Cloud Rider HD 2.0
2.4GHz Quadcopter with Live Video Streaming and Altitude Stabilization Technology

INSTRUCTION BOOKLET

WARNING: Never leave product charging unattended for extended periods of time. Always disconnect Cloud Rider™ HD 2.0 battery from charger immediately after it is fully charged. Please refer to enclosed safety instructions.

PACKAGE CONTAINS:
- Cloud Rider™ HD 2.0
- 2.4GHz Wireless Controller
- Spare Parts
- USB Charger & Li-Poly Rechargeable Battery
- USB Certifier & microSD Card
- Instruction Manual

Colors and styles may vary slightly.

Conforms to safety requirements of RSS 247 and FCC.

Made in China

Choking Hazard - Small parts. Not suitable for children under 3 years.

Required Speed Class 6 or higher microSD or microSDHC card (included).

This device complies with Industry Canada license-exempt RSS standards.

This product meets the applicable Innovation, Science and Economic Development Canada technical specifications.

Conforms to safety requirements of RSS 247 RSS210 and FCC.

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Thank you for purchasing the Cloud Rider™ HD 2.0 2.4 Ghz Quadrocopter. Please read this instruction booklet as it contains valuable information on how to properly fly and care for your Cloud Rider™ HD 2.0 Drone.

PRODUCT FEATURES
• 6 Axis Gyro For Extremely Stable Flight and Maneuverability
• Wide Range Digital Radio Allows Flight Range Up To 350 Feet
• 3 Speed Settings From Beginner To Advanced Pilots
• 360 Degree Push Button Stunt Rolls
• Air pressure sensors lock flight altitude for stable video footage
• Automatically Starts / lands with the push of a button
• 2.4 Ghz Controller, Replaceable Li-poly Battery and Additional Replacement Parts Included.

REMOTE CONTROL BATTERY INSTALLATION
1. Remove the battery cover from the back of the controller as shown in diagram A.
2. Install 6 “AA” fresh alkaline batteries into the controller as shown in diagram B. Make sure to install batteries to their correct polarity. Do not mix old and new batteries or battery types.
3. Replace the battery cover.

CHARGING YOUR CLOUD RIDER™ HD 2.0 BATTERY
1. Slide the battery into the USB charger and then connect the MICRO USB cable to the charger (see diagram C). Connect the large end of the USB cable to your computer’s USB port.
   CAUTION: Do not force battery into charger, improper connection may damage the Cloud Rider™ HD 2.0 battery.
2. The indicator light will turn red when connected, flash red while charging and when the RED Led light turns GREEN your battery has a complete charge.
3. Average charging time is around 50 minutes.
4. A full charge will allow for about 7-10 minutes of flight time depending on the environment and user input.

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

- Verify that there are 6 "AA" batteries inside the remote control unit and the Cloud Rider™ HD 2.0 battery has been fully charged.
- Make sure your Cloud Rider™ HD 2.0's and controller battery is inserted turned on.
- Make sure to be in a large space with an open radius of at least 200 feet.
- Make sure the empty space has no obstacles. Set your Cloud Rider™ HD 2.0 on a clean flat level surface before take-off.

DO NOT ATTEMPT TO FLY YOUR Cloud Rider™ HD 2.0 IF THERE IS RAIN, SNOW, HEAVY WINDS, THUNDER OR LIGHTNING OUTDOORS. IT COULD DAMAGE YOUR PRODUCT AND POSSIBLY EVEN CAUSE BODILY HARM.

SYNCING YOUR CLOUD RIDER™ HD 2.0

Important! When syncing your Cloud Rider™ HD 2.0 quadrocopter with the controller always make sure that the quadrocopter is on a flat level surface and your digital trim settings are in the center position. These will insure the 6 Axis gyro is properly programmed to mimic your trim settings.

Syncing your aircraft:
1. Before starting, make sure that the power switch on your controller is in the OFF position and the Cloud Rider™ HD 2.0 battery is not inserted. Make sure that there are no other 2.4GHz devices in the area as well.
2. Insert the battery into the compartment in the correct orientation and set it down on a flat level surface (see diagram D). The led indicator lights under the rear arms of the Cloud Rider™ HD 2.0 should begin to flash.
3. Next turn ON the remote controller. After hearing a series of beeps, the Cloud Rider™ HD 2.0’s flashing LED lights will start flashing at a slower rate. Pull the throttle (left control stick) all the way up and then all the way down. The LED lights will flash rapidly for a few seconds and then stay solid. You are now ready to fly the Cloud Rider™ HD 2.0. If this does not happen, repeat all steps above.

FLYING TIPS

- It is recommended that you operate the Cloud Rider™ HD 2.0 outdoors in a wide space. The ideal space should have at least a 200 foot radius.
- Parental guidance or adult supervision is suggested at all times.
- If you are flying the Cloud Rider™ HD 2.0 with others, make sure all spectators are behind you.
- For best performance, it is recommended that you operate the Cloud Rider™ HD 2.0 in zero wind conditions. Wind can greatly affect the performance of the aircraft or cause injury.
STARTING / STOPPING THE ROTORS

Note: You can start/stop your Cloud Rider™ HD 2.0 manually or automatically. Please follow one of the steps below to operate accordingly. Make sure you have properly synced the Cloud Rider™ HD 2.0 and the power stays on.

MANUAL START / STOP

- To start the rotors simply move the two control sticks both down and out (see diagram), hold until the rotors start spinning. Now release both sticks to the neutral position and push the throttle up to take off.
- To stop the rotors, after starting them you can simply wait about 10 seconds, and they will stop automatically. Or move both sticks down and out again to stop immediately. After take off, you can simply pull the throttle all the way down and land.

AUTO START/LAND

The Cloud Rider™ HD 2.0 has an auto start/land feature which allows you to start/land automatically. Simply press the AUTO START / LAND button on the top of the controller and your Cloud Rider™ HD 2.0 will begin taking off/landing (see diagram below).

NOTE: You can still control the direction while auto starting/landing to avoid obstacles.

SPEED SELECT BUTTON

The Cloud Rider™ HD 2.0 has 3 speed settings: SLOW, MEDIUM and HIGH. The default setting when you first turn on your Cloud Rider™ HD 2.0 is the SLOW speed mode. To increase the speed simply push the Speed setting button. (see diagram pg 3) You will hear two beeps indicating your Cloud Rider™ HD 2.0 has changed to MEDIUM speed mode. To increase the speed again simply push the Speed setting button one more time and you will hear three beeps indicating your Cloud Rider™ HD 2.0 has changed to HIGH speed mode. Push the Speed setting button again and you will hear one beep indicating your Cloud Rider™ HD 2.0 speed changed back to SLOW speed mode.

RECOGNIZING THE FRONT & REAR OF THE CLOUD RIDER™ HD 2.0

Even though the Cloud Rider™ HD 2.0 has four rotors there is still a front or “forward” facing direction and rear or “backward” facing direction. The front of the Quadrocopter displays WHITE LED lights and the rear of the Quadrocopter displays RED LED lights when activated (see diagram E).

UNDERSTANDING THE ALTITUDE LOCK SENSOR

The Cloud Rider™ HD 2.0 has a unique Altitude Lock, air pressure sensor that allows for easier flight control and stability. A beginner’s friend, it allows the user to ease into piloting the copter. The sensor locks in the altitude of the copter while allowing the user to adjust the directional controls without having to hold the throttle.

After starting the copter, fly it upwards to a safe height using the left joystick. Once at a safe height, letting go of the throttle should lock in the altitude and allow the user to focus on getting used to the directional controls of the Cloud Rider™ HD 2.0. If when flying, the copter always tends to self correct and go back to the last locked height after moved up or down by outside forces.

Note: The altitude sensor does have some tolerance based on atmospheric conditions and could have a slight variation in altitude.

3 CHANNEL VS 4 CHANNEL FLYING

Props unique “switch-blade” technology allows you to choose between 3ch or 4ch flight control modes. Most people with no experience in flying multi copters may find 3ch easier to learn at first as controls are set up to simply move forward, back, turn left and turn right. 4channel flying gives the operator ultimate control by adding two more dimensions of flight banking left and banking right.

- NOTE: The Cloud Rider™ HD 2.0’s default setting is 4 Channel mode.
- To change to 3 Channel mode:
  PRESS and hold the 3/4 CH button (see remote diagram on pg 3), you will hear a long beep sound indicating the Cloud Rider™ HD 2.0 now is set to 3 CH mode.
- To change back to 4 Channel mode:
  PRESS and hold the 3/4 CH button (see remote diagram on pg 3), you will hear another long beep sound indicating the Cloud Rider™ HD 2.0 is now set to 4 CH mode.

3 CHANNEL FLIGHT CONTROL

Below is a list of basic flight functions for your long-range remote to control the Cloud Rider™ HD 2.0. While learning to fly your Cloud Rider™ HD 2.0 it is best to start in a large space until you get used to the basic controls. As you master flying your Cloud Rider™ HD 2.0 you can move to more advanced maneuvering techniques. Practice makes perfect! When you have these basic steps down you can move to the next level.

Move the Throttle stick up to increase the propeller speed and the Cloud Rider™ HD 2.0 will accelerate and ascend. Move the Throttle stick down to decrease the propeller speed and the Cloud Rider™ HD 2.0 will decelerate and descend (see diagram F).

While in the air, move the Direction Stick up and the Cloud Rider™ HD 2.0 will move forward. Move the Direction Control down and the Cloud Rider™ HD 2.0 will move backward (see diagram G).

While in the air, move the Direction Control left and the Cloud Rider™ HD 2.0 will spin to the left. Move the Direction Control right and the Cloud Rider™ HD 2.0 will spin to the right (see diagram H).
4 CHANNEL FLIGHT CONTROL

Below is a list of basic flight functions for your long-range remote control Cloud Rider™ HD 2.0. While learning to fly your Cloud Rider™ HD 2.0 it is best to start with a large space until you get used to the basic controls. As you master flying your Cloud Rider™ HD 2.0 you can move to more advanced maneuvering techniques. Practice makes perfect! Once you have these basic steps down you can move to the next level.

Forward/Backward Trim
Move the Throttle stick up to increase the speed and the Cloud Rider™ HD 2.0 will accelerate and ascend.
Move the left Throttle stick down to decrease the speed and the Cloud Rider™ HD 2.0 will decelerate and descend (see diagram I).

Move the Throttle stick left and the Cloud Rider™ HD 2.0 will rotate left.
Move the left Throttle stick right and the Cloud Rider™ HD 2.0 will rotate right (see diagram J).

Move the Direction Stick up while in flight and the Cloud Rider™ HD 2.0 will move forward.
Move the Direction Control down while in flight and the Cloud Rider™ HD 2.0 will move backward (see diagram K).

Move the Direction Control left and the Cloud Rider™ HD 2.0 will bank to the left.
Move the Direction Control right and the Cloud Rider™ HD 2.0 will bank to the right (see diagram M).

ADJUSTING TRIM

From time to time you may have to adjust the TRIM buttons to ensure the Cloud Rider™ HD 2.0 will hover in mid-air and respond accurately to your commands (make all trim adjustments while the drone is in air).

Forward/Backward Trim
- If your Cloud Rider™ HD 2.0 drifts forward, push and release the TRIM button backward repeatedly until the motion stops and proper flight is maintained (see diagram N).
- If your Cloud Rider™ HD 2.0 drifts backwards, push and release the TRIM button forward repeatedly until the problem is resolved.

Right/Left Trim
- If your Cloud Rider™ HD 2.0 drifts left, push and release the TRIM button rightward repeatedly until the motion stops and proper flight is maintained (see diagram O).
- If your Cloud Rider™ HD 2.0 drifts right, push and release the TRIM button leftward repeatedly until the problem is resolved.

Right/Left Spin Trim
- If your Cloud Rider™ HD 2.0 spins counter clockwise, push and release the TRIM button rightward repeatedly until the motion stops and proper flight is maintained (see diagram P).
- If your Cloud Rider™ HD 2.0 spins clockwise, push and release the TRIM button leftward repeatedly until the problem is resolved (see diagram Q).
PROPEL CLOUD RIDER™ HD 2.0 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 "Propel Cloud Rider 2.0 HD." Hit the Install button and the "Propel Cloud Rider 2.0 HD" App should download and install automatically.
4. For Android™ OS devices, visit the Google Play store and search for "Propel Cloud Rider 2.0 HD." Selecting the "Propel Cloud Rider 2.0 HD" App will download the App and automatically install it on your device.
5. After the "Propel Cloud Rider 2.0 HD" App is installed, it should create an icon on your screen. Click the "Propel Cloud Rider 2.0 HD" 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 RIDER™ HD 2.0 TO YOUR COMPATIBLE DEVICE
1. After completely charging your Cloud Rider™ HD 2.0 battery, install the battery to your Cloud Rider™ HD 2.0. (refer to the user manual).
2. In the Settings menu of your device, locate the Wi-Fi option.
3. Turn ON the Wi-Fi option.
4. Select "Propel Cloud Rider 2.0 HD" from the Wi-Fi list. Wait for your Cloud Rider™ HD 2.0 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. After you install the App correctly and have paired to the drone successfully, you can open the "Propel Cloud Rider 2.0 HD" App icon. Tap "START" on the bottom right hand side of the screen. You should see the real-time video from your Cloud Rider™ HD 2.0 camera.
2. This App also allows you to control your Cloud Rider™ HD 2.0 via your mobile device. To activate the control sticks, tap the "ON" button at the top right hand side of the screen. This will switch the control from your traditional controller to your compatible device. Now click (a) to start the motors. The control sticks will show up in the screen for your fly control and you can now use your device as a traditional controller. Or you can click (a) to auto launch your Cloud Rider™ HD 2.0 in the air and then use your device as a traditional controller. Click this button again, your Cloud Rider™ HD 2.0 will automatically land on the floor.

DETAILED APP OVERVIEW
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
- Settings
- Wi-Fi
- Propel Cloud Rider 2.0 HD

HELP PAGE 1
- Control Sticks
- Wi-Fi

HELP PAGE 2
- Home Page
- Help Page 1

HELP PAGE 3
- Help Page 2
- Help Page 3

If you’re still encountering difficulties please contact our customer service department at 1-866-458-5151(USA).
LEVEL SURFACE CALIBRATION
If the aircraft becomes unstable during flight, you may need to restabilize the internal gyros.
To do this, turn off the controller and disconnect the drone battery. Place the Cloud Rider™ HD 2.0 on a flat level surface. Follow the steps to sync your Cloud Rider™ HD 2.0 (page 4). Now, pull both the joysticks downwards and towards the right at the same time (see diagram S). The lights on the drone will flash a bit and then remain solid. This indicates that your drone has been calibrated.

FLYING ENVIRONMENT
The Cloud Rider™ HD 2.0 is designed for outdoor use only. Pick a day of warm sunny weather with no wind or rain.
WARNING: Do not fly in extreme temperatures or windy conditions as this may affect the performance of your Cloud Rider™ HD 2.0 and cause damage or injury.

FLIGHT PRACTICE
To master flying your aircraft try practicing the exercises 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!

PERFORMING 360º FLIPS
After you have mastered flying the Cloud Rider™ HD 2.0 you are ready to try flips. Once the Cloud Rider™ HD 2.0 is hovering at least 3 meters (about 10 feet) off the ground, trigger the 360º Flip Button (see diagram S) and push the right lever forward slightly and let go. The Cloud Rider™ HD 2.0 will instantly perform a forward flip. To perform a backwards or side flip, trigger the 360º Flip Button and push the right lever in the direction you wish to flip just as you did for the forward flip (see diagram T & U).
NOTE: At speed mode 1 or when the drone battery running low, the 360º Flip function is disabled.

PROBLEM | POSSIBLE REASON | SOLUTION
--- | --- | ---
No Power | 1. Power switched off 2. Polarity is reversed 3. Batteries may be dead | 1. Switch the ON/OFF switch to ON 2. Make sure all batteries are installed correctly (see diagram B) 3. Replace batteries
Remote Not properly Responding | 1. Remote is switched off 2. Cloud Rider™ HD 2.0 battery is not connected 3. Too windy 4. The remote is not synced | 1. Switch the ON/OFF switch to ON 2. Connect the battery to Cloud Rider™ HD 2.0 3. Windy conditions severely impair the operation of the Cloud Rider™ HD 2.0 4. Re-sync the remote
Aircraft Won’t lift off | 1. Rotor speed too slow 2. Aircraft not fully charged | 1. Push throttle lever forward 2. Recharge your Cloud Rider™ HD 2.0
Aircraft Descends Too Fast | 1. Moving the throttle too quickly | 1. Control the throttle slower and smoother
Aircraft Not Responding | 1. Gyroscope not functioning | 1. Turn ON the Cloud Rider™ HD 2.0 and Reset the Gyro (see diagram R)
Less of Cloud Rider™ HD 2.0 Control | 1. Aircraft is out of range of remote | 1. Keep the aircraft within a 150 feet radius of the remote
OPERATING THE CAMERA
You can take in-flight photos or video with your Cloud Rider™ HD 2.0 on-board camera.
1. Ensure that the camera module is securely attached and locked onto the copter, carefully insert a micro SDHC card with a speed class of 6 or higher (included) into the slot on the rear of the camera module. Push in gently until you hear and feel a click. Now you are ready to use the camera.
2. To take still pictures, short press the camera button. The indicating LED light will flash 3 times.
3. To take video footage, hold down the camera button on the remote for a few seconds (see diagram V1).
   You will hear a long beep and the camera indicating LED lights will start flashing. To stop video footage simply short press the button again.
4. After turning the Power Off on the copter, you may now remove the microSDHC card from the Cloud Rider™ HD 2.0 by gently pushing on the back of the card with your thumb until you hear and feel a slight click. You may use the included USB card reader to connect it to a computer and retrieve your pictures and video footage.

REPLACING THE PROPELLER BLADES
NOTE: Always disconnect the battery before replacing the propeller blades.
Your Cloud Rider™ HD 2.0 propeller system is a precision instrument that may need repair or replacement from time to time for optimal flight function. Crash landing from high-speed aerial flights may cause damage to your Cloud Rider™ HD 2.0 propellers.
The Cloud Rider™ HD 2.0 has four propeller blades, two on the front and two on the back. Each one of these propellers is marked with either A or B on the underside.
1. When replacing the propeller blades, carefully unscrew the broken propeller from the rotor shaft.
2. Replace the damaged blade with the correct new blade. Ensure that the identification letter on the broken blade and on the new blade are the same before screwing back on (See diagram W).
   NOTE: The color of the blade does not matter. What matters is the identification letter on the bottom of blade. All “A” blades would perform the same irrespective of color and the same would apply for “B”.

CLOUD RIDER™ HD 2.0 WARNING:
The Cloud Rider™ HD 2.0 is designed for OUTDOOR use only. The Cloud Rider™ HD 2.0 blades revolve at high speed and can cause damage to the user, spectators and animals. Stand away from the Cloud Rider™ HD 2.0 to reduce the risk of getting into the flight path. Warn spectators that you will be flying your Cloud Rider™ HD 2.0 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 Rider™ HD 2.0.
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 take out the battery from the Cloud Rider™ HD 2.0 when not in use.
• The included charger is built specifically for the Cloud Rider™ HD 2.0 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 Rider™ HD 2.0.

BATTERY WARNINGS
RECHARGEABLE BATTERY:
This Cloud Rider™ HD 2.0 uses a Li-Poly rechargeable battery. If battery can no longer be charged, dispose it battery properly according to the local law.

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 Rider™ HD 2.0 with a clean damp cloth.
• Keep away from direct heat or sunlight.
• Do not submerge into water. This can damage the unit beyond repair.
• Parental guidance recommended when installing or replacing the batteries.

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

IC Radiation Exposure Statement:
This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 cm between the radiator and your body.

Déclaration d’exposition aux radiations:
Cet équipement est conforme aux limites d’exposition aux rayonnements IC applicables pour un environnement non contrôlé. Cet équipement doit être installé et utilisé à une distance minimum de 20 cm de votre corps.