



Quadcopter Drone with Video Camera

User's Guide for Model DR775 v1396-01

For the most up-to-date version of this User's Guide, go to www.gpx.com

Warnings & Precautions

Important Safety Instructions

- Read these instructions.
- Keep these instructions for future reference.
- Heed all Warnings.
- Follow all instructions.
- Intended for children ages 14 and higher.
- Adult supervision is required.
- Only use attachments/accessories specified by the manufacturer.
- Before flying, always check the quadcopter body, rotors, and battery for any damage or obstructions.
- Battery should be free from cracks or swelling.
- Always keep the rotors clear of any obstructions 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 quadcopter in sight at all times during flights. If you lose sight of the quadcopter 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.
- Never fly over open bodies of water.
- Never fly the quadcopter at night.
- Never try to retrieve the quadcopter from areas you cannot safely reach, such as rooftops or trees.
- Always launch the quadcopter from a flat, level surface.
- Never launch the quadcopter from your hand.
- Never leave the quadcopter unattended while it is powered on.

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.

AVIS: Pour réduire le risque d'incendie ou de choc électrique, ne pas exposer cet appareil sous la pluie et l'humidité.

- **CAUTION:** Use of controls or adjustments or performance of procedures other than those specified may result in hazardous radiation exposure.
- **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.

AVIS: Danger d'explosion si les piles sont remplacées de façon incorrecte. Remplacer les piles seulement par le même type de pile ou l'équivalent.

- 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.
AVIS: Risque de choc électrique - ne pas ouvrir
- Battery shall not be exposed to excessive heat such as sunshine, fire, or the like.
Les piles ne doivent pas être exposées à de forte chaleur, tel qu'à la lumière du soleil, au feu ou autres choses de semblable.
- 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.

Gardez les piles neuves et d'occasion à partir des enfants. Si le compartiment de la batterie ne pas fermer correctement, cesser d'utiliser le produit et garder loin des enfants.

- If you think batteries might have been swallowed or placed inside any part of the body, seek immediate medical attention.
Si vous pensez que les batteries peuvent avoir été avalé ou placé à l'intérieur d'une partie du corps, consulter immédiatement un médecin.
- Do not mix old and new batteries.
Ne pas mélanger vieilles et nouvelles batteries.
- Completely replace all old batteries with new ones.
Remplacer complètement toutes les piles par des neuves.
- Do not mix alkaline, standard (carbon-zinc), or rechargeable (ni-cad, ni-mh, etc) batteries.
Ne mélangez pas des piles alcalines, standard (carbone-zinc) ou rechargeables (Ni-Cd, Ni-MH, etc) batteries.
- Batteries should be recycled or disposed of as per state and local guidelines.
Piles doivent être recyclées ou éliminées selon les directives étatiques et locales.
- **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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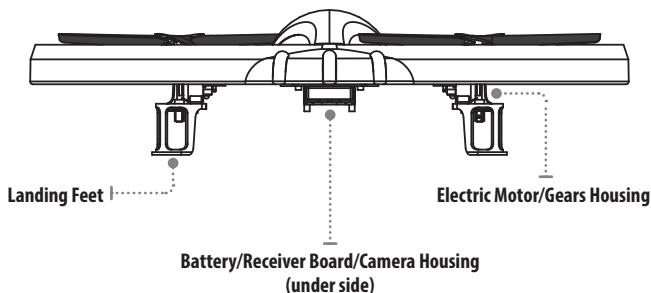
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Orientation

Includes

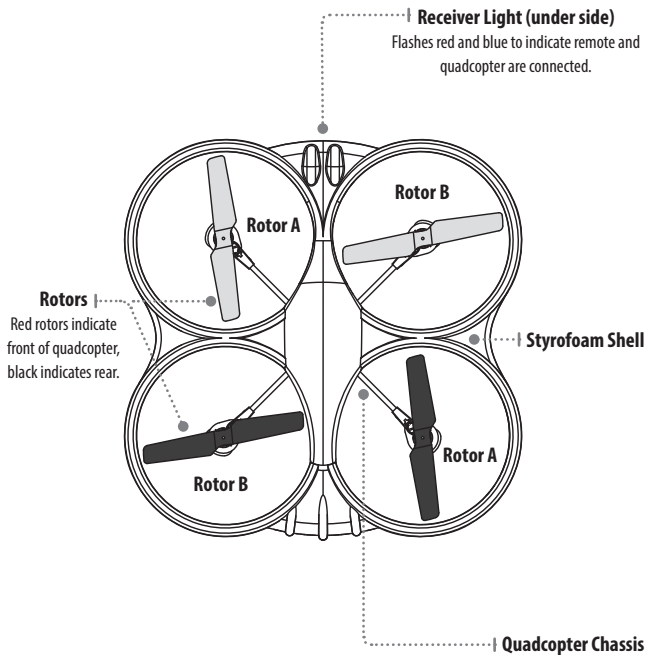
- Remote control: requires 6 AA batteries (not included)
- USB cable for battery recharge
- 4 GB SD card and Card Reader
- 4 replacement rotors

Rear View

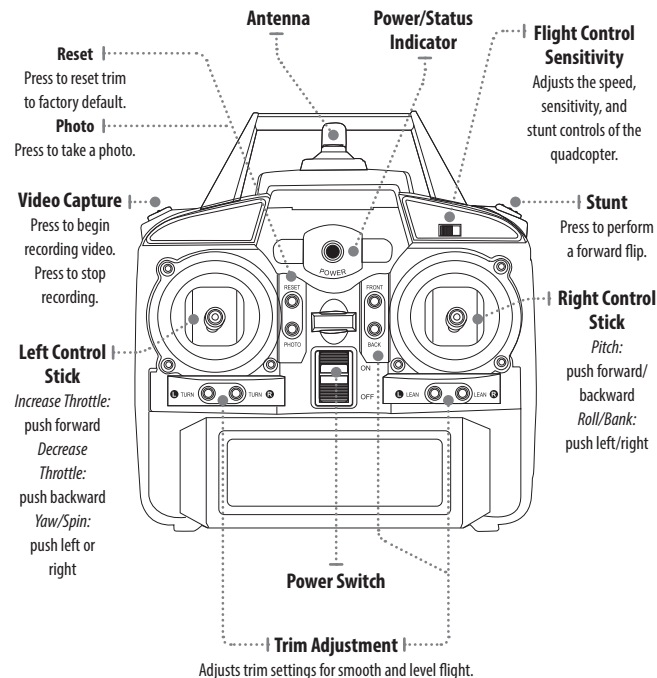


Orientation

Top View



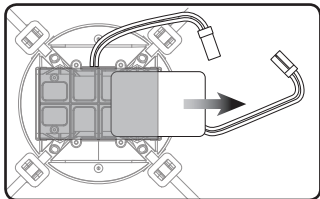
Remote Control



Batteries & Charging

The quadcopter's Lithium-Polymer battery must be charged before the unit can be flown. Before charging, be sure the quadcopter and remote control are powered off. Failure to do so may result in injury.

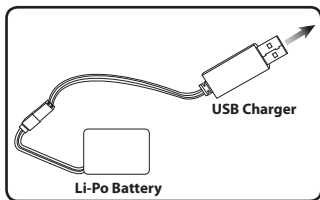
Charging Procedure



Step 1

To charge the battery, disconnect the plugs between the battery and the receiver board on the underside of the quadcopter, then gently slide the battery out of its tray.

Be sure to pull on the connector plugs only, pulling on the wires may result in damage to the plugs or wires.



Step 2

Connect the battery plug to the matching plug on the included USB charger, then connect the USB charger to a USB power source, such as a powered on computer or USB power adapter (recommended, not included).

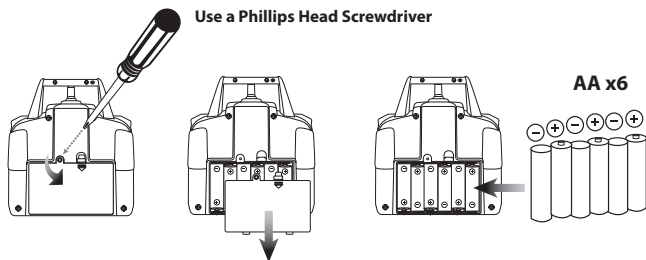
The red light in the plug of the USB charging cable will indicate battery charge status (see table below).

When the battery is fully charged, re-install the battery in its tray and connect the plug to the receiver board.

Charging Status

LIGHT	STATUS
Red Light ON	Battery charging
Red Light OFF	Battery fully charged

Remote Batteries



Battery & Usage Info

BATTERY TYPE	SPECIFICATION	DURATION	CHARGE TIME
Quadcopter Li-Po Battery	3.7V/650mAH	6 to 8 minutes flight time	60 to 70 minutes
Remote AA Batteries	1.5V	Approx. 18 hours	Non-rechargeable

Pre-Flight Calibration

Quadcopter/Remote Link

Before flying, the quadcopter and the remote must be linked together, and the gyroscopes on the quadcopter must be allowed to calibrate to ensure smooth and level flight.

Begin with the quadcopter and remote powered off.

Step 1 - Power ON & Connect

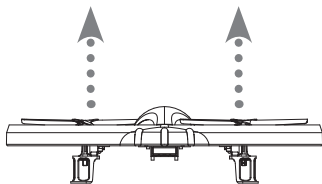
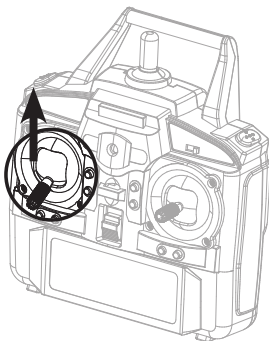
Connect the battery to the quadcopter, place the quadcopter on a flat surface, and turn on the remote. This will calibrate the gyroscopes in the quadcopter and connect it to the remote.

YOU MUST PERFORM THIS ACTION QUICKLY FOR IT TO TAKE EFFECT.

When the receiver light at the front of the styrofoam body begins slowly blinking red and blue, and the Power/Status indicator on the remote is red, the quadcopter and remote are successfully calibrated and linked.

Step 2 - Take Off

Add light throttle until the quadcopter is in the air. If there are any problems, perform these steps again until a stable hover is achieved. If there are no problems, you may start flying at will.



Attempt a stable hover, low to the ground.

- Use Left Control Stick and add *light* throttle.

Trim Adjustment

Countering Drift & Setting Trim

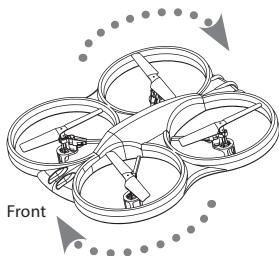
Even after the quadcopter is calibrated, it may show a tendency to drift while airborne. Adjusting the trim will counter this effect and allow the unit to hover in place. Adjust the trim while flying as controlled and low to the ground as possible.

Remember, the red propeller blades indicate the front of the quadcopter.

If the trim adjustments do not seem to be helping, or seem to be making the problem worse, press the **Reset button** to the right of the **Left Control Stick**, to reset the trim to factory default settings and try again.

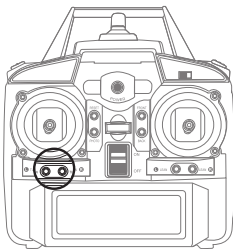
Drift Type

Quadcopter yaws/spins left or right.



Solution

Press L/R buttons under the Left Control Stick.



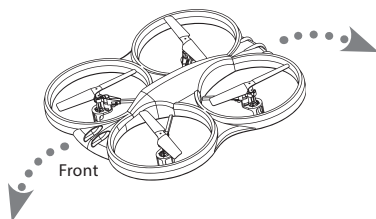
Trim settings continued on the following page.



Trim Adjustment

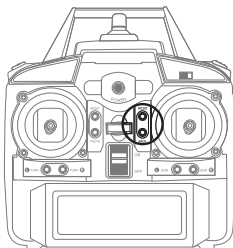
Drift Type

Quadcopter pitches/moves forward or backward.

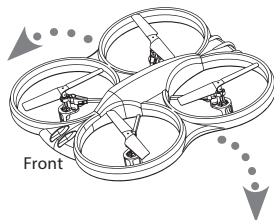


Solution

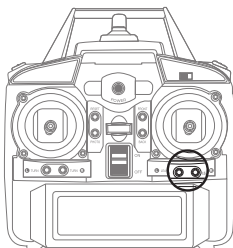
Press Up/Down buttons to the left of the Right Control Stick.



Quadcopter banks/rolls left or right.



Press L/R buttons under the Right Control Stick.



Flying & Tips

Flight Control Sensitivity

The quadcopter has three settings for the responsiveness of the flight controls: 30%, 60%, and 100%. The higher settings allow faster and more precise control inputs. It is recommended to start with the lowest setting, and as you become more skilled at flying, increase the sensitivity as you see fit.

- **30%:** Intended for novice pilots. Gives a smooth, more relaxed control feel.
- **60%:** Intended for advanced pilots. The quadcopter will move and respond much faster to all control inputs.
- **100% (Stunt Mode):** The Right Control Stick will perform a flip in any direction, but loses the ability to change pitch and roll. Use with care.

Tips for Safe Operation

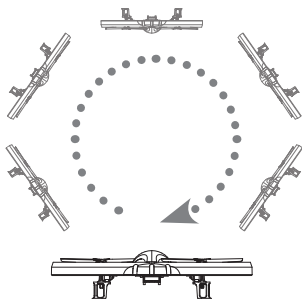
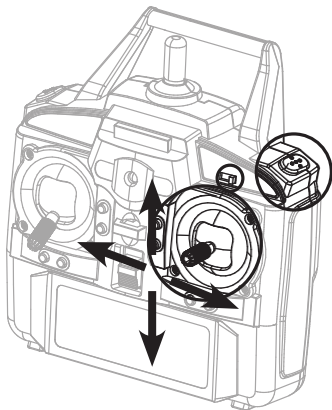
- Only fly in large, open spaces, such as a field or a very large indoor area, free of obstacles like power lines, trees, ceiling fans, etc.
- When flying indoors, avoid walls and ceilings, as the quadcopter will be drawn towards them if closer than 2 to 3 feet.
- Stand behind the quadcopter when first taking off, so that you and the quadcopter are facing the same “forward” direction. This will make it easier to know which direction the unit is flying. Also, remember that the red colored propellers indicate the front of the quadcopter.
- Practice basic flight operations like take off, hovering, and landing.
- Flying inside and at low speed, low to the ground will reduce the chance of turbulence that can negatively affect the stable flight of the quadcopter.
- Novice pilots should move the controls slowly and deliberately, using one control at a time, to get used to the quadcopter’s flying characteristics. Next try combining the pitch and roll controls (forward/backward and left/right on the Right Control Stick) to fly the quadcopter like the way an airplane flies. After mastering this, try the yaw controls (left/right on the left thumbstick) to spin the quadcopter in place and perform more complex flights.
- When you crash, throttle down the engines IMMEDIATELY to reduce the chance of permanent damage to the quadcopter and other objects.
- If anything obstructs the propellers for any reason, throttle down IMMEDIATELY and safely clear the obstruction.

Stunts

Before attempting any stunts, be sure that there is ample clear space around the quadcopter, ideally 9 to 10 ft in every direction. It is not recommended to attempt to stunt around or through any obstacles, as this may result in unintended damage.

There are two ways to perform aerial stunts:

- Press the **Stunt button (Right Trigger)** to perform a forward flip.
- Set the **Flight Sensitivity Control to 100%** and use the **Right Control Stick** to perform a flip in any direction. The Stunt button does not need to be used in this case, though it will still function. *Note that in this setting, the Right Control Stick will only perform stunts, and will not adjust the pitch or roll of the quadcopter. Use this mode with care to avoid damage.*



- Press Stunt Button for forward flip.

OR

- Use Right Control Stick with Flight Control Sensitivity set to 100%.

On Board Camera

Using the Camera

This unit is equipped with an on board camera and SD memory card that allows you to document your flights and view them later. The camera will record stills and video as JPEG and AVI files. The video files (AVI) can be viewed on a computer with any common video playing software, like Quicktime or Windows Media Player.

To take video during your flight, press the **Left Trigger** on the remote control to begin recording. When the camera is recording video the power/status indicator will turn green.

To take still shots during your flight, press the **Photo button** to the right of the Left Control Stick. The power/status indicator will flash green when it will takes a photo. Press & hold the Photo button for a 3 photo burst.

When the light on the unit is flashing blue, the SD card's memory is full and will need to be downloaded to a computer, and the card formatted, before it can be used again. The SD card is stored in a slot on the rear of the camera/battery housing. **To remove the SD card**, lightly push against it until it springs partially out of its slot, then pull the card out. Use the included USB/SD card reader to connect to your computer.

After you've connected and opened the SD Card file folder ("NO NAME" drive), open the "DCIM" folder, then "100DSCIM". You should be able to see and play any of the AVI video files on the card.

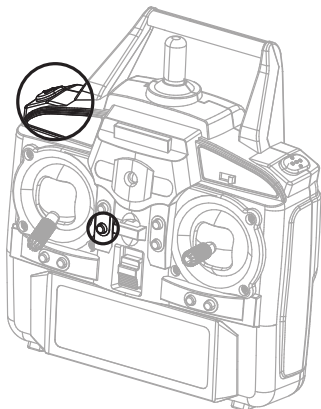
NOTE:

- The video camera does not record sound.
- Proper orientation of the SD Card in the slot (see figure on next page).
- You can format the SD card at any time without worry, the camera will automatically re-create the DCIM and 100DSCIM file folders.

Camera info continued on the following page.

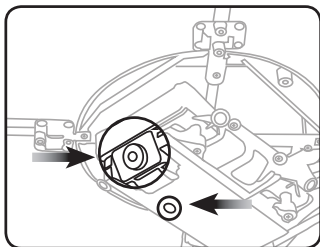


On Board Camera

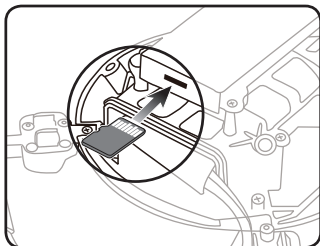


- Press Left Trigger for video.
- Use Photo button to the right of the left thumbstick for still shots or 3 shot burst.

Camera & Indicator



SD Card & Slot



Troubleshooting

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

PROBLEM	POSSIBLE CAUSES	SOLUTION
Quadcopter is unresponsive	• No power to remote or quadcopter • Poor contact between power plugs	• Check remote batteries. • Check quadcopter battery, be sure it is fully charged. • Be sure the remote has an unobstructed line of sight to the quadcopter. • Be sure to remain within the remote's 30 ft. range.
Quadcopter flies erratically	• Gyroscopes may be misaligned	• Perform Pre-Flight Calibration again (see pg. 10).
Quadcopter drifts while in flight	• Trim not set	• Adjust trim settings (see pg. 11).
Quadcopter suffers from mechanical difficulty or vibrates excessively	• Damage to styrofoam body, rotors, or other major components	• Check to make sure the quadcopter has not taken significant damage. • Replacement parts may be needed (see pg. 21).
Receiver LED flashes, but quadcopter no longer responds to throttle inputs	• Low battery power	• Recharge the battery.

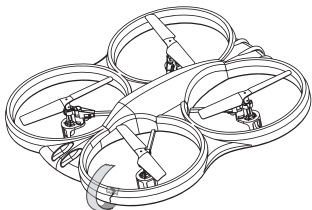
Repair

In the event that the quadcopter absorbs light damage that renders flight difficult, but not impossible, the following repairs are easy to perform and should get the quadcopter back to a flyable condition.

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

Body Repair

The styrofoam shell is designed to absorb damage from crashes and impacts, but in doing so it can develop cracks and tears over time. The easiest way to repair the shell is to use any kind of light, clear tape to reconnect and seal the crack.

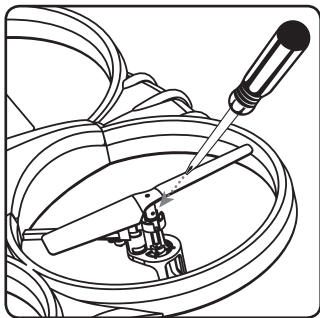


Rotor Replacement

The quadcopter comes with 4 replacement rotors, to be used if the originals are broken or badly damaged.

To replace a rotor, use a small Phillips head screwdriver and remove the screw connecting the rotor to the electric motor shaft. Remove the damaged rotor and replace with a new one, then screw it back into place on the motor shaft.

REMINDER: It is extremely important to use the correct rotor (A or B) for replacement. Using the incorrect rotor will cause the quadcopter's flight to be erratic and impossible to control. The marking can be seen on the top of the rotor.



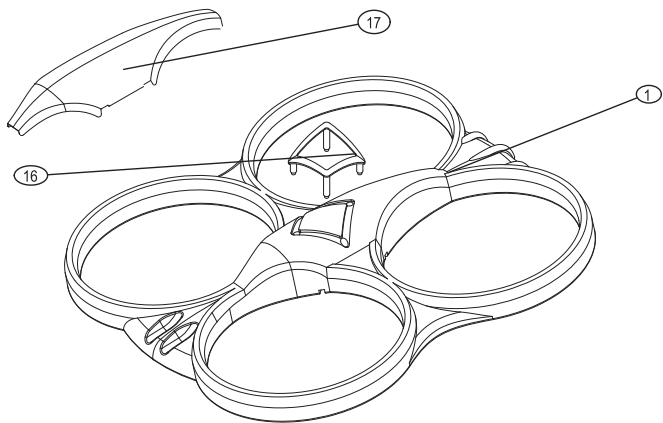
Parts

Parts Replacement

If any major components of the quadcopter are damaged beyond repair, you can order new parts by contacting the customer support number, or by following the web address below to the product page and clicking on the "Parts and Accessories" tab.

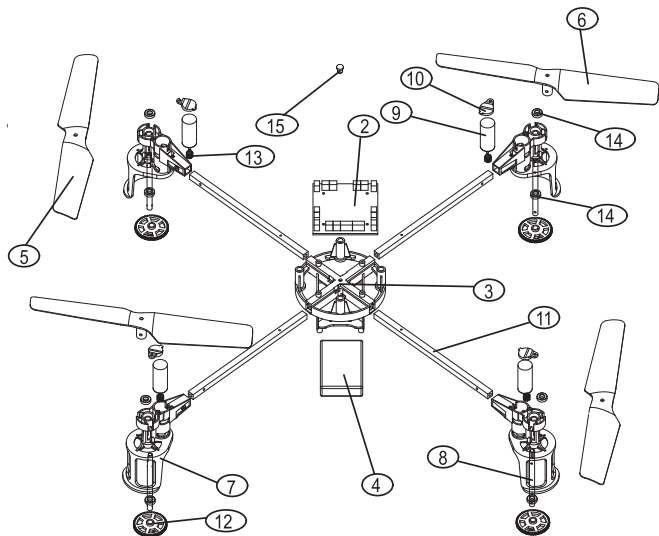
Product web address: <http://bit.ly/1HI5ziY>

Parts Diagram



Parts

Parts Diagram



Parts

Parts List

PART	NAME	QUANTITY
1	Styrofoam Shell	1
2	Receiver Board	1
3	Chassis	1
4	Lithium-Polymer Battery	1
5	Rotor Blade A (Red/Black)	4
6	Rotor Blade B (Red/Black)	4
7	Electric Motor Block	4
8	Engine Harness/ Landing Pad	4
9	Electric Motor	4
10	Electric Motor Cover	4
11	Engine Harness Strut	4
12	Electric Motor Pinion Gear	4
13	Copper Gear	4
14	Copper Set	8
15	LED Receiver Light	1
16	Receiver Board Harness	1
17	Name Plate	1

Company Information

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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