SKYFLOW

4K
VIDEO

**ULTRA HD
RECORDING**

18
MIN

**TOTAL FLIGHT
TIME**

5"
INCH

**TOUCHSCREEN
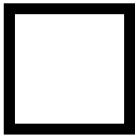DISPLAY**

3-AXIS

**IMAGE STABILIZATION
3-AXIS GIMBOL**
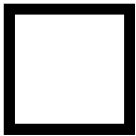
M

**BRUSHLESS
MOTORS**

DRCSCX2
USER'S MANUAL

PRE-FLIGHT CHECKLIST

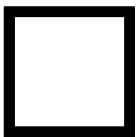Before attempting to fly your drone, make sure that you have done all of the following:

☐ **Read and Follow All Safety Precautions**
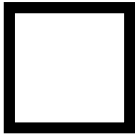See page 3 of this manual for more information.

☐ **Charge Your Remote and Drone Battery**
See pages 6 of this manual for more information.

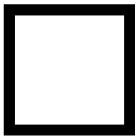☐ **Checked That the Propellers are Firmly Attached**
See page 21 of this manual for more information.

☐ **Connected Your Drone with the Remote Control**
See page 7 of this manual for more information.

☐ **Calibrated Your Drone's GPS**
See pages 7-8 of this manual for more information.

☐ **Calibrated Your Drone's Gyroscope**
See page 8 of this manual for more information.

☐ **Prepare Your Drone For Take-off**
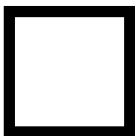See page 11 of this manual for more information.

⚠ **WARNING!**
Failure to calibrate your drone before flight can lead to severe flight malfunctions and potential damage to your drone. Always fly carefully!

1. Introduction

Thank you for purchasing the Skyflow GPS Foldable Video Drone, item DRCSCX2. The included remote controlled aircraft is designed specifically for outdoor flying. In order to get the best possible results, please read this user's manual carefully before using. In addition, be sure to keep this manual in a safe place for future reference.

IMPORTANT NOTE: FAA REGISTRATION

Owners of a drone that weighs more than 0.55 lbs. (250 g) and less than 55 lbs. (25 kg) must register their UAS online at the FAA website, https://www.faa.gov/uas/registration.

After receiving the certificate of registration, a unique FAA registration number will be provided and it must be marked on the Drone by any means, such as permanent marker, label, engraving, or other means, as long as the number is readily accessible and maintained in a condition that is readable and legible upon close visual inspection.

2. Features

-4K Ultra HD
-18 Minutes flight time
-Slide in battery with USB charging port
-Memory card included (Installed directly on Drone)
-Variable speed settings
-Rechargeable 7.4V Lithium Polymer Battery

3. Package Contents

-Quadcopter Foldable Drone
-Icon Coded Controller
-Additional Propeller Blades
-USB Charging Cable
-Carry Case
-Screwdriver
-User's Manual With Warranty Information

4. Important Safety Precautions

When using your Skyflow Drone, basic safety precautions should always be followed, including the following:
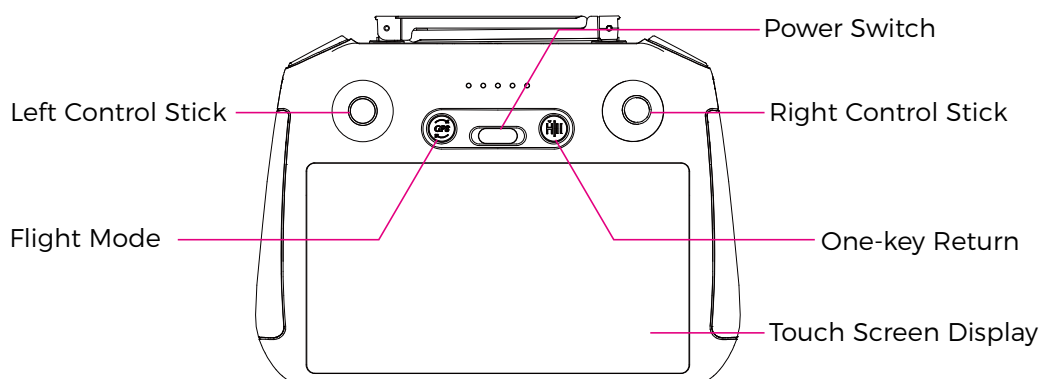
1. Do not allow children or the infirm to operate your drone without adult supervision. For safety purposes, only allow experienced pilots aged 14 and up fly your drone.
2. To avoid choking hazards, keep all small parts and pieces away from children.
3. Your drone is not a toy. Makes sure that it is properly assembled before use, and operated safely.
4. Keep your drone away from obstacles, crowds, power lines, trees, and bodies of water while it is in flight. Always fly your drone in a wide open spacious environment. Avoid flying your drone directly above people or animals. Maintain a 7ft (2m) distance from the aircraft when taking off and landing.
5. Only use your drone in a dry environment. Your drone is composed of sophisticated electronic components and parts. To avoid damage to your drone, please keep your drone away from water and moisture. Use a soft dry cloth to wipe the surface of your drone and keep it clean.
6. Beginner and novice level pilots should practice flying with experienced pilots until suitably experienced in flight.
7. To ensure safety, only use the included parts when using your drones.
8. Make sure to keep your ears and eyes protected when using your drone. When your drone's blades are spinning, make sure to keep people and objects at a distance from rotating parts.
9. Keep your drone away from excessive heat or flames, especially while charging the battery.
10. Please recycle or dispose of your drone properly based on the laws and rules of your municipality. Contact local recycling facilities and/or the manufacturer of your drone for further information.
11. Your drone is specifically designed for outdoor flying. Do not attempt to fly your drone or calibrate it indoors.
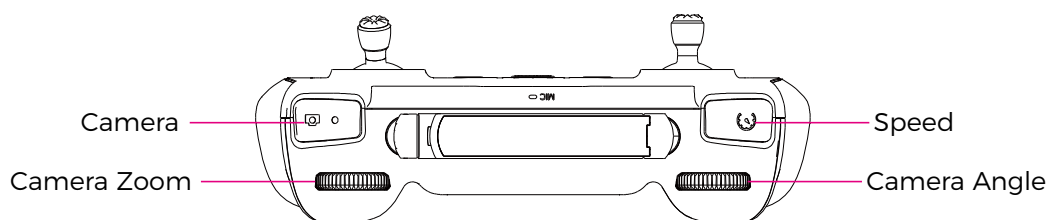
BATTERY SAFETY WARNING
--When handled incorrectly, lithium polymer batteries can be dangerous and can potentially harm and do damage to persons or property. The manufacturer of your drone does not accept any liability for damage to persons or property if the battery is not correctly charged, stored or protected.
--Always unwind all cables before charging.
--Do not over charge the battery. Once the charging process is completed, remove the battery from the charger as soon as possible.
--Only use the included or replacement Sky Tracker charging cable and batteries.
--You must charge the lithium polymer battery in a safe area away from flammable materials.
--The battery is only to be charged under adult supervision, do not leave charging batteries unattended. You should always remain in constant observation to monitor the charging process and react immediately to any potential problems that may occur.
--Do not charge the battery in temperatures hotter than 40˚C or colder than 0˚C.
--Do not cover the batteries when charging. Do not leave batteries in direct sunlight.
--After each flight and/or crash, please check the battery for any damage or swelling. If the battery is damaged, leaking, making noise, punctured or malformed in any way DO NOT attempt to use it. Please dispose of the battery immediately and safely.
--Do not bend, puncture, crush or scratch the drone's battery. Do not store batteries in your pockets, on your person or in extreme temperatures.
--After flying/discharging the battery you must allow it to cool to ambient room temperature before recharging.
--If at any time during the charge or discharge process the battery begins to balloon or swell, discontinue charging or discharging immediately. Quickly and safely disconnect the battery, then place it in a safe, open area away from flammable materials to observe it for at least 15 minutes. Continuing to charge or discharge a battery that has begun to balloon or swell can result in a fire. A battery that has ballooned or swollen even a small amount must be removed from service completely.
--Never plug in a battery and leave it to charge unattended overnight.
--Non-compliance with the above warnings may result in the failure of the battery.

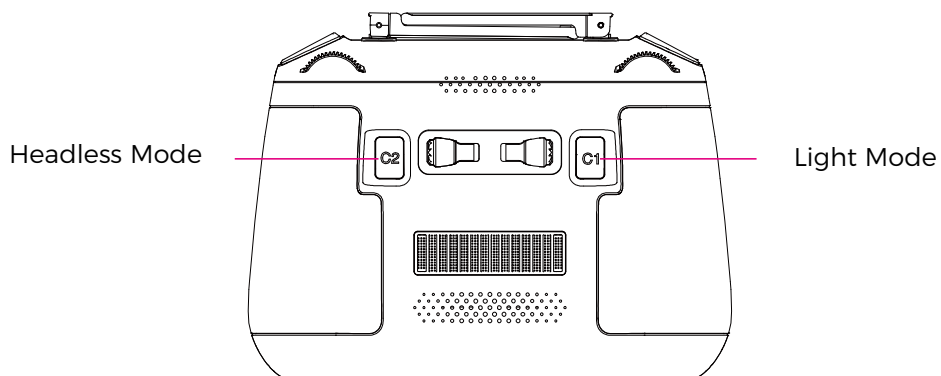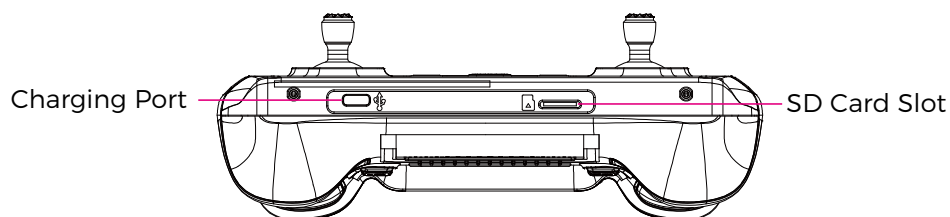# 5. A Quick Look at Your Remote Control

Front

Power Switch

Left Control Stick

Right Control Stick

Flight Mode

One-key Return

Touch Screen Display

Top

Camera

Speed

Camera Zoom

Camera Angle

Back

Headless Mode
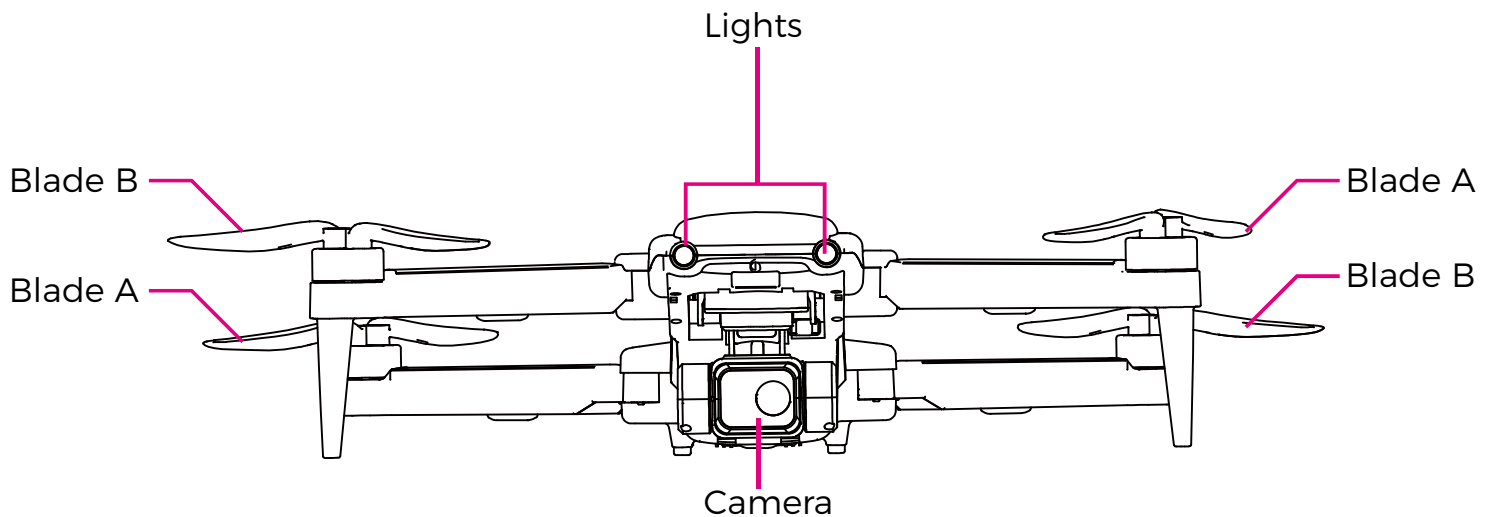
Light Mode

Bottom

Charging Port

SD Card Slot

NOTE: Before using the remote, insert a Memory Card to take photos and record videos. Your drone comes with Memory Card in drone's SD Card Slot. It's recommended to keep insert Memory Card in the drone's SD Card Slot to take higher resolution photo and video.
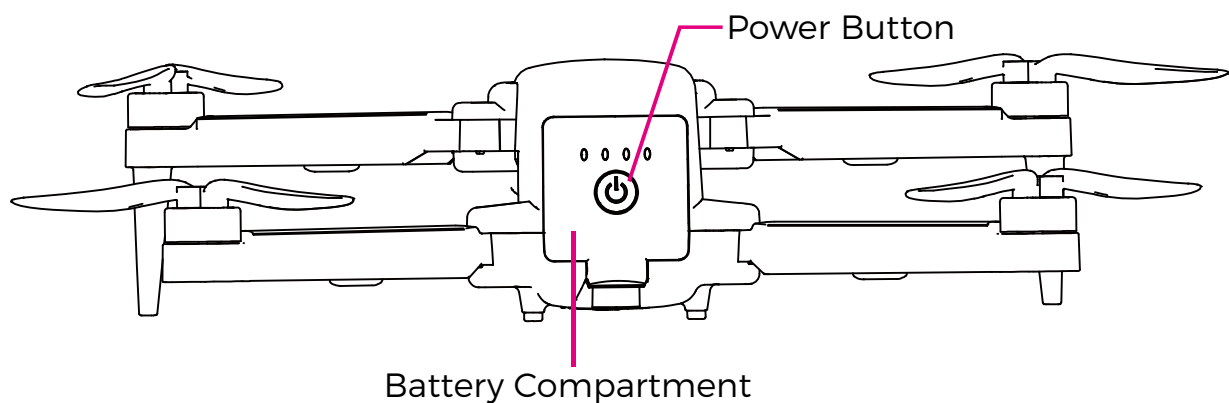
6. A Quick Look at Your Drone

Forward View

Lights

Blade B

Blade A

Blade A

Blade B

Camera

Note: When replacing the rotor blades, the A/B labels should correspond to the diagram above.

Battery Compartment
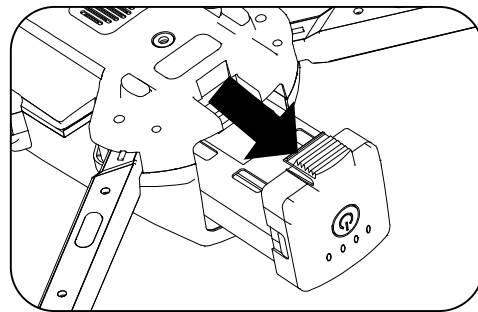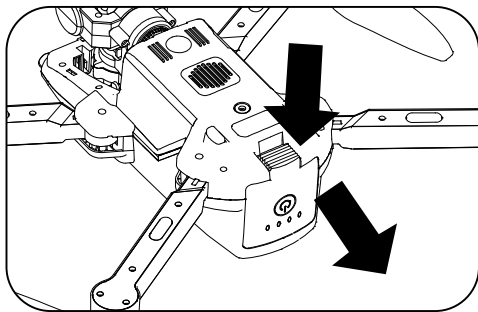
Power Button

Battery Compartment

7. Charging Your Remote

Connect one end of the included charging cable to your remote's charging port. Connect the other end of the charging cable to a suitable USB charging adapter (not included). Make sure to plug the USB power adapter into a wall outlet in your home.

When charging, the charging indicator on the remote controller is flashing, and it will be steady when the battery is fully charged. Charging time is about 180mins.
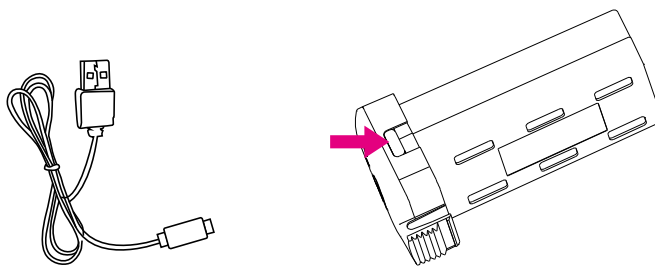
8. Charging Your Drone

Press and hold the buckle of drone's battery, and take out the battery

Connect one end of the included charging cable to the battery's charging port. Then plug the charger into a USB charging adapter (not included). For best results, use a 5V, 1-2A charger to charge the battery.

While charging, an LED light on the battery will illuminate. This light will turn off once charging is complete. Charging typically takes approximately about 180mins

Once fully charged, insert the battery back into the drone battery slot.

⚠ WARNING:

1. The charging plug can overheat if overcharged. If this occurs unplug the charger immediately to avoid damaging the battery.
2. Do not leave the battery unattended when charging.
3. Do not use other chargers other than the one supplied.
4. Wait at least 30 minutes after using your drone before charging the battery. The battery's temperature can become elevated during use and charging it immediately could damage the battery.
5. Remove the drone's battery when the drone is not in use. Store it in a cool dry place.
6. Do not leave the battery exposed to excessive heat, flame or fire.
7. Do not short circuit the battery. Do not leave the battery in contact with any metal parts.

9. Connecting Your Drone & Remote

To connect your drone to the remote controller, press and hold the Power ON/OFF button located on the back of the drone until the drone makes an audible sound. The lights on the drone will flash quickly, indicating that the drone is powered on.
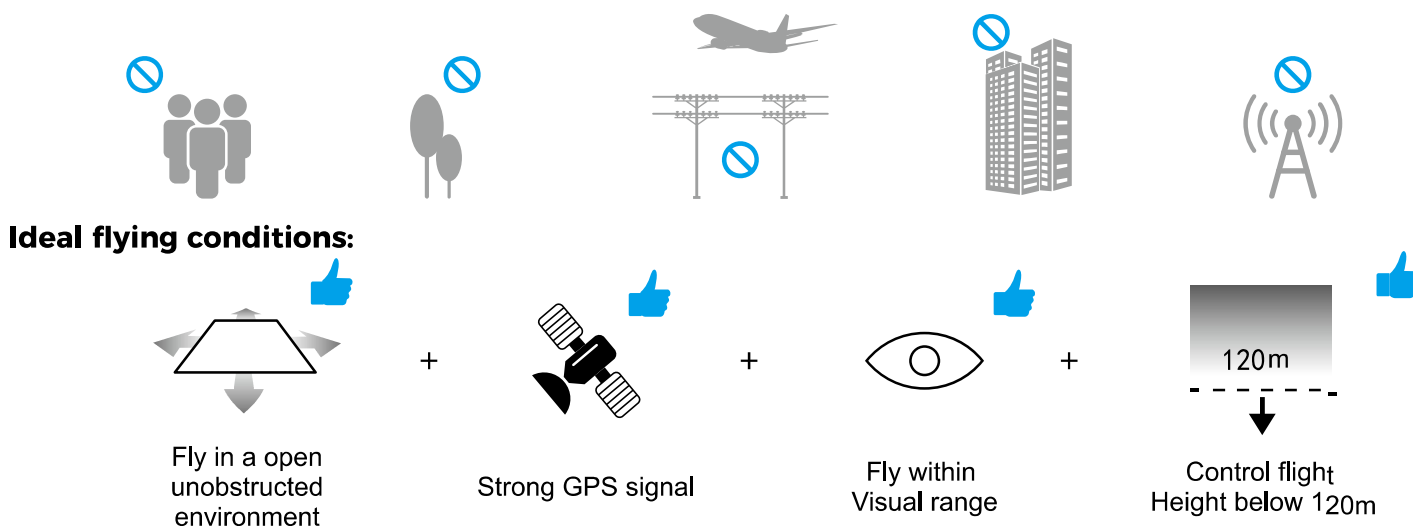To turn on the remote controller, set the Power Switch on the remote to the right position. The remote control makes an audible sound.
Once the drone light emitting from the light indicator on your remote controller is steady, the lights at the front of the drone will stabilize while the rear lights will continue to flash. The pairing with your drone is successful. Press "Go Fly" on your touch screen remote controller, you can see Real-time FPV screen.
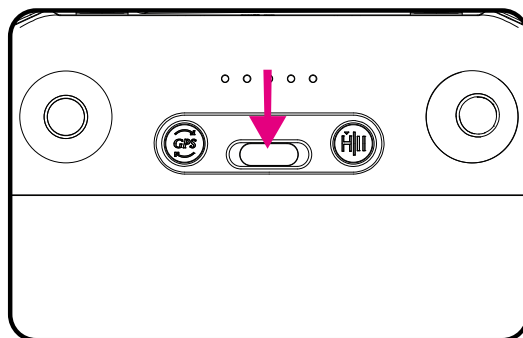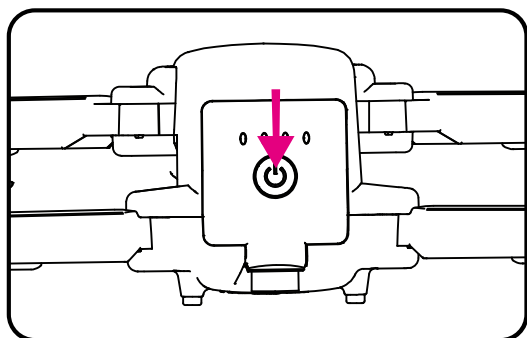
Notes: Drone and remote controller will pair automatically. It will take about 20 seconds for remote controller to pair with your drone.

10. Calibrating Your Drone (Preparing for Flight)

Before preparing your drone for flight, first make sure that you have a suitable environment for flight. Avoid flying in rain or snow, or in windy conditions. Stay away from people, trees, power lines, tall buildings, airports and signal towers. **Your drone is specifically designed for outdoor flying. Do not attempt to fly your drone or calibrate it indoors.**

Ideal flying conditions:

| Fly in a open unobstructed environment | + | Strong GPS signal | + | Fly within Visual range | + | Control flight Height below 120m |

Set the Power Switch to the right position to power on your remote controller. You will hear a beep when it powers on. To power on your drone, press and hold the power button. The LED lights on the drone's arms flash rapidly. Once the light emitting from the light indicator on your remote controller is steady, the lights at the front of the drone will stabilize while the rear lights will continue to flash. The pairing with your drone is successful. Press "Go Fly" on your touch screen remote controller, you can see Real-time FPV screen. After your drone and remote controller are powered on and paired sucessfully, follow the calibration steps on the next page to prepare your drone for flight.

11. Geomagnetic Calibration

The drone's geomagnetic calibration allows it to be tracked over GPS. Before starting, ensure your drone is placed on a flat, stable surface.

-To begin the geomagnetic calibration process, press the Flight Mode button (GPS button) on your controller. Your drone's front and rear lights will start to flash.
Note: Default Flight Mode is GPS Mode, when in GPS Mode please make sure to go through the geomagnetic calibration process each time you fly your drone (once the drone is turned on)!
-Rotate your drone horizontally, spinning it in a clockwise direction continuously until the remote control makes an audible sound.
-Turn the head of your drone downwards and rotate it clockwise vertically, spinning it continuously until the lights on the front of your drone stop flashing and shine steadily, and the lights on the back of your drone flash slowly. Calibration is complete. After 1-3mins, once the drone locates a GPS signal, the rear lights will stop flashing and shine steadily.
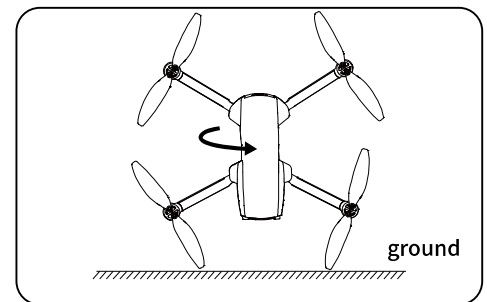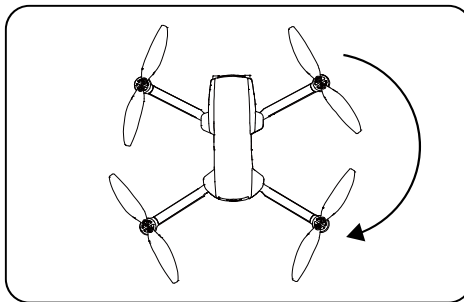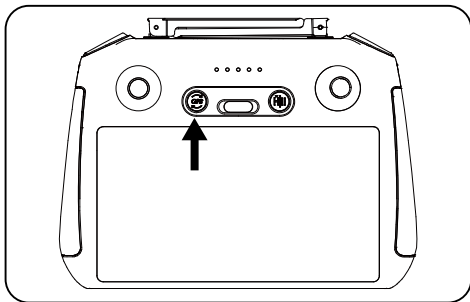
WARNING
-When flying your drone in GPS mode, make sure you are in a wide-open space.
-Do not calibrate your drone in areas with strong magnetic fields.
-Do not carry ferromagnetic materials such as keys or cell phones when calibrating.
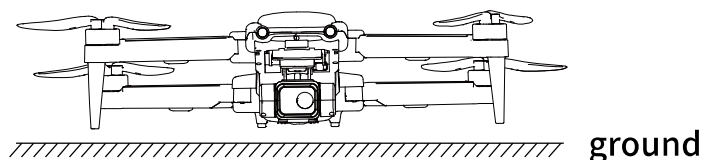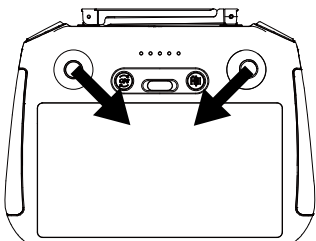-Do not calibrate near large sheets of metal.

ground

Calibrating Your Drone's Internal Gyroscope

Calibrate your drone's internal gyroscope to ensure smooth and balanced flight. Before starting, ensure your drone is placed on a flat, stable surface.
Push the left throttle stick to the bottom right and push the right direction stick to the bottom left simultaneously. Drone's lights start to flash rapidly and then stop flashing immediately, means, Gyroscope calibration is complete.

Note: If your drone takes off and flies without a corresponding remote control command, you may need to retry calibrating the gyroscope.

ground

12. Flight Modes

Outdoor Flight: GPS Mode

After successfully connecting to the remote controller and make sure your drone is at an open outdoor field, press and hold the Flight Mode Button and set it to GPS mode, you can see the Flight Mode is on your remote controller's screen. Follow the Geomsgnetic Calibration steps carefully, when the satellite's signal symbols reach 10PCS, means a GPS signal is obtained, the lights will stabilize. It's ready to fly up.

If the drone's lights slowly flash, it is likely due to GPS signal interference caused by obstructing objects in the current flying environment. To remedy this, relocate your drone to an environment where it can fly unobstructed. Establishing a connection can take a few minutes.

NOTE: Default Flight Mode is GPS Mode. You don't need to switch Flight Mode if GPS is on.
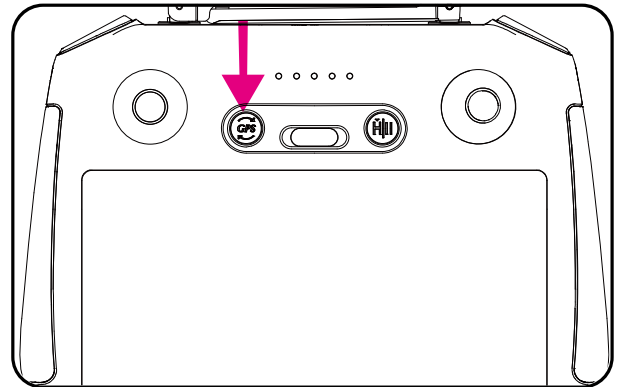
Indoor and Closed Spaces Flight: Optical Flow Mode

When flying your drone indoors or in closed spaces, set the flight mode to optical flow mode. When you hear a single beep from the remote controller, the aircraft has entered indoor optical flow mode.

To re-enter GPS mode for outdoor flight, press and hold the flight mode button. The remote controller will emit two beeps to indicate that the aircraft has entered outdoor GPS mode.

Flight Mode Button
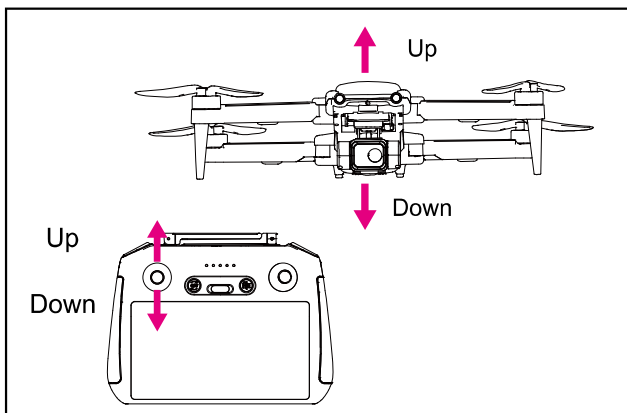Press and hold to change Flight Mode.

13. Flying Your Drone
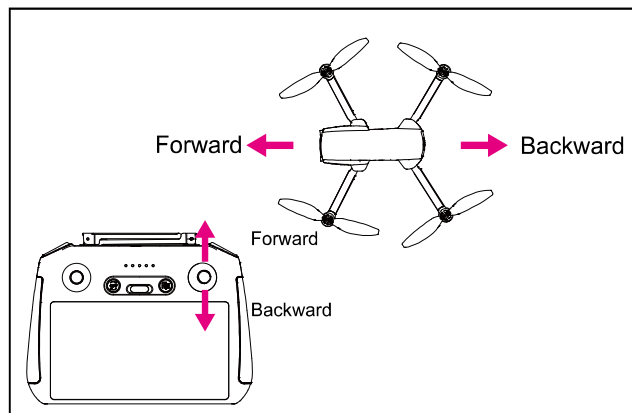
Pre-Flight Preparation

If you have never used a drone before and you are not an experienced pilot, make sure to read these instructions carefully before flying and get familiar with all of the controls. If necessary, read through these instructions many times and practice handling the remote control until you feel completely comfortable and ready.

1. Place your drone in a clear, open field. Make sure that it is resting on a secure, flat surface.
2. Practice using the throttle stick and the directional control stick (see below).
3. By simulating the use of the remote and both sticks, you will grow more comfortable with the natural motions required during flight and you will learn to react more rapidly to unexpected circumstances.

UP AND DOWN

Up

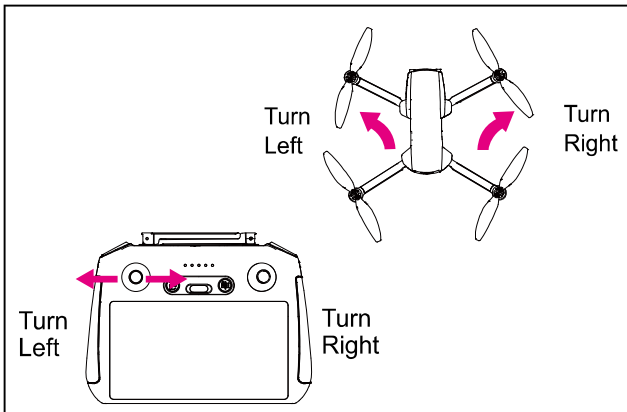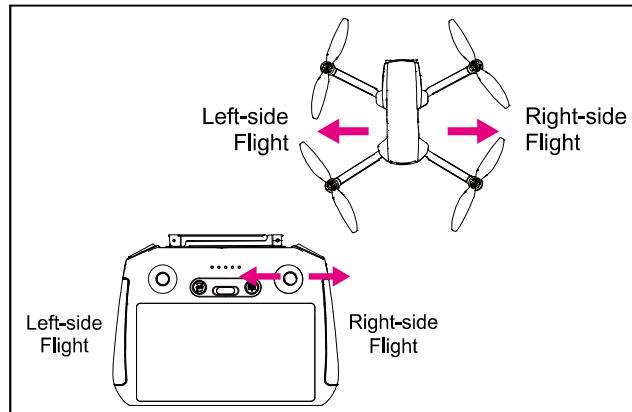Down

Up

Down

FORWARD AND BACKWARD

Forward

Backward

Forward

Backward

LEFT AND RIGHT TURN

Turn Left

Turn Right

Turn Left

Turn Right

LEFT AND RIGHT SHIFT

Left-side Flight

Right-side Flight

Left-side Flight

Right-side Flight
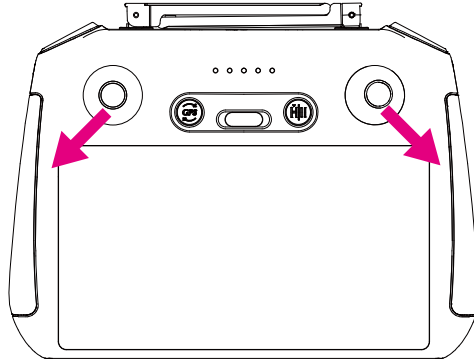
14. Take-off & Landing

Manual Take-Off

Once the remote is paired and your drone is calibrated, the drone will automatically search for a GPS signal. Once sufficient GPS connection is achieved, (the lights on the drone will be steady. Push the left throttle stick to the bottom left and push the right direction stick to the bottom right simultaneously (⟋⟍). The blades will start to rotate. Push the throttle up, the drone will begin to take off.
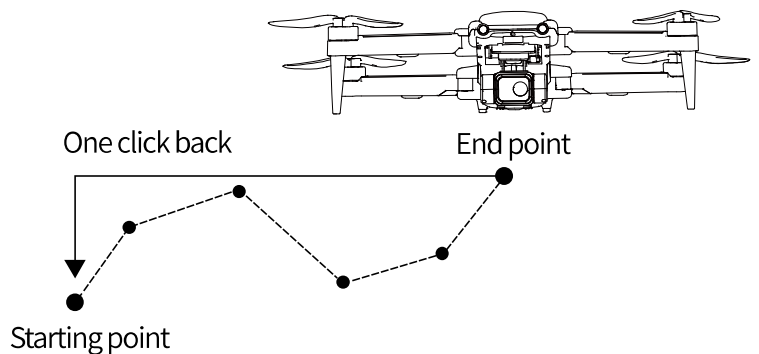
NOTE: Make sure your drone is properly calibrated before attempting to fly.

15. One Key Return

Press the One-key Return button to start a return flight. The drone will travel back and land on the take-off point.

PLEASE NOTE: It is important that the GPS is correctly calibrated before launch and before activating one-key return. Failing to do so may result in the drone flying away when one-key return is attempted.

One click back   End point

Starting point

16. Speed Adjustment

Your drone has three speed modes: high speed, medium speed, and low speed.
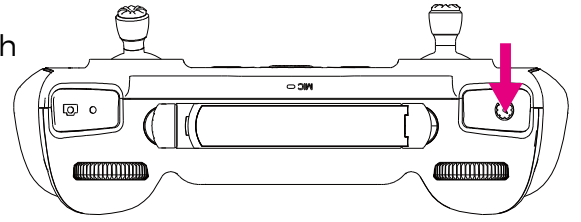To switch between speed modes, press the speed button. Each mode will be identifiable by a series of beeps.

Low Speed Mode: One Beep
Medium Speed Mode: Two Beeps
High Speed Mode: Three Beeps

17. Emergency Landing

When the drone battery is low, its LED lights will slowly flash. You should immediately fly the drone back to your location when the battery is low. Otherwise, the drone will begin flying automatically towards the take-off point and slowly lower itself to the ground.

The drone may not respond to commands from the remote controller when the drone battery is extremely low.

CONTROLLER ALERTS
When the remote control battery is low, it will emit a slow series of beeps, signaling that the batteries need to be replaced.

PLEASE NOTE: Do not ignore low-power warnings. Doing so may result in unplanned landings.

18. Using the Drone's Camera
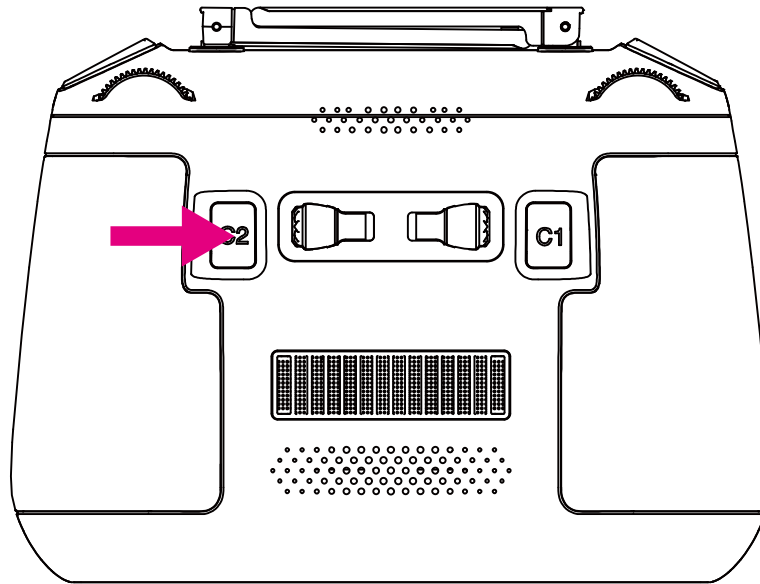
Attached to your drone is a camera that allows you to shoot videos of your flights. Insert a compatible SD card into the Drone's SD Card Slot to enable taking photos and videos.

Note: Inserting a compatible SD card into the Remote's SD Card Slot to enable taking photos and videos will take lower resolution photos and videos. It's recommended to insert SD card into the Drone's SD Card Slot.

19. Headless Mode

Headless mode allows you to fly your drone without worrying about the drone's orientation. Regardless of which way the drone is facing, this function ensures that the drone will always follow controls from your perspective all the time.

To enter Headless mode, before your drone takes off, stand in front of your drone and press the Headless mode button on your remote control.

20. Light Modes

Press the Light Modes button to turn on/off the headlight on the drone.
Press once to turn off light, press again to turn on the light.

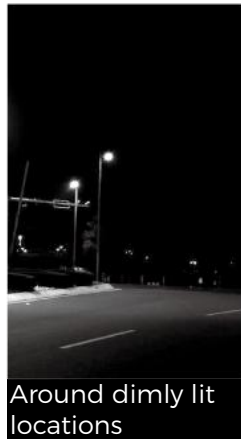## 21. Environmental Caution

When operating your drone in certain environments, certain features, such as hovering mode, may be limited or unstable, making it difficult for the aircraft to fly smoothly.

Avoid operating your aircraft in the following environments:

| Over water | Around dimly lit locations | In areas with large height difference | Over smooth and reflective floors | In locations with two-color stripes |

22. A Quick Look at the Touch Screen

Main Menu

Language: English ∧   Albums   Go Fly

Language Options   Album   Go Fly

14

23. Touch Screen Go Fly Menu

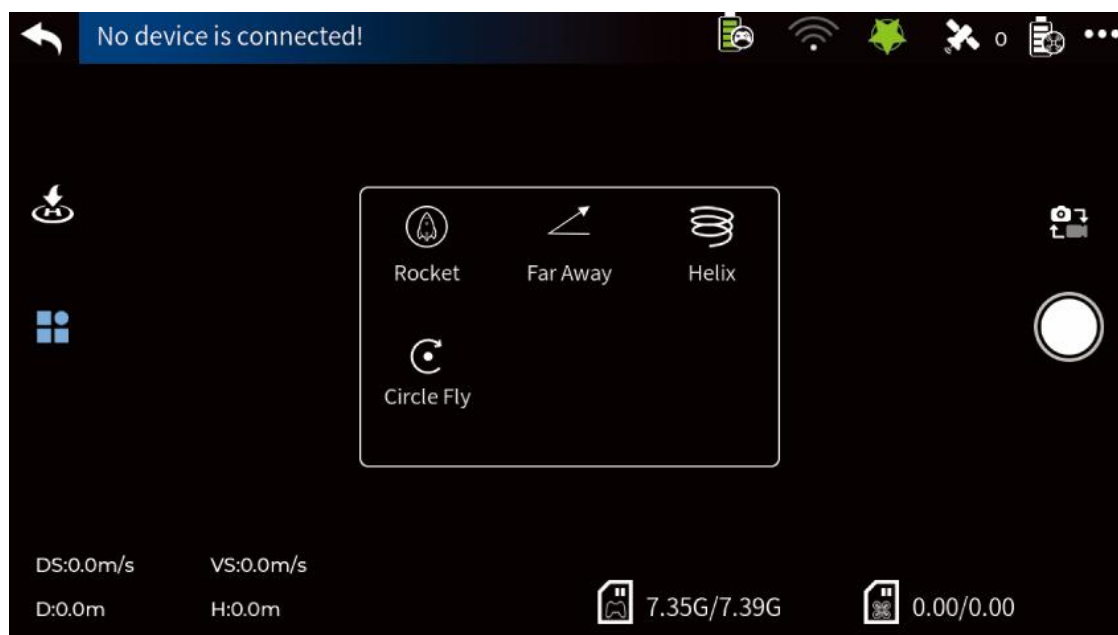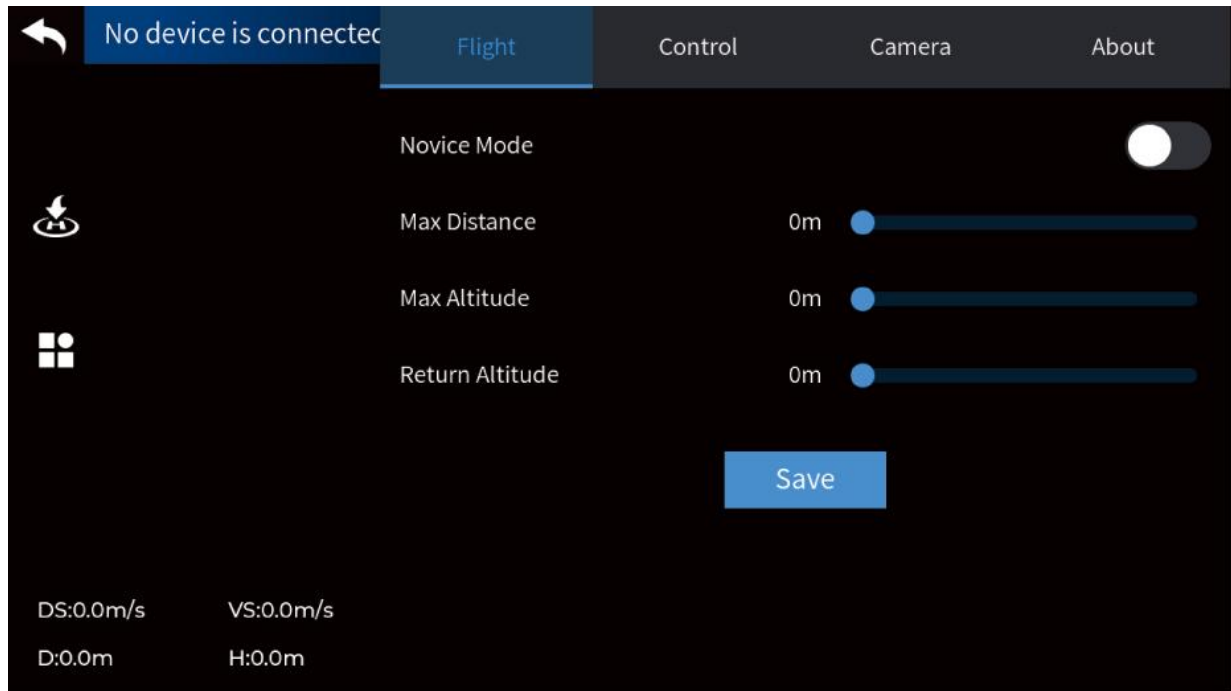| #	Name	Function / Effect
1	Main Menu	**Select to return to the main menu.**
2	Remote Battery	Displays the remote's battery.
3	Wifi	Displays the current Drone's Camera Wifi connection status with remote controller.
4	Magnetic Field	Displays the current magnetic field status. If it turns red, you need to change another place to fly and calibrate the drone again.
5	GPS	Indicates the current flight mode. Blinking indicates the current mode is Optical Flow, while a solid light means the drone is set to GPS mode.
6	Drone Battery	Displays your drone's current battery charge.
7	Settings	Select to enter settings menu.
8	Photo/Video	Select to swap between photo and video mode
9	Shutter	Select to take a photo while in photo mode. Press to start recording a video, press again to stop recording while in video mode.
10	Distance/Height	Shows the current height and distance from the takeoff point.
11	Speed	Shows the current speed of the drone.
12	Additional Functions	Select to access additional functions.
13	GPS Return	Select to cause the drone to return to the starting point.

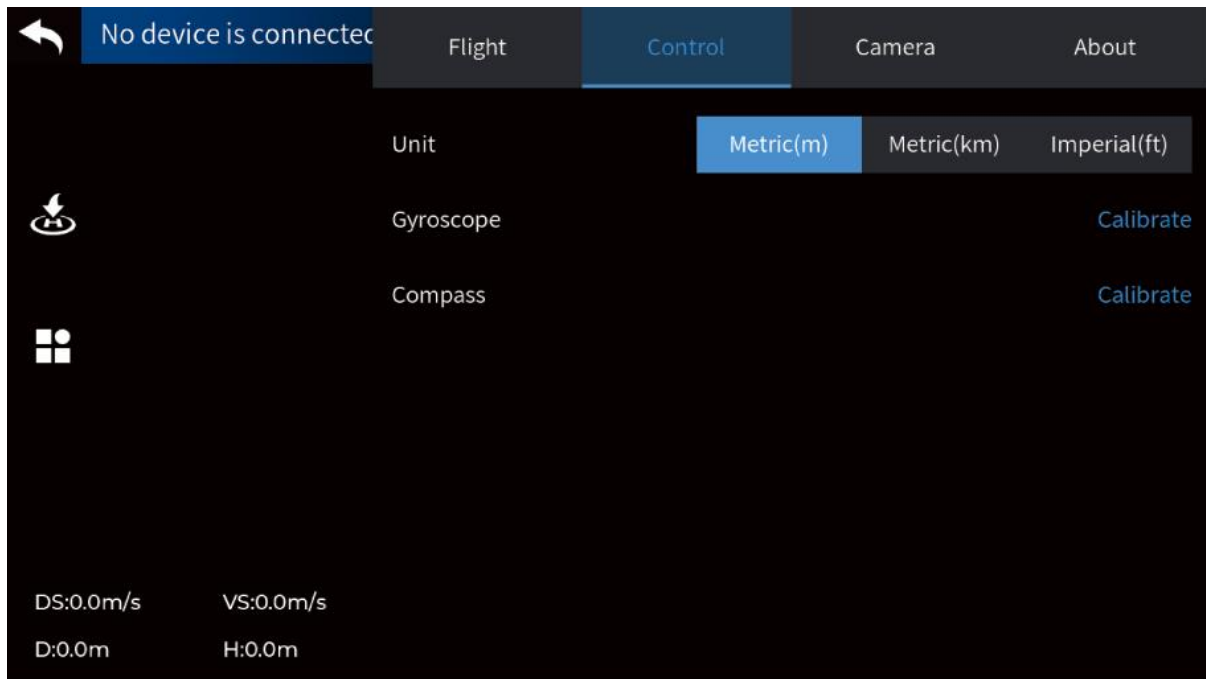| Name	Function / Effect
Rocket	Select to cause the drone to fly up by 15 meters.
Far Away	Select to cause the drone to move two meters away from its current position.
Helix	Select to cause the drone to fly up in a spiral pattern.
Circle Fly	While in GPS mode, select to set a specific position for the drone to orbit around.

CAUTION: Before using any of these functions, ensure there is at least 15 feet of space in all directions for the drone. Using these features without sufficient space available could cause the drone to collide with nearby objects, resulting in damage and/or injury.

25. Touch Screen Settings (Flight)
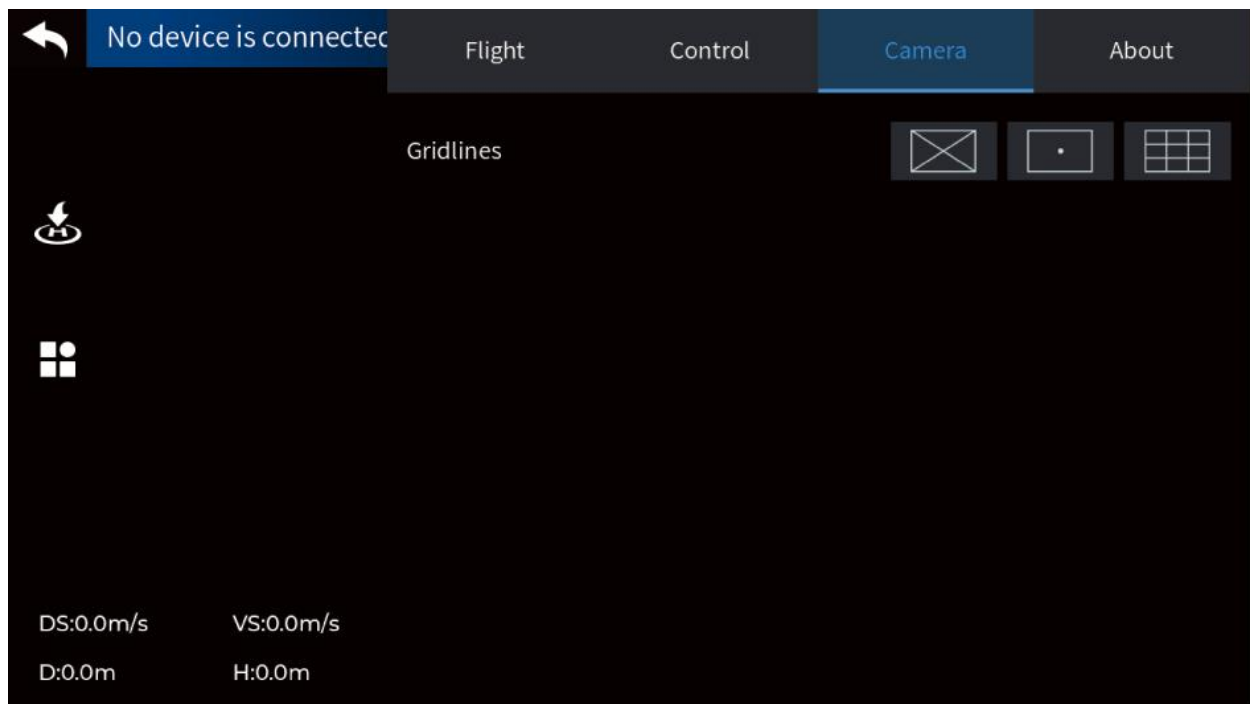

Name	Function / Effect
Novice Mode	Select to toggle Novice Mode.
Max Distance	Use to toggle the max distance the drone is allowed to fly.
Max Altitude	Use to toggle the max altitude the drone can fly.
Return Altitude	Use to toggle the altitude the drone will take while returning to the start position.

26. Touch Screen Settings (Control)

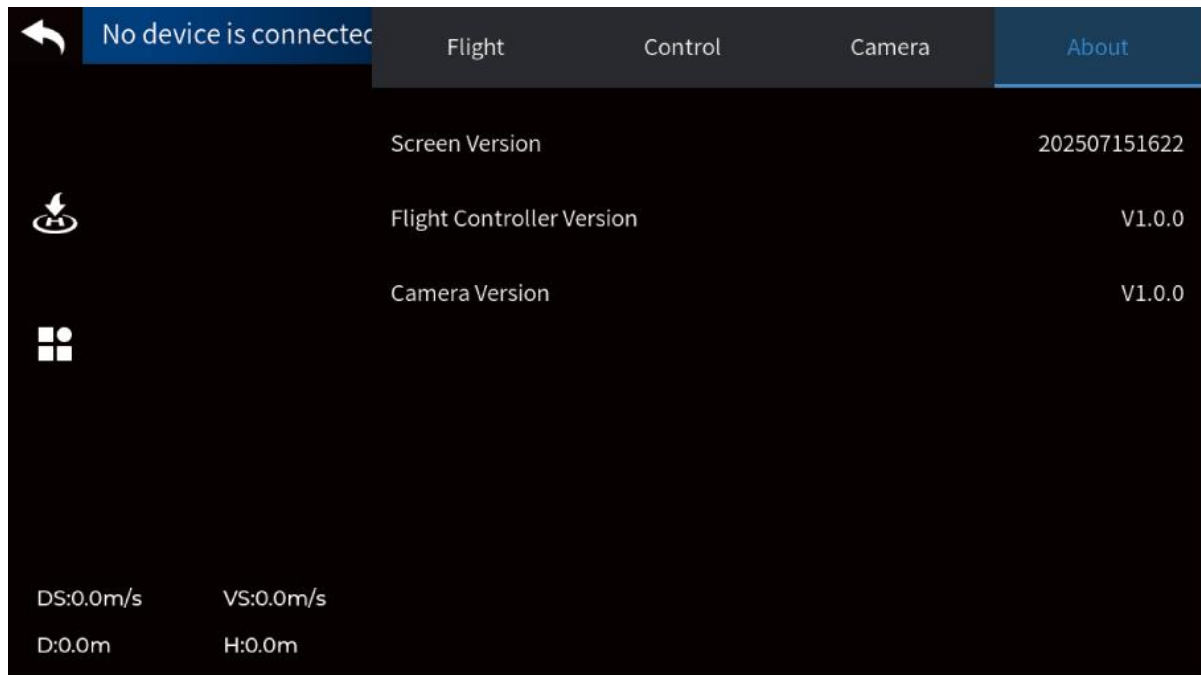| Name	Function / Effect
Unit	Select your preferred measurement unit.
Gyroscope	Select to begin calibrating the drone's gyroscope.
Compass	Select to begin calibrating the drone's compass.

27. Touch Screen Settings (Camera)

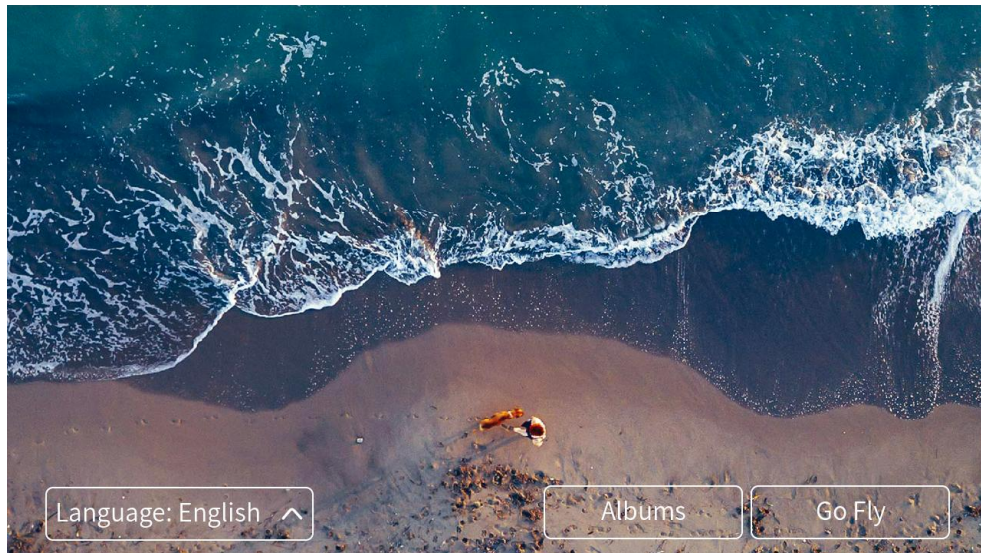| Name	Function / Effect
Gridlines	Select an option to add gridlines to the display.

28. Touch Screen Settings (About)

Name	Function / Effect
App Version	Displays the current application version on the remote.
Flight Controller Version	Displays the controller's current version.
Camera Version	Displays the camera's current version.

29. Album

To access the photos and videos of an inserted SD Card, enter the main menu. Select "Albums" on the Touch Screen Display to access photos and videos.
Notes: Reviewing photo, video via remote controller is not the original files. It's recommended to insert SD card into the Drone's SD Card Slot, after taking photo and video, please take out the SD Card from drone body, and view higher resolution photo and video via computer.

Language: English ∧   Albums   Go Fly

30. Propeller Blade Installation

If your rotor blades become damaged or the drone is no longer flying straight the rotor-blades may need to be replaced. To replace the rotor blades please follow the directions below.

1. Remove the motor cap and the screw securing the rotor blade, and lift the blade off taking note whether the blade that is being replaced is an 'A' blade or a 'B' blade.

2. Push the replacement blade onto the stem making sure that the screw holes align and the replacement rotor blade is the same ('A' or 'B') as the original rotor blade.

3 .Once the rotor blade is in position replace the securing screw.

Vivitar One Year Warranty

This warranty covers the original consumer purchaser only and is not transferable.

This warranty covers products that fail to function properly UNDER NORMAL USAGE, due to defects in material or workmanship. Your product will be repaired or replaced at no charge for parts or labor for a period of one year.

What Is Not Covered by Warranty
Damages or malfunctions not resulting from defects in material or workmanship and damages or malfunctions from other than normal use, including but limited to, repair by unauthorized parties, tampering, modification or accident.

To Obtain Warranty Service and Troubleshooting Information:
Call 1-800-592-9541 or visit our website at www.vivitar.com.

To receive Warranty service along with the name and address of an authorized product service center, the original consumer purchaser must contact us for problem determination and service procedures. Proof of purchase in the form of a bill of sale or receipted invoice, evidencing that the product is within the applicable Warranty period(s), MUST be presented in order to obtain the requested service. It is your responsibility to properly package and send any defective products along with a dated copy of proof of purchase, a written explanation of the problem, and a valid return address to the authorized service center at your expense. Do not include any other items or accessories with the defective product. Any products received by the authorized service center that are not covered by warranty will be returned unrepaired.

FCC Compliance Statement

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

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.

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 an experienced radio/TV technician for help.
The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.

VIVITAR®