Raptor Pro

2.4G RC DRONE WITH WIFI CAMERA

SKY RIDER

User's Guide for Model DRW528 v2124-01

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.

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.

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.
- This device complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter
- fly part:This equipment should be installed and operated with a minimum distance of 20cm between the radiator & your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

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.
- Only use the included power supply/power charger or a UL/ETL certified power supply of the same power output specifications.

Table of Contents

Eagle 3 Pro Wi-Fi Drone

FAA Information: Flying Your Drone Under the Special Rule for Model Aircraft

To fly under the Special Rule for Model Aircraft you must:

- Fly for hobby or recreation ONLY
- Register your model aircraft
- Fly within visual line-of-sight
- Follow community-based safety guidelines and fly within the programming of a nationwide community-based organization
- Fly a drone under 55 lbs. unless certified by a community-based organization
- Never fly near other aircraft
- Notify the airport and air traffic control tower prior to flying within 5 miles of an airport
- Never fly near emergency response efforts

You alone are responsible for safely and responsibly flying your drone. For more information on FAA Rules and Guidelines for flying Unmanned Aerial Systems please visit: *http://www.faa.gov/uas/*

Features

- 360° flips & tricks
- 6-axis gyroscope
- Free app for Wi-Fi viewing
- Adjustable angle Wi-Fi camera
- 3 speeds
- Control distance: up to 328 feet
- LED navigation lights
- Operating time: 5-7 minutes
- Charge time: approx. 120 minutes

Includes

- USB charging cable
- Rechargeable lithium polymer battery
- 2.4GHz remote control: requires 4 AA batteries (not included)
- Detachable smartphone cradle
- Screwdriver
- User's Guide

Diagram & Specifications

- Folded Dimensions (LWH): 93 x 135 x 38mm / 3.6 x 5.3 x 1.5 in.
- Unfolded Dimensions (LWH): 171 x 135 x 22mm / 6.7 x 5.3 x .87 in.
- Weight: 77g / 2.72oz / 0.17lb

Rotor

Power On/Off

Foldable Rotor Guard

Camera (front)
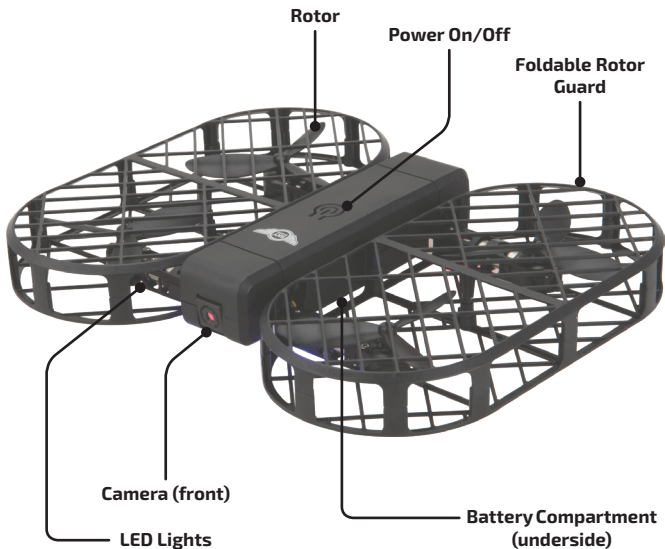
LED Lights
Blue LEDs indicate the front of the craft.
Green flashing LEDs indicate the rear of the craft.

Battery Compartment (underside)

Rotor Guards

The rotor guards can be folded for flight or for easy stowage.

Rotors Stowed

Rotors Deployed

Remote Control

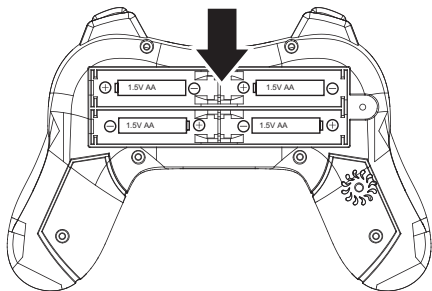## Functions

Speed
Press to adjust the speed setting.

Start/Landing
Press to start rotors and take off automatically. Press again to land and stop rotors.

Power Switch

Auto-Spin
Press to automatically spin the drone. Press and hold for orbit.

Move the Right Stick to cancel.

Trim Reset
Press to reset trim settings to default.

Left Control Stick
Increase Throttle: push forward
Decrease Throttle: push backward

Yaw/Spin: push left or right

Press for Headless Mode.

Trim Adjustment
Press to enter Trimming Mode. Indicator will blink, then move right control stick to adjust Pitch and Roll trim.
Press and hold to finish Trimming Mode, or wait 3 seconds to finish automatically.

Right Control Stick
Pitch: push forward/backward
Roll/Bank: push left/right

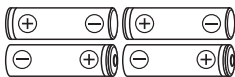Press once, then move the stick left or right to perform a flip in that direction.

Remote Control

Battery Installation
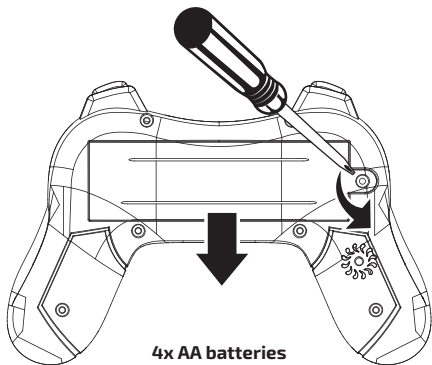

4x AA batteries

Charging the Battery

Information & Procedure

The craft's battery must be charged before it can be flown. To avoid risk of injury or damage, **be sure the craft and remote control are both powered OFF and remove the battery from the craft when charging.** Charging time is approximately 120 minutes. Charge fully before use for best performance.

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

While charging, the cable will display a red light.

When charging is complete, the light will turn OFF.
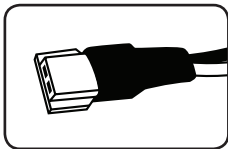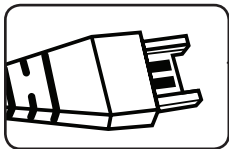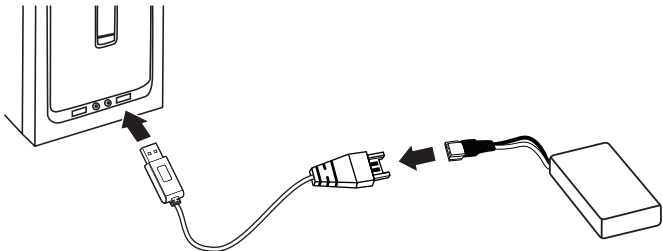
Be sure to correctly match the plug to the charging port or damage may occur.

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

Flying

Remote Link & Calibration

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, the battery compartment closed, and the craft and remote powered OFF.

Step 1

Power ON the craft and place it on a flat surface. This is necessary for the craft's gyroscopes to properly align. The lights on the craft will blink as it searches for a signal from the remote.

Be sure the craft and yourself are facing the same forward direction, this will help with orientation while flying.

Front

Step 2

Power ON the remote. The light on the remote will blink as it searches for the signal from the craft. When the remote and the craft have linked, an audible chime will sound and the lights on the remote and the craft will turn solid.

Step 3

Push the **Left Control Stick (throttle)** fully forward, then fully rearward, and wait for a chime. **When this last chime has sounded, the gyroscopes on the drone are calibrated, and the craft is ready to fly.**
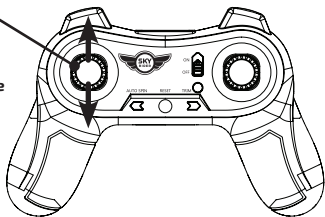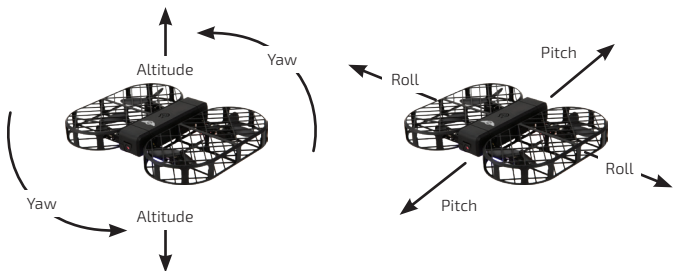
Step 4

Press the **Start/Landing button** to start the rotors. The drone will take off and hover at a set altitude. Use the controls sticks to fly.
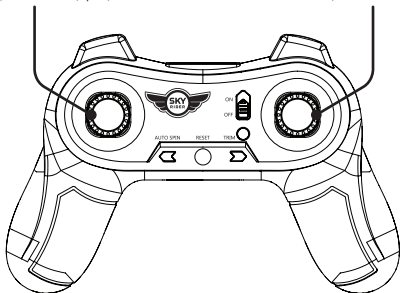
Press the **Start/Landing button** again to automatically land the drone and stop the rotors.

Flight Controls

Left Stick controls Altitude (power) and Yaw (spin).

Right Stick controls Pitch (forward/backward) and Roll (left/right).

When You're Finished Flying

After landing, keep the Left Control Stick (throttle) in the lowest position 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.

Flying

Trim Adjustment & Countering Drift

Even after a craft is calibrated, it may still drift while airborne. To counter this effect you can adjust the trim for better control. However, adjusting the trim may not entirely eliminate drifting. Air currents and other factors can still affect the craft's handling.

Making Trim Adjustments

Press the **Trim button** to enter Trimming Mode, indicated by a blinking indicator light on the remote. While in Trimming Mode, move the **Right Control Stick** *ONCE* in the opposite direction of the drift.

For example, if the craft is drifting forward, enter Trimming Mode and pull rearward on the stick to correct. If the craft is drifting right, pull left. The remote will chime once for each adjustment. It may take multiple adjustments to set the trim to your liking.

When you are finished making adjustments, press the **Trim button** to exit Trimming Mode. You can also wait 3 seconds and Trimming Mode will finish automatically.

To avoid potential damage, adjust the trim while attempting a stable hover and adjust one trim setting at a time to avoid confusion.

Note: While in Trimming Mode, the Right Control Stick only makes trim adjustments and does not control the direction of the craft. You must exit Trimming Mode to resume normal flight controls. The Left Control Stick is not affected by Trimming Mode.

Press to enter and exit Trimming Mode.
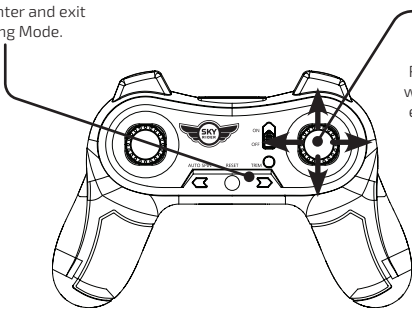
Move Right Control Stick to adjust Pitch and Roll trim. Remote will chime once for each adjustment.

Gyroscope Recalibration

If the craft is having difficulty flying or is behaving erratically, it's 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.

*Note: The craft and the remote should already be linked together.*

Pull down and inwards on both control 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.
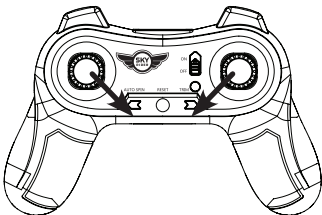
Remote Trim Reset

If you are still having difficulty flying, it may help to reset the trim adjustments 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.
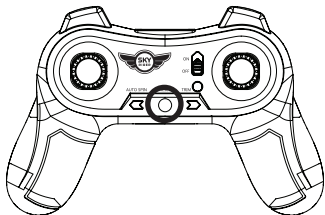
Flying

Tips 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 may 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, cut power immediately and safely clear the obstruction. Check for possible damage before flying again.

Speed Setting

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

- **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

Before using Headless Mode be sure you and the craft are facing the same "forward" direction, otherwise the craft will not fly correctly. **To activate Headless Mode, press down on the Left Control Stick** on the remote control. The LED lights will quickly flash while Headless Mode is ON. Press the button again to deactivate Headless Mode.

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

Auto-Spin

Press the **Auto-Spin button** to activate Auto-Spin. The drone will begin spinning (yawing) in a clockwise direction. Press the **Auto-Spin button again or move the Right Control Stick** in any direction to cancel Auto-Spin.

Use the **Left Control Stick** to control the altitude of the craft while in Auto-Spin.

Orbit

Before activating Orbit Mode, be sure that there is ample clear space around the craft, and no obstacles will obstruct its flight path.

Press and hold the **Auto-Spin button** to activate Orbit Mode. The drone will begin flying in a circular path from its starting point.

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.

To perform a flip, press down on the **Right Control Stick,** then move the stick left or right, and the craft will perform a flip in the same direction.

Sky Rider View App

The Sky Rider View app will display the image from the craft's camera on your smartphone's screen, allowing you to capture images and video of your flights. Connect your smartphone to the craft's Wi-Fi signal and start flying!

Free Download

Scan the appropriate QR code with your smartphone or search for **"Sky Rider View"** in the Apple App Store or Google Play Store.

Android

Connect to Wi-Fi

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

Before beginning, make sure your phone's Wi-Fi is enabled and the craft is powered ON.

- From your smartphone, open the Wi-Fi settings menu, then search for and select **DRW528xxx** to connect to the craft.
- Once connected, open the app. You will see the image from the craft's camera and the camera controls at the top of the screen.
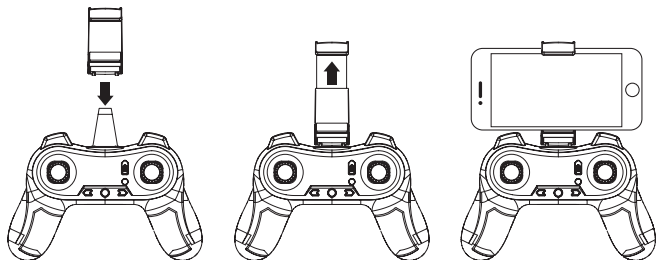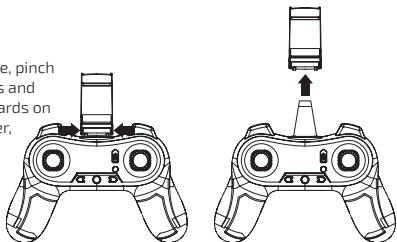
Apple
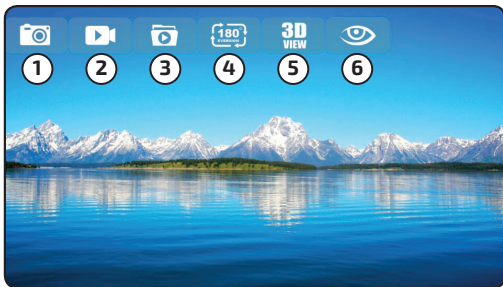
1. Take Photo
2. Take Video
3. Photo/Video Gallery
4. Flip Camera 180°
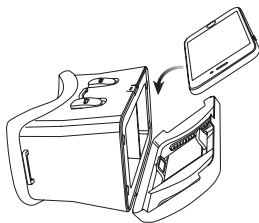5. VR Mode
6. Controls ON/OFF

Smartphone Holder

To release, pinch
at arrows and
pull upwards on
the holder,

Virtual Reality Mode

VR Mode splits the phone's screen for use in
a VR headset (not included). Use VR Mode to
give a friend a fully immersive, point-of-
view flying adventure.

Press the 3D Mode (VR) button on the
screen to turn this feature ON or OFF.

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, etc. can be ordered by placing an inquiry with our parts department at: **partsinfo@dpiinc.com.**

Troubleshooting

Troubleshooting Guide

PROBLEM	POSSIBLE CAUSES	SOLUTION
Craft does not respond to controls.	· No power to remote or craft. · Poor contact between power plugs. · Craft is out of range.	· 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.	· Gyroscopes may be misaligned.	· Perform Gyroscope Recalibration (see pg. 13). · Power OFF remote and craft and reconnect (see pg. 10).
Craft drifts while in flight.	· Trim not set or needs adjustment.	· Adjust trim settings (see pg. 12). · Reset Trim Settings if need be (see pg. 13).
Craft suffers from mechanical trouble.	· Damage to body, rotors or other major components.	· Repair or replace parts as needed.
LED lights ON but craft does not respond to controls.	· Low battery power.	· 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**

Made Green

Protect for Today Sustain for Tomorrow