



EPIK

FOLLOW ME BRUSHLESS DRONE WITH GPS AND 5G-WIFI FPV

*Please read this manual carefully before operation and keep it properly for future reference.

Important statement and safety guidelines

Thank you for purchasing JPRO product. Please read this manual carefully before use and retain for future reference.

Packaging has to be kept since it contains important information.

- #### Important statement
- This drone is not a toy, but hobby grade model. It should be assembled and operated properly. Put most emphasis on this drone in safe way. Improper operation may cause injury or property damage.
 - This drone is applicable for pilots aged 14+ who are well skilled flying drone.
 - Users are in full charge of proper operating this drone. Manufacturer and dealers disclaim any responsibility for damages caused by misuse.
 - Keep the smart accessories away from kids to avoid accident.

- #### Flight safety guidelines
- Hobby grade radio control drone is somewhat considered to be the highest danger potential article. Users should fully understand the principle of safety control first. Never fly the drone near airports, power lines or to places where dangerous goods and understand the responsibility of the accident may cause by improper operations.
- Stay away from obstacles, crowds, power lines, trees or waters. Always choose a wide open area for every flight, well away from people and property. Never fly directly over people or animals. Please don't fly in such bad weather conditions as high temperature, snow, strong wind (level 5), rain or fog. Maintain a 20m distance from the drone when taking off and landing.
 - Keep the drone in dry environment. The drone is composed by sophisticated electronic components and mechanical parts. To avoid damage on the mechanical and electronic components, please keep the drone in dry environment and use clean cloth to wipe the surface and keep it clean.
 - Practice flying together with skillful pilot. Beginners are suggested to practice flying together with skillful pilots guidance. Do not fly alone.

- Wear proper operation and safe flight guidelines in mind. Please take a careful look at the manuals before flight for important information of product functions and operation tips, and how to use the accessories. Safe flight always comes first. Stay informed of and abide strictly by relevant local laws and regulations. Keep away from any non-fly zones and respect other people's privacy.
- Safety flying. Please make sure you are in good shape mentally before every flight. Fly the drone as per your flying experience. Never fly under influence of alcohol or drugs. Keep the remote controller at least 20 cm away from your body when using the drone.
- Keep distance from a flying drone. Never use your hands to touch a flying drone under any circumstance. Don't approach and touch a landed drone before its propellers are completely locked.
- Keep away from heat source. The drone is made of metal, fiber, plastic, electronic component and other material. Please keep it away from the heat source to avoid deformation or even damage caused by sun exposure and high temperature.
- Environmental protection requirements. To protect our blue planet, so please recycle the drone as per local laws and regulations.

Product profile

Product configuration

Package includes

DroneX1	Battery charger X1	Undercarriage X4	Battery X1
Propeller changing tool X1	Remote controller X1	Silicone holder X1	USB cable X1
Extra Propeller A/B X2	Charging converter X1	Mobile phone holder X1	

Technical parameter of the drone

DroneX1	250mm	Overall height	95mm
Maximum flying time	1800-1500V	Battery	7.4V 1800mAh 25C
Maximum flying time	about 16-18 minutes	Charging Time	about 5 hours
Gross weight	about 410g (with undercarriage and battery)		

Product assemble

How to attach and detach the propellers

Attach propeller A: Put the propeller mounting "A" into the clockwise rotating motor shaft (the side marked A should be pushed). Then, put the silicone rubber ring into the center bore of the propeller. Last, choose the propeller screw with dot and put into the motor shaft. Tighten the screws by counter-clockwise.

Attach propeller B: Put the propeller mounting "B" into the counter-clockwise rotating motor shaft (the side marked B should be pushed). Then, put the silicone rubber ring into the center bore of the propeller. Last, choose the propeller screw without dot and put into the motor shaft. Tighten the screws by clockwise.

Detach the propellers: Hold the drone brushless motor and unscrew the motor shaft by counter-clockwise (screw with dot should be rotated by clockwise) to take apart the propeller.

Warning: Please install all things step by step as below pictures. Please note that the propellers are distinguished by A & B mark and their rotation directions are distinguished by dot mark. Please pay attention to the propeller direction.

Undercarriage installation

Insert the bulge of the undercarriage into the holes locating at the bottom of the motors and fix the screws by clockwise.

Battery installation

Slide the battery into the battery compartment at the rear of the drone by pushing with appropriate force. The drone will make beep sounds with LED light flashing. Then, turn counter-clockwise of the lock knob locating at the rear of the battery to the "C" position to confirm the battery is installed firmly.

Attention: The battery should be installed firmly, failure to do so may affect the flight safety of your drone. The drone may crash due to power cut during the flight.

How to charge the battery of drone

Step 1: Make sure that your power adapter (SV 1-2A) is connected with the power outlet (indicated as Pic. 1).

Step 2: Connect the battery charger to the power adapter by plug-in the USB cable according (indicated as Pic. 2).

Step 3: Insert the white inductive plug of the charging converter box into the triplex-wire socket of the battery charger (indicated as Pic. 3).

Step 4: Connect the battery to the charging converter and charging is started. Full charging time takes about 5 hours (indicated as Pic. 4).

Warning tips:

- The battery plug should be connected correctly with face up (but not upside down) when plug into the balance charger. Failure to do so will result in battery cannot charge or charge damaged.
- The recommended using IV (1.2A) adapter for charging.
- It is not suggested to charge by computer.
- Never add supervision when the drone is being charged by children.
- Non-rechargeable batteries of the same or equivalent type as recommended are to be used.
- Insert batteries with correct polarity.
- Non-rechargeable batteries are not to be charged; the transmitter need AAA batteries for work.
- Do not mix old and new batteries.
- Do not mix alkaline, standard (carbon zinc), or rechargeable (nickel-cadmium) batteries.
- Rechargeable batteries are only to be charged under adult supervision.
- Enhanced batteries are to be removed from the drone.
- The supply terminals are not to be used for charging.

How to attach and detach the camera

Attach:

Step 1: Insert the white plug of the camera into the socket at the bottom of the drone (indicated as Pic. 1).

Step 2: Press on the buckle and take out the plug of the camera from the center of the drone (indicated as Pic. 2); then turn clockwise 90 degrees of the camera to confirm the camera is installed firmly (indicated as Pic. 3).

Detach:

Step 1: Hold the camera with your thumb and index finger and then turn counter-clockwise 90 degrees (indicated as Pic. 1).

Step 2: Press on the buckle and take out the plug of the camera from the center of the drone (indicated as Pic. 2).

Warning tips:

- Rechargeable batteries are only to be charged under adult supervision.
- Enhanced batteries are to be removed from the drone.
- The supply terminals are not to be used for charging.
- The charging line to be used with the product should be regularly examined for potential hazard, such as damage to the cable or cord, plug, enclosure of other parts and in the event of such damage, the product must not be used until that damage has been properly removed.

Warning tips

Warning tips:

- The camera works only with "JPRO" APP. Please turn to Page 18 for the APP download and installation. Beginners are suggested to press "H" button to learn about the camera operation method.
- Adjust the camera. The camera angle can be adjusted within a 60 degree range by operating the gimbal trimmer to obtain a better aerial experience. When scroll up the gimbal trimmer (upward direction of "A"), the camera will tilt upward to the direction of "A"; when scroll down the gimbal trimmer (downward direction of "B"), the camera will tilt downward to the direction of "B".
- Warning tips: Please adjust the camera to keep a horizontal level by operating the gimbal upward before landing on the ground.

How to remove the battery

Turn clockwise of the lock knob at the rear of the battery to "I" position, then put your thumb and index finger on the designated position and pull backward with appropriate force. The battery will be removed. To avoid slipping, please keep your finger and your drone dry and clean.

Major parts of the remote controller

- One-key unlock
- One-key reset
- One-key landing
- Left stick
- Camera/GPS mode switch
- Power switch
- Power indicator
- One-key return
- Photo/shooting
- Right stick
- Headless mode switch
- Full button
- LED display
- Gimbal trimmer
- Full button

How to connect the signal of the drone with the remote controller

Step 1: Keep pressing the red button "A" and turn on the remote controller (indicated as Pic. 1). The remote controller makes 2 beep sounds, and the indicator light keeps flashing; the remote controller is under signal connection status.

Step 2: Power on the drone (indicated as Pic. 2). The drone will make beep sounds with front and rear lights flashing and will automatically link to the remote controller. Once the remote controller sends out a long beep sound and the indicator light of the remote controller turns from flashing to solid on and the signal icon "all" is shown on the LCD screen, it means that signal connection is successful.

Warning tips:

- Signal connection is done once for all if the remote controller is not linked to other drone.
- Set the connection only one to avoid signal connection error.

Major parts of the drone

- LED light
- Brushless motor
- Undercarriage
- Propeller
- Camera

Remote controller status indicator

No.	Remote controller status	Description
1	Indicator lights flash quickly	The remote controller is under signal connection status.
2	Indicator lights flash slowly with steady beep sound and the battery legend "C" on LCD display flashing	The remote controller is in low voltage status. Please charge full charged battery.
3	Battery legend "C" on LCD display is as shown, with steady beep, beep, beep sound	Battery is running out "C": the drone will return when the altitude is over 100m or the distance is over 200m.
4	Battery legend "D" on LCD display is as shown, with steady long beep sound	Battery is low "D": the drone will return when the altitude is over 150m or the distance is over 150m. If either the flying altitude or flying distance is less than 150m, the drone will not be split.
5	Signal strength on LCD display is less than two grids or no displaying, and the remote controller makes steady beep, beep, beep sound	The distance between drone and remote controller is so long that the signal connects to the remote controller.

LCD screen

Attitude against Home Point, Satellite Amount, Return-to-Home (RTH), Video, Remote Controller Battery Level, GPS Mode, Distance against Home Point, Headless Mode, Photo, Aircraft Battery Level, Signal Strength, Trim Mode.

How to install the battery of remote controller

Open the battery door, install AAA batteries into the battery compartment according to the given polarity and then close the battery compartment.

Warning tips:

- Insert batteries with correct polarity.
- Non-rechargeable batteries are not to be charged; the transmitter need AAA batteries for work.
- Do not mix old and new batteries.
- Do not mix alkaline, standard (carbon zinc), or rechargeable (nickel-cadmium) batteries.
- Rechargeable batteries are only to be charged under adult supervision.
- Enhanced batteries are to be removed from the drone.
- The supply terminals are not to be used for charging.

How to change throttle mode

Step 1: Keep pressing the red button "A" and turn on the remote controller. The remote controller is under signal connection status (indicated as Pic. 1).

Step 2: Keep pressing the RTH button "B" for 3 seconds to choose the throttle control mode (indicated as Pic. 2). The throttle control mode will change accordingly to each press. The mode number is shown on the LCD screen. The throttle control mode is set as Mode 2 by default.

Warning tips:

- Adjust the stick mode of the remote controller, please make sure that the remote controller is under signal connection status (indicator light keep flashing). If not, the stick mode could not be changed.

Remote controller control stick calibration

Step 1: Keep pressing the red button "A" and turn on the remote controller (indicated as Pic. 1).

Step 2: Press the calibration button for 3 seconds, the remote controller will make 3 beep sounds and the indicator light of the remote controller turns from flashing to solid. Maximum rotate both of the left and right control sticks to 2 o'clock (indicated as Pic. 2).

Step 3: Then, again, press the calibration button for 3 seconds (indicated as Pic. 3). The remote controller will send out 3 beep sounds and the indicator light of the remote controller turns from flashing to solid, which means that the control stick calibration is completed.

Warning tips:

- When both left remote controls have been calibrated when manufacturing, remote controller calibration is not required only if pilots find that the remote controller control sticks are not working properly.
- Attention: Please do not power on your drone when calibrate the control stick for the remote controller.

Operate the drone

Flight mode

One-key takeoff/landing:

- When the drone is undocked, short press the "I" button (indicated as below), the drone will automatically takeoff and hover at 1.5m altitude.
- When the drone is flying, short press the "I" button (indicated as below), the drone will automatically land on the ground.

Gesture mode

Short press the "A" button (indicated as below), the drone is in gesture mode that GPS is not used for positioning, and the drone only uses the barometer to maintain altitude. The drone will not fly with precise positioning and hovering. Gesture mode requests pilot with good skill.

Drone status indicator

No.	Indicator status	Meanings
1	Front and rear lights flash yellow rapidly	Drone 2 GHz disconnected.
2	Front and rear lights flash red, green and yellow alternately	Drone is in initialization detection status. Please charge full charged battery.
3	Front light glow solid red, rear light glow solid green	No GPS signal, drone is in gesture mode.
4	Front light glow solid red, rear light glow solid green	Good GPS signal, drone is preparing for GPS mode.
5	Front and rear lights flash green rapidly	Drone is in gyroscope calibration status.
6	Front and rear lights flash yellow alternately	Drone is in compass calibration.
7	Front and rear lights flash green alternately	Drone is in compass vertical calibration.
8	Front light glow solid red, rear light flashes solid blue	Drone is nearly low voltage, 1/4 battery left.
9	Front light glow solid red, rear light flashes red rapidly	Drone is in low voltage, only 1/8 voltage left.
10	Front and rear lights flash twice, stop for 1.5 seconds	Something wrong with the gyroscope.
11	Front and rear lights flash three times, stop for 1.5 seconds	Something wrong with the barometer.
12	Front and rear lights flash three times, stop for 1.5 seconds	Something wrong with the compass.
13	Front and rear lights flash four times, stop for 1.5 seconds	Something wrong with the GPS module.

Drone initialization detection

After signal connection, the drone enters into initialization detection procedure with front and rear lights flashing red, green and yellow alternately. After the drone is set on a flat and still surface for the initialization detection. The drone initialization detection takes about 2 seconds. Once the remote controller sends out "D" sound and the drone front and rear lights flash yellow alternately, initialization detection is completed.

Attention: Make sure that the drone is set on a flat and still surface for the initialization detection.

Drone compass calibration

Attention:

- Compass calibration should be performed after successful drone initialization detection.
- Drone compass calibration should be done for every flight. That is to say, if changing new battery or the battery is recharged, compass calibration should be done again.

Two steps of compass calibration:

Step 1: Vertical calibration

Hold the drone with camera facing up, and rotate it 360 degrees along the central axis for about 3 seconds. The drone front and rear lights will change from flashing to solid on, the compass calibration is successful.

Step 2: Horizontal calibration

Hold the drone with camera facing up, and rotate it 360 degrees along the central axis for about 3 seconds. The drone front and rear lights will change from flashing to solid on, the compass calibration is successful.

Warning tips:

- During the Fail-safe RTH procedure, the drone can not be added obstacles.
- The drone cannot Return-to-Home if the GPS signal is weak (satellite amount is less than 7).
- If there is no signal and the remote controller signal for more than 6 seconds, the drone will Return-to-Home but descend slowly until land on the ground and the drone.

Low voltage warning

When the battery icon "C" is shown on the LCD screen, and the drone front lights glow solid on and the rear lights keep flashing slowly, it means that the battery is nearly low voltage.

When the battery icon "D" is shown on the LCD screen, and the drone front lights glow solid on and the rear lights keep flashing rapidly, it means that the battery is in low voltage.

Signal strength indicator

Signal strength "all" shows the strength of the received signal. The more, the better.

Prepare the flight

Before you take off, check and make sure that

- The drone and the remote controller are fully charged.
- The propellers are installed correctly.
- The motors work normally after unlocking.

Basic flight operation steps

- Connect the remote controller with the drone and then proceed drone initialization detection.
- Drone compass calibration.
- Unlock the drone after the gyro detection of the drone is completed.
- Put the throttle stick to the drone take off, and control the drone flight by left/right stick.
- Put down the throttle to the bottom position and keep for 3 seconds to lock the drone.
- Put all the battery from the drone and then turn off the remote controller; the battery lock.

FPV software download and installation

Where to download "JPRO" APP

- For Apple IOS system, please turn to App store, search "JPRO X3" or scan the QR code at right side to download the software.
- For Android system, please scan the "Google play" or "Android" QR code or search "JPRO X3" in "Google play" to download the software.

(Support IOS 8 version and the above)

How to connect the drone with the remote controller

- Power on the drone, then enter phone settings option. Turn on WiFi, find drone" on the list and connect it. When "J" legend is shown, it means WiFi connecting is successful. Exit settings and turn "JPRO X3" app by mobile device, then select your drone model on the home page.
- Click "GO" to enter the real-time image transmission interface.

Connect WiFi Tap "JPRO X3" App Click "GO"

GPS mode

Slide the button to position "B" (indicated as below), the drone is in GPS mode and can precisely position and hover by the assistance of the GPS module.

Headless mode

Slide the Headless mode switch button to position "I" (indicated as below), the drone enters into headless mode. When the drone is in headless mode, you're required to position the drone in such a way that is facing to your front before the drone takes off. Then, when you take off the drone with the drone pointing to the front, you can enjoy a very easy and enjoyable flying.

Return-To-Home (RTH)

The Return-to-Home (RTH) procedure brings the drone back to the last recorded Home Point. There are 3 types of RTH procedures: smart RTH, fail-safe RTH and low battery RTH. The following sections describe them in detail.

GPS	Description
Home Point	This Home Point is the location of which the drone takes off. A strong GPS signal must be present in the Home Point to activate the Home Point.

Smart RTH

If the GPS signal is available more than 7 satellites is presented and the Home Point is recorded previously, press the button, the drone will fly back to the Home Point. During the smart RTH, you can use the remote controller to guide the drone around obstacles. You can press the RTH button again to use the RTH procedure and again control of the drone.

Fail-safe RTH

If the GPS signal is available (more than 7 satellites is presented) and the Home Point is recorded previously, the Fail-safe RTH will be triggered if the remote controller signal is lost for more than 6 seconds, the flight-control system will control the drone automatically and the drone will automatically fly back to the last recorded Home Point. You can regain control of the drone by press the RTH button if the remote controller signal is recovered.

Warning tips:

- During the Fail-safe RTH procedure, the drone can not be added obstacles.
- The drone cannot Return-to-Home if the GPS signal is weak (satellite amount is less than 7).
- If there is no signal and the remote controller signal for more than 6 seconds, the drone will Return-to-Home but descend slowly until land on the ground and the drone.

Low voltage RTH

When the drone rear lights flash red slowly, battery icon "C" is shown on the LCD screen, and steady beep, beep, beep, beep sound is heard. At the moment, as long as the drone flying altitude is over 100 meters or the flying distance is over 300 meters, the drone will automatically fly back to the Home Point.

When the drone rear lights flash red slowly, battery icon "D" is shown on the LCD screen, and steady beep, beep, beep sound is heard. At the moment, as long as the drone flying altitude is over 150 meters or the flying distance is over 300 meters, the drone will automatically land on the ground.

Attention: When drone is in low voltage RTH status you can not regain control of the drone by pressing the RTH button.

Photo/Video

Short press the button indicated as below and the camera icon "all" on the LCD screen flashes once, the camera takes one photo. Long press the same button, the camera icon "all" on the LCD screen flashes slowly, the camera is taking video. Long press again will exit shooting.

Attention: When the drone is not treated with TP and/or in the TP mode is malfunction, photos and videos taking can not be done by pressing the button of the remote controller, but by the icon on the APP interface.

Low voltage warning

When the battery icon "C" is shown on the LCD screen, and the drone front lights glow solid on and the rear lights keep flashing slowly, it means that the battery is nearly low voltage.

When the battery icon "D" is shown on the LCD screen, and the drone front lights glow solid on and the rear lights keep flashing rapidly, it means that the battery is in low voltage.

Signal strength indicator

Signal strength "all" shows the strength of the received signal. The more, the better.

Prepare the flight

Before you take off, check and make sure that

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- The propellers are installed correctly.
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- Connect the remote controller with the drone and then proceed drone initialization detection.
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(Support IOS 8 version and the above)

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- Power on the drone, then enter phone settings option. Turn on WiFi, find drone" on the list and connect it. When "J" legend is shown, it means WiFi connecting is successful. Exit settings and turn "JPRO X3" app by mobile device, then select your drone model on the home page.
- Click "GO" to enter the real-time image transmission interface.

Connect WiFi Tap "JPRO X3" App Click "GO"

Photos and video saving feature:

- If the camera is without TF card, videos and photos will be saved at the APP.
- If the camera is with TF card, videos and photos will be saved at the TF card.
- Videos and photos in the TF card can be downloaded to the APP.

Attention: Please make sure that your mobile device supports 5G WIFI before linking JPRO to your device.

5G WIFI Channel Selection Guide

The product uses 5G WIFI and works at channels 36 and 149. Factory default is set at the 36 channel. Corresponding country/area available channel lists are as follows:

Channel	Frequency (MHz)	USA	Europe	Japan	Singapore	China	Taiwan	South Korea
36	5180	Available	Available	Available	Available	Available	Available	Available
149	5745	Available	Disable	Disable	Available	Available	Available	Available

How to adjust channel

Connect the drone to the remote controller, and keep pressing the "H" button on the remote controller for about 8 seconds, the remote controller makes "Di Di Di Di" sound. Then, remain pressing the "H" button for another 3 seconds, power off your drone. Turn on your drone again, it has changed to new channel already.

Product components

Basic parts

Upper cover, Main frame, Flight controller board, Undercarriage, Transparent front lamp cover, Front/Rear light bar, ESC, GPS module, Clockwise motor, Counter-clockwise motor, Charging converter, Battery, Screws pack, Lamp cover of the front and rear light, Interleaving paper, Vibration-absorbed ball.

Trouble shooting

No.	Phenomenon	Solution
1	The lights are flashing quickly.	The gyro of the drone is under signal detecting condition, set the drone to take off.
2	The drone can't take off because the signal is off.	Put the drone on a flat surface or a ground and proceed the signal off take-off procedure.
3	The drone is shaking freely.	The motor and propellers are not of standard, change the propellers.
4	The battery fails to unlock and the rear lights flash quickly.	The battery is under low power status, please charge the battery lock.

Optional accessories

Silicone rubber ring, Mobile phone holder, Remote controller, 1080P 5G WIFI camera.

Note:

- Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
- The 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 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.

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