Controls ON/OFF             | 15. Gyroscope Calibration |
| 5. Speed Setting         | 11. Flight/ Trim Controls             |                           |
| 6. Auto-Hover ON/OFF     |                                       |                           |

# Flying

## Flying & Setting Trim

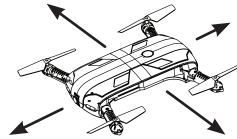
### Auto-Hover/Take Off & Land

- Press the **Up Arrow** to start the craft's motors and take off. The craft will climb to a set altitude (3-5 ft.) and hover in place.
- Press the **Down Arrow** and the craft will make a gradual descent until it has landed. Wait for the rotors to stop spinning before handling.
- **STOP** will immediately cut power to the motors (emergency only).



Use the **Left Directional Control** to control the throttle and Yaw (spin).

**Adjust the Yaw Trim settings** (under the control) if the craft drifts in a left/right spin.



Use the **Right Directional Control** to control the Pitch (forward/backward) and Roll (left/right).

**Adjust the Pitch and Roll Trim settings** (to the right and under the control) if the craft drifts forwards/backwards or in a left/right direction.

**Intuitive Mode** uses the G-Sensor in your phone to control the craft. Tilt the phone forward, back, left and right to control the **pitch and roll** of the craft. **Throttle and yaw** are still manually controlled from the **Left Directional Control**.

# 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 get into trouble or if anything obstructs the rotors, use the **STOP** button to immediately cut power to the motors. Check for possible damage before flying again.

## Speed Setting

Press the **Speed** button to change the craft's speed setting.

- **30%:** Provides smooth and predictable control of the craft.
- **60%:** The craft will move and respond faster to all control inputs.
- **100%:** Highest setting for maximum performance.

## Headless Mode

While Headless Mode is active the craft will fly in whatever direction the **Right Directional Control** is moved, 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.

Before using Headless Mode be sure you and the craft are facing the same "forward" direction, otherwise the craft will not fly correctly. Press the **Headless button** in the app to activate Headless Mode. The LED lights will slowly flash while Headless Mode is ON. Press the button again to deactivate Headless Mode.

# Parts & Repair

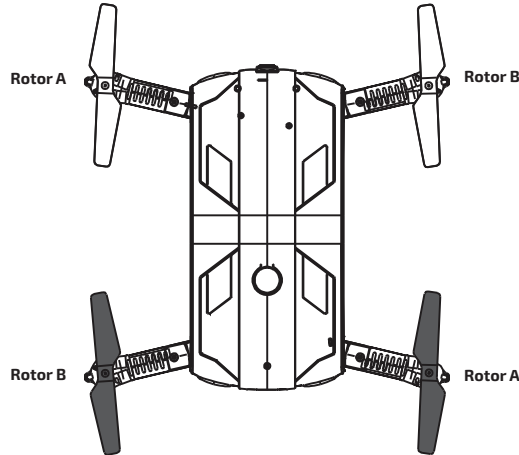
**REMINDER: Pilots are responsible for any damage caused by improper use.**

## 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](mailto:partsinfo@dpiinc.com).

## Rotor Replacement

The craft comes with replacement rotors if the originals are broken or badly damaged. Rotors can be removed by hand by pulling up and off of the motor shaft. If the rotor feels stuck and won't budge, try using a set of pliers for a firmer grip. Be careful not to damage the motor shaft or rotor arm assembly. **It is extremely important to use the correct rotor (A or B) for replacement.** Using the incorrect rotor will make the craft impossible to control. The marking can be found on the underside of the rotor.



# Troubleshooting

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

PROBLEM	POSSIBLE CAUSES	SOLUTION
<b>Craft does not respond to controls.</b>	<ul style="list-style-type: none"><li>• Lost Wi-Fi connection.</li><li>• Low battery</li><li>• Poor contact between power plugs.</li><li>• Craft is out of Wi-Fi transmission range.</li></ul>	<ul style="list-style-type: none"><li>• Close app, power OFF craft and restart. Perform Wi-Fi connection again (see pg. 7).</li><li>• Check battery, be sure it is fully charged.</li><li>• Be sure the power plugs are firmly connected.</li><li>• Remain within Wi-Fi transmission range.</li></ul>
<b>Craft is difficult to control or flies erratically.</b>	<ul style="list-style-type: none"><li>• Gyroscopes may be misaligned.</li></ul>	<ul style="list-style-type: none"><li>• Place craft on flat surface and recalibrate gyroscopes (see Controls pg. 9).</li></ul>
<b>Craft drifts while in flight.</b>	<ul style="list-style-type: none"><li>• Trim not set or needs adjustment.</li></ul>	<ul style="list-style-type: none"><li>• Adjust trim settings (see Controls pg. 9).</li></ul>
<b>Craft suffers from mechanical trouble.</b>	<ul style="list-style-type: none"><li>• Damage to body, rotors or other parts.</li></ul>	<ul style="list-style-type: none"><li>• Repair or replace parts as needed.</li></ul>
<b>LED lights ON but craft does not respond to controls.</b>	<ul style="list-style-type: none"><li>• Low battery power.</li></ul>	<ul style="list-style-type: none"><li>• Recharge the battery.</li></ul>

# Customer Support

## Contact Information

Website: [www.gpx.com](http://www.gpx.com)

Email Support: [prodinfo@dpiinc.com](mailto:prodinfo@dpiinc.com)

Email Parts: [partsinfo@dpiinc.com](mailto: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](http://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](http://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](http://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](http://www.gpx.com)



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Sustain for Tomorrow***

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