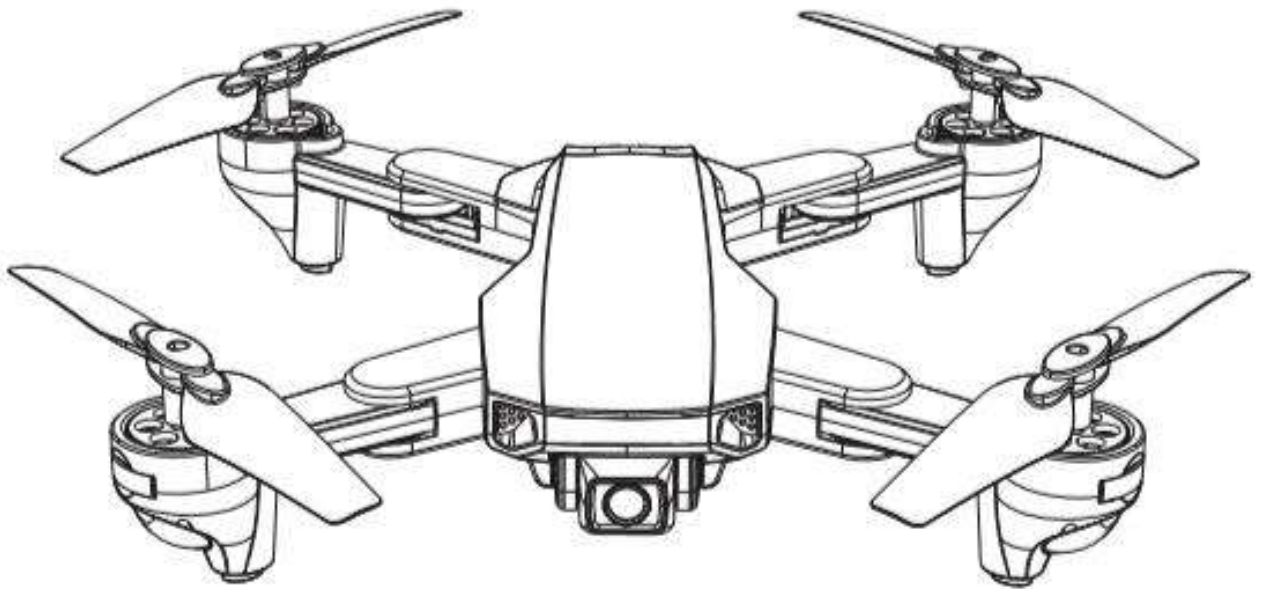# USER MANUAL

FOLDING DRONE WITH HD CAMERA AND APP CONTROL

PFBD302

Thank you for choosing ProFlight.

Please read this user manual before using this drone and keep it safe for future reference.

CONTENTS

SAFETY WARNINGS

- Read the entire instruction manual and familiarise yourself with the product and all its features before operating.
- Failure to operate the product correctly can result in damage to the product, surroundings or even serious injury.
- This product is not a toy and must be operated with caution and common sense. It requires some basic mechanical knowledge.
- This product is not intended for use by children without direct adult supervision.
- This manual contains instructions for safety, operation and maintenance. It is essential to read and follow all the instructions and warnings in this manual prior to assembly, setup or use in order to operate correctly and avoid damage or serious injury.
- The drone is not intended for use by children under 14 years of age. This is not a toy.
- Always operate your drone in open spaces away from vehicles, buildings, traffic and people.
- Always keep out of reach of children.
- Avoid exposure to water as moisture can cause damage to the electronics.
- Never operate your drone when the controller or drone batteries are low.
- The battery charger included with the drone has been designed to safely charge the battery. Do not use other chargers.
- Mishandling of batteries can result in a fire, personal injury, and /or property damage.
- By handling, charging or using the included Li-Po battery you assume all risks associated with lithium batteries.
- If at any time the battery begins to balloon or swell, discontinue use immediately. If charging or discharging, discontinue and disconnect. Continuing to use, charge or discharge a battery that is ballooning or swelling can result in fire.
- Always store the battery at room temperature in a dry area for best results.
- Do not store the battery or drone in a car or direct sunlight. If stored in a hot environment, the battery can be damaged or even catch fire.
- Never use any other type of battery charger other than the one supplied with the drone. Failure to charge the battery with a compatible charger may cause fire resulting in personal injury and/or property damage.
- Never exceed the recommended charge rate.
- When a Li-Po battery is discharged below 3.7V, the battery may be damaged and may no longer accept a charge. The drone will automatically land and become inactive when the battery approaches this level, this is to protect the battery.
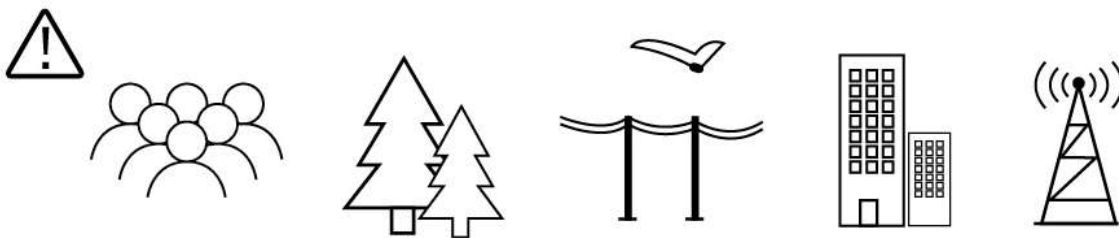
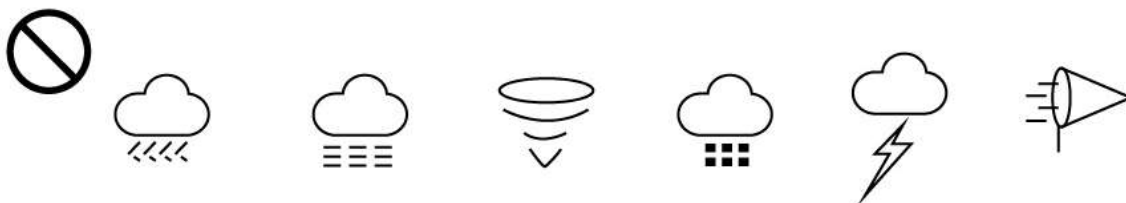# SAFETY PRECAUTIONS
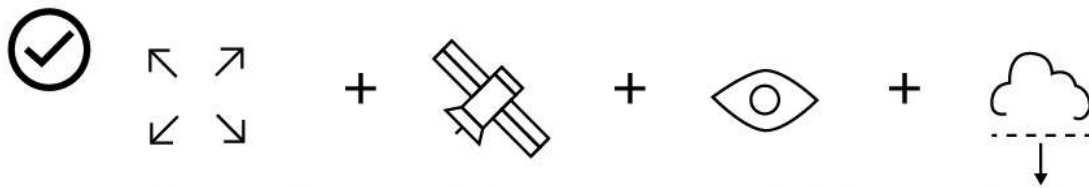
Only fly in an open space	Ensure good GPS signal	Keep within line of sight	Fly at a height below 80m

When flying ensure that the drone is kept away from other people, trees, electric wires, buildings, airports or signal transmitting tower etc.

Ensure that the weather conditions are suitable for flying. Do not fly the drone during snow, rain, fog, thunder or in windy conditions.

DO NOT touch the rotating blades during operation. They can cause injury or damage to property

No-fly zones must be observed. It is the user's responsibility to ensure that the drone is operated legally and safely.

NOTE: Due to continuous product development and improvement some images may differ from the final product.

PREPARING FOR FIRST FLIGHT

1. Fully read and understand the safety warnings, and precautions.
2. Make sure both the transmitter and aircraft batteries are sufficiently charged.
3. Find a suitable place to fly the aircraft, away from people, buildings and vehicles.
4. Make sure the throttle stick is centred before turning on the transmitter.

BATTERY CHARGING

Use only the supplied USB Li-Po charger to charge your battery.

Remove the battery from the battery compartment on the base of the aircraft. Slide the battery out to remove it.

Plug the charger into a USB socket before attaching the battery. When the battery is charging the LED on the charger will flash green. When the battery is fully charged the LED will be a solid green. Charging should take around 180 minutes. DO NOT leave the battery unattended whilst charging.
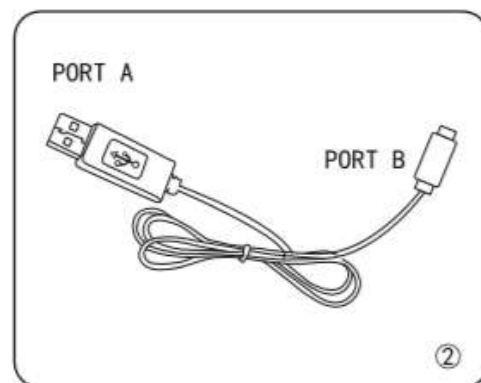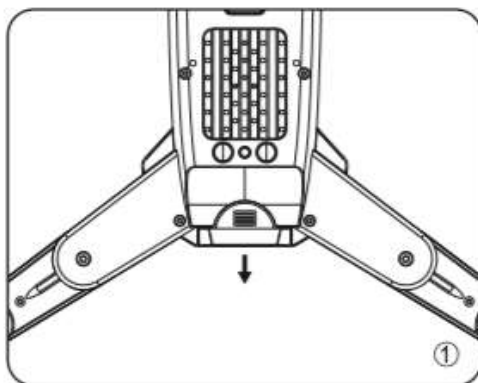
WARNINGS:

- DO NOT use other USB cables. They may lead to incorrect charging, and could cause damage or present a safety risk.
- When reinserting the battery, ensure that it locks fully into place.

MOBILE PHONE HOLDER
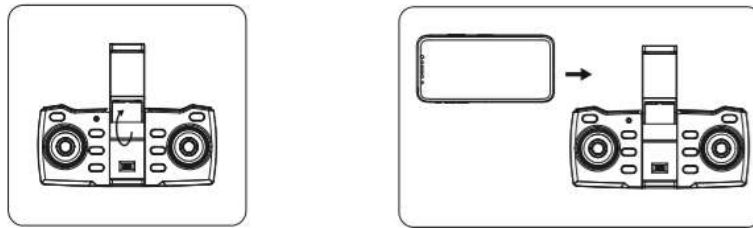
Open the phone holder and place the phone securely onto the controller.

DRONE DIAGRAM

A
(Clockwise)

Cover

B
(Anticlockwise)

B
(Anticlockwise)

A
(Clockwise)

Foot

Camera

Arm
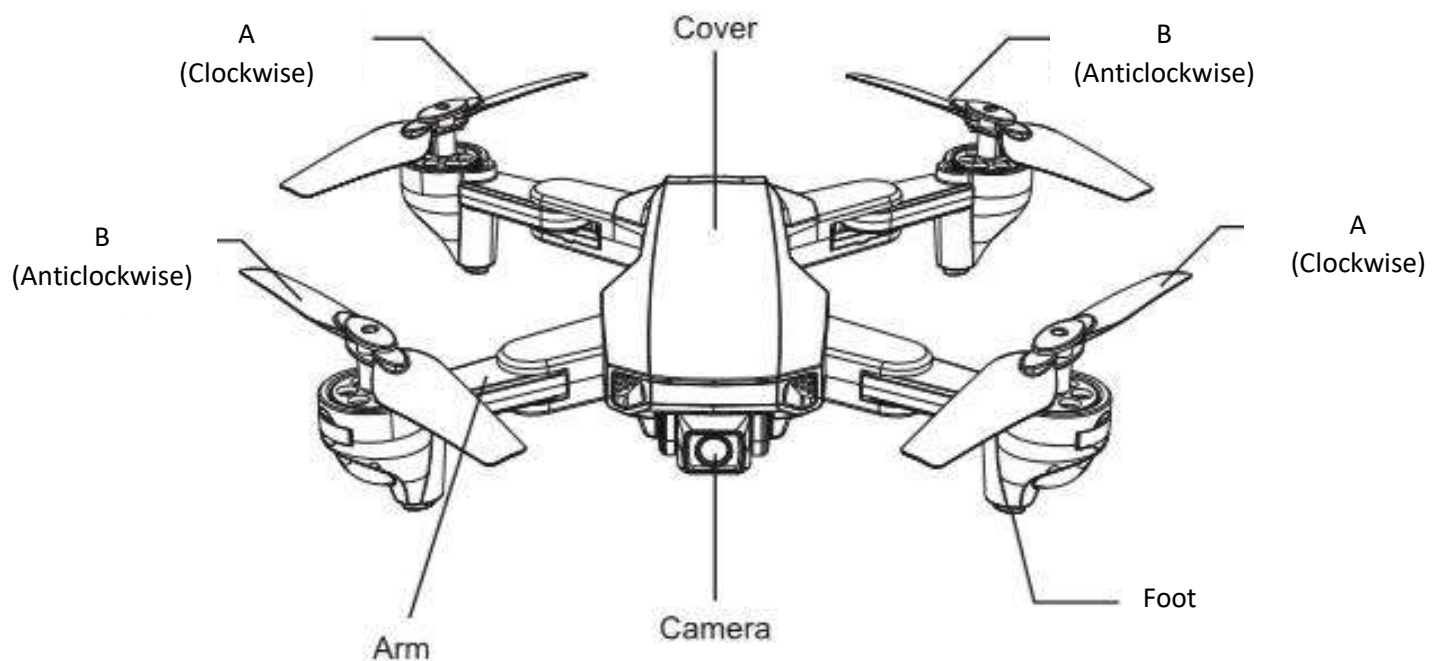
FOLDING THE ARMS

1. Fold the front arms backwards until they sit close to the body of the drone.
2. Fold the rear arm down until it is parallel to the body.
   DO NOT FORCE THE ARMS AWAY FROM THE BODY AS THIS MAY RESULT IN DAMAGE.
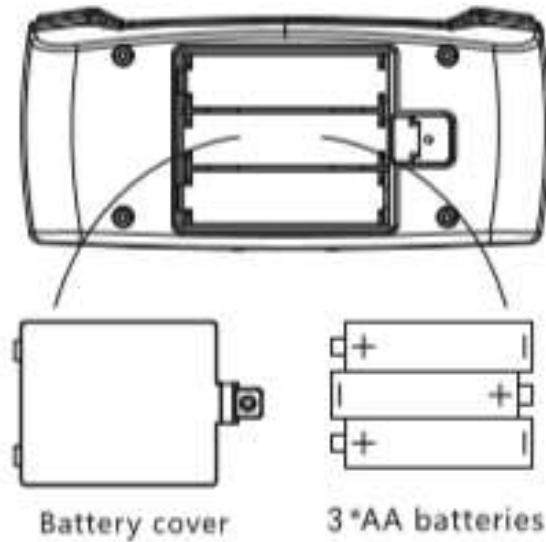
REPLACEMENT OF THE PROPELLERS
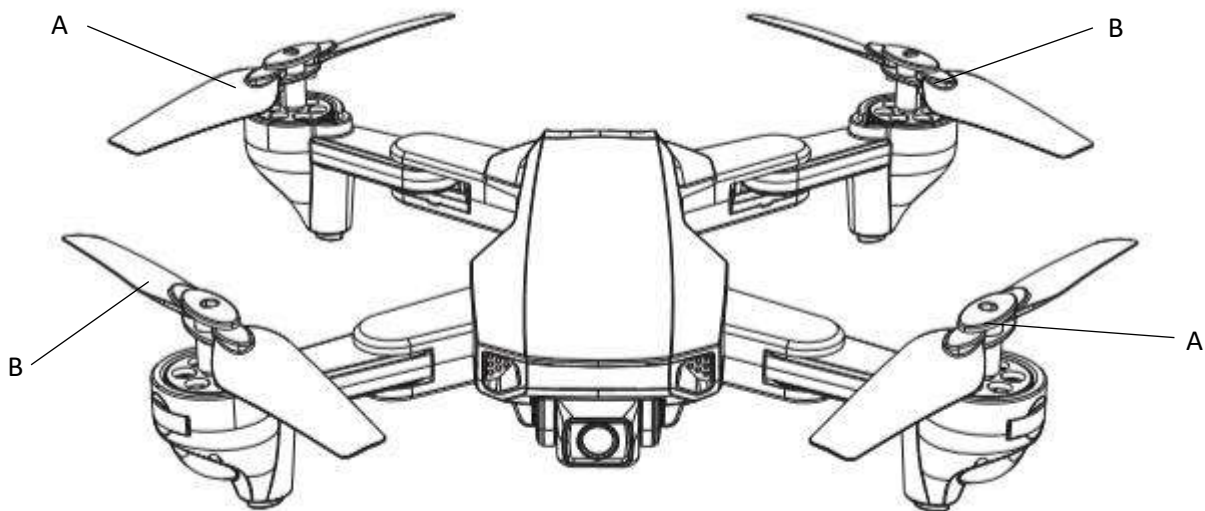
Should one of the fitted propellers become damaged, it can be replaced, by removing the screw from the top of the propeller before sliding the propeller off the motor shaft. Refitting is the reversal of removal.
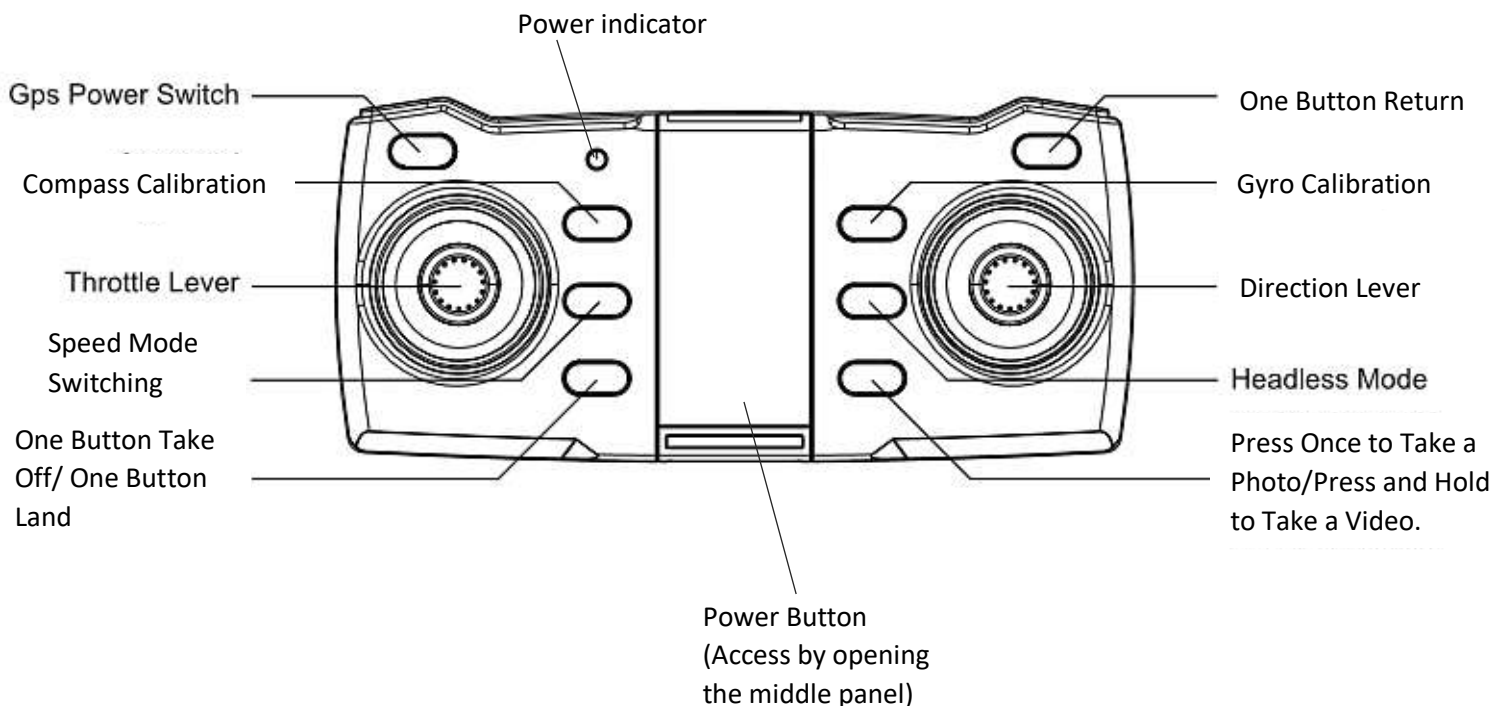
It is important for the correct blade to be placed on the correct motor or the aircraft will not fly correctly. Each blade is marked with an A or B on the top to indicate which motor it corresponds to.

INSTALLING THE CONTROLLER BATTERIES

Unclip the battery covers from the rear of the controller and insert 3 x AA batteries, making sure the correct polarity is followed. Once the batteries are correctly installed, the battery cover must be re-fitted. (Batteries not supplied)

Battery cover   3 *AA batteries

CONTROLLER DIAGRAM

Power indicator

Gps Power Switch   One Button Return

Compass Calibration   Gyro Calibration

Throttle Lever   Direction Lever

Speed Mode
Switching   Headless Mode

One Button Take
Off/ One Button   Press Once to Take a
Land   Photo/Press and Hold
                                                   to Take a Video.

Power Button
(Access by opening
the middle panel)

MAIN FUNCTIONS

CONTROLLER FUNCTIONS

SPEED MODE
Press speed to change the flight mode between low speed (Beginner) and high speed (Advanced).

PHOTO
Press once to take a photo, press and hold to start recording a video.

COMPASS CORRECTION
Press the compass correction button and the drone LED will flash quickly. Pick up the drone and hold it around 1 meter from the ground and with the base facing the ground. Turn the drone clockwise 3 times, the controller will emit a sound. Then hold the drone vertically with the camera facing the ground and turn 3 times clockwise again, the controller will emit a long sound indicating compass correction has been successful.

GYROSCOPIC CORRECTION
Place the drone on a flat surface. Press the gyroscopic calibration button and the drone will flash quickly. This indicates that calibration has been successful. You can now search for GPS signals by pressing the GPS button.

GPS SIGNAL
Indicates the current flight mode and the number of satellites;
When flashing indicates that the GPS signal is insufficient and that the no return, follow, surround and pointing flight functions are disabled.
When the light is steady it indicates that the current mode is GPS.

POWER
Turn the controller ON/OFF

HEADLESS MODE
The drone can be made to fly in Headless mode by pressing the headless flight button. This will make the aircraft fly without a front or rear. It will fly in the orientation of the pilot. It does not matter which direction the drone is facing in headless mode.
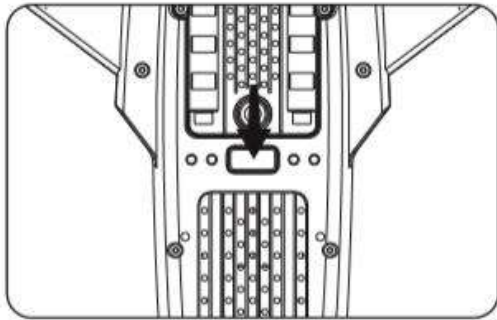
ONE BUTTON TAKE OFF/ONE BUTTON LAND
Press once and the aircraft will take off from the ground. Press and hold and the aircraft will begin descending.

ONE BUTTON RETURN
Press the return button and the controller will emit a sound. The aircraft will return home regardless of the current direction. Press again to cancel the function.

PREPARING FOR FLIGHT

Power on the drone by pressing the power button on the underside of the aircraft. Then press and hold the power button for 3 seconds, the light will flash for around 3 seconds.

Turn on the controller by pressing the power button, and the indicator light shown will appear. When the light on the front of the aircraft comes on and the light on the rear slowly flashes, the controller has been successfully connected.
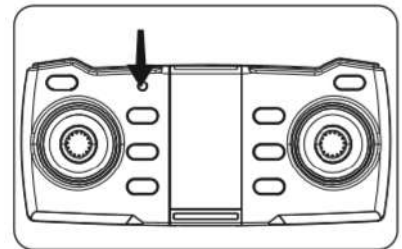

COMPASS CORRECTION
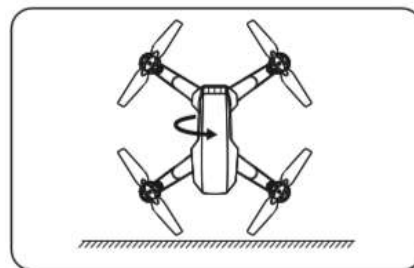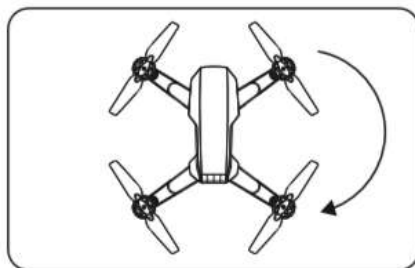
Press and hold the geomagnetic correction button until you hear a bleep and the front and rear lights of the drone flash. Pick up the drone with the base facing the ground and rotate until you hear a bleep. The front lights will flash and the rear light will stay solid. Face the drone's camera to the ground and rotate until a bleep is heard, when the rear light flashes compass correction is successful.
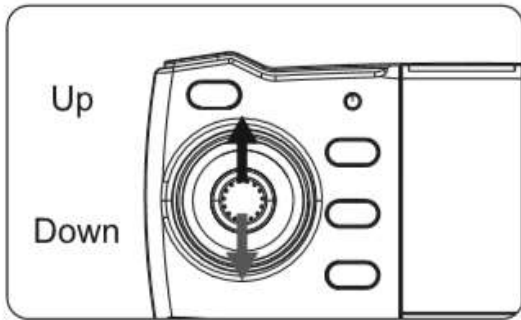
Push the throttle lever and the direction lever in the direction shown to unlock the aircraft for take-off.
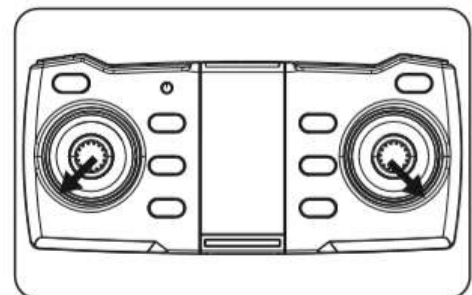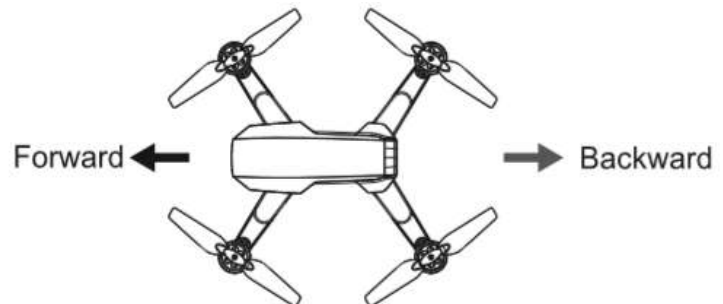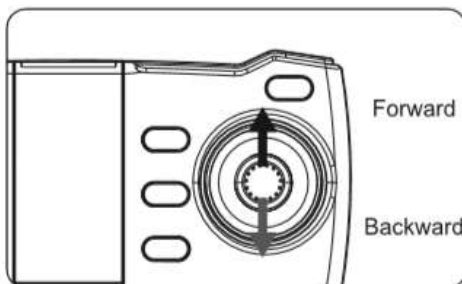
HOW TO CONTROL YOUR DRONE

Ascending and Descending

Push the throttle lever up and the drone will gain height. Push the throttle lever down and the drone will descend.
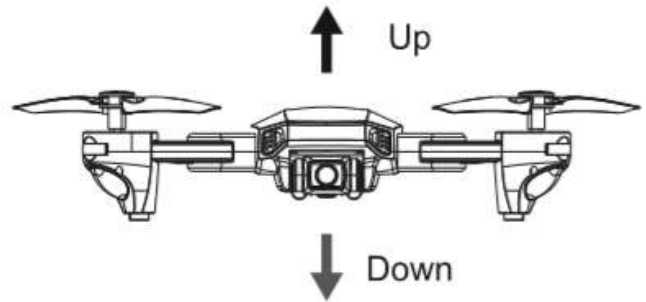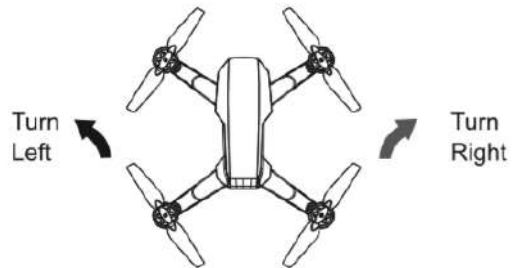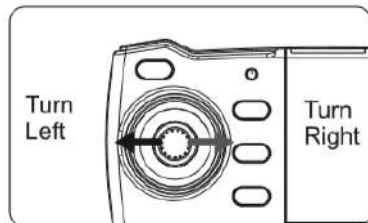

Moving Forward and Backwards

Push the direction lever up to move the drone forward and down to move the drone backwards.
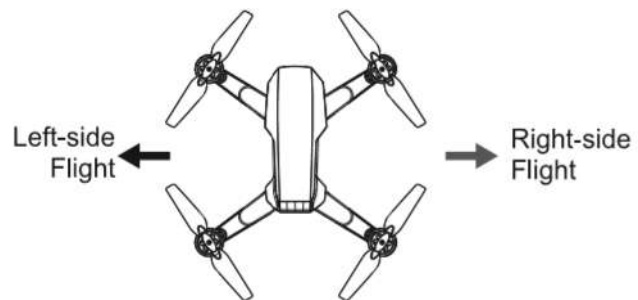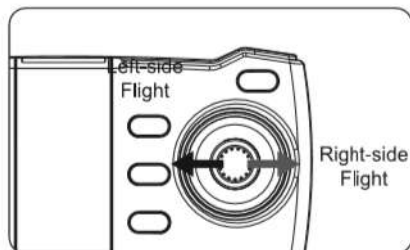
Left and Right Turn

Push the throttle to the left or right and the drone will turn in the corresponding direction.

Turn
Left

Turn
Right

Turn
Left

Turn
Right

Left and Right Flying

Push the direction lever left or right and the drone will fly in the corresponding direction.

Left-side
Flight

Right-side
Flight

Left-side
Flight

Right-side
Flight

Wi-Fi AND PHONE CONNECTION

Install the GPS SKY app on your device by scanning the relevant QR code below.
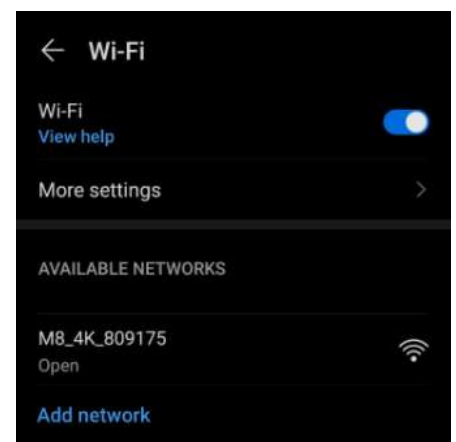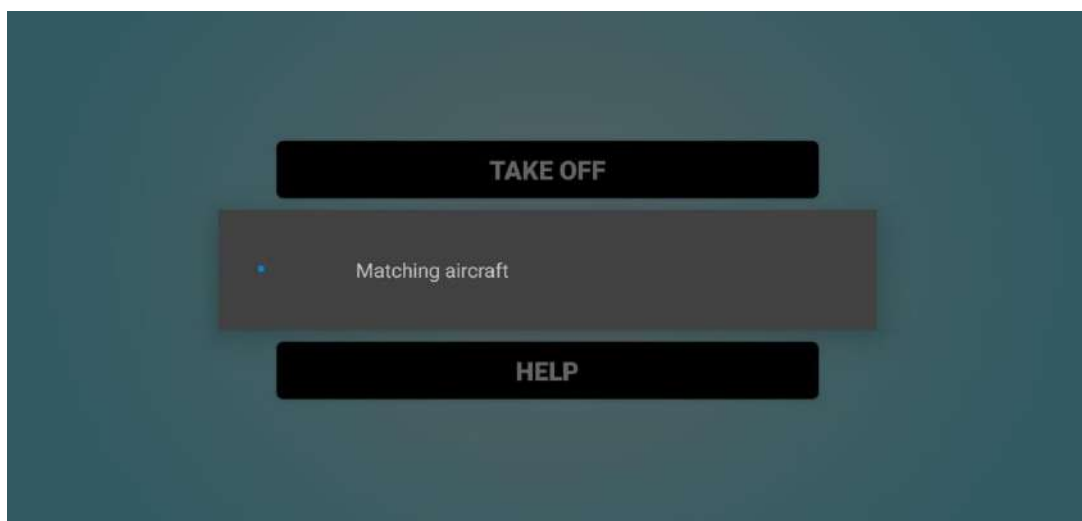

ANDROID

IOS

After you have installed the app turn on the drone and open your phones wi-fi settings, the drone will have created a hotspot. Connect to the drone's hotspot and then open the app.

In the app you will be greeted with the homepage. From here you access: Media/ Help and the Take Off screen.
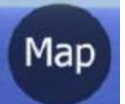
CONTROLLING THE DRONE VIA THE APP

Once connected, press take off to access the controls. For ease of use we recommend you mount your phone in the provided phone holder.

	EXIT	Press this button to exit the control menu and return to the homepage.
	FLIGHT MODE	Chose a flight mode. (Fly to waypoint/Follow/GPS)
	FOLDER	Access your saved pictures and videos
	MV	Press to enter the MV interface. From here you can select music and add filters to your videos and pictures.
	TAKE OFF/LAND	Press take off and the drone will take off and maintain a steady hover. Press again to land.
	AUTOMATIC RETURN	Press to return the drone, to your current position.

	TAKE PHOTO	Press once to take a picture.
	TAKE VIDEO	Press once to start video capture. Press again to cancel and save video.
	TURN THE ON SCREEN JOYSTICKS ON	Press once to turn on the on-screen joysticks. Press again to turn them off. The on-screen joysticks work in the same way as the controller joysticks.
	MAP	Press once to access the map, this will show the drones current location, it must be on and connected to the app.
	CHANGE ANGLE	Press to change the cameras viewing angle.
	ZOOM	Press to change the magnification of the on-screen feed.
	SETTINGS	Press to enter the drone's settings. From this screen you can: Alter video settings, map settings, and control settings.
	GESTURE CONTROL	Use gestures to take pictures and video.

TOP DISPLAY

Altitude:0.0m	Speed V:0.0m		N:0.0	roll:0	0%		
Distance:0.0m	Speed H:0.0m	0/s	E:0.0 Optical flow...	pitch:0 yaw:0	HD		
1	2	3	4	5	6	7	8
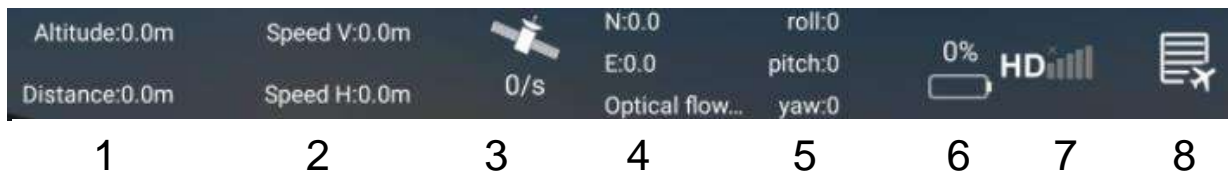
1. **ALTITUDE AND DISTANCE:** Displays the current flight altitude and distance travelled.

2. **SPEED:** Shows how fast the drone is travelling vertically and horizontally.

3. **SATELLITES**: Shows the number of GPS satellites in the drone's range.

4. **LONGITUDE/LATITUDE:** Shows the longitude and latitude position of the aircraft in its current flight.

5. **ROLL/PITCH/YAW:** Shows the angles of the aircraft's current movements.

6. **BATTERY LEVEL:** Shows the current battery level of the drone.

(1) 2-4 bars indicate normal power, and the return, follow, surround and pointing flight functions can be normally operated.

(2) 1 bar indicates that the aircraft is currently low on battery, and the aircraft will perform the automatic return function; there is no following, surround and pointing flight function while the battery is low.

7. **SIGNAL:** Shows the drones connection status.

8. **FLIGHT RECORD:** Press to enter the flight records of all your flights. They are organised by date.

WARNING:
- Always calibrate the drone before controlling using the APP.
- Ensure you understand the operating instructions provided before attempting to fly.
- Android device operating system must be 5.0 or higher.
- If you experience problems with the image, the drone is either too far away or there is too much interference in the area. Try moving to a place with less interference.
- Ensure all safety warnings in the front of the manual are adhered to.

TROUBLESHOOTING

	Problem	Cause	Solution
1	The lights on the aircraft are flashing but it does not respond to the control	1. The aircraft and transmitter are not connected. 2. Insufficient battery power.	1. Repeat the connection procedure. 2. Recharge the battery.
2	The aircraft blades turn but it will not take off	1. Insufficient battery power. 2. The blades are distorted. 3. Take off button not pressed.	1. Recharge the battery. 2. Replace the blades. 3. Press the take-off button.
3	The aircraft shakes in flight	The blades are damaged/distorted	Replace the blades.
4	The aircraft won't fly using the App.	1. Aircraft not connected to App. 2. Connection not done in correct order. 3. Main controller is turned on.	1. Aircraft cannot fly on App when main controller is turned on. Turn off the controller, reset aircraft, app and WiFi to reconnect to App
5	Camera not working in App	1. Aircraft not connected to App.	1. Reconnect using the instructions on page 14

TECHNICAL SPECIFICATION

Product Size (cm)	19x13x6CM
Carton Size	24x23x8
Box Contents	1 x Drone 1 x 2.4G Controller 4X Spare Blades 1 X Manual 1 X Battery 1X Screwdriver 1*USB Charger
Flying time (On Full Charge)	15 minutes (approx.)
Controller Batteries	3 AA (Not Included)
RC Distance	400 meters (approx.)
Wi-Fi Distance	200 meters (approx.)
Drone Battery	7.4 V 1100mAH
Weight	214g

SUPPORT

Disposal: Do not dispose this product as unsorted municipal waste. Collection of such waste must be handled separately as special treatment is necessary

Recycling facilities are now available for all customers at which you can deposit your old electrical products. Customers will be able to take any old electrical equipment to participating civic amenity sites run by their local councils. Please remember that this equipment will be further handled during the recycling process, so please be considerate when depositing your equipment. Please contact the local council for details of your local household waste recycling centres.

UK Support

http://www.proflightuk.co.uk/support/
If you have been through the troubleshooting, and the unit is failing to operate, our service line can be contacted on: 0330 390 3062

Office hours: 9AM - 5PM Monday to Friday
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West Yorkshire, HX5 9DA