

CHUBORY X10 PRO

CHUBORY X10 PRO GPS Drone User Manual

Model: X10 PRO

1. INTRODUCTION

This manual provides essential information for the safe operation and maintenance of your CHUBORY X10 PRO GPS Drone. Please read it thoroughly before operating the drone to ensure proper function and to prevent damage or injury. The CHUBORY X10 PRO is a mid-sized GPS drone designed for adults, featuring a 4K UHD camera, extended flight time, and intelligent flight modes.

2. SAFETY GUIDELINES

Always prioritize safety during drone operation. Failure to follow these guidelines may result in injury, property damage, or legal consequences.

- **Pre-Flight Check:** Before each flight, inspect the drone, remote control, and batteries for any damage. Ensure propellers are securely attached and free from obstructions.
- **Flight Environment:** Operate the drone in open areas, away from people, animals, buildings, and power lines. Avoid flying in strong winds, rain, or other adverse weather conditions.
- **Battery Safety:** Use only original CHUBORY batteries and chargers. Do not overcharge or puncture batteries. Discontinue use if batteries show signs of swelling or damage.
- **Maintain Visual Line of Sight:** Always keep the drone within your visual line of sight during flight.
- **Respect Privacy:** Be mindful of privacy laws and avoid flying over private property or recording individuals without consent.
- **FAA Registration:** The CHUBORY X10 PRO weighs under 0.55lb (250g), which typically exempts it from FAA registration requirements in the United States. However, always check local regulations as rules may vary.

3. PACKAGE CONTENTS

Verify that all items are present in your CHUBORY X10 PRO package:

- CHUBORY X10 PRO Drone
- Remote Control
- 3 x Flight Batteries
- USB Charging Cable
- Spare Propellers
- Screwdriver
- Durable Carrying Case



Image 3.1: Contents of the CHUBORY X10 PRO drone package.

4. SETUP

4.1 Unfolding the Drone

1. Gently unfold the front arms of the drone until they lock into place.
2. Unfold the rear arms.
3. Ensure all arms are fully extended and locked.

4.2 Battery Installation and Charging

1. Insert a fully charged flight battery into the drone's battery compartment until it clicks securely.
2. To charge the flight batteries, connect them to the provided USB charging cable and plug into a suitable USB power source (e.g., computer, USB wall adapter). The charging indicator will show charging status.
3. Charge the remote control battery using its dedicated charging port and cable.

4.3 Propeller Installation

If propellers are not pre-installed or need replacement:

1. Match the propellers with the corresponding motor shafts (usually marked A and B).
2. Securely attach each propeller using the provided screws and screwdriver. Ensure they are tight but do not overtighten.

4.4 Remote Control Setup

1. Install batteries into the remote control (if not rechargeable).
2. Extend the phone holder and securely mount your smartphone.

4.5 App Installation and Connection

1. Download the official CHUBORY drone app from your device's app store.
2. Turn on the drone and then the remote control.
3. Connect your smartphone to the drone's Wi-Fi network (usually named CHUBORY_XXXX).
4. Open the app to establish a connection and view the FPV feed.

4.6 Calibration

Perform compass and gyroscope calibration before the first flight and whenever flying in a new location.

- **Compass Calibration:** Follow the on-screen instructions in the app. Typically involves rotating the drone horizontally and vertically.
- **Gyroscope Calibration:** Place the drone on a flat, level surface and follow the app's instructions to calibrate the gyroscope.

5. OPERATING INSTRUCTIONS

5.1 Pre-Flight Checks

- Ensure batteries are fully charged for both drone and remote.
- Check for clear GPS signal (indicated in the app).
- Verify propellers are secure and undamaged.
- Confirm a stable Wi-Fi connection between the drone and your smartphone.

5.2 Takeoff and Landing

- **One Key Start:** Press the One Key Start button on the remote control or in the app. The drone will automatically take off and hover at a safe altitude.
- **Manual Takeoff:** Push both joysticks down and outwards to start the motors. Then, push the left joystick up to ascend.

- **One Key Landing:** Press the One Key Landing button. The drone will descend and land automatically.
- **Manual Landing:** Slowly pull the left joystick down to descend.

5.3 Basic Flight Controls

Use the remote control joysticks to maneuver the drone:

- **Left Joystick (Throttle/Yaw):** Up/Down for altitude, Left/Right for rotation (yaw).
- **Right Joystick (Pitch/Roll):** Up/Down for forward/backward movement (pitch), Left/Right for sideways movement (roll).

5.4 GPS and Optical Flow Positioning

The X10 PRO utilizes a dual positioning system for stable flight:

- **GPS Positioning:** Provides stable outdoor flight, precise hovering, and enables intelligent flight modes. Ensure a strong GPS signal before outdoor flights.
- **Optical Flow Positioning:** Assists with safer and more stable indoor flight by detecting ground patterns.

5.5 Auto Return Home (RTH)

The drone will automatically return to its takeoff point under the following conditions:

- Low battery.
- Signal loss.
- Manual activation via the One Key Return button.



Image 5.1: The Auto Return Home function ensures the drone returns safely to its starting point.

5.6 Camera Operation

The 4K UHD camera captures high-resolution photos and videos.

- **Photo/Video Capture:** Use the dedicated buttons on the remote control or within the app to take photos (4096x3072) or record videos (2048x1080).
- **Adjustable Lens:** The camera's 100° wide-angle lens can be adjusted remotely by 90° via the remote control or app to capture different perspectives.
- **FPV Transmission:** The 5GHz FPV transmission provides stable and smooth real-time video streaming to your smartphone.



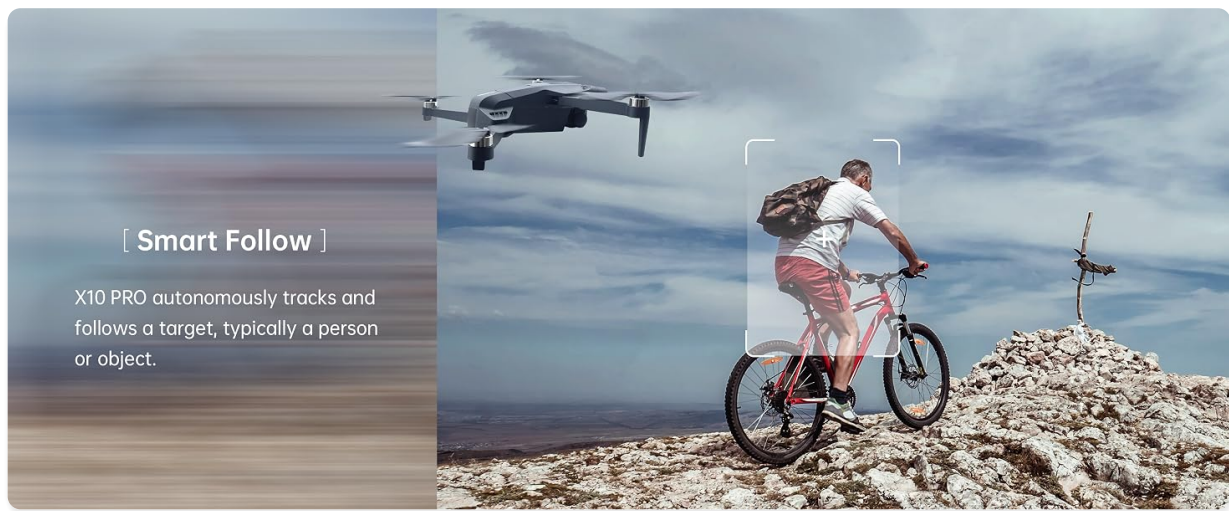
Image 5.2: The 4K UHD camera offers adjustable angles for diverse shots.

6. ADVANCED FEATURES

The CHUBORY X10 PRO includes several intelligent flight modes for enhanced creativity and ease of use.

6.1 Follow Me

In Follow Me mode, the drone will autonomously track and follow a designated target, typically the remote control user, allowing for dynamic hands-free video recording.



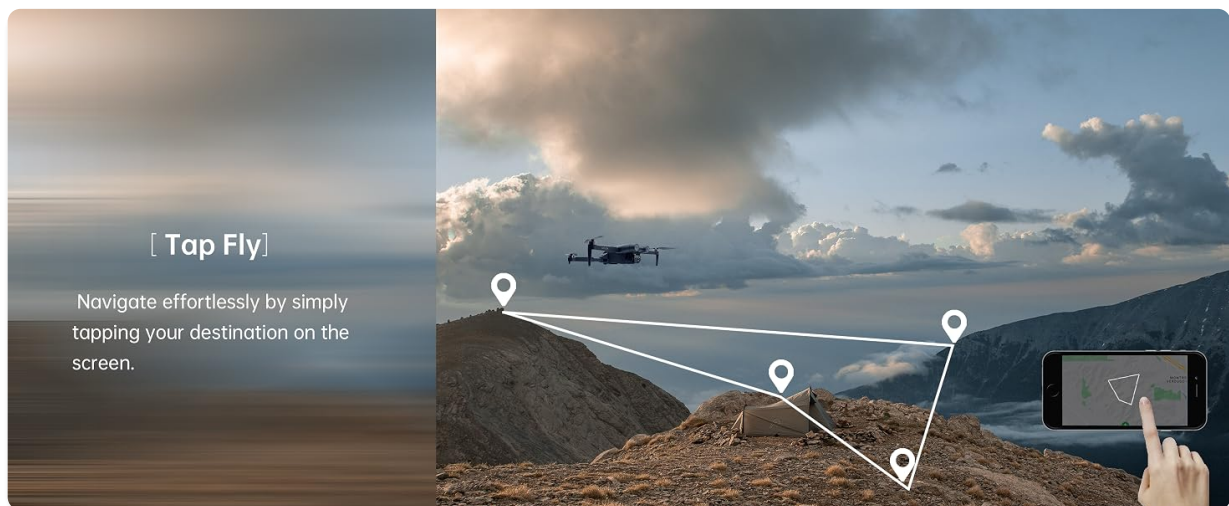
[Smart Follow]

X10 PRO autonomously tracks and follows a target, typically a person or object.

Image 6.1: The Smart Follow feature allows the drone to track a moving subject.

6.2 Tap Fly (Waypoint Flight)

With Tap Fly, you can define a flight path by tapping points on your smartphone screen. The drone will then fly along the specified route automatically.



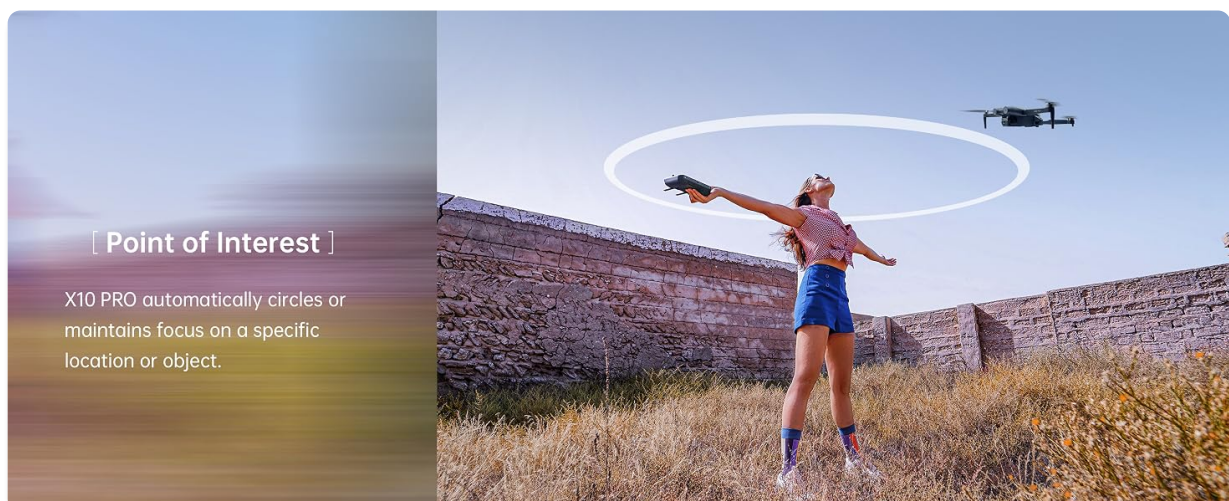
[Tap Fly]

Navigate effortlessly by simply tapping your destination on the screen.

Image 6.2: Tap Fly enables the drone to navigate a pre-defined route.

6.3 Point of Interest (Orbit Flight)

Select a point of interest on the map, and the drone will circle around it at a set radius and altitude, capturing cinematic footage.



[Point of Interest]

X10 PRO automatically circles or maintains focus on a specific location or object.

6.4 Gesture Photography

Perform specific hand gestures in front of the camera to trigger photo or video capture, providing a convenient way to take selfies or group shots.



Image 6.4: Gesture Photography allows for hands-free photo capture.

6.5 Speed Switch

Adjust the drone's flight speed to suit your skill level or the flying conditions. Multiple speed modes are available for beginners and experienced pilots.

6.6 Auto Hover

The drone maintains a stable altitude and position automatically, making it easier to control and capture steady footage.

7. MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your drone.

- **Cleaning:** After each flight, gently wipe the drone body and camera lens with a soft, dry cloth to remove dust and debris. Avoid using harsh chemicals.
- **Propeller Replacement:** Inspect propellers for cracks, bends, or chips. Replace damaged propellers immediately using the provided spare parts and screwdriver.
- **Battery Care:** Store batteries in a cool, dry place. Do not fully discharge batteries for extended periods. Charge them to about 50-60% for long-term storage.
- **Storage:** When not in use, store the folded drone and all accessories in the durable carrying case to protect them from damage.

8. TROUBLESHOOTING

If you encounter issues with your CHUBORY X10 PRO drone, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
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Problem	Possible Cause	Solution
Drone does not respond to controls	Unpaired remote, low battery, calibration issue.	Ensure remote and drone are paired. Charge batteries. Perform compass and gyroscope calibration.
Poor GPS signal or unstable hover	Flying indoors, interference, no clear sky view.	Fly in an open outdoor area with a clear view of the sky. Recalibrate compass.
Short flight time	Battery not fully charged, old battery, aggressive flying.	Ensure batteries are fully charged. Replace old batteries. Fly more conservatively.
Camera not working or poor image quality	SD card issue, app connection problem, dirty lens.	Ensure a compatible Micro SDXC/SDXC card is inserted correctly. Reconnect the app. Clean the camera lens.
Drone drifts during flight	Uncalibrated gyroscope, strong wind.	Perform gyroscope calibration on a flat surface. Avoid flying in strong winds.

9. SPECIFICATIONS

Detailed technical specifications for the CHUBORY X10 PRO GPS Drone:

- **Model Name:** X10 PRO
- **Manufacturer Reference:** X10-231214
- **Product Dimensions:** 13.5 x 8 x 5 cm (folded)
- **Item Weight:** 235 Grams (under 0.55lb)
- **Material Type:** Composite
- **Batteries:** 3 x CR5 Lithium Ion batteries (included)
- **Flight Time:** Up to 90 minutes (with 3 batteries)
- **Maximum Control Range:** 3328 Feet (approx. 1014 meters)
- **Video Capture Resolution:** 4K (4096x3072 photos, 2048x1080 videos)
- **Camera Features:** 100° Wide-angle lens, 90° remotely adjustable
- **FPV Transmission:** 5GHz Wi-Fi
- **Positioning System:** GPS and Optical Flow
- **Supported Image Format:** JPEG
- **Video Capture Format:** MP4
- **Media Type:** Micro SDXC, SDXC (card not included)
- **Skill Level:** Beginner
- **Age Range (Description):** Adult
- **Included Components:** Drone, Remote Control, 3 Batteries, Brushless Motors, 5GHz FPV Transmission, Durable Carrying Case



Image 9.1: Product identification label for the CHUBORY X10 PRO drone.

10. WARRANTY AND SUPPORT

CHUBORY offers a 1-year warranty for replacing damaged parts and a 30-day money-back guarantee for any reason. For any questions or support needs, please contact CHUBORY customer service. Refer to your purchase documentation for specific contact details.