X-11 Stratosphere

Quadcopter Drone with Wi-Fi Camera

User's Guide for Model DRW311 v2781-01

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.

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X-11 Stratosphere 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

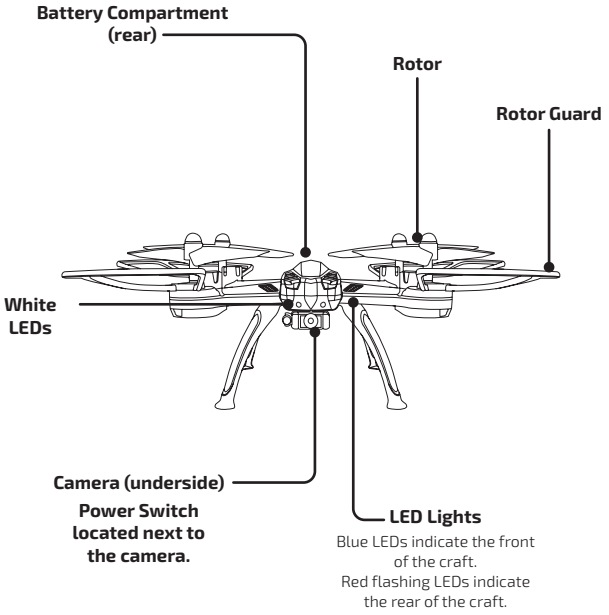
- 6-axis gyroscope
- Free app for Wi-Fi viewing
- Adjustable angle Wi-Fi camera
- Altitude hold
- 3 speeds
- Control distance: up to 328 feet (Wi-Fi or remote)
- LED navigation lights
- Operating time: 6-8 minutes
- Charge time: approx. 120 minutes

Includes

- 2.4GHz remote control: requires 3 AA batteries (not included)
- USB charging cable
- Rechargeable lithium polymer battery
- 4 replacement rotors
- Attachable smartphone cradle for remote control
- Screwdriver
- User's Guide

Diagram & Specifications

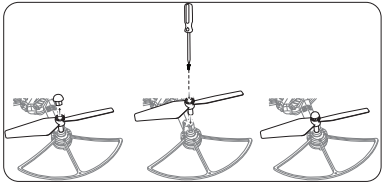
- Dimensions: 27 x 27 x 9cm/11.6 x 11.6 x 3.5 in. (LWH)
- Weight: 91g/3.20oz/0.2olb

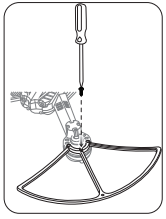


Assembly

Rotor Guards

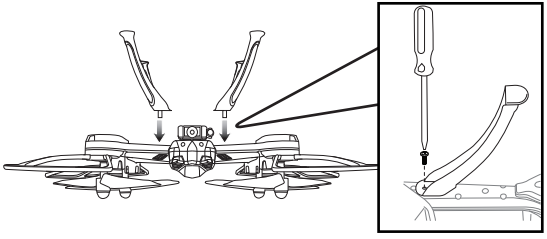
Attach each rotor and rotor guard as shown, using the included small screws and then tighten in the center location using the included screwdriver.





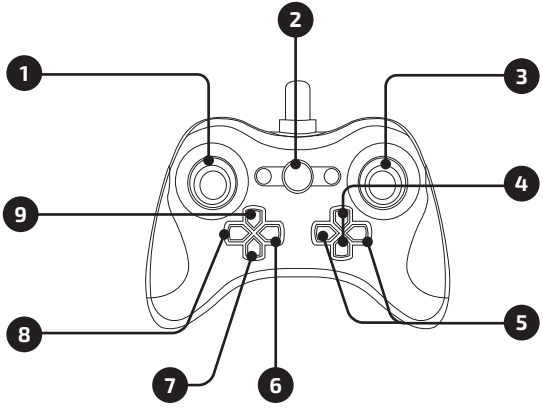
Legs

Place each leg on the underside of the craft as shown in the figure below.



Remote Control

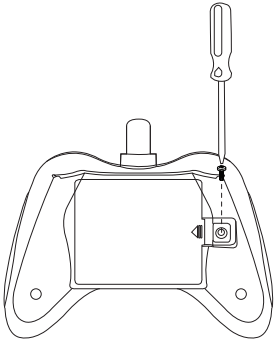
Functions



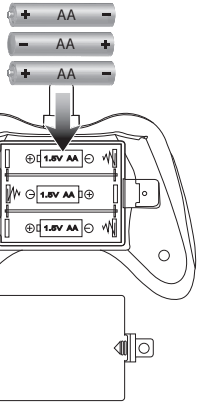
1. **Left Control Stick**
   Ascend: Push forward.
   Descend: Push backward.
   Yaw/Spin: Push left or right.
2. **Power Switch**
3. **Right Control Stick**
   Pitch: push forward/backward
   Roll/Bank: push left/right.
4. **"Pitch" Trim**
5. **"Roll/Bank" Trim**
6. **360° Flip**
7. **Trim Reset**
8. **Speed Setting (slow, medium, fast).**
9. **Headless Mode**

Remote Control

Battery Installation



x3 AA batteries



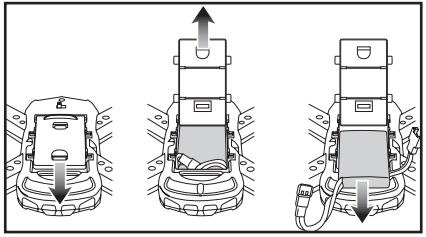
Charging the Battery

Information & Procedure

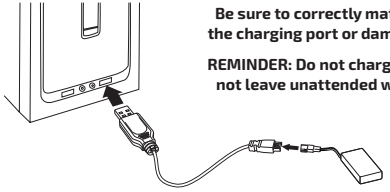
The craft's battery must be charged before it can be flown. To avoid risk of injury or damage, **be sure the craft and remote control are both powered OFF and remove the battery from the craft when charging.** Charging time is approximately 120 minutes. Charge fully before use for best performance. Connect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

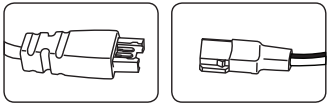


Remove the battery from the bottom of the craft.



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

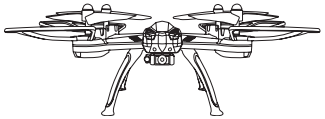
Remote Link & Calibration

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.



Front

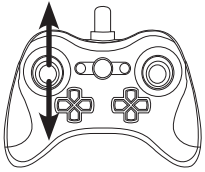
Be sure the craft and yourself are facing the same forward direction, this will help with orientation while flying.

Step 2

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.

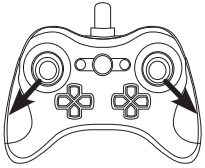
Step 3

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.



Step 4

To start/stop the rotors, push both control sticks down and to the outside as shown in the diagram. Once the rotors have started, the craft is ready for flight.



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.

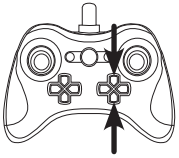
Making Trim Adjustments

Press the **Trim buttons** to adjust the craft trim accordingly.

For example, if the craft is drifting forward, press the **Backward Trim** button until the craft is balanced.

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

Forward/Backward “Pitch” Trim



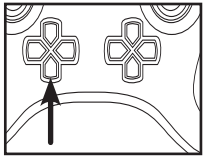
Left & Right “Roll/Bank” Trim

Flying

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 **Trim Reset** button on the remote. The remote will chime once, and the lights on the craft will blink rapidly. When the lights return to normal, the trim reset is complete.

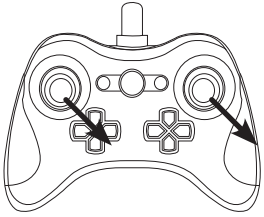


Gyroscope Recalibration

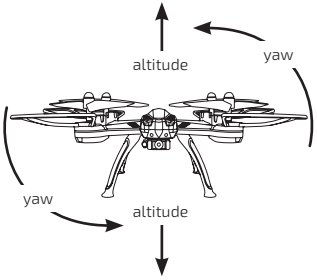
If the craft is having difficulty flying or is behaving erratically, it's gyroscopes may need to be recalibrated. Do not attempt to do this while flying, safely land the craft first, and place it on a flat surface.

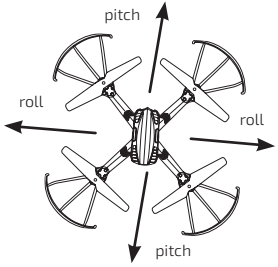
Note: The craft and the remote should already be linked together.

Pull down and to the right on both control sticks for 2-3 seconds. The remote will chime once, and the lights on the craft will blink rapidly. When the lights return to normal, the recalibration is complete.

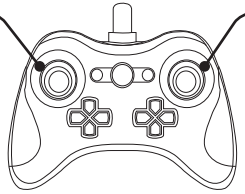


Flight Controls





Left Stick
controls Altitude (throttle) 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

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 the Headless Mode button (see page 7)** on the remote control. All of the LED lights will 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.

Flips

Before attempting a flip, be sure that there is enough 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 **360° Flip** button and the craft will automatically do a flip.

Sky Rider Cruise App

The Sky Rider Cruise 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 Cruise"** in the Apple App Store or Google Play Store.

Android

Apple

Connect to Wi-Fi

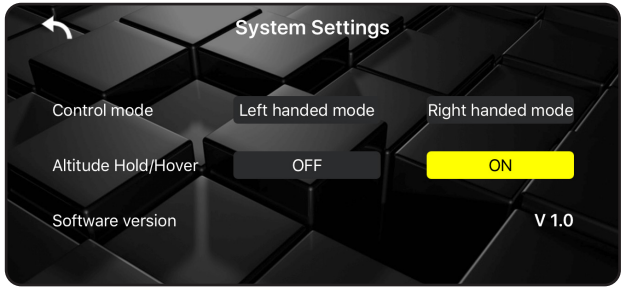
NOTE: Wi-Fi control may be interrupted by interference from other nearby Wi-Fi equipment.

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 **Sky Rider Cruisexxx** to connect to the craft.
- Once connected, open the app. You will see the **Home Screen** (image below). From here you can adjust settings and start using the app.

1. Start
2. FAQ
3. Settings

Settings Screen

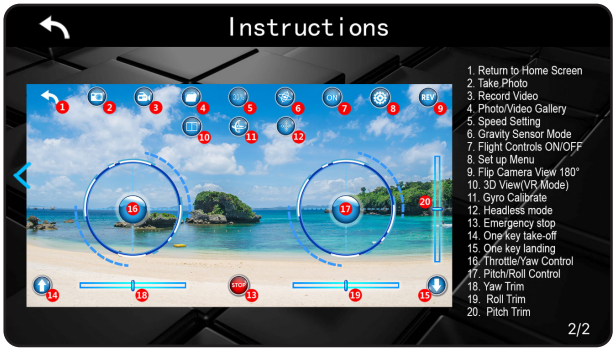


Altitude Hold/Hover- This setting will lock the aircraft at the altitude it is currently at.

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

Sky Rider Cruise App

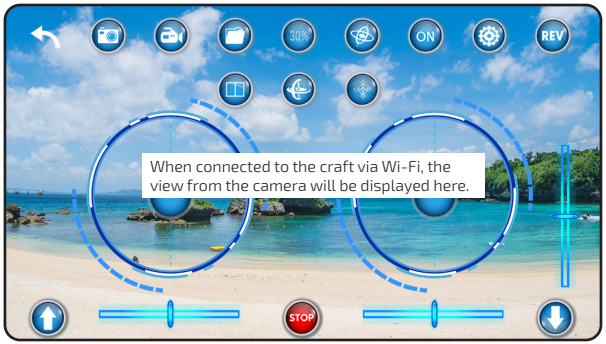
Screen Controls



Gravity Sensor 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.**

Camera & Video
Use the **Photo and Video buttons** to document your flight. Images and video are saved to your phone and can be viewed later by pressing the **Gallery button.**

Flight Controls



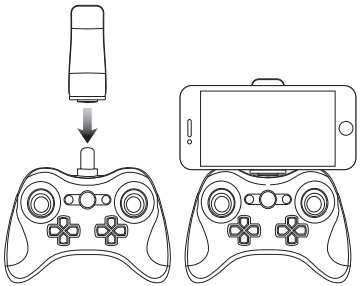
Sky Rider Cruise App

Using the Remote & App Together

It can be easier to capture photos and video by using the remote to fly the drone and using the app in a viewing only method. Use the app and the remote together by attaching the smartphone holder (included) to the remote and placing your phone in the holder.

Follow the steps below to connect to the remote and the app in the proper sequence.

- **First, connect the remote to the craft like normal.** Connecting the remote first overrides any control signals from the app.
- Next, use your phone to connect to the craft's Wi-Fi. Open the app and go to the Flight Screen. Leave the Flight Controls off for the best view from the drone's camera.
- **Use the controls on the remote** to fly the craft while the Wi-Fi camera streams to your phone.
- When you're finished flying, power down the remote and craft like normal.



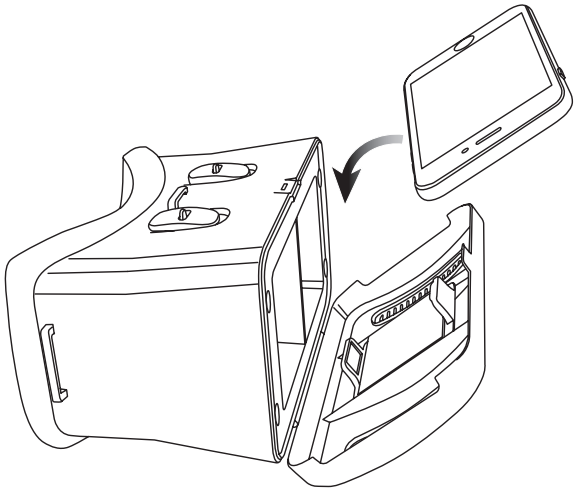
To release pull upwards on the holder.

3D Mode

VR Mode splits the phone's screen for use in a VR headset. **Press the 3D button** on the screen to turn this feature ON or OFF. Use VR Mode to give a friend a fully immersive, point-of-view flying adventure.

NOTE:

- On screen flight controls are locked out in VR Mode. You must have the regular remote connected in order to fly the craft.
- **We do not recommend flying the craft while wearing a headset.** The craft's camera has a limited forward view and the headset will completely obscure the user's peripheral vision and situational awareness. **Pilots assume all risk and are responsible for any damage caused by improper use.**



Parts & Repair

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

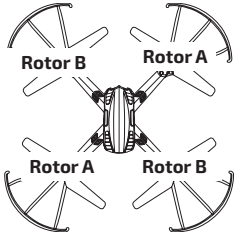
Parts Replacement

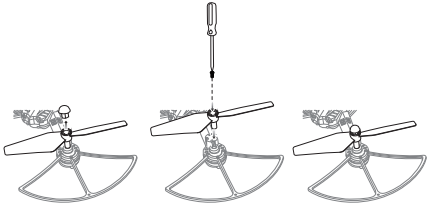
Standard parts such as extra batteries and remotes are available online for purchase when in stock. However, any non-standard parts such as cameras, screws, bodies, etc. can be ordered by placing an inquiry with our parts department at: **partsinfo@dpiinc.com.**

Rotor Replacement

The craft comes with replacement rotors if the originals are broken or badly damaged. Use the included screwdriver to remove the rotor retaining screw that holds the rotor to the motor shaft. Once the retaining screw is out, pull upwards on the rotor to remove it from the motor shaft. Installation of the new rotor is the reverse of the removal process. Be sure to tighten the rotor retaining screw firmly, but do not over tighten.

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 rotor near the shaft.





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 328 ft. range.
Craft is difficult to control or flies erratically.	• Gyroscopes may be misaligned.	• 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).
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**

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