## PR®PEL

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#### FCC Part 15 Notice

CAUTION: Changes or modifications 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 experienced radio/TV technician for help.

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.

#### INDUSTRY CANADA NOTICE: CANADA ONLY.

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter dout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.



Conforms to safety requirements of FCC. 8619 Wall street, Suite 400, Austin, TX 78754 © 2016 Rooftop Brands<sup>TM</sup>. All Rights Reserved. www.propelrc.com. iPhone®, iPad®, and iPod touch® are registered trademarks of Apple Inc. ANDROID™ is a trademark of Google Inc.

# CLOUD FORCE™

2.4GHz High-Performance Stunt Drone with Live Video Streaming



#### INSTRUCTION BOOKLET

WARNING: Never leave product charging unattended for extended periods of time. Always disconnect the battery from charger immediately after the battery is fully charged. Please refer to enclosed safety instructions.

#### PACKAGE CONTAINS:





2.4G Wireless Controller



Spare Parts



USB Charging Cord

& Li-Poly

Rechargeable Battery





Made in China

Phone Holder

Instruction Manual

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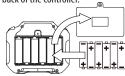
Thank you for purchasing the Cloud Force™ 2.4 Ghz High-Performance Stunt Drone. Please read this instruction booklet as it contains valuable information on how to properly fly and care for your Cloud Force™.

#### **FEATURES**

- Wide range digital radio allows flight range up to 200 feet!
- · 6 axis gyro for extremely stable flight and maneuverability
- Push button 360° aerial stunts
- On-board camera records high-definition videos and still photos to your mobile devices.
- 2 speed settings for beginner to intermidate pilots
- · Additional replacement parts included

#### REMOTE CONTROL BATTERY INSTALLATION

- 1. Unscrew the security screw and remove the battery cover from the back of the controller.
- 2. Install 6"AA" alkaline batteries into the controller as shown in diagram A.
- 3. Replace the battery cover and secure it.
- Turn over the controller and turn the ON/OFF switch to the On position. If the LED lights turns on you have installed your batteries properly.

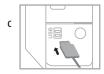


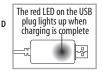
#### CHARGING THE CLOUD FORCE'S LI-POLY BATTERY

6 x"AA" Batteries (not included)

- Connect the battery to the USB charging cord as shown (see illustration B).
   Caution: The USB plug fits the charging socket only in one way. Do not force it.
- 2. Next, connect the USB charging cord to your computer's USB port (see diagram C ).
- Caution: Only use this charging cord with a computer USB port! Do not attempt to use other USB charging devices.
- 3. The red LED on the USB plug lights up when charging is complete (See diagram D).
- Note: If the red LED lights up, either the charging is complete or the USB plug is not properly connected.
- 4. Average charging time is approximately 40-50 minutes. A fully charged drone can fly for approximately 8-10 minutes depending on environment and user input.



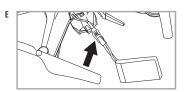


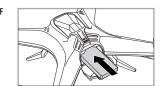


#### IMPORTANT: ALWAYS REMEMBER TO UNPLUG YOUR CHARGING CORD WHEN NOT IN USE!

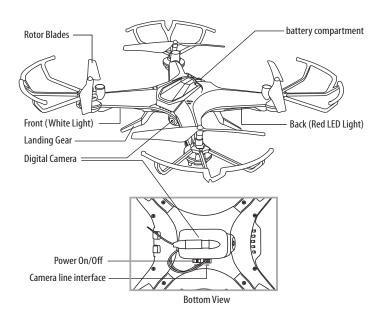
#### **CLOUD FORCE BATTERY INSTALLATION**

- 1. Open the Cloud Force's battery compartment and Connect the power cord as shown on diagram E,
- Slide the battery into Cloud Force battery compartment and close the battery compartment cover (see diagram F).
  - Caution: The power cord fits only in one way. Do not force it.
- 3. Turn on the ON/OFF switch of the Cloud Force, the LED lights should flashing indicates you install the battery properly.

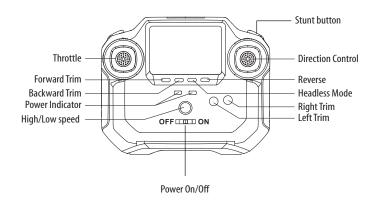




#### **CLOUD FORCE DIAGRAM**



#### CONTROLLER DIAGRAM



# WARNING DO NOT FLY YOUR CLOUD FORCE IN FOUL WEATHER!









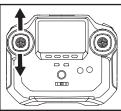
#### **FLIGHT PREPARATION**

- Verify that there are 6"AA" batteries installed the remote control unit and the Cloud Force battery has been fully charged.
- Make sure to be in a large open space preferably a field or a park with an open radius of at least 200 feet.
- Make sure to start your drone on a clean flat level surface before take-off.
- IMPORTANT! Until you have experience in flying your Cloud Force, it is not advised to use in any rate of wind. Wait until a zero wind day or extremely light wind when learning how to fly.

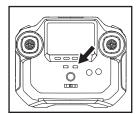
#### SYNCING YOUR CLOUD FORCE

Important! When syncing your Cloud Force with the controller always make sure that the drone is on a flat level surface and that your digital trim settings are in the center position. This insures that the 6 Axis gyro is properly programmed to respond to your trim settings. Your Cloud Force utilizes an automatic 2.4G channel selection system that allows up to 8 people to fly side by side in the same wireless range with no interference.

- 1. Before starting, make sure that the power switch is off both on your controller and the Cloud Force. Make sure that there are no other 2.4G devices in the area.
- 2. Turn on your Cloud Force and set it down on any flat surface. The red and white LED lights of the drone should begin to flash repeatedly.
- 3. Quickly turn ON the remote and you will notice that the red LED light on the face of the controller should also be flashing.
- 4. Push the left control stick all the way up until it stops and then pull it back all the way down to the bottom(see illustration below). When pulling the stick down to the bottom you should hear a high-pitched beep and the lights on both the drone and the controller should stop flashing and become solid. If the lights on both the drone and the controller have stopped flashing and become solid you have successfully synced your Cloud Force and are ready to fly. If the lights on the controller or the drone are still flashing repeat steps 1-4 again.
- TIP 1: try not to leave too much time between turning on the drone and the controller or your syncing window will time-out.
- TIP 2: Syncing your drone indoors or in the shade will make it easier to see the LED light indicators on both the controller and the drone.



move the control stick all the way up and all the way down you should hear a beep



the flashing red LED light will become solid when you are synced

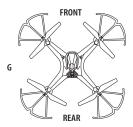
# NOW YOU ARE READY TO FLY! If you have successfully synced your Cloud Force to your controller as explained on page 4 you are now

If you have successfully synced your Cloud Force to your controller as explained on page 4 you are now ready to fly. Before beginning to fly your drone you should familiarize yourself with how the controls work so please carefully read and familiarize yourself with various control features explain in the next two pages. Once again as a beginner pilot you should learn how to control your drone in a large open field or park on a day with zero or very light wind. Do not try to fly your Cloud Force too high until you become a more experience pilot.

#### RECOGNIZING THE FRONT & BACK OF THE CLOUD FORCE

Even though the Cloud Force has four rotors there is still a front or "forward" facing direction and "back" or backwards facing direction. The forward Front and forward facing direction of the Cloud Force is the side with two gray blades (see diagram G). The rear and back of the Quadrocopter is the side with two black propellers (see diagram G).

NOTE: The front of the Quadrocopter also displays WHITE LED light and the back of the Quadrocopter displays RED LED lights.



#### SPEED SELECT BUTTON

The Cloud Force has 2 speed settings; SLOW, and HIGH. The Default setting when you first turn on your Cloud Force is the SLOW speed mode. To increase the speed simply trigger the Speed setting button (see remote diagram on pg 3) you will hear a beep and the speed changed to HIGH speed. Speed settings can be set before flight or during the flight.

#### **REVERSE BUTTON**

The Cloud Force has an REVERSE feature which allows you to operate your drone reverse automatically. Simply press the REVERSE Button and your Cloud Force will begin fly reversed. To exit the reverse mode simply press the REVERSE Button again or use the direction control stick to any direction.

#### **HEADLESS MODE BUTTON**

You can maintain orientation of your Cloud Force during flight.

- 1. Once the Cloud Force is activated press the headless mode button (see controller on pg.3) to activate the internal compass.
- 2. The flying orientation is now locked to match the direction control lever.

Note: You need stay the same location when you activated the headless mode, the cloud force will exit headless mode when you move.

#### FLIGHT CONTROL

Below is a list of basic flight functions for your long-range remote to control the Cloud Force. While learning to fly your Cloud Force it is best to start in a large space until you get used to the basic controls. As you master flying your Cloud Force you can move to more advanced maneuvering techniques. Practice makes perfect!

Move the left Throttle stick up to increase the propeller speed and the Cloud Force will accelerate and ascend.

Move the left Throttle stick down to decrease the propeller speed and the Cloud Force will decelerate and descend (see diagram H).

While in the air, move the left Throttle stick left and the Cloud Force will rotate left.

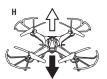
Move the left Throttle stick right and the Cloud Force will rotate right (see diagram I).

While in the air, move the right Direction Stick up and the Cloud Force will move forward.

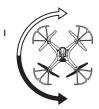
Move the right Direction Control down and the Cloud Force will move backward (see diagram J).

While in the air, move the right Direction Control left and the Cloud Force will bank to the left.

Move the right Direction Control right and the Cloud Force will bank to the right (see diagram K).











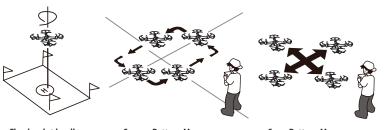






#### FLIGHT PRACTICE

To master flying your aircraft try practicing the excersizes shown below. Start with simple vertical takeoffs, landings, and left/right turning and rotating. Once those are mastered move on to square and cross maneuvers. Good luck and have fun!



Fixed-point landing

**Square Pattern Maneuver** 

**Cross Pattern Maneuver** 

#### **ADJUSTING THE TRIM**

NOTE: The Cloud Force is already properly trimmed and calibrated right out of the box and should not require any trim adjustments before flying. Some more experienced pilots may want to adjust trim settings for their style of flying. After several crashes you may need to adjust trim settings for the Cloud Force to be more balanced.

#### Forward/Backward Trim

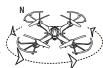
- If your Cloud Force drifts forward while in the air, push and release the BACKWARD TRIM button back repeatedly until the motion stops and proper flight is maintained (see diagram L).
- If your Cloud Force drifts backwards, push and release the FORWARD TRIM button forward in the same manner until the problem is resolved.





#### Bank Right/Left Trim

- If your Cloud Force drifts left while in the air, push and release the RIGHT TRIM button back repeatedly until the motion stops and proper flight is maintained (see diagram M).
- If your Cloud Force driffs right, push and release the LEFT TRIM button in the same manner until the problem is resolved.



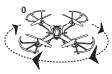


#### Spin Left Trim

• If your Cloud Force spins left while in the air, push and release the RIGHT SPIN TRIM button back repeatedly until the motion stops and proper flight is maintained (see diagram N).



• If your Cloud Force spins right while in the air, push and release the LEFT SPIN TRIM button in the same manner until the problem is resolved (see diagram 0).





NOTE: The use of the Trim buttons utilizes sounds. A single long Beep indicates the product is center trimmed. Continuous long Beeps indicate the product is trimmed to the maximum on a particular side.

#### CALIBRATING THE CLOUD FORCE

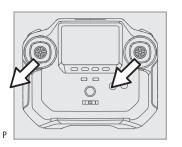
NOTE: Your Cloud Force comes pre-calibrated out of the box so you are ready to fly.

After several crashes and shock to your gyro sensors, you may notice that your drone is drifting and not holding its center position as well as it used to.

This most likely means that you need to recalibrate the 6 axis gyro. Please follow the simple instructions below

- 1. Place the Cloud Force on a flat ground or any other flat stable surface.
- 2. Make sure the Cloud Force is on and that the controller is synced (refer to syncing pg 4.). Do not start the blades. Instead move both the throttle and control stick down and to the left corner and hold them there for 5 seconds (See Diagram P). You will see the lights on the drone rapidly flash and stop. Once the lights stop flashing you have completed your calibration and are ready to fly!

**TROUBLE SHOOTING**: If you do not see the lights flash, turn off your controller take out the battery in the Drone and Start again. Always make sure to put your battery in first, then turn on your controller. Push the left throttle stick up all the way and then pull back down again. When you hear the beep the Cloud Force is synced to the controller and you are ready to calibrate.



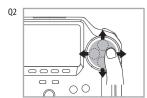
#### **HOW TO PERFORM 360° STUNT ROLLS**

Performing 360° stunt rolls with the Cloud Force is as easy as 1-2-3:

- Hover the Cloud Force in still position making sure that you have at least 5 feet of clearance above and below the guadrocopter.
- 2. Press down and hold the 360 stunt button for 1.5 seconds and you will enter the stunt roll mode which is indicated by a rapid beeping (see diagram Q1).
- Determine which direction you want it to flip and quickly push the right control stick in the direction you want to flip your Cloud Force (see diagram Q2).
   You have 4 choices a) Forward Roll, b) Backwards roll, c) Right side roll, d) Left side roll.
- 4. To exit the Stunt Roll mode, simply release the button.

#### 360° Stunt Roll Button







#### LIVE VIDEO STREAMING

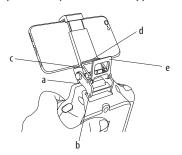
Your Cloud Force comes equipped with an onboard digital camera that takes both video and still photographs to your mobile devices. Now you can have hours of fun creating aerial photography and videos for family and friends.

#### WHAT YOU WILL NEED TO GET STARTED USING YOUR CAMERA

- 1. One Apple or Andriod phone\* (not included)
- 2. Propel Cloud Force APP installed (app store or Andriod market available)

#### PHONE HOLDER AND PHONE INSTALLATION

Put the phone holder hook (a) and Hook (b) to the slots on the top of the controller, see the illustration below, postion the metal lock(c) to the bottom of the bar(d), Push the locker(e) to tigten the phone holder. When you install the phone holder correctly you can use it to hold your phone (see diagram R)





#### PROPEL CLOUD FORCE FPV APP INSTALLATION

- 1. Make sure you are using a compatible Android™ or Apple® iOS device.
- 2. Make sure your device has access to the Internet.
- 3. For Apple® iOS devices, within the App Store, search and select "PPL CLOUD FORCE FPV". Hit the Install button and the "PPL CLOUD FORCE FPV" App should download and install automatically.
- 4. For Android™ OS devices, visit the Google Play store and search for "PPL CLOUD FORCE FPV". Selecting the "PPL CLOUD FORCE FPV" App will download the App and automatically install it on your device.
- 5. After the "PPL CLOUD FORCE FPV" App is installed, it should create an icon on your screen. Click the "PPL CLOUD FORCE FPV" icon to run the App to make sure that it has installed correctly on your device. If not, please delete and repeat the process again.

#### PAIRING CLOUD FORCE TO YOUR COMPATIBLE DEVICE

- 1. After completely charging your CLOUD FORCE battery, install the battery to your CLOUD FORCE.
- 2. In the Settings menu of your mobile device, locate the Wi-Fi option.
- 3. Turn ON the Wi-Fi option.
- 4. Select "propel cloud force" from the Wi-Fi list. Wait for your CLOUD FORCE to be connected. Return to the Main Menu.









Note: Apple® devices require the use of iOS 7.0 or higher. ANDROID™ devices require the use of OS 4.2.2 or higher.

#### **QUICK START**

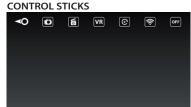
- 1. When you install the App correctly and have paired to the drone successfully, you can hit the "PPL CLOUD FORCE FPV" App icon. Tap "START" on the bottom right hand side of the screen. You should see the real-time video from your HD Video Drone's camera.
- 2. This App allows you to control your cloud force to take photo or record video by your mobile device. Note: all the photos and videos will storaged in your mobile device, you can review the photos and videos on your mobile device by using this App.

#### **DETAILED APP OVERVIEW**

**HELP PAGE 1** 

3. Please see images below for a detailed App overview. This overview is also available under the "HELP" icon in the home screen of the App.

# HOME PAGE PRAPEL CLOUD FORCE 2-dist High-indrance Start Drow with the Wold Starmery HELP START



PR PEL

I. Turn on your Cloud Force Drone



 $4. If you're still encountering difficulties please contact our customer service department at \\ +1.949.566.9573.$ 

IMPORTANT NOTICE: You can not take photos and videos at the same time. When you are in video mode your camera/ photo button is disabled. If you want to take photos you must first turn off video mode.

#### TROUBLESHOOTING YOUR CLOUD FORCE

PROBLEM	POSSIBLE CAUSE	POSSIBLE SOLUTION
No Power	1. Power switched off     2. Polarity is reversed     3. Batteries may be low or in need of charging	Switch the ON/OFF switch to ON     Make sure all batteries are installed correctly (see diagram A on pg.2)     Replace batteries
<b>Drone Not</b> Responding	1. Remote is switched off     2. battery power in remote is too weak     3. The remote is not properly synced     4. Out of control range	1. Switch the ON/OFF switch to ON 2.Connect the battery to Cloud Force 3. Re-sync the remote 4. Do not fly beyond 500 feet
Drone Won't lift off	Rotor speed too slow     Drone not fully charged     Obstruction of rotors	Push throttle lever forward     Recharge your Cloud Force     Check rotors for hair or other obstructions
Drone Descends Too Fast	Moving the throttle down too quickly flying in high wind or bad weather	Control the throttle slower, use auto land feature, Do not fly in bad weather

If you continue to encounter problems call our customers service line at (949) 566-9573 Ext 1 for assistance.

#### REPLACING THE PROPELLER BLADES

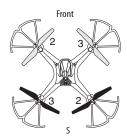
Your Cloud Force's propeller system is a precision instrument that may need repair or replacement from time to time for optimal flight function. Crash landing at high-speed may cause damage to your Cloud Force's propellers.

- The Cloud Force has four blades, two gray colors on front, and two black colors on back (see the diagram S).
- 2. When replacing the propeller blades, make sure to match both the color of the blade and the indication letter on the blade.
- 3. Replace the damaged blade with the correct blade.

Gray Blade Front Left = 2
Gray Blade Front Right = 3

Black Blade Back Left = 3

Black Blade Back Right = 2



#### **CLOUD FORCE WARNING:**

The Cloud Force is designed for OUTDOOR use. The Cloud Force's blades revolve at high speeds and can cause damage to the user, spectators and animals. Stand away from the Cloud Force to reduce the risk of getting into the flight path. Warn spectators that you will be flying your Cloud Force so that they are aware of its position. Before flight, inspect the rotor blades to make certain that the blades are securely fastened to the Cloud Force.

#### WARNING!

- Choking/Cutting Hazard. Small Parts/Sharp Rotor Blades.
- Keep hands, hair and loose clothing away from the propeller when the power switch is turned to the ON position.
- Turn off the transmitter and Cloud Force power switches when not in use.
- The included charger is built specifically for the Cloud Force Li-Poly battery. Do not use it to charge any other battery.
- New alkaline batteries are recommended for maximum performance.
- Parental supervision recommended when flying Cloud Force.

#### **BATTERY WARNINGS**

#### RECHARGEABLE BATTERY:

This Cloud Force uses a Li-Poly rechargeable battery. If battery no longer stays charged, dispose of battery properly according to local disposal requirements.

#### **CONTROLLER BATTERIES:**

Remote control requires 6"AA" batteries (not included).

Please read the important battery safety warning below.

- Do not mix alkaline, standard (carbon-zinc) and rechargeable batteries (Nickel Metal Hydride).
- Do not mix old and new batteries.
- Non-rechargeable batteries are not to be recharged.
- Rechargeable batteries are to be removed from the item before being charged (if removable).
- Rechargeable batteries are only to be charged under adult supervision.
- Exhausted batteries should be removed immediately and must be recycled or disposed of properly according to state or local government ordinances and regulations.
- The supply terminals are not to be short-circuited.
- Only batteries of the same or equivalent type as recommended are to be used.
- Batteries are to be inserted with the correct polarity (see inside booklet for diagram).
- Do not dispose batteries in a fire batteries may leak or explode.

#### CARE AND MAINTENANCE

- Always remove the batteries from the wireless remote control when it is not being used for an
  extended period of time.
- To clean, gently wipe the remote control and Cloud Force with a clean damp cloth.
- Keep the toy away from direct heat or sunlight.
- Do not submerge the toy into water. This can damage the unit beyond repair.
- Parental guidance recommended when installing or replacing the batteries.

### 90-DAY LIMITED WARRANTY

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#### **Limited 90-Day Warranty**

NORTH AMERICA

ROOFTOP BRANDS™ warrants to the original consumer that this product is free from any electrical or mechanical defects for a period of 90 DAYS from the date of purchase. If any such defect is discovered within the warranty period, ROOFTOP BRANDS™ will repair or replace the unit free of charge upon receipt of the unit, shipped postage prepaid and insured to our warranty center. The warranty covers normal consumer use and does not cover damage that occurs in shipment or failure that results from alterations, accident, misuse, abuse, neglect, wear and tear, inadequate maintenance, commercial use or unreasonable use of the unit. Removal of any parts/components voids all warranties. This warranty does not cover cost of repairs made or attempted outside by third-party individuals or companies. Any applicable implied warranties, including warranties of merchantability and fitness, are hereby limited to 90 DAYS from the date of purchase. Consequential or incidental damages resulting from a breach of any applicable express or implied warranties are hereby excluded. Some states do not allow limitations on the duration of implied warranties and do not allow exclusion of incidental or consequential damages, so the above limitations and exclusions in these instances may not apply.

#### REPAIR/REPLACE PRODUCT

If your product begins to malfunction or stop working, immediately call or email our warranty center at the phone/email listed below. If it is determined that a return is necessary, our warranty department will issue you an RMA number/form and an address to the nearest return center for shipping the product to. IMPORTANT NOTICE: We will reject all returns that are not accompanied by an issued RMA form and number so make sure to contact our warranty center before attempting to return your product!

#### PREPARATION FOR SHIPPING YOUR PRODUCT

Please repack your product in a durable box, preferably in the original carton, and send it prepaid, and adequately insured. Include the RMA form that was issued by our warranty department along with your daytime telephone number and email address (if available) inside the shipping carton. If your warranty has expired, contact our warranty center for charged service. For further information please send all inquiries to customerservice@rooftopbrands.com

#### **IMPORTANT NOTICE!**

DO NOT ATTEMPT TO SHIP YOUR PRODUCT BACK WITHOUT FIRST CONTACTING OUR WARRANTY DEPARTMENT AT:

ROOFTOP BRANDS™ WARRANTY REPLACEMENT DEPARTMENT TEL: + (1) 866-458-5151 customerservice@rooftopbrands.com